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The Mynydd y Ffynnon Archaeological and Historic Landscape Survey

> CPAT Report No 223 DAT Project Record No 34440

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DESK TOP ASSESSMENT and FIELD SURVEY

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Report for RCAHMW

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1 INTRODUCTION

- 1.1 The area which has been classed as Mynydd y Ffynnon by ADAS and Forest Enterprise occupies a block of upland in the heart of the Cambrian Mountains, covering nearly 10,000 hectares (centred at SN 8100 8000). It lies between the valleys of the River Ystwyth on the south, the River Wye on the north, and the River Rheidol on the west, with Devil's Bridge (Ceredigion) to the west and Llangurig (Powys) to the east.
- 1.2 ADAS and Forest Enterprise in conjunction with a number of other organisations have recently initiated a joint project for Mynydd y Ffynnon which is termed 'a new Welsh upland vision for the restoration of upland ecosystems', and is defined as 'a pilot scheme for the uplands aimed at restoring indigenous upland habitats and their wildlife conservation whilst ensuring that there are true economic returns for forestry and agriculture and hence the rural economy of the same area'.
- 1.3 The project involves conservation interests and one of the key objectives propounded in the mission statement is 'to maintain and enhance the landscape, ecological and historic value of Pwllpeiran and the surrounding land by producing sustainable and marketable agricultural and timber products and to investigate new ways of diversifying the rural economy. In turn this will then be used as a model for what could be developed elsewhere on the Welsh uplands and throughout the upland areas of the United Kingdom'. A further objective is 'to maintain and enhance the intrinsic landscape character and archaeological features of the agricultural land resource'.
- 1.4 In view of these stated objectives and the potential long-term significance of this project for other similar programmes elsewhere it was evident that at an early stage in the evolution of the project an input on the archaeological and historic landscape elements of the region was not only desirable but absolutely essential to ensure their integration into land management plans and other development initiatives that might arise during the duration of the project.
- 1.5 Funding for the overall Mynydd y Ffynnon project was anticipated from a number of sources and the application to the European Union (EU) included an element for archaeological survey over a two-year period. To release the EU monies it was necessary to find matched funding from other sources and this was achieved in 1996/97 by a joint bid from the Clwyd-Powys and Dyfed Archaeological Trusts (CPAT and DAT respectively) to the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW) for grant aid under their Uplands Initiative Scheme.
- 1.6 The two archaeological trusts produced a detailed project design involving both ground survey and desk-top analysis, with proposals for different elements of the project being funded by different sources at different times (see Appendix 1: Project Design). Delays in the establishment of the overall project forced the postponement of the EU-funded work, but that grant-aided by RCAHMW continued throughout 1996/97. This report offers a preliminary assessment of two elements of the archaeological programme completed during this period. CPAT were responsible for an initial assessment of aerial photograph cover for the region, and also for field survey in the eastern part of the Mynydd y Ffynnon land block, DAT for the desk-top collation and analysis of data from a variety of sources.

2 DEFINITIONS and METHODOLOGY

2.1 Three areas are referred to in this report, namely:

The Landscape Study Area is the large topographically delimited land block between the Wye, Rheidol and Ystwyth valleys.

The Mynydd y Ffynnon area lies within the Landscape Study Area and is that tract of land defined by ADAS and Forest Enterprise for the purposes of their overall project. Its boundaries are configured by the modern landholdings of the two organisations and thus bear little relation to past land-use and activity in the region.

The Archaeological Survey Area is the initial area defined by ADAS and Forest Enterprise (on advice from Cadw: Welsh Historic Monuments) for the archaeological field survey in the east of the Mynydd y Ffynnon area. It consists of approximately 10 sq. km of open hill land surrounded by forestry in the north-eastern part of the Mynydd y Ffynnon area. Its western boundary is a national grid line, arbitrarily adopted, its other boundaries are a reflection of the Mynydd y Ffynnon area above.

3 AERIAL PHOTOGRAPHY ASSESSMENT

- 3.2 The aerial photograph assessment involved the examination of six sets of vertical photography covering the Landscape Study Area: these were ADAS photography of the Pwllpeiran Estate dated 1972 (Colour), 1985 (Black and White) and 1995 (Colour), and RAF Black and White photography held by RCAHMW (1946 and 1947) and by ADAS (1957).
- 3.2 The different photo sets were of variable quality and coverage. Those from 1972 and 1985 did not extend beyond the ADAS Pwllpeiran estate, but this was compensated for by the RAF photography. The 1946 RAF photography was hampered by cloud cover over the eastern part of the study area, and it seems likely that the 1947 AP's were taken to remedy this omission. The 1957 RAF photographs were particularly useful for earthwork identification as they were taken in oblique light in December, though some of the deeper valleys were in shade and could not be assessed.
- 3.3 Sites were plotted onto modern Ordnance Survey 1:10,000 maps. Roofed houses and buildings were not recorded: it was assumed that these would be apparent in modern map and documentary sources.
- 3.4 A total of 63 possible sites were identified. These were numbered consecutively from 1 upwards (see Appendix 2 and accompanying plan), in order to avoid any confusion with the different PRN numbers used by CPAT and DAT.
- 3.5 It is not proposed to consider the identifications in any detail at this stage as it is anticipated that many will be field checked in due course. Many are buildings of putative post-medieval date relating to quarrying and mining activity where a general attribution can be made with some confidence. Others such as the enclosures on Bwlch yr Oefa (nos 23 & 24) and the platform near Nant Rhuddnant (no.45) require field examination. Some features within the Archaeological Survey Area have already been assessed. Nos 1 and 19 can be attributed to vegetation changes, no.49 if it did exist, has been swept away during pasture improvement, but no.48, the cairn on the top of Pen y Garn was recorded in the field.

4 FIELD SURVEY

- 4.1 Fieldwork was undertaken in the Archaeological Survey Area (ASA) during July and August 1996. Standard fieldwork techniques used by CPAT and based on line walking 30m apart were adopted, although the nature of the terrain sometimes required a modification of this approach. For instance on steep gradients, the contours were followed. All newly identified sites were recorded on *pro forma* sheets and located on 1995 aerial photographs. The information was subsequently fed into a computerised database. Distribution plans were produced using the AutoCad system with a digitised map base provided by ADAS.
- 4.2 The ASA occupies an upland plateau of rounded local summits and generally north/south aligned ridges, separated by small, often immature, stream valleys. The elevation of the area ranges from a minimum of approximately 450m OD at Llyn Rhuddnant to around 610m OD on Pen y Garn in the extreme south-west.
- 4.3 Vegetation within the survey area encompasses the extremes of that normally seen in upland areas. Much of the central and western parts of the area are under improved grassland with variable levels of rush infestation, while the northern and southern parts remain unimproved with significant amounts of heather cover. Of particular ecological interest are areas of ungrazed land in the extreme north-western and north-eastern parts of the survey area.
- 4.4 A list of the sites discovered in the ASA is given in Appendix 3 and they are considered briefly below. Some, too, are referred to in the desk-top assessment that follows. In view of the altitude throughout the ASA, expectations for the discovery of archaeological features were fairly low, as a ceiling of c.420m OD is often quoted for the usual range of human activity except in particularly favourable circumstances.
- 4.5 The majority of the twenty-nine new records can be attributed to the post-medieval/early modern era: a number of boundary stones bearing the dates 1865 or 1866 (though one no.64 had a much weathered date of 1844); and a miscellaneous collection of sheepfolds, small shelters, huts, mine trials and the like. Of more specific interest are the series of long huts along or close to Nant Felan and other south-flowing streams (e.g. nos 70, 72, 82, 83, 84, 86, 87, 89 & 90). Most of these are between 7m and 10m long, lack any associated enclosures, and are best interpreted as *hafotai* of medieval or earlier post-medieval date. That two of these (nos 70 & 72) are well over 500m OD is interesting in itself.
- 4.6 Prehistoric sites are restricted to the probable cist (no. 71) and the cairn on Pen y Garn (no.48), mentioned above (2.2.5).

5 DESK TOP ASSESSMENT: THE NATURAL LANDSCAPE

5.1 Geology and Geomorphology.

- 5.1.1 The main rock types of the study area are all of Silurian Age. The core of the upland block is composed of strata of the Aberystwyth Grits Formation, but this gives way to mudstones and shales across the western half of the area, which have been thrown up by the Central Wales Syncline.
- 5.1.2 Some important geological formations have contributed to the characteristics of the landscape. Roughly parallel to the Central Wales Syncline, but some 5-10km to the west, runs the Teifi

Anticline. The Afon Rheidol follows the axis of the anticline for the first part of its course, flowing north - south as far as Pontarfynach (Devil's Bridge), where it turns sharply to follow a westerly course towards Cardigan Bay, cutting through softer strata. The Afon Ystwyth follows a major line of weakness in the strata for the first half of its course, the valley of Cwmystwyth having been cut by the river along the line of the Ystwyth Fault.

5.2 Soils

5.2.1 Along with geological and geomorphological factors, variations of soil type has also contributed to determining man's activity in the landscape. The soils of the study area have been classified by C.C. Rudeforth (1994, 21-25). For the purposes of this study, three main zones of soil types can be identified within the study area:

i) the central upland core of the study area, straddling the Ceredigion/Powys border, is composed of peat soils on poorly drained hill ground with extensive areas of raised peat bog. The peats and associated Stagnopodzols of the upland core have historically proved important for the summer grazing of livestock, but rarely has any attempt been made at cultivation, except where small plots of land associated with *lluestau* have been cultivated in the past (Vaughan 1967).

ii) around this lies a girdle characterised by Stagnopodzols, defined by Rudeforth (1994, 23) as loamy acid soils with a periodically wet peaty surface, a bleached sub-surface horizon and some ironpanning. This 'girdle' extends westwards along the ridge of higher ground which separates the Rheidol and Ystwyth valleys and eastwards towards the fringes of the Wye valley floodplain. Some Stagnohumic gley soils are found within this 'girdle' and these are characterised by slowly permeable loamy or clayey acid soils with a humose or peaty surface. The slow permeation of water through these soil horizons leaves them waterlogged during wet periods and unsuitable for cultivation. However, good grazing can be achieved on such soils, particularly if artificial drainage channels are created. There has certainly been a long tradition of land improvement and drainage programmes on such soils in the study area in order to maximise the potential of the land.

iii) in the Rheidol, Ystwyth and Mynach valleys, the soils are characteristically Brown podzols, with some Stagnohumic gley soils occurring. The Brown podzols are mostly well drained loamy acid soils. It is these areas which might be considered to be most favourable for arable farming, but the Brown podzolic soils are acidic and their ironenriched subsoil inhibits growth, therefore they are not ideal for crop raising. The valley sides are, however, suitable for growing coniferous tree species such as the Sitka Spruce, the Douglas Fir, and the Japanese and European larch, as well as broadleaf species such as sessile oak and beech in sheltered places (Rudeforth 1994, 24). This explains the success of plantation developers since the late 18th century in afforesting relatively large sections of the local landscape.

5.2.2 Although there is no doubt that some arable farming has been practised in some favourable locations across the valleys and hillslopes of the study area since early times, the nature of the landscape and the characteristics of local soil types have invariably meant that the bulk of the land surface is best suited to animal husbandry rather that crop raising. Until relatively recent historic times, most of the upland block between the Rheidol and Ystwyth valleys was unenclosed common and waste, exploited as the summer pasture for stock raised and wintered on lowland farms.

6 DESK TOP ASSESSMENT: ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistory and Romano-British

6.1 There is an absence of evidence for human settlement and activity in the mid-Wales uplands during the earliest archaeological periods. During the Palaeolithic period, which corresponds with the last Ice Age, we can envisage that for much of the time the mountain block was an inhospitable, tundra environment which would certainly not have attracted settlement. However, warmer periods did occur and some human activity might have emerged during such interludes, although whether any communities permanently occupied the uplands is unknown and perhaps unlikely.

6.2 Mesolithic

6.2.1 The Mesolithic period (8,000BC - c.4,000BC) is an almost equally blank chapter in the current archaeological record of the mid-Wales uplands. During the early Mesolithic much of what is now Cardigan Bay was dry land. The wide coastal plain was probably well afforested and would have offered ample natural resources in terms of game, fish and fruits. Mesolithic finds in Ceredigion are generally confined to the coastal strip and this may be indicative of a preference amongst Mesolithic communities to exploit the resources of this low lying coastal plain, using the uplands to the east as hunting territories, less frequently visited. A single find of an unfinished stone mace head (PRN11421) discovered north of Hafod has been tentatively dated to the Mesolithic period and may represent an artefact discarded or lost by a hunter passing through the area.

6.3 Neolithic

6.3.1 With the gradual loss of the coastal plain as sea levels rose throughout the Mesolithic period, it is perhaps not surprising that significantly greater evidence of human activity is present for the Neolithic period in mid-Wales (c.4000BC-c.2500BC), as communities were obliged to move further west for both hunting and settlement. The Neolithic period is notable for the arrival of agricultural practices and pottery making in the British Isles. Agriculture necessarily requires the establishment of permanently occupied settlements in place of the seasonal camps used by the hunter and gatherer communities which were typical of previous periods. It also requires that tracts of land are cleared of woodland and opened up for grazing and cultivation. Pollen evidence in many parts of the British Isles shows that there was a significant decline in the elm population, as well as other tree species, from about 3000BC onwards, with a corresponding rise in the pollen of cereal crop plants and weed species associated with cultivation. Pollen samples taken from a number of sites within Ceredigion, which include Borth Bog and Cors Tregaron, indicate that a marked decline was occurring here at around the same time (Moore 1994, 39-40). However, there are no sites of Neolithic date currently identified within the study area.

6.4 Bronze Age

6.4.1 The Bronze Age (c.2500BC-c.600BC) in mid-Wales is represented by a wide range of archaeological site types, some of which are relatively numerous. Palaeo-environmental and excavation evidence is also available, which help in the interpretation of man's impact on the landscape during this period. Peat cuttings within the study area itself have exposed bogwood (prehistoric timber buried in the peat bogs). This timber was probably buried by the growing

peat during the Bronze Age and its preservation in the peat suggests that any contemporary manmade features or artefacts, even of organic material, may be preserved.

- 6.4.2 Bronze Age settlement and farming is suspected to have had an impact over much of the Welsh landscape. A possible site of Bronze Age date noted on an aerial photograph was the remains of a circular hut on Banc Twlc, which appeared to be associated with a 130m long field boundary wall (Fairey Surveys 7212 2 892/3).
- 6.4.3 Burnt mounds are a class of site which are of Bronze Age origin. They comprise of mounds of burnt stone and charcoal, usually located alongside a stream or other water source. They have been interpreted as the archaeological remains of prehistoric cooking sites, but their function is not wholly understood. A single example has been previously recorded within the study area, at Ponterwyd (PRN 4138), but future fieldwork may well locate further examples of what is becoming a fairly common monument in the mid-Wales landscape.
- 6.4.4 Bronze Age round barrows, ritual cairns and standing stones are fairly common classes of monument in the Welsh upland landscape. Their often prominent siting has meant that they have served as useful boundary markers or trail markers for many centuries and therefore have been preserved. They are also generally away from those areas where peat bogs have accumulated and have therefore remained visible in the modern landscape. A number of Bronze Age round barrows were previously known in the study area, all sited on prominent hilltops, e.g. Carn Bwlch Cloddiau (PRN6198; CPAT PRN816) and Esgair Wen (PRN6199; CPAT PRN6199). A standing stone has also been recorded on Cefn Blaen Meherin (PRN14294). Only a single new site belonging to this category was recorded by the field survey. This was a damaged burial cist on Cripiau Fagwyr Fach (PRN33262) which has been attributed a Bronze Age date.
- 6.4.5 It is evident that the mineral resources of mid-Wales were known and exploited by prehistoric communities. At an opencast copper mine at Copa Hill, Cwmystwyth (PRN5461), evidence has been found of Bronze Age mining activity which elevates the site to that of national importance. The most recent excavations on the site have produced antler picks of prehistoric origin and charcoal from within the workings has been radiocarbon dated to c.1800BC, making this one of the earliest metal mining sites identified in Europe (Hughes, 1993, introduction; Timberlake & Mighall 1992).

6.5 Iron Age

6.5.1 The transition from the Bronze Age to Iron Age in west and mid-Wales is loosely defined as occurring during the period 800-600BC. It appears that a deterioration in climate during this period reduced the use of the uplands for both settlement and agriculture and this caused a gradual shift of human activity as communities were obliged to adapt their agricultural practices to the changing conditions. There is currently no recorded evidence of Iron Age settlement within the Mynydd y Ffynnon study area, although Iron Age hillforts are fairly common in neighbouring districts to the west.

6.6 Romano-British Period

6.6.1 Physical evidence for the extension of Roman influence into Ceredigion and Powys, during the late 1st century AD, is represented by a chain of military forts along the course of the Roman road which ran between Pumsaint, Carmarthenshire and Pennal, near Machynlleth, Powys, via Llanio and Trawscoed in Ceredigion. A small Roman fortlet, known as Cae Gaer (PRN4179;

CPAT PRN230) is located within the Mynydd y Ffynnon study area, well to the east of this road. Its location suggests that it was intended to protect a communication route linking Ceredigion with Powys, possibly crossing the hills to the Wye valley from either the Rheidol or Ystwyth Valleys. The Romans may have had some mineral interests in the Cwmystwyth area and this might also explain the fort's presence. Some limited excavation was undertaken at Cae Gaer in 1913 (Pryse 1914), but no significant discoveries were made.

The Dark Ages and Mediaeval Period

6.7 Although these periods jointly represent a time span of some eleven centuries, there is an absence of historical and archaeological evidence to aid our interpretation of life in the mid-Wales uplands during a greater part of those centuries, particularly those of the 'Dark Ages' (430AD-1066AD). It is therefore convenient to discuss the landscape history of these periods together.

6.8 Medieval Settlement

- 6.8.1 There is little doubt that it was the lower lying, better sheltered valleys which were favoured for settlement purposes throughout most of the history of the study area. The presence of better soils, suited to arable farming, along the Wye, Ystwyth and Castell valleys must have been a determining factor for the concentration of early farms and settlements during medieval and earlier times. It is quite feasible that the lower slopes and floors of the main valleys which penetrate into the upland block were under the plough well before the Middle Ages, possibly from the Iron Age or even earlier. These farmsteads would have been integral to the *hafod/hendre* system of transhumance which was practised during medieval times, being the *hendrefi* which would send their stock animals to the summer pastures or *hafodydd* on the higher mountain slopes.
- 6.8.2 The extent to which the area had been settled and farmed by the close of the mediaeval period is exemplified by surviving rental rolls of farms rented to tenant farmers by Strata Florida abbey in the early 16th century (Morgan 1991, 6). These lists include the following holdings, all of which are still occupied or traceable in the study area;

Pwllpeiran	Brignant	Allt Gron
Lledwennau Uchaf	Lledwennau Isaf	Dolygors
Tyddyn y Clyttie	Bwlch Gwallter	Hafod yr Abad (Tyllwyd?)
Dologau	Hafod Uchdryd Uchaf	Hafod Uchdryd Isaf
Rhosytyddyn	Dolychenog	Briwnant
Nant y Gafod	Blaenmyherin	

6.8.3 Morgan (1991, 5) makes the valid observation that "these rentals show clearly that every farmable area of Cwmystwyth was already being farmed" by the 16th century, and that the surrounding wastes "were grazed by the stock of the valley farmers".

6.9 Ecclesiastical sites.

6.9.1 There is little evidence of 'Dark Age' ecclesiastical activity in the study area. Both of the churches which now stand in the area, Ysbyty Cynfyn (PRN5479) and Eglwys Newydd (PRN5491), are related to the later medieval or post-medieval periods. Ysbyty Cynfyn was

possibly the site of a medieval hospice, whilst the building of Eglwys Newydd is associated with the rise of the Hafod estate.

6.9.2 One of the most significant discoveries made during this study was the identification of what appears to be a medieval or early medieval ecclesiastical focus around Llaneithyr (PRN33255), which may have been associated with the Cwmystwyth Grange of Strata Florida abbey or even represent a pre-Norman foundation. The *Llan*- element in the placename is indicative of an early church site. *Eithyr* may be the personal name of a Celtic saint. A cluster of placenames in the vicinity suggest that there was an ecclesiastical foundation here. The name Afon Mynach (Monk's River) is itself significant, and the parish tithe map records neighbouring fields as *Cae Ffynnon Saint* ('Saints Well Field' - PRN33256) and *Mynwent Fach* ('Little Cemetery' - PRN33257). The neighbouring property to the east is Ty Gwyn (PRN33195), a name which itself has ecclesiastical overtones - *Gwyn* can mean 'blessed' or 'sacred' as well as 'white'.

6.10 The Cwmystwyth Grange of Strata Florida Abbey.

- 6.10.1 The Cistercian Abbey of Strata Florida, near Tregaron, was founded in 1164, at a time when Ceredigion was in Norman hands, although it was later strongly associated with the cause of the Welsh princes. One of the earliest land grants awarded to Strata Florida included the upper Cwmystwyth valley, along with the mountain waste on the southern side of the valley, to which was later added land to the north of the Ystwyth. This latter parcel of land now forms a large part of the present study area. This estate or grange was known as the Cwmystwyth Grange. A similar link with Strata Florida is perhaps also true of the portion of the study area which lies within Powys, for Hamer (1869, 227) records a tradition that much of the parish of Llangurig was also once in the possession of Strata Florida. This tradition is based on the fact that Strata Florida acquired the tithes and profits of the parish during the 13th century (Jones Pierce 1951, 29).
- 6.10.2 The Cwmystwyth Grange was one of several granges in the possession of the abbey. These included both lowland and upland territories, ensuring a satisfactory balance between arable farming and animal husbandry. Although notable for their importance for the summer pasturing of sheep and cattle, the upland granges of the abbey were not exclusively restricted to animal husbandry. Each had a mixed agricultural base, with all suitable land turned over to the cultivation of oats, a crop which could be successfully grown in these areas up to an altitude of c.330m OD (Howells 1972, 267). Other sources of income, such as fish and fowl or lead and copper, were also exploited where found.
- 6.10.3 That said, during the Middle Ages, the prime value of the Cwmystwyth Grange and adjacent hills was the availability of extensive upland pasture vital to pastoral activity in the district, based on the traditional *hafod/hendre* system. Animals were wintered at lowland farm or the *hendre*, and were turned out to graze the hill pasture or *hafod* during the summer months (traditionally May-October). Documentary sources indicate that the Cwmystwyth Grange was divided into four *hafodydd*, namely Hafod Uchared, Hafod Uchtryd, Hafod Gau and Hafod yr Abad (Morgan, 1991). Our understanding of the archaeology of the mediaeval *hafod* is limited, but it is thought probable that some of the deserted settlement sites dotted across the uplands of the study area are associated with medieval transhumance.
- 6.10.4 By the early 13th century, Strata Florida was heavily involved in the wool trade and even received a special three-year licence from King John in 1212, allowing the abbey to export its wool unhindered to the continent, where it was much needed to feed the woollen industry of the Low Countries (Bowen 1951, 36). Undoubtedly, the produce of the Cwmystwyth area was significant to this trade.

6.10.5 Whether or not Cwmystwyth Grange had a focal settlement is unknown, although it does appear that one important focus of activity during the medieval period was the Pentre Briwnant/Pwllpeiran area (in the vicinity of the present Cwmystwyth village). The *pentre* element in the placename may itself be significant in this respect. Near here there was the Pyran water mill (PRN11969) as well as a fishing weir on the Ystwyth and some mining activity - the abbey owned the Briwnant Mine (Hughes 1981, 6). A 'monastic garden' (PRN25540) at Bwlchyroerfa, near Pwllpeiran may also have been a focus of activity.

The post-Mediaeval period

6.11 The landscape

6.11.1 It is significant that the first detailed description of the Ceredigion uplands, that of Leland, in 1535, expresses the opinion that the hills around Strata Florida which "hath been well wooded", were now bare because the former woodlands had been felled to deny shelter to thieves (Williams 1965, 15). Leland found that he could stand atop a hill near the abbey and see nothing but bare hills all around, completely stripped of woodland. Regrowth had been impossible, he records, due to the overgrazing of the land by goats, once the woods had been felled. Leland's journey took him to Cwmystwyth itself. Here he describes the lead mine of *Cloth Moyne* (Clawdd Mwyn) or Cwmystwyth, and provides another reason why the landscape appeared so bare, for "there hath been a great digging for Leade, the smelting whereof hath destroid the woodes that sometimes grew plentifully thereabout" (Hughes 1993, 7). Many local placenames recall the former flora and fauna of the district (see Appendix 4).

6.12 The Hafod Estate

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- 6.12.1 Hafod was only one of several influential estates which held property within the study area until modern times. Nanteos and Trawsgoed (Crosswood) were amongst the major estates which held land in the study area. The Hafod estate arose from Strata Florida's Cwmystwyth Grange, focused on the lands of one of the four *hafodydd* of the grange, namely Hafod Uchdryd. The lease of the grange had been sold by the crown to the Earls of Essex following the dissolution of the monastery, although the Crown retained its role as Lord of the Manor. During the late 16th century, the Herbert family had bought the lease outright and thus had the nucleus of one of the most important estates in the district. Their possessions were inherited by the Johnes family, through marriage, and it was Thomas Johnes, the third generation of his family at Hafod, who brought the property to the fore in the later 18th century with his efforts to improve estate land and re-afforest the surrounding valley slopes.
- 6.12.2 As noted above, the Cwmystwyth landscape had been dramatically altered by mining and smelting activity in previous centuries. Thomas Johnes embarked on an ambitious programme of tree planting and landscaping which he intended would restore the natural beauty of the valley and secure a future income for the Hafod estate. To this end he arranged for the planting of an estimated 5 million trees between 1782 and his death in 1816 (Linnard 1970, 311). It is unfortunate that Johnes' records were destroyed in a serious fire at Hafod in 1807, which means that we do not know the precise location and extent of his plantations. The Llanfihangel y Creuddyn tithe map of 1841 does however give some indication of the extent of the wooded area at that time.
- 6.12.3 The extensive conifer plantations of the study area represent a much later period of plantation, beginning during the inter-war period. Ordnance Survey Land Utilization maps of the mid-

1930s show that a large coniferous plantation was already in existence in the eastern portion of the study area by that time, on the slopes of Peraidd Fynydd.

6.13 Lluestau and sheepwalks.

- 6.13.1 The *lluest* represents a type of solitary dwelling which was characteristic of the mid-Wales uplands during the post-medieval period, being a small cottage occupied by a shepherd and his family, and situated on a parcel of mountain pasture or sheepwalk, some of which could be quite extensive (i.e. several hundreds of acres of mountain land).
- 6.13.2 Lewis Morris, Deputy Steward of the Crown Manor of Perfedd, an area immediately adjacent to the northern side of the study area, made a detailed survey of the *lluestau* of the Manor in 1744, and provided the following description;

"In this Mannor interspersed all over the Common there are small cottages which were originally summer houses for shepherds and have an inclosure of a few acres of ground annexed to them. ... These cottages are called by the natives Lluestai to distinguish them from the freeholds." (Vaughan 1966, 257).

- 6.13.3 Morris also makes it clear that the presence of the shepherd's cottage on the commons was probably not only a necessity from the point of view of convenience, but also as a pre-requisite for enjoying the privilege of 'right of common' stating quite clearly that animals turned out onto the Perfedd commons could only be allowed to remain there if accompanied by a shepherd (Vaughan, 1966). It is possible that the same was true of neighbouring commons such as those of Llanifyny and Llanfihangel y Creuddyn (the latter was also a Crown Manor).
- 6.13.4 The *lluest* dwelling is typically found in a sheltered position, usually with a convenient water supply. The narrow stream valleys which run off the hills of the study area, therefore provided many locations suitable for the construction of such dwellings. The sites described by Lewis Morris in Perfedd, where abandoned, mostly survive as ruinous, rectangular, stone built structures, often mistaken for *ffaldau* or sheep folds, although some are still occupied, usually with a later cottage or farmstead on the site of the earlier *lluest*. Careful examination of the surrounding area sometimes leads to the identification of ancillary structures, such animal pens or storage buildings, sheep dips, small enclosures and, occasionally, evidence of cultivation. Some of these characteristics are shared by sites such as those clustered around Llyn Rhuddnant in the heart of the study area (PRNs 33261-73), and may be also attributed to other abandoned dwelling sites in the area, suggesting that many of the deserted settlements located on the upland sheepwalks once served as post-mediaeval *lluestau*.
- 6.13.5 The boundaries of the sheepwalk associated with the *lluestau* were not usually denoted by walls or fences, but were rather marked by natural features such as watercourses or other prominent physical landmarks. Vaughan (1966 248-49) notes an example, from 1790, of walking the bounds of a mountain sheepwalk at Camddwr Mawr in the Manor of Perfedd and cutting turfs in order to denote boundaries.
- 6.13.6 The origins of the *lluestau* are obscure, although those of Perfedd were certainly being documented during the 17th century, and Nantygafod (PRN33234), which in form and location is a typical *lluest*, was named in the early 16th century Strata Florida rent rolls previously mentioned. Another deserted settlement, Esgair Neint (PRN9424), was described on a 1764 estate map as a deserted shepherd's hut. It is possible that some of these sites had mediaeval origins and continued in use into later centuries. The prevalence of sheep rearing in the district since the 13th century makes this all the more likely, for it is quite feasible that the best pastures, most favoured locations for settlement and the dipping and penning of sheep, would have been frequented from generation to generation.

6.14 19th-century enclosures

- 6.14.1 The commons and wastes of the Cambrian mountains were reduced by piecemeal enclosure from time immemorial. Evidence of this is preserved in the study area in placenames and cartographic evidence. For instance, along the Wye valley, the term *ffridd* occurs in some field names, identifying them as *ffriddoedd* or lands enclosed during early post-medieval times (e.g. NGR SN853811). Above the Rheidol, mid-18th century estate maps show that the small farmstead of Erwbarfe (PRN33193) had a 'walled in sheepwalk' as well as an 'unenclosed sheepwalk' (NLW, Crosswood Vol.14 Map 30).
- 6.14.2 During the 18th century, population growth and rapid advance in agricultural practices, created increasing pressure for waste and common lands to be enclosed and improved in a more organised and permanent manner. This led to parliamentary intervention in the form of a great number of 'Enclosure Acts', mostly passed during the last decade of the 18th century and the mid-19th century.
- 6.14.3 Parliamentary enclosure came late to the Cwmystwyth area, the relevant enclosure act of 1860 applying to the commons either side of the county boundary, and either side of the Ystwyth. It included land in the parishes of Llanfihangel y Creuddyn Uchaf, Gwnnws and Llangurig and listing holdings such as Blaenmyherin, Ty Gwyn, Pwllpeiran, Nant Rhys, Dyliw, Dolchenog, Nantycae and Bwlch Gwallter, all of which are found within the study area. Enclosure took place in 1865 and it is probable that many of the boundary banks in this central section of the study area date to this period, although it is far from certain to what extent enclosed lands were actually enclosed by the construction of boundary banks. A number of boundary stones recorded during them current fieldwork programme are inscribed with the dates '1865' and '1866' (PRNs 33173-76; 33178-80; 33182-84) and contemporary records survive which suggest that wire fences were in some places erected to divide the previously unfenced sheepwalks on these hills (NLW, Glansevern 92-99).

6.15 Metal mining

- 6.15.1 It is in relation to the economic activities of the monks of Strata Florida that there are the first documented references to lead mining in Cwmystwyth area. Lead was being mined on the abbey's Cwmystwyth Grange during the 13th and 14th centuries (Hughes 1981, 6), but it is not until a charter of 1426 that mention is made of the abbey's rights to exploit 'the fatness of the earth'. Confirmation of the abbey's mining interests comes in 1535, when the Cwmystwyth mine was leased to Rhys and David ab Hywel by the Abbot of Strata Florida. The mine appears to have been idle for some time after this, but was re-opened in 1583, under the auspices of the Society of Mines Royal, which had been founded in 1568 by Elizabeth I in order to ensure Crown control over all valuable minerals within her kingdom.
- 6.15.2 The Cwmystwyth Mine was by far the most significant in the area. It remained in production into the 20th century, despite declining returns. Records surviving for the years 1845-1912 show that during this latter stage of the mine's history lead output was at its highest in 1863, with over 1300 tons produced, whilst employment peaked in 1880, when 173 men worked at the mine. A number of smaller, usually short lived, concerns attempted to raise ore at a number of locations along the Wye, Ystwyth and Castell valleys, and also within the upland block between them. Apart from small ventures and prospecting workings which came to nothing, there are also numerous minor levels and shafts associated with extensive underground workings of the larger mines.

6.15.3 There was a substantial mining population in the area throughout the 19th century. Census returns throughout the century show that mines captains, lead miners, mines carpenters and blacksmiths resided in significant numbers in local villages, or lodged in the farms and cottages of the district. Indeed, many of the cottages in the vicinity of the village of Cwmystwyth probably have their origins in the expansion of the local mines. Comparison of early and late 19th-century OS maps demonstrates graphically how this community expanded during the middle and latter decades of the century. The decline of the mines was paralleled with a decline in the local population, as men were obliged to seek employment in the coal mining valleys of South Wales or elsewhere. The loss of population from both the mines and the land during the 20th century has left a legacy of abandoned smallholdings and farms in the district, and the disappearance of the schools and some of the chapels which had once served the community.

6.16 Quarrying

6.16.1 Apart from metal mining and smelting, the only other signs of industrial activity are numerous stone quarries dotted around the local landscape. However, none is significant and they seem mostly to have been developed purely to supply building stone for their immediate neighbourhood.

6.17 Peat Cutting

6.17.1 The turbaries or peat cutting areas of the study area are largely unrecorded. Rights of turbary were as jealously guarded as rights of pasture. The chief importance of peat to the local economy was of course as a domestic fuel, especially in post-medieval times, by when wood had become a scarce resource. Peat also became an important raw material exported out of the district for a short period in the mid-19th century. Edward Hamer (1869, 231) records that, in the parish of Llangurig, peat was cut in great quantities and carted to Llanidloes for sale, but that this trade declined with the opening of the Mid Wales railway, which allowed coal to be more easily imported into the district.

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APPENDIX 1: THE ARCHAEOLOGY AND HISTORIC LANDSCAPES OF THE MYNYDD Y FFYNNON AREA -- PROJECT DESIGN

1 Introduction

1.1 The area which in accord with current practice is here termed Mynydd y Ffynnon occupies part of a large block of upland in the heart of the Cambrian Mountains in central Wales between the Ystwyth Valley on the south, the Rheidol Valley on the west and the Wye Valley to the north (centred at SN 8180). The main A44 trunk road linking the West Midlands with Aberystwyth and the west coast also demarcates the area on the north side where it follows the Wye, and the Montgomeryshire/Ceredigion border bisects the eastern part of the area.

2 Definitions

2.1 Three areas are referred to in this design, and are defined as follows:

The Landscape Study Area is the large topographically delimited land block between the Wye, Rheidol and Ystwyth valleys.

The Mynydd y Ffynnon Area is that area defined by the land holdings of ADAS and Forest Enterprise for the purposes of their project.

The Archaeological Survey Area is the initial area defined by ADAS and Forest Enterprise for a proposed archaeological survey.

3 Project Design

3.1 The Clwyd-Powys and Dyfed Archaeological Trusts (CPAT and DAT) have proposed, after discussions with ADAS, Forest Enterprise and RCAHMW, to conduct a joint archaeological survey of the Mynydd y Ffynnon region. It is understood that ADAS has applied for European Union funding for the whole of their Mynydd y Ffynnon scheme and that this includes an element - believed to be £10,000 per year for two years - for archaeological work, assuming that this EU finance is matched by funding from other sources.

3.2 The Mynydd y Ffynnon area as defined by the Forest Enterprise/ADAS partnership is an artificial block defined by landholdings and forestry boundaries. For the study, analysis and appreciation of the pre-afforestation landscape, such an artificial land block is not satisfactory, and it is therefore proposed that in due course a larger topographical area will be assessed, subject to the agreement of the funding bodies involved. Preliminary consideration suggests that the Wye Valley on the north, the Afon Castell and Rheidol valleys on the west and the Ystwyth valley on the south provide appropriate boundaries to such a topographical area.

3.3 The following stages in the archaeological and historic landscape project are envisaged:

- 3.3.1 Preliminary and on-going liaison with ADAS, Forest Enterprise and RCAHMW and between CPAT and DAT; and from December 1996 with the Project Co-ordinator and the Steering Committee
- 3.3.2 Correlation of all existing archaeological records for the larger survey area (e.g. from the regional Sites and Monuments Records, the National Monuments Records etc).

Aim: to correlate records of the known archaeology of the area.

3.3.3 Detailed assessment of the pre-afforestation landscape of the Landscape Study Area larger topographical area involving the analyses of all existing cartography (OS, Tithe, Estate maps etc), all available aerial photography (RCAHMW, ADAS, Trusts etc), place-names (Montgomeryshire place-name survey etc/ Ceredigion?), readily available documentary evidence, and the collation of oral evidence.

Aim: to synthesise data from a variety of sources and provide a foundation study of past land use and history of the Landscape Study Area

3.3.4 Methodical field survey of all unforested zones within i) the Archaeological Survey Area, ii) the remainder of the Mynydd y Ffynnon Area, and iii) within the remainder of the Landscape Study Area, dependant on the availability of time and resources.

Aim: to identify and record the archaeology of the various areas

3.3.5 Field assessment of known or suspected archaeological sites within the afforested areas of the Mynydd y Ffynnon Area, based on data from the detailed landscape assessment (3.3.3). Preparatory work will require the careful correlation of pre-afforestation mapped data and modern digital data of the afforested areas used techniques pioneered by CPAT to ensure fieldwork efficiency.

Aim: to assess the validity of the data and report on the current state of the archaeology

3.3.6 Identification of zones of potential palaeoenvironmental significance.

Aim: to identify significant areas for further work

3.3.7 Assessment of proposals within the broader Mynydd y Ffynnon programme against the archaeological and historic landscape data. Feedback of information to FE/ADAS etc to ensure appropriate steps taken to conserve the archaeological resource

Aim: to conserve the archaeological resource within the framework of the overall project

- 3.4 Output
- 3.4.1 Rapid Identification Survey records on paper and in database form for both open land and afforested areas.
- 3.4.2 Reports on the interpretation and analysis of archaeological sites, historic landscapes, past land-use and palaeoenvironmental zones.
- 3.4.3 Recommendations for further work (survey, palaeoenvironmental) and site management proposals including preservation and access.

4 Timetable and Resourcing

- 4.1 Ongoing liaison (3.3.1): throughout the duration of the project
- 4.2 Correlation of existing archaeological data (3.3.2): complete
- 4.3 Assessment of pre-afforestation landscape (3.3.3): ongoing
- 4.4 Field survey of unforested zones within Archaeological Survey Area (3.3.4): complete
- 4.5 Report on 4.3 and 4.4 (3.4.2): due by March 1997
- 4.6 Field assessment of archaeology within afforested areas of Mynydd y Ffynnon, including preparatory analysis (3.3.5): January-March 1997 subject to funding and manpower availability textfile:uplands/mynfynpd.doc/05-12-96

- 4.7 Identification of zones of potential palaeoenvironmental significance (3.3.6): ongoing.
- 4.8 Field survey of unforested zones within Mynydd y Ffynnon Area (3.3.4): 1997/98 subject to funding
- 4.9 Field survey of unforested zones within Landscape Study Area (3.3.4): 1997/98 subject to funding
- 4.10 Report on 4.8 and 4.9 (3.4.2): due by March 1998 subject to funding
- 4.11 Assessment of proposals/Feedback of information (3.3.7): ongoing
- 4.12 Recommendations for further work: *ongoing*
- D. Benson, Director, Dyfed Archaeological Trust
- B. Silvester, Deputy Director, Clwyd-Powys Archaeological Trust

8 January 1997

Appendix 2: Sites on Aerial Photographs

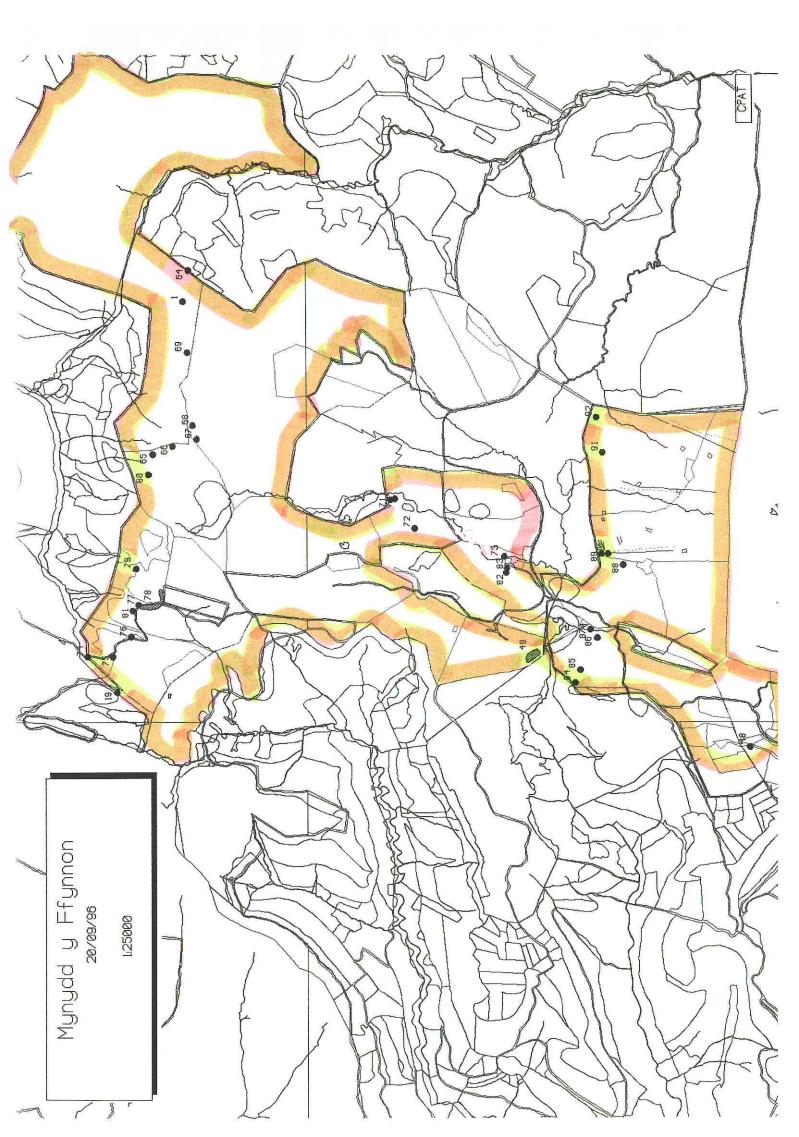
1	Bryn Llychese Enclosure	Non Antiquity	SN82778080		540
2	Llyn Uchaf Dam	Dam	SN80407611	Post-medieval	510
3	Cwmystwyth Mine Site	Mine	SN81007520	Multiperiod	500
4	Llyn Rhuddnant Sheepfold II	Sheepfold	SN80607811	Post-medieval	475
5	Cwm Perfedd House Site	House	SN79237590	Post-medieval	420
6	Llethr Brith Farmstead	Farmstead	SN79227573	Post-medieval	410
7	Llethr Brith House Site	House	SN79317570	Post-medieval	425
8	Nant Cwta House Site I	House	SN79307554	Post-medieval	420
9	Nant Cwta Long Hut	Long Hut	SN79317555	Post-medieval	420
10	Nant Cwta House Site II	House	SN79317543	Post-medieval	420
11	Nant Cwta Sheepfold	Sheepfold	SN79227536	Post-medieval	412
12	Nant Gorlan House Site I	House Site	SN79107529	Post-medieval	395
13	Nant Gorlan House Site II	House	SN79007539	Post-medieval	385
14	Nant Gorlan House Site III	House	SN78917527	Post-medieval	372
15	Nant Gorlan House Site IV	House	SN78877524	Post-medieval	367
16	Glog Mine Site	Mine	SN79007455	Post-medieval	350
17	Ty'n y Rhyd House Site	House	SN78757465	Post-medieval	320
18	Bryn y Gwydd Mine Site	Mine	SN78367517	Post-medieval	355
19	Llynnoedd Ieuan Hut Group	Non Antiquity	SN80188125		515
20	Ty'n-y-bryn Mine Site	Mine	SN78057440	Post-medieval	325
21	Allt Gron Mine Site	Mine	SN77057450	Post-medieval	350
22	Pwllpeiran House Site	House Site?	SN77297490	Post-medieval	305
23	Bwlch yr Oerfa Enclosure I	Enclosure	SN76417493	Unknown	360
24	Bwlch yr Oerfa Enclosure II	Enclosure	SN76367495	Unknown	360
25	Cyrnau Mawr Sheepfold	Sheepfold?	SN75187498	Post-medieval	380
26	Nant Arthur Ridge and Furrow	Cultivation Ridges	SN74457487	Med/Post-medieval	320
27	Cyrnau Bach House Site	House	SN74667471	Post-medieval	310
28	Pen Cefndyrys Farmstead	Farmstead	SN75007455	Post-medieval	330
29	Cyrnau Mawr Mine Slte	Mine	SN75187498	Post-medieval	380
30	Pen Cefndyrys House Site	House	SN75337452	Post-medieval	340
31	Pen y banc House Site I	House	SN78847457	Post-medieval	330
32	Pen y banc House Site II	House	SN78827459	Post-medieval	320

Appendix 2: Sites on Aerial Photographs

33	Graig y Ddalfa House Site	House Site?	SN79417405	Post-medieval	310
34	Ysbyty Cynfyn House Site	House	SN75587941	Post-medieval	255
35	Mynydd yr Ychen Fold	Sheepfold ?	SN75838001	Post-medieval	290
36	Mynydd yr Ychen Mine Site	Mine	SN75827992	Post-medieval	305
37	Banc Ty Mawr Hafod	Hafod ?	SN76297880	Med/Post-medieval	335
38	Pen Dihewyd Mine Site	Mine	SN78037988	Post-medieval	450
39	Esgair Naint Sheepfold	Sheepfold ?	SN77488022	Post-medieval	357
40	Dyffryn Castell Mine Site	Mine	SN77388125	Post-medieval	285
41	Cerrig Llwydion Mine Site	Mine	SN76088016	Post-medieval	335
42	Ochr Glog House Site	House	SN78797435	Post-medieval	285
43	Nant Rhuddnant Mine Site	Mine	SN77217752	Post-medieval	275
44	Ty'n y Maes House Site	House	SN76887776	Post-medieval	280
45	Nant Rhuddnant Platform	Platform	SN78117791	Med/Post-medieval	295
46	Abertrinant House Site	House	SN86358032	Post-medieval	337
47	Llyn Nant Watcyn Dam	Dam	SN80917636	Post-medieval	540
48	Pen y Garn Cairn	Cairn	SN79847707	Bronze Age	610
49	Banc Twlc Hut Circle	Hut Circle	SN80457848	Bronze Age	465
50	Cae Gaer Roman Fort	Fort	SN82378190	Roman	360
51	Bryn Diliw House Site	House	SN84217755	Post-medieval	380
52	Craig y Lluest Sheepfold	Sheepfold ?	SN85567632	Post-medieval	405
53	Penrhiwgwnau Earthworks	Hafod ?	SN84777762	Med/Post-medieval	450
54	Nant y Creuau Mine Site	Mine	SN78908015	Post-medieval	360
55	Bryn Botgoll Mine Site	Mine	SN75907686	Post-medieval	270
56	Bwlch yr Oerfa House Site	House	SN76607472	Post-medieval	365
57	Nant Crafanglach Dam	Dam	SN76387438	Post-medieval	325
58	Graig Ddu Hafod	Hafod ?	SN76187426	Med/Post-medieval	340
59	Cefn Dyrys Enclosure	Enclosure	SN75087419	Med/Post-medieval ?	315
60	Graig Ddu Sheepfold	Sheepfold ?	SN76117385	Post-medieval	300
61	Allt y Dafarn Pillow Mound I	Pillow Mound	SN76497416	Post-medieval	330
62	Allt y Dafarn Pillow Mound II	Pillow Mound	SN76707406	Post-medieval	330
63	Nant Gau House Site	House Site ?	SN77507246	Post-medieval	300

Appendix 3: Sites from Field Survey

6	4 Bryn Llychese Stone I	Boundary Stone	SN82998077	Early Modern	525
6	5 Cefn Blaenmerin Stone I	Boundary Stone	SN81768102	Early Modern	555
6	6 Cefn Blaenmerin Stone II	Boundary Stone	SN81828088	Early Modern	545
6	7 Bryn Llychese Stone II	Boundary Stone	SN81858073	Early Modern	545
6	8 Bryn Llychese Stone III	Boundary Stone	SN81958076	Early Modern	545
6	9 Bryn Llychese Stone IV	Boundary Stone	SN82438079	Early Modern	560
7	0 Cripiau Fagwyr Fach Hafod I	Hafod	SN81477942	Med/Post-medieval	520
7	1 Cripiau Fagwyr Fach Cist	Cist ?	SN81467945	Bronze Age	520
7	2 Cripiau Fagwyr Fach Hafod	Hafod ?	SN81287929	Post-medieval	530
7	3 Nant Melyn Shelter	Shelter	SN81097869	Post-medieval	470
7	4 Llynoedd Ieuan Stone I	Boundary Stone	SN80448144	Early Modern	530
7	5 Llynoedd Ieuan Stone II	Boundary Stone	SN80438128	Early Modern	535
7	6 Llynoedd Ieuan Stone III	Boundary Stone	SN80568117	Early Modern	530
7	7 Cefn Croes Fold	Fold	SN80778111	Post-medieval	540
7	8 Cefn Croes Mine Trials	Mine trials	SN80768100	Post-medieval	535
7	9 Cefn Blaenmerin Stone III	Boundary Stone	SN81018113	Early Modern	540
8	0 Cefn Blaenmerin Stone IV	Boundary Stone	SN81638104	Early Modern	550
8	1 Cefn Croes Stone	Boundary Stone	SN80738115	Early Modern	540
8	2 Cripiau Nantmelyn Hafod I	Hafod	SN80997868	Med/Post-medieval	490
8	3 Cripiau Nantmelyn Hafod II	Hafod	SN81017867	Med/Post-medieval	480
8	4 Llyn Rhuddnant Long hut	Long hut	SN80257822	Med/Post-medieval	475
8	5 Llyn Rhuddnant Sheepfold I	Sheepfold	SN80347818	Post-medieval	480
8	6 Llyn Rhuddnant Hafod	Hafod	SN80557807	Med/Post-medieval	490
8	7 Llyn Rhuddnant Long hut	Long hut ?	SN80607811	Med/Post-medieval	475
8	8 Nant Yspryd-gwyn Sheepfold	Sheepfold ?	SN81037789	Post-medieval	495
8	9 Nant Yspryd-gwyn Long hut	Long hut	SN81107804	Med/Post-medieval	470
9	0 Nant Yspryd-gwyn Hafod	Hafod	SN81107800	Med/Post-medieval	475
9	1 Diliw Marker Cairn	Marker Cairn	SN81777803	Modern	495
9	2 Diliw Hut	Hut	SN82007807	Med/Post-medieval	480



Appendix 4: Significant Placenames

The place names of the study area provide a surprising array of names of broad-leaved tree species, animals and possible indicators of human activity. The following interpretative list highlights the most significant of these.

ANIMALS			
Welsh	English	Example	NGR
Myherin	Rams	Blaenmyherin	SN801796
Defaid	Sheep	Mynydd y Defaid	SN8478
Buwch	Cow	Cors y Fuwch	SN811793
Ychion	Oxen	Esgair Ychion	SN860797
Ychen	Ox	Mynydd yr Ychen	SN762796
Llwynog	Fox	Grafiau'r Llwynog	SN817786
Gwartheg	Cattle	Pant y Gwartheg	SN760798
Caseg	Mare	Nant y Gaseg	SN845778
Ceffyl	Horse	Craig Ceffyl	SN791774
Ceiliog	Cockerel	Nant y Ceiliogyn	SN818816
Ydfran	Rook	Frwdd yr Ydfran	SN822762
Eryr	Eagle	Nant yr Eryr	SN843820
Gwydd	Geese	Bryn y Gwydd	SN788753
			SN860782

HUMAN ACTIVITY			
Placename	Keyword	Translation	NGR
Nant y creua	Creua	Pigsty (mediaeval word)	SN786796
Banc Twlc	Twlc	Pigsty	SN804784
Nant Rhiw'r ordd	Gordd	Mallet; hammer (as used in crushing ore?)	SN803802
Cripiau'r Fagwyr Fach	Magwyr	Walls; enclosures; ruins	SN812792
Fuches wen	Buches	Herd of dairy cows <i>or</i> the fold where they are milked	SN778807
Fuches gau	Buches	Herd of dairy cows <i>or</i> the fold where they are milked	SN767808
Y Ffridd	Ffridd	Enclosure of mountain land	SN853811
Cefn yr Henffordd	Henffordd	The old road	SN828799
Cwm y Gorlan	Corlan	Sheepfold	SN820755
Glan-helem	Helem	Specifically a barley rick	SN867806

BROAD-LEAVED TREES			
Welsh	English	Example	NGR
Derw	Oak	Dderw	SN7780
Onnen	Ash	Nant yr Onnen	SN8075
Helygen	Willow	Nant Helygen	SN7780
Bedw	Birch	Glanfedw	SN7375
*Gwern	Alder	Pen y Gwernydd	SN7273
*Gwern	Alder	Nant Gwernog	SN8182

*Gwern (pl. Gwernydd) can mean swamp or bog, but is usually indicative of an area where alder trees grow, this being a species which flourishes in damp conditions.