

# UPLANDS INITIATIVE FIELD PROJECTS 2003-2004

## Dyffryn Tanat Survey Area

North Wales

### **Archaeological Survey Report**



**Oxford Archaeology North** 

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Prepared by: Peter Schofield
Position: Project Supervisor

Date: June 2004

Checked by: Jamie Quartermaine Signed.....

Position: Senior Project Manager

Date: June 2004

Approved by: Alan Lupton Signed......

Position: Operations Manager

Date: June 2004

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Storey Institute Janus House
Meeting House Lane Osney Mead
Lancaster Oxford
LA1 1TF OX2 0EA

w: www.oxfordarch.co.uk e: info@oxfordarch.co.uk

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#### **SUMMARY**

An archaeological identification survey of the Tanat Valley area of North Wales (SJ 050 290 centred) was undertaken in June and October 2003. The work was undertaken by Oxford Archaeology North (OA North) on behalf of the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as part of the Uplands Initiative. The fieldwork consisted of an identification survey to identify, locate and describe archaeological and historical features within the defined survey area.

The Tanat Valley study area incorporates parts of Historic Landscape 34 (Cadw/CCW/ICOMOS, 1998), and the area of Y Berwyn to the immediate north of the study area has been previously surveyed by Clywd Powys Archaeological Trust. The OA North 2003 survey area comprised *c*33 sqkm, encompassing enclosed and improved agricultural land as well as large open tracts of heather and grassed moorland. The edges of the study area consist of improved, steep-sided glacial valleys where enclosure has taken place.

The area had been surveyed on a number of occasions, and prior to the survey there were 335 sites already documented. All of these were revisited and the records checked and enhanced as appropriate. In addition the survey identified a total of 124 new sites, which included 26 clearance cairns, seven cairns, eight farmsteads, six shielings, 12 quarries, 20 stock management features, seven trackways and two leats.

The earliest remains were those forming part of an important funerary / ceremonial complex located in a hanging valley above the Pistyll Rhaeadr falls, elements of which had the potential to be of Neolithic date. There were also a number of Bronze Age type funerary monuments located on the summits, plateaux and ridgelines of the area. The Iron Age remains were grouped at and around Craig Rhiwarth, in the southern part of the area, and comprised a large hillfort containing many putative hut circles. In addition, there were a number of hut circles beyond the rampart which also had the potential to be of Iron Age date.

Medieval remains were scattered around the area and comprised for the most part isolated shielings, sometimes with associated stock pounds. The post-medieval agricultural system reflects a rationalisation of the earlier one; more permanent farmsteads were established at the margins of the field intakes, and a substantial number of stock enclosures were constructed across the unenclosed land. Some of the stock control structures reused the earlier shieling sites and often used the same foundations.

Some of the more significant sites were the mining sites, which have been exploited ever since the late Bronze Age or Iron Age evidenced by the finding of mining hammers at Cwm Orog and Craig Rhiwarth. There was also evidence for Roman working at Cwm Orog and Crag-y-Mwyn lead mines, and also medieval hushing at Craig-y-Mwn lead mines. Inevitably there was a substantial episode of post-medieval working, particularly during the eighteenth century but this declined sharply in the nineteenth century. This has had the effect of in part obscuring the evidence for earlier working. In addition, there was

Slate quarrying, gravel extraction and for a short time phosphate mining also undertaken during the eighteenth / nineteenth centuries. This degree of continuity / reuse of the mining sites highlights that the remains are of immense archaeological importance.

The survey has highlighted some important prehistoric landscapes and very significant industrial landscapes. There is an evident need for further recording of the Bronze Age funerary monuments and the important lead mining and processing landscapes throughout the study area.

#### 1. INTRODUCTION

#### 1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Oxford Archaeology North (OA North) was invited to undertake an archaeological identification survey of the Dyffryn Tanat survey area (SJ 050 290 centred) of North Wales on behalf of the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as part of the Uplands Initiative.

#### 1.2 OBJECTIVES

- 1.2.1 The objectives of the project were:
  - to promote a wider and deeper understanding of upland areas and their role in Welsh history, in accordance with the aims of the Uplands Initiative
  - to provide an accurate Level 1 survey of all identified monuments (OA North 2002).
- 1.2.2 To achieve these objectives the study area was subject to a desk-based assessment and walk-over survey. The desk-based study, carried out in May / June 2003, consisted of a search of both published and unpublished records held by the National Monuments Record of Wales, Clywd-Powys Archaeological Trust and the library and archives at OA North's offices in Lancaster. The field work was carried out at different times of the year to fit in with access availability; the initial part of the survey was undertaken in June 2003 and a further phase of investigation was undertaken in October 2003.
- 1.2.3 This report sets out the results of the work, accompanied by a summary gazetteer of new sites (*Appendix 1*).

#### 2. METHODOLOGY

#### 2.1 PROJECT DESIGN

2.1.1 A project design was submitted by OA North in response to a request for archaeological surveys of extensive areas of the Welsh Uplands, and was designed to meet the requirements of a brief by RCAHMW. A survey of two areas, Dyffryn Tanat and Eastern Snowdonia, were commissioned by RCAHMW, and the project design provided for an initial archaeological desk-based study, followed by a field identification survey of these areas. The present report relates to the Dyffryn Tanat area only (Figs 1 and 2). In all respects the work has been carried out in accordance with the project design.

#### 2.2 DESK-BASED SURVEY

- 2.2.1 *National Monuments Record (NMR):* an assessment was made of data held by the RCAHMW, Aberystwyth, which was overlain onto digital 1:10,000 mapping for the study area.
- 2.2.2 **Sites and Monuments Record (SMR):** an assessment was made of data held by the Clywd–Powys Archaeological Trust (CPAT), which was also overlain onto the digital base map for the area.
- 2.2.3 *Aerial Photographs:* aerial photography from the NMR office was also consulted along with RCAHMW aerial photographic interpretation of the study area. Information relating to possible new sites was annotated onto the field walking maps in GIS format.
- 2.2.4 *Ordnance Survey Mapping:* first and/or second edition mapping was available for the entire survey area, and was examined for indications of historic sites not previously represented in the NMR and SMR databases.
- 2.2.5 **World Wide Web:** historic landscape characterisation, parish records, census data and transcripts of some public records were obtained from archives and local histories on the internet. More modern data on the parish was also gleaned, which provided information about recent developments in the area.

#### 2.3 IDENTIFICATION SURVEY

2.3.1 An identification survey to Level 1 (OA North 2002) was undertaken across the Dyffryn Tanat study area. The identification survey represents the minimum standard of record for field investigation, and is aimed at the discovery of previously unrecorded sites. Its objective is to record the existence, location, and extent of any archaeological site. The emphasis of the record lies on the written description, which, in this instance, includes comments on character and condition, and sites have been graded in terms of condition and archaeological significance.

Sites already identified within the study area by the NMR and SMR were checked and recorded at the same level of consistency as the newly discovered sites. The whole survey area, including both the unenclosed and partially enclosed land in the southern and eastern parts of the area, was examined. The survey aimed to identify, locate and record archaeological sites and features on the ground and involved four elements: reconnaissance, mapping, description and photography. This generated core information for entry into the NMR and additional archive information, in accordance with the RCAHMW Data Standard for Upland Survey (RCAHMW, 2003).

2.3.2 Each area was walked in transects of between 20m and 50m, depending on local topography and ground cover. The archaeological detail was mapped using Leica differential GPS equipment, which used post-processed corrections from a base station to achieve an accuracy of ±0.25m. The digital survey data was transferred, via DXF file format, into a CAD system (AutoCAD14), and was then superimposed onto the digital base map (Fig 3). The descriptive records were input on-site into a database on a Psion portable palm computer; the more complex sites were also sketched onto paper *pro-forma* sheets. A photographic record of the sites was maintained in 35mm black and white print format, colour slides, and also using digital colour photography; the digital photographs were used to accompany the present report.

#### 2.4 GAZETTEER OF SITES

2.4.1 All of the information concerning archaeological sites within the assessed area was collated into a gazetteer (*Appendix 1*), which provides brief details of their location, period, character and altitude. Locations are given as eight-figure National Grid References where possible, and the position of each site is indicated on Fig 3.

#### 2.5 ARCHIVE

2.5.1 A full archive has been produced to a professional standard in accordance with current English Heritage guidelines (1991) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The archive is provided in the English Heritage Centre for Archaeology format, both as a printed document and digitally. A synopsis, including the index to the archive and a copy of the report, will be placed in the National Monuments Record, RCAHMW at Aberystwyth and the Clywd-Powys Sites and Monuments Record, CPAT, Welshpool.

#### 3. TOPOGRAPHICAL AND HISTORICAL BACKGROUND

#### 3.1 LOCATION AND TOPOGRAPHY

- 3.1.1 The survey area of Dyffryn Tanat (SJ 050 290 centred) is located at the head of the valleys separating the Berwyn Mountains to the north and the Montgomery Hills within the old county of Montgomeryshire, and in the north is situated immediately adjacent to the convergence of the county boundary with both Denbighshire and Merionethshire (Fig 1). The area extends from the peaked ridgeline of the Berwyn mountains to the north, to the east it is bounded by the steep glacial valley of Cwm Blowty and the community of Llanrhaedr-ym-Mochnant at its mouth. To the south it is bounded by the upper reaches of the Tanat Valley around Llangynog and further to the west by Cwm Pennant around the small settlement at Pennant Melangell. To the west the area is bounded by mountains on the outskirts of Snowdonia National Park. It is a visually striking area with narrow, steep-sided glacial valleys and high, rounded and undulating mountain peaks. The study area is dissected from north to south by Cwm Rhiwarth and is dominated by the impressive edifice of Craig Rhiwarth, which has an Iron Age hillfort around its summit. The open moorland rises to the north where a small hanging valley discharges the Afon Disgynfa over the picturesque waterfall of Pistyll Rhaeadr and the ground continues to rise up to the county boundary and the summit of Moel Sych.
- 3.1.2 The majority of the study area lies between the 450m and 640m OD and is broadly characterised as open heather or grassed moorland along the plateau of Hafod Hir, the summits of Post Gwyn, Bryn Mawr, Y Clogydd and Craig Rhiwarth and with partly enclosed moorland to the south around Glan Hafon and Y Garn (Fig 2). To the north the area rises to the summit of Moel Sych at 827m OD. Improved and partially improved enclosed farmland is confined to the edges of the study area where the ground descends sharply into the glacial valleys. There are many small tributaries that descend from the uplands into the valleys feeding into the Afon Tanat, Afon Eirth and Afon Rhaeadr. Additionally, there is a small portion of land given over for forestry plantation in the centre of the study area around Cwm Orog and Bedd Crynddyn. The landscape of the study area forms part of the Tanat Valley Historic Landscape, designated number 34 within the Register of Landscapes of Outstanding Historic Interest in Wales.

#### 3.2 GEOLOGY

3.2.1 The solid geology of the study area consists mainly of Ordovician slates, shales and tuffs. The soils are predominantly peats overlying Cambic stagnohumic gleys, which are waterlogged reduced mineral soils (Neville George and Smith 1961; Soil Survey 1983)

#### 3.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.3.1 *Prehistoric:* there was clear evidence of human activity in the area during the prehistoric period; the utilisation of the moorland landscape having its origins in the upland economies of the late Neolithic and Bronze Age.
- 3.3.2 Prehistoric ritual/ceremonial monuments are limited to a discrete complex sat within the hanging valley of Afon Disgynfa and above the impressive Pistyll Rhaeadr falls (Fig 3). The complex consists of Rhos-y-Beddau stone circle and avenue (NPRN 14004/300389), with the avenue leading east towards Cerrig Beddau Cairn (NPRN 140003/143893/306570). Another stone circle (potentially modern in origin) lies upslope some 400m to the north of the first at Cwm Rhiwiau (NPRN 145270). At the head of the valley just above the waterfall lies the Afon Disgynfa Cairn (NPRN 156007/306537). The complex is of some significance as Rhos-y-Beddau stone circle is one of only two discovered in Wales to have an associated stone-lined avenue (Burl 2000, 184); the avenue is not physically connected to the circle and does not point to its centre, suggesting that it may be a separate phase of construction (Grimes 1963, 122). It has been suggested that the siting of the ritual complex above Pistyll Rhaeadr is significant and this upland complex possibly complements a second ritual complex containing a putative henge monument that is located within the Tanat valley bottom (to the south-east of the study area) (CPAT, nd, Funerary, Ecclesiastical and Legendary Landscapes, 3)
- 3.3.3 There is no identified Bronze Age settlement within the study area but funerary monuments are well represented throughout the area. Within the lowlands there is a middle Bronze Age cremation and pits discovered during excavations at Pennant Melangell Church (Britnell 1994, 41, NPRN 155307), the findspot of an early Bronze Age cremation urn at Nant y Llyn (NPRN 156078), and a Bronze Age axe in Llangynog (NPRN 141367); all attesting to Bronze Age lowland habitation in the area. The majority of upland funerary monuments consist of funerary cairns placed in prominent topographical settings upon exposed crags, on the edges of plateaux and the saddles between summits. The distribution of cairns is fairly even throughout the study area with isolated summit cairns in the north at Moel Sych and Pen-y-Garnedd (NPRN 14002/306571 and 14001/306585) (Plate 1) that characterise the summits of hills running along the ridgeline to the north of the study area (Silvester 2003, 81). In the west the long plateau running between Hafod Hir and Y Gribin has funerary cairns at Craig-y-Glas (NPRN 140012/306543) and Y Gribin (NPRN 145409); a cist also survives close to the latter site (NPRN 140018). Isolated cairns are distributed on several of the hills in the central and southern parts of the study area, with one on Craig Rhiwarth (NPRN 141364), one named Bedd Crynddyn looking down both Cwm Orog and Cwm Glan-Hafon on the saddle to the north of the hillfort (NPRN 141366/306535), and one at the head of Nant y Gangen-ddu on Glan-hafon (NPRN 144336/306536).
- 3.3.4 A group of prehistoric cairns is concentrated in the centre of the study area on the saddle between Glan-hafon and Y Clogydd at Garnedd Wen; these consist of a ring cairn around a large erratic (NPRN 144334), a possible additional funerary cairn to the north (NPRN 143242) and three smaller, possibly prehistoric,

- clearance/funerary cairns (NPRN 143333, 145558 and 145559). The cairns overlook Cwm Glan-hafon and up towards Craig Rhiwarth to the west.
- 3.3.5 Prehistoric mining has been hinted at within the study area with the discovery of possible late Bronze Age/ early Iron Age mining hammers at both Cwm Orog (NPRN 152326) and on Craig Rhiwarth, but later extensive mining activities have masked the vast majority of 'early workings' at these sites (Hughes 2003, 44).
- 3.3.6 *Iron Age Roman:* there is substantial evidence for Iron Age activity within the study area, notably the impressive hillfort of Craig Rhiwarth (NPRN 141313/306533), whose placename means rhiw (slope) and garth (enclosure) (Evans 1994 12). There are approximately 170 putative hut circles surviving to varying degrees within the interior and a substantial univallate rampart, comprising a bank and ditch, demarcates the north edge where the ground is not so precipitous. Excavations in the hillfort have revealed only ephemeral sub-surface features, and some of the earthworks may in fact be natural in origin (Sayce 1938, 106). It has been argued that this hillfort, along with the possibly contemporaneous hillfort further down the valley at Llwyn Bryn Dinas (where early metalworking evidence has been found), controlled the supply and distribution of metal ores in the local region (Cadw/CCW/ICOMOS, 1998, 1). The only other definite Iron Age site of this period is a hut circle on the saddle of Garnedd Wen to the east of Craig Rhiwarth (NPRN 144332/145277).
- 3.3.7 Roman activity in the area is represented by phases of mining activity at both Cwm Orog and Crag y Mwyn lead mines (NPRN 152327 and 152341) (Plate 5). Extensive opencast and hushings at the latter site have been dated to this period, along with rectangular water tanks for the hushing process that have been typologically dated as being Roman (Hughes 2003, 45). There are no definite settlement sites associated with this period in the study area, although, within the lowlands of the Tanat valley itself, five ditched cropmark enclosures have been recognised (CPAT, nd, *Defended Landscapes*, 1).
- 3.3.8 Early Medieval / Medieval: the record of medieval settlement is limited and uncertain. The Tanat valley to the south of the study area has three churches with early foundation dates, St Melangell (NPRN 160381), St Cynog (NPRN 146231) and St Dogfan each at Pennant Melangell, Llangynog and Llanraeadr-ym-Mochnant respectively. It has been argued that only Llanraeadr-ym-Mochnant formed a nucleated settlement in the medieval period, the church here was founded by the ninth century and fragments of a shrine to St Dogfan survive (CPAT, nd, Funerary, Ecclesiastical and Legendary Landscapes, 4). The church at Pennant Melangell is famous for the legend of St Melangell, it was founded in the eighth century and a Romanesque shrine holds the body of St Melangell within the later twelfth century church. The church became a place of pilgrimage from the medieval period (ibid) but the earliest medieval phases consist of a ditch running beneath the church and several early graves that date to the sixth to eighth centuries (NPRN 155308, Britnell 1994, 70). Further ecclesiastical sites of the period consist of a holy well to the north of Pennant Melangell at Ffynnon Cwm Ewyn (NPRN 140011/32414) and

- a small isolated church and burial ground at the head of Cwm Rhiwarth called Hen Eglwys Pont Dwr (NPRN 140009).
- 3.3.9 There is only limited evidence for medieval settlement and cultivation in the study area. Steeply terraced strip fields were seen to the south-west of the area at Y Gribin (NPRN 146066; Silvester 2000a, 102, Silvester 2000b, 56) and are associated with one definite and one probable rectangular stone hut (NPRN 168108 and 168109). Further significant potential medieval settlement consists of an enclosed platform settlement on the south-east slope of Craig Rhiwarth to the north of Glan-hafon Uchaf (NPRN 143738), Tan-y-Graig farmhouse to the south of Craig Rhiwarth, consisting of a fifteenth century arch braced, cruck framed farmhouse (NPRN 206706), and a possible shieling on the southern edge of the summit of Crag Rhiwarth (NPRN 141365).
- 3.3.10 There is also evidence of medieval phases of mining at Craig-y-Mwn lead mine where some of the hushes have been radiocarbon dated to AD 1300-1460 (Hughes 2003, 45).
- 3.3.11 *Post-Medieval:* the vast majority of sites identified by previous surveyswere from the post-medieval period and the remains are dominated by upland stock management and extractive industrial activity. The extensive lead mining landscapes within the study area are of great importance with commercial exploitation on behalf of Lord Powys on his estate by 1725 (Bick 1990, 26) and a smelter was built below Craig Rhiwarth (NPRN 152275/156947). The complexity of water management and hushing activity is seen at Cwm-y-Mwyn mine (NPRN 152342) (Plate 5), where the upland portion of the site is covered in leats, reservoirs, trial levels, opencast and hushes, whilst at the foot of the valley are dressing floors, a water driven crusher house and workers cottages that were used from the mid eighteenth century onwards (Bick 1990, 36; Hughes 2003, 45; Jones and Frost 1995, 4-7). Cwm Orog mine (NPRN 152329) is a well preserved complex of mining features on the north side of Craig Rhiwarth dating from the mid eighteenth to the early twentieth centuries, with the stopes and levels upslope to the east feeding the crusher and dressing floors via ore-slides, tramways and latterly an aerial ropeway (Bick 1990, 34; Jones and Frost 1995, 12-15). The North Llangynog mine (NPRN 34007) is located on the south side of Craig Rhiwarth and was in operation from at least the 1840's, it is now much damaged and the dressing floors have been demolished. Other extractive industries include the large slate quarry on the south side of Craig Rhiwarth (NPRN 206547) that was in operation from the 1760's until the 1940's and the short-lived phosphate works at the head of Cwm Rhiwarth at Trwyn Swch (NPRN 145889, 206566) that was in operation between 1872 and 1883.
- 3.3.12 The village of Llangynog grew up around the newly exploited natural resources in the eighteenth and nineteenth centuries with many miners cottages still surviving and used today on the southern slopes of Craig Rhiwarth (CPAT, nd, *Settlement Landscapes*, 4). The local industrial entrepreneurs had a great deal of difficulty in transporting their goods away from the valley because of the poor state of the roads, which was partly rectified in the 1760's when the main valley roads were turnpiked;

- however, the industries declined throughout the nineteenth century. The Tanat Valley Light Railway, completed in 1904, was too late to regenerate sustained exploitation of the lead mines and it in turn was shut in 1964 (CPAT, nd, *Transport and Communication*, 2-4).
- 3.3.13 The improvement of the roads also contributed to an increase of visitors to the valley, particularly to the waterfall of Pistyll Rhaeadr; the vicar of Llanrhaeadr-ym-Mochnant successfully petitioned for a turnpike to be built up to the falls and in the mid nineteenth century Sir Watkin Williams-Wynn built a cottage for tourists at the foot of the falls (NPRN 206694, CPAT, nd, *Ornamental and Picturesque Landscapes*, 1-2).

#### 4. RESULTS OF THE DESK-BASED STUDY

#### 4.1 DESK-BASED STUDY SUMMARY

- 4.1.1 Documentary and Cartographic Evidence: the study area has an elevated and exposed character by comparison with the surrounding topography of the valley bottoms surrounding it and, consequently, has seen little intensive agricultural exploitation within its documented history (Figs 2 and 3). The intake of the more marginal lands was found predominantly on the very edges of the steep sided valleys, around Cwm Pennant, Cwm Rhiwarth, Cwm Rhaeadr, at the northern edge of the Dyffryn Tanat and to a lesser extent Cwm Glan-hafon. Within these intakes both partial and intensive improvement has taken place in the last few centuries. The large-scale Parliamentary Enclosure of unimproved moorland took place in the southern and south-eastern part of the study area, although since then the land has not suffered intensive improvement, and has only low intensity pastoral land use. Sheep folds and stock management features have survived to a certain extent within the upper reaches of the enclosed intakes, along with several small farmstead intakes within Cwm Glan-hafon that were first documented on the OS first edition mapping (1874). On the enclosed land that has been subject to improvement the mapped stock management features and sheep folds were concentrated in the upper parts of the intakes and also into the Afon Disgynfa hanging valley in the north of the study area. The location of sheepfolds in these locations may possibly mirror earlier transhumant exploitation practices, as there are putative shielings on the southern edge of Craig Rhiwarth.
- 4.1.2 The majority of sites on the earlier first and second edition mapping (1874, 1900) consist of extractive industries, which have had a considerable, albeit localised impact on the landscape. The main focal points being the Crag-y-Mwyn, Cwm Orog and North Llangynog lead mines where some detail of the locations of levels and transport features are depicted. Other major extraction sites include the Llangynog slate quarries, to the east of the lead mine and the phosphate works and associated gravel quarries at Trwyn Swch. Also of note are the 'quarries' marked on the OS first edition mapping (1874) at the head of Cwm Glan-hafon, which, when visited consisted of multiple mine workings.
- 4.1.3 Clwyd Powys Sites and Monuments Record (SMR), National Monuments record of Wales (NMR): in total, 335 sites were identified between the SMR and NMR, six Prehistoric, 29 Bronze Age, six Iron Age, two Roman, two Early Medieval, 19 Medieval, 257 post-medieval, six multi-period and eight of unknown date (Table 1, Fig 3). Digital air photo mapping was supplied by the RCAHMW under the auspices of the Uplands Initiative, and any information relating to potential archaeological sites was transcribed onto the field walking maplets.

#### 5. SURVEY RESULTS

#### 5.1 Introduction

- 5.1.1 The study area incorporated 33 sqkm of enclosed and unenclosed land and the survey examined both known and previously unknown sites which ranged in date from the prehistoric to the post-medieval periods. Some of these were individual monuments, such as a single cairn or sheepfold but many were part of larger groups, particularly industrial features, which have been combined into a single record because of the evident relationships between them. All the sites identified by the documentary study were examined, their locations and extent were updated where required on the mapping and the site descriptions were enhanced. Both new and old sites are indicated on Figure 3.
- 5.1.2 **Previously Recorded Sites:** the desk based study identified 335 sites between the NMR and SMR. The great majority of the known sites were confirmed by the identification survey but a small number, despite extensive searching, could not be located.
- 5.1.3 *New Sites:* in total, 124 new sites were identified from the general prehistoric, Bronze Age, Iron Age, Roman, Medieval and Post-Medieval periods. These are summarised below in Table 1 showing substantial numerical increases in the sites within the study area.

Period	Pre-Survey Number	Post-Survey Number	Numerical Increase
Post-Medieval	257	360	103
Medieval	19	26	7
Early Medieval	2	2	0
Roman	2	2	0
Prehistoric	6	10	4
Iron Age	6	7	1
Bronze Age	29	34	5
Multiple	6	6	0
Unknown	8	12	4
Total	335	459	124

Table 1: Pre- and Post-Survey Site Numbers

5.1.4 *Altitude range of sites:* the overall site density was 13.91 sites per km<sup>2</sup>, which was spread according to altitude as shown in Table 2. The greatest density of sites occurs within the 350-525m OD range.

Height Range	<b>Existing Sites</b>	New Sites	Total
150-174m	2	0	2
175-199m	18	0	18
200-224m	33	0	33
225-249m	7	2	9
250-274m	15	2	17
275-299m	9	7	16
300-324m	25	9	34
325-349m	3	3	6
350-374m	69	6	75
375-399m	10	5	15
400-424m	13	9	22
425-449m	19	17	36
450-474m	19	24	43
475-499m	13	5	18
500-524m	55	8	63
525-549m	7	9	16
550-574m	5	10	15
575-599m	4	3	7
600-624m	3	2	5
625-649m	1	1	2
650-674m	2	2	4
675-699m	0	0	0
700-724m	1	0	1
725-749m	0	0	0
750-774m	0	0	0
775-799m	0	0	0
800-824m	1	0	1
825-849m	1	0	1
Total	335	124	459

Table 2: Pre- and Post-Survey Site Numbers with respect to altitude

5.1.5 *Range of site types:* the sites identified from the present survey, and previously identified within the record fall into 76 types, which are defined as shown in Table 3.

Туре	Existing Sites	New Sites	Total
Aerial Ropeway	2	0	2
Aircraft Crash Site	1	0	1
Boundary Bank	2	2	4
Boundary Stone/ Marker Cairn	1	3	4
Bronze Age Pits	1	0	1
Building/ Building Platform/ Platform	21	2	23
Cairn/ Mound/ Barrow/ Ring Cairn	26	7	33
Cairnfield	2	0	2
Chapel	5	0	5
Church	4	0	4
Church Bells	2	0	2
Church Building	1	0	1
Church Cross	2	0	2
Church Effigy	2	0	2
Church Font	1	0	1
Church Lychgate	1	0	1
Church Preaching Mound	1	0	1
Church Pulpit	1	0	1
Church Rood Screen	1	0	1
Church Shrine	1	0	1
Church Yard	2	0	2
Cist	2	0	2
Clearance Cairns	2	26	28
Cockpit	6	0	6
Crusher House	2	0	2
Ditch	0	1	1
Drain	0	1	1
Dressing Floor	1	0	1
Early Medieval Graves	1	0	1
Earthwork	0	2	2

4	0	4
1	8	9
4	0	4
1	0	1
13	2	15
3	0	3
4	4	8
0	1	1
2	0	2
1	0	1
1	0	1
11	4	15
31	2	33
2	0	2
17	0	17
7	0	7
1	0	1
5	0	5
7	0	7
0	2	2
5	0	5
3	0	3
0	1	1
1	0	1
27	12	39
1	0	1
10	0	10
4	0	4
1	0	1
42	20	62
6	6	12
0	1	1
		1
		1
		1
	1 4 1 1 1 3 3 4 4 0 0 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1       8         4       0         1       0         13       2         3       0         4       4         0       1         2       0         1       0         1       0         1       0         1       0         2       0         17       0         7       0         0       2         5       0         3       0         0       1         1       0         27       12         1       0         4       0         1       0         42       20         6       6         0       1         1       0         1       0

Standing Stone	1	0	1
Stock Enclosure	0	4	4
Stone Circle	3	0	3
Tailrace	1	0	1
Tollgate	1	0	1
Trackway/ Track/ Hollow Way	5	7	12
Tramway/ Tramroad	7	0	7
Wall	0	6	6
Well	2	0	2
Wheelpit	2	0	2
Workshop	1	0	1
Total	335	124	459

Table 3: Range of Site Types

#### 5.2 Prehistoric

- 5.2.1 There was plentiful evidence of prehistoric activity within the environs of the study area, which mainly comprised funerary cairns, along with possible clearance cairns and a discrete ceremonial landscape. The earliest recorded evidence were the early Bronze Age stone circles and avenue in the ceremonial landscape within the Afon Disgynfa hanging valley (Burl 2000, 184, Grimes 1963, 122, NPRN 14004 and 145270) although elements of this landscape may date back to the Neolithic period. Limited numbers of findspots were also recorded from the Bronze Age, in particular pits and a cremation at Pennant Melangell Church, a funerary urn and an Bronze Age axe (NPRN 155307, 156078 and 141367). There were plentiful Bronze Age funerary monuments which were evenly distributed on the summits of hills and along ridgelines, plateaux and saddles upon the open moorland of the study area. The majority of these sites and monuments are highly visible in the landscape they occupy, and it was therefore not surprising, in an area of such stark natural landforms, that few previously unrecorded funerary cairns were identified.
- 5.2.2 **Bronze Age:** five new, potentially Bronze Age, sites were added, and include three small, probably marker cairns on the summit and western slopes of Craig Rhiwarth (NPRN 275305, 275306 and 275307) that range in size from 1m diameter by 0.7m high to 2m diameter and 0.4m high. The cairns were small and were probably marker cairns; however, cairn NPRN 275307, located on the summit of Craig Rhiwarth, was evidently multi-phased with more recent stone material on top of an earlier earthfast cairn. The underlying part of the structure was possibly a boundary cairn and the later a walkers cairn.

- 5.2.3 A further two potential cairns were identified in the east of the study area at Craig Garwallt and above Tyn-y-Llwyn (NPRN 275387 and 275389) although these could be associated with later mining and clearance activities. The first is a moderately large elliptical cairn identified from the RCAHMW aerial photo interpretation and was located in an improved field at Craig Garwalt; the cairn was 8m long by 4m wide and was up to 1m in height. The enclosed field has been subject to field clearance with three further areas of modern field clearance in the vicinity (NPRN 275385, 275386 and 275388), and this cairn has probably been enhanced by recent field clearance. The second cairn was located in a field to the north-west of the first and lay on the hillside overlooking Tyn-y-Llwyn. It was constructed of small, angular scree and measured 9m long by 4m wide and up to 0.7m in height; while this could potentially be a prehistoric cairn there is also the possibility that it was a more recent clearance cairn.
- 5.2.4 Only one previously recorded site of Bronze Age character was provided with additional information by the field survey, which was the Moel Sych summit cairn (NPRN 140002) (Plate 1). This was located on the northernmost tip of the study area and was described as being kerbed and measuring up to 16m in diameter by 1m in height. The Ordnance Survey marked it as no longer visible in 1971, but this was clearly not the case. The cairn survives to the previous dimensions but has been masked by a later boundary cairn that marks the boundary of three counties, and has in part robbed the earlier cairn. The cairn incorporates some natural outcropping stone within the build and has a kerbed element defined on the south side and irregularly on the north.
- 5.2.5 *General Prehistory:* the field survey identified four new sites that were attributed to a broad prehistoric date as well as two previously identified sites that were provided with additional information by the field survey and these sites were located in two areas. The first new site comprised of two small clearance cairns, located to the north of Y Clogydd (NPRN 275356) at the head of Cwm yr Ast overlooking the stream and the valley below. The lichen-covered cairns were built from small to medium, sub-rounded stones, arranged in loose piles measuring 2m in diameter by 0.4m high. Despite the prominent positions, these were most likely to be clearance cairns.
- 5.2.6 The other three newly recorded sites include two cairns and a boundary bank located to the north of Nant-Ddial (NPRN 275348, 275349, and 275347). The cairns were located on the sloping edge of the plateau below Garnedd Wen, overlooking the valley of Cwm Glan-hafon and across towards Craig Rhiwarth. Each cairn was sub-circular and measured up to 5m in diameter by 1.5m in height. The boundary bank (NPRN 275347) ran along the contour of the slope from southeast to north-west, between Nant-y-Ddial and extending up towards the slopes of Garnedd Wen; at the north end the bank turned 45 degrees and ran to the crag. The bank survives as a denuded, low, wide bank with protruding stone and was up to 3m wide and no more than 0.5m high. The newly discovered cairns are part of a distinct grouping of monuments on the plateau between Nant-y-Ddial and Garnedd Wen. Within the distinct grouping are five previously discovered cairns (NPRN)

143242, 144333, 144334, 145558 and 145559) which are divorced from the newly identified group by the boundary bank (NPRN 275347). The previously discovered cairns consist of a badly mutilated/destroyed cairn on an outcrop above and to the north of the main group (NPRN 143242) a moderately large funerary cairn placed around a large erratic rock (NPRN 144334), and three associated, but smaller, probable clearance cairns measuring typically 5m diameter by 0.5m in height and located to the west nearer the boundary bank (NPRN 144333, 145558 and 145559). While these smaller cairns may have served as clearance monuments within an area of improved land, at least one may have also had a sepulchral function, Cairn NPRN 144333 is slightly larger than the other two and has a central depression, and another of the cairns (NPRN 145559) appears to have the elements of a small collapsed internal cist. In addition, there was a possible funerary cairn to the north on the edge of the outcrop at Garnedd Wen (NPRN 143242). The spatial association with the boundary bank may be an indication that it was related to the cairns and potentially divided two areas of cleared land on the lower slopes of Garnedd Wen.

#### 5.3 IRON AGE

5.3.1 Only one new, putative Iron Age site was discovered by the field survey, a well defined circular stone hut circle (NPRN 275304) (Plate 2). The hut circle was at the western end of a lower sloping plateau beneath a natural defensive cliff on the west side of Craig Rhiwarth, and below the hillfort settlement (NPRN 141363). The hut circle measured *c*6m in diameter by 0.5m high and was internally hollowed. Its drystone walls were irregularly coursed and it was 0.8m wide and 3m high. On the south-western side was a possible entrance 0.5m in width.

#### 5.4 MEDIEVAL

- 5.4.1 The study area is moderately well represented by medieval period sites, although these do not form extensive complex landscapes. There was the localised survival of significant medieval features, many of which had been previously discovered, but the field survey was able to enhance the existing record.
- 5.4.2 The platform settlement on the lower shallow slope on the south-east side of Craig Rhiwarth, just to the north of Glan-hafon Uchaf (NPRN 143738), was described within the NMR as unenclosed; however it was found to comprise three platforms. each up to 15m long by 10m wide, which were encircled by earthen and stone banks. The enclosure was shown as sub-circular on the aerial photographic interpretation, and the banks consisted of earth and protruding stone and were 1.3m wide by 0.5m high. It was difficult to identify further field systems or platform features within the settlement, as the bracken cover was moderately high. The centre of the settlement had been cleared of surface stone however, and at least three clearance cairns (NPRN 275311) were evident. Further to the south in Cwm Gloywfa is a relatively isolated three-celled rectangular building (NPRN 275376)

- (Plate 4), that is 16m long; it is considerably decayed and has a sheep shelter constructed into the central cell. There is no associated field system and its remote upland context suggest that it was originally a shieling, but its size and three-celled form suggest that it may have developed into a more established agricultural settlement.
- 5.4.3 Another putative medieval site consisted of the possible farmstead site at Rhyd y Cwrlid, located in the upper reaches of the Afon Disgynfa hanging valley (NPRN 146116) (Plate 3), which now consists of a group of three rectangular sheepfolds, including a washfold, which are conventional post-medieval stock control structures. However, beneath the sheepfolds were the foundations of earlier stone structures and paddocks with earthen banks with earthfast medium to large boulders in a closely defined area on the north side of Afon Disgynfa. The site was also possibly associated with an area of improved land, demonstrated by clearance cairns (NPRN 275313-5) that were located to the east along the bottom of the valley. These earlier structures were potentially elements of a farmstead or a group of shielings.
- 5.4.4 Further putative medieval sites within the study area included the strip field systems and associated rectangular houses at Y Gribin (NPRN 146066, 168108 and 168109), and also the grouping of shielings at the south end of the summit of Craig Rhiwarth (NPRN 141365). The first of these sites could not be examined by the field survey because of access restrictions, but the shielings on Craig Rhiwarth were examined. These consisted of four well-defined rectangular stone structures occupying a small sheltered plateau beneath the craggy outcrops on Craig Rhiwarth. Each of the shielings commanded naturally defined sheltered areas and there were clearly defined access routes down into the valley below. There was no evidence of field systems that were referred to in the primary site description, and the site grouping took the form of a moderately dispersed but sheltered upland transhumant settlement.

#### 5.5 POST-MEDIEVAL

- 5.5.1 In total, 103 sites have been ascribed to the post-medieval period, and form the majority of the new sites. However, there is some uncertainty in determining dates, particularly between later medieval and the post-medieval, purely on the basis of the physical evidence, particularly when agricultural settlement has remained largely unchanged until relatively recent times, and there is the potential that many of the post-medieval farmsteads and landscapes have medieval origins. Similarly, there is a long documented history of mineral extraction in the area, in part overlain by the more extensive post-medieval workings.
- 5.5.2 Agricultural Landscapes: the expansion of agricultural activity and the enclosure of waste land within the study area during the eighteenth and nineteenth centuries was limited to the steep sides of the surrounding glacial valleys. In particular, the later enclosure has extended around the south-eastern side of the study area, beneath Y Garn, and in the centre on the east side of Cwm Rhiwarth. Farming of

these slopes and more intensive land improvement has led to the differential survival of field monuments; for example some of the stock enclosures and stock management features have survived on the fringes of the intakes. There is an extensive complex of relict field systems, possible house platforms and stock management features surviving on the slopes above Mochnant in the south-east of the study area (NPRN 275395-275401). There is a further series of ruinous small enclosed fields and farmsteads extending up the narrow ancillary valley of Cwm Glan-hafon, where small fields, with occasional clearance cairns, around two farmhouses, and a further unenclosed house platform to the south (NPRN 275336-275342 and 275344). In other parts of the enclosure more intensive field clearance has taken place, especially on the eastern side of Cwm Rhiwarth. There is a distinct area of ground between Nant y Pantiau and Nant Llwynon where the aerial photographic interpretation has highlighted a complex grouping of agricultural paddocks and enclosures (NPRN 275369). The field has now been heavily improved and all that remains are a group of five large machine-dumped clearance cairns.

- 5.5.3 The upland moorland, except for the northern half of the study area, has been enclosed by fence and is no longer in the ownership of the large estates, such as Wynnestay and Powis Castle, and are now for the most part divided piecemeal between the local farmers within the valleys. The upland areas have not suffered the same degree of improvement as the valley sides, and this has left an upland pastoral landscape with sheepfolds, shelters, shielings, trackways and peat cutting scars. This is interspersed, and presumably in some areas masked by, localised but extensive mining activity. There is evidence of peat cutting in several areas of the upland moorland within the study area. The most obvious of these is in the north of the study area, on the ridgeline above Llyn Lluncaws and below the summit of Moel Sych (NPRN 275320). The site consists of moderately extensive irregular peat cutting associated with ribbon-like trackways ascending from Pistyll Rhaeadr.
- 5.5.4 The practice of transhumant farming was most prevalent during the medieval period and to a certain extent some, if not many, of the upland settlements and sheepfolds within the study area may have had an earlier origin and have re-used favoured sheltered locations, sometimes upon platforms and foundations of medieval shielings. For example the farmstead at Rhyd y Cwrlid (NPRN 146116) (Plate 3), already discussed, is in a hanging valley littered with sheepfolds, and a group of sites to the east of this farmstead on the narrow tributary valley of Cwm Glowfa consist of two long house structures with associated sheepfolds (NPRN 275375-275377). Each of these structures are located on flattened platforms which may be the remains of earlier sites.
- 5.5.5 *Industrial Activity:* the mining activity within the study area is extensive, with large-scale extraction at Cwm-y-Mwyn (Plate 5). The upper workings of this mines have been surveyed closely but the dressing floors, and the extensive leat system running into the reservoir for the crushing mill, have only been subject to cursory investigation prior to the present study (NPRN 275353). The mining remains at Craig Rhiwarth, include the Cwm Orog, North Llangynog lead mines (NPRN

152329 and 34007), a slate quarry (NPRN 206547) and ancillary trial levels (NPRN 206596) which surround the central massif. A drainage leat was discovered just below and to the south of the summit of Craig Rhiwarth (NPRN 275308), which was presumably used to draw water away from the mine workings rather than to feed water-powered machinery. Similarly, to the east of Craig Rhiwarth, on the eastern slopes of Cwm Glan-hafon, is a smaller collection of industrial sites, including slate quarries (NPRN 206549 and 206603) and six trial levels (NPRN 206558) (Plate 6). There were also two drainage leats running downslope from the trial levels towards Nant Sebon (NPRN 275343 and 275345). In the north-west of the study area are the remains of a complex of features associated with short lived phosphate works at Twyn Swch. Previously identified features include three air shafts at the southern end of the level entrance and open stoping at the surface with trials immediately to the north (NPRN 145889). Additionally there were long linear gravel pits at the phosphate works but located to the north of Afon Erith (NPRN 206725 and 206726) which were also associated with zig-zagging trackways or drains (NPRN 275420). To the north of the mine workings, and sat upon the slope leading down to Nant Erith, were two stone houses which were probably related to the mine workings and possibly served as mine office buildings (NPRN 275421 and 275422). A probable potash kiln was discovered to the north-east of the mine workings, adjacent to the north side of Nant Erith (NPRN 275417), which consisted of a mound measuring 11m long from north to south by 7m wide and up to 1.5m high. The inside chamber was revetted with partially-collapsed, slate drystone walls. There was evidence of burning on some stones, although there were no visible remains of a pot.

#### 6. CONCLUSION

#### 6.1 DISCUSSION

- 6.1.1 The survey has recorded a broad range of monuments and landscapes dating between the Neolithic and the present, of which the most significant landscapes are the ceremonial complex around Rhos-y-Beddau and Cwm Rhiwiau stone circles (NPRN 14004 and 145270), the long-lived mining remains centred on Cwm-y-Mwyn (Plate 5) and the extractive remains immediately north of Craig Rhiwarth, which may have had an association with the hillfort. In addition, there is a general scatter of mainly funerary prehistoric cairns associated with the more marked topographic features in the area.
- 6.1.2 The location of the ceremonial complex of stone circles, stone avenue and funerary cairns within the hanging valley above Pistyll Rhaeadr is of considerable significance as it contains one of only two avenues associated with a stone circle discovered in Wales (Burl 200, 184). The complex of monuments itself is enclosed within a valley overlooked on three sides but open towards the east down into Cwm Rhiwarth down past the spectacular natural landform of the Pistyll Rhaeadr falls. It is possible that Pistyll Rhaeadr itself was a place of veneration to the creators of the monuments and which was reflected in the siting of the ceremonial complex.
- 6.1.3 The cairns across the area are distinctive in that many of them appear to be funerary in function, and are predominantly located on the broad ridges of steep crags, the summits of hills, along plateaux and saddles between hills that all look down into the surrounding steep glacial valleys. Such topographic settings are typically favoured for Bronze Age funerary monuments (Quartermaine and Leech forthcoming) from both North Wales and the Northern English uplands.
- 6.1.4 Although there is a significant number of funerary monuments, there is a marked absence of associated settlement or agricultural remains. The notable exception is the grouping of cairns on the saddle between Glan hafon and Y Clogydd where there is an apparent discrete cairnfield, made up of only about six cairns, in part associated with a large funerary cairn (NPRN 144334). Even here at least one of the cairns (NPRN 145559), although only 4.5m x 3m in size, appears to have the remains of a collapsed cist within its interior, and raises the possibility that at least some of these may have served both as funerary monuments as well as clearance cairns. The presence of substantial numbers of funerary or ceremonial monuments, but a relative absence of contemporary settlement remains mirrors the situation at Ruabon (OA North 2003), where it was argued that in the Bronze Age, when the funerary monuments were constructed, most occupation was on the adjacent lowlands as there was insufficient pressure for expansion onto the adjacent upland waste, which served almost exclusively as a depository for the deceased.
- 6.1.5 By contrast with the relative absence of the occupation activity for the Bronze Age, there is clear evidence for the Iron Age in the form of the hillfort (NPRN 141363) and an adjacent stone founded hut circle (NPRN 275304) (Plate 2). However, this

situation is certainly far from unusual, reflecting that while there may have been insufficient economic pressures to warrant the expansion out from the lowlands onto the marginal uplands, there were undoubted defensive pressures in the Iron Age that warranted the exploitation of a natural exposed promontory, such as Craig Rhiwarth, to provide for security of a community. Although there are a large number of annular features within the interior of the hillfort, the recent excavation evidence (Sayce 1938, 106) suggests that many of these may in fact be natural pingos rather than hut circles. As such this raises the possibility that the fort served as a refuge rather than as a permanent defended settlement.

- 6.1.6 In later periods the occupation of the uplands was again apparently non-intensive. While there are the remains of a number of settlement sites, these were not associated with any field systems and appear to be shieling sites, exploiting the grazing of the marginal lands only during the summer months. The classic examples of these are to be found on a small sheltered plateau beneath the outcrops of Craig Rhiwarth, where each of the four isolated rectangular huts occupied a single sheltered terrain (eg NPRN 141365) and yet were within the same broad area. As such this would appear to reflect a scattered but yet self contained transhumant community. The one apparent permanent settlement was the enclosed settlement on the lower slopes to the north of Glan-hafon Uchaf (NPRN 143738) which contained three rectangular platforms.
- 6.1.7 In the post-medieval period the farmsteads were for the most part within the enclosed lands around the lower margins of the study area, but yet there was abundant evidence for stock control features across the higher ground, such as stock pounds and sheep washes. In at least one shieling site (NPRN 146116), at Rhyd y Cwrlid in the Afon Disgynfa hanging valley, the successor of the medieval rectilinear houses was a series of post-medieval stock pounds, which highlights the shift away from seasonal occupation to more established grazing practice (Plate 3).
- 6.1.8 The various lead mining and processing landscapes and slate quarries within the study area represent a well-documented and extant survival of early industry in North Wales. The post-medieval mining landscapes incorporate not only the extractive elements of the industry, but also the processing components, and the associated communication infrastructure. Their survival and complexity mark them as being of considerable archaeological importance; however, the most significant aspect of these mining landscapes is that there is evidence for medieval hushing at Craig-y-Mwn lead mine (Hughes 2003, 45), evidence for Roman working at Cwm Orog and Crag-y-Mwyn lead mines (NPRN 152327 and 152341), and even potentially evidence for prehistoric working as suggested by the finding of late Bronze Age/ early Iron Age mining hammers at both Cwm Orog (NPRN 152326) and Craig Rhiwarth. This degree of continuity/reuse highlights that the remains are of immense archaeological importance.

#### 7. RECOMMENDATIONS

#### 7.1 RECOMMENDATIONS FOR FURTHER WORK

- 7.1.1 The survey has highlighted a prehistoric landscape that contains a high proportion of sepulchral monuments. There is a case for further investigation of the monuments and their relationship with the local topography; this would take the form of more detailed survey work to follow on from the present identification survey to examine the detailed character of the funerary sites, to investigate the inter-relationship of the monuments and their outward vistas. Such a survey would particularly suit the setting of the ceremonial complex around Rhos-y-Beddau and Cwm Rhiwau stone circles (NPRN 14004 and 145270), and the complex of funerary and clearance cairns along with the boundary bank on the saddle between Glan-hafon and Y Clogydd (centred upon NPRN 144333).
- 7.1.2 There are considerable uncertainties about the form and function of the hillfort of Craig Rhiwarth (NPRN 141363) relating in particular to annular features within the interior of the fort. This prompts the need for a detailed survey of the features coupled with the selective trial excavation of.
- 7.1.3 The important industrial heritage of the Tanat valley is already in the process of being archaeologically investigated, however, further possible work could involve an intensive survey of the lower workings and dressing floors below Cwm-y-Mwyn mine (NPRN 152342) to complement the much more intensively investigated upper workings and hushes. Further intensive survey could be carried out on the North Llangynog mine, and the slate quarry to the west (NPRN 34007 and 206547). They form an obvious visual element of the use of Craig Rhiwarth in the past and dominate the view to the north of Llangynog.

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# APPENDIX 1 GAZETTEER OF NEW SITES

NPRN	NGR	ТҮРЕ	PERIOD	ALTITUDE (m)
275301	SJ 05252650	SHELTER	Post-Medieval	245
275302	SJ 04922665	SHAFT	Post-Medieval	250
275303	SJ 04752680	QUARRY	Post-Medieval	230
275304	SJ 05122704	HUT CIRCLE	Iron Age	440
275305	SJ 05082701	CAIRN	Bronze Age	422
275306	SJ 05672708	CAIRN	Bronze Age	530
275307	SJ 05492710	CAIRN	Bronze Age	512
275308	SJ 05752675	LEAT	Post-Medieval	425
275309	SJ 06152753	QUARRY	Post-Medieval	285
275310	SJ 06142754	SHELTER	Post-Medieval	285
275311	SJ 06352670	CAIRNFIELD	Medieval	260
275312	SJ 07082976	SHEEP SHELTER	Medieval	440
275313	SJ 06473005	CAIRNFIELD	Medieval	450
275314	SJ 06533007	CAIRNFIELD	Medieval	455
275315	SJ 06323008	CAIRNFIELD	Medieval	455
275316	SJ 06073011	SHEEP SHELTER	Medieval	450
275317	SJ 05723004	SHEEP SHELTER	Medieval	460
275318	SJ 06163107	SHEEP FOLD	Post-Medieval	580
275319	SJ 07193002	DRAINAGE DITCH	Post-Medieval	500
275320	SJ 07143054	PEAT CUTTING	Post-Medieval	600
275321	SJ 06503065	QUARRY	Post-Medieval	635
275322	SJ 06663074	QUARRY	Post-Medieval	665
275323	SJ 03812745	FARMHOUSE	Post-Medieval	295
275324	SJ 03502740	TRACKWAY	Post-Medieval	350
275325	SJ 03202763	SHOOTING STAND	Post-Medieval	480
275326	SJ 07652649	QUARRY	Post-Medieval	370
275327	SJ 07772675	HAFOD	Post-Medieval	455
275328	SJ 07802670	SHEEP FOLD	Post-Medieval	465
275329	SJ 07652675	BOUNDARY WALL	Post-Medieval	460
275330	SJ 07702670	TRACKWAY	Post-Medieval	490
275331	SJ 07852688	HUT	Post-Medieval	530
275332	SJ 07832712	SHEEP SHELTER	Post-Medieval	565
275333	SJ 07802713	SHEEP FOLD	Post-Medieval	565
275334	SJ 07732700	HAFOD	Post-Medieval	535
275335	SJ 07202722	SHEEP SHELTER	Post-Medieval	535
275336	SJ 06552785	HOUSE PLATFORM	Post-Medieval	370
275337	SJ 06522706	BOUNDARY WALL	Post-Medieval	290
275338	SJ 06522706	FARMHOUSE	Post-Medieval	290
275339	SJ 06482716	WALL	Post-Medieval	290
275340	SJ 06392725	FARMHOUSE	Post-Medieval	300
275341	SJ 06472732	CAIRNFIELD	Post-Medieval	300

		T		
275342	SJ 06422740	CAIRNFIELD	Post-Medieval	305
275343	SJ 06412744	LEAT	Post-Medieval	310
275344	SJ 06512748	FARMHOUSE	Post-Medieval	320
275345	SJ 06832755	LEAT	Post-Medieval	455
275346	SJ 06582741	QUARRY	Post-Medieval	340
275347	SJ 06512707	BOUNDARY BANK	Prehistoric	525
275348	SJ 06782779	CAIRNFIELD	Prehistoric	515
275349	SJ 06792779	CAIRNFIELD	Prehistoric	515
275350	SJ 06752788	TRACKWAY	Post-Medieval	560
275351	SJ 06752796	FARMSTEAD	Post-Medieval	570
275352	SJ 06802808	TRIAL MINE	Post-Medieval	580
275353	SJ 07682884	LEAT	Post-Medieval	310
275354	SJ 07582900	BOUNDARY WALL	Post-Medieval	300
275355	SJ 07732895	FARMSTEAD	Post-Medieval	280
275356	SJ 06592861	CAIRNFIELD	Prehistoric	565
275357	SJ 00392801 SJ 07492793	QUARRY	Unknown	500
275358	SJ 07492793 SJ 08362796	SHEEP FOLD	Post-Medieval	470
	SJ 08302790 SJ 08132787			
275359		SHEEP SHELTER	Post-Medieval	490
275360	SJ 08202806	EARTHWORK	Unknown	450
275361	SJ 07532820	CAIRNFIELD	Post-Medieval	480
275362	SJ 02553027	PEAT CUTTING	Post-Medieval	540
275363	SJ 02713020	MARKER CAIRN	Post-Medieval	560
275364	SJ 02883009	HOUSE	Post-Medieval	580
275365	SJ 03113025	BOUNDARY CAIRN	Post-Medieval	600
275366	SJ 04473012	SHEEP FOLD	Post-Medieval	550
275367	SJ 02323011	SHEEP FOLD	Post-Medieval	520
275368	SJ 04342843	CAIRNFIELD	Post-Medieval	340
275369	SJ 04372860	EARTHWORK	Post-Medieval	380
275370	SJ 04922892	TRACKWAY	Unknown	520
275371	SJ 05222870	CAIRNFIELD	Post-Medieval	570
275372	SJ 04862937	MARKER CAIRN	Unknown	660
275373	SJ 04112909	QUARRY	Post-Medieval	540
275374	SJ 04112910	CAIRNFIELD	Post-Medieval	540
275375	SJ 06482963	SHEEP FOLD	Post-Medieval	440
275376	SJ 06492966	HAFOD	Post-Medieval	430
275377	SJ 06592977	HAFOD	Post-Medieval	410
275378	SJ 06612976	SHEEP FOLD	Post-Medieval	410
275379	SJ 06283001	HAFOD	Post-Medieval	430
275380	SJ 05932954	SHEEP FOLD	Post-Medieval	560
275381	SJ 08132832	QUARRY	Post-Medieval	337
275382	SJ 08702828	TRACKWAY	Post-Medieval	360
275383	SJ 08792815	CAIRNFIELD	Post-Medieval	407
275384	SJ 08792815	CAIRNFIELD	Post-Medieval	390
275385	SJ 08792813 SJ 09092770	CAIRNFIELD	Post-Medieval	466
		CAIRNFIELD		447
275386	SJ 09242769		Propos Acc	
275387	SJ 09262777	CAIRN	Bronze Age	432
275388	SJ 09112780	CAIRNFIELD	Post-Medieval	459

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275389	SJ 09012804	CAIRN	Bronze Age	380
275390	SJ 09072823	BOUNDARY BANK	Post-Medieval	307
275391	SJ 09062823	HUT	Post-Medieval	307
275392	SJ 08612839	HOUSE	Post-Medieval	350
275393	SJ 08852648	SHEEP FOLD	Post-Medieval	372
275394	SJ 08662651	CAIRNFIELD	Post-Medieval	398
275395	SJ 08702662	TRACKWAY	Post-Medieval	395
275397	SJ 08672665	STOCK ENCLOSURE	Post-Medieval	410
275398	SJ 08672664	QUARRY	Post-Medieval	410
275399	SJ 08592667	STOCK ENCLOSURE	Post-Medieval	420
275400	SJ 08442671	STOCK ENCLOSURE	Post-Medieval	444
275396	SJ 08712660	QUARRY	Post-Medieval	400
275401	SJ 08532680	HAFOD	Post-Medieval	425
275402	SJ 08762704	CAIRNFIELD	Post-Medieval	468
275403	SJ 08762696	SHEEP FOLD	Post-Medieval	455
275404	SJ 08762703	BOUNDARY WALL	Post-Medieval	465
275405	SJ 08902696	QUARRY	Post-Medieval	448
275406	SJ 08612720	CAIRNFIELD	Post-Medieval	551
275407	SJ 08622715	CAIRNFIELD	Post-Medieval	540
275408	SJ 05342824	STOCK ENCLOSURE	Post-Medieval	410
275409	SJ 04892846	CAIRNFIELD	Post-Medieval	505
275410	SJ 04782832	CAIRNFIELD	Post-Medieval	460
275411	SJ 08013006	HOLLOW WAY	Post-Medieval	490
275412	SJ 01552985	HUT PLATFORM	Post-Medieval	470
275413	SJ 01542970	CAIRN	Post-Medieval	447
275414	SJ 01562973	CAIRN	Post-Medieval	445
275415	SJ 01652969	BOUNDARY WALL	Post-Medieval	440
275416	SJ 01672968	CAIRNFIELD	Post-Medieval	440
275417	SJ 01802992	POTASH KILN	Post-Medieval	445
275418	SJ 01802992	CAIRNFIELD	Post-Medieval	472
275419	SJ 01822993	CAIRNFIELD	Post-Medieval	472
275420	SJ 01252971	DITCH	Post-Medieval	469
275421	SJ 01222955	HUT	Post-Medieval	457
275422	SJ 01392957	HUT	Post-Medieval	448
275423	SJ 01822989	CAIRNFIELD	Post-Medieval	460
275424	SJ 01882987	SHEEP SHELTER	Post-Medieval	452

#### **ILLUSTRATIONS**

Figure 1: Location Map

Figure 2: Dyffryn Tanat Study Area

Figure 3: Site Distribution showing both pre- and post-survey sites

#### **PLATES**

- Plate 1: Moel Sych Summit Cairn (NPRN 140002)
- Plate 2: Outline of hut circle NPRN 275304 on the west side of Craig Rhiwarth
- Plate 3: Putative shieling group overlain by stock shelters at Rhyd-y-Cwrlid (NPRN 146116)
- Plate 4: Three celled long house in Cwm Gloywfa (NPRN 275376)
- Plate 5: Lead mining extraction sites on the upper slopes of Cwm-y-Mwyn
- Plate 6: Slate quarry on the eastern slopes of Cwm Glan (NPRN 206549)

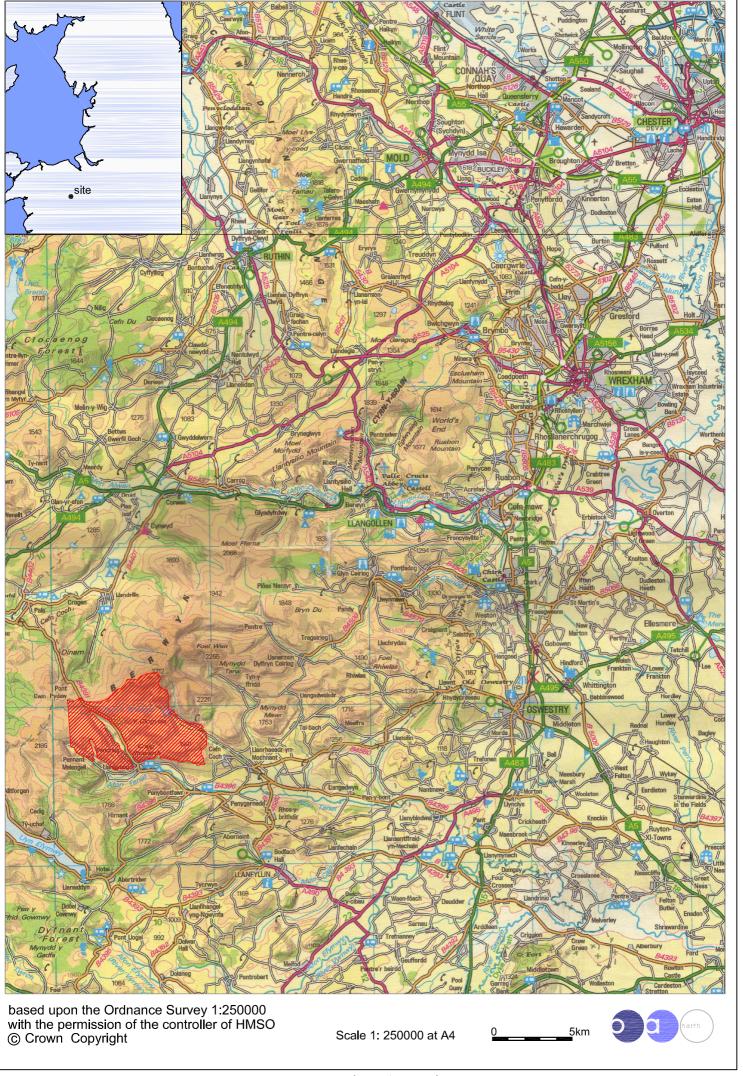


Figure 1: Location map

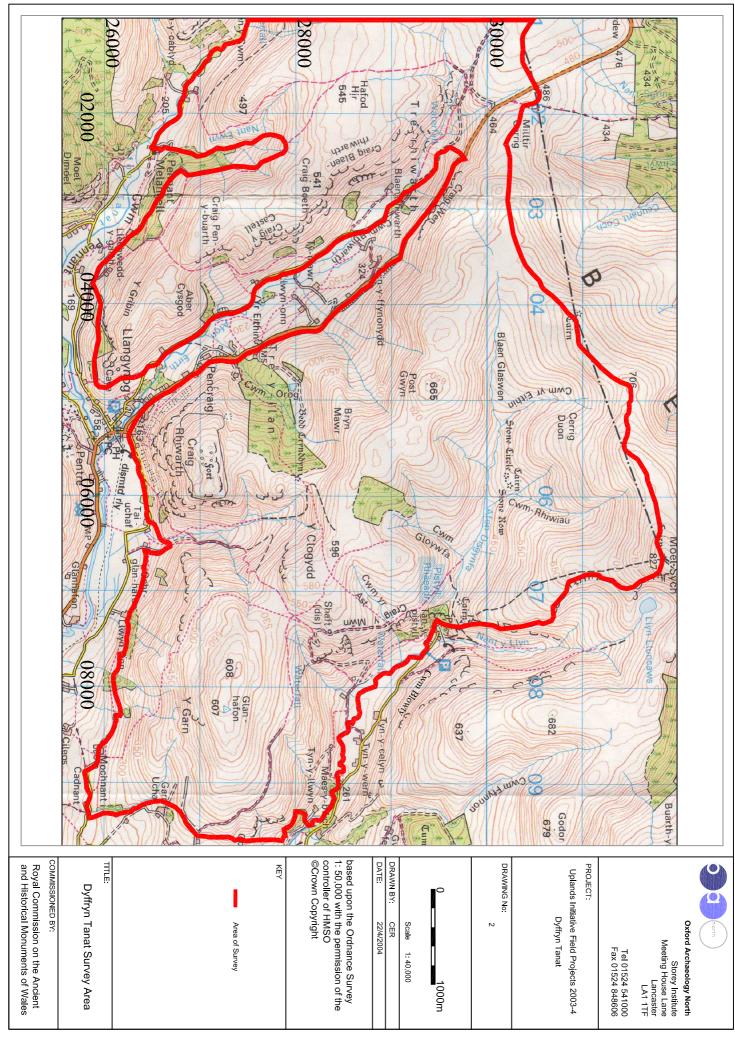


Figure 2 : Dyffryn Tanat Study Area

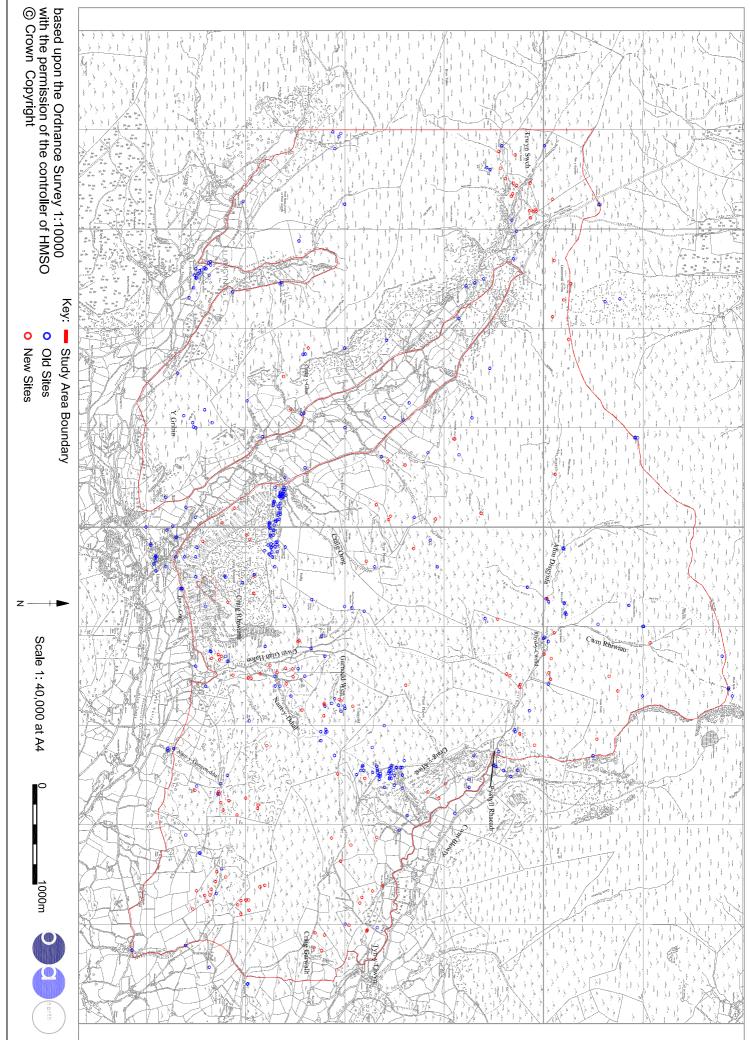


Figure 3: Site distribution showing both pre- and post survey sites



Plate 1: Moel Sych Summit Cairn (NPRN 140002)



Plate 2: Outline of hut circle NPRN 275304 on the west side of Craig Rhiwarth



Plate 3: Putative shieling group overlain by stock shelters at Rhyd-y-Cwrlid (NPRN 146116)



Plate 4: Three celled long house in Cwm Gloywfa (NPRN 275376)



Plate 5: Lead mining extraction sites on the upper slopes of Cwm-y-Mwyn



Plate 6: Slate quarry on the eastern slopes of Cwm Glan (NPRN 206549)





#### Head Office/Registered Office/ OA South

Janus House Osney Mead Oxford OX2 0ES

t: +44(0)1865 263800 f: +44(0)1865 793496

e:info@oxfordarchaeology.com w:http://oxfordarchaeology.com

#### **OA North**

Mill 3 Moor Lane Lancaster LATTQD

t: +44(0)1524 541000 f: +44(0)1524 848606

e: oanorth@oxfordarchaeology.com w:http://oxfordarchaeology.com

#### **OA East**

15 Trafalgar Way Bar Hill Cambridgeshire CB23 8SQ

t: +44(0)1223 850500 e: oaeast@oxfordarchaeology.com w:http://oxfordarchaeology.com



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