

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Trannon Moor Survey and Excavation 2007

ARCHAEOLOGICAL FIELD SURVEY AND EXCAVATION



CPAT Report No 860

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with contributions by A Caseldine

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Report for Powys County Council


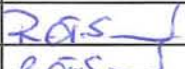

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CONTENTS

GENERAL INTRODUCTION

A TRANNON MOOR FIELD SURVEY 2006-7

- 1 Introduction
- 2 Location, topography and geology
- 3 Methodology
- 4 Results of the field survey
- 5 The archaeology and landscape history of the survey areas
- 6 Conclusions
- 7 Acknowledgements
- 8 References

B ESGAIR DRAENLLWYN STONE SETTING EXCAVATION

- 1 Nature of the site and background
- 2 Aims of the excavation
- 3 Excavation description
- 4 Discussion
- 5 Acknowledgements

C PALAEOENVIRONMENTAL STUDIES

- 1 The Palaeoenvironmental Potential of Trannon Moor
- 2 Assessment of Pollen Preservation in Peats from Trannon Moor

Appendix 1: Gazetteer of archaeological sites from the field survey, by PRN

Figure 1: Archaeological sites recorded within the eastern field survey area

Figure 2: Archaeological sites recorded in the western field survey area

Figure 3: Plan of the Esgair Draenllwyn excavation

GENERAL INTRODUCTION AND REFERENCES

Archaeological works were first undertaken on Trannon Moor by the Clwyd-Powys Archaeological Trust in 1992-3 when the construction of a wind farm was first proposed on that tract of upland (Owen 1993). Planning permission for the construction of the wind farm was granted in 1994 and an archaeological excavation and a watching brief were carried out before and during construction work (Silvester 1995; Hankinson 1996). When the wind farm opened in 1996, one of the arrangements made between Montgomeryshire District Council, the planning authority at the time, and the developers, National Wind Power, led to the allocation of an annual grant for environmental work within the area of the wind farm.

With local government reorganisation, planning responsibilities passed to Powys County Council, who took over the administration of the arrangements for environmental work. Archaeological investigations carried out under the scheme included a historic landscape study (Hankinson et al 1998), a detailed measured survey of a number of monuments (Jones and Owen 1999), and a programme of excavation designed to assess the nature, dating and state of preservation of certain sites within the wind farm area (Jones et al 2000). Preliminary palaeoenvironmental assessment was also undertaken and reported on in Jones *et al* 2000.

More recently, an additional area was surveyed on the north-eastern periphery of the wind farm, as a result of proposals for an extension to it (Hankinson and Silvester 2003). Also land to the south of the wind farm was examined as part of an upland area survey carried out under the Welsh Royal Commission's Uplands Initiative in 2005 (Hall and Sambrook 2006).

The programme of work reported on here was enabled by a grant from Powys County Council and comprises a survey of hitherto unexamined sections of Trannon Moor, adjoining the wind farm, and the evaluation by excavation of a stone setting at Esgair Draenllwyn. Further work assessing the potential of the local peat deposits has also been undertaken by the University of Wales, Lampeter.

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A TRANNON MOOR FIELD SURVEY 2006-7

1 Introduction

- 1.1 In March 2006, the Field Services Section of the Clwyd-Powys Archaeological Trust (henceforward termed CPAT) was offered a grant by Powys County Council to carry out an archaeological survey of hitherto unexamined sections of Trannon Moor, one of the southern uplands in what was the old county of Montgomeryshire, lying to the south of the Carno Valley. The systematic programme of fieldwork was intended to identify previously unrecognised archaeological sites and features in two areas which form a natural extension to the areas examined in previous surveys relating to the wind farm. In addition the funding covered the partial excavation of a stone setting that had previously been recognised on the moor, and a preliminary assessment of the palaeoenvironmental potential of the area. Both of these elements are reported in separate reports below.
- 1.2 This section of the report summarises the results of the survey, which was carried out in May 2006 and March 2007 and employed the formal transect methodology originated by CPAT in 1989. Data entry was carried out in parallel as the fieldwork progressed and continued after the cessation of fieldwork. This report was prepared in March 2007, following the completion of the second phase of survey and the excavation of the stone setting on Esgair Draenllwyn.

2 Location, topography and geology

- 2.1 The two areas surveyed border on those localities previously examined by field surveys carried out by CPAT. The larger, eastern, area covered a total area of 2.63km², and was centred at National Grid Reference (NGR) SN 932966. The area encompassed the higher reaches of the Afon Cledan valley, largely consisting of the enclosed ground immediately to the east of the wind farm, but also including the block of upland that edges the valley on its north-west and the enclosed ground to its south-east. The altitude of the area rises from approximately 290m OD in the base of the Cledan valley, up to a maximum of 490m OD on the summit of Bryn Amlwg.
- 2.2 The smaller, western, area, covering some 1.53km², is centred at NGR SN 901963, to the north-west of the wind farm. This area is located to the north of Trannon farm, and encompassed the area known as Bryn Du, which lies on the edge of the Trannon Moor plateau, where it overlooks the upper part of the Afon Cwm-calch valley. The elevation of the area varies little, generally between 430m OD near Trannon farm and 480m OD on Bryn Du.
- 2.3 The landscape of the eastern area is largely dominated by the old enclosures along Cwm Cledan, some of which have seen improvement in more recent years, but which retain small areas of woodland, giving a mixed appearance. The field boundaries are now represented by post and wire fences, but were formerly earth and stone banks. On the higher ground, beyond the upper limit of the old enclosures, the former *ffridd* land has been enclosed into larger blocks by post and wire fences. The western area is more homogenous in character, comprising relatively recently enclosed upland, divided into blocks by post and wire fences.
- 2.4 Land-use in the survey areas can be divided broadly between improved and unimproved upland pasture, with smaller amounts of lower-level enclosed farmland interspersed with deciduous woodland and two small conifer plantations. With the exception of the plantations, both areas are exclusively used for stock grazing. The

vegetation cover is predominantly of acid grassland with rush infestation, with some bracken on the lower slopes and small areas of remnant heath - predominantly heather and bilberry - on the higher ground.

- 2.5 The underlying geology is mainly composed of a mixture of mudstones, siltstones, grits and greywackes belonging to both the Sheinwoodian Age of the Wenlock Series rocks and the Telychian Age of Llandovery Series rocks. These represent distinct phases in deposition during the Silurian period (1994 British Geological Survey map; also Smith and George 1961).
- 2.6 The soils of the locality display a varied range of types, partially related to their geographical location. The upper reaches of Cwm Cledan are characterised by fine loamy and silty soils of the Brickfield 1 Soil Association and loamy upland soils with a peaty surface horizon belonging to the Wilcocks 2 Soil Association. On the slopes leading up to higher ground, both loamy upland soils with a peaty surface and a bleached subsurface horizon belonging to the Hafren Soil Association, and fine loamy or silty soils of the Manod Soil Association, are found. The highest portions of the survey areas are occupied by thick peat soils of the Crowdy 2 Soil Association (all data derived from the 1983 Soil Survey of England and Wales map and legend).

3 Methodology

- 3.1 The initial phase of the survey involved the examination of the regional Historic Environment Record (HER), held by CPAT. All sites within the areas intended for survey were then abstracted and used to compile the initial project database. Prior to the commencement of fieldwork, aerial photographs and the available 19th-century maps for the area were also examined, with any additional sites that were identified from these sources being appended to the project database. The search area for primary and secondary sources included part of a ridge which heads northwards from the north-western edge of Trannon moor, but, although time was not available to visit the sites revealed in this area, they have been retained in the database for future reference. Most of the known sites and features were subsequently checked in the field to determine their nature, authenticity and state of preservation.
- 3.2 Much of the field survey programme was carried out in May 2006. This was undertaken by the systematic transect walking of the survey area at intervals of 30m. The methodology employed for enclosed fields varied slightly while still holding to the principles of 30m transect coverage, with the lines taken depending on a number of factors, including the position of gates, streams, and field shapes.
- 3.3 Sites that were encountered during the field survey were recorded on standard CPAT site-visit forms, the data including: an accurate location using a hand-held global positioning system (GPS) receiver; a written description of the character, function, condition, vulnerability and dating of the monument; and a sketch survey, where appropriate. Digital photographs were taken of selected sites and landscapes, where conditions were good and the site was readily discernible. While discussing access arrangements, the opportunity was also taken to gather anecdotal evidence from the local landowners regarding the area generally and a small number of the sites that were known to them.
- 3.4 A brief analysis of the results of the survey is attempted by site type/function in Section 4, and this, together with more detailed site-specific information, is then used to assess the landscape history and archaeology of the survey area in Section 5. The main details of the sites recorded during the survey are presented in Appendix 1, in order of their

Primary Record Number (PRN) in the regional HER. Fuller information regarding each site is contained within the project database which will, it is hoped, be incorporated in the HER on completion of the project.

4 Results of the field survey (Figs 1 and 2)

- 4.1 The total area surveyed during the project amounted to almost 4.2km², within which only fourteen sites were recorded in the HER. On completion of the survey programme, the number of archaeological features recorded in the survey area had risen to seventy-five sites, which represents a site density of eighteen sites per square kilometre. Four sites were recorded from primary and secondary sources beyond the boundary of the western survey area, but were not examined on the ground. The archaeological sites are depicted on Figs 1 and 2, where they are identified by their PRN.
- 4.2 A breakdown of the archaeological resource by broad classes is given in the following table (Table 1). The numbers of sites belonging to particular site types and periods are entered in Tables 2 and 3, respectively. Some amalgamation of equivalent or closely related site types has carried out to give a useful overview. Appendix 1 provides a detailed site description, should this be required.

Table 1 Numbers of sites attributed to broad functional classes

Agriculture and Subsistence	49
Civil	1
Domestic	11
Religious, ritual and funerary	6
Transport	9
Unassigned	3

Table 2 Numbers of sites belonging to different site types

Barn	6
Boundary stone	1
Bridge	3
Building	2
Clearance cairn	2
Enclosure (Pastoral)	2
Farmstead (Medieval)	1
Farmstead (Post-medieval)	4
Field boundary/system etc	1
Findspot (Neolithic axe)	1
Fold	6
Dwelling (Post-medieval)	5
Hut (Medieval/Post-medieval)	1
Hut platform (Prehistoric)	1
Leat	1
Long hut	1
Peat cutting features	12
Platform	1
Quarry	10

Round barrow or related site	6
Sheep dip	1
Shelter	1
Store	1
Trackway/road	9

Table 3 Numbers of sites attributed to different periods

Prehistoric (undifferentiated)	1
Neolithic	1
Bronze Age	6
Roman	1
Medieval	6
Post-medieval	59
19 th century	1
20 th century	2
Unknown	2



Plate 1 The ruinous Lletty-yr-eos Farmstead (PRN 83275) Photo CPAT 2163-017

- 4.3 As might be expected given the topography and nature of the locality, buildings and features of post-medieval date represent some three-quarters (75%) of the archaeological resource. Many of these sites were related to the pastoral use of the area and at least 20% can be identified as structures specifically designed to be used in stock rearing.
- 4.4 Although there is an obvious dominance of post-medieval settlement, dwellings of the earlier, medieval, period are well-represented in comparison to many similar localities,

forming 5% of the total. In one case, a pair of cruck blades were found in the ruinous and former farmstead known as Nant Hir (see plate 2) that as a dwelling would otherwise have been ascribed a post-medieval date. Recent research on cruck-framed buildings in Wales suggests that the farm could have built around the beginning of the 16th century.



Plate 2 The collapsed cruck-frame at Nant-hir (PRN 8825) Photo CPAT 2163-008



Plate 3 Probable hut platform (PRN 83262), above Nant-hir Photo CPAT 2163-012

- 4.5 One example (PRN 83262), which appeared to represent considerably earlier settlement in the locality, was recorded in a small valley above Nant-hir. It was thought to be a hut platform of prehistoric date, although further work would probably be needed to confirm this attribution. Nevertheless, any evidence of early settlement on Trannon Moor is potentially significant.
- 4.6 Evidence of prehistoric funerary and ritual activity was also encountered in the survey area, with 8% of the sites falling within this broad site category. New features recorded include two cists in the western survey area and a possible cairn in the upper reaches of Cwm Cledan.



Plate 4 The cist at the centre of a low cairn (PRN 83286) Photo CPAT 2163-024

- 4.7 Trackways and other access routes were one of the main site types (11% of the total sites). One of these is known as Sarn Ddu (PRN 83244), and has been tentatively identified as a possible Roman road, although an interpretation as an access route for peat cuttings is equally plausible. In addition to peat cutting access, other tracks probably functioned as links between the settlements and farms of Cwm Cledan (see plate 5).
- 4.8 The presence of peat cutting for domestic fuel has been suggested above, and these features, including the cuttings themselves and peat drying stands, represent 15% of the total number of sites recorded. The only other widely represented sites were stone quarries, which probably provided material for the construction of field divisions or perhaps for one or more of the dwellings in the locality. These represent 13% of the total number of sites.

5 The archaeology and landscape history of the survey areas

- 5.1 The earliest known evidence for human activity in the locality concerns the discovery near Cwm Cledan, in the latter part of the 19th century, of a stone axe (PRN 1399) belonging to the Neolithic period. No Neolithic settlement is yet known in the area, although Trannon Moor and its environs were evidently of significant importance in the immediately succeeding period.



Plate 5 Cwm Cledan trackway (PRN 83281), passing Ty-bach Photo CPAT 2163-002

- 5.2 Bronze Age activity is widespread on Trannon, and is represented by a large number of funerary and ritual monuments, some of which, such as the large cairn known as 'Twr Gwyn Mawr' have been known since at least the mid-19th century. In more recent years, the nature of many of these sites has been elucidated and their authenticity confirmed by CPAT who have carried out a series of trial excavations at sites on the moor (Jones 2000). Further concentrations of this type of activity have also been revealed by a field survey carried out in advance of a proposed extension to the wind farm (Hankinson and Silvester 2003).
- 5.3 While it is evident that the edges of the moor provided a focal point for funerary and ritual activity in the Bronze Age, probably in relation to the communities which inhabited the surrounding valleys, there has been a lack of evidence regarding this settlement. The discovery of a possible circular hut platform (PRN 83262), above Nant-hir, is therefore of great potential significance.
- 5.4 No evidence of Iron Age activity has been recognised in the locality.
- 5.5 The only potential evidence of Roman activity in the areas surveyed concerns the trackway, Sarn Ddu (PRN 83244), which has been considered as a possible Roman road. At present there is no evidence which confirms this attribution and it is equally likely that the track represents a later route used to gain access to the peat cuttings on Trannon moor.

- 5.6 No evidence of early medieval activity has been recognised in the locality.
- 5.7 Evidence for dwellings of medieval date has been found in Cwm Cledan and its environs during the survey, suggesting that the settlement pattern was much the same as we find there today. Dwellings were represented by at least one earthwork platform (PRN 83279), on which a timber house would have been erected. A building of the same period, though of drystone construction, was encountered as a long hut (PRN 83251). There is often some possibility for doubt in the dating of ruinous farmsteads and dwellings, when significant features have been lost or obscured by collapse or dismantling, and it is quite possible that some of the dwellings ascribed a post-medieval date had origins in the medieval period. One site, Nant-hir (PRN 8825), was recorded, in which a pair of cruck blades were found. There is no doubt that the site would have been given a post-medieval date if the cruck had not survived. Recent research on cruck-framed buildings in Wales would suggest that the farm was built around the beginning of the 16th century.
- 5.8 It seems probable that settlement in Cwm Cledan increased in the post-medieval period, as many abandoned farms and dwellings of this date were revealed by the survey. Activity was generally related to a pastoral economy, which was based in the dwellings and enclosed fields in the valley. The higher ground, beyond the boundaries of the enclosed land, was almost certainly used as additional grazing in the summer months, as well as providing a source of fuel, in the form of peat, which could be used for domestic heating. The only exception to this generality is the dwelling of Trannon itself, which lies on the plateau and is still inhabited.



Plate 6 A former dwelling (PRN 83255) and barn (PRN 83254) in Cwm Cledan Photo CPAT 2163-005

- 5.9 Many features which are ancillary to the settlement were recorded during the survey, including trackways used both as links between dwellings and as access routes to the peat cuttings on the moor. Evidence of the collection and transport of peat is provided

in the description of the discovery of the Neolithic axe (see para 5.1), where it is noted that the finder came across the axe while "carting peat down from Trannon turbary" (Jerman 1936, 121). Three bridges associated with trackways were also recorded, as well as a number of quarries that probably provided stone for field boundaries, or even for use in constructing dwellings.

- 5.10 The modern landscape of the study area is not significantly different from that of the post-medieval period, except that some ground, which was probably common land, has now been subdivided between different landowners. Land improvement has also taken place in recent years, leading to significant changes in vegetation cover, and some evidence of clearance and drainage features related to this improvement was observed. Additionally, there has been a significant amalgamation of land holdings, which has led to many of the dwellings becoming detached from the land which surrounds them. Other dwellings have become abandoned as part of the same process.
- 5.11 The boundaries that enclose the modern fields have not been recorded in any detail, nor have they been attributed specific PRNs. Most recent are the typical and ubiquitous post and wire fences, although these occasionally surmount earlier embankments on which a hedge was probably planted. Some stone boundary walls were also present.
- 5.12 In summary, it can be stated that the archaeological resource is widely distributed in the two survey areas, but with a greater concentration of sites in Cwm Cledan, as would be expected given the moorland nature of the other survey area. The evidence for both survey areas is predominantly pastoral and post-medieval in origin, representing a subsistence economy which also utilised peat from the higher ground as domestic fuel. It is perhaps more significant that there are a reasonable proportion of landscape elements belonging to both the Bronze Age and Medieval periods.

6 Conclusions

- 6.1 The survey has been successful in adding a significant number of new sites - sixty-five - to the regional Historic Environment Record, in comparison to the small number that were already known in the survey areas. This should enable a more balanced view to be taken of the archaeological resource of Trannon moor, particularly in view of the large amount of field survey which has been completed in the area since it was first examined by CPAT in 1992-3.
- 6.2 Although the archaeological resource is widely, and fairly evenly, distributed throughout the two survey areas, the vast majority of the resource (75% of the total) is of post-medieval origin. The activity is primarily related to pastoralism, and a much more accurate picture of the distribution of dwellings and farmsteads in Cwm Cledan has been obtained.
- 6.3 Significant evidence of medieval activity has been revealed, which is likely to have mirrored that of the post-medieval period, although probably on a smaller scale. Much of the evidence related to settlement, but this probably signifies that some ancillary sites which have been ascribed a post-medieval origin, such as trackways, were also in use during the medieval period.
- 6.4 Prehistoric funerary and ritual activity was present but formed a relatively minor component of the archaeology, although it was significant that a possible settlement site of the period was recorded. It has always seemed plausible that prehistoric settlement (particularly of the Bronze Age) would be present in the areas surrounding

Trannon Moor, but this is one of the first sites which provides direct evidence of the hypothesis.

- 6.5 Local transport links between settlements were represented by a number of trackways, and there were also longer-distance routes crossing the upland plateau. Some of these were probably related to the carrying of peat from the plateau, and documentary evidence of this activity was recorded.

7 Acknowledgements

- 7.1 CPAT wish to thank Powys County Council, and particularly Mr G Lee, their Shire Development Control Officer, for the grant that enabled this work to be undertaken. The writer would also like to thank his colleagues, Mr I Grant and Ms W Owen, for their assistance with the survey. Also the following for their assistance and co-operation: the staff of the Regional Historic Environment Record, CPAT; and the landowners Mr H Thomas, Sarn, Carno; Mr G Thomas, Bronhaul, Carno; and Mr J Anwyl, Maes-ymdrisiol, Staylittle, for their help and permission to carry out the survey.

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8.1 Published and Printed Sources

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Smith, B, and George, T N, 1961, *British Regional Geology - North Wales*, London: HMSO

8.2 Cartographic Sources

1833 Ordnance Surveyors drawing No 335H

1849 Tithe survey of Carno parish

1886/7 Ordnance Survey 1st edition 25 inch: 1 mile maps: Montgomeryshire 27.14; 34.2; 34.3; 34.4 and 34.7

1983 Soil Survey of England and Wales map and legend (Sheet 2 - Wales, at 1:250,000 scale)

1988 Ordnance Survey 1:25,000 pathfinder map (No 907)

1994 British Geological Survey map of Wales (Solid edition, at 1:250,000 scale)

B ESGAIR DRAENLLWYN STONE SETTING EXCAVATION

1 Nature of the site and background

- 1.1 A potentially significant group of stones known as the Esgair Draenllwyn stone setting and given Primary Record Number (PRN) 4875 in the Historic Environment Record, was identified during the initial survey of the Trannon wind farm area in 1992-3, prior to the commencement of construction work. It lies at NGR SN93039505, some 3.5km to the south-west of the village of Carno in the old county of Montgomeryshire, and is sited on the crest of a spur ridge which projects north-eastwards from the main plateau of Trannon moor, forming the south-eastern side of the Cwm Cledan valley.



Plate 7 Esgair Draenllwyn stone setting, prior to the excavation, from the west-south-west Photo CPAT 2163-022

- 1.2 The setting comprises a total of four upright or leaning stone slabs, three of which form an unevenly-spaced, north-west/south-east alignment, with a fourth lying to the south-west of the central stone. The overall area occupied by the setting measures approximately 14m north-west/south-east by 6m. A small 'cairn', approximately 1.5m in diameter, lies some 4m to the north-west of the north-west stone, but its nature and its relationship to the setting are unclear. Since its discovery, the setting has been designated as a scheduled ancient monument (SAM Mg 297 (POW)) by Cadw, from whom scheduled monument consent was sought for the excavation. Permission was granted by Cadw for the work, which is described below, subject to appropriate conditions.

2 Aims of the excavation

- 2.1 The nature of the setting, particularly its function and dating, are unclear from the visible evidence. It was therefore intended to examine the site, firstly to determine

whether there are any significant deposits around the stones, secondly to establish whether any stones had disappeared leaving only sub-surface pits and thirdly to examine the 'cairn' to discover whether it might be an integral part of the monument. The methods prescribed by Cadw included a provision that 50% of any feature revealed could be excavated, should the need arise.

3 Excavation description

- 3.1 The following statement is an interim description of the excavation. This may be modified or adjusted in the future in any final report prepared for publication as part of a broader statement on the archaeological works undertaken on Trannon Moor in recent years. Numbers in brackets in the text that follows are context numbers given to individual layers, deposits and features during the excavation. These numbers may appear on accompanying plans and sections.
- 3.2 The excavation was undertaken entirely by hand within an L-shaped area of approximately 10m (north-west/south-east) by 7m around the main part of the stone setting and the 'cairn'. In this area, about 0.15m of turf and topsoil (1) were removed down to the level of any sub-surface features, or the natural subsoil, whichever was encountered first. The area was then cleaned to reveal the archaeological features, such as stone-holes for the existing stones, and drawn, prior to investigating these features. Any features identified were recorded on individual record forms and were drawn and photographed as appropriate, and the excavation was located using total station surveying to nearby boundaries identified on modern Ordnance Survey maps. The site was carefully reinstated on completion of the excavations.
- 3.3 The basal part of the natural subsoil (3) consisted of orange or occasionally yellowish gritty silt, whose thickness was not determined. This material was iron-rich, but only appeared where features had been cut into the layer, or where the overlying pinkish-grey gleyed clay silt (2), generally no more than 50mm thick, had been removed or disturbed. The combination of layers 2 and 3 represents the natural subsoil for the locality of the stone setting.
- 3.4 In the area between the central, south-west, and north-west stones, an oval area of pinkish-grey sandstone (16) was revealed beneath the turf and topsoil. This deposit overlay layer 2, and the stones were set in a matrix of black, powdery, peat mixed with orange-brown clay silt, the resultant layer having a thickness of up to 150mm. It seemed to be partially cut by a stone-hole (6) for one of the upright stones (see para 3.8), and was probably an artificial deposit which predated the setting.
- 3.5 A hollow in the surface of layer 16 was noted during the initial phase of site cleaning, and it was thought possible that this might be due to subsidence of an underlying feature. Accordingly, it was investigated by removing the stones forming layer 16, over an area of approximately 1.0m by 1.0m. This revealed the southern end of a probable pit (14), measuring 0.4m east-west and 0.3m deep, which extended northwards for at least 0.3m. The feature was sectioned, revealing a fill (15) of black sticky and blocky peat with occasional small pieces of sandstone. Three stones that seemed to be the remnants of packing were present in the fill, suggesting the pit once held a large upright stone.



Plate 1 Possible former stone-hole (14) Photo CPAT 2327-020

- 3.6 Cleaning around the area of the 'cairn' (4) demonstrated that it comprised a group of local sandstone boulders, partially covered by undisturbed natural subsoil, and projecting approximately 0.2m above the level of layer 2. The boulders were individually up to 0.6m long, and covered an area of 1.8m north to south by 1.4m.



Plate 2 Overall view of the excavation showing 'cairn' (4) in the foreground Photo CPAT 2327-004

- 3.7 Of the four slabs of local pinkish-grey sandstone which combine to make up the stone setting, three were within the area defined for the excavation. Once the topsoil had been removed, the setting of each stone was investigated to establish the methods employed in its erection.
- 3.8 The most north-westerly of the three stones (5) measured 0.85m north-west/south-east by 0.15m thick and would have been 0.85m high, if vertical. The stone was actually leaning to the south-west at approximately 30 degrees from vertical, and had been propped up by about six smaller edge-set stones on its south-west side. The smaller stones are unlikely to be contemporary with the erection of the stone and it seems reasonable to assume that they were installed at a later date to stabilise the stone and prevent it becoming recumbent. The hole (6), in which the stone was set, measured approximately 0.9m north-west/south-east by perhaps 0.4m, but was only cut into the subsoil to a depth of 100mm, giving a total depth below the turf-line of 0.25m. It also appeared to have partially cut layer 16, suggesting that the positioning of this stone belonged to a later period than the probable pit (14). With the exception of the edge-set stones on the south-west, the packing material (7) in the stone hole was mostly black, fibrous, peat with a little disturbed subsoil.
- 3.9 The eastern stone (8) measured 0.55m north-east/south-west by 0.20m and was 0.75m in height. Although the stone was vertical, the stone hole (9) was still only set into the subsoil to a depth of 100mm, giving a total depth below the turf-line of 0.25m, and was oval, measuring 0.60m north-east/south-west by 0.35m in plan. There was some suggestion that the stone had been placed into the hole from the south-east. The fill (10) of the hole comprised fairly loose dark grey-brown gritty and peaty silt with occasional lumps of orange silt, with a few small stones (<100mm) against the edge of the hole.



Plate 3 The setting of stone (8) Photo CPAT 2327-016

- 3.10 The remaining, south-western, stone (11) measured 0.62m east-north-east/west-south-west by 0.10m and would have been 0.75m high, if vertical. The stone actually leant

excessively to the south-south-east at an angle of 45 degrees to the vertical and was evidently on the point of collapse owing to erosion of the topsoil on its south-south-east side. The very shallow (<100mm deep) stone hole (12), in which the stone was placed, was only really visible on the north-north-west side of the stone owing to its excessive lean in the opposite direction, but appeared to be oval in shape with dimensions of 0.7m east-north-east/west-south-west by 0.3m. The fill (13) of the hole was brownish-black peaty silt, which did not form a compact setting for the stone, and had probably contributed to its instability. Prior to the re-turfing of the monument, a small amount of drystone packing was placed underneath the south-south-east side of the stone to prevent any further collapse, and was covered by the replaced turf to hide it from view.

4 Discussion

- 4.1 The excavation revealed that all the stones were set within very shallow holes, which were not much larger than the base of each stone and no more than 0.1m deep, or 0.25m below the surface of the turf. The result of the shallow settings was that each stone was fairly loose and, indeed, two were displaying marked leans from the vertical. In the case of the north-western stone, it had been propped up by smaller stones in the past, and a similar response was used by the excavation team to prevent the south-western stone becoming recumbent in the near future.
- 4.2 A spread of stone (16) was revealed between the stones, and a hollow in the spread was investigated, revealing what seemed be a stone-hole into which another stone had once been set. The relationship of the stone layer with the setting of the north-western stone (5) suggested that the stone-hole represented an earlier phase of activity on the site than the setting represented by stones 5, 8 and 11.



Plate 4 The setting of stone (5), showing its relationship with layer 16 (visible in the foreground and on the left hand side of the photograph) Photo CPAT 2327-018

- 4.3 The 'cairn' (4) mentioned by earlier sources was investigated, but it appeared to be an entirely natural feature, consisting of local sandstone partially covered by undisturbed subsoil. It is therefore unlikely to be connected with the stone setting.
- 4.4 None of the stones which comprise the setting seem to be sufficiently firmly placed to suggest a prehistoric origin, it being unlikely that they could have remained upright for such an extended period, given the shallowness of the holes in which they were erected. Evidence of a possible earlier setting was, however, signalled by the likely stone-hole (14), found beneath layer 16.
- 4.5 Unfortunately, no dating evidence was found during the excavation and the origin of the setting is therefore still somewhat obscure. The most likely possibility seems to be that the visible stones represent a reconstruction, perhaps in the 19th century, of an earlier, as yet undated, stone setting.

5 Acknowledgements

- 5.1 CPAT wish to thank Powys County Council, and particularly Mr G Lee, their Shire Development Control Officer, for the grant that enabled this work to be undertaken. The writer would also like to thank his colleagues, Mr I Grant and Ms W Owen, for their assistance with the excavation and the landowner, Mr H Thomas, Sarn, Carno, for permission to carry out the excavation.

C PALAEOENVIRONMENTAL STUDIES

1 The Palaeoenvironmental Potential of Trannon Moor

by Astrid E. Caseldine, Department of Archaeology and Anthropology, University of Wales, Lampeter

- 1.1 The peat deposits on Trannon Moor offer considerable potential for palaeoenvironmental studies. Peats provide an archive of environmental data which can be used to reconstruct former vegetation and landscape changes brought about by both natural processes and anthropogenic activity. There are abundant archaeological remains in the area indicating human activity in the past, notably cairns which are possible Bronze Age in date, but there is also evidence for later activity including a probable Roman road and buildings which are probably post-medieval. The absence of monuments earlier than the Bronze Age does not preclude human activity prior to this in the area and this might be discernible in the palaeoenvironmental record. Environmental context and landscape change is one of the key themes recognised in *A Research Framework for the Archaeology of Wales* (forthcoming) with the landscape setting of Neolithic and Bronze Age funerary and ritual monuments identified as one of the main areas requiring investigation. The monuments and peat deposits on Trannon Moor provide an ideal opportunity for such an investigation.
- 1.2 A preliminary investigation by Walker (2000) identified several areas of high potential as well as several other areas which might also offer environmental potential. Of note is the depth of deposits recorded in two areas, area 1 approximately 300 m from Twr Gwyn Mawr cairn and within 500m from other monuments in the prehistoric monument complex and area 2 around 1km from the complex and adjacent to the Roman road, where coring indicated peat deposits of 3.5m or deeper. Potentially these sites offer the opportunity to obtain a long palaeoenvironmental record. Although the depth of peat deposits is shallower in the third area recognised by Walker as being of particular potential, this area stands out as an area of high potential because of its close proximity to the main complex of archaeological monuments. Samples were taken from this area in order to carry out a rapid assessment of the state of preservation of pollen in the peats (Caseldine and Jones 2007). The results demonstrate that pollen preservation is good and pollen concentrations are high, confirming the high potential of the peats for palaeoenvironmental reconstruction.
- 1.3 Previous studies in other parts of upland Wales have demonstrated that peat initiation was not synchronous, not even within the same area (e.g. Smith and Cloutman 1988). Hence it is probable that the deeper deposits began forming at an earlier date than the shallower deposits. Analysis of the peats together with radiocarbon dates would determine the environmental conditions at the time of peat formation, when this occurred and how this related to human activity in the area, as well as the later record of environmental change in the area.

Recommendations

- 1.4 It is recommended that a detailed investigation of the peats on Trannon Moor is undertaken. This could be carried out in stages, depending on the level of funding available.
 - i) Further coring needs to be carried out in the two areas (1 and 2) of deeper peats to determine where the deepest sequence occurs. A decision should then be taken (involving both palaeoenvironmentalists and archaeologists) as to which of the two areas should be sampled for pollen analysis and a pollen core recovered.

Radiocarbon dates should be obtained for the top and bottom of the core and a skeleton pollen diagram produced. This should demonstrate the timeframe for environmental change available for the area.

ii) Because of the close proximity of area 3 to the main group of monuments it is recommended that a pollen core is also taken from this area. Again radiocarbon dates should be obtained for the top and bottom of the core and a skeleton pollen diagram produced. This should enable this record to be compared with the longer sequence from either area 1 or 2.

iii) Detailed analysis of both cores should be undertaken with additional radiocarbon dates to enable a detailed reconstruction of the environmental history of the area.

iv) Depending on the results obtained other sites might be selected, possibly shallower peat sites, where investigation might provide information relating to a specific monument.

1.5 References

Caseldine, A.E. and Jones, S. 2007 *Assessment of Pollen Preservation in Peats from Trannon Moor*. Report prepared for Clwyd-Powys Archaeological Trust.

Smith, A.G. and Cloutman, E.W. 1988 Reconstruction of Holocene vegetation history in three dimensions at Waun-Fignen-Felen, an upland site in South Wales. *Philosophical Transactions of the Royal Society of London* B322, 159-219.

Walker, M.J.C. 2000 *Trannon Moor (Carno Windfarm), Powys: Report on the Palaeoenvironmental Potential of the Landscape in the Area of the Carno Windfarm*. Unpublished report prepared for Clwyd-Powys Archaeological Trust.

2 Assessment of Pollen Preservation in Peats from Trannon Moor by Astrid E. Caseldine and Sarah Jones, Department of Archaeology and Anthropology, University of Wales, Lampeter

- 2.1 Two peat samples were taken with the primary aim of carrying out a quick assessment of the state of pollen preservation in the peats on Trannon Moor. The samples were taken with a gouge auger which has a one-metre open chamber and is frequently used for stratigraphic survey work. Because the chamber is open there is a risk of contamination and therefore this type of auger is not usually used for detailed pollen work. However, by careful sampling it is possible to recover samples from the centre of the core which are at least suitable to assess the quality of the pollen present particularly where, as at Trannon Moor, the peat deposits are quite cohesive.
- 2.2 The samples were taken from an area previously identified as an area of high palaeoenvironmental potential (Walker 2000). The first core (TM1) was taken from the ground surface approximately 70m west-north-west of Twr Gwyn Mawr cairn (at c SN 917329594), whilst the second core (TM2) was taken through peat deposits at the base of an old peat cut approximately 100m to the north-west of the cairn (at c SN 91769603). The visible peat section at the second site was 0.80m, hence the total peat

depth at the second site was 1.80m. The upper core from TM1 and the bottom core from TM2 therefore together broadly cover the whole sequence available.

Methods

- 2.3 Three samples were taken from TM1 and five samples were taken from TM2. The samples were prepared using a shortened version of the standard pollen preparation procedure (Moore *et al* 1991). This included digestion in sodium hydroxide, sieving to remove coarser material and micro-sieving to remove very fine particles. An exotic, *Lycopodium* spores, was added as a guide to concentrations. The samples were mounted in glycerine jelly. The samples were scanned for pollen and a small count (25 pollen grains) was undertaken. The results are presented in Table 1.

Results and discussion

- 2.4 Pollen preservation was good in all the samples and pollen concentrations were relatively high in all the samples. The pollen represented includes species such as *Betula* (birch), *Quercus* (oak), *Corylus* (hazel), *Calluna* (heather), Poaceae (grasses) and several other herbs. Although the pollen counts are too low to be reliable in terms of the proportions of the various taxa, the results do confirm the impression from scanning the slides that the pollen is plentiful in the peats. The lowest concentration recorded is at 48cms from TM1 where 25 pollen grains equalled 24 *Lycopodium* spores, whilst the highest concentrations were found in the lowest two levels, 168cms and 178cms, from TM2. The counts are also too low to draw any conclusions about vegetational change in the area; for this a full analysis would be necessary. However, it is worth noting the presence of anthropogenic indicator species such as *Plantago* (plantain), *Potentilla* (tormentil) and *Rumex* (docks) and charcoal, the latter indicating fire activity in the area. *Ulmus* (elm) is present in the lowest two levels from TM2 but the significance of this requires detailed investigation, including radiocarbon dating of the peats.

Conclusions

- 2.5 A rapid assessment of the peats from Trannon Moor has demonstrated that pollen is well preserved and present in high concentrations, suggesting that the peats have high potential for providing a detailed record of environmental change and landscape development in the area.

References

Moore, P.D., Webb, J.A. and Collinson, M.E. 1991 *Pollen Analysis*. Oxford, Blackwell Scientific Publications.

Walker, M.J.C. 2000 *Trannon Moor (Carno Windfarm), Powys: Report on the Palaeoenvironmental Potential of the Landscape in the Area of the Carno Windfarm*. Unpublished report prepared for Clwyd-Powys Archaeological Trust.

Table 1 Pollen from Trannon Moor

Core Depth	TM 1 24cm	TM 1 48cm	TM 1 72cm	TM 2 96cm	TM 2 120cm	TM 2 144cm	TM 2 168cm	TM 2 178cm
Trees								
<i>Betula</i>	3	1	1	4	2	-	1	1
<i>Ulmus</i>	-	-	-	-	-	-	1	1
<i>Quercus</i>	1	5	2	1	1	3	4	-
<i>Alnus</i>	1	5	-	3	2	1	3	3
Total Trees	5	11	3	8	5	4	9	5
Shrubs								
<i>Corylus</i>	-	8	-	-	7	4	4	5
<i>Hedera</i>	-	-	1	-	-	-	-	-
Total Shrubs	0	8	1	0	7	4	4	5
Herbs								
Poaceae	1	4	6	2	-	1	5	8
Cyperaceae	1	-	-	8	3	1	-	-
<i>Calluna</i>	16	1	13	6	10	12	5	6
Lactuceae	1	-	-	-	-	-	2	-
<i>Filipendula</i>	-	-	1	-	-	-	-	-
<i>Plantago</i>	1	1	1	1	-	2	-	-
<i>Potentilla</i> type	-	-	-	-	-	-	-	1
<i>Rumex</i> type	-	-	-	-	-	1	-	-
Total Herbs	20	6	21	17	13	17	12	15
Total Land Pollen	25	25	25	25	25	25	25	25
Spores								
<i>Pteridium</i>	-	-	-	-	-	1	-	-
<i>Sphagnum</i>	1	5	-	-	2	2	4	1
Total Spores	1	5	0	0	2	3	4	1
<i>Lycopodium</i> (exotic)	7	24	9	8	11	9	3	3
Charcoal	3	5	4	2	1	2	-	4

Appendix 1: Sites on Trannon Moor from the Field Survey

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
1372	SN89939807	Mynydd Esgair Enclosure	Field system ?	Medieval ?
Banked enclosure. 55m by 30m. Prob small field. On SE facing slope. NW side bank 4m-5m wide 1m high acting as hood. NE and SW sides minimal. SE side formed by positive lynchet 0.6m high. Similar fields to E.				
1373	SN89849913	Mynydd Esgair Enclosure	Enclosure ?	Unknown
Circular bank c8m diameter with possible opening to east. Stone protruding through the turf. Fairly level site on hillside close to old track. Possible cairn or hut?				
NB. The grid reference given on the OS card (SN89849813 is incorrect: it should be SN89849913).				
1399	SN94439657	Warren House Junction Find	Findspot	Neolithic
Stone axe found in 1890, measuring 18cm long by 6.9cm wide and 4cm thick, and weighing one and a half pounds. Composed of non local stone, with a pointed oval section, although chipped. Location unknown.				
1411	SN93389720	Ffridd Wen Cropmark II	Ring ditch	Bronze Age
Circular cropmark some 20m dia (RAF, AP, 1947). Presumed natural and rejected by OS.				
1412	SN92989683	Nant Hir Cropmark I	Enclosure complex ?	Unknown
Two oval cropmarks, each some 17m by 12m (RAF, AP, 1947). Presumed natural and rejected by the OS.				
No evidence of a cropmark seen at this locality. Rough pasture and unsuitable for cropmarks. (CPAT 2006)				
1413	SN927967	Nant Hir Cropmark II	Round barrow cemetery	Bronze Age
Circular cropmarks (RAF, AP, 1948). Presumed natural and rejected by OS.				
1414	SN937965	Bryn Cropmark	Round barrow cemetery	Bronze Age
Circular cropmarks (RAF, AP, 1948). Presumed natural and rejected by OS.				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
8825	SN9265096876	Nant-hir farmstead	Farmstead	Medieval ?
House site (CPAT site visit, 1978). Unroofed but with walls standing and with associated garden and orchard still apparent (CPAT site visit, 1978).				
<p>Abandoned and ruined farmstead, comprising two E/W aligned buildings. The lower (E) is a barn of three or four compartments and seems to have been used in the mid 20th century from the sections of corrugated iron cladding which are present. It was probably timber-framed internally as there are sleeper walls forming the divisions. It measures 20m E/W by 5m, overall. The upper (W) building was the house and consists of a central two-roomed part with additions on its W, N and E sides. It has collapsed timber framing in the interior of the central portion, including the remains of a cruck-frame. It seems therefore that this was the site of a late medieval house which was perhaps rebuilt in the 18th century, with mortared stone walls, a slate roof and ceramic ridge tiles. The internal face of the E wall of the central portion has a cement repair with ED 1931 incised upon it. The dwelling measures 20m E/W by 5.5m and up to 4m high. Nant-hir is depicted on OS surveyors drawing (No 335H) of 1833, the Carno tithe map of 1849, and the first edition OS map (Monts 34.3) of 1887. (CPAT 2006)</p>				
8826	SN9290796020	Blaen y Cwm building	Barn ?	Post Medieval
Site of house or barn surviving only as stone foundation. No further detail.				
22095	SN8971799070	Mynydd Esgair Quarry (dis)	Quarry	Post Medieval
Quarry, captured from 1:25,000 map (OS, 1988)				
22096	SN8992199843	Pen-y-wern quarry	Quarry	Post Medieval
Quarry, captured from 1:25,000 map (OS, 1988)				
39903	SN90289681	Trannon Moor Trackways IV	Trackway	Post Medieval
Series of trackways visible on aerial photographs as hollow ways.				
<p>Complex of linked trackways, originating at Sarn Ddu (SN 89729693), from where the main route crosses the Bryn Du ridge (SN 89959678), then turns north-eastwards, passing SN 90409693. At their north-eastern end they mostly run along the edge of the wet, boggy ground and almost certainly served the peat cuttings (PRN 83288). The last section was seen leaving the survey area at SN 90729713. (CPAT 2006)</p>				
39904	SN9194096948	Trannon Moor Trackways V	Hollow way	Post Medieval
Series of trackways visible on aerial photographs as hollow ways.				
39907	SN9305095893	Trannon Moor Trackways VIII	Hollow way	Post Medieval
Series of trackways visible on aerial photographs as hollow ways.				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83241	SN8947798409	Ffordd Goch sheepfold	Sheep fold	Post Medieval ?
Sheepfold depicted on first edition OS 1:2,500 map (Montgomeryshire 27.14 of 1887).				
83242	SN8948198072	Ffordd Goch quarry	Quarry	Post Medieval ?
'Old quarry', therefore presumably redundant, depicted on first edition OS 1:2,500 map (Montgomeryshire 34.2 of 1887).				
83243	SN8910096640	Mynydd Penypistyll sheepfold	Sheep fold	Post Medieval ?
Sheepfold depicted on first edition OS 1:2,500 map (Montgomeryshire 34.2 of 1887).				
83244	SN8969296974	Sarn Ddu placename	Road ?	Roman ?
Placename 'Sarn Ddu' or 'Black road', depicted on first edition OS 1:2,500 map (Montgomeryshire 27.14 of 1887). Perhaps relates to a Roman road, or an access route of later date.				
83245	SN93519624	Parc y Sarn quarry I	Quarry	Post Medieval
Linear quarry cut into a rock outcrop at the crest of the slope. Measures some 60m N/S by 15m and 3m deep. Small amount of spoil on the lower side, creating a terraced interior. The stone was probably used to create field boundaries in the immediate locality, these are generally stone revetted earth banks. (CPAT 2006)				
83246	SN93139654	Cwm Cledan fold	Fold	Post Medieval ?
Remains of a sub-square drystone-built fold. Appended to the SSE side of a stone wall running along the floor of Cwm Cledan. The entrance was probably on the S side. The stones used are large river-worn rocks, and there are some stones in the interior but it is uncertain whether these are artificial in origin or not. Overall dimensions 14m NE/SW by 12m and 0.5m high. (CPAT 2006)				
83247	SN93099644	Ty-bach farmstead	Farmstead	Post Medieval
Ruinous farmstead on the valley floor downstream from Blaen-y-cwm. The buildings consist of a long range comprising four units, the central two of which were probably the house with an additional unit on either end. The whole range measures some 20m NE/SW by 5m and up to 1.5m high. Facing this range is a stone wall containing some structural elements, although what these represent is difficult to ascertain, perhaps the area was used for storage of materials. Detached to the N is a probable barn/byre, which is a rectangular stone building, some 12m NE/SW by 6m, with mortared walls. This is generally in poor condition, but some sections of wall survive to c.4m high, suggesting that it had two storeys. The site is named 'Cwm' on the OS surveyors drawing (No 335H) of 1833, but 'Ty-bach' on the subsequent Carno tithe map of 1849 and the first edition OS 1:2,500 map (Montgomeryshire 34.7) of 1887. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83248	SN93389606	Parc y Sarn quarry II	Quarry	Post Medieval
Small stone quarry on the side of the road, but just in the fields, near the wind farm substation. It was probably used to provide stone for the nearby boundary walls/revetments. Measures 12m by 5m and 1.5m deep. (CPAT 2006)				
83249	SN92989589	Blaen-y-cwm cairns	Clearance cairn	Post Medieval ?
Two fairly irregular heaps of partially grass-covered stone, each roughly 7m in diameter and lying 9m apart, situated on a slight spur overlooking Blaen-y-cwm. They probably represent clearance in this improved field but may be the remains of a pair of burial cairns. The nature of this site is only likely to be determined by excavation. (CPAT 2006)				
83250	SN92909605	Blaen-y-cwm barn	Barn	Post Medieval
Stone-built barn at Blaen-y-cwm, with a corrugated iron roof. Various entrances, including one into the loft space for hay. The main part of the building measures 12m E/W by 6m and c.4m high, with a lean-to on the S, some 8m E/W by 4m. On the N side is an area of former pens on a stone-built terrace, approximately 12m E/W by 5m. The timber-framing of the interior is of re-used beams, probably from a nearby house. Old diesel generator in the interior which was used for electricity supply at the house. There used to be a mechanical horse gin alongside the barn some 20 years ago, but this has subsequently disappeared. The site is depicted on the OS surveyors drawing (No 335H) of 1833. (CPAT 2006)				
83251	SN92629614	Pantle long hut	Long hut	Medieval ?
Rectangular long hut aligned E/W, sited on the gentle E-facing slope of an interfluvial spur. The site seems to be incorporated into an old earth-banked field boundary. Faced walling is visible in places and the entrance is probably on the S side. There is also a hint of a step down in the interior, but this coincides with a modern fence which crosses the site, so its authenticity is uncertain. Overall dimensions 10.0m E/W by 4.5m and up to 0.5m high. (CPAT 2006)				
83252	SN92639631	Pantle farmstead	Farmstead	Post Medieval
Semi-abandoned farmstead comprising a house, barn/byre and a third former building. The house is of mortared stone construction with a slate roof and measures 11m E/W by 5m. It has a derelict addition, 4m long, on its W (upslope) end. To the NE of the house is a barn, still in use as a shearing shed and measuring 13m N/S by 7m, with a corrugated iron roof, mortared stone walls and a corrugated iron lean-to on its N, W and S sides. The third building lay to the SSW of the house and survives only as a few traces of walling, 0.3m high. It seems to have been rectangular and measured 12m NE/SW by 5m, the terracing into the slope at the SW end suggests a possible late medieval or early post-medieval date for the building. The house and third building are depicted on the 1849 Carno tithe map, but by the time of the first edition OS 1:2,500 map (Montgomeryshire 34.7 of 1887), it is the house and barn which are depicted, perhaps stone had been taken to build the barn from the third building. The farm is recorded as 'Pant-y-lle' on the OS surveyors drawing (No 335H) of 1833. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83253	SN92909637	Pantle field barn	Barn	Post Medieval
<p>Ruinous remains of a field barn, measuring 10m E/W by 5m and 1.3m high, set into the slope of a redundant field bank. The W wall is the best preserved, where it is revetted into the bank. The N wall terminates after c.4m, but probably continued to the E end at c.10m. The E end has hints of walling, and there may also be an internal division. In contrast, the S wall is very faint, perhaps it was a sleeper wall for timber-framing. The site is named as a barn on the OS surveyors drawing (No 335H) of 1833, but not subsequently depicted on cartographic sources. (CPAT 2006)</p>				
83254	SN92999658	Cwm Cledan barn	Barn	Post Medieval
<p>The ruinous remains of a stone-built barn, measuring 6.5m NW/SE by 5m. The SW wall is the best-preserved, to 1.5m high, but the rest of the building is less than half that height. Entrances probably at the SE end of the NE wall and the SW end of the SE wall. A second building (PRN 83255) lies nearby, perhaps suggesting this was once a small farmstead. The site is named as a barn on the OS surveyors drawing (No 335H) of 1833 and is also depicted on the first edition OS 1:2,500 map (Montgomeryshire 34.3) of 1887. (CPAT 2006)</p>				
83255	SN92989659	Cwm Cledan house	House ?	Post Medieval
<p>Very low traces of a probable dwelling, terraced into the SE-facing slope near PRN 83254. The site measures some 8m NE/SW by 5m and 0.3m high and lies parallel with the contours. Evidence of some faced walling at the E corner. Interestingly, the building is not depicted on the OS surveyors drawing (No 335H) of 1833, so perhaps of 18th century date. (CPAT 2006)</p>				
83256	SN93069642	Ty-bach bridge	Bridge	Post Medieval
<p>The abutments of a former bridge over the stream. A track runs NE to the nearby farmstead. The abutments are well constructed and of drystone build, giving a span of c.3m. Overall area 4m NW/SE by 5m. (CPAT 2006)</p>				
83257	SN92879608	Blaen-y-cwm house	House	Post Medieval
<p>House with associated garden plot. House measures 10m NNE/SSW by 6m, with a lean-to, 6m NNE/SSW by 3m, attached to the WNW wall. Windows on both floors and original door face ESE. Chimney at SSW end. The interior is known to be partially timber-framed. The house was restored for use as an interpretation centre for the wind farm. The house is depicted and named on the OS surveyors drawing (No 335H) of 1833, but called 'Blaen Cledan' on the Carno tithe map of 1849. (CPAT 2006)</p>				
83258	SN92529585	Blaen-y-cwm fold	Fold	Post Medieval
<p>Rectangular sheepfold of two compartments, measuring 14.5m NNW/SSE by 5.3m and 0.8m high. The NNW compartment is 10m long, the SSE 4.5m long. Faced walling is present in many places. The fold overlies an earlier earth-banked field boundary and was presumably associated with Blaen-y-cwm. The site was described as a sheepfold on the first edition OS 1:2,500 map (Montgomeryshire 34.7) of 1887 and possibly depicted on the OS surveyors drawing (No 335H) of 1833. (CPAT 2006)</p>				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83259	SN92459601	Blaen-y-cwm peat cutting	Peat cutting	Post Medieval
Long linear peat cut, on a slight curve. Measures 60m E/W by 2.5m and 0.3m deep. (CPAT 2006).				
83260	SN92519669	Pantle peat cutting	Peat cutting	Post Medieval
Rectangular peat cutting on the slope between and above Pantle and Nant-hir. Measures 15m N/S by 7m and 0.3m deep. (CPAT 2006)				
83261	SN92519691	Nant-hir leat	Leat	Post Medieval ?
Narrow leat running from the Nant hir stream at SN 92439694 to SN 92519691. It seems to end in a natural bowl above Nant-hir farm, but may have continued downslope to the buildings for use as a water supply. Measures 1m wide and 0.5m deep. (CPAT 2006)				
83262	SN92459694	Nant-hir hut platform	Hut platform	Prehistoric ?
Possible hut platform surviving as a level area on the steep NE-facing slope of the Nant hir ravine. It lies just below the leat (PRN 83261) and spoil from this may have encroached on the SW side of the platform. The site is now oval as a result but could have been circular. Overall dimensions 5m WNW/ESE by 4m. (CPAT 2006)				
83263	SN91809708	Bryn Amlwg cairn	Cairn ?	Bronze Age ?
Extensive but low pile of stone with an approximately oval overall shape. It is difficult to determine any pattern, except possibly at the S end, where there is a semi-circle of stones c. 3m across. The stones are largely grass-covered, but are generally loose, so it does not seem to be a natural outcrop. There are various possibilities, not least that this may be three conjoined cairns, but this is only likely to be resolved by excavation. Overall area 18m N/S by 6m and 0.3m high. (CPAT 2006)				
83264	SN91999704	Nant-hir peat cutting I	Peat cutting	Post Medieval
Area of peat cutting on a gentle S-facing slope above a boggy area. Mostly angular cuts. Overall area c.50m in diameter, cuts 0.4m deep. (CPAT 2006)				
83265	SN92099703	Nant-hir peat cutting II	Peat cutting	Post Medieval
Large area of varied peat cuts, both angular and curved in shape. Roughly 100m in diameter overall, individual cuts generally 0.4m deep. (CPAT 2006)				
83266	SN92369703	Nant-hir trackway	Trackway	Post Medieval
Former trackway ascending the hill slope from and above Nant-hir farmstead. It seems to have been serving the areas of peat cutting to the W (PRNs 83264 and 83265). Averages 3m wide. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83267	SN93199739	Bryn Migwrn peat cutting	Peat cutting	Post Medieval
Area of peat cuttings on a slight shelf of the SE-facing slope. Varying forms. Overall area c.100m in diameter, individual cuts up to 0.5m deep. (CPAT 2006)				
83268	SN93259746	Ffrwd-wen trackway	Trackway	Post Medieval
Trackway ascending the slope above Ffrwd-wen house. It ends at an area of peat cutting (given NGR) and was presumably used for the transport of cut peat. Terraced into slopes, where encountered, to a depth of 1.5m. It leaves the survey area at SN 93419751. Averages 3m wide. (CPAT 2006)				
83269	SN93449683	Bryn-coch trackway	Trackway	Post Medieval
Trackway leading onto the river terrace and up the valley slope from opposite Bryn-coch house, seemingly towards the barn (PRN 83271). This seems to suggest some relationship between the barn and either Bryn-coch or Lletty-yr-eos. Averages 3m wide. (CPAT 2006)				
83270	SN93199705	Lletty-yr-eos barn I	Barn	Post Medieval
Remains of a drystone-built barn terraced into a moderate S-facing slope. Aligned ENE/WSW, with the contours. Entrance near ENE end of SSE wall. Although the walls are generally 0.6m high, they stand to a maximum of 1.0m high and are c.0.6m thick. Possible centrally-placed internal division, but this is very low and may be the base for a timber partition. Overall dimensions 11m ENE/WSW by 5m. The site is depicted on the OS surveyors drawing (No 335H) of 1833 and the first edition OS map (Monts 34.3) of 1887. (CPAT 2006)				
83271	SN93149685	Lletty-yr-eos barn II	Barn	Post Medieval
Ruinous rectangular building aligned approximately NW/SE. Stone walled construction with lime mortar bonding, also evidence of roofing material comprising slate and ceramic ridge tile fragments. Presumably late 18th to 19th century in date. Entrance in SW wall, opening onto a stone revetted pen, which mirrors the alignment and length of the building. No visible internal features so it was probably a barn. Some recent robbing of the remaining stone from the walls. Barn measures 15m NW/SE by 6m and up to 1.5m high, while the pen is 15m NW/SE by 8m and 0.8m high. The site is depicted on the Carno tithe map of 1849 and the first edition OS map (Monts 34.3) of 1887. (CPAT 2006)				
83272	SN92749690	Nant-hir hut	Hut ?	Medieval ?
Gently S-sloping terrace cut into the ravine of Nant-hir and on the N side of the stream. There are sparse traces of a building on the terrace, which is aligned NW/SE and consists of a large stone at the N corner, a few stones along the NE side, part of the external facing of a SE wall and the remains of walling alongside the stream where it has been undermined by stream action. Its authenticity is supported by a small circular store or pen (PRN 83273) on the opposite side of the stream, to the S. Site measures 9m NW/SE by 5m and up to 0.5m high. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83273	SN92749689	Nant-hir store	Store ?	Medieval ?
Small circular structure, some 4m in diameter, revetted into the steep ENE-facing slope above the Nant-hir stream to a depth of 1.4m. The entrance is on the ENE, with the remainder consisting of a drystone revetment facing inwards. It could be either a cold store or small pen associated with the adjoining ?hut (PRN 83272). It seems to be too far distant from Nant-hir farmstead to be associated with that site. (CPAT 2006)				
83274	SN93359685	Lletty-yr-eos fold	Fold	Post Medieval ?
Small fold or pen set into the S-facing slope of a stream gully. Defined by large boulders on the S side, a stone revetment on the W and the slope of the gully on the N. The E side is open, so possibly the site of an entrance. Measures 4m E/W by 3.5m and 0.6m high. (CPAT 2006)				
83275	SN93489687	Lletty-yr-eos farmstead	Farmstead	Post Medieval
Series of three drystone buildings on a terrace to the N of the river. A former trackway leads through the complex and up the valley. The exact function of each building is uncertain but the best assumption is that the NW one was the house, with a lobby entry opposite the chimney. The SW building was probably a barn in two compartments with a lean-to addition on the E end. The E range were probably outbuildings, but seem to include two hearths or ovens, so potentially a bakehouse. The complex measures roughly 50m E/W by 25m, the individual buildings are as follows: NW building is 16m ENE/WSW by 5m in three compartments, SW building is 16m E/W by 6m in three compartments, and the E building is 22m E/W by 5m in four compartments. The farmstead is depicted on the OS surveyors drawing of 1833 and the Carno tithe map of 1849, but the buildings seem to have become roofless by the time of the first edition OS map (Mons 34.3) of 1887. (CPAT 2006)				
83276	SN93529688	Lletty-yr-eos dipping bath	Dipping bath	20th Century
Concrete dipping bath on the river bank. The bath is 3.5m ENE/WSW by 1m, while the collecting/catching pen at the ENE end measures 4m ENE/WSW by 3m. There is also a tapering draining pen on the WSW of the bath, measuring 5.5m ENE/WSW by up to 2m wide. The wooden rails for the pens themselves have collapsed but their slots are still visible in the concrete. (CPAT 2006)				
83277	SN93699691	Ffrwd-wen fold	Fold	Post Medieval ?
Small sub-square fold or pen terraced into the slope above the river. The entrance was probably on the SE. The pen is very low, but was probably drystone-built. There is damage at the NW corner, where a tree has been uprooted by the wind. Measures 6m E/W by 5m and up to 0.5m high. (CPAT 2006)				
83278	SN93849607	Parc y Sarn quarry III	Quarry ?	Post Medieval
Small linear quarry, cut into a steep SE-facing slope. This runs with the contours, ie NE/SW, with spoil on the downslope (SE) side. It may have been used to provide stone for the boundary wall to the S. The field has been improved. Measures 15m NE/SW by 5m and 1m deep. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83279	SN93879604	Parc y Sarn platform	Platform ?	Medieval
Possible sub-rectangular platform cut into a steep SE-facing slope. Some uncertainty due to land improvement, but it is probably authentic. Wide fan on NW, with apron projecting into unimproved ground on the SE. Overall dimensions 15m NW/SE by 11m. The interior measures 8m by 6m, cut into the slope to a depth of 1.0m and built up to a height of 0.8m. (CPAT 2006)				
83280	SN93959621	Parc y Sarn quarry IV	Quarry ?	Post Medieval
Sub-circular scoop, near the base of a SE-facing slope. It could be a quarry for walling stone, or might even be the remains of a badly eroded platform. The field has been improved and there is some clearance stone on the site. Measures 10m diameter by 1.2m deep. (CPAT 2006)				
83281	SN93049640	Cwm Cledan trackway	Trackway	Post Medieval ?
The line of a trackway running up Cwm Cledan from Llety-yr-eos (SN 93529689), past Bryn-coch and probably up to Ty-bach. Not readily identifiable beyond the bridge abutments of PRN 83256, but it was probably heading to Blaen-y-cwm. Generally 3m wide. (CPAT 2006)				
83282	SN9292296057	Blaen-y-cwm footbridge	Bridge	Post Medieval
Site of a footbridge depicted on the first edition OS map (Monts 34.7) of 1887. No visible trace left of the structure. (CPAT 2006)				
83283	SN90509686	Llyn Gloyw peat stand	Peat stand	Post Medieval
Possible peat stand consisting of an oval hollow surrounded by a low earth bank. There are some stones on the bank, potentially used to weigh down a rush mat cover. Measures 10m E/W by 6m and 0.2m high. This locality could contain further, less-distinct examples, but this is the only one which has definite form. (CPAT 2006)				
83284	SN90469714	Bryn Du shelter	Shelter	Post Medieval
Probable small shelter, composed of a low curving wall, 0.7m wide. It abuts the SE side of a natural rock ridge and was probably entered from the NE. Measures 3.0m diameter by 0.2m high. (CPAT 2006)				
83285	SN90069718	Bryn Du cist cairn I	Cist cairn	Bronze Age
Roughly circular mound of stones forming a small cairn, some 4.5m in diameter and 0.4m high. Its authenticity as a Bronze Age cairn is supported by a probably central cist, formed from well-set stones on the SE, S and W sides. The cist is aligned approximately N/S and measures 1.1m by 0.5m. The site has only just been avoided by land improvement activity and a pile of cleared stone lies to its SE. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83286	SN90099724	Bryn Du cist cairn II	Cist cairn	Bronze Age
Rectangular cist aligned N/S at the centre of a very low mound. The cist is formed from edge-set stones on its W, S and E sides and there is possibly another stone on the N but this is less certain. The mound measures 3.3m in diameter and 0.3m high, while the cist measures 1.1m N/S by 0.6m and is at least 0.15m deep. (CPAT 2006)				
83287	SN90189718	Bryn Du peat stand	Peat stand	Post Medieval
Approximately oval earth bank, probably defining a former peat stand. Situated on the edge of boggy ground. One or two stones lying around. Measures 14m ENE/WSW by 7m and up to 0.5m high. (CPAT 2006)				
83288	SN90609680	Llyn Gloyw peat cutting	Peat cutting	Post Medieval
Extensive area of peat cuttings on the edges of a wet boggy area. From the name on the OS map, it seems this was once a lake. At least one associated peat drying stand (PRN 83283), and possibly others nearby. The cuttings extend for at least 1km on a north-east/south-west alignment. (CPAT 2006)				
83289	SN9342596807	Bryn-coch house	House	Post Medieval
Intact dwelling on the valley floor of the Cledan. Seems to have been recently refurbished but not examined in detail. (CPAT 2006)				
83290	SN9344796829	Bryn-coch footbridge	Bridge	Post Medieval ?
Footbridge depicted on OS first edition map (Monts 34.3) of 1887. Perhaps still in its original location, but rebuilt using modern materials. (CPAT 2006)				
83291	SN9288897026	Nant-hir boundary stone	Boundary stone	Post Medieval ?
Boundary stone depicted on the first edition OS map (Monts 34.3) of 1887. No longer extant. (CPAT 2006)				
83292	SN93749680	Bryn quarry	Quarry	Post Medieval
Approximately circular quarry scoop, measuring 10m in diameter and up to 2m deep. There is stock erosion around the NE side. The quarry undoubtedly would have provided stone for the adjoining field boundary wall. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83293	SN93679670	Bryn house	House	Post Medieval
Stone-built house in ruinous condition. Aligned NW/SE, and sited on a slight shelf of the NW-facing slope. The fireplace is sited at the SE (upslope) end, where the building has been terraced into the slope. There has been some recent collapse of this wall. The entrance was probably on the SW, but has been infilled with stones. There is no visible internal detail, partly due to dense nettle cover, so it is likely that there were timber partitions. The walls are some 0.5m thick, with some lime mortar evident in the construction. A few loose slates are visible. The main part of the building measures 12m NW/SE by 7m and up to 3m high, with a lean-to addition on the NW end measuring 5m NE/SW by 2m. The dwelling is depicted on the Carno tithe map of 1849 and the first edition OS 1:2,500 map (Monts 34.4) of 1886. It may also be depicted on the OS surveyors drawing (No 335H) of 1833, where it seems to be named 'Coedan'. (CPAT 2006)				
83294	SN93819664	Ty'n-yr-eithin quarry I	Quarry	Post Medieval
Linear quarry, measuring some 40m N/S by 10m and up to 4m deep. Some spoil on W side. Probably used to provide stone for either nearby field boundaries or Ty'n-yr-eithin house. (CPAT 2006)				
83295	SN94239666	Bryn-glas house	Longhouse	Post Medieval
Possible longhouse aligned NE/SW, with the contours. Now ruinous, but was depicted on the Carno tithe map of 1849 and the first edition OS 1:2,500 map (Monts 34.4) of 1886. The precise arrangement of the building is uncertain due to more recent dumping, but there seem to have been three compartments. The SW compartment seems to have seen the most recent use, perhaps as a fold or field barn, but even this is now abandoned. Overall dimensions 20m NE/SW by 5m and up to 1.8m high, though more generally less than 0.6m high. (CPAT 2006)				
83296	SN94009668	Ty'n-yr-eithin quarry II	Quarry	Post Medieval
Linear area of quarrying centred on a rock outcrop. Aligned approximately N/S. Probably supplied material for nearby field boundaries, or for use in the construction of Ty'n-yr-eithin. Measures approximately 35m N/S by 7m and up to 1.0m deep. (CPAT 2006)				
83297	SN93939663	Ty'n-yr-eithin building I	Building	Post Medieval
Slight terrace above Ty'n-yr-eithin, which seems to have been the site of a building aligned ENE/WSW. The only surviving trace of walling occurs at the E corner and is 0.1m high. Probably an outbuilding associated with Ty'n-yr-eithin. Measures 11m ENE/WSW by 5m, the terrace is up to 0.5m deep. (CPAT 2006)				
83298	SN93799663	Ty'n-yr-eithin building II	Building	Post Medieval
A collection of stones on a slight terrace. They probably represent clearance material covering a building. The building is depicted on the Carno tithe map of 1849 and the first edition OS map (Monts 34.4) of 1886. (CPAT 2006)				
83299	SN93919660	Ty'n-yr-eithin farmstead	Farmstead	Post Medieval
Former farmstead, now used as a private dwelling. Stone-built, but not examined closely. (CPAT 2006)				

<i>PRN</i>	<i>NGR</i>	<i>Name</i>	<i>Site Type</i>	<i>Period</i>
83828	SN90329524	Trannon peat cutting I	Peat cutting	19th Century
Area of peat cutting to the W of Trannon farm, to which they are probably related. It seems likely that this was the source of fuel for Trannon in the past. The cuts are mostly linear but are somewhat eroded. Overall area measures c.150m NW/SE by 40m.				
83829	SN90319550	Trannon peat mound I	Peat mound	Post Medieval
Pronounced oval mound close to the boundary between dry grassland and more boggy ground. Possibly an old peat mound. Possible peat cutting on the slope to the NW, but poorly defined. Measures 13m E/W by 10m and 1.0m high.				
83830	SN89899595	Trannon peat mound II	Peat mound	Post Medieval
Oval mound of peat, with peat cuts (PRN 83831) in the surrounding area. Peat is visible at the ESE and WNW ends, where they have been eroded. Overall dimensions 8m WNW/ESE by 3m and 0.5m high.				
83831	SN89969591	Trannon peat cutting II	Peat cutting	Post Medieval
The visible edge of an area of peat cutting is apparent at the given NGR. Its centre probably lay to the W. Overall, the area is perhaps 100m in diameter, but may have extended over much of this locality in the past.				
83832	SN90059598	Trannon stone clearance	Clearance cairn	20th Century
Probable pile of cleared stone on the crest of a local ridge. The surrounding area has been improved and other heaps of stone are evident, but this has the appearance of an attempt at constructing a small shelter, c.3m in diameter. It comprises a pile of stones on the E, with three further stones curving around to the W from the N end of the heap.				
83833	SN89969632	Cwm Mawr trackway	Trackway	Post Medieval ?
A trackway, depicted as a bridleway on the OS Explorer 1:25,000 map of 2005. It runs generally S from Sarn Ddu (SN 89709694) and emerges into the survey area at SN 89719640. From there it continues S as a hollow 3m wide, to the point where it fades out in improved ground at SN 89719620. A branch runs WNW from SN 89669632, leaving the survey area at SN 89579635.				

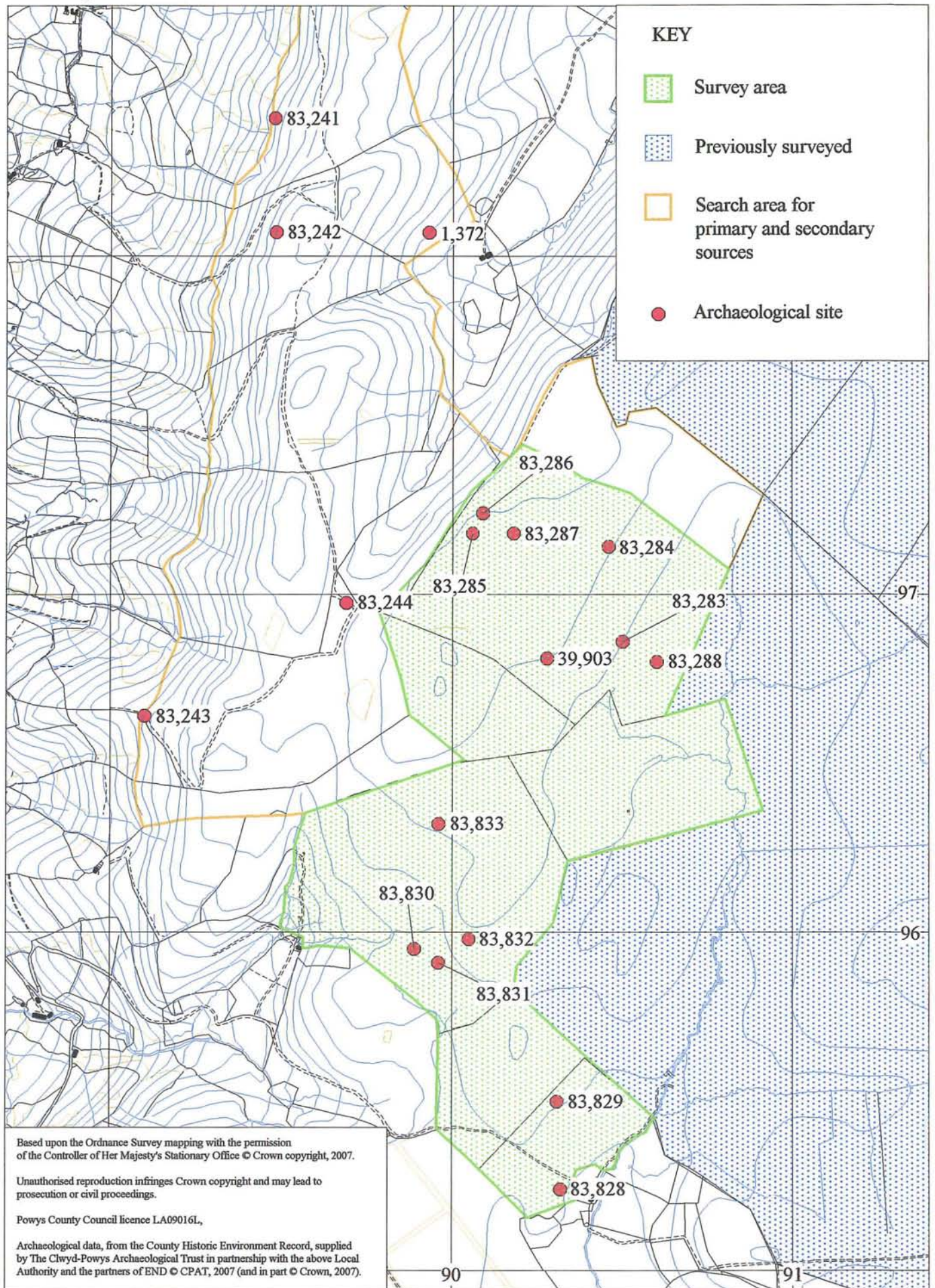


Fig 1 Archaeological sites in the western survey area Scale 1:15,000

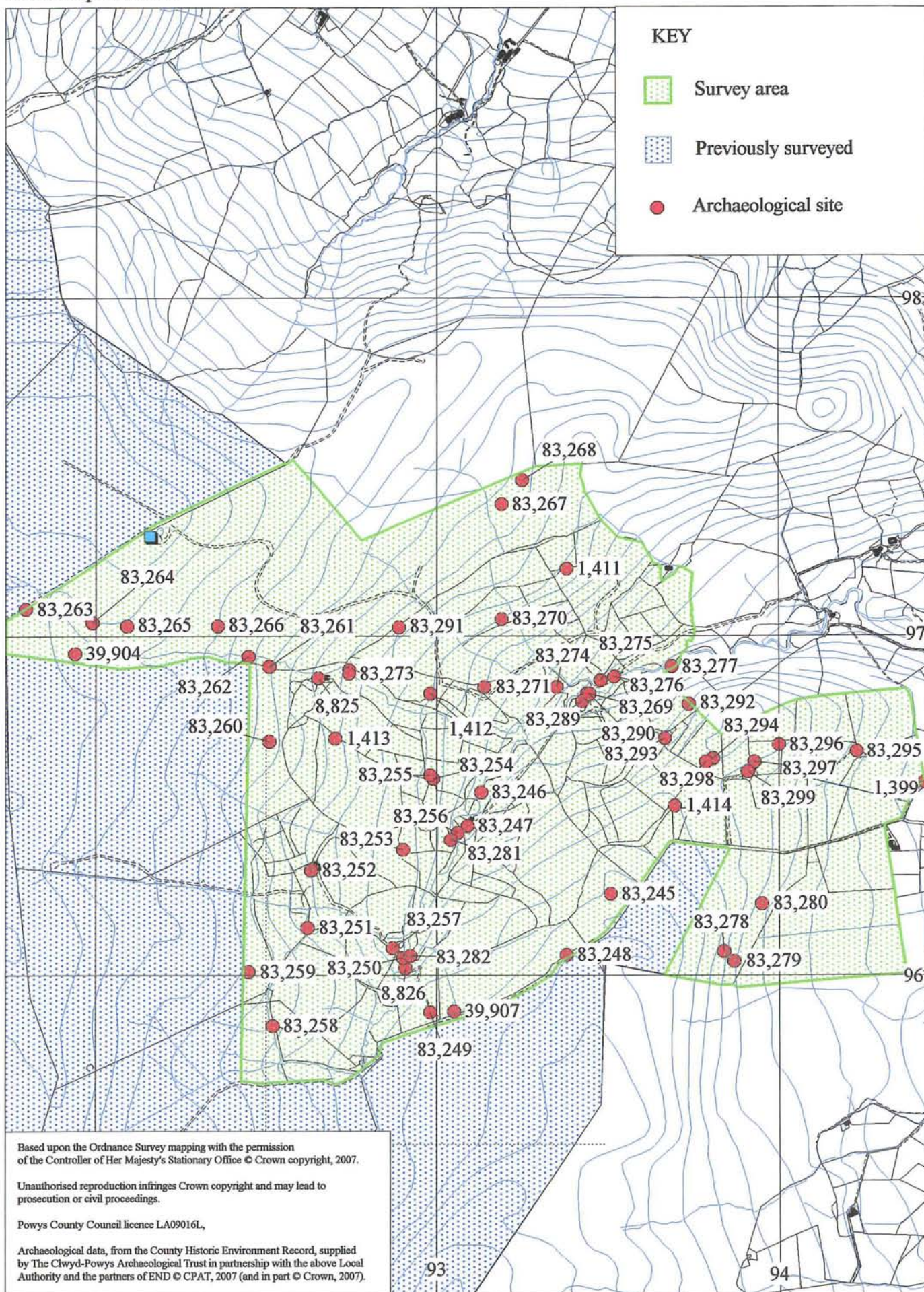


Fig 2 Archaeological sites in the eastern survey area Scale 1:15,000