



**UPLANDS INITIATIVE
FIELD PROJECTS
2011-12,
Foel Goch
Survey Area,**

North Wales

**Archaeological Survey
Report**



Oxford Archaeology North

February 2012

RCAHMW

Issue No: 2011-12/1204
OA North Job No: L10362
NGR: SH 947 416

Document Title: UPLANDS INITIATIVE FIELD PROJECTS 2011-12,
FOEL GOCH SURVEY AREA

Document Type: Archaeological Survey Report

Client Name: RCAHMW

Issue Number: 2011-12/1204

OA Job Number: L10362

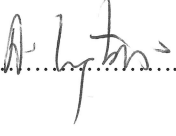
National Grid Reference: SH 947 416

Prepared by: Peter Schofield
Position: Project Officer
Date: February 2012

Checked by: Jamie Quartermaine
Position: Senior Project Manager
Date: February 2012

Approved by: Alan Lupton
Position: Operations Manager
Date: February 2012

Signed 

Signed 

Oxford Archaeology North

Mill 3
Moor Lane Mills
Moor Lane
Lancaster
LA1 1GF
t: (0044) 01524 541000
f: (0044) 01524 848606

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

© Oxford Archaeology Ltd (2012)

Janus House
Osney Mead
Oxford
OX2 0EA

t: (0044) 01865 263800
f: (0044) 01865 793496

Oxford Archaeology Ltd is a Registered Charity No: 285627

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

CONTENTS

SUMMARY	2
CRYNODEB.....	3
ACKNOWLEDGEMENTS.....	4
1. INTRODUCTION.....	5
1.1 Circumstances of the Project.....	5
1.2 Objectives.....	5
2. METHODOLOGY.....	6
2.1 Project Design	6
2.2 Desk-Based Survey.....	6
2.3 Identification Survey.....	6
2.4 Gazetteer of Sites.....	7
2.5 Archive.....	7
3. TOPOGRAPHICAL AND HISTORICAL BACKGROUND.....	8
3.1 Location and Topography	8
3.2 Geology.....	8
3.3 Archaeological and Historical Background.....	8
4. RESULTS OF THE DESK-BASED STUDY	13
4.1 Desk-Based Study Summary.....	13
5. SURVEY RESULTS.....	14
5.1 Introduction.....	14
5.2 Bronze Age/Prehistoric	16
5.3 Medieval	18
5.4 Post-Medieval/Modern.....	19
6. CONCLUSION.....	21
6.1 Discussion.....	21
6.2 Site Visibility.....	22
7. RECOMMENDATIONS	23
7.1 Recommendations for Further Work.....	23
8. BIBLIOGRAPHY	24
8.1 Primary Sources	24
8.2 Published Cartographic Sources.....	24
8.3 Secondary Sources.....	24
APPENDIX 1: GAZETTEER OF NEW SITES	27
ILLUSTRATIONS	32
Figures.....	32
Plates	32

SUMMARY

An archaeological identification survey of a mountainous region on the north side of Bala (SH 947 416 centred), North Wales was undertaken from May 2011 to January 2012, 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 project comprised an initial archaeological desk-based study, followed by a field identification survey.

The study area of Foel Goch covers an area of 16.69 sqkm of relatively rolling mountainous upland landscape with the northern end which includes the undulating ridgeline between Craig y Llwynog, Garnedd Fawr, Foel Goch, Orddu, Pen y Cerrig-serth and Moel Cae'r-ceiliog, forming the county boundary between Conwy and Gwynedd. The rest of the study area comprises rough grazing on the flanks of a group of interspersed hills of slightly lower altitude, rising from approximately 300m to over 600m on the highest ridges, with the moorland being fringed by improved and semi-improved enclosure on the lower slopes, in particular surrounding Cefn Caer Euni.

In total, 44 sites were established by the desk-based study as being recorded within the HER and NMR, of which all were updated and 36 were given additional new NMR numbers. In total, 127 new sites were identified by the field survey, representing a substantial numerical increase in the number of sites within the study area.

The previously discovered sites identified in the NMR and HER were limited to three Bronze Age funerary cairns, a ring cairn and a kerb cairn circle, an Iron Age hillfort and two putative round houses, three medieval sites and 26 post-medieval sites representing stock management structures, quarries and boundary stones. Most importantly, the present survey has identified a particularly rich prehistoric resource, in the form of five groups of funerary/ritual monuments. One Iron Age round house, however, was found to be probably a later stock enclosure.

Three sites of possible medieval date had previously been discovered within the study area, a possible hermitage, a longhouse and a farmstead/stock enclosure. The present survey has been able to add further a longhouse within a sub-oval enclosure and three new transhumance-type sites of upland domestic structures, each associated with an adjacent stock enclosure that are probably of medieval date.

In total, 136 sites have been ascribed to the post-medieval period, and nine are of unknown date. The majority of the identified sites reflect the relatively recent exploitation of large tracts of open and post-Enclosure Act moorland sheepwalks. Sites from the period are divided relatively equally between sheep folds/stock management structures, and boundary stones. Other features consist of a possible Ty Unnos enclosure (a squatters cottage and enclosure) the reservoir at Llyn Maes Bras, moorland trackways, limited peat cutting areas, small-scale quarry scoops and a potash kiln.

CRYNODEB

Ymgwymerwyd ag arolwg archeolegol i adnabod yr ardal fynyddig ar ochr ogleddol y Bala (SH 947 416 canol), gogledd Cymru rhwng Mai 2011 ac Ionawr 2012, gan Oxford Archaeology North (OA North) ar ran Comisiwn Brenhinol Henebion Cymru (CBHC) fel rhan o Fenter yr Uwchdiroedd. Cyflawnodd y prosiect astudiaeth archeolegol wrth y ddesg i ddechrau, yn cael ei ddilyn gydag arolwg adnabod yn y maes ar gyfer yr ardal astudiaeth.

Mae ardal yr astudiaeth, Foel Goch, yn cwmpasu ardal 16.69 cilomedr sgwâr o dirwedd fynyddig uwchdirol, gyda'r pen gogleddol ar y ffin sirol rhwng Conwy a Gwynedd, yn cynnwys yr esgair donnog rhwng Craig y Llwynog, Garnedd Fawr, Foel Goch, Orddu, Pen y Cerrig-serth a Moel Cae'r-ceiliog. Mae gweddill ardal yr astudiaeth yn cynnwys tir pori garw ar lethrau grŵp o fryniau ychydig yn is, sy'n codi o tua 300m i dros 600m ar yr esgair uchaf, gyda'r gweunydd wedi'u hamgylchynu gan dir caeedig wedi'i wella a'i led wella ar y llethrau isaf, yn arbennig o amgylch Cefn Caer Euni.

Pennodd yr astudiaeth ddesg gyfanswm o 44 safle oedd wedi'u cofnodi dan HER a NMR, ac fe ddiweddarwyd pob un gyda 36 yn cael rhifau NMR newydd, ychwanegol. Nodwyd cyfanswm o 127 safle newydd gan yr arolwg maes, sy'n gynydd sylweddol yn nifer y safleoedd o fewn ardal yr astudiaeth.

Roedd y safleoedd a ganfuwyd yn flaenorol ac a nodwyd yn yr NMR a'r HER wedi'u cyfyngu i dair carnedd angladdol Oes Efydd, carnedd gylchog a chylch carnedd ymylfaen, bryngaer Oes Haearn a dau dŷ crwn tybiedig, tri safle canoloesol a 26 safle ôl-ganoloesol yn cynrychioli strwythurau rheoli stoc, chwareli a cherrig ffiniau.

Yn fwyaf pwysig, mae'r arolwg presennol wedi adnabod adnodd cynhanesyddol arbennig o gyfoethog, ar ffurf pum grŵp o gofebion angladdol/defodol. Canfuwyd bod un tŷ crwn Oes Haearn yn fwy tebygol o fod yn lloc anifeiliaid diweddarach.

Canfuwyd tri safle o ddyddiad canoloesol posibl cyn hyn o fewn yr ardal astudiaeth, meudwyfa bosib, tŷ hir a fferm/lloc anifeiliaid. Mae'r arolwg cyfredol wedi medru ychwanegu tŷ hir o fewn lloc hirgrwn a thri safle trawstrefa newydd o strwythurau cartref uwchdirol, bob un yn gysylltiedig â lloc anifeiliaid cyfagos, sydd yn ôl pob tebyg yn gynharach nag ôl-ganoloesol o ran dyddiad.

Priodolwyd cyfanswm o 136 safle i'r cyfnod ôl-ganoloesol, ac mae naw yn o ddyddiad anhysbys. Mae'r mwyafswm o'r safleoedd a nodwyd yn adlewyrchu'r defnydd cymharol ddiweddar o ddarnau mawr o weunydd agored a chaeedig ar ôl y Ddeddf Amgáu Tiroedd. Mae safleoedd o'r cyfnod yn cael eu rhannu'n gymharol gyfartal rhwng corlannau/strwythurau rheoli stoc, a cherrig ffiniau. Mae nodweddion eraill yn cynnwys Tŷ Unnos posibl, y gronfa ddŵr yn Llyn Maes Bras, llwybrau gweunydd, ardaloedd torri mawn cyfyngedig, crafbantiau chwareli bychain ac odyn potash.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank the Staff of the Royal Commission on Ancient and Historical Monuments of Wales (RCAHMW), in particular David Leighton, Philip Ray and Medwyn Parry, and also the staff of the reader services of the National Library of Wales, Aberystwyth. OA North is also grateful to all the landowners and estate managers who generously allowed the survey team onto their land. In particular, we would like to thank Mr Jones of Wenallt-fawr, Mr I Jones of Pen-yr-allt, Mr I Jones of Pen-y-bryn, Mr HM Jones of Hafod yr Esgob, Mssrs AG & E Jones of Aeddren, Mr L Jones of Henblas, Janice Norton of Ysgubor-fawr, Mr Owen of Pentre tai-yn-y-cwm, Mr R Price of Rhiwlas Estate and Mr Williams of Coed y Bedo.

We would like to thank both Sophie Watson of the Clwyd Powys Archaeological Trust and Angharad Stockwell of the Gwynedd Archaeological Trust for providing Historic Environment Record (HER) details.

The field survey and desk-based assessment were undertaken by Peter Schofield, assisted by David Maron. The report was written by Peter Schofield, who also produced the illustrations. The summary translation was by Meleri Macdonald. The report was edited by Jamie Quartermaine, who also managed the project.

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 mountainous region on the north side of Bala (SH 947 416 centred), North Wales, on behalf of the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as part of the Uplands Initiative (RCAHMW 2010). The study area was initially 14.84 sqkm but was extended by a further 1.85 sq km to encompass land at Cefn Caer Euni. The land consists of relatively rolling mountainous upland landscape (Fig 1), and is located to the north of the Bala and Bala Lakesides registered Historic Landscape No. 53 (Cadw/ICOMOS 1998).

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 subjected to a desk-based assessment and identification survey. The desk-based study, carried out in April 2011, consisted of a search of both published and unpublished records held by the National Monuments Record (NMR) of Wales, the Historic Environment Records (HERs) of both Clwyd Powys and Gwynedd Archaeological Trusts, and the library and archives at OA North's offices in Lancaster. The fieldwork was carried out to fit in with access availability and weather conditions, and was undertaken between May-June 2011 and January 2012

1.2.3 This report sets out the results of the work, accompanied by a summary gazetteer of new sites (*Appendix I*).

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (OA North 2010a) was submitted by OA North in response to a request for archaeological surveys of extensive areas of the Welsh Uplands; it was designed to meet the requirements of a brief issued by RCAHMW (2010). The project design provided for an initial archaeological desk-based study, followed by a field identification survey for the following areas: Yr Aran, Foel Goch and Cwm Prysor – Cwm Lliw. OA North was commissioned to undertake survey of one of these project areas and the present report relates to the Foel Goch area (Figs 1 and 2). Subsequent to the initial survey, funding was made available for further survey of a small parcel of land at Cefn Caer Euni, measuring 1.85 sq km in extent.

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 *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.

2.2.3 *Historic Environment Record (HER)*: an assessment was made of HER data held by both the Clwyd Powys and the Gwynedd Archaeological Trusts (CPAT and GAT), which was overlain onto the digital base map for the area.

2.2.4 *Ordnance Survey Mapping*: all available historic mapping for the study area (provided by RCAHMW), was examined for the study area for indications of historic sites that were not previously represented in the NMR and HER 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 on the Foel Goch 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 in the written description, which 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 HER were checked and recorded at the same level of consistency as the newly discovered sites. The whole study area, including both the

upland commons and surrounding improved and enclosed fringes, was examined. The survey involved four elements: reconnaissance, mapping, description and digital photography. This generated core information for entry into the NMR and additional archive information, in accordance with the RCAHMW Revised Data Standard for Upland Survey (RCAHMW 2004).

- 2.3.2 Each area was walked in transects of between 30m and 50m apart, depending on local topography and ground cover. The archaeological detail was mapped using Leica differential GPS equipment which used real-time EGNOS corrections from geo-stationary satellites to achieve an accuracy of up to ± 0.5 m. The digital survey data was transferred as shapefiles into a GIS system (ArcGIS 9.3), and was superimposed onto the embedded digital Ordnance Survey data (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 using digital colour imagery and the images 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, type and altitude. Locations are given as ten-figure National Grid References where possible, and the position of each site is indicated on Figure 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 NMR, RCAHMW at Aberystwyth, Clwyd HER at CPAT, Welshpool and the Gwynedd HER at GAT, Bangor.

3. TOPOGRAPHICAL AND HISTORICAL BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

3.1.1 The study area of Foel Goch covers an area of 16.69 sqkm and consists of rolling moorland with north- and south-facing slopes on either side of the chain of mountains running along the county boundary Gwynedd and Conwy (Fig 1). The northern side of the area is defined for the most part by the county boundary between Gwynedd and Conwy and roughly 1/7th of the north end of the study area lies in the latter county (Fig 2). The undulating ridgeline which carries the county boundary includes the summits of: Craig y Llwynog; Garnedd Fawr; Foel Goch (highest at 611m OD); Orddu; Pen y Cerrig-serth; and Moel Cae'r-ceiliog. The rest of the study area comprises rough grazing on the flanks of a group of interspersed hills of slightly lower altitude, at: Foel Fach, Moel Emoel, Moel Darren and Bryn Bras (Plate 1). The hills have cwms with watercourses radiating away from the watershed in every direction but with the most extensive direction of flow being to the south along Nant Cefn-coch, Nant Cwm-da, Nant Cae'r-ceiliog and the tributary streams draining into Llyn Maen Bras. The topography surrounding Llyn Maen Bras is much gentler in profile and contains an extensive boggy area (Plate 2). At present the upland is mostly common land, with some large parcels of fenced enclosure of predominantly twentieth century date, which have formalised most of the areas of common that was traditionally used by each of the lowland farms. The relatively recently established enclosures within Cwm Da are still contested by the local farmers. The south of the study area also contains the upper limits of two historic 'ffridd' enclosures associated with farmsteads in Pentre-tai-yn-y-cwm and, to the west, the field-system surrounding Eglwys-Anne Warren Ffridd. The majority of the separate block of land at Cefn Caer Euni remains low-lying open common skirted by enclosed fields.

3.2 GEOLOGY

3.2.1 The exposed solid geology of the study area consists almost entirely of faulted bands of Ordovician age rock of the Bala (Caradoc) series. The south-west tip of the area is of the Bala (Ashgill) series (British Geological Survey 1994; Neville George and Smith 1961). The overlying soils are a mixture of various soil types dependant on the parent rock (Soil Survey 1983). The area is dominated by loamy, permeable upland soils of the Hafren association in the bulk of the area. This is flanked on the west, south and east sides by well-drained fine loamy upland soils of the Manod association on the steeper valley sides (*ibid*).

3.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.3.1 **Prehistoric to Roman:** prior to the present survey several sites were recorded within the study area as being of prehistoric, and more specifically Bronze Age, in date. There is a funerary cairn located on the summit of Garnedd Fawr (NMR 303461; Plate 3), and a closely related pair of funerary/ritual monuments on top of the small block of common ground at Caer Euni. These consist of an unusual ring

cairn comprising, originally, four concentric boulder rings set into a low cairn and a kerbed cairn circle (NMR 275897 and 400457; Lynch 1995, 61). In addition, there are also two round cairns located on Cefn Caer Euni recorded in the Gwynedd HER (NMR 519351 and 519349). Further prehistoric sites are located nearby at Coed y Bedo farm (in the valley between the two portions of study area), which include the Maen y Rhos standing stone (NMR 303459: Scheduled ME 228), found in close proximity to a pair of burnt mounds (HER 2885).

- 3.3.2 Iron Age/Romano-British activity in the region seems to have had strong defensive and military components, although most sites are further to the south of the study area in the lowlands, mainly around the natural routeway in the valley containing Bala Lake (Cadw *et al* 1998, 69). There is little evidence from the HER of upland occupation in the region immediately surrounding the present study area, although this may reflect a lack of archaeological investigation. The route through the valley around Bala Lake has the potential to have been used as far back as the prehistoric period, prior to Roman occupation (Bowen and Gresham 1967, 3). The study area contains a hillfort at Cefn Caer Euni located overlooking the valley to the north-east of Bala (NMR 93712; Lynch 1995, 83), and nearby there is a single possible round house (NMR 519350). The distribution of lowland findspots of stone axes and axe hammers show a concentration on the flanks of the hills located on the north side of Bala Lake (Cadw *et al* 1998, 40) which may point towards lowland occupation in this area. There are Roman military complexes located at either end of Bala Lake, which are joined by the putative Roman road to Chester (NMR 303524). There are the remains of an auxiliary fort at Caer Gai on the south-west end of the lake (NMR 95436) and the cropmark remains of a large military complex at Llanfor on the north-east end of the lake (NMR 95436). The complexes at Llanfor also revealed a putative destroyed stone circle (Bowen and Gresham 1967, 283) and geophysical anomalies which may relate to putative Bronze Age burial and ritual sites (Cadw *et al* 1998, 69). A further round house site was recorded from the Gwynedd HER, but the present survey revealed that the structure at Moel Emoel (NMR 519305; Plate 4), was more likely to be a later medieval or post-medieval stock management feature.
- 3.3.3 **Medieval:** there is only limited physical or documentary evidence for the dispersed upland habitation and exploitation in the study area in the medieval period, such as longhouses and/or other domestic structures and elements of field-systems, which are prevalent elsewhere in the region (OA North 2009; Davies 1973). A single oval enclosure on Cefn Caer Euni, recorded in the HER, was found during the present survey to be a well-preserved longhouse (NMR 519352). There is a tentative attribution of the placename Eglwys Anne in the south-west of the study area as being the site of a medieval hermitage/church (NMR 43836; RCAHMW 1914 and 1921), and there is a dubious triangular platform adjacent to a spring which is supposedly the site of the building (Plate 5). A further antiquarian site was recorded in 1698 by Edward Lhuyd, which was the findspot of a brass tripod pot or kettle on Yr Orddu mountain (NMR 519290; RCAHMW 1914, 129). A putative cockpit was also recorded on the open fell just to the north of Coed y Bedo farm (NMR 303458; Plate 6), and, nearby, was a possible farmstead within a small enclosure (NMR 519291). The farmstead of Coed y Bedo itself (just outside of the study area) is a Grade II Listed building (NMR 28290; LB – 4671) and is said (NMR entry) to have once been the home of the bard Bedo Aedderen around c 1500. The farmhouse

is a good example of a timber-framed structure that had been encased in stone in the early seventeenth century.

- 3.3.4 Within the medieval period the majority of the study area was on the northern edge of the commote of Penllyn in Merionethshire and was under the control at first of the Princes of Gwynedd and, subsequently, the English Crown (Beverly-Smith and Beverly-Smith 2001, 209). The area was relatively uninhabited in the early medieval period, especially the rugged upland areas, although it was exploited latterly for its extensive upland woodland resources, hunting and moorland grazing as part of the Forest of Snowdon. Tenants of the Penllyn commote were taxed on their produce, which largely comprised renders in livestock and dairy produce and, to a lesser extent, oats (*op cit*, 42). The mountains formed suitable areas for both legal and illegal encroachment of ffridd enclosures in the late medieval period, and possibly earlier, with widespread cattle-based transhumant hafod-style settlement and agriculture in the study area.
- 3.3.5 The landscape of the study area, and the surrounding region around Bala, was, from the Tudor period, shaped predominantly by the development of the Rhiwlas Estate under the Price family. Large tracts of the upland moorland remained ostensibly Crown Lands of the Forest of Snowdon; however, the farms and cultivable lands surrounding these areas, and also certain encroachments into the forest, were increasingly amalgamated into the estate through crown leases (Thomas 1967, 212). The Forest of Snowdon suffered particularly badly through illegal encroachment and as the 'Extents of Merioneth' manuscript had been lost, at some stage prior to 1573 (Evans 2005), it was extremely difficult to ascertain which encroachments and landholdings were medieval freehold land. At the end of the sixteenth century (during the Crown survey of 1592) the emerging landed estates fought hard against the disclosure of concealed lands which had been enclosed as ffriddoedd from the earlier commons and monastic upland grazing lands (*op cit*, 660). In particular, the Dissolution of the Monasteries directly led to the lands of Ystrad Marchell of some 1,400 acres in Penllyn coming into the hands of the Rhiwlas estate (GAT 2006, 1; Thomas 1967, 661). The main focus of the estate, however, lay to the west of the study area around Cwmtirmynach, which had again been acquired from the remnants of monastic lands, this time of Basingwerk Abbey (*ibid*; Evans 2005, 283).
- 3.3.6 **Post-Medieval:** the identified sites within the Clwyd Powys HER and Gwynedd HER were limited to several phases of archeological activity. Firstly a landscape investigation recorded in 1988 systematically surveyed the area excluded from the current archaeological survey on the west flank of Garnedd Fawr (Fig 2). It identified thirteen sites, including springs, trackways, sheepfolds and peat cuttings (NMR 519292 – 519304). Secondly, cartographic evidence has been used to identify further monuments, which, for the most part, consist of boundary stones that are located on the county boundary between Conwy and Gwynedd running east/west along the northern part of the study area (NMR 519233, 519256, 519294-519295, 519306-519310 and 519313-519318). Other sites include: a relict farmstead within a rectangular enclosure (NMR 412788); a mountain trackway (NMR 519311); a sheepfold (NMR 519 312); and a stock enclosure (NMR 519291).
- 3.3.7 Encroachments on the commons, held as Crown Lands, were undertaken by manorial lords, and tenants alike, with widespread cattle-based transhumant hafod-

style settlement and agriculture in the region. These encroachments were to continue down the centuries by a process of neglect (by the Crown), corruption and stealth (*op cit*, 31). Large tracts of the upland moorland presumably remained ostensibly Crown Lands in the post-medieval period; however, the farms and cultivable lands surrounding these areas, together with certain encroachments on to the commons, were increasingly amalgamated into large estates through crown leases. There was a further phase of enclosure, added after the tithe schedule, which reflects the large-scale acquisition of Crown Lands by means of the Enclosure Acts of the mid-1860s. The Enclosure Acts consolidated holdings of common grazing into enclosed sheepwalks. The majority of the study area was open common land in 1847 (Thomas 1967, 232) and, apart from land around Moel Emoel, remained common after the Enclosure, unlike, for example, land to the west around Llyn Celyn which all came under the ownership of the Rhiwlas estate (OA North 2009). The lowland distribution of land ownership in the valley below the study area was one of consolidated landholdings to the south-west associated with the Rhiwlas estate and individual private freeholders with common grazing rights running up Cwm Main to the south and east. The private landholdings were increasingly amalgamated in the late-nineteenth/twentieth century by both intermarriage and abandonment of small unprofitable farmsteads. The hamlet of Pentre-tai-yn-y-cwm within the isolated cwm in the centre/south of the study area was reduced from over 90 individuals to just one family in this period (Mr E M Owen *pers com*).

- 3.3.8 By the nineteenth century the Rhiwlas estate had reached its maximum extent through prudent land acquisitions and intermarriage; by the time of the tithe schedules in the 1840s it was the third largest estate in Merioneth with 14,751 acres (Thomas 1967, 232-233 [Fig 4] and 238). By the end of the century it owned almost 16,500 acres (GAT 2006, 1), and the estate actively extended the area of cultivatable lands into the uplands with improvements of the existing ffridd enclosures through drainage and stone clearance. The study area mostly lay outside of the large-scale land acquisitions undertaken by the estate in the period of the Enclosure Acts in the 1860s but their landholding in the study area encompassed land to the south-west edge of the area. This contained Moel Emoel which was recorded as waste on a schedule of land, dated 1863, immediately prior to the estate buying it from the Crown (Z/DDD/1/191). Surrounding land at the farmstead of Eglwys-Anne was presumably already owned by the estate pre-1860s and this was where the Warren Ffridd was located. The land of the study area was predominantly held as upland sheepwalks for stock grazing and to a lesser extent as shooting moorland for the estate on the south-west end.
- 3.3.9 The Rhiwlas Estate had first developed shooting lands nearer to the estate seat with a mixture of rabbit warrens, pheasant coverts and grouse shooting. The study area did not contain one of the main grouse shooting moors, such as that at Arenig Fach (OA North 2009) but did contain 350 acres of land at Eglwys-Anne which was designated as one of the three rabbit warrens (with attached pheasant covert) recorded on an undated (?late nineteenth century) schedule in the Rhiwlas archive (Z/DDD/1/200). This block of land was leased out on the schedule for a yearly rent of £200 to Herbert J Parkes esq. Another warren was located just south of the study area at College Warren and a further one to the west at Fron Goch where numerous pillow mounds still survive. To give an example of the industrial scale of the

enterprise, one particular shoot at Moel Emoel on the 7th October 1885 dispatched 5096 rabbits and 5106 game between 10am and 5pm (Price 1899, 29).

4. RESULTS OF THE DESK-BASED STUDY

4.1 DESK-BASED STUDY SUMMARY

- 4.1.1 ***Cartographic Evidence:*** examination of the historic maps, the Ordnance Survey (OS) First and subsequent editions of the 6" and 25" to 1 mile mapping, has the potential to inform the development of enclosed lands and higher unenclosed moorland; however, in practice there was little significant difference revealed between the extensive OS First Edition mapping (1875-1901) and that of today. There are several old ffridd enclosures surrounding Eglwys-Anne in the west of the study area that were possibly associated with a warren, and a ffridd enclosure located to the north of Pentre-tai-yn-y-cwm in the south of the study area that are associated with the ruined farm of Beudy Tafolog. A small rectangular enclosure at the south-west end of Cefn Caer Euni was probably a small farmstead or squatter's cottage. There are also fenced enclosures, formalised straight-sided boundaries, crossing the roughly-grazed uplands, located on the east flank of Orddu on the east side of the study area and on Y Gessail on the north-west end. Very few sites of archaeological interest are marked on the historic OS mapping, the majority of these consist of a chain of boundary stones located along the county boundary between Conwy and Gwynedd, and also included the summit cairn on Garnedd Fawr. The hillfort on Cefn Caer Euni was depicted on mapping. There are also multiple sinuous trackways running in all directions up onto the upland sheepwalks from the lowland farms, stock enclosures on Moel Emoel in the south of the study area and also on the east flank on Bryn Bras on the south-east of the area, along with single examples of sheep folds and sheep shelters. The reservoir at Llyn Maen Bras, located in the south-west of the area, with its dam and curtain of coniferous plantation, was shown as having been constructed by the time of the OS First Edition mapping (1875-1901).
- 4.1.2 ***Aerial Photographic Interpretation:*** digital aerial photographic mapping and interpretation was supplied by the RCAHMW under the auspices of the Uplands Initiative (Ray 2011). The interpretation identified limited potential remains of archaeological interest. The most important being an area of cultivation at Eglwys Anne farmstead, numerous moorland trackways and several stock enclosures. These sites clearly relate to highly visible episodes of post-medieval moorland exploitation. The interpretation did identify the round cairn on Cwm Cywen.
- 4.1.3 ***Gwynedd Historic Environment Record (HER), Clwyd Powys Historic Environment Record, National Monuments Record of Wales (NMR):*** in total, 44 unduplicated sites were recorded within the HER and NMR; comprising five Bronze Age sites, one prehistoric site, two Iron Age sites, three medieval sites, 26 post-medieval sites and seven sites of unknown date (Table 1; Fig 3).

5. SURVEY RESULTS

5.1 INTRODUCTION

- 5.1.1 The survey examined both known and previously unknown sites, which ranged in date from the Bronze Age through to the post-medieval and modern periods. The majority of the sites consisted of widely dispersed single monuments, although both prehistoric cairns and medieval/post-medieval domestic sites and stock enclosures were often found in pairs. There is also an extensive grouping of boundary marker stones running along the county boundary. All the sites identified by the documentary study were examined; their locations and extent were updated on the mapping, as required, and the site descriptions were enhanced. Both new and old sites are indicated on Figure 3. A portion of the study area identified in the project design, measuring 0.7sq km, was not subject to walkover survey as this had already been systematically surveyed in 1988 by Gwynedd Archaeological Trust (Fig 2). This survey had identified thirteen ostensibly post-medieval agricultural sites, all of which have been given new NMR numbers (NMR 519292 - 519304).
- 5.1.2 **Previously Recorded Sites:** the desk-based study identified eight pre-survey NMR sites, whilst a further 36 unduplicated HER sites were also updated and given new NMR numbers. The majority of the known sites were confirmed by the identification survey; excepting those within the area excluded from the survey (Fig 2), and a few boundary stones that could not be located.
- 5.1.3 **New Sites:** in total, 127 new sites were identified representing a substantial numerical increase in the number of sites within the study area and are summarised below (Table 1).

Period	Pre-Survey Number	Post-Survey Number	Numerical Increase
Prehistoric	1	1	0
Bronze Age	5	16	11
Iron Age	2	2	0
Medieval	3	7	4
Post-Medieval	26	136	110
Unknown	7	9	2
Total	44	171	127

Table 1: Pre- and Post-Survey Site Numbers

- 5.1.4 **Altitude range of sites:** the overall site density was 10.24 sites per sqkm, which was spread according to altitude as shown in Table 2. The greatest density of sites was between the 350-374m OD range.

Height Range	Existing Sites	New Sites	Total
275-299m	0	1	1
300-324m	0	4	4
325-349m	3	15	18
350-374m	9	25	34
375-399m	1	15	16
400-424m	0	19	19
425-449m	4	11	15
450-474m	5	19	24
475-499m	4	5	9
500-524m	5	5	10
525-549m	6	5	11
550-574m	5	1	6
575-599m	0	1	1
600-624m	2	1	3
Total	44	127	171

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 NMR and HERs, fall into fifteen general types, which are defined as shown in Table 3.

Type	Existing Sites	New Sites	Total
Boundary Bank, Boundary Stone, Marker Cairn Clearance Cairn, Stone	17	29	46
Building Platform, Farmstead, Longhouse, Structure	4	6	10
Cockpit	1	0	1
Dam, Pond, Spring	3	3	6
Field-System	0	1	1
Findspot	1	0	1
Hermitage	1	0	1
Hillfort	1	0	1
Round house	2	0	2
Peat Cutting, Peat Stand, Potash Kiln	3	6	9
Quarry	0	9	9
Kerb Cairn, Ring Cairn, Round Cairn	5	11	16
Sheep Fold, Sheep Shelter, Shelter	2	35	37
Stock Enclosure	1	8	9

Trackway	3	19	22
Total	44	127	171

Table 3: Range of Site Types

5.2 BRONZE AGE/PREHISTORIC

- 5.2.1 *Prehistoric Cairns:* previously discovered potential funerary sites were limited to the paired ring cairn and kerbed cairn circle (NMR 275897 and 400457) and two round cairns located on Cefn Caer Euni and the single summit round cairn at Garnedd Fawr (NMR 303461; Plate 2). All the round cairns had, to some degree, been damaged by later disturbance as a result of antiquarian investigations and the summit cairn was used as part of the county boundary between Gwynedd and Conwy, and had had a boundary stone placed on top of it (NMR 519294).
- 5.2.2 The current survey identified several further potentially prehistoric sites (Fig 4), ten of which are almost certainly funerary cairns and a single possible ring cairn. All of the newly discovered monuments were in five groupings in separate parts of the study area. Only three of the cairns could be classed as summit cairns, those within the hillfort at Cefn Caer Euni; as for the rest their less-striking locations may in part explain why they have not previously been identified. The majority of prehistoric sites recorded (and scheduled) in the mountainous region, immediately surrounding the study area, are summit cairns, although examples of cairns located on lower land were found nearby during previous investigations (OA North 2005a; 2009 and 2010b). The newly discovered cairns were typically located either adjacent to the summits, or on land that was slightly sheltered and just below the summits on lower shelved land on the flanks of the hills. Many had good viewsheds towards lower land in at least a 180 degree directional arc. The first grouping was a pair of monuments, and included a round cairn (NMR 519227; Plate 7) and a ring cairn (NMR 519226; Plate 8), set some 24m apart on a small plateau located on the north-west flank of Foel Goch. The round cairn is quite large, surviving to 14m in diameter by 2m high, and has a slight external bank and ditch that is up to 3m wide. The cairn has been truncated by antiquarian investigations. The ring cairn measures 10.5m in diameter with the ring bank surviving up to 2m wide by 0.25m high. There are narrow gaps in the ring bank on the south-west and north-east sides and there is a possible rectangular cist measuring 2m long by 1m wide, constructed of small stones, placed internally in the north-west quadrant.
- 5.2.3 The second grouping was a pair of monuments consisting of round cairns located above Cwm Cywen (NMR 519282; Plate 9) and Craig Wenallt (NMR 519284; Plate 10) in the east end of the study area. The cairns, set roughly 277m apart, are on a wide plateau of land protruding east from the hill of Bryn Bras, and overlooking the steep slope into Cwm Main. The largest cairn at Cwm Cywen is locally known as 'The Old Soldier's Grave'; it measures 9m in diameter by 0.5m high with several possible outer kerb stones surviving on the south-east side. There is a central depression (2m long by 1.5m wide by 0.6m deep) that was possibly where antiquarian activity had disturbed a cist. There are no obvious cist side slabs surviving but a possible fragmentary part of a cover slab has been displaced to the south-east side of the depression. The smaller cairn at Craig Wenallt is 4.5m in

diameter by up to 0.4m high, and has a central depression 1m in diameter by 0.3m deep that is probably from antiquarian disturbance.

- 5.2.4 The third grouping of monuments consisted of a pair of round cairns set some 15m apart on a small south-facing plateau on the ridgeline descending south of Bryn Bras. The larger cairn (NMR 519261; Plate 11) is a circular kerbed cairn consisting of a ring of stones (with a disturbed centre) measuring 11m in diameter by 2-3m thick and up to 0.6m high. The fabric of the cairn is best preserved on the south-east side where some of the kerb stones survive. At a later period, the cairn has been disturbed to create a fold containing a small shepherd's shelter and a square external annex. The smaller cairn (NMR 519260; Plate 12) is 5m in diameter by only 0.4m high; it consists of a small upright stones in places and little other material in between. There are four possible kerbing stones on the south side and a possible open cist (1m long by 0.5m wide) is evident in the central/east quadrant of the cairn.
- 5.2.5 The fourth grouping of monuments consisted of three closely associated round cairns located at the summit of Cefn Caer Euni and within the later hillfort. The cairns have apparently not previously been recorded, possibly because a later marker cairn covers one of the cairns, and also because of their poor survival. All the cairns have been denuded with only their foundations surviving, and they each measure between 3-4m to 7m in diameter (NMR 519340-519342). One of the cairns may have had part of a cist slab visible on the surface (NMR 519341).
- 5.2.6 The final grouping of monuments are two further cairns located on the south-west half of Cefn Caer Euni (NMR 519327 and 519328). Unlike the more prominent cairns already identified in the vicinity, these examples are small turf-covered cairns, each only measuring up to 4.5m in diameter.
- 5.2.7 Groups of barrow and cairn cemeteries have been identified on the Hiraethog Moors (OA North 2005b; Silvester 2011), and in the Brenig Valley (Lynch 1993), with the former area containing stone rows located above the village of Pentrefoelas (Davies 1929; OA North 2003; Silvester 2011) and the latter also containing an abundance of ritual sites, in particular ring cairns (Lynch 1993; Lynch 2002, 22). Both regionally and nationally ring cairns, where excavated, are typically suggested as sites of ritual ceremony, and are often found in close proximity to funerary cairns and cairn cemeteries (Lynch 1993, 145). In the general region (*c* 7.5km east of the study area) a ring cairn was found adjacent to a linear cemetery group of three cairns at Moel yr Henfaes on the north-western edge of the Berwyn mountains above the village of Corwen (OA North 2005a). It is also interesting to note that both pairs of cairns at Bryn Bras and Cwm Cywen/Craig Wenallt in the study area have intervisibility between themselves and the ring cairn and kerb cairn located on the common at Caer Euni to the immediate south-east of the study area (*Section 3.3.1*).
- 5.2.8 ***Iron Age/Roman:*** an elongated, irregular enclosed hillfort and a single putative round house had previously been identified on Cefn Caer Euni (NMR 93712 and 519350). None of the 25 possible round houses identified within the hillfort interior could be discerned during the present survey. The round house on Cefn Caer Euni consists of an embanked oval platformed structure measuring 8m long by 7.5m wide with a slightly scooped centre and an entrance on the south-east side. This structure may be of prehistoric origin. A further round house had also been previously identified located on the west flank of Moel Emoel (NMR 519305; Plate 4), and consists of a turf-covered sub-circular earth and stone-constructed bank, measuring

16m long by 14.5m wide with banks surviving up to 3.5m wide by 0.8m high externally and is scooped out to 1m deep internally. The round house is elongated towards the entrance on the south-west side. The present survey found that this was more likely to be associated with later stock management associated with a rectangular domestic structure (*Section 5.3.1*).

5.3 MEDIEVAL

- 5.3.1 **Domestic Sites:** only three sites of probable medieval date had previously been discovered within the study area. The most likely example had been recorded as a sub-circular enclosure of recent origin at Cefn Caer Euni; it was found during the present survey to be a well-preserved rectilinear and platformed longhouse measuring up to 10m long by 6m wide (NMR 519352). The second site is that of the putative hermitage of Eglwys-Anne (NMR 43836; Plate 5), which consisted of a triangular platform set within a shallow gully and adjacent to a stream. The platform does not, however, appear to have once contained a building. The third site was a putative farmstead located to the north-west of Coed y Bedo farm and set within a small rectangular enclosure (NMR 519291). The current survey could find no evidence of a structure within the enclosure, and although it may still be of medieval date, the site is more likely to be a stock enclosure associated with Coed y Bedo farm rather than a farmstead in its own right.
- 5.3.2 The present survey identified a probable longhouse set within a sub-oval enclosure at Waen Fawr on Cefn Caer Euni (NMR 519346). It consisted of large boulder-constructed foundations of a two-celled rectangular longhouse measuring 18m long by 10.5m wide that was cut parallel into the hillside.
- 5.3.3 The current survey identified several possible transhumant sites scattered across the study area. There is a group of two small possibly domestic rectangular structures located adjacent to a trackway running onto the sheepwalks on the west flank of Moel Emoel. The northernmost structure is associated with a putative round house (NMR 519213 and NMR 519305; Plate 4); it is single celled measuring 11m long by 8m wide with turf-covered foundations surviving up to 3m wide by 0.5m high. There is an entrance flanked by a pair of orthostatic door jambs on the south gable end. It is likely that the adjacent round house, if not a re-used site, was deliberately constructed as a stock enclosure, and the internal scooping could suggest the removal of manure from the site. The southern rectangular structure survives in a poorer state but is also associated with a possible stock enclosure (NMR 519214-519215). It is a small single-celled structure measuring 8m long by 6m wide with foundations surviving up to 2.5m wide by 0.5m high. The structure is slightly platformed in the centre.
- 5.3.4 The third group of sites also contains a possible transhumant structure and adjacent sub-oval stock enclosure. They are located in the east of the study area above Hafotty Isaf on the east flank of Craig Wenallt (NMR 519280-519281). There is a two-celled rectangular building platform that measures 11m long by 7m wide, with collapsed wall foundations 1.25m wide by 0.5m high. The structure is possibly subdivided with the western cell slightly higher than the eastern cell, which in turn is platformed on the east side. The area was shown on the OS First Edition mapping as being on the open common adjacent to a trackway.

5.4 POST-MEDIEVAL/MODERN

- 5.4.1 ***Agricultural Landscape and Settlement:*** in total, 136 sites have been ascribed to the post-medieval and modern periods, and form the majority of the identified sites (Table 1). The sites reflect the relatively recent exploitation of large tracts of moorland. The land is either currently open moorland common, gradually improved moorland enclosed by Enclosure Act, or small areas of agricultural fringe lands located adjacent to farms within Pentre-tai-yn-y-cwm or surrounding Cefn Caer Euni. The farmstead of Eglwys-Anne is the only definitive permanently occupied site within the study area (NMR 519240; Plate 13); it consists of a single ruinous range including a farmhouse and attached barn, and has an area of enclosed cultivation on the south side and some associated peat cuttings (NMR 519244-519245 and NMR 519285). The surrounding ffridd enclosures are called Eglwys-Anne Warren Ffridd and historically this area, (along with land outside the study area to the west) was the site of a warren, and the land is still tenanted by the Rhiwlas estate. Two other potentially domestic structures were recorded in the study area both located on the upland edge of enclosed land. The first site, a platformed structure, is located at Nant Cefn Coch (NMR 519202) and has been built-over with a sheepfold. There is an area of peat cutting not too distant from it on the east flank of Moel Emoel (NMR 519203). The second site is a rectangular enclosure at Waen Fawr on the southern flank of Cefn Caer Euni (NMR 412788). The enclosure has a disturbed central area that may have contained a cottage that could have functioned as a Ty Unnos (a small squatters cottage).
- 5.4.2 Many sites relate to the extensive moorland sheep walks, and comprise disparate sheepfolds, sheep shelters and shepherd's shelters (up to 37 examples) scattered widely across the whole study area. The number of these identified structures was relatively low when compared with the wider region (OA North 2009; OA North 2010b), but still demonstrate that sheep farming, and to some extent cattle farming, have been a major enterprise across the moorland at altitude during the post-medieval period. The sheepfolds are located on the open common, for the most part either hugging the sheltered cwms on the streams running off of the mountains (eg in Cwm Da) or are located adjacent to moorland trackways (eg on Garnedd Fawr - NMR 519190; Plate 14). The trackways can be found radiating in all directions giving access up onto the sheepwalks and will have also formed long-distance routes over the mountains between communities in different valleys. A series of stock enclosures have been identified, with potentially early examples being associated with possible transhumant domestic sites (*Section 5.3.2*). Further slightly larger examples were located on the east flank of Craig Wenallt and Bryn Bras in the east of the study area (NMR 519266 and NMR 519268; Plate 15). The latter site contained a sheepfold but it is just possible that such structures could have formed small squatter settlements.
- 5.4.3 ***Industrial Landscape:*** the evidence for industrial activity is limited within the study area. There are disparate examples of nine small-scale quarries located within the study area, all of which, except one, are associated with small-scale, localised extraction for enclosure wall construction. The other quarry was used to construct a marker cairn/trigonometric point on Moel Emoel (NMR 519210-519211). Similarly, surviving evidence for peat cutting is on a small-scale within the study area and

reflect post-medieval or earlier activity for domestic farm needs with several cuttings associated with Eglwys-Anne farmstead (NMR 519245 and NMR 519285), and one possibly associated with the house platform at Nant Cefn Coch (NMR 519203; Owen 1975). A possible peat stand was found at the latter site, and another possible stand was found adjacent to a moorland trackway on Foel Fach (NMR 519195). A single potash kiln was identified just above and external to the enclosure of Caeru-uchaf farmstead on the south-flank of Cefn Caer Euni (NMR 519347).

- 5.4.4 **Civil Structures:** the majority of these sites consist of a chain of boundary stones, natural stones and marker cairns located along the county boundary between Conwy and Gwynedd (old counties of Denbigh and Merioneth). The identified boundary stones are all of identical construction and were presumably erected in a single phase (Plate 16). They are simple quarried stones with rounded tops and each has the relevant parish engraved on each side. The reservoir of Llyn Maen Bras, that is depicted on the OS First Edition mapping is still extant (NMR 519287; Plate 17-18). The structure was presumably either constructed for use by the inhabitants of Bala or, as it is on Rhiwlas estate land, served the needs of the surrounding estate farms and Rhiwlas Hall itself, and evidently the estate still had interest in the upkeep of the reservoir in the 1920s (Z/DD/1/160-161).
- 5.4.5 **Recreation:** the only site previously discovered was the Cockpit at Coed-y-bedo (NMR 303458; Plate 6), which was a common type of site in each village and parish in Wales in the period. Their popularity peaked in eighteenth to early nineteenth century and waned after the Prevention of Cruelty to Animals Act of 1849 made cock-fighting illegal. Such sport still took place at isolated sites away from prying eyes considerably later (Peate 1970; Lile 2009).
- 5.4.6 No definitive evidence was identified for the 350-acre estate warren at Eglwys Anne Warren Ffridd. The ffridd enclosures did not have substantial barrier walls and no pillow mounds were identified within them to house the burrows for the rabbits. It is possible that the west side of Eglwys Anne warren (outside of the study area) held such structures near Wern Fawr covert and the east of the ffridd was just farmed from Eglwys Anne. It is also possible that rabbits were housed at Fron Goch to the west of the study area where numerous pillow mounds can be observed, or to the south at College Warren, and the game was only transported over to Moel Emoel just prior to shooting days (*Section 3.3.8*). Two large trapezoidal stock enclosures located on the flank of Moel Emoel may have functioned both as secure stock and game-holding enclosures (NMR 519207 and NMR 519209). No evidence of shooting stands were identified across the study area as this was not one of the main estate grouse shooting moors, unlike that at Arenig Fach; however, a cruciform sheep shelter adjacent to the enclosures on Moel Emoel may have also served this function (NMR 519208).

6. CONCLUSION

6.1 DISCUSSION

- 6.1.1 The survey has identified a low/moderate density of sites widely distributed throughout the study area, most of which were associated with post-medieval stock management, agriculture and habitation, although there were also significant concentrations of prehistoric funerary/ritual sites. Previous surveys have highlighted a relatively small number of sites whilst the present survey has recorded a substantial increase on the previous surveys; although this was skewed by a landscape survey undertaken within the excluded area. The present survey has increased the number of identified monuments within the NMR/HER by 386%.
- 6.1.2 ***Prehistoric Funerary/Ritual Sites:*** a pair of monuments consisting of a ring cairn and kerbed cairn circle as well as two round cairns had previously been recorded, but the present survey has provided evidence for a wide distribution of five further groups of monuments, with one containing a definite ring cairn. Many of the monuments were located either on a plateau on the lower flanks of the hills, or on sheltered ground just below the summits of the hills. The ring cairns may originally have had a ritual rather than a funerary function and within the group of round cairns there is fragmentary evidence of internal architecture, such as possible cists, as well as external banks and ditches, and kerbing which are common for examples in the region (Lynch 2002, 21). Most, if not all, have been disturbed by antiquarian investigation or agricultural clearance. The grouping of cairns into both pairs and larger cemeteries, and often associated with prestige monuments, such as stone circles and ring cairns, is often seen in the wider region (Lynch 1993 and 1995; OA North 2005a, Silvester 2003 and 2011).
- 6.1.3 ***Medieval to Post-Medieval Agriculture and Settlement:*** only two sites of probable medieval date have previously been discovered within the study area, the most likely being a definite longhouse at Cefn Caer Euni (NMR 519352). the other site being the putative hermitage of Eglwys-Anne. There seems to be no further evidence for the identification of the ecclesiastical site here other than the 'eglwys/church' and personal name, presumably of a saint or hermit. Archaeological evidence for medieval/early post-medieval occupation at ecclesiastical sites, such as granges, is well known within the region (Silvester 2006) and in the vicinity of the study area sites were investigated in the Brenig Valley that revealed sixteenth century pottery and occupational debris (Lynch 1993, 179).
- 6.1.4 The current survey identified a probable longhouse set within a sub-oval enclosure at Waen Fawr on Cefn Caer Euni, and nearby are the remains of a possible Ty Unnos enclosure (NMR 519346 and 412788). Three sites associated with probable upland transhumant domestic occupation with associated ancillary stock enclosures were identified. The first two were located along a mountain trackway on the west side of Moel Emoel (NMR 519213-519214), both of which had ancillary stock enclosures. The distribution of such sites conformed to the pattern of dispersed singular sites or small settlement groups on what would have been pre-Enclosure Act open common land. Such a pattern is documented elsewhere in the region (Davies 1973, 57; Fig 2). The mountains formed suitable areas for both legal and

illegal encroachment of ffridd enclosures, with pioneer settlement on the fringes of the uplands with permanent enclosure and homesteading on pockets of cultivable soil such as at Eglwys Anne and also just outside the study area at Hafotty-Isaf. The enclosure of the transhumant sites of Hafotty Isaf and Hafotty Uchaf, to make permanent farmsteads, may have necessitated the construction of a new transhumant hafod site, the third such site found by the present survey, further up the mountain (NMR 519281).

- 6.1.5 ***Post-Medieval/Modern Agriculture and Industry:*** the remains of post-medieval agriculture make up the vast majority of sites within the study area, and are mostly split into thinly-dispersed stock management features located on the unenclosed moorland sheep walks and down into the enclosed fringe lands. Stock enclosures were encountered by the survey on the west of the study area, which were unlikely to have had domestic structures, but were related to farmsteads lower down in the valleys (NMR 519291, 519266 and 519268). Access onto the sheep walks has required the construction of various sinuous trackways radiating up from the valleys below. Peat cutting was found to be of small-scale domestic use within the study area and, similarly, quarries were found to be small in size and associated with enclosure walls. A single potash kiln was identified near Caerau-uchaf farmstead (NMR 519347)
- 6.1.6 Some of the open hills and moorland of the study area was part of the extensive holdings of the Rhiwlas estate, and 350 acres of land was documented as forming Eglwys Anne warren. The area was traditionally held over for shooting, with both rabbits and game bird referred to, although there is little evidence for structures associated with the warren and no shooting stands were recorded unlike on Arenig Fach (OA North 2009). It is possible that two large stock enclosures on Moel Emoel, and an adjacent cruciform shelter wall, had dual functions, being both general stock management for sheep and also forming short-term holding pens and a shooting platform (NMR 519207-519209). It may have been the case that the rabbits were farmed nearby at the pillow mounds on Fron Goch, and were only housed on Moel Emoel immediately prior to shooting taking place.

6.2 SITE VISIBILITY

- 6.2.1 The identification of surviving archaeological sites within the Upland Initiative study areas has to a greater or lesser extent been dictated by the topography and current ground conditions. The present study area could be classified as having good ground conditions and the visibility of monuments was particularly marked as the majority of the moorland was closely cropped rough grazing. The only areas that could be said to be obscured would be the small amount of burnt heather vegetation within Eglwys Anne Warren Ffridd and a little on Moel Cae'r-ceiliog, and the deep peat within the basin surrounding Llyn Maen Bras. The pattern of archaeological sites would seem to be very dispersed with little chance of obscured monuments having been missed. Interestingly, considering the size of the area, there were very few stone-built stock management features when compared to other regional surveys (OA North 2009; OA North 2010b).

7. RECOMMENDATIONS

7.1 RECOMMENDATIONS FOR FURTHER WORK

- 7.1.1 It is recommended that investigation in the form of palynological sampling and peat coring be undertaken within the study area. Sampling should take place in the boggy areas on the south-western limits of the study area adjacent to Llyn Maen Bras where there is potential for deep peat deposits. Sampling should also take place both in the steep cwms surrounding the locations of ritual/funerary monuments, adjacent to Llyn Caer Euni where there is a profusion of prehistoric activity, and around the putative domestic sites on the west flank of Moel Emoel. This would not provide an absolute chronology for the sites, but palynological work from peat adjacent to the sites would be able to determine clearance episodes and periods of potential agricultural activity in the vicinity of the sites.
- 7.1.2 Detailed topographic survey should be undertaken on all of the identified prehistoric ritual/funerary cairns identified within the study area. Detailed topographic survey could elucidate details of their construction, their surviving fabric and any later disturbance to the monuments,. It could also shed light on their topographic setting and the inter-relationship between each of the monuments and the wider landscape.
- 7.1.3 There is little scope for further recording at any of the few localised quarrying sites within the study area. The quarries recorded in the project are all associated with small-scale post-medieval extraction for wall construction.

8. BIBLIOGRAPHY

8.1 PRIMARY SOURCES

Gwynedd Archives, Meirionnydd Record Office (GAS DAO)

Rhiwlas Estate:

Z/DDD/1/191 Schedule (copy) of wastes and encroachments in pas. Llanycil, Llanfawr and Llandderfel, dated 1863

Z/DDD/1/160 Report by J A Saner on Llyn Maen Bras reservoir, with attached plan of the dam, dated 9th July 1928.

Z/DDD/1/161 Copy of report by Messrs. Wickham and Beckett of the state of Llyn Maen Bras reservoir, dated 27th December 1928.

Z/DDD/1/200 Schedule of shootings, rabbit warrens and woodlands and other properties on the Rhiwlas Estate, including acreage and rent, no date

8.2 PUBLISHED CARTOGRAPHIC SOURCES

British Geological Survey, 1994 *Geological map of Wales: Solid, 1:250,000*

Landmark digital copies of 1st Series Ordnance Survey 6" and 25" mapping 1875-1901

Landmark digital copies of 2nd Series Ordnance Survey 6" and 25" mapping 1900-13

Landmark digital copies of 3rd Series Ordnance Survey 6" and 25" mapping 1913-14

Landmark digital copies of 4th Series Ordnance Survey 6" and 25" mapping 1953-54

Soil Survey, 1983 *Soils of England and Wales, Sheet 2, Wales, 1:250,000, Soil Survey of England and Wales*

8.3 SECONDARY SOURCES

Beverley-Smith, J, and Beverly-Smith, L (eds), 2001 *History of Merioneth, Volume II: The Middle Ages*, Cardiff

Bowen, EG, and Gresham, CA (eds), 1967 *History of Merioneth, Volume I: From the Earliest Times to the Age of the Native Princes*, Dolgellau

Cadw/CCW/ICOMOS, 1998 *Register of Landscapes of Special Historic Interest in Wales : HLW (GW) 16 Bala* , Cardiff

Davies, Canon E, 1929 *The Prehistoric and Roman Remains of Denbighshire*, Cardiff

Davies, E, 1973, Hendre and Hafod in Merioneth, *J Merioneth Hist Record Soc*, **7.1**, 13-27

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn, London

Evans, ED, 2005 The Crown Lordship of Denbighshire - Part 1, *Denbigh Hist Soc Trans*, **50**, 24-35

GAT, 2006 *Historic Landscape Characterisation – Bala, Llyn Tegid, Development of the Estates*, (<http://www.heneb.co.uk/balaandlakeside/balahlcintro/estates.html>) website accessed 07/07/2011

- Lilie, E, 2009 *Cock Fighting*, (<http://www.museumwales.ac.uk/en/Rhagor/article/cockfighting/>) website accessed 07/07/2011
- Lynch, F, 1993 *Excavations in the Brenig Valley – A Mesolithic and Bronze Age Landscape in North Wales*, Bangor
- Lynch, F, 1995 *A Guide to Ancient and Historic Wales: Gwynedd*, Cardiff
- Lynch, F, 2002 Prehistoric Funerary and Ritual Sites in Denbighshire and East Conwy, *Denbigh Hist Soc Trans*, **51**, 15-25
- Neville George, T, and Smith, B, 1961 *British Regional Geology: North Wales, 3rd edition*, London
- OA North, 2002 *Survey Levels*, unpubl doc
- OA North, 2003 *Uplands Initiative Field Projects 2002-3: Mynydd Hiraethog Study area*, unpubl rep
- OA North, 2005a *Uplands Initiative Field Projects 2004-5: North Berwyn (North) Study area*, unpubl rep
- OA North, 2005b *Uplands Initiative Field Projects 2004-5: Mynydd Hiraethog (North East) Study area*, unpubl rep
- OA North, 2009 *Uplands Initiative Field Projects 2008-9: Llyn Celyn Study area*, unpubl rep
- OA North, 2010a *Upland Initiative Field Projects 2011-12: Project Design*, unpubl doc
- OA North, 2010b *Upland Initiative Field Projects 2009-10: Bwlch y Pentre Study area*, unpubl doc
- Owen, TM, 1975 Historical aspects of peat-cutting in Merioneth, *J Merioneth Hist Record Soc*, **7.2**, 308-321
- Peate, IC, 1970 The Denbigh Cockpit and Cockfighting in Wales, *Denbigh Hist Soc Trans*, **19**, 125-132
- Price, RJL, 1899 *The History of Rulace, or Rhiwlas; Ruedok, or Rhiwaedog; Bala, its Lake; The Valley of the Dee River; and much more of Merionethshire and Counties adjacent thereto*, London
- Ray, P, 2011, Foel Goch, *Digital Air Photograph Mapping*, RCAHMW, unpubl doc
- RCAHMW, 1914 *An Inventory of the Ancient Monuments in Wales and Monmouthshire: Vol IV Denbighshire*, London
- RCAHMW, 1921 *An Inventory of the Ancient Monuments in Wales and Monmouthshire: Vol VI Merioneth*, London
- RCAHMW, 2004 *Revised Data Standard for Upland Survey: for Projects Conducted April 2005 to March 2006*, unpubl doc
- RCAHMW, 2010 *The Uplands Initiative: Invitation to bid for the 2011/2012 programme of archaeological survey*, unpubl doc
- Silvester, R, 2003 *Y Berwyn* in Browne, D, and Hughes, S (eds), *The Archaeology of the Welsh Uplands*, RCAHMW, Aberystwyth

Silvester, RJ, 2006 Deserted Rural Settlements in Central and North-East Wales, in *Lost Farmsteads: Deserted Rural Settlement in Wales*, CBA Research Report, **148**, 13-39

Silvester, R, 2011 *Discovering Upland Heritage: The Denbigh Moors*, RCAHMW, Aberystwyth

Thomas, C, 1967 Merioneth Estates, 1790-1858: A study in agrarian geography, *J Merioneth Hist Record Soc*, **5.3**, 221-37

UKIC, 1990 *United Kingdom Institute for conservation: Guidelines for the preparation of archives for long-term storage*

APPENDIX 1: GAZETTEER OF NEW SITES

NPRN	NGR	TYPE	PERIOD	ALTITUDE
43836	SH9259340286	Hermitage	Medieval	390
93712	SJ0004041280	Hillfort	Iron Age	365
275897	SH9927540994	Kerb Cairn	Bronze Age	350
303458	SH9641040400	Cockpit	Post-medieval	330
303461	SH9379042310	Round Cairn	Bronze Age	565
400457	SH9928540986	Ring Cairn	Bronze Age	350
412788	SH9865340296	Farmstead	Post-medieval	350
412985	SH9967040870	Stone	Unknown	330
519190	SH9420242161	Sheep Fold	Post-medieval	490
519191	SH9425541526	Trackway	Post-medieval	445
519192	SH9461241001	Shelter	Unknown	380
519193	SH9459141272	Trackway	Post-medieval	410
519194	SH9476841178	Trackway	Post-medieval	410
519195	SH9456141654	Peat Stand	Post-medieval	440
519196	SH9463842542	Boundary Stone	Post-medieval	540
519197	SH9536142287	Boundary Stone	Post-medieval	610
519198	SH9546342376	Marker Cairn	Post-medieval	595
519199	SH9558541277	Trackway	Post-medieval	450
519200	SH9495641176	Boundary Bank	Post-medieval	460
519201	SH9479140968	Boundary Bank	Post-medieval	395
519202	SH9472240700	Building Platform	Post-medieval	365
519203	SH9423540399	Peat Cutting	Post-medieval	440
519204	SH9409440328	Sheep Fold	Post-medieval	455
519205	SH9410039623	Pond	Post-medieval	390
519206	SH9409439503	Trackway	Post-medieval	385
519207	SH9374939729	Stock Enclosure	Post-medieval	460
519208	SH9378040005	Sheep Shelter	Post-medieval	505
519209	SH9377840156	Stock Enclosure	Post-medieval	530
519210	SH9379540258	Marker Cairn	Post-medieval	550
519211	SH9381840276	Quarry	Post-medieval	545
519212	SH9357740689	Boundary Stone	Post-medieval	460
519213	SH9349040576	Longhouse	Medieval	435
519214	SH9334140125	Longhouse	Medieval	400
519215	SH9337140118	Stock Enclosure	Medieval	405
519216	SH9341639826	Sheep Fold	Post-medieval	390

519217	SH9347539678	Quarry	Post-medieval	410
519218	SH9291339440	Sheep Fold	Post-medieval	350
519219	SH9376440920	Sheep Fold	Post-medieval	455
519220	SH9225843835	Sheep Fold	Post-medieval	420
519221	SH9280943871	Quarry	Post-medieval	475
519222	SH9299543272	Boundary Stone	Post-medieval	415
519223	SH9234542908	Quarry	Post-medieval	445
519224	SH9220542877	Sheep Fold	Post-medieval	440
519225	SH9173443339	Sheep Fold	Post-medieval	340
519226	SH9434742482	Ring Cairn	Bronze Age	520
519227	SH9436942491	Round Cairn	Bronze Age	520
519228	SH9390242911	Sheep Fold	Post-medieval	420
519229	SH9514043130	Sheep Fold	Post-medieval	470
519230	SH9566742800	Trackway	Post-medieval	545
519231	SH9517343262	Trackway	Post-medieval	450
519232	SH9507743588	Trackway	Post-medieval	400
519233	SH9350142524	Boundary Stone	Post-medieval	505
519234	SH9293340257	Sheep Fold	Post-medieval	375
519235	SH9317441959	Sheep Shelter	Post-medieval	450
519236	SH9286041741	Sheep Fold	Post-medieval	400
519237	SH9322541507	Trackway	Post-medieval	455
519238	SH9246540702	Boundary Bank	Post-medieval	440
519239	SH9237140553	Boundary Bank	Post-medieval	440
519240	SH9297040477	Farmstead	Post-medieval	395
519241	SH9245740581	Boundary Bank	Post-medieval	450
519242	SH9229240482	Boundary Bank	Post-medieval	435
519243	SH9257040451	Boundary Bank	Post-medieval	435
519244	SH9299540390	Field System	Post-medieval	385
519245	SH9281140188	Peat Cutting	Post-medieval	370
519246	SH9696341398	Trackway	Post-medieval	390
519247	SH9257940387	Trackway	Post-medieval	420
519248	SH9599940898	Sheep Fold	Post-medieval	375
519249	SH9600641001	Sheep Fold	Post-medieval	380
519250	SH9602941067	Sheep Fold	Post-medieval	390
519251	SH9599641685	Sheep Fold	Post-medieval	420
519252	SH9603141163	Sheep Shelter	Post-medieval	400
519253	SH9612642041	Sheep Shelter	Post-medieval	480
519254	SH9624642254	Sheep Shelter	Post-medieval	540

519255	SH9647842468	Boundary Stone	Post-medieval	540
519256	SH9673042679	Boundary Stone	Post-medieval	505
519257	SH9676941748	Sheep Fold	Post-medieval	485
519258	SH9639641277	Sheep Shelter	Post-medieval	480
519259	SH9653041387	Sheep Shelter	Post-medieval	470
519260	SH9634341042	Round Cairn	Bronze Age	450
519261	SH9632941047	Round Cairn	Bronze Age	450
519262	SH9585540830	Boundary Bank	Post-medieval	370
519263	SH9588440783	Trackway	Post-medieval	365
519264	SH9473739959	Sheep Shelter	Post-medieval	450
519265	SH9630640460	Sheep Fold	Post-medieval	335
519266	SH9635040573	Stock Enclosure	Post-medieval	350
519267	SH9642040626	Trackway	Post-medieval	360
519268	SH9665241027	Stock Enclosure	Post-medieval	385
519269	SH9702941314	Pond	Post-medieval	370
519270	SH9702041311	Sheep Fold	Post-medieval	370
519271	SH9812942338	Quarry	Post-medieval	380
519272	SH9792342530	Boundary Stone	Post-medieval	420
519273	SH9717742992	Marker Cairn	Post-medieval	510
519274	SH9762643309	Trackway	Post-medieval	450
519275	SH9746743552	Stock Enclosure	Post-medieval	390
519276	SH9687743008	Sheep Shelter	Post-medieval	470
519277	SH9692342825	Marker Cairn	Post-medieval	515
519278	SH9702342641	Sheep Shelter	Post-medieval	470
519279	SH9732842231	Sheep Fold	Post-medieval	410
519280	SH9753941875	Stock Enclosure	Post-medieval	405
519281	SH9755041830	Building Platform	Post-medieval	405
519282	SH9706141758	Round Cairn	Bronze Age	455
519283	SH9723442179	Trackway	Post-medieval	415
519284	SH9733241814	Round Cairn	Bronze Age	445
519285	SH9278439973	Peat Cutting	Post-medieval	360
519286	SH9281039620	Trackway	Post-medieval	365
519287	SH9298939626	Dam	Post-medieval	360
519288	SH9723541261	Trackway	Post-medieval	300
519289	SH9770941566	Trackway	Post-medieval	285
519290	SH9600042000	Findspot	Unknown	480
519291	SH9619040340	Stock Enclosure	Medieval	350
519292	SH9318042610	Peat Cutting	Post-medieval	465

519293	SH9356042430	Structure	Unknown	520
519294	SH9378642304	Boundary Stone	Post-medieval	565
519295	SH9402042330	Boundary Stone	Post-medieval	545
519296	SH9390042250	Peat Cutting	Post-medieval	550
519297	SH9377042100	Sheep Fold	Post-medieval	535
519298	SH9390741990	Trackway	Post-medieval	510
519299	SH9339042420	Structure	Unknown	480
519300	SH9317042470	Peat Stand	Post-medieval	455
519301	SH9306042800	Trackway	Unknown	495
519302	SH9303042290	Dam	Post-medieval	425
519303	SH9260042950	Spring	Unknown	430
519304	SH9296042210	Spring	Unknown	425
519305	SH9348540603	Round house	Iron Age	435
519306	SH9431642375	Boundary Stone	Post-medieval	525
519307	SH9443242388	Boundary Stone	Post-medieval	545
519308	SH9285743650	Boundary Stone	Post-medieval	450
519309	SH9489742544	Boundary Stone	Post-medieval	565
519310	SH9513042363	Boundary Stone	Post-medieval	600
519311	SH9541642362	Trackway	Post-medieval	600
519312	SH9497743806	Sheep Fold	Post-medieval	355
519313	SH9709942914	Boundary Stone	Modern	515
519314	SH9734542757	Marker Cairn	Post-medieval	455
519315	SH9750642652	Boundary Stone	Post-medieval	465
519316	SH9638642339	Boundary Stone	Post-medieval	550
519317	SH9587742430	Boundary Stone	Post-medieval	525
519318	SH9282243820	Boundary Stone	Post-medieval	475
519319	SH9405539683	Stock Enclosure	Unknown	400
519320	SH9810740170	Sheep Fold	Post-medieval	345
519321	SH9817540216	Quarry	Post-medieval	350
519322	SH9817240229	Trackway	Post-medieval	350
519323	SH9876840603	Marker Cairn	Post-medieval	355
519324	SH9902340672	Marker Cairn	Post-medieval	350
519325	SH9912540647	Clearance Cairn	Post-medieval	345
519326	SH9898940704	Sheep Shelter	Post-medieval	355
519327	SH9893340754	Round Cairn	Bronze Age	355
519328	SH9888940782	Round Cairn	Bronze Age	350
519329	SH9836440265	Boundary Bank	Post-medieval	345

519330	SH9827940372	Clearance Cairn	Post-medieval	340
519331	SH9809540424	Boundary Bank	Post-medieval	325
519332	SH9811940364	Clearance Cairn	Post-medieval	325
519333	SH9811240714	Boundary Wall	Post-medieval	315
519334	SH9807740624	Peat Cutting	Post-medieval	315
519335	SH9797040607	Quarry	Post-medieval	330
519336	SH9832240819	Sheep Fold	Post-medieval	315
519337	SH9870541035	Quarry	Post-medieval	330
519338	SH9935141247	Sheep Fold	Post-medieval	350
519339	SH9989141203	Boundary Bank	Post-medieval	350
519340	SJ0005641283	Round Cairn	Bronze Age	365
519341	SJ0005041277	Round Cairn	Bronze Age	365
519342	SJ0004941297	Round Cairn	Bronze Age	365
519343	SH9889440399	Clearance Cairn	Post-medieval	340
519344	SH9882040308	Clearance Cairn	Post-medieval	345
519345	SH9849840126	Quarry	Post-medieval	340
519346	SH9845040079	Longhouse	Medieval	340
519347	SH9838040113	Kiln	Post-medieval	340
519348	SH9842340182	Clearance Cairn	Post-medieval	350
519349	SH9888940592	Round Cairn	Bronze Age	360
519350	SH9886540814	Round house	Prehistoric	350
519351	SH9862940393	Round Cairn	Bronze Age	360
519352	SH9856340565	Longhouse	Medieval	345

ILLUSTRATIONS

FIGURES

- Figure 1: Location of Study area
- Figure 2: Foel Goch Study area
- Figure 3: Site distribution showing both pre- and post-survey sites
- Figure 4: Probable prehistoric period sites

PLATES

- Plate 1: The undulating hill moorland in the centre of Foel Goch study area
- Plate 2: The open moorland on the western end of Foel Goch study area
- Plate 3: Garnedd Fawr, Round Cairn (NMR 303461)
- Plate 4: Moel Emoel, Round House (NMR 519305)
- Plate 5: Eglwys-Anne, Hermitage (NMR 43836)
- Plate 6: Coed-y-bedo, Cockpit (NMR 303458)
- Plate 7: Foel Goch, Round Cairn (NMR 519227)
- Plate 8: Foel Goch, Ring Cairn (NMR 519226)
- Plate 9: Cwn Cywen, Round Cairn (NMR 519282)
- Plate 10: Craig Wenallt, Round Cairn (NMR 519284)
- Plate 11: Bryn Bras, Round Cairn II (NMR 519261)
- Plate 12: Bryn Bras, Round Cairn I (NMR 519260)
- Plate 13: Eglwys-Anne, Farmstead (NMR 519240)
- Plate 14: Garnedd Fawr, Sheep Fold I (NMR 519190)
- Plate 15: Coed-y-bedo, Stock Enclosure II (NMR 519266)
- Plate 16: Foel Goch, Boundary Stone IV (NMR 519310)
- Plate 17: Llyn Maen Bras, Dam (NMR 519287)
- Plate 18: The open moorland of Moel Emoel seen over Llyn Maen Bras

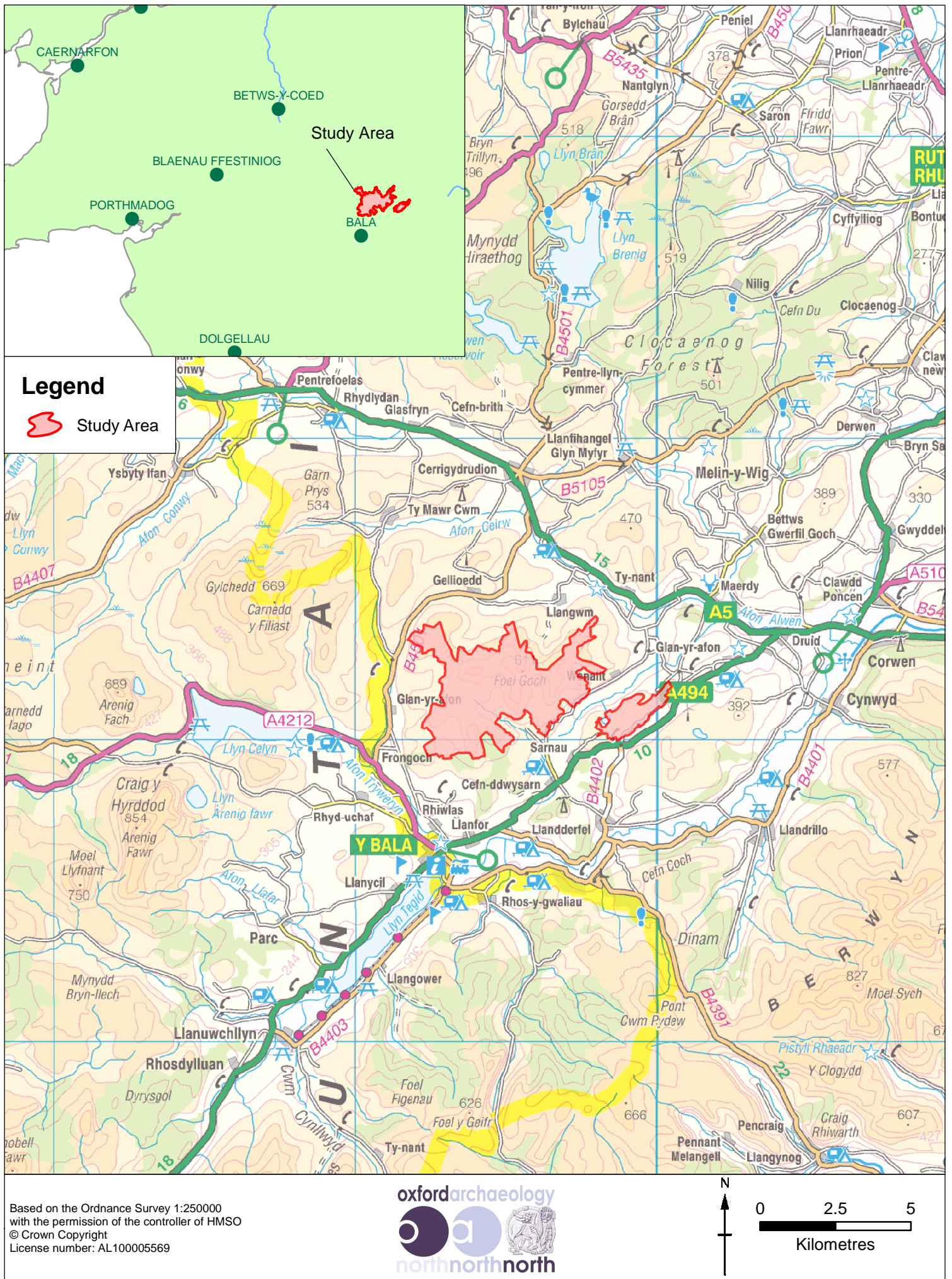
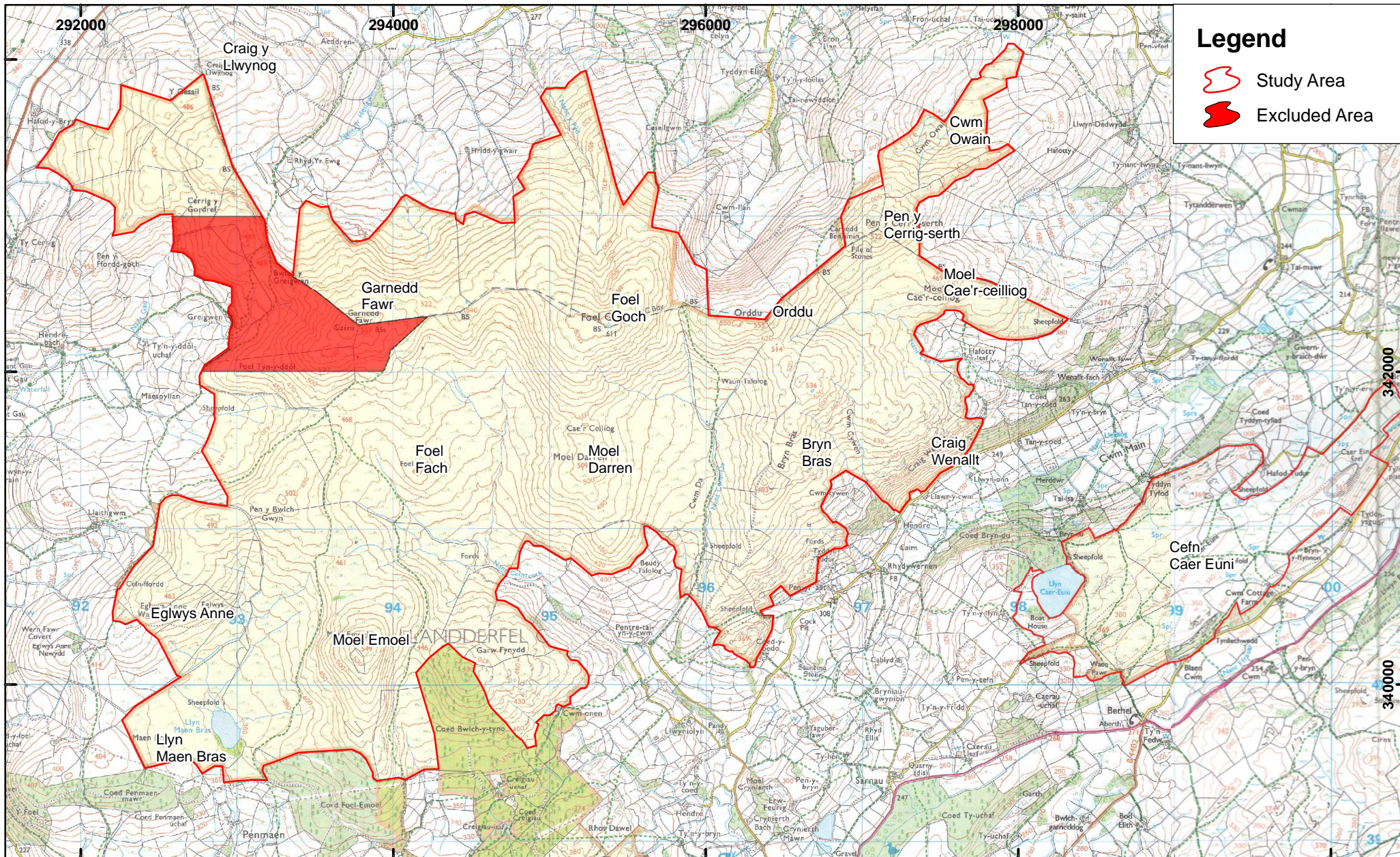


Figure 1: Location of Study Area



Based on the Ordnance Survey 1:25000
with the permission of the controller of HMSO
© Crown Copyright
License number: AL100005569

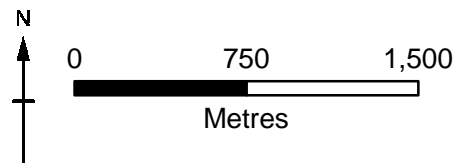
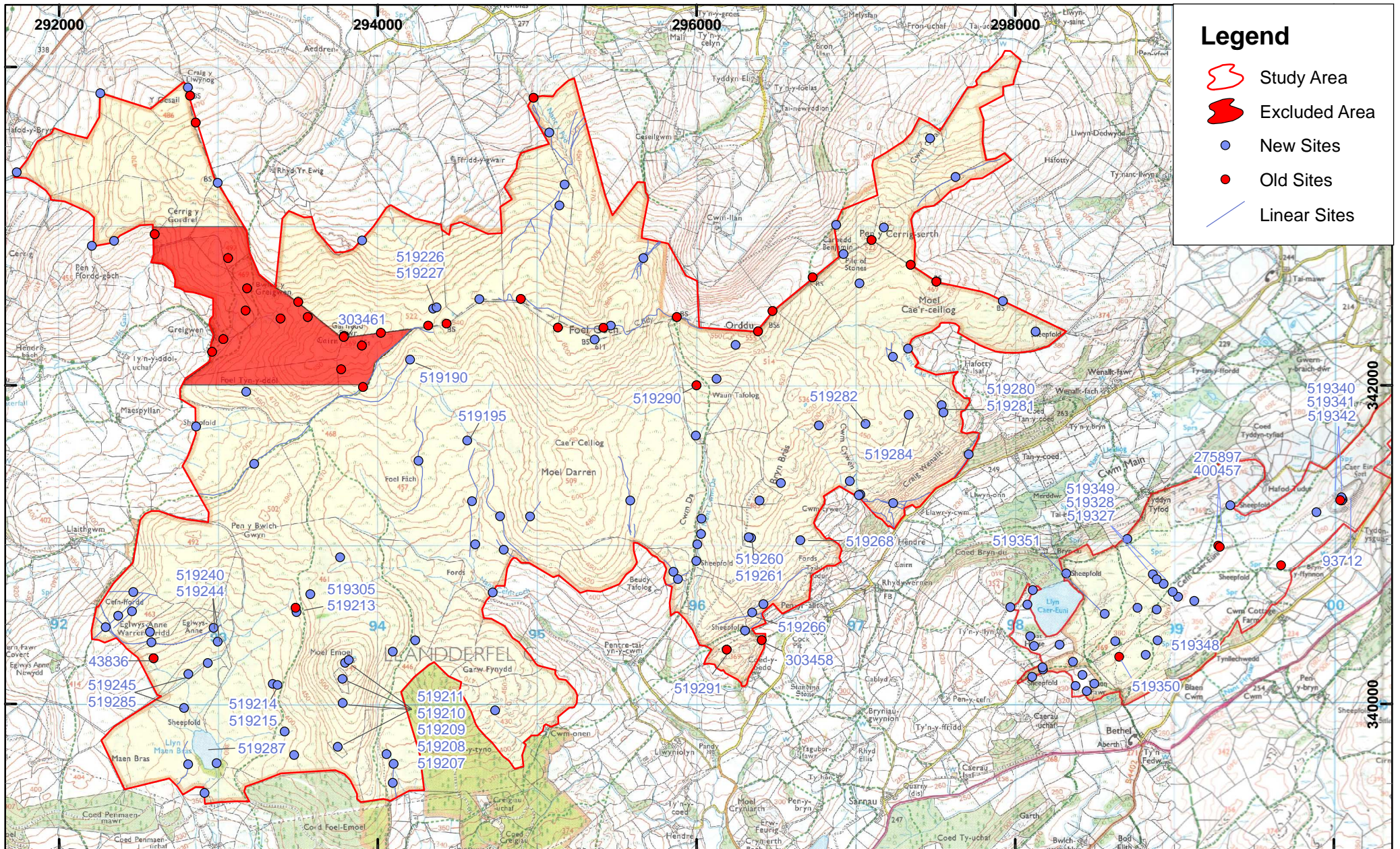


Figure 2: Foel Goch Study Area



Based on the Ordnance Survey 1:25000
with the permission of the controller of HMSO
© Crown Copyright
License number: AL100005569

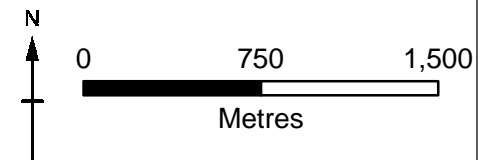
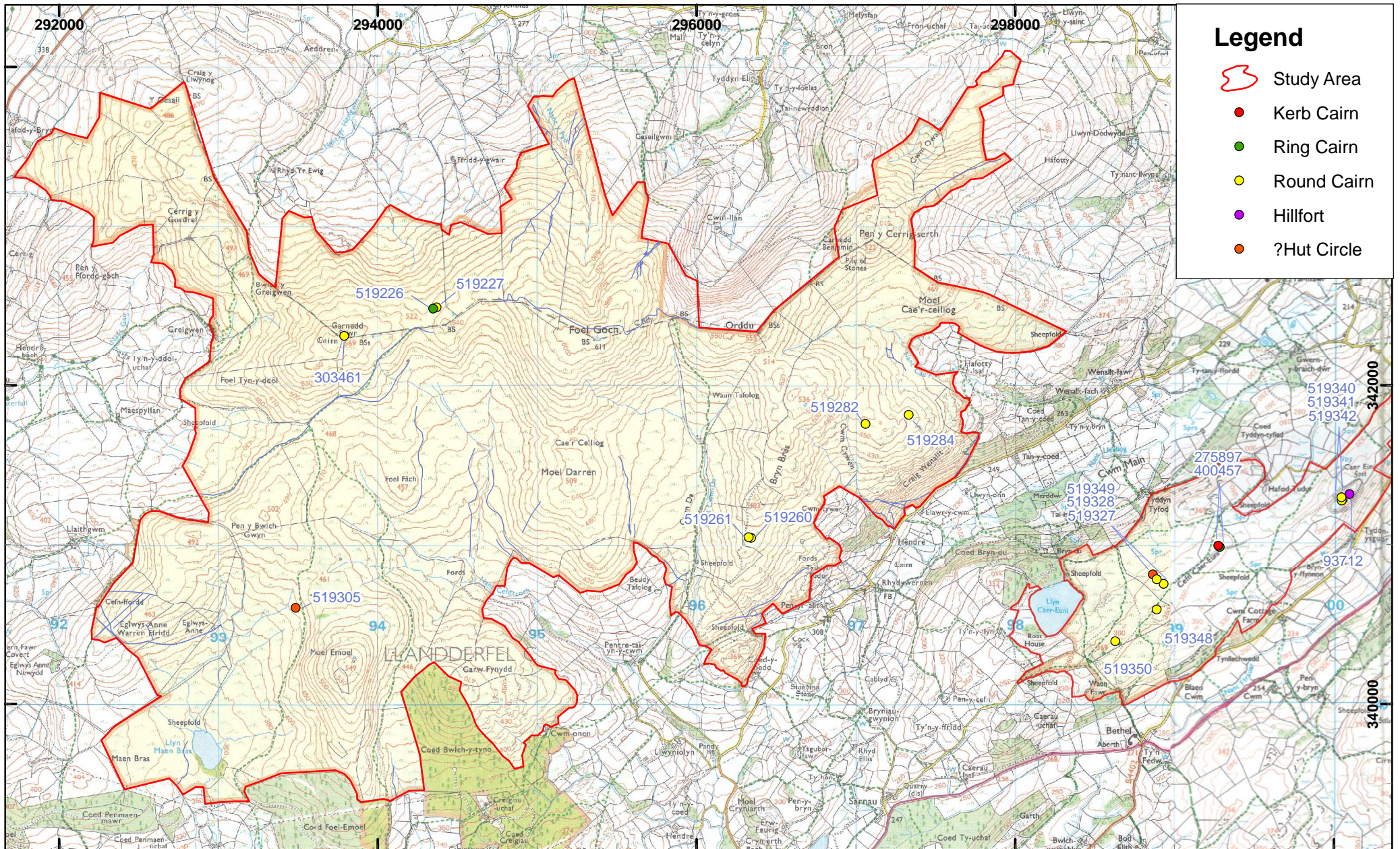








Figure 3: Site distribution showing both pre- and post-survey sites



Legend

-  Study Area
-  Kerb Cairn
-  Ring Cairn
-  Round Cairn
-  Hillfort
-  ?Hut Circle

Based on the Ordnance Survey 1:25000
with the permission of the controller of HMSO
© Crown Copyright
License number: AL100005569

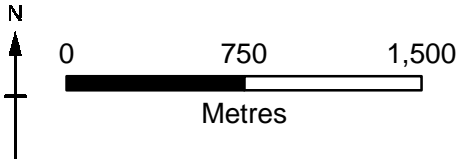


Figure 4: Probable prehistoric sites



Plate 1: The undulating hilly moorland in the centre of the Foel Goch study area



Plate 2: The open moorland on the western end of Foel Goch study area



Plate 3: Garnedd Fawr, Round Cairn (NMR 303461)



Plate 4: Moel Emoel, Round House (NMR 519305)



Plate 5: Eglwys-Anne, Hermitage (NMR 43836)



Plate 6: Coed-y-bedo, Cockpit (NMR 303458)



Plate 7: Foel Goch, Round Cairn (NMR 519227)



Plate 8: Foel Goch, Ring Cairn (NMR 519226)



Plate 9: Cwn Cywen, Round Cairn (NMR 519282)



Plate 10: Craig Wenallt, Round Cairn (NMR 519284)



Plate 11: Bryn Bras, Round Cairn II (NMR 519261)



Plate 12: Bryn Bras, Round Cairn I (NMR 519260)



Plate 13: Eglwys-Anne, Farmstead (NMR 519240)



Plate 14: Garnedd Fawr, Sheep Fold I (NMR 519190)



Plate 15: Coed-y-bedo, Stock Enclosure II (NMR 519266)



Plate 16: Foel Goch, Boundary Stone IV (NMR 519310)



Plate 17: Llyn Maen Bras, Dam (NMR 519287)



Plate 18: The open moorland of Moel Emoel seen over Llyn Maen Bras