
Management of archaeological sites on Cochwillan Estate



GAT Project G1523

Report no. 285

October 1998



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT

CONTENTS

1	INTRODUCTION	1
2	IMPROVING THE MANAGEMENT OF ARCHAEOLOGICAL SITES AND HISTORIC LANDSCAPE ELEMENTS	3
2.1	GENERAL.....	3
2.2	GUIDELINES FOR HISTORIC LANDSCAPE FEATURES	3
2.2.1	Landscape element types.....	3
2.2.2	Ecological features of the historic environment	3
2.3	GUIDELINES FOR SITES OF RELICT ARCHAEOLOGICAL IMPORTANCE	4
2.3.1	Relict landscape element types	4
2.3.2	Cropmarked and parchmarked sites	5
2.4	OTHER GENERAL GUIDELINES.....	5
3	DESK-TOP RESEARCH AND FIELD SURVEY.....	6
3.1	DESK-TOP RESEARCH.....	6
3.1.1	Caernarfonshire Record Office.....	6
3.1.2	University College North Wales Archives Department, Bangor.....	6
3.1.3	Aerial photographs; collection of The Countryside Council for Wales, Bangor	7
3.2	INDIVIDUAL SITE DOSSIERS.....	7
3.2.1	Condition and threat definition parameters.....	7
3.2.2	Assessment of relative site importance	7
3.2.3	Hut Group, Coed Bronydd Isaf (PRN 067)	8
3.2.4	Hut Circles, Nant Heilyn (PRN 068)	10
3.2.5	Ancient Fields, Bronydd-Isaf (PRN 069).....	13
3.2.6	Ancient Fields, Coed Ty'n yr Hendre (PRN 070)	15
3.2.7	Long Hut, Nant Heilyn (PRN 071).....	17
3.2.8	Long Hut, Nant Heilyn (PRN 072).....	19
3.2.9	Enclosure, Crymlyn Oaks (PRN 074)	21
3.2.10	Area of Cultivation Remains and Associated Features; W side of Ffridd Ddu.....	23
4	PRACTICAL CONCLUSIONS: SITE MANAGEMENT SUMMARIES.....	27
	PRN 067 Hut group, Coed Bronydd-isaf.....	27
	PRN 068 Hut circles, Nant Heilyn:	27
	PRN 069 Ancient fields, Bronydd-isaf:.....	27
	PRN 070 Ancient fields - Coed Ty'n-yr-hendre:	28
	PRN 071 Long hut, Nant Heilyn:.....	28
	PRN 072 Long hut, Nant Heilyn:.....	28
	PRN 074 Enclosure, Crymlyn Oaks:	28
	PRN 7487 Cultivation remains and associated features, west side of Ffridd Ddu:	28
5	DISCUSSION AND FURTHER RECOMMENDATIONS	29
5.1	HOLISTIC APPROACHES TO LANDSCAPE MANAGEMENT.....	29
6	ACKNOWLEDGEMENTS	30
7	APPENDICES.....	31
7.1	APPENDIX 1: PARAMETERS FOR USE WITH SITE RECORD FORMS	31
7.2	APPENDIX 2: CONTEXTUAL LANDSCAPE SURVEY PLAN AND CATALOGUE OF FEATURES.....	33
7.2.1	Catalogue of features.....	33

1 INTRODUCTION

1.1 Carter Jonas, on behalf of the Cochwillan Estate, commissioned the Gwynedd Archaeological Trust to provide management advice on eight archaeological sites, which lie on land owned by the estate. The sites identified are as follows¹:

1. Hut group, Coed Bronydd-isaf (PRN 067, SH63187066)
2. Hut circles, Nant Heilyn (PRN 068, SH 64217070)
3. Ancient fields, Bronydd-isaf (PRN 069, SH 62807050)
4. Ancient fields - Coed Ty'n-yr-hendre (PRN 070, SH 62707080)
5. Long hut, Nant Heilyn (PRN 071, SH 64287065)
6. Long hut, Nant Heilyn (PRN 072, SH 64327080)
7. Enclosure, Crymlyn Oaks (PRN 074, SH 64357144)
8. Cultivation remains and associated features, Ffridd Ddu (PRN 7487², SH 64457110)

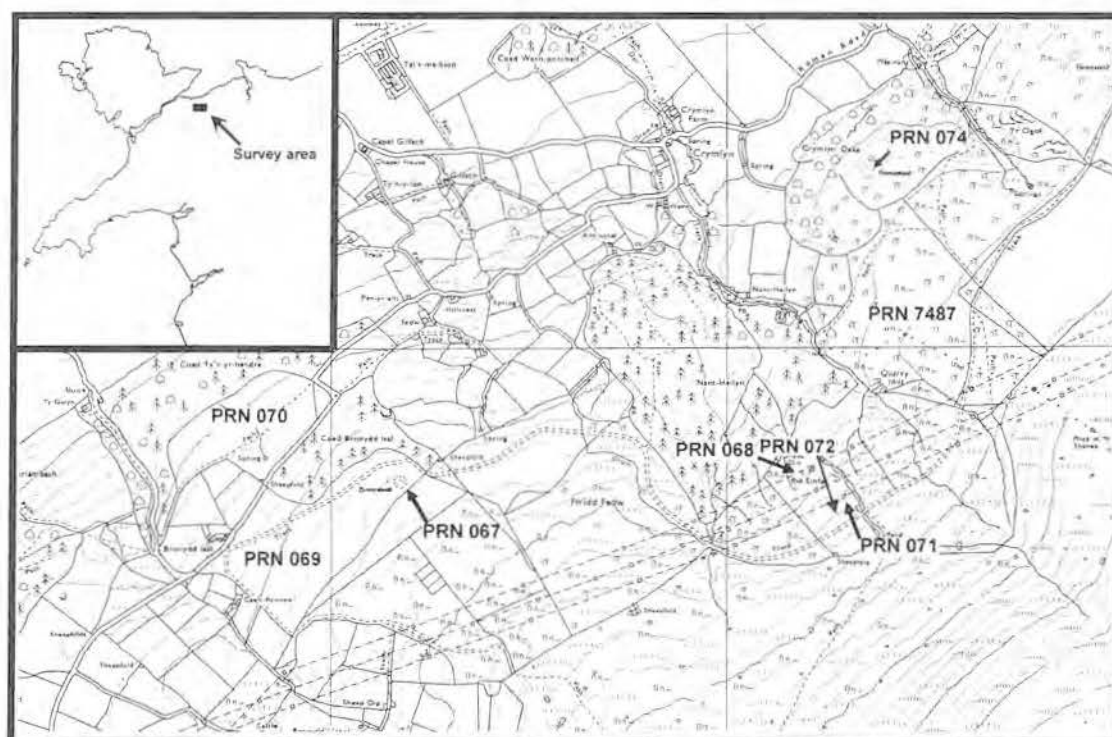


Figure 1 Location map showing the position of the eight sites surveyed.

Reproduced from the 1975 Ordnance Survey 1:10000 scale map (sheet SH 67 SW) with the permission of The Controller of Her Majesty's Stationery Office. © Crown copyright Gwynedd Archaeological Trust, Craig House, Garth Road, Bangor, Gwynedd, LL57 2RT. Licence number AL51790A0001. Not at original scale.

1.2 A programme of archaeological research was carried out, on the basis of which management recommendations could be made. This consisted of:

1. Desk-top documentary and cartographic research at: the Caernarfonshire Record Office, Caernarfon; the regional Sites and Monuments Record (SMR), maintained by the Gwynedd Archaeological Trust and; the University College of North Wales Archives Department at Bangor. The collection of aerial photographs held by the Countryside Council for Wales at their Bangor offices was also consulted. The work was conducted over a combined period totalling one working day.
2. Primary field survey work was carried out at the Cochwillan estate by a qualified archaeologist from the Gwynedd Archaeological Trust. This took place over a period of one and a half working days. Each of the sites was visited on an individual basis, and observations were recorded both in writing and photographically.

¹ PRN stands for Primary Record Number. Every known archaeological site in Gwynedd is allocated a unique identifying PRN under which it is recorded within the Gwynedd Sites and Monuments Record (SMR).

² Prior to the undertaking of this project, a single PRN, number 6617, was ascribed within the Gwynedd SMR to a substantial area of cultivation and settlement remains on the west side of Ffridd Ddu, which was first recorded by the Royal Commission for Ancient and Historic Monuments in Wales (RCAHMW 1956, 9-10). However, as a result of the survey work conducted for this project, it became apparent that the remains would be more adequately recorded as two discrete areas. A new PRN, number 7487, was generated to describe the SW area of cultivation remains and associated features.

In addition, a landscape survey plan, executed to walk-over sketch survey specifications, was also produced for those fields in which the various sites were located. This level of observation extended the survey beyond the remit of the original commission, but was pursued as a component of the work once it was realised that features associated with the eight identified sites occurred over a much broader spatial area. The survey plan was intended to provide contextual information through which the individual sites could be better understood in relation to the wider historic landscape of the area. It also establishes a potential platform from which to discuss the development of management plans sensitive to the demands of the historic environment as a whole, a point that is returned to in the final remarks of this report. The survey plan is reproduced in this report as **maps 1 and 2 of appendix 2**.

- 1.3 The body of this text describes the findings of this research and discusses their implications for the development of a successful heritage management plan for the Cochwillan estate.

Part Two provides general management guidance and information on best practice for particular types of historic landscape feature.

Part Three presents the site-specific findings of the research.

Part Four draws together and discusses the management recommendations listed under the separate site record forms of part three.

Part Five discusses holistic approaches to the management of the historic environment, and makes a series of further recommendations.

Appendix One outlines the descriptive terms and scoring system used on the site record forms (*Part Three*) to define the condition, risk and threat levels of the sites.

Appendix Two presents the results of the landscape survey in the form of a catalogue of features and two accompanying survey maps.

2 IMPROVING THE MANAGEMENT OF ARCHAEOLOGICAL SITES AND HISTORIC LANDSCAPE ELEMENTS

2.1 General

- 2.1.1 The intention of this section is to provide general management guidance and information on best practice for particular types of historic landscape feature.
- 2.1.2 The majority of historic landscape features, including many relict sites of archaeological and historical interest, can probably be adequately dealt with under general umbrella management objectives and prescriptions. Such sites might include walls, *cloddiau*, standing stones, small cairns, possibly even earthwork enclosures.
- 2.1.3 A series of guidelines is described below, adherence to which should ensure that most everyday actions will avoid accidental damage to archaeologically significant features. Most are common sense and should not involve extra expense or time consuming action. Sites that are more complex and require more involved positive management are examined in later sections.

2.2 Guidelines for historic landscape features

2.2.1 Landscape element types

These include *cloddiau*, field walls, hedges, banks, sheepfolds and agricultural buildings.

Management guidance

Maintain features in a stable condition. If required, stone walls, *cloddiau* or other boundaries should be re-built to retain their character: where possible, boundaries should be restored and not replaced by post and wire fences. Where the latter are inevitable, their line should follow the previous boundary; boundary lines should not be removed. No new boundaries should be constructed unless they follow the line of previous boundaries and are of the same type. Fields should not be amalgamated unless they fall within areas that are characterised by 'decayed' field patterns.

Avoid the use of heavy machinery close to or across the features. Where this is unavoidable, utilise existing gaps and crossing points in the feature, rather than create new ones. If this is not possible, ensure minimum damage is caused by the construction of tracks and that a boundary is only crossed once: avoid areas where features join each other as this may destroy valuable archaeological information.

It is not necessary to remove healthy deciduous trees that lie adjacent to boundaries, provided that they are not causing root damage. In many cases they enhance the ecological value of the feature. Do not allow the removal of any stone or any material from the feature. Do not allow the tipping of any rubbish, spoil or any other debris, or storage of equipment, fuel, *etc.* on or adjacent to the site.

Buildings should be preserved wherever possible: at the least, further decay should be prevented. Halt any damaging processes such as root damage or erosion, by the removal of trees or scrub growing on walls or within the building/structure. Do not remove low vegetation (*e.g.* grass, mosses, lichen, ferns, *etc.*) which are binding the structure and preventing erosion.

2.2.2 Ecological features of the historic environment

This type includes wetlands, former woodland, *etc.*

Management guidance

Boggy areas may be important deposits of environmental remains such as pollen, the analysis of which makes it possible to investigate and understand the former environment. They may also preserve organic remains including wooden structures. It is important that they are not allowed to dry out.

It may be necessary to remove trees and scrub from waterlogged deposits, as this vegetation will dry out any organic remains. Avoid the use of any heavy machinery on or around such deposits. Take particular care not to damage the edges of ponds. Do not damage the deposit by drainage works or by any form of pollution. Do not divert existing or new drainage channels into waterlogged deposits as this may alter their chemical and physical composition. Waterlogged deposits should not be excavated to construct conservation ponds unless expert advice has been taken.

Where it is considered desirable to clean out silted ponds, environmental and archaeological advice should be taken. Any such work should ideally be monitored by an archaeologist. In the event of such work proceeding without archaeological monitoring, any archaeological remains discovered

should be immediately brought to the attention of the Gwynedd Archaeological Trust, and work should cease until advice has been received. Any organic finds such as wood and leather should be immediately immersed in clean water to prevent deterioration. Deciduous trees in the vicinity of ponds or waterlogged deposits may be left if they are not damaging the banks or causing drying of the deposits. Do not allow the tipping of any rubbish, spoil or any other debris on the site.

Ancient woodland may include areas of former coppice, sometimes associated with charcoal burning mounds. Other types of feature frequently found in woodland include banks and earthworks associated with woodland management, and pollarded trees. Woodlands may also contain preserved elements of landscapes that pre-dated the wood. All work in woodland should be carefully planned to ensure the survival of such features. Evaluate the historic landscape value of ancient woodland in liaison with appropriate archaeological advice. If appropriate, consider the viability of recommencing traditional management, or a modified form of the present management, to enhance the value of the sites.

2.3 Guidelines for sites of relict archaeological importance

2.3.1 *Relict landscape element types*

This includes earthworks (e.g. house platforms, charcoal burning mounds, pillow mounds, barrows, enclosures, lynchets), stone-built sites (e.g. hillforts, hut circles, hut groups, long huts, relict field walls) as well as buried remains such as cropmarked and parchmarked sites, and isolated findspots. It also includes Scheduled Ancient Monuments, which may be made subject to separate management plans agreed with Cadw, Welsh Historic Monuments.

Management guidance

Maintain the site in a stable condition. Current practices that are not creating problems should be continued. Existing grass cover should be maintained, as grazing is normally a desirable means of conserving archaeological sites. However, it is important that grazing is maintained at levels which keep undesirable vegetation under control, whilst also ensuring that it does not lead to erosion. Artificial feed points and licking blocks should not be placed on identified historic landscape features.

Halt any damaging processes such as root damage or erosion, by the removal of trees or scrub growing on earthworks and stone-built features. It is not necessary to remove healthy deciduous trees in the vicinity of the feature provided that they are not causing root damage. Woody scrub growth should be cut or treated with herbicide without disturbing the ground surface. Do not remove remains of hedgerows or trees directly associated with the site or which form an integral part of its surroundings. Prevent regeneration of scrub growth on earthworks. No new tree planting should occur within 20m of known or possible sites of archaeological or historic landscape interest.

Existing erosion scars affecting sites of archaeological interest should be repaired and subsequently monitored and maintained. Rabbit populations (and those of other burrowing animals) should be kept under control. From time to time, fencing may be necessary to protect part of a site or feature while allowing grazing elsewhere. In such a situation, care is required when positioning fence posts. If permanent fencing is erected, it must not cut across areas of archaeological significance.

No areas should be ploughed, cleared or otherwise improved without specific prior archaeological consultation, and any proposals for other changes in land-use should be referred for archaeological comment. Boggy and other wet areas should not be drained, and no new drainage should be carried out without prior archaeological consultation. No ditched feature should be infilled without prior archaeological consultation.

The layout of roads, tracks and footpaths should be designed to avoid crossing areas of archaeological significance. No heavy machinery should be moved across the area without prior archaeological consultation.

Archaeological sites should not be used as a source for stone, turf or other materials, neither should materials (including stone, topsoil, rubbish, farm waste, scrap, old machinery *etc.*) be stored or dumped in archaeologically sensitive areas.

Metal detecting can cause damage to the archaeological heritage by removing items from their archaeological context and disturbing sites. No metal detecting should be allowed on known archaeological sites, unless under qualified archaeological supervision. This is particularly worrying in areas where there is a potential wealth of archaeological metalwork in the ground. Metal detecting on a Scheduled Ancient Monument without the prior written permission of the Secretary of State is an offence. If in doubt, archaeological advice should be taken before granting permission to metal detectorists.

Public access to vulnerable sites should not be improved as this may lead to erosion or deliberate damage. As the approach to some sites is often on steep slopes, consideration should be given to improvement to footpaths to prevent erosion.

If the site is a Scheduled Ancient Monument any work, outside a management plan agreed with Cadw, will require Scheduled Monument Consent.

2.3.2 Cropmarked and parchmarked sites

These sites are usually only to be viewed from the air, although they can be observed from other well-located vantage points. They occur usually only under exceptional circumstances, when the growing crop or grass cover is under stress from too little moisture. Areas of previous ground disturbance (such as pits and ditches) or buried features (such as walls or hearths) may be revealed as lighter or darker marks in the growing crop, or as shadow patterns resulting from differential plant growth over archaeological remains.

Management Guidance

The recognition of buried archaeological remains in arable fields, the underlying landscape, relies on the continuation of arable cultivation. However, these sites will already be much reduced in their archaeological layers and invaluable information will already have been lost. This rate of loss should be diminished and, if possible, discontinued.

Current ploughing depths should be retained, and deeper ploughing should not be allowed over known sites. Activities involving disturbance of the deeper subsoil (into which the archaeological remains are usually cut), such as mole-draining or pan-busting, should be avoided in areas known or thought to contain buried remains.

2.4 Other general guidelines

Archaeological excavation is a skilled and expensive operation, which should be left to those professionally qualified, with the proper resources to undertake it. All excavations should be carried out within the parameters of longer-term research frameworks.

If archaeological features or artefacts (such as pottery, flint or bone) are found, they should be left undisturbed if at all possible, and immediately reported to the Gwynedd Archaeological Trust. Artefacts always have a greater significance when recorded in context, and in many cases will become meaningless if taken away.

If the artefact is found loose on the ground surface, however, and is likely to be removed anyway, it is probably safer to record its exact location and then hand it in to the Trust with full details of the circumstances surrounding its discovery. It will be returned if wanted, after it has been duly recorded.

Public access to vulnerable sites should not be improved as this may lead to erosion or deliberate damage. Where sites lie close to public roads and/or are publicly accessible (e.g. near car parks or picnic places), consideration should be given to the provision of interpretation boards, perhaps as part of the conservation plan.

3 DESK-TOP RESEARCH AND FIELD SURVEY

3.1 Desk-top research

The following archives and collections were visited and searched for information pertinent to the eight identified sites. The findings of this research are summarised below.

3.1.1 *Caernarfonshire Record Office*

Llanllechid Tithe map, 1839 [CRO-50Llanllechid, part 1, 7.8]:

- Sites **PRN 067** and **PRN 069** appear in enclosure number 60, which was part of *Bronydd Ganol* land, owned by Dawkins Pennant and tenanted by Owen Ellis and Hugh Jones. The enclosure is referred to as *Ffridd Tairmeibion*.
- Sites **PRN 068** and **PRN 071** probably fall within enclosure number 54, *Rhallt* land, owned by Dawkins Pennant and tenanted by William Pritchard and partner.
- Site **PRN 070** appears in parcel number 49, which was part of *Ty Gwyn* land, owned by Dawkins Pennant and tenanted by Thomas Jones.
- Site number **PRN 72** seems to lie within enclosure number 55, *Nant Heilyn* land, owned by Dawkins Pennant and tenanted by Henry Evans and partners.

3.1.2 *University College North Wales Archives Department, Bangor*

Map of lower part of Llanllechid parish, 1768 [S2203]:

- The area now covered by Coed Ty'n-yr-hendre (SH 626709) is largely the same as that shown as Yr-allt-coed on the 1768 map.
- Sites **PRN 068**, **PRN 071** and **PRN 072** appear to be located on land marked as *ffridd*.
- 069 lies in an enclosure marked Bronydd Canol. No relict field boundaries that may relate to the extant cultivation features of the present day landscape are shown on the map.
- One of the lynchets of **PRN 070** may relate to part of a field, Cae Pen y Lôn Goch, which is shown on the 1768 map, but which is no longer in existence.

Map of lower part of Llanllechid parish, circa 1840 [S2213]:

- The fields shown in the area of **PRN 070** on the 1768 map have already been removed by 1840.
- The rest of the sites fall within two large enclosures, which were presumably *ffridd* land.
- Bronydd-isaf is known as Bryn-adda on the 1840 map. The fields shown around this area on the modern 1:10000 Ordnance Survey map were predominantly in place by 1840 map, by which time Coed-Ty'n-yr-hendre was already well established.

Map of Penrhyn lands in the lower parts of Llanllechid and Aber parishes, 1871-1872, by W.G. Haslam [S2221]:

- **PRN 067** and **PRN 069** are depicted within an enclosure named Bronydd Cynol [*sic*], within which a number of lynchets are indicated by hachures.
- **PRN 068** and **PRN 071** are within an enclosure called Ffridd y Rallt.
- **PRN 072** lies within an enclosure labelled Ffridd Croyn, belonging to Gilfach farm.
- **PRN 7487** corresponds with a large enclosure labelled Ffridd Newydd, which was used by Glyn and Crymlyn. A number of lynchets are indicated by hachures as lying within this area.
- **PRN 074** is in an enclosure called Pen-yr-ogof, belonging to Crymlyn.

1900 (1st edition) and 1914 (2nd edition) 25" to the mile Ordnance Survey maps:

- The areas occupied by the sites are shown as rough grazing. None of the sites themselves are depicted.

6" to the mile Ordnance Survey map, sheet VII SW, 1920.

- **PRN 070** lies within 'improved' land, but **PRN 067** and **PRN 069** are in Ffridd-fedw, which is depicted with symbols showing unimproved, grassy, tussock land.

6" to the mile Ordnance Survey map, sheet VII SE, 1919

- **PRN's 068, 071, 072, 074, and 7487** are not themselves depicted on the map, but clearly fell within enclosures denoted as unimproved grassland.

3.1.3 *Aerial photographs; collection of The Countryside Council for Wales, Bangor*

17th August 1993, run 9, photograph numbers 92, 93, 160 and 161:

- Very little is noticeable for the area covered by **PRN 7487**. **PRN 6617**, which is situated a short distance to the E and NE shows up well on the photographs as a number of strong lynchets running cross contour, with a couple of possible settlements associated with them.
- Sites **PRN 068**, **PRN 071**, **PRN 072** and **PRN 074** could not be made out on the photographs.
- Site **PRN 067** is visible as a distinct earthwork enclosure, with a number of lynchets at its downslope side (W/NW).
- Four fairly distinct lynchets relating to feature area **PRN 069** are visible at a bend in the track. A single well-defined lynchet is visible to the north of the track.
- Two parallel lynchets are visible at **PRN 070**

3.2 Individual site dossiers

The results of the field survey work conducted at each of the eight identified sites on the Cochwillan estate are presented below in the form of information dossiers. The dossiers draw together all known information about the sites and state their relative levels of importance.

3.2.1 *Condition and threat definition parameters*

The dossiers also describe the current condition of the identified sites and raises a series of recommendations for their future management. Four descriptive categories are used to define the current condition and management of the sites. These are: *form*, *condition*, *threat* and *risk*. The site is assessed under each category and quantified according to a standardised set of parameters, which enable comparisons to be made between different sites. The categories and their quantifying parameters are laid out in **Appendix 1**.

3.2.2 *Assessment of relative site importance*

The following is an assessment of the relative importance of the archaeological features surveyed. It has been made by an archaeologist from the Gwynedd Archaeological Trust in the light of archaeological features known throughout the region as a whole.

LEVEL OF IMPORTANCE	FEATURE NUMBER (PRN, PRIMARY RECORD NUMBER)
Archaeological features of Regional Importance	067 - Hut group, Coed Bronydd-isaf 068 - Hut circles, Nant Heilyn 069 - Ancient fields, Bronydd-isaf 071 - Long hut, Nant Heilyn 072 - Long hut, Nant Heilyn 074 - Enclosure, Crymlyn Oaks
Archaeological features of Local Importance	070 - Ancient fields - Coed Ty'n-yr-hendre 7487 - Cultivation remains and associated features, Ffridd Ddu.

Features of Regional Importance are considered to be important for the understanding of the archaeology of Gwynedd as a whole. All have the potential to provide information, which ideally, should be recorded in greater detail than the brief inspection notes made during the rapid survey described here. If at some future time a feature or group of features of this category comes under threat of damage or destruction, excavation may well be desirable if conservation measures cannot be negotiated. Locally Important features are those which are important to the archaeology of the locality.

None of the eight sites carry statutory national protection (i.e. Scheduled Ancient Monuments or Listed Buildings). However, six of the sites have been accorded the status of Regional Importance, with the remaining five ascribed Local Importance. Features of Local Importance should not be regarded as insignificant, for they contribute to character and distinctiveness of the local landscape. This point is returned to in the concluding remarks of this report.

3.2.3 Hut Group, Coed Bronydd Isaf (PRN 067)

PRN 067	Site name: HUT GROUP, COED BRONYDD ISAF	NGR: SH 63187066
	Importance/category: Regional	Period: Late Prehistoric
Description of site: <p>Much ruined oval enclosure situated at the NW edge of a broad natural terrace, above a short but steep scarp, at an altitude of 220m. The enclosure platform is excavated out of the gentle hill-slope to the SE, and banked/revetted against the slope to the NW. Traces of a boundary wall are visible at the N and NW of the low stone and earth bank (surviving to no more than 0.3m high) which surrounds the enclosure. The enclosure is orientated NE-SW and measures approximately 28m by 24m. There are earthwork traces of a hut circle, 5.0m in diameter, abutting the inside of the enclosure on the SW. A possible ancillary structure (6m by 4.5m) is visible as a faint earthwork immediately to the N of the hut circle. This interpretation is not unequivocal, as the area may have been used as an animal feeding place, with the resulting formation of a sunken circular feature akin to that discussed here. A third possible hut circle or annex lies to the NW, abutting part of the outside bank of the enclosure. This feature is visible as a semi-circle of stones, some of which appear to be <i>in situ</i>, the others probably resulting from more recent field clearance.</p> <p>A series of relict field boundaries and cultivation features can also be seen to be associated with the site. Three low earth and stone banks (1.0m wide and 0.2m high to 2.0m wide and 0.5m high) can be seen running down-slope on SE-NW orientations to the N and NE of the enclosure. Of these banks, the greatest survives to a 30m length. Further relict field boundaries and lynchets lie to the W and SW of the enclosure, and in the field beyond the survey area to the SW. A very slight bank arcs around the SE-SW of the enclosure, possibly defining an annex enclosure. This feature is difficult to define precisely as it appears to have been plough levelled.</p>		
Site history: <p>First described in 1956 [1]. Surveyed by Ordnance Survey in 1969 [2]. Visited by Cymdeithas Archaeoleg Llandegai a Llanllechid on 12.1.1980. Visited by Gwynedd Archaeological Trust staff on 25.5.94.</p> <p>Several additional features have been identified since the sites first description in 1956, including one secure hut circle, two possible hut circles/ancillary buildings, a large enclosure paddock/annex and a number of associated relict cultivation features. Field visits conducted in 1980 and 1995 noted that caterpillar tracks, which were visible running across the enclosure, had caused some damage to the site.</p>		
Present condition and management: <p>The enclosure lies within improved pasture land. Although the remains are slight, the enclosure is complete. Its value and importance is raised by the presence of surviving internal features, and of associated boundary and cultivation remains beyond it. The site is currently in a stable condition.</p>		
Form: Earthwork	Condition: 3 Generally satisfactory, some minor problems.	Threat/level: Animal erosion - 3 Dumping - 3 Vehicle erosion - 3
Risk: Medium		
Management recommendations: <ul style="list-style-type: none">No fresh vehicle track damage is visible at the site. However, as some of the disturbance visible to the NW is likely to have been caused by the caterpillar track damage noted in 1980 and 1995, it is evident that vehicles do cause long term damage. It is important that farm vehicles and machinery are not taken across either the enclosure itself or any of the earthworks immediately associated with it.Some small patches of erosion are occurring at various points throughout the enclosure bank. These are a result of stock trampling (poaching), and should be monitored to ensure that they do not develop into a more threatening problem. If erosion levels increase, then it may be necessary to fence the enclosure off from stock from time to time, to ensure that the damaged areas have time to regenerate.The enclosure and its immediate vicinity should not be used as feeding areas, to ensure that erosion from trampling is kept to a minimum.		
References: <p>[1] RCAHMW 1956 Caernarfonshire, Volume 1. HMSO: Cardiff.</p> <p>[2] Ordnance Survey National Archaeological Record card, SH 67 SW (1969).</p>		
Owner: Cochwillan estate.		
Tenant: Mr. G. Williams, Tai'r-meibion, Aber Road.		

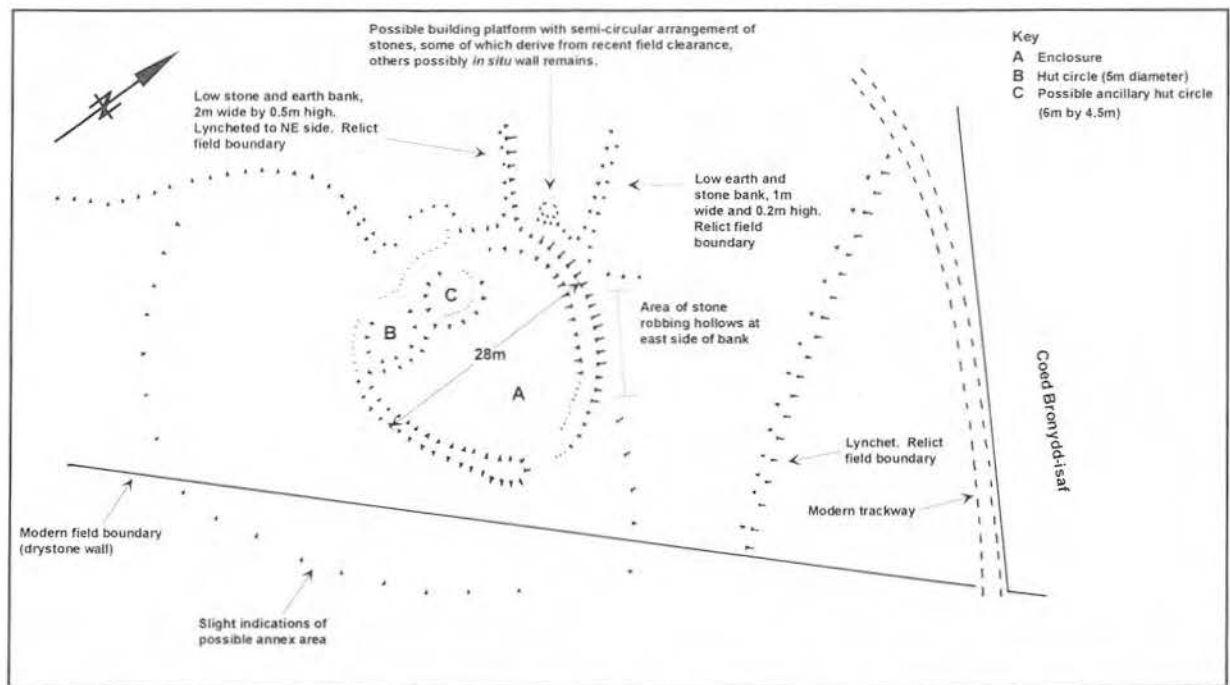


Figure 2 Sketch plan of hut group, Coed Bronydd-isaf, PRN 067



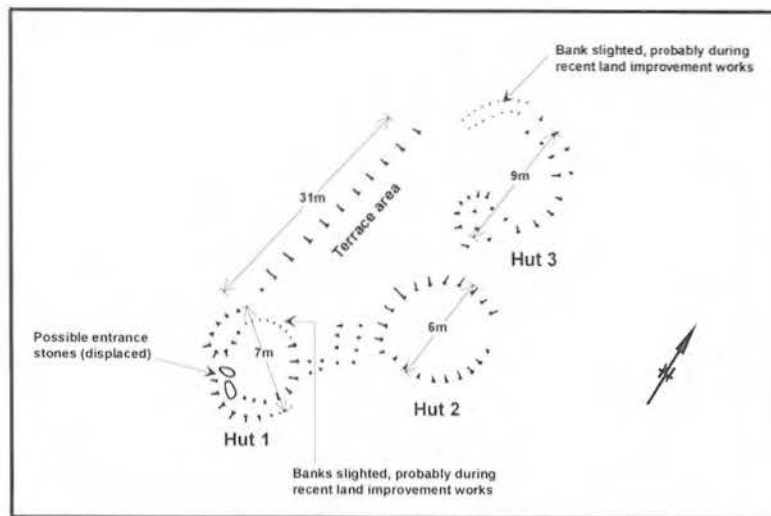
Figure 3 Hut group, Coed Bronydd-isaf, PRN 067. Facing NW.



Figure 4 Hut group, Coed Bronydd-isaf, PRN 067. Showing damage to enclosure bank caused by earlier episode of stone robbing. Facing NW.

3.2.4 Hut Circles, Nant Heilyn (PRN 068)

PRN 068	Site name: HUT CIRCLES, NANT HEILYN	NGR: SH 64217070
	Importance/category: Regional	Period: Late Prehistoric
Description of site: <p>Three hut circles, which have been severely damaged by stone robbing, probably associated with drainage works on the marshy ground immediately to the south. They are located on gently sloping ground, at an altitude of 220m. A low terrace, which is about 30m long, runs immediately in front of them (down-slope, NW). They have a NW aspect. The external diameters of the three hut circles (from south to north respectively) is 7m, 6m and 9m. The northern most has a small annex at its southern side. Few traces of banks or walling survives; the platforms are defined by removal scoops and hollows at their circumferences. No other associated archaeological features (such as cultivation remains) can be seen in the immediate vicinity. It is possible that two large boulders located at the SW of the southern most hut circle represent the approximate location of an entrance. In a previous survey visit, these boulders were noted to be positioned about 1m apart [G.A.T. 25.4.1994]. They have subsequently been cast down, probably with the intention of clearing them from the area, although fortunately this has not yet occurred.</p>		
Site history: <p>First identified in 1956 [1]. Classified in 1964 [2]. Surveyed by Ordnance Survey in 1971 [3]. Visited by G.A.T. staff on 25.5.94 (Gwynedd Hut Groups Survey). Terraces associated with the hut circles are noted in both [1] and [3], but have subsequently been destroyed, probably during drainage activities and land improvement. The 1971 reference [3] notes that the circles were visibly constructed of earth and stones, but also that the damage had occurred at the site during the construction of an electricity pylon.</p>		
Present condition and management: <p>The impact of electricity pylon construction, coupled with subsequent activity associated with the drainage works occurring immediately to the south, has considerably degraded the sites over the past few decades.</p>		
Form: Earthwork	Condition: 4 Unsatisfactory, local problems.	Threat/level: Drainage - 4 Vehicle erosion - 3 Stone robbing - 3
Management recommendations: <ul style="list-style-type: none"> Waterlogged ground conditions favour the preservation of organic deposits (such as timber and leather) and environmental evidence (such as pollen, insect remains and seeds), both of which are important archaeological resources. There is a strong chance that the boggy area located immediately to the south of the hut circles may have contained evidence of this kind, which could have provided a key source of contextual evidence for understanding the nature and economy of the site. Unfortunately, much of this potential material is likely to have been lost or damaged during the drainage works. However, despite the drainage works, the ground in the area is still fairly boggy, and it is possible that the soil deposits covering the hut circles remains moist. If this is the case, then organic material, particularly timber (for example, the remains of building posts), may well be preserved beneath the surface. To ensure that no further damage occurs to such potential deposits, it is suggested that the drainage regime of the area is not intensified. No further ditches should be cut, or drains sunk. The hut circles should be exempted from any further land clearance or improvement (such as stone removal or ground levelling). Care should be taken to ensure that vehicles or machinery operating in the vicinity do not cross the sites. During the survey, it was noted that several piles of stone derived from field clearance have been made at the up-slope edge of the boggy area, about 60m to the SSW of the hut circles. It may be the intention that these stones are used elsewhere on the farm wall repair etc. If this is the case, then care should be taken during their removal to ensure that vehicles do not cross the sites. Given the advice outlined in the two bullet-points above, and the fact that the site is not immediately apparent to the untrained eye, it may be necessary for a professional archaeologist to visit the site in the presence of the farmer and demonstrate its location and extent. 		
References: <p>[1] RCAHMW 1956 Caernarfonshire. Volume 1. HMSO: Cardiff. [2] RCAHMW 1964 Caernarfonshire. Volume 3. HMSO: Cardiff. [3] Ordnance Survey National Archaeological Record card, SH 67 SW 1971.</p>		
Owner: Cochwillan estate. Tenant: Mrs J. Owen, Aber-Ogwen Farm, Talybont.		



Left

Figure 5 Sketch plan of hut circles, Nant Heilyn (PRN 068)



Figure 6 Hut circles, Nant Heilyn (PRN 068), showing landscape setting and area of drainage works to the S of the site. Facing NW. The arrow indicates the location of the site.



Figure 7 Hut circles, Nant Heilyn (PRN 068). The arrows indicate the central points of the three circles. The scale rods located next to the arrows are each 1m long.



Figure 8 Hut circles, Nant Heilyn (PRN 068), showing the displaced entrance stones. Three of the 1m scale survey rods are located at the central points of the circles. The fourth rod (to the left of the photograph) is located at the crest of the terrace.

3.2.5 *Ancient Fields, Bronydd-Isaf (PRN 069). See landscape survey map (appendix 2, map 2) for plan view of feature area PRN 069.*

PRN 069	Site name: ANCIENT FIELDS, BRONYDD-ISAF	NGR: SH 62807050
	Importance/category: Regional	Period: Late prehistoric to medieval
Description of site: <p>An extensive area of terraced strip lynchets and relict earth-and-stone field boundaries. The lynchets are substantial in places, being up to 5m wide and 2m high. The banks survive up to 2m wide and 0.5m high in places, but are mostly much smaller than this. The features lie on moderate to steeply sloping ground and have a NW aspect.</p> <p>Two further possible features are associated with the cultivation remains, a 26m diameter enclosure containing an internal hut circle platform, and an oval hut platform. These are depicted on the landscape survey sketch plan that accompanies this report and described in more detail in the feature catalogue (see appendix 2, map 2, features 32 and 24).</p>		
Site history: <p>First described in 1956 [1]. Surveyed by Ordnance Survey in 1969 [2].</p> <p>The features have been partly destroyed by ploughing and stone clearance. According to Mr. Davies, occupant of Bronydd Isaf farm, a major phase of land improvement (during which the ground was first ploughed) occurred during the late 1950s. The two possible associated features were identified during this survey, and are not previously documented.</p>		
Present condition and management: <p>The features are categorised in the RCAHMW description [1] as 'mostly destroyed' and being in a poor condition. However, the area covered by the complex seems to be far more extensive than that delineated by the RCAHMW. They are considered here to be of regional importance. This is because despite the plough damage that they have sustained, they remain fairly well-defined and when viewed together form a group of associated features of some integrity. They form part of a patchy local landscape of such features lying on the NW facing slopes of Moel Wnion and Ffridd Ddu, between Llanllechid and Aber. Such systems of related features were once a far more common element of the NW Wales uplands than they are today. As such, this group of features is representative of an element of the historic landscape that has been more heavily affected by land improvement in other areas than it has here. Assuming that the process of land improvement has come to an end in the vicinity of PRN 069, the features are in a relatively stable condition. The only significant threats to their longer-term survival comes from stock erosion (poaching) and erosion from the passage of farm vehicles and machinery over the area.</p>		
Form: Earthworks	Condition: 3 Generally satisfactory, some minor problems	Threat/level: Animal erosion - 3 Vehicle erosion - 3 Land improvement - 2
Management recommendations: <ul style="list-style-type: none"> The levels of poaching (animal erosion) on the banks and lynchets should be monitored. If significant areas of erosion (exposed soil deposits) develop, then stock levels should be reduced for a length of time sufficient to allow regeneration of the protective turf layer. No further land improvement (such as ploughing or bulldozing) should occur within the field that contains these features. As far as is possible, farm vehicles and machinery should not be driven over the area. Where this is unavoidable, no single regular route should be followed; this should help to minimise the impact of wheel erosion on any one feature. 		
References: <p>[1] RCAHMW 1956 Caernarfonshire. Volume 1. HMSO: Cardiff.</p> <p>[2] Ordnance Survey National Archaeological Record card, SH 67 SW 1969.</p>		
Owner: Cochwillan estate. Tenant: Mr. G. Williams, Tai'r-meibion, Aber Road.		



Figure 9 Lynchets and terraces, Bronydd-isaf (PRN 069), Facing SE.

3.2.6 *Ancient Fields, Coed Ty'n yr Hendre (PRN 070). See landscape survey map (appendix 2, map 2) for plan view of feature area PRN 070.*

PRN 070	Site name: ANCIENT FIELDS, COED TY'N YR HENDRE.	NGR: SH 62707080	
	Importance/category: Local	Period: Late prehistoric to medieval	
Description of site: <p>Terraced strip lynchets and relict earth-and-stone bank field boundaries lying throughout the large field to the SE of Coed Ty'n-yr-hendre. There are four lynchets running parallel to the contours of the slope, the largest of which is 8m wide and 2.0m high. The lynchet nearest Coed Ty'n-yr-hendre runs atop a low grassy scarp, and marks the NW edge of the area of ancient cultivation. The banks survive up to 2m wide and 0.5m high in places, and are the remains of removed field walls. The banks run at 90 degrees to the contours and although it is now difficult to ascertain the precise nature of their relationship with the lynchets, it seems probable that they were once more widespread across the field. Lynchets and banks together would have formed a system of small terraced field plots. The lynchets are substantial in places, being up to 5m wide and 2m high. The features lie on moderately sloping ground at an average altitude of about 150m above OD, and have a NW aspect.</p> <p>Two further possible features are situated within the broad area covered by the cultivation remains. Firstly, a cluster of four wall-stone quarry pits the largest of which is 10m by 15m by 2m deep. The second feature is a low mound, which has the dimensions 2.5m by 8m by 0.4m high. Although the feature is turfed, it seems to have an earth and stone composition. It could be a vestigial part of a removed boundary, or a cairn of stones formed during clearance of the surrounding area during land improvement.</p>			
Site history: <p>First described in 1956 [1]. Surveyed by OS in 1969 [2].</p> <p>The RCAHMW survey (conducted 1949) describes the features as 'old field walls...visible in the <i>ffridd</i> immediately above Coed Ty'n-yr-hendre' [1]. At this time they were stated to be in a poor condition. The land has subsequently been cleared and ploughed, and is now more accurately described as improved pasture than <i>ffridd</i>.</p>			
Present condition and management: <p>Land improvements have part levelled many of the features, particularly the cross contour field boundaries. However, the lynchets, despite being ploughed over are still substantial in places, and retain the overall impression of their former size and extent. A small stream has cut through two of the lynchets, producing erosion scars. Trampling and poaching, where animals access the stream, is exacerbating these erosion scars.</p>			
Form: Earthwork	Condition: 3 Generally satisfactory, minor problems.	Threat/level: Animal erosion - 3 Vehicle erosion - 3	Risk: Slight
Management recommendations: <ul style="list-style-type: none">• The levels of poaching (animal erosion) on the banks and lynchets should be monitored, particularly for those features truncated by the stream. If significant areas of erosion (exposed soil deposits) develop, then stock levels should either be reduced for a length of time sufficient to allow regeneration of the protective turf layer, or should be excluded from the area of damage by the erection of fencing.• No further land improvement (such as ploughing or bulldozing) should occur within the field that contains these features.• As far as is possible, farm vehicles and machinery should not be driven over the features themselves. Where this is unavoidable, no single regular route should be followed; this should help to minimise the impact of wheel erosion on any one feature.			
References: <p>[1] RCAHMW 1956 Caernarfonshire. Volume 1. HMSO: Cardiff. Page 149.</p> <p>[2] Ordnance Survey National Archaeological Record card, SH 67 SW 6 (1969).</p>			
Owner: Cochwillan estate.			
Tenant: Mr. T.W. Davies, Bronydd Isaf Farm, Llanllechid.			



Figure 10 Relict field boundary, Coed Ty'n-yr-hendre (PRN 070). Facing SE.
1m scales.



Figure 11 Lynchet, Coed Ty'n-yr-hendre (PRN 070). Showing erosion
caused by stream action and animal poaching. Scale rod is 1m.

3.2.7 Long Hut, Nant Heilyn (PRN 071)

PRN 071	Site name: LONG HUT, NANT HEILYN	NGR: SH 64287065	
	Importance/category: Regional	Period: Post-Roman to Post-Medieval	
Description of site: The site of a long hut, located at 250m OD on a natural shelf at the SW bank of a stream. It has a NW aspect. Very little of the site is currently visible. A large electricity pylon has been placed on it, and a substantial pile of field clearance stone has been dumped immediately to the south (possibly overlying part of the site itself).			
Site history: First identified 1956 [1]. Surveyed 1971 [2]. The site was described in the 1950s as having 1m thick walls, which were faced on both sides with large stones, being oriented NW-SE, and having the dimensions 8m by 5m [1].			
Present condition and management: The site has been almost entirely obscured by the electricity pylon and the pile of field stone. There are no traces of the substantial walling described by the RCAHMW [1]. The survival of the site cannot be assessed. It is possible that some stone was robbed from the site during the pylon construction, or as part of land clearance in the area. The only remaining visible traces of the site are a 5m line of stone slab wall footings at the NW, and two lines of faint hollows (possible stone removal scoops) revealing the locations of the NE and SE walls.			
Form: Earthwork	Condition: 4 Unsatisfactory, local problems	Threat/level: Dumping - 3 Development - 2	Risk: Slight
Management recommendations: <ul style="list-style-type: none">The site has been ascribed to a low risk category on account of the sparse nature of the extant surface remains. If at any point deconstruction of the pylon, or stone removal from the clearance dump, leads to the exposure of remains that are not currently visible, then the assessment levels will have to be reviewed. Staff at the Gwynedd Archaeological Trust should be informed of any such changes, in order that the site can be re-visited.Stone should not be removed from the surviving (visible) section of footings at the NW of the site.			
References: [1] RCAHMW 1956 Caernarfonshire, Volume 1. HMSO: Cardiff. [2] Ordnance Survey National Archaeological Record card, SII 67 SW (1971).			
Owner: Cochwillan estate. Tenant: Mrs J. Owen, Aber-Ogwen Farm, Talybont			

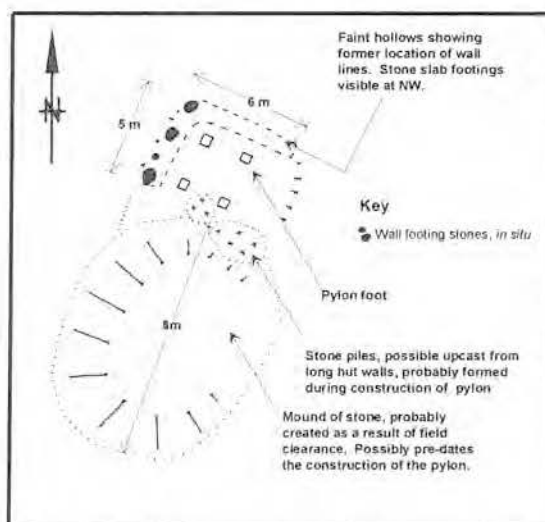


Figure 12 Sketch plan of relict traces of long hut, Nant Heilyn (PRN 071).

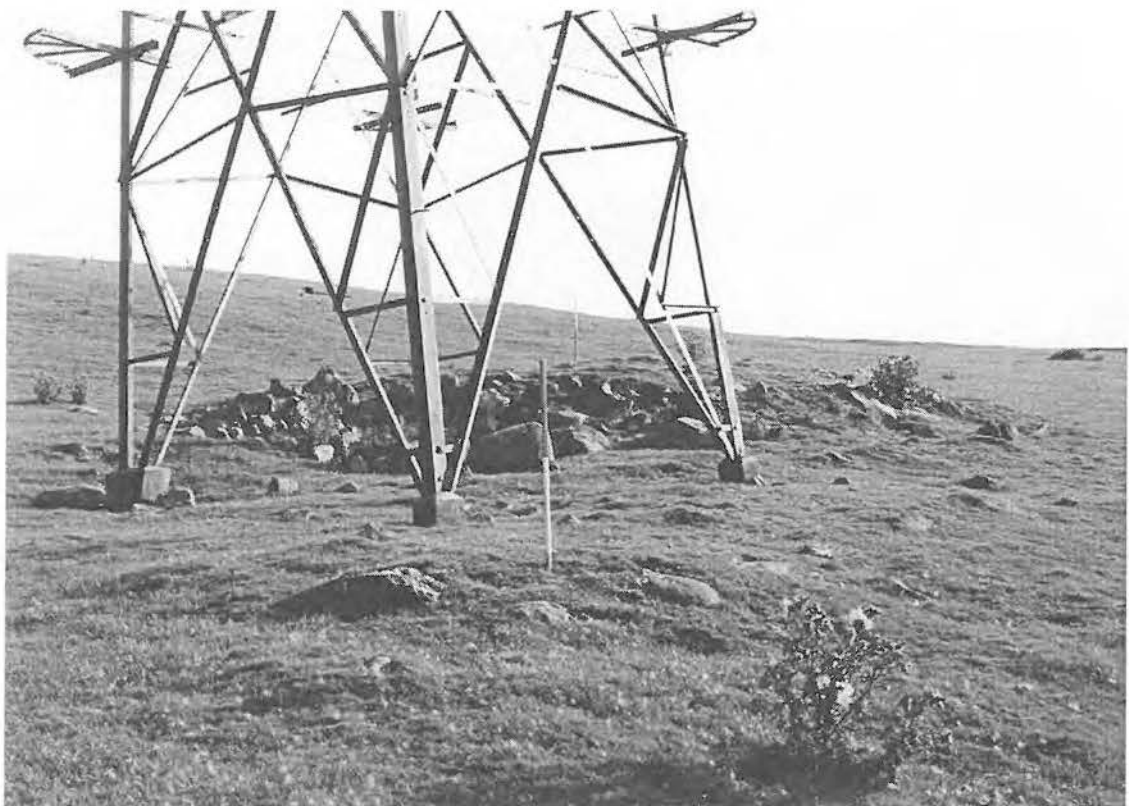
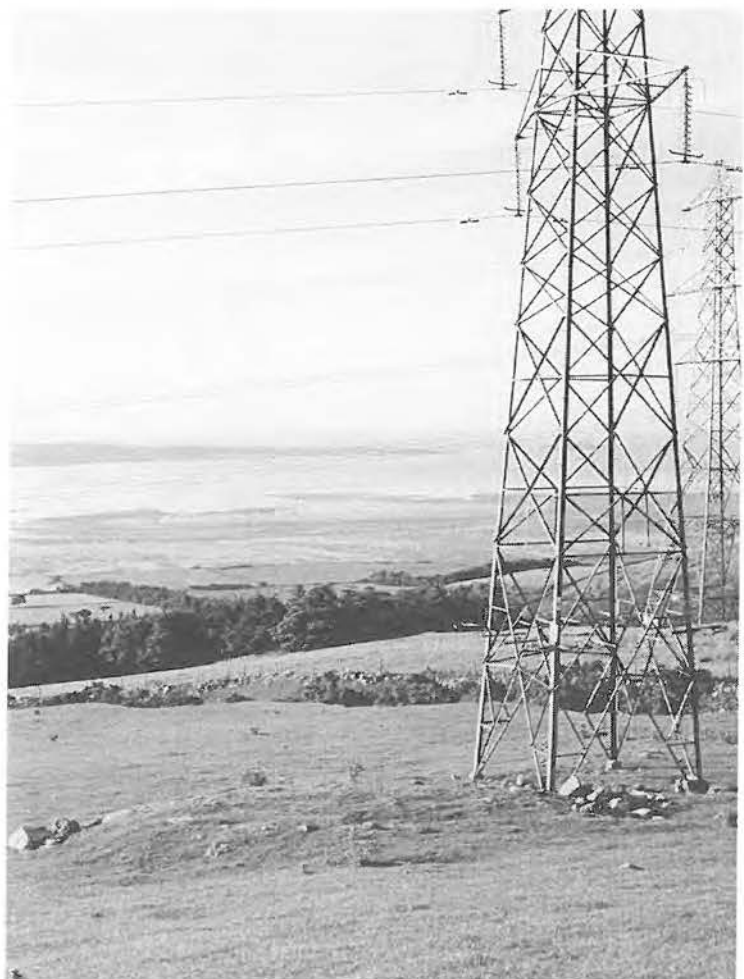


Figure 13 Site of long hut, Nant Heilyn (PRN 071). Scale rod is 1m. Facing SE

Figure 14 Site of long hut, Nant Heilyn (PRN 071). Facing NW



3.2.8 Long Hut, Nant Heilyn (PRN 072)

PRN 072	Site name: LONG HUT, NANT HEILYN	NGR: SH 64327080
	Importance/category: Regional	Period: Post-Roman to Post-Medieval
Description of site: <p>This site was not unequivocally located during the current survey. Only a short stretch of robbed out field wall is visible at the location indicated by the eight-figure OS grid reference given on the SMR PRN card. The site may actually have lain further to the east than the point indicated by the grid-reference. About 60m to the SW of this point lies a 13m, N-S oriented, stretch of wall footings and relict boundary. Circa 9m of this is about 1m wide, and appears to have a regular, faced, construction which may suggest that it originally formed part of a building. However, no further wall footings, or return walls (indicating corners), are visible in the immediate vicinity. The remaining few metres of wall footings are less substantial and are more consistent with a relict field wall. To the south of the footings themselves, the wall orientation is followed by a small lynchet, indicating the former presence of a now removed field boundary. This may imply that the faced stretch of footings represent no more than part of a field wall. However, despite these reservations this location remains the most convincing site lying within the vicinity of the supposed long hut location. It is topographically similar to the position described in the 1956 RCAHMW account (west bank of a small stream). Remains of relict field walls and cultivation terraces lie to the west of the site, as noted in the RCAHMW description. A possible reason for the poor survival of the 8.5m by 4m site described by the RCAHMW may be that it was damaged by stone robbing during the construction of the nearby electricity pylon (25m to the NE). The pylon is located on boggy ground, which would have required stone to be laid down as hard standing in advance of its construction.</p>		
Site history: <p>First described in 1956 [1]. Surveyed by OS in 1971 [2]. Described by RCAHMW as follows: 'Long hut, 25ft by 12ft, axis N-S, with walls 3ft thick of earth faced on both sides with large stones. The site lies on the W bank of a small stream, and to the W are traces of old field walls and ploughing, probably medieval' [1].</p>		
Present condition and management: <p>The site has either been entirely destroyed or severely degraded since its description in the 1956 RCAHMW publication [1].</p>		
Form: Earthwork	Condition: N/A Not possible to ascertain until the site has been confidently located.	Threat/level: Not possible to ascertain until the site has been confidently located.
Management recommendations: <ul style="list-style-type: none"> The farmer should be made aware of the location of the possible site (short length of N-S oriented wall footings). The feature is not readily visible; pointing out its location would allow the farmer to ensure that future activity (movement of machinery, stone removal, stock feeding areas etc) avoids the possible site. Other than this, the current land use and management regime is well suited to the welfare of any archaeological remains in the area. 		
References: <p>[1] RCAHMW 1956 Caernarfonshire. Volume 1. HMSO: Cardiff. [2] Ordnance Survey National Archaeological Record card, SH 67 SW (1971).</p>		
Owner: Cochwillan estate. Tenant: Mr. G. Williams, Tai'r-meibion, Aber Road.		

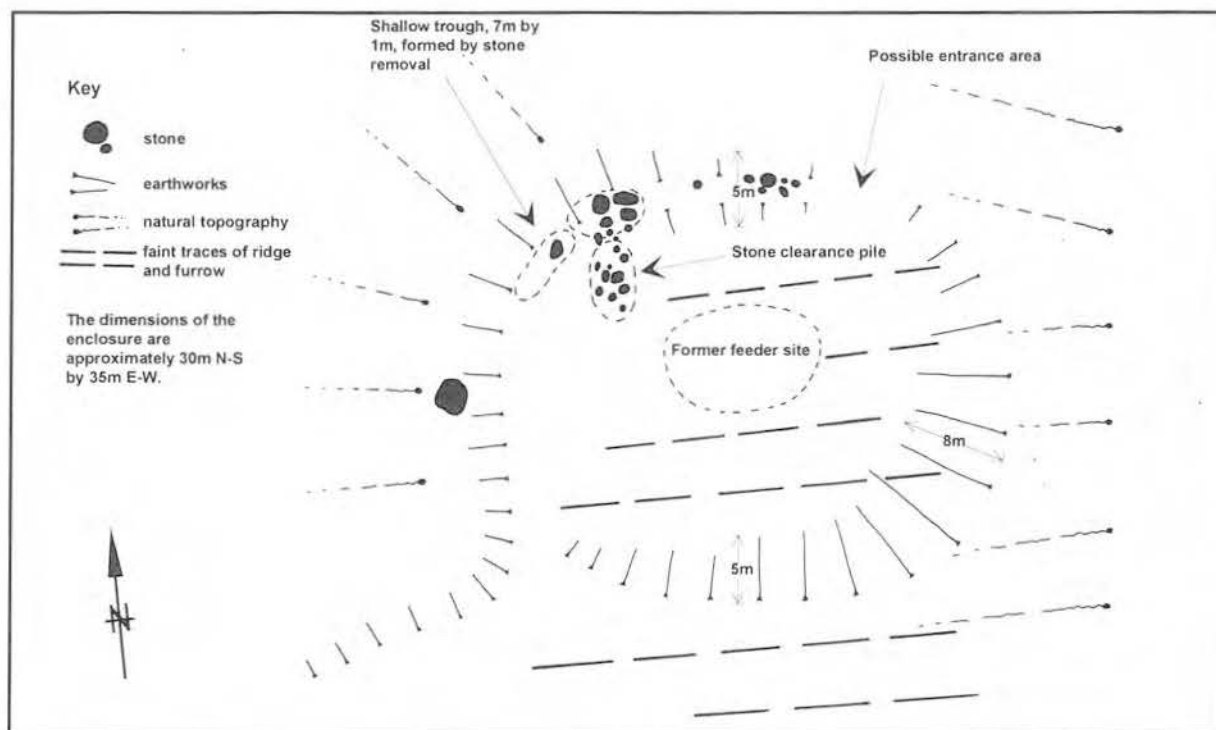


Figure 17 Sketch plan of enclosure, Crymlyn Oaks (PRN 074).



Figure 18 Enclosure, Crymlyn Oaks (PRN 074). The arrow points to the centre of the enclosure. Facing NW.



Figure 19 PRN 074, showing small stone dump, and erosion scar caused by animal trampling around feeder area. Facing SE.

3.2.10 Area of Cultivation Remains and Associated Features; W side of Ffridd Ddu

PRN 7487	Site name: AREA OF CULTIVATION REMAINS AND ASSOCIATED FEATURES; W SIDE OF FFRIDD DDU.	NGR: SH 64457125
	Importance/category: Regional	Period: Late prehistoric to late medieval
<p>Description of site:</p> <p>A large field above (to the E of) Nant Heilyn and to the SE of Crymlyn Oaks, carries extensive traces of early cultivation and two possible settlement sites. The remains are related to a much more expansive set of hut circles, rectangular building remains, relict field boundaries, lynchets and other cultivation features located on Ffridd Ddu, the hill-side to the S of Aber. The features may be separated into two main periods of activity. The earlier comprises terraced strip lynchets associated with a number of enclosed and unenclosed circular hut groups. These features may date from the bronze age to the Romano-British periods (i.e. about 4500 to 1500 years ago). The later is identified by areas of ridge and furrow, which was formed by ploughing, probably in the medieval to late medieval periods. This later phase of activity seems to be associated with the remains of rectangular buildings [1].</p> <p>Immediately to the E and NE of 7487, lies a particularly well preserved group of early fields (PRN 6617) (figure 23). Here the ground is somewhat steeper, and the terraced lynchets derived from prehistoric activity are accordingly more substantial than those on the gentler ground to the W and SW. The lynchets and banks were large enough here to influence the pattern of later plough cultivation and the areas of ridge and furrow can be seen to respect the grain of the earlier field arrangements.</p> <p>The two broad periods of activity are also evidenced in the area recorded as PRN 7487 (see map 1, appendix 1). However, here the later phase has not respected the earlier layout of features, apart from at those areas to the E and SE of the field, where the ground becomes steep enough to have limited the extent of ploughing in the medieval period. In these marginal areas, there are some faint traces of early spade dug cultivation ridges, otherwise known as 'lazy-beds' (number 19 on map 1, appendix 1). Two possible circular building platforms were also found here during the current survey work. The southern most of these (number 18 on map 1, appendix 2) is approximately 5m in diameter. That to the N is lies on more moderately sloping ground, and is larger. It is ovoid in shape, measuring 12m by 14m, with its axis oriented SE-NW. It is slightly terraced, being raised by about 0.4m above the ground surface at its NW side, but flush with it to the SE. Small quantities of stone are visible throughout the circumference of the site, possibly indicating a relict bank around the platform. Two larger stones, which are set approximately 2.5m apart, may indicate the position of an entranceway at the SE. The site is located close to, and is probably associated with, a low earthwork which runs on the same orientation as that of the building platform. The bank is probably a relict field boundary and is between 1.5m and 2m wide, and 0.3m high.</p> <p>A number of similar banks, running parallel to one another, are found across the field. Ridge and furrow, again running on the same orientation, covers the flatter areas of the field. The ridges are spaced between 4m and 5m apart and are predominantly fairly faint, the most substantial being no more than about 0.4m high. The banks are probably relicts of the earlier period of activity (prehistoric), respected to some extent by the later ploughing. There are traces of lynchets to the N part of the field. These were probably once widespread across the field, as is the case for PRN 6617, but unlike the banks (which lie perpendicular to the contours of the slope), have been destroyed by medieval cross contour ploughing. Where they do survive, it is in places where the ground is steeper, or where they are substantial enough to have defined the edges of cultivation areas and act as headlands.</p> <p>Two turf covered stone clearance cairns are located at the S of the field, and seem to pre-date the ridge and furrow. The larger (number 14, map 1, appendix 2) is 8m by 6m and the smaller 7m by 4m.</p> <p>A hollowed trackway (which is braided in places where it runs over steeper ground) runs from NW to SE across the northern half of the field (number 6, map 1, appendix 2). It appears to truncate, and therefore post-date, the ridge and furrow, implying that it is late medieval to post-medieval in date. The trackway is up to 1m deep and between 2.5m and 5m wide.</p> <p>Site history: First described in 1956 [1, 8-9]. The RCAHMW survey of 1950 describes the range and location of the features that are found on Fridd Ddu. PRN 7487 forms part of this broader landscape. The RCAHMW identified the holloway and some of the lynchets, and noted the presence of ridge and furrow. The possible areas of lazy-beds, the two circular building platforms and the clearance cairns were identified as part of the current survey. At the time of the RCAHMW survey the general condition of the early features on Fridd Ddu was described as 'fair, in parts damaged by modern ploughing' [1]. Further ploughing was being undertaken at this time.</p>		

Present condition and management:

Modern land improvements have part levelled many of the features. However, ridge and furrow, low banks and a number of lynchets are still visible throughout the area. The earthworks are suffering a limited amount of erosion throughout from trampling and poaching by animals. The greatest potential threat to any of the features is that of future land improvements. Common activities of this kind taking place in similar situations elsewhere include ploughing to level out ridge and furrow, and the in-filling of holloways.

Form: Earthwork	Condition: 3 Generally satisfactory, minor problems.	Threat/level: Animal erosion - 3 Vehicle erosion - 2 Land improvement - 3	Risk: Slight
------------------------	---	--	---------------------

Management recommendations:

- The levels of poaching (animal erosion) on the banks, lynchets and areas of ridge and furrow should be monitored. If significant areas of erosion (exposed soil deposits) develop, then stock levels should either be reduced for a length of time sufficient to allow regeneration of a protective turf layer, or should be excluded from the area of damage by the erection of fencing.
- No further land improvement (such as ploughing or bulldozing) should occur within the field that contains these features.
- As far as is possible, farm vehicles and machinery should not be driven over the features themselves. Where this is unavoidable, no single regular route should be followed; this should help to minimise the impact of wheel erosion on any one feature.

References:

[1] RCAHMS 1956 Caernarfonshire. Volume 1. HMSO: Cardiff. Page 9.

Owner: Cochwillan estate.

Tenant: Mr. G. Williams, Wig Farm, Aber.



Above: Figure 20 Ridge and furrow, PRN 7487. Facing NE.
The 1m scale rods are located on three consecutive ridges.

Right: Figure 21 Eroded area on ridge and furrow (PRN 7487), resulting from animal poaching. Facing SE.



Figure 22 Holloway (PRN 7487). Facing W.



Figure 23 Aerial photograph of early fields and associated features, PRN 6617.



Figure 24 Site of possible circular building platform (feature 20, appendix 2, map 1), PRN 7487. Facing NW. Scale rods are 1m.



Figure 25 Clearance cairn (feature 16, appendix 2, map 1), PRN 7487. Facing East.

4 PRACTICAL CONCLUSIONS: SITE MANAGEMENT SUMMARIES

This section draws together the management recommendations listed under the separate site record forms, and presents them in a more readily accessible form. It will be seen that similar recommendations are made for many of the sites, particularly regarding the risk of animal or vehicular erosion to earthworks.

PRN 067 Hut group, Coed Bronydd-isaf:

Form: Earthwork

Condition: 3 [Generally satisfactory, some minor problems].

Threat/level: Animal erosion 3. Dumping 3. Vehicle erosion 3.

Risk: Medium

- No fresh vehicle track damage is visible at the site. However, as some of the disturbance visible to the NW is likely to have been caused by the caterpillar track damage noted in 1980 and 1995, it is evident that vehicles do cause long term damage. It is important that farm vehicles and machinery are not taken across either the enclosure itself or any of the earthworks immediately associated with it.
- Some small patches of erosion are occurring at various points throughout the enclosure bank. These are a result of stock trampling (poaching), and should be monitored to ensure that they do not develop into a more threatening problem. If erosion levels increase, then it may be necessary to fence the enclosure off from stock from time to time, to ensure that the damaged areas have time to regenerate.
- The enclosure and its immediate vicinity should not be used as feeding areas, to ensure that erosion from trampling is kept to a minimum.

PRN 068 Hut circles, Nant Heilyn:

Form: Earthwork

Condition: 4 [Unsatisfactory]

Threat/level: Drainage, 4. Vehicle erosion, 3. Stone robbing, 3.

Risk: High

- Waterlogged ground conditions favour the preservation of organic deposits (such as timber and leather) and environmental evidence (such as pollen, insect remains and seeds), both of which are important archaeological resources. There is a strong chance that the boggy area located immediately to the south of the hut circles may have contained evidence of this kind, which could have provided a key source of contextual evidence for understanding the nature and economy of the site. Unfortunately, much of this potential material is likely to have been lost or damaged during the drainage works. However, despite the drainage works, the ground in the area is still fairly boggy, and it is possible that the soil deposits covering the hut circles remains moist. If this is the case, then organic material, particularly timber (for example, the remains of building posts), may well be preserved beneath the surface. To ensure that no further damage occurs to such potential deposits, it is suggested that the drainage regime of the area is not intensified. No further ditches should be cut, or drains sunk.
- The hut circles should be exempted from any further land clearance or improvement (such as stone removal or ground levelling). Care should be taken to ensure that vehicles or machinery operating in the vicinity do not cross the sites.
- During the survey, it was noted that several piles of stone derived from field clearance have been made at the up-slope edge of the boggy area, about 60m to the SSW of the hut circles. It may be the intention that these stones be used elsewhere on the farm wall repair etc. If this is the case, then care should be taken during their removal to ensure that vehicles do not cross the sites.
- Given the advice outlined in the two points above, and the fact that the site is not immediately apparent to the untrained eye, it may be necessary for a professional archaeologist to visit the site in the presence of the farmer and demonstrate its location and extent.

PRN 069 Ancient fields, Bronydd-isaf:

Form: Earthworks

Condition: 3 [generally satisfactory, some minor problems]

Threat/level: Animal erosion, 3. Vehicle erosion, 3. Land improvement, 2.

Risk: Slight.

- The levels of poaching (animal erosion) on the banks and lynchets should be monitored. If significant areas of erosion (exposed soil deposits) develop, then stock levels should be reduced for a length of time sufficient to allow regeneration of the protective turf layer.
- No further land improvement (such as ploughing or bulldozing) should occur within the field that contains these features.
- As far as is possible, farm vehicles and machinery should not be driven over the area. Where this is unavoidable, no single regular route should be followed; this should help to minimise the impact of wheel erosion on any one feature.

PRN 070 Ancient fields - Coed Ty'n-yr-hendre:

Form: Earthwork

Condition: 3 [generally satisfactory, some minor problems]

Threat/level: Animal erosion, 3. Vehicle erosion, 3.

Risk: Slight

- The levels of poaching (animal erosion) on the banks and lynchets should be monitored, particularly for those features truncated by the stream. If significant areas of erosion (exposed soil deposits) develop, then stock levels should either be reduced for a length of time sufficient to allow regeneration of the protective turf layer, or should be excluded from the area of damage by the erection of fencing.
- No further land improvement (such as ploughing or bulldozing) should occur within the field that contains these features.
- As far as is possible, farm vehicles and machinery should not be driven over the features themselves. Where this is unavoidable, no single regular route should be followed; this should help to minimise the impact of wheel erosion on any one feature.

PRN 071 Long hut, Nant Heilyn:

Form: Earthwork

Condition: 4 [unsatisfactory, local problems]

Threat/level: Dumping, 3. Development, 2.

Risk: Slight

- The site has been ascribed to a low risk category on account of the sparse nature of the extant surface remains. If at any point deconstruction of the pylon, or stone removal from the clearance dump, leads to the exposure of remains that are not currently visible, then the assessment levels will have to be reviewed. Staff at the Gwynedd Archaeological Trust should be informed of any such changes, in order that the site can be re-visited.
- Stone should not be removed from the surviving (visible) section of footings at the NW of the site.

PRN 072 Long hut, Nant Heilyn:

Form: Earthwork

Condition: N/A [not possible to ascertain until the site has been confidently located]

Threat/level: Not possible to ascertain until the site has been confidently located.

Risk: N/A, as above.

- The farmer should be made aware of the location of the possible site (short length of N-S oriented wall footings). The feature is not readily visible; pointing out its location would allow the farmer to ensure that future activity (movement of machinery, stone removal, stock feeding areas etc) avoids the possible site. Other than this, the current land use and management regime is well suited to the welfare of any archaeological remains in the area.

PRN 074 Enclosure, Crymlyn Oaks:

Form: Earthwork

Condition: 3 [generally satisfactory, some minor problems]

Threat/level: Stone robbing, 3. Animal erosion, 2.

Risk: Medium

- Protect against the possibility of further damage being caused through stock trampling, by ensuring that the site is no longer used as a feeding area.
- Maintain stock levels at or below those of current practice to ensure continued protection against soil erosion. The site may need to be fenced off in the event of increased stock presence.
- Tidy up the area within the enclosure. Remove items of farm rubbish (wooden pallets etc). Remove recent dump of stone currently situated near the enclosure bank at the north west of the site.

PRN 7487 Cultivation remains and associated features, west side of Ffridd Ddu:

Form: Earthwork

Condition: 3 [generally satisfactory, some minor problems]

Threat/level: Animal erosion, 3. Vehicle erosion, 2. Land improvement, 3.

Risk: Slight

- The levels of poaching (animal erosion) on the banks, lynchets and areas of ridge and furrow should be monitored. If significant areas of erosion (exposed soil deposits) develop, then stock levels should either be reduced for a length of time sufficient to allow regeneration of a protective turf layer, or should be excluded from the area of damage by the erection of fencing.
- No further land improvement (such as ploughing or bulldozing) should occur within the field that contains these features.
- As far as is possible, farm vehicles and machinery should not be driven over the features themselves. Where this is unavoidable, no single regular route should be followed; this should help to minimise the impact of wheel erosion on any one feature.

5 DISCUSSION AND FURTHER RECOMMENDATIONS

5.1 Holistic approaches to landscape management

5.1.1 It is considered here that the current survey and report would most effectively be seen as a preliminary stage in the creation of a more comprehensive heritage management plan for the Cochwillan estate. The survey work had a limited brief; namely, to visit the eight sites identified within the extant management plan, to evaluate their condition, and to make recommendations concerning their preservation. However, during the fieldwork, a far larger range of features, was discovered in the immediate vicinity of the eight identified sites. Many of these were directly associated (either physically or chronologically) with the sites themselves. A landscape sketch plan and series of feature descriptions were made in the field, and are presented here to demonstrate the complexity of the historic landscape of the area (**maps 1 and 2, appendix 2**).

5.1.2 The eight identified sites may represent the most important elements of the known archaeology of this part of the Cochwillan estate. However, it is clear there are several features of potential importance which had not been previously recorded. The only reasonably intensive field work to have been carried out in the area previously was that conducted by the Royal Commission for Ancient and Historic Monuments in Wales, in 1949-1950 (RCAHMW 1956). A more up-to-date survey is required to provide a more reliable heritage resource assessment on which to base an integrated estate landscape management plan.

5.1.3 It is also clear that it is not only the isolated sites of key importance that need to be taken into account when drawing up a successful management plan. Beyond the eight highlighted sites lies an extensive landscape of cultivation features, relict boundaries, small stone quarries and trackways, which together form the context which gives the more important sites their meaning (see **appendix 2, maps and catalogue**). When taken together at a landscape level, it can be seen that these features make a major contribution to the distinctiveness of the historic environment of the local area. This is an important point, and one which requires the adoption of a somewhat different management strategy.

5.1.4 Any management plans that are intended to cater for the overall integrity of the historic environment must be constructed on the basis of a solid understanding of the resource with which they are concerned. Recent agri-environmental schemes such as the Tir Cymin scheme and the Environmentally Sensitive Areas schemes have taken the emphasis of heritage management plans beyond the level of the single site to the landscape perspective of the 'whole-farm' (GAT report 250). In earlier correspondence between the Gwynedd Archaeological Trust and Carter Jonas, the following course of action for the construction of a successful management plan was recommended:

1. *Plan brief*
2. *Survey*
3. *Management assessment*
4. *Discussion and debate*
5. *Practical action plan*
6. *Implementation and review*
7. *Long-term perspectives*
8. *Consideration of other factors*

5.1.5 This report has tackled some of these issues for the eight sites evaluated, and has made a number of site specific recommendations. A number of general recommendations have been noted in section 2 of this report. However, to facilitate management of the historic landscape as a whole, it will be necessary to return to the second stage of the scheme detailed above, namely, that of survey work. A certain amount of desktop work (concentrating on old maps, photographs, descriptions etc.) should be followed by a detailed field survey and evaluation of the archaeology of the landscape of the estate. All information noted should be recorded on a sketch plan made in the field by a professional qualified archaeologist, preferably at the scale of 1:2500. The plan should identify all the features of archaeological and historical interest, and should record basic information regarding their form and condition. The resulting package of information (map, written descriptions and photographic record) would form the a base-line for making decisions about the future management of the historic environment of the estate as a whole.

6 ACKNOWLEDGEMENTS

The Gwynedd Archaeological Trust would like to thank the following organisations and individuals. Carter Jonas helped to establish access to the various farms on which the sites lay.

The tenant farmers listed below kindly granted their permission to visit the sites on their land:

Mr T.W. Davies, Bronydd Isaf Farm, Llanllechid.

Mrs J. Owen, Aber-Ogwen Farm, Talybont.

Mr G. Williams, Tai'r-meibion, Aber.

Mr. G. Williams, Wig Farm, Aber Road.

Staff at the Caernarfonshire Record Office and University College North Wales Archives Department, Bangor, for their assistance.

This project was carried out by members of staff from the Gwynedd Archaeological Trust. David Thompson (Principal Archaeological Officer) conducted the desk-top research. The survey work and the production of this report was carried out by John Roberts (Advisory Officer Historic Environment).

7 APPENDICES

7.1 Appendix 1: Parameters for use with site record forms (see Part Three of this report)

Form

Cropmarked or parchmarked
Earthwork
Relict standing building or structure
Building or structure in use
Earthwork with standing structure

Condition

1 Optimal
2 Satisfactory
3 Generally satisfactory - minor problems
4 Unsatisfactory - local problems
5 Extensive problems (3 or more)

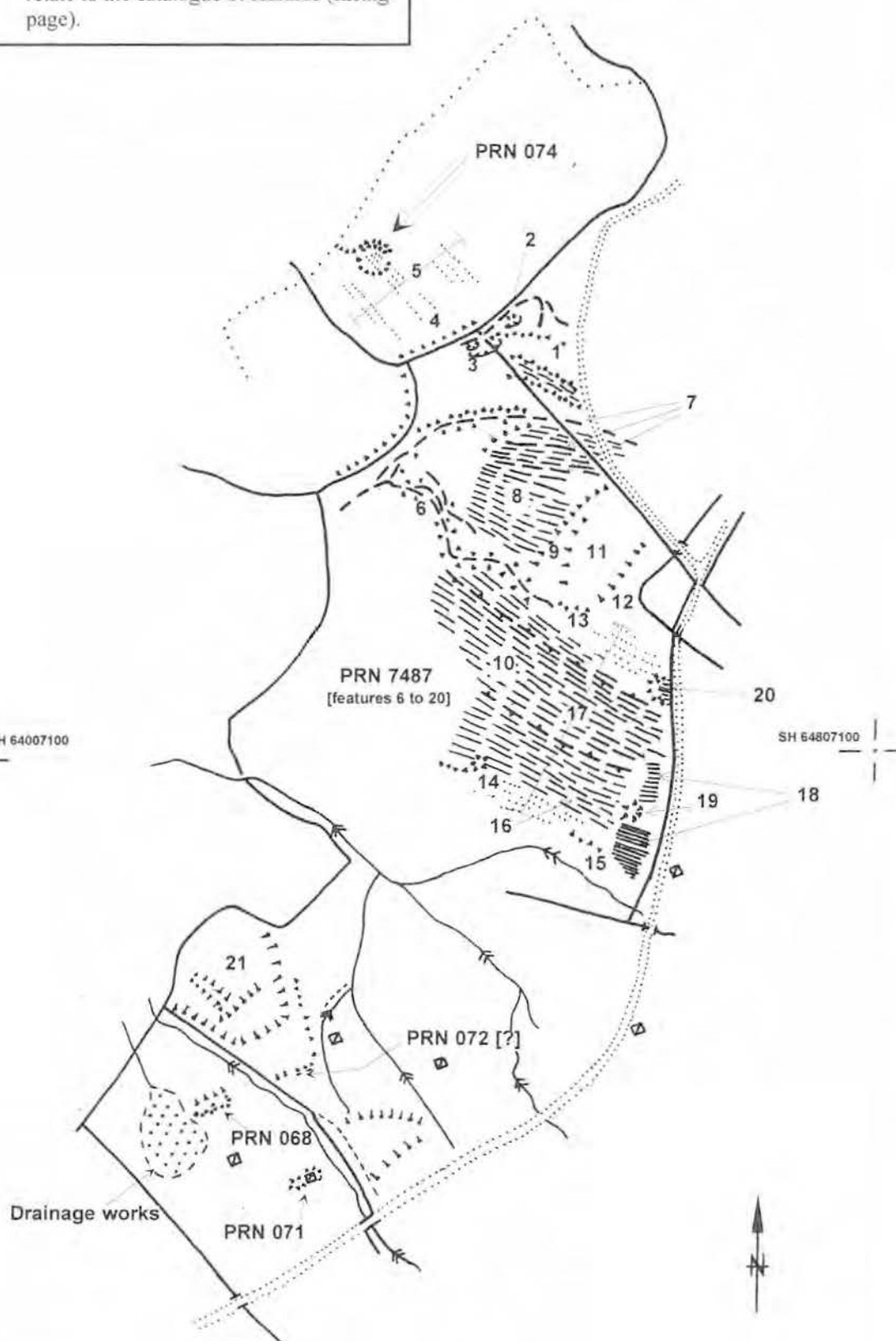
Risk

1 No risk
2 Slight risk
3 Medium risk
4 High risk
5 Immediate risk

Threats

Afforestation
Animal burrowing
Animal erosion (poaching)
Building / development
Drainage
Dumping
Land improvement
Natural decay
Ploughing - around
Ploughing - over
Quarrying / stone robbing
Scrub growth
Subsidence
Tree growth
Vehicle erosion
Visitor erosion
Weathering

Map 1 Landscape context survey. The numbers relate to the catalogue of features (facing page).



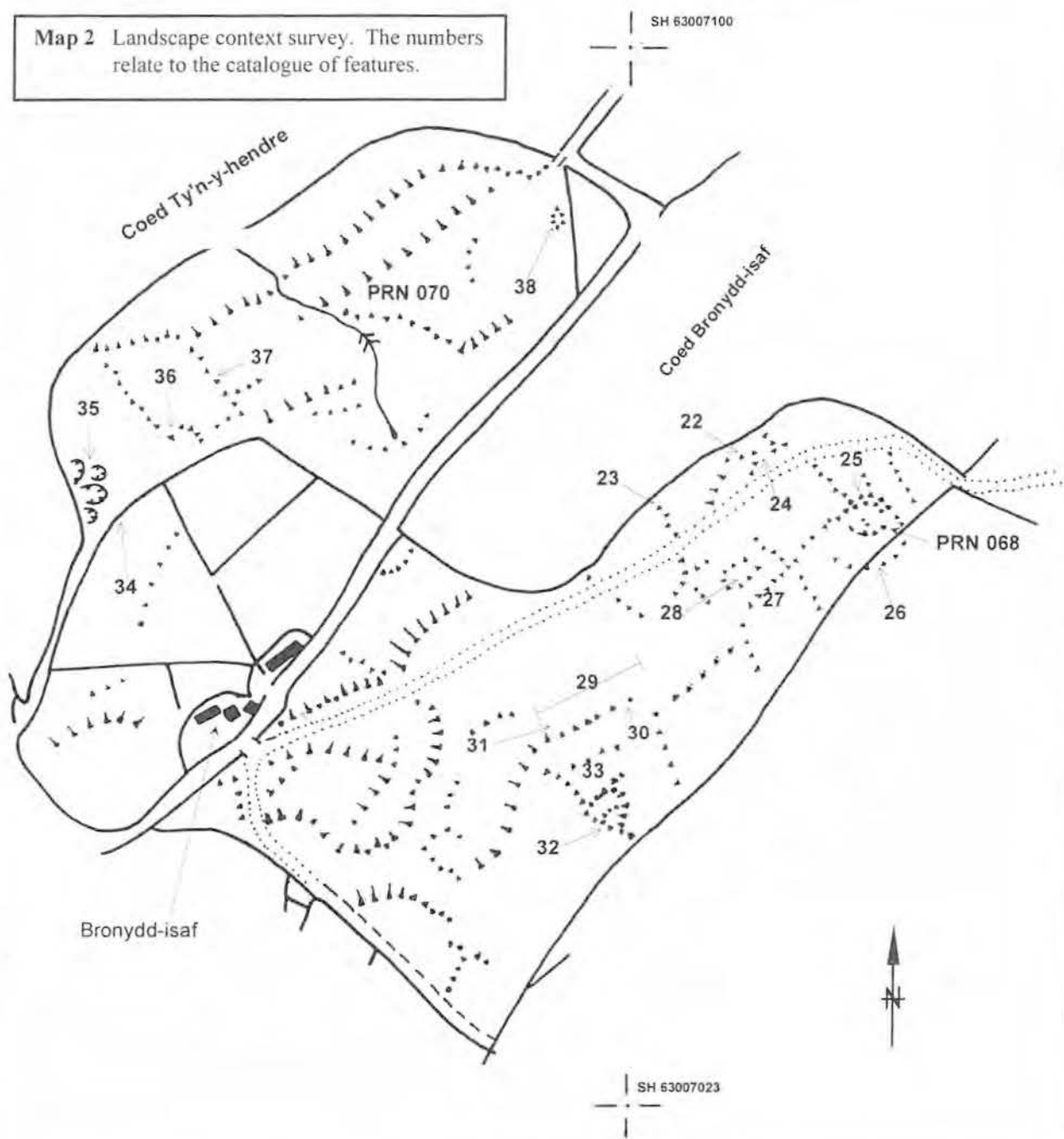
7.2 Appendix 2: Contextual landscape survey plan and catalogue of features

7.2.1 Catalogue of features

Map One (page 32, facing)

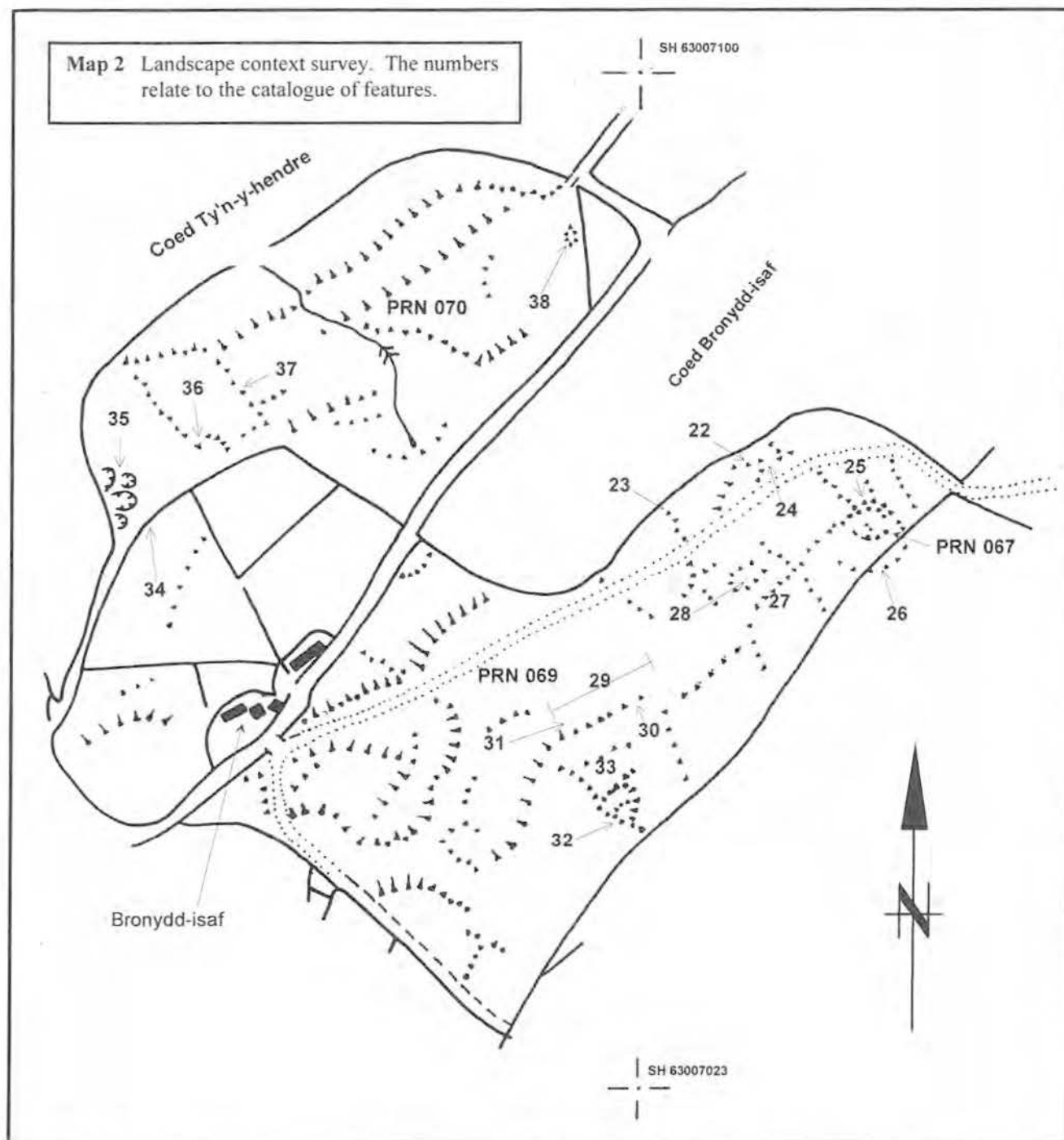
- 1 Lynchets and low banks, with traces of ridge and furrow between.
- 2 Small wall-stone quarries.
- 3 Small wall-stone quarries. NB, features 2 and 3 lie to either side of a line of wall footings.
- 4 Earth bank, c.1.5m high, revetted by drystone wall on east side where it is less than 1m high. The bank is 2.5m wide.
- 5 This field has been intensively 'improved'. There are some traces of linear features throughout, probably ploughed out ridge and furrow or other cultivation features, but possibly also relating to location of field drains.
- 6 Braided holloway, up to 1m deep and 2.5 to 5m wide.
- 7 Lynchets, running across the contours of the slope. Ridge and furrow lies between them. They may possibly be early field boundaries, which subsequently influenced the course of future ploughing in the area. They lie c.20m apart, and are about 4m wide and 0.6m high.
- 8 Area of ridge and furrow, c.4-5m between ridges.
- 9 Headland, which possibly lies atop an early lynchet.
- 10 Area of ridge and furrow cf. feature 8.
- 11 Level, sub-rectangular area of ground. Possibly a plough destroyed early field plot. 150m SE-NW by 45-50m SW-NE, bound by lynchet (12) at east side.
- 12 Lynchet or terracing. Presently turf covered, but much small stone is visible at surface, implying that the feature may have a deliberately constructed form, perhaps that of walled terrace revetting. 3m wide by 0.8m high.
- 13 Possible removed field boundary. Low bank with some stone visible.
- 14 Clearance cairn with a low bank running from it to the SE. The cairn measures 7m by 4m and is 0.5m high. There is a slim possibility that it represents the remains of either a small robbed out burnt stone mound, or a barrow. The relict bank is 0.4m high and 3m wide. Some stones are visible throughout in places.
- 15 Low bank, relict field.
- 16 Stone and earth mound (turved), similar in form to 14. Probable clearance cairn. Measures 7m by 4m, and 0.5m high. small
- 17 Faint traces of ridge and furrow.
- 18 Faint traces of possible lazy-beds (which are features formed by spade dug cultivation). They survive here where the ground is steep enough to have acted as a disincentive to medieval plough teams (the features have not been superseded by ridge and furrow).
- 19 Small stone terraced building platform, 10m by 5m. Possible site of hut circle.
- 20 Possible building platform. It is ovoid in shape, measuring 12m by 14m, with its axis oriented SE-NW. It is slightly terraced, being raised by about 0.4m above the ground surface at its NW side, but flush with it to the SE. Small quantities of stone are visible throughout the circumference of the site, possibly indicating a relict bank around the platform. Two larger stones, which are set approximately 2.5m apart, may indicate the position of an entranceway at the SE. The site is located close to, and is probably associated with, a low earthwork bank which runs on the same orientation as that of the building platform. The bank is probably a relict field boundary and is between 1.5m and 2m wide, and 0.3m high.
- 21 Terraces and probable field stone clearance banks. The grass in the area is still very lush. Stone visible in places throughout the terraces, implying that the terraces were constructed with stone revetting.

Map 2 Landscape context survey. The numbers relate to the catalogue of features.



SH 63007100
SH 63007023

Map 2 Landscape context survey. The numbers relate to the catalogue of features.



Map Two (page 34, facing)

- 22 Slightly terraced ancient trackway (turved).
- 23 Area of lynchets and banks which have been damaged by ploughing, probably as part of land improvement works in the 1950s (Mr. T.W. Davies, Bronydd-isaf, pers. comm.).
- 24 Possible site of small circular enclosure, the east part of which has been destroyed by the construction of the modern trackway. Situated at the west of a broad natural shelf in the hillside.
- 25 Site of possible building platform.
- 26 Very slight bank, possible ancillary enclosure around SE and S parts of enclosed hut group PRN 067. Plough levelled.
- 27 Hollows and low bank remaining where a wall or bank boundary has been removed from atop a small natural scarp edge.
- 28 Plough-damaged strip lynchets with the traces of two possible hut circle platforms (5m and 7m diameter).
- 29 Rough terrace above western most of the two small scarps.
- 30 Removed wall line.
- 31 Field stone clearance pile, probably created in the 1950s during a major episode of land improvement (10m by 5m). Currently being used as a source of stone for drystone wall renovation.
- 32 Possible enclosure (26m diameter), defined by low bank at west side and cut into hill slope at east (to depth of up to 1m). Possible hut circle at SE, (5m diameter). Overlain in part by a drystone wall (which is now reduced to footings only). The whole site has been damaged by modern ploughing, and a dump of field clearance stone (probably 1950s) lies at the SW.
- 33 Terraced field plots defined by lynchets and low banks.
- 34 Earth and stone wall, *clawdd*.
- 35 Wall stone quarries, largest measures 10m by 15m by 2m deep.
- 36 Slight trackway (1-1.5m wide) to N of relict field boundary (low bank, 2m wide and 0.3m high, with some large boulders throughout its length).
- 37 Low bank (0.5m high by 2.5m wide). Removed wall line.
- 38 Low mound, 8m by 2.5m, by 0.4m high. Turved, but appears to be of earth and stone. Probably a clearance cairn.

