

ARCHAEOLEG CAMBRIA ARCHAEOLOGY

PENTRE IFAN AND TY-CANOL
WOODLAND ARCHAEOLOGICAL
ASSESSMENT

PROJECT RECORD No. 36246

(Including Watching Brief on re-excavation of a Pond at Pentre Ifan
Project Record No. 36537)

NOVEMBER 1998

Report prepared by: M Trethowan

Commissioned by: Forest Authority
(Watching Brief commissioned by PCNP)

ARCHAEOLEG CAMBRIA ARCHAEOLOGY
THE SHIRE HALL
8 Carmarthen Street
Llandeilo
Carmarthenshire
SA19 6AF

Contents

Summary.....	1
Acknowledgements	1
Introduction	2
Commission	2
Methodology	2
Pentre Ifan Wood.....	3
Results of Desk-Top Assessment.....	3
Results of Field Survey.....	5
Area 1.....	5
Archaeological Features Identified.....	5
Area 2.....	8
Archaeological features Identified	8
Area 3.....	10
Archaeological features Identified	11
Area 4.....	11
Ty-Canol Wood	12
Results of Desk -Top Assessment.....	12
Results of Field Survey.....	12
Area 5.....	12
Archaeological Features Identified.....	12
Additional Archaeological Features Area 5.....	13
Area 6.....	16
Area 7.....	17
Categorisation Of Importance.....	17
Management Strategies for Archaeological Features.....	17
Bibliography.....	19
Figure 1 - Survey Areas.....	20
Figure 2 - Archaeological Features	21
Figure 3 - Marl Pit PRN 36249 Area 1	22
Photographs.....	23
Appendix One Maps.....	33
Appendix Two Pentre Ifan Pond, Archaeological Watching Brief	37

PENTRE IFAN AND TY-CANOL WOODLAND **ARCHAEOLOGICAL ASSESSMENT**

Project Record No. 36246

I. SUMMARY

An archaeological survey, comprising of a desk-based assessment and fieldwork, was conducted over an area centred on Pentre Ifan wood and Ty-Canol wood. The purpose of the survey was to establish the quantity, nature, and significance of archaeological features within the survey area, and to propose a management strategy for conserving them. Due to the density of some sections of the woodland, and restrictions on time, however, it was not possible to conduct a comprehensive survey of the woods, and the results produced should therefore be seen as a representative sample of the features present.

Two main types of archaeological feature were identified within the woodland ; those features directly associated with woodland management, such as saw pits, and those features which are now contained within the woodland although they would not originally have been (e.g. field boundaries, fish ponds, marl pits, and drainage ditches).

A strategy of conducting any further work within the woods, whilst being aware of the presence of archaeological features, and re-surveying areas as they are cleared, is suggested as the future management strategy of the woodlands from an archaeological perspective.

II. ACKNOWLEDGEMENTS

Acknowledgements to the following people for their assistance and co-operation in conducting the field work and research for this project :

Ms Sally Brown - Pembrokeshire Coast National Park
Mr Hugh Denman
Mr Watkins - Trewern
Mr Richards - Pencawsai
Ms Louise Austin - Dyfed Archaeological Trust
Mr Ken Murphy - Archaeoleg CAMBRIA Archaeology

The fieldwork and report were conducted and produced by M Trethowan, Project Assistant, Archaeoleg CAMBRIA Archaeology, Llandeilo.

1.0 INTRODUCTION

1.1 Commission

The Field Operations section of Archaeoleg CAMBRIA Archaeology was commissioned by the Forest Authority to conduct an archaeological assessment of Pentre Ifan wood, Ty-Canol wood, and various additional areas bordering the two main woods (see Figure 1).

The assessment is a continuation of an earlier commission by PCNP (February 1997), where Archaeoleg CAMBRIA Archaeology conducted an archaeological assessment of nine woods within the Gwaun valley, of which Pentre Ifan and Ty-Canol were two.

The latest commission however, included several areas which were not in the initial assessment, and the re-assessment of sections of woodland which had been cleared since the original assessment.

The archaeological assessment of Pentre Ifan and Ty-Canol is part of the Forest Design Plan Pilot Project, conducted by PCNP to enable a comprehensive management plan to be established.

The brief for the archaeological assessment involved the following areas :

- Conducting an additional desk-top assessment, where documentary as well as cartographic sources would be consulted.

- Conducting a field survey comprising of a systematic walk-over and adequate mapping of location, character and extent of visible features in all previously un-visited parts of the woodland

- Previously identified features in areas already surveyed will be accurately located and mapped to the same standard

- Additional areas which have become more accessible since the previous survey will be identified and surveyed.

- Following the identification and mapping of surviving sites and features, appropriate management regimes for these areas will be developed.

1.2 Methodology

The additional desk-top assessment was conducted from sources held at the Sites and Monuments Record at Dyfed Archaeological Trust, Llandeilo.

The field work was conducted on the following four days;

18/09/98	21/09/98	22/09/98	23/09/98
----------	----------	----------	----------

Due to the restrictions on time and the density of the majority of the woodland, (see Photo 10) it was only possible to conduct a systematic walk along one or two routes through each section of woodland (see Figure 2). It was therefore not possible to

through each section of woodland (see Figure 2). It was therefore not possible to conduct the assessment over the entirety of each woodland, and because of this the results stated below must be seen as a proportion of the archaeological features present rather than a definitive inventory.

2.0 PENTRE IFAN WOOD

2.1 Results of Desk-Top Assessment

Pentre Ifan wood can be traced through documentary sources to the 12th century when it was part of the ancient estate of Cilrhyth in the Baronry of Camaes, and known as Cilruth wood. The estate has remained under the control of the Bowen family for over 800 years during which time it has undergone several phases of expansion and contraction, indicating fluctuations in population levels and associated economic pressures.

During the mid 13th century, Pentre Ifan wood, known then as Cilruth wood, was said to extend up the slopes of Carnedd Meibion Owain (including the present day Ty-Canol wood), East to the burial chamber, and West towards Trewern. The main family house was located within the woodland although its precise location is not known.

Pentre Ifan mansion and the associated buildings were constructed in the 15th century under orders from Sir James ab Owen who had *“received substantial financial reward for supporting the Earl of Richmond in his quest for the English crown in 1485.”* (G.D. Nash 1989). The mansion was still in use in the early 17th century as George Owen mentioned it in his *“Description of Pembrokeshire”* (1603) as *“the chief house and place, not only of this quarter but of this county.”* and of the woods he stated *“it is a wonder to see such fair timber.”*

Along the northern edge of the complex of buildings were a series of ponds. Nash describes these ponds as *“traces of former ponds, almost certainly man-made, which may well have served as fishponds. At least four such ponds were sited here and it is possible that the out-flow from the lowest (western-most) pond led to further ponds beyond the farmstead proper.”* (1989). Evidence of these additional ponds are mentioned in the *“Results of Field Survey - Area 1”*.

By the late 18th century however, the mansion was in decline as Fenton stated there were *“fragments of buildings of superior architecture and portions of the chapel ; it lay in the midst of an extensive wood called Cilrhydd”* (1790). The mansion complex continued to decline throughout the 19th and 20th centuries until there were no visible remains of the main house left standing, and strangely, no record amongst cartographic sources of its original location.

The only surviving building of this extensive Tudor courtyard homestead is the building which is referred to as the 'barn', although Nash states it is likely to have originally been the gatehouse at the entrance to the courtyard.

The first reference to 'Pentre Ifan' wood, as opposed to Cilruth wood, was made in 1342 in a final concord, setting out the apportionment of lands, made in the court of

the Earl of Pembroke. Nash's report on Pentre Ifan barn states that *"the first son Robert ap Owen inherited . . . lands and a mill in Cilrhuth. As Pentre Ifan was settled on the second son Evan, it is quite probable that it was he who gave his name to the property. Evan, however, died without a successor and the property passed to the sons of his youngest brother Llewelyn, who probably lived in the main homestead at Coed Cilruth."* Pentre Ifan Barn : The Remains of a Tudor Gentry House ? An Interim Report. G.D. Nash, 1989.

The cartographic record shows several subsequent phases of change in the boundary of Pentre Ifan wood. The index to the tithe survey map (1836) indicates the wood continuing west to Dolbont cottages, and not as far east as the present boundary. the Nevern parish tithe map (1840) shows the boundary changed to encompass the whole of the most westerly of the two present day areas comprising Pentre Ifan wood (Tithe field 1033). It also states that fields 1035 and 1028 of the easterly section were wooded, accounting for slightly less than half of the present easterly area.

The western section remained densely wooded, and the eastern section remained a mixture of pasture and woodland until at least 1964 where it can be seen on the 6" O.S. map. However at some point after 1964 the wood expanded to its present day boundary.

The field systems within Pentre Ifan wood have remained largely unchanged throughout the cartographic record. The western section of the wood is shown on the 1840 tithe map as one large undivided area, and it is much the same on all the sources consulted. The eastern section of the wood appears on the tithe map as five separate fields, however, by 1888 the boundary dividing fields 1027 and 1026 had disappeared. the first edition OS map also shows a small enclosure, in the corner of the field referred to on the tithe map as 1027, which was not present in 1840. This small enclosure can be traced through to the present day.

The additional desk-top assessment revealed another source of information concerning the history of timber working within Pentre Ifan wood. The source is the Forestry Estate workers reminiscences (1918 - 1945) which were recorded for the Ty-Canol NNR Advisory Committee. It refers to the use of horses and a light railway to extract timber from all parts of Pentre Ifan and Ty-Canol to the roadside at Dolbont gate, Ty'r Coed Isaf. Personal communication with the residents of Trewern has suggested that the light railway was used extensively during the WWI, where vast quantities of timber were felled, possibly to be used as props for the British trenches in France, and the railway was used to transport the timber out of the woods. A former forestry worker of this period told the residents of Trewern that the basic nature of the light railway meant it was fairly mobile, enabling it to be moved to other woods in the area and used for the same purpose. This explains the inability to locate any sign of the light railway during the field survey.

The four footpaths illustrated on the cartographic record in the western section of the wood, can be traced back to the first edition O.S. map (1888). These are largely disused at present, although the main footpath running East-West (PRN 33695), has been widened in places and resurfaced within chippings, enabling it to be used for forestry vehicles.

This upgrading of the footpaths has also occurred on the main footpath through the eastern section of the wood (PRN 33699), which has been resurfaced with chippings and widened. The cartographic record shows that this footpath was established between 1888 and 1906, and has remained operational to the present day.

2.2 Results of Field Survey

The field survey of Pentre Ifan wood and surrounding area was divided into four areas as shown in Figure 1.

Area 1 comprised of land not included in the original survey, to the west of Pentre Ifan wood. This area of land is owned by several individual private owners.

Area 2 comprised of the western section of Pentre Ifan wood, which is owned by PCNP. This area was included in the original survey although there has since been some clearance within the woodland.

Area 3 comprised of the eastern section of Pentre Ifan wood (PCNP owned), which was included in the original survey and has only had limited clearance since then to establish trackways.

Area 4 is an additional section on the eastern side of Pentre Ifan wood which was not included in the original survey, and is owned by PCNP.

2.2.1 AREA 1

Archaeological Features Identified

Fish Ponds	PRN 36247	NGR - SN08803806	Category B
-------------------	------------------	-------------------------	-------------------

A series of three ponds of varying dimensions and linked by a stream, run from the north-east of Trewern to the north-west, as shown in Figure 2. Consultation with documentary sources as well as personal communication suggests that these may well have been fish ponds, which may have been linked to a similar series of ponds at Pentre Ifan farmstead. Nash describes the ponds at Pentre Ifan as follows *“across the top one-third of the site are traces of former ponds, almost certainly man-made, which may well have served as fishponds. At least four such ponds were sited here and it is possible that the out-flow from the lowest (western-most) pond led to further ponds beyond the farmstead proper.”* (Nash, 1989) The reference to ponds to the west of Pentre Ifan farmstead further substantiates the hypothesis of the fish ponds at Trewern.

The 1840 Nevern parish Tithe map does not illustrate any ponds at Trewern, and the apportionment refers to the area as woodland and pasture. This may, however, be due to the lack of detail shown, as they are clearly present on the 1888 1st edition O.S. map (as well as on cartographic sources produced since then), and, if as suspected they are contemporary with those at Pentre Ifan, they would have been in existence long before the Tithe map and apportionment were compiled. Within the last fifty years the

ponds have become increasingly silted up until they have reached their present condition where they are a maximum of 0.5m deep and frequent oak, ash, and holly trees are growing within them (See Photos 1,2,3,4).

Derelict Cottage PRN 36248 NGR - SN08533797 Category C
Stone built, single storey, two celled 19th century cottage, now largely derelict. Presumably it was once part of Dol-bont cottages and the woollen mill to the west. (see Photos 5,6,7,8).

Marl Pit ? PRN 36249 NGR - SN08643789 Category C
A possible marl pit was located in the vicinity of the stream running east-west through area 1 (see Figures 2 & 3 & Photo 18). It was oval in plan and measured c.10m long x c.5m wide x c.0.5m deep. The pit cut appeared to be man-made and presumably would have been considerably deeper than its present depth.

The criteria to which a pit usually conforms to be considered a marl pit are generally assumed to be as follows:

The geology of the area has to be clayey chalk, or chalky clay, the components of marl.

The cut of the pit should be steep sided, usually with a ramp at one end for access by cart.

They are normally located in the middle of fields to cut down the distance which the marl needs to be carted, and the pits are usually limited to one per field.

Despite these criteria it can still be difficult to positively identify marl pits, particularly where the land has since become wooded and the pits have filled with woodland debris and water. It is therefore often the case for any unexplained, silted up pit to be defined as a marl pit when this is not necessarily the case. As Oliver Rackham states "*The history of ponds and pits can often be very difficult.*" (Illustrated History of the Countryside, 1994).

Derelict Cottage - Llwyn-bedw PRN 36250 NGR - SN08933758 Category B
Llwyn-bedw is a post-mediaeval, single storey, three celled, stone built dwelling (NW-SE aligned), with a separate out-house at the southern end. The structure is in a ruinous condition, with the majority of walls surviving to a maximum height of 1.5m, with the exception of the gable ends which survive to a height of approximately 2.5m.

The dwelling is shown on the 1840 Nevern Parish Tithe map on the southern edge of Pentre Ifan wood, where it is set within the corner of a pasture field named Park Llwyn Beddw. The apportionment states that it was occupied by Benjamin Rees at that time. The 1st edition O.S. map (1888) shows the structure in more detail with an enclosure adjacent to the structure on the NE side. The boundaries of this enclosure are constructed of stone walls, approximately 0.5m high, which are still present today.

Personal communication with local residents confirmed that the dwelling was last occupied in 1925 when it was in use as a cobbler's. The previous uses of the dwelling are unknown (see Photos 14,15,16,17).

Earthworks ? PRN 36251 NGR - SN08773775 Category C

The tithe map indicates a cottage on the eastern edge of Area 1 named Ty Coed Issa, and occupied by Thomas Rees. It shows the dwelling set within a concentrated area of small enclosures of pasture and arable land (i.e. before the woodland extended as far as area 1). However the dwelling is not represented on the 1st edition O.S. map, or any further later cartographic sources, thus suggesting it fell into rapid decline in the years between 1840 and 1888 to such an extent that it was not shown even as a vacant property in 1888. The field survey did not reveal any evidence of the dwelling either, although this may have been due to the density of the woodland, and the limited survey time available, and cannot be seen as positive evidence of its total demise.

Field Boundaries (18th/19th Century) PRN 36252 Area 1 Category C

The field boundaries within Area 1 can be divided into two main types. The majority of boundaries within the northern and central part of Area 1 are constructed of stone and earth banks (see Photo 9). They are generally a maximum of 1m high and 1m wide, although several are smaller than this. The boundaries towards the southern end of area 1 however, tend to be constructed largely of stone, without the earth bank. They tend to be slightly smaller, with a maximum height of c.0.8m and width of c.0.7m.

There also appears to be a change in the location of boundaries, with many of those indicated on the 1840 tithe map, to the south of the fish ponds, having been removed by 1888, whilst others had been added between this time, particularly in the region of Llwyn-bedw.

It may be possible therefore to hypothesise that there was a change in the construction of boundaries, away from earth and stone banks, towards dry-stone walls. However this apparent change may also be due to variations in the availability of stone within the different locations.

The landuse within these boundaries also began to change between 1840 and the end of the 19th century. The tithe apportionment indicates that all the land within Area 1 was either pasture or arable, apart from one section of wood (field No. 1046). However, by the end of the 19th century Pentre Ifan wood was extending further west, into Area 1, and at the time of the field survey, virtually all of Area 1 had become wooded, with the field boundaries remaining.

Trackways PRN 33695 & 33694 Category C

The main trackway through Area 1 begins at the western side of the area, near Dolbont bridge, and runs in a SE direction through the wood. Approximately half way through the area it forks into two, and both tracks continue into the western side of

Pentre Ifan wood. The tracks are shown on the first edition O.S. map, and at the time of the field survey they were in the process of being cleared and widened (see Photo 11).

There is another trackway running from Dol-bont cottages, along the northern perimeter of the area, to Trewern. This trackway is also shown on the first edition O.S. map, and at the time of the field survey it appeared clear and operational.

2.2.2 AREA 2

Area 2, as indicated on Figure 1, comprises of the western section of Pentre Ifan wood. This area was included in the original survey of the Gwaun Valley, and therefore several features within it have already been identified and recorded. Since the original survey however, clearance of the woodland has taken place in certain areas (see Photo 12). It was necessary therefore to re-conduct the survey in these areas, particularly as they have a long history of woodland management, in case additional features had become apparent.

Archaeological Features Identified

<u>Saw Pit</u>	<u>PRN 36253</u>	<u>NGR - SN09263781</u>	<u>Category B</u>
----------------	------------------	-------------------------	-------------------

Located towards the eastern edge of Area 2 on the line of one of the field survey traverses (see Figure 2), a possible saw pit was identified. The pit is aligned E-W, and measured approximately 4.5m long x 3m wide x 0.5m deep (Photo No.13 and archive 501). Located on the top of a natural rise on the north side of a stream, with a beech tree at its eastern end. Originally it would have been c.1.5m deep although it had gradually filled with woodland debris since it became disused.

As mentioned above, Area 2 was included in the original survey of Pentre Ifan wood where the saw pits identified as PRN 33789 were recorded, also on the eastern edge of the area (See Figure 2). The absence of any recorded saw pits elsewhere within Area 2 does not however mean that they were not present. It seems more likely that with the history of ancient woodland management in this area, many more saw pits are in fact present. However, due to the density of the woodland, the constraints on time, and the difficulty in identifying these now virtually completely back-filled features, they have not been recorded in this survey.

<u>Saw Pit</u>	<u>PRN 33789</u>	<u>NGR - SN09233774</u>	<u>Category B</u>
----------------	------------------	-------------------------	-------------------

Located close to PRN 36253 is another saw pit approximately 4m long x 2m wide x 0.4m deep. As mentioned above the pit would have originally been c.1.5m deep, but since its disuse it has filled with woodland debris.

<u>Pond</u>	<u>PRN 36638</u>	<u>NGR - SN0910038000</u>	<u>Category B</u>
-------------	------------------	---------------------------	-------------------

The pond was located just within the northern side of Pentre Ifan Wood, 150m to the west-south-west of the former farm of Pentre Ifan. The pond was oval, measured

approximately 25m x 16m and was very silted. There was a wide hollow on its north-west side, possibly the former supply to the pond. On the south-west side there was a channel for the out-flow from the pond. This pond has now been cleared of silt (archive Photo 505) and was subject to an archaeological watching brief (DAT PRN 36537). See appendices.

Marl Pits PRN 36639 NGR - SN0905038025 Category C

Several large pits (total length approximately 75m), now very silted, with a small stream running through them. Situated on the northern side of a hedgebank. These pits would be better interpreted as former marl pits, rather than fish-ponds. They appear to be later than a hollow possibly for the supply for the pond (PRN 36638) to the south east, and would have cut off the supply of water to the hollow, which is now diverted out of the south western end of these marl pits.

Enclosure; Mansion? PRN 36640 NGR - SN0913137905 Category B

Located on level ground above a stream to the north and adjacent to a modern trackway on its southern side. Consists of old low banks up to 0.6m high. No bank seen on north side; this may be the site of a mansion house (C Thomas per com). A forest track was on the southern side of this flat area and was not explored further. (archive Photo 502).

Saw Pit PRN 36847 NGR - SN0894437875 Category B

Located on the northern side of a modern trackway on the route of an older trackway (PRN 33695). Aligned SW-NE, approximately 6.5m long x 3.5m wide x 1m deep (archive Photo 503).

Saw Pit PRN 36848 NGR - SN0895375 Category B

Reported near saw pit PRN 36847 (C Thomas per com) and adjacent to a beech tree but could not be located.

Saw Pit? PRN 36849 NGR - SN0894437875 Category B

Probably just a slight linear natural hollow. Aligned 020-220°, approximately 5m long x 2m wide x 0.3 deep. Filled with a lot of brush. Located 20m to south of pond PRN 36638. (Not photographed).

Saw Pit PRN 36850 NGR - SN0907637978 Category B

Located about 11m south of pond PRN 36638 and to the west of Saw Pit? PRN 36849. Aligned E-W, adjacent and parallel to former trackway PRN 33693, approximately 5m long x 2m wide x 0.5m deep (archive Photo 504).

Saw Pit	PRN 36851	NGR - SN0904637958	Category B
---------	-----------	--------------------	------------

Located just on the north side of a stream and close to former trackway PRN 33693. Location may be 20m to east of grid reference. Aligned E-W, 5m long x 2m wide x 0.5m deep (archive Photo 506).

Saw Pit	PRN 36852	NGR - SN0917837690	Category B
---------	-----------	--------------------	------------

Located adjacent to south side of modern trackway with large beech tree on south-west side, and slight bank on north-east side. Aligned 120-300°, 5m long x 2.5m wide x 0.5m deep (archive Photo 507).

Boundary Bank	PRN 33696	NGR - SN09003800 SN08803788 SN08803755	Category C
Trackway	PRN 33693	NGR - SN09003800 SN09253802	Category C
Trackway	PRN 33694	NGR - SN08853762 SN09903767	Category C
Trackway	PRN 33695	NGR - SN00853778 SN09253788	Category C
Bank	PRN 33897	NGR - SN09203794 SN09213802	Category C

2.2.3 AREA 3

Area 3 comprises of the eastern section of Pentre Ifan wood, which was included in the original Gwaun valley survey. The area is almost entirely wooded at present although this has not always been the case, and it still retains its field boundaries and water drainage trenches, from the time when it was pasture land. The Nevern tithe map and apportionment (1840) shows that approximately half of area 3 was wooded at this time, with the remainder being pasture. The area was divided into five enclosures (see Figure 2) which have remained largely unchanged.

It is possible that these fluctuations in landuse, and the subsequent attempts at drainage and enclosure, can be attributed to a range of economic and demographic factors. The increased use of pasture for example, may be due to local population increases and a subsequent increased demand for food. The increased area of woodland however, may be due to a local decrease in population levels, or an increased demand for wood, such as that during WWI.

Archaeological Features Identified

Marl Pits	PRN 33788	NGR - SN09373778	Category B
Several large pits of varying dimensions, up to c.10m in diameter can be found within the southern half of Area 3. The depth of these pits is unknown as they have filled with water and woodland debris, although they seem to be very substantial. The location of the pits was roughly central within the remaining field boundaries (see Figure 2), although it was not possible to identify an access ramp due to the density of the woodland which has established itself since the fields were no longer used for pasture. It appears therefore, that these are marl pits, an assumption further substantiated by George Owen's reference to marl extraction within this area in the early 17th century.			
Drainage Ditch	PRN 33698	NGR - SN09453780	Category C
Trackway	PRN 33699	NGR - SN09633781 SN09353792	Category C
Drainage Ditch	PRN 33700	NGR - SN09523770	Category C
Bank	PRN 33701	NGR - SN09463763 SN09643791 SN09383793	Category C
Boundary Bank	PRN 33702	NGR - SN09333763 SN09623765 SN09663800	Category C

The main trackway (PRN 33699) running E-W through Area 3, was established between 1888 and 1906. It was recorded as still being operational during the original survey, although recently it has been widened and chippings put down to enable it to be used for forestry vehicles. The field survey revealed that a new trackway of a similar quality has been constructed, running N-S, parallel to boundary bank PRN 33701.

A series of drainage channels run along the perimeters of the enclosures within Area 3. It would seem that these were constructed in order to drain the land during its use as pasture.

2.2.4 AREA 4

Area 4 is an additional area which is not included in the original survey. The tithe apportionment (1840) shows the land use in the western half of the area as woodland, and the eastern half as meadow. The field survey revealed that the entire area is now wooded although the field boundaries remain. No other features of particular archaeological interest were identified during the field survey, although the density of the woodland limited the effectiveness of the survey. Further inspection when the woodland is cleared may reveal features of archaeological interest.

3.0 TY-CANOL WOOD

3.1 Results of Desk-Top Assessment

Ty-Canol wood is a National Nature Reserve which is leased to the Nature Conservancy Council. It is a mixture of moorland, pasture, and ancient sessile oak woodland. It is a species rich habitat for flora such as lichens, moss and ferns. It is managed through selective felling, coppicing, and removal of non-native species. It contains many spectacular natural rocky outcrops, although the majority of these are not within the survey area.

The Ancient Woodlands Survey, conducted by the Nature Conservancy Council, states that Ty-Canol wood was 'present in 1600', although this may have been as part of the ancient Cilrhyth wood, mentioned above.

The results of the cartographic survey can be seen within the discussion of individual archaeological features.

The results of the documentary survey are also discussed within individual archaeological features.

3.2 Results of Field Survey

The field survey of Ty-Canol woods and additional areas (see Figure 1) was divided into three areas. The numbering system allocated to each area runs on continuously from areas 1 to 4 in Pentre Ifan wood .

Area 5 - consists of Ty-Canol wood, up to the border with the heathland of Carnedd Meibion Owen. This area was included in the original survey, and has not been subject to clearance since. The field survey was therefore, only conducted in areas where the desk-based assessment suggested there maybe features not identified by the original survey.

Area 6 - consists of a small area of land adjacent to the eastern side of the northern half of Ty-Canol wood. This area was not included in the original survey.

Area 7 - consists of four small area of woodland adjacent to the southern side of the northern half of Ty-Canol wood. This area was also not included in the original survey.

3.2.1 AREA 5

Archaeological Features Identified

Iron Age Hillfort	PRN 1491	NGR -SN09103676	Category A
-------------------	----------	-----------------	------------

There is no reference to a hillfort at this location on the cartographic sources consulted, possibly due to the area being wooded, thus hindering identification. The

only indication of its existence is that it is marked on the SMR record map as having been identified during a field visit to the area in 1966. The field assessment conducted for this project confirmed the possibility of this being the site of an iron age hillfort or defended enclosure. As is characteristic of a promontory fort, the site has a bank and ditch defence combined with a stone and earth rampart (approximately 1.5m high and 2m wide) on the sides not naturally protected by the near vertical drop to Ty-Canol farmstead. It also has a simple entrance, with a trackway leading into a possible internal enclosure.

This dwelling is located within the deserted settlement at the northern end of Ty-Canol wood. The settlement appears to pre-date the cartographic sources consulted although the exact date is not known. The first reference to this dwelling appears on the 1840 Nevern tithe map and apportionment. It refers to a house / garden / field (pasture) which was owned by Thomas Lloyd and Charles Longcroft and occupied by Benjamin Rees. The dwelling is not mentioned on the earlier Ty-Canol estate map (1755) because on its location the words "Copy Hole" are written. It is not clear as to the meaning of this, and it neither proves nor disproves the existence of the dwelling at this date. By the time of the first edition O.S. map in 1888, the dwelling is no longer represented although the associated field systems remain. This situation continues throughout the cartographic record and was evident in the field evaluation. The remains of the dwelling could not be seen, although to the west of the trackway which leads from the original manor-house of Pentre Ifan through this site, is a walled enclosure which was possibly the garden. The area clear and flat, and is approximately 25m long and 15m wide, with stone walls approximately 0.6m high and 0.4m wide. On the eastern side of the track are three small enclosed areas, bounded by stone and earth walls (0.5m high and 0.7m wide). These may be the fields referred to in the tithe apportionment.

Dwelling	PRN 33476	NGR - SN09443733	Category B
----------	-----------	------------------	------------

The earliest cartographic record of this site appears on the 1755 Ty-Canol estate map which shows one large building, south of Ty-Canol farmstead, with three smaller buildings around it. No name is given for this dwelling, but it is probably contemporary with the dwelling north of Ty-Canol farmstead (PRN 33478). This also relates to Ty-Canol farmstead, as Ty-Canol translates to 'middle house' and it would have been the middle house in this series of three dwellings. By 1840 when the Nevern tithe map was compiled, this dwelling is shown as one small rectangular building, suggesting that its importance was in decline. It was not represented at all on the first edition O.S. map (1888) and must therefore have been vacated and either dismantled or fallen into rapid decline, in the intervening forty-eight years. The associated boundaries were however represented throughout the cartographic record and were still visible during the field assessment. The remains of three stone boundary walls were visible in an open ended rectangle formation, with some rubble in the middle which may have been part of the building.

Additional Archaeological Features Area 5

There are several other 'possible' archaeological features located along the boundary of Ty-Canol Wood, to the SW of the deserted settlement. A paper by Hedd Ladd-Lewis

(1987) refers to several clearance cairns, enclosures, and a possible standing stone, in the vicinity of this boundary. The only feature mentioned in this paper, within the survey area, of any potential significance is the standing stone (SN09113720). It is debatable however, whether this is in fact a standing stone or simply a gatepost/rubbing stone (see Photos No. 21,22). Further detailed documentary search would be necessary to clarify its intended purpose.

Field Boundaries		Area 5	Category C
Field Boundary	PRN 33712	NGR - SN09393733	Category C
Boundary Bank	PRN 33711	NGR - SN09663713 SN09403703	Category C
Boundary Bank	PRN 33710	NGR - SN09443612 SN09253596 SN08983664	Category C
Bank	PRN 33709	NGR - SN09443645 SN08983664	Category C
Boundary Wall	PRN 33708	NGR - SN09133678 SN08993670	Category C
Field Boundary	PRN 33707	NGR - SN08903696 SN08803705 SN08743714 SN09323734	Category C
Bank	PRN 33703	NGR - SN09403743	Category C

As stated above, the present day Ty-Canol wood is a National Nature Reserve comprised of several habitat types ranging from moorland and pasture, to ancient sessile oak woodland. Therefore when assessing the changing boundaries it is necessary to examine the spread of woodland into these areas of pasture and moorland which are now part of the NNR but were originally not associated with the wood itself.

The main change in the boundary of the woodland is therefore, the spread of woodland to the north-east. The cartographic record shows an increase in woodland in the Hagr-y-Cod area. It increased from the level shown on the 1755 Ty-Canol estate map, to include the area described as 'field' on the 1840 Tithe map (No: 1332) and the marginal areas described as 'wood and pasture' (Nos: 1333, 1334, 1335). The fields north of the dwellings, PRN 33476 & 33477, were also affected by the changing boundary of the woodland. Tithe fields 2517 and 2516 were both listed in the apportionment as pasture, but by the time of the first edition O.S. map (1888) the encroachment of the wood was apparent.

A later stage of expansion of Ty-Canol wood occurred in those fields numbered 1326, 1327, 1328 in the tithe apportionment. They were described as pasture, and can be traced as such up to the second edition O.S. map was produced in 1906. However, by the time the Provisional Edition of the county Series map was produced, in 1948, these areas had become wooded, and have remained so to the present day.

There have been several changes in the field systems of this area from the earliest cartographic reference in 1755, to the present. The main change from 1755 to 1840, in the north of the present area, was the removal of certain field boundaries to make larger fields. Since this time the field boundaries have remained largely unchanged, although the majority are now disused as the once pasture fields have become either wooded or marginal moorland.

In the south of the present day area, the 1755 Ty-Canol estate map shows two fields (Nos: 14 and 16) below the boundary to the moorland around Carnedd Meibion-Owen. The Nevern tithe map shows only one field in this area (No:1310 - Pasture), and in 1888 the first edition O.S. map showed there were three fields along this boundary.

Trackways		PRN33704, 33705, 33706	Category C
Trackway	PRN 33706	NGR - SN09183684 SN08753702 SN08943718	Category C
Trackway	PRN 33705	NGR - SN09233688 SN09343731 SN09543710	Category C
Trackway	PRN 33704	NGR - SN09333762	Category C

The original system of footpaths through Ty-Canol wood has been largely maintained (1888 First edition O.S.), and can be seen throughout the cartographic sources consulted. In addition further paths have been added in recent years, such as that around Carnedd Meibion-Owen, to make the entire area of the wood accessible to the public.

Nevern parish - Tithe Field Names and State of Cultivation (1840)

Owner : William Edwards / Occupier : Thomas Davies

FIELD NUMBER	FIELD NAME	CULTIVATION
1310	Hayguard	pasture
1311	field	pasture
1313	wood	-
1314	field	pasture

1315	field	pasture
1316	field	pasture
1322	Clustieu	meadow
1323	field	-
1325	field	pasture
1326	field	pasture
1327	Mydyndd	pasture
1328	Weiglodd	pasture
1329	Park-y-Bach	pasture
1330	field	pasture
1331	Park-y-felyn	-
1332	field	-
1333	Park-y-Bach	-
1334	field	wood and pasture
1335	field	wood and pasture
1340	field	pasture
1341	field	pasture

Owner : Thomas Lloyd & Charles Longcroft / Occupier : David Griffiths

FIELD NUMBER	FIELD NAME	CULTIVATION
2514	park and garden	arable
2515	Park Penfordd	arable
2516	same	pasture
2517	Park Ichaf	pasture

Owner : Thomas Lloyd and Charles Longcroft / Occupier : Benjamin Rees

FIELD NUMBER	FIELD NAME	CULTIVATION
2518	House, garden, field	Pasture

3.2.2 AREA 6

Area 6 was not included in the original survey and is shown on the 1st edition O.S. map as small enclosures of pasture land. During the 20th century however, this area has become wooded with oak, hazel, and silver birch, some of which appear to be less than fifty years old. The route taken through Area 6 did not reveal any features of archaeological significance, although the hedgebanks were noted as being of similar construction to those within Ty-Canol wood. It is possible that archaeological features may be revealed if the woodland is cleared, although it is unlikely as no features were illustrated on the map produced before the area was wooded.

3.2.3 AREA 7

Area 7 was not included on the original survey and comprises of four small patches of wooded land along the southern border of Ty-Canol wood, north of Ty-Canol farmhouse. The main archaeological feature identified was Pen-banc cottage (PRN 36255 - Category B) a two celled, single storey, stone built house, first shown on the 1840 Tithe map. It was apparently, last inhabited by a local headmistress in the early 20th century (see Photos 19,20).

The other three small areas of woodland did not contain any standing structures of archaeological interest, although they may have at some stage, been the location of a semi-permanent structure.

4.0 CATEGORISATION OF IMPORTANCE

Each site has been allocated a value in accordance with national criteria. Five classes are employed:

- A. Sites of national importance, usually Scheduled Ancient Monuments and Listed Buildings, or sites worthy of listing or scheduling
- B. Sites of regional or county importance
- C. Sites of district or local importance
- D. Minor sites or sites that are so badly damaged that too little now remains to justify their inclusion in a higher grade
- E. Unknown

5.0 MANAGEMENT STRATEGIES FOR ARCHAEOLOGICAL FEATURES

The field survey revealed two main types of archaeological feature within the areas:

- I. Those features such as saw pits and certain trackways, which are a direct result of woodland management, and are therefore generally located within the areas which have been woodland for a considerable period of time. These features are also usually fairly small and inconspicuous, especially after they have become filled with woodland debris, and therefore are difficult to identify unless the woodland has been cleared.
- II. Those features that were not originally woodland features, but, due to the expansion of the woods, have become contained within the woodland perimeters. Field boundaries, marl pits, fishponds, drainage ditches, and some dwellings are examples of this type of feature. Generally these features are larger and more conspicuous than indigenous woodland features.

It is recognised that for management purposes that generally these two categories have been treated separately; trackways recorded in the survey are still used in modern woodland management and their necessary upgrading for modern working practices is recognised. Other archaeological sites and elements of the historic landscape are essentially redundant and relict and therefore strategies for their management are different. The following guidelines are suggested for the management of site types recorded in the survey:

Category A sites: these sites are of national importance and are usually Scheduled Ancient Monuments or Listed Buildings. Where they are so designated it may be necessary to formulate specific management plans for their protection. The only site assigned to this category in the survey area is the Iron Age hillfort 1491. This is not scheduled. Earthworks of this nature are generally in a better upstanding state of preservation under woodland, where they have not been subjected to long-term agricultural degradation, than on farmland. The effect of roots on the buried archaeology is, however, an unknown factor and may vary according to geology, soil conditions, tree species and character of the archaeological deposits. Should it be necessary to thin or fell trees on such an earthwork site then care must be taken not to drive heavy machinery over earthworks. Heavy machinery should not be used in very wet conditions or in circumstances where deep rutting is likely to damage, or even destroy, important buried archaeological deposits. Severe local damage to archaeological deposits may occur by the up-rooting of a root-plate of a mature tree as it falls. Monitoring of old trees and trees susceptible to wind damage, and their felling, or other management action, is therefore recommended on earthwork sites, and other sites of a similar character assigned to category A, to prevent potential root-plate damage.

Category B sites: A wide range of site types and forms have been assigned to this category ranging from the upstanding remains of deserted buildings, old ponds and dams, to insubstantial earthworks of saw pits. Generally, the archaeological remains assigned to this category are robust, and the most appropriate management strategy is the passive 'do nothing approach'. Care must be taken to ensure that these remains are not inadvertently or unknowingly damaged. New trackways or other installations must not therefore be located over or very close to these sites. Upstanding remains such as old cottages must not be used as convenient quarries of stone for the repair of tracks or boundaries. Active management of category B sites would normally be limited to monitoring old or large trees to ensure future root-plate damage does not occur - see category A recommendations above.

Included in category B are the fishponds, 36427. These are unusual remains to be found in woodland. Currently there are plans to clear and restore these silted-up ponds. This work should be accompanied by an archaeological watching brief to ensure that archaeological remains such as sluices and weirs are properly recorded. Artefacts that may assist in the dating of the ponds should be retained and records made on the palaeoenvironmental potential of deposits encountered.

Category C sites: As with category B sites, a wide range of site types and forms are included. Recommendations are generally as for category B.

All old field boundaries and trackways have been assigned to category A. Individually boundaries are a minor element of the historic landscape, but collectively they represent the historic landscape's major component. Because of their ubiquity and their perceived insignificance they are often needlessly damaged or destroyed. Care should therefore be exercised to ensure that damage or destruction does not occur. Existing gateways and gaps through field boundaries should be used, where feasible, for access tracks and paths. Should it be necessary to create a new track then a single new gap through a boundary sufficiently wide, but no wider, for the new track should be created. During felling machinery should be driven through gateways or created gaps in boundaries, not over them.

As noted above, tracks are one element of the historic landscape that are still in use. It is recommended that where possible historic tracks are kept in use, upgraded if necessary. Should it be necessary to create a new track then care must be taken to avoid archaeological features recorded in this survey and any new gateways through old field boundaries must be as specified above.

Other recommendations: Following clear felling and thinning of trees, further site visits should be made to identify and record sites not visible during the current survey. These visits could be intermittent and need not take place immediately following felling - a period of several years may intervene between felling and site visits.

Notification of new sites discovered by members of PCNP or reported to PCNP during felling operations should be reported to Archaeoleg Cambria Archaeology to enable them to be recorded on the Dyfed Sites and Monuments Record. This will ensure that any future management recommendations will embrace all known sites in the woodland.

BIBLIOGRAPHY

Charles B.C. - 1992 - *Place Names of Pembrokeshire*

Fenton R. - 1811 - *A Historical Tour Through Pembrokeshire*

Ladd-Lewis - 1987 - *Arolwg O Hnaes Ac Archaeoleg Ardal Ty Canol, Plwyf Nanhyfer, Sir Benfro*

Nash G.D. - 1989 - *Pentre Ifan Barn : The Remains of a Tudor Gentry House ? an Interim Report*

Nature Conservancy Council 1978 - *Pembrokeshire Ancient Woodlands Survey*

Owen G. - 1603 - *The Description of Pembrokeshire*

FIGURE 1- SURVEY AREAS



AND FIELD SURVEY ROUTES

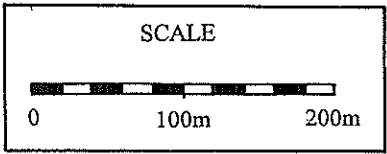
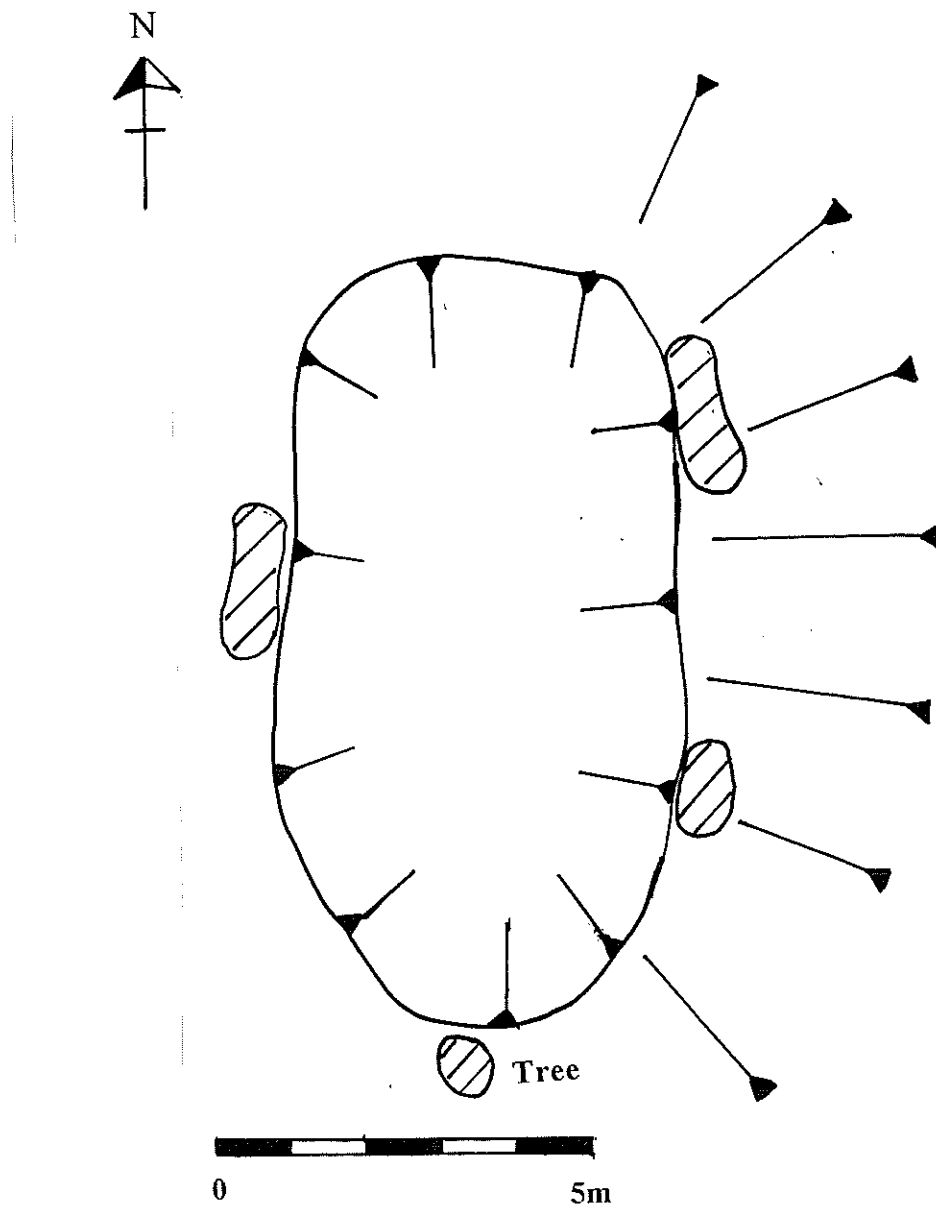


Figure 3 - Marl Pit PRN 36249 Area 1



Photograph 1.
Pond South-West of Trewern



Photograph 2. Pond South-East of Trewern



Photograph 3.
Pond South-West of Trewern



Photograph 4. Pond South-East of Trewern



Photograph 5. Derelict Cottage PRN 36248



Photograph 6. Derelict Cottage PRN 36248



Photograph 7. Derelict Cottage PRN 36248



Photograph 8. Sluice Adjacent to Derelict Cottage PRN 36248



Photograph 9. Field Boundary PRN 36252 in Area 1



Photograph 10. Example of Density of Woodland in Area 1



Photograph 11. Example of
Trackway Clearance within Area 1



Photograph 12. Example of Woodland Clearance in Area 2



Photograph 13. Saw Pit PRN 36253



Photograph 14. Llwyn-bedw Cottage PRN 36250



Photograph 15. Llwyn-bedw Cottage PRN 36250



Photograph 16. Llwyn-bedw Cottage PRN 36250



Photograph 17. Llwyn-bedw Cottage PRN 36250



Photograph 18. Marl Pit PRN 36249



Photograph 19. Pen-banc Cottage PRN 36255



Photograph 20. Pen-banc Cottage



APPENDIX ONE MAPS

NEVERN PARISH

Tithe Map - 1840



NEVERN PARISH

Tithe Map - 1840



APPENDIX TWO

ARCHAEOLEG CAMBRIA ARCHAEOLOGY

PENTRE IFAN POND
ARCHAEOLOGICAL WATCHING BRIEF

PROJECT RECORD No. 36537

NOVEMBER 1998



Report by: P Crane BA (Hons) MIFA

Commissioned by: Pembrokeshire Coast National Park

ARCHAEOLEG CAMBRIA ARCHAEOLOGY

THE SHIRE HALL

8 Carmarthen Street

Llandeilo

Carmarthenshire

ARCHAEOLOGICAL WATCHING BRIEF PRN 36537

CONTENTS

SUMMARY	39
ACKNOWLEDGEMENTS	39
1. INTRODUCTION	39
1.1 Project commission	39
1.2 Scope of project	39
1.3 Report outline	39
1.4 Abbreviations	40
2. THE SITE	40
2.1 Location	40
3. SUMMARY OF WATCHING BRIEF RESULTS	41
4. CONCLUSIONS	43
APPENDIX ONE: DETAILED RECORDS OF WATCHING BRIEF	44
APPENDIX TWO: CATALOGUE OF WATCHING BRIEF ARCHIVE	44
BIBLIOGRAPHY	45
Other Sources	45
FIGURE 1 PENTRE IFAN POND	46
PHOTOGRAPH 1. PENTRE IFAN POND PRN 36638, ...	47
PHOTOGRAPH 2. SLUCE STONEWORK 107 IN CUT CHANNEL 105, ...	47

SUMMARY

Two days were spent, on the 26th and 27th October 1998, watching the mechanical excavation of a pond in the northern edge of Pentre Ifan Wood. The pond was artificial and may have been a fishpond with stone lined sluice.

ACKNOWLEDGEMENTS

Celia Thomas - Pembrokeshire Coast National Park

This report was prepared by Pete Crane, Project Manger, Archaeoleg **Cambria** Archaeology Field Operations. The fieldwork was carried out by P Crane.

1. INTRODUCTION

1.1 Project commission

The Field Operations section of Archaeoleg CAMBRIA Archaeology was commissioned by Pembrokeshire Coast National Park (PCNP) to conduct an archaeological watching brief on the mechanical excavation of a pond in the northern part of Pentre Ifan Wood, Nevern, Pembs (figure 1).

This project was a continuation of the archaeological assessments undertaken previously by Cambria (February 1997 and September 1998), and this watching brief was suggested by the Heritage Management section of Archaeoleg CAMBRIA Archaeology as being desirable on the re-excavation of this pond.

1.2 Scope of project

This was limited to the observance of the re-excavation of the pond with no interference to the excavation thereof, and a reconnaissance of the immediate area.

1.3 Report outline

This report describes the physical environment of the site (Section 2) before summarising the watching brief results (Section 3) and the conclusions (Section 4), based on the results of Sections 2 and 3. Supporting data, including detailed records of the watching brief, are given in the appendices.

1.4 Abbreviations

Sites recorded on the regional county Sites and Monuments Record (SMR) will be identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Any new sites discovered during the course of the project will be allocated a new PRN and identified by their NGR.

Archaeological features and contexts will be referred to using the continuous three-figure numbering system (e.g. 001) employed by Archaeoleg **Cambria** Archaeology Field Section.

2. THE SITE

2.1 Location

The pond, PRN 36638, was located just in the northern side of Pentre Ifan Wood (see main report figure 2 page 21), at the NGR SN 09103800, 150m to the west-south-west of the former farm of Pentre Ifan, in an area of previously dense mixed woodland and undergrowth; much of this had been flattened by recent tree thinning. The area to the north and west was bounded by an old hedgebank, supplemented with a modern wire fence. To the east there was a stream flowing north to south which joins another flowing from east to west. The ground sloped gently from the north towards the pond before falling slightly more steeply towards the stream to the south of the pond. Here there may have been up to three post medieval saw pits PRNs 36849, 36850 and 36851 and a trackway PRN 33693 (figure 1).

The pond was in what appeared to be an artificial hollow with a possible natural inlet on its north-western side, and a short but steep-sided gully on its north-eastern edge. The sides of the pond were high and steep on all but the western side (Photo 1). The southern side of the pond appeared to be dam-like.

On the far side of the stream to the south the ground rises in a steep natural bank before a level area, part of which may be the former location of the Mansion house (PRN 36640)(C Thomas per com). A forest track lay on the southern side of this flat area and was not explored further.

3. SUMMARY OF WATCHING BRIEF RESULTS

Some trees still had to be removed prior to the start of the mechanical excavation of the pond and outlet. The machine used was a large tracked excavator with a toothless digging bucket. Spoil from the re-excavation was deposited to the south of the pond. Notes and photographs were taken as necessary. After a small amount of material was removed by machine from the pond outlet some archaeological hand excavation took place; unfortunately weather conditions were very bad on the second day. A large scale plan at 1:1000 was made of the pond and adjacent features using tape and magnetic compass.

Inlet?

The earliest feature was possibly that of a former stream (110), now a 10m wide shallow hollow with sides rising 0.5m to the north and 1m to the south. The surface of this hollow was probed to approximately 300mm deep and in a few places gravel or stones were encountered, possibly the remains of a stream bed.

The south-eastern part of the hollow opens out into a slightly lower area of damp ground, before reaching the pond edge, perhaps where it fed the pond.

Across the north-western part of this hollow was a hedgebank (un-numbered, but probably a continuation of bank PRN 33897), apparently of some antiquity but appeared to be later than the hollow, which continued on the other side of the hedgebank. However a later filling of a gap, perhaps left for the stream, should not be discounted. On the western side of this hedgebank there was a shallow 'pond' (PRN 36537) or 'ponds', which would be better interpreted as former marl pits, rather than fish-ponds. These 'ponds' appeared to be later than the hollow and would have cut off the supply of water to the hollow, which is now diverted out of the south western end of these 'ponds'.

Bypass channel?

To the south-west of the point where the hollow (110) opened out was a gully (111). This gully ran parallel to the outlet of the pond. This may have been part of the original stream course before having material excavated from the pond banked on its western side, or it may have been a bypass channel for the stream.

Pond, lining and fills

The pond (101 and PRN 36638), was roughly oval in shape. Maximum length at the top of the cut for the pond on a north-east south-west axis was 25m. It was 16m across. The bottom of the silts in the pond lay 1.2m below water level (at commencement of excavation). The cut or pond edge above the water level was approximately 2m on the southern side and maybe as much as 3m on the north-eastern edge. The western side was much lower, around 1m or less.

The short but steep-sided gully on the ponds north-eastern edge, did not appear to have extended for much further and would not appear to be an inlet channel. This may

have been either the site of a former spring, part of the pond construction or a natural feature. This was not excavated.

Some of the material of the original pond excavation appeared to have been deposited in a flat topped wide bank; possibly acting as a slight dam (109) on the south side of the pond, although most of this apparent structure is the result of the pond having been cut into geological material. The flat top may be caused by a former trackway (PRN 33693).

Neither the cut for the pond nor what appeared to be a lining, were re-excavated. This lining (102) a light grey clay with few visible intrusions, was observed where cut by mistake by the machine.

Above the lining there was a fill (103) of brownish clay and organic material. This was probably made up of a number of layers.

Above the brown fill and up to the surface of the pond was an upper layer (104) of very dark humic material, including much rotting timber and decaying leaves. This later deposit was probably made up of a number of smaller ones. Parts of the surface of this layer were covered with shallow water prior to excavation.

Sluice or outlet

A channel was visible running from the south-western edge of the pond in a straight line towards the stream. However it was hidden to a great extent by fallen timber and scrub, and was visibly silted up.

Initial clearance was by machine and large stones were encountered in the base of the channel near the pond. Some of these stones were removed or dislodged, partly as a result of substantial tree roots being taken out at the same time as the fill. On the southern side of the gully at this point part of the side of the channel was damaged and machine excavation was halted. Some archaeological hand clearance of the stonework did take place, but conditions were very muddy, and this was therefore discontinued as no useful progress could be made. The stonework was photographed in detail (Photo 2, archive 208).

The cut (105) for the channel, visible as a surface feature for at least 25m, was just over 1.5m wide at the top and 0.5m across its base. This cut was not revealed to any extent but appeared to have been slightly curved or flat based; however this profile may be due to water action particularly at the southern end, rather than the more obvious artificial cut nearer the pond.

At the pond end of the channel cut there appeared to be a possible clay lining (106), it was not distinguishable from the lining (102) of the pond (101), but was more disturbed and may have contained some stone or pebbles.

In and above the clay lining (106) were one to two courses of very large flat stones up to 550mm long and most 100-150mm thick. These stones may have extended up the sides of the cut, but on the east side had been dragged or removed by the machine.

The stones (107) in the base of the cut appeared to have been laid, not just tipped in and to form a base for the outflow. This stonework was probably the remains of a sluice rather than a crossing for a trackway (PRN 33693 which can be seen on 1st edition OS 1:2500).

There was no lower brown silt (103) above the sluice stones as was seen in the pond, just an upper fill (108) of very dark grey or black humic silt. This silt was probably disturbed by the continuing overflow from the pond, and is probably just a continuation of the pond upper fill (104).

4. CONCLUSIONS

The pond would appear to be artificial. The remains of a probable sluice indicate that the pond was not a marl pot. Its use as a fishpond is possible especially given the location of the mansion house nearby. The marl pits to the north-west would appear to have cut off any water supply for this pond and therefore must post-date the pond.

If similar work should be undertaken again some hand digging of more sensitive areas should be anticipated; possibly an environmentalist should be consulted, with a view to sampling. Auguring, prior to excavation, could give profiles of the bottom shape and size of the pond, and assist in formulating a re-excavation strategy.

APPENDIX ONE: DETAILED RECORDS OF WATCHING BRIEF

Drawing

001 1:1000 Tape and magnetic compass overall plan

Context

101	Pond cut
102	Pond lining?
103	Pond lower silt/fill
104	Pond upper silt/fill
105	Channel cut
106	Channel lining?
107	Channel sluice structure
108	Channel fill
109	Dam?
110	Inlet for pond
111	Bypass channel for pond?

Photographic (mostly both black and white prints + colour slides)

201	View E	Dam and pond before excavation
202	View S	Possible sluice before excavation
203	View S	Possible sluice before excavation
204	View S	Sluice with machine
205	View NW	Sluice as excavated by machine
206	View E	Working, pond being excavated, south side
207	View NE	Working, excavation on west side from sluice
208	View NW	Sluice
209	View N	Sluice pond in background
210	View Various	General of pond at end of excavation on 27/10/98
211	View W	"Dam" and pond
212	View SE	Spoil tip from re-excavation.

APPENDIX TWO: CATALOGUE OF WATCHING BRIEF ARCHIVE

The project archive has been indexed and catalogued according to National Monument Record (NMR) categories and contains the following:

- A. Copy of final report.
- B. Site records, including context record sheets.
- C. Drawing catalogue and site drawings.
- D. Site photographs - catalogue, colour slide and B/W prints.

G. List of references, including primary and secondary sources.

M. Miscellaneous correspondence.

There is no material in categories E, F, H, I, J, K, L and N.

The archive is currently held by Archaeoleg **Cambria** Archaeology Field Operations, Llandeilo, Carmarthenshire, as project number PRN 36537.

BIBLIOGRAPHY

Trethowan M 1998 Pentre Ifan and Ty-Canol Woodland Archaeological
Assessment *PRN 36246* (November 1998)

Other Sources

Ordnance Survey 1st Edition 1:2500

Ordnance Survey 2nd Edition 1:2500

Tithe Map 1840 Nevern Parish

Pentre Ifan Pond

Watching Brief PRN36248

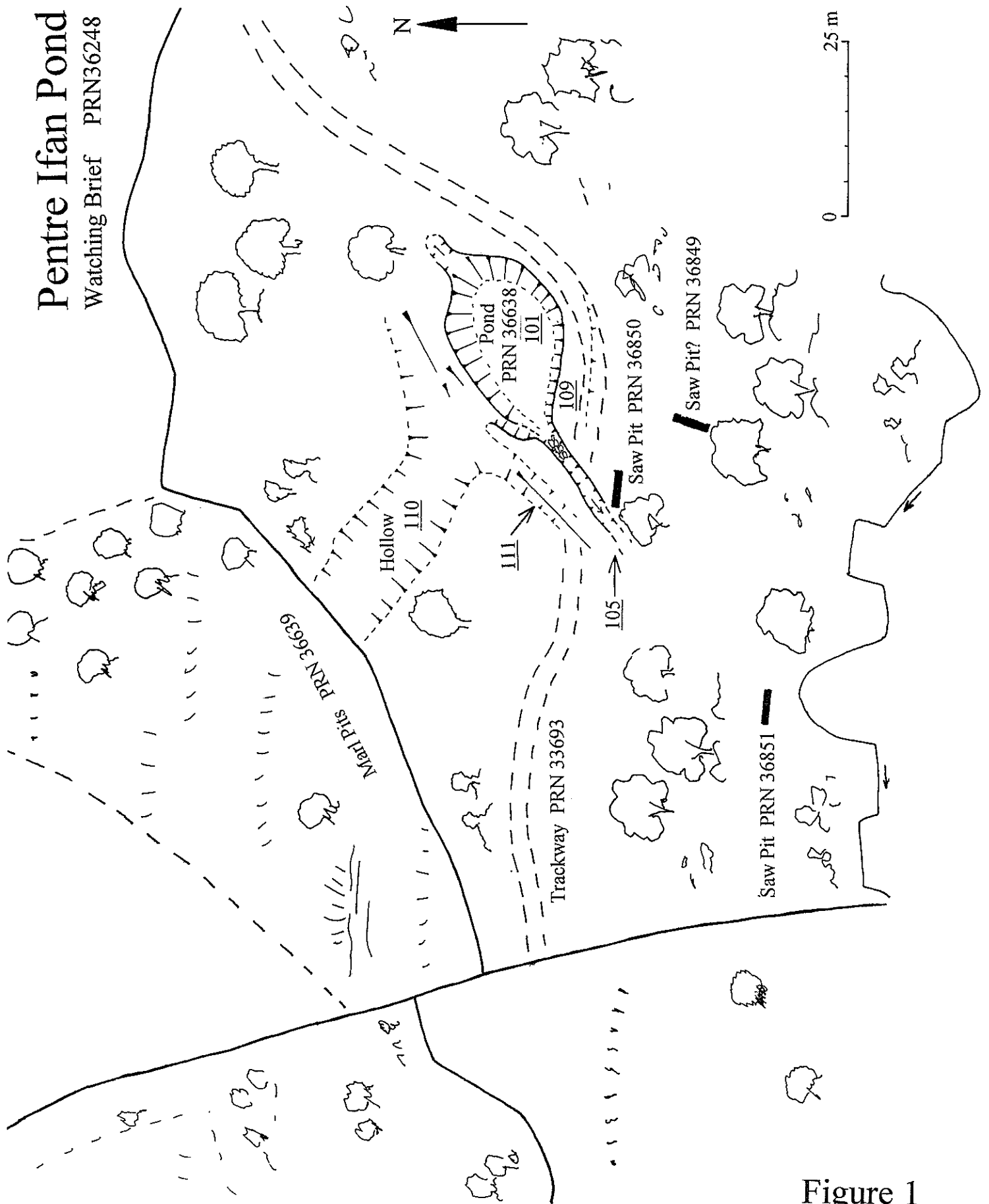


Figure 1

Photograph 1. Pentre Ifan Pond PRN 36638, view north-east



Photograph 2. Sluce stonework 107 in cut channel 105, view north-west

