

U P L A N D S U R V E Y : C A E R S W S - L L A N B R Y N M A I R



T H E C L W Y D - P O W Y S A R C H A E O L O G I C A L T R U S T
7a Church Street Welshpool Powys SY21 7DL

Sponsored by Cadw/Welsh Historic Monuments and the Community Programme of the Manpower Services Commission, and carried out with the assistance and advice of the Royal Commission on Ancient and Historical Monuments in Wales.

August 1987

I N T R O D U C T I O N

Almost half of Wales is formed of upland over 300 metres. In common with many other upland areas of Britain the sites generally appear to represent settlement and land-use patterns of the earlier prehistoric and the Medieval and Post-Medieval periods corresponding to periods of more favourable climatic conditions. Physical, climatic and economic constraints have, until recent years, generally limited the agricultural use of much upland to rough grazing, which has aided the preservation of a rich archaeological heritage.

Since the 1950s, however, some 40% of the country's 'wild' upland has been given over to forestry and improved pasture (RSPB 1984). The last 20 years in particular have witnessed a major increase in land improvement and afforestation schemes. These changes have involved drainage, stone clearance and ploughing, much of which has been grant-aided as a direct consequence of government policy. The work has often been carried out with little regard to archaeological sites, many of which have been damaged or entirely destroyed.

Only a relatively small proportion of archaeological sites are currently protected by legislation: of about 6300 archaeological sites recorded in the whole of Powys, for example, less than 10% are statutorily protected. About 30% might fulfill the criteria for scheduling, and about 75% of the total number of sites are worthy of some form of protection.

Although Cadw/Welsh Historic Monuments has recently established a monitoring system for Scheduled Ancient Monuments - by Field Monument Wardens and by the Aerial Monitoring Programme - little provision has been made for the recording or protection of the majority of known sites throughout Wales. Many of the land-use developments affecting unscheduled upland sites (and indeed other rural sites in general) bypass the normal planning-control procedures. Losses in the past have very often resulted from a failure of communication between the archaeological community, farmers and planners. The cause of this failure has widely been seen as stemming from under-resourcing of archaeology rather than a lack of concern on the part of archaeologists or the general public.

Little detailed primary fieldwork has been carried out in many upland areas and consequently it is often difficult to estimate the actual scale of losses of archaeological sites. Moreover, although there are indications that the situation has improved in recent years as a result of improved liaison with County, District and National Park authorities, and the Forestry Commission, all of whom administer grant application schemes, the archaeological community has often been placed in a poor position to gain an overview of the actual rate of land-use changes in upland areas, and consequently to make a clear case for resources to deal with the problems.

The Council for British Archaeology and the Countryside Commission have recently carried out a survey of the problems facing the British uplands (Darvill 1986) and have made recommendations for further action. The present study centres on the problems facing archaeological sites in upland Wales by looking at a sample area in the northern part of the Cambrian Mountains, and concludes recommendations tailored to what are seen as local problems.

BACKGROUND TO THE STUDY AREA

The study area forms a block of upland 14 x 17 kilometres across between Caersws and Llanbrynmair in northern Powys, centred on Carno (Figures 1 and 2).

It consists of a dissected plateau mostly over 300 metres above sea level, bounded on the west by Afon Twymymyn and on the east by the Severn Valley. The solid geology comprises Silurian sedimentary rocks, mainly shales, with an overlying mantle of glacial drift and extensive areas of blanket bog. Vertically-bedded grits outcrop in one area at Garreg Hir and Llyn y Tarw which give rise to scree and boulder fields, but elsewhere there are relatively few rock exposures and erratics are infrequent except where stream action has eroded the drift. Soils are generally of a thin, acid and gleyed character, typical of upland areas with high rainfall. Natural vegetation includes heather, Molina and Nardus grasses, and Sphagnum in boggy areas.

The principal use of the upland is for rough grazing. Pasture improvement by drainage, ploughing and reseeded, and stone clearance undertaken in some areas has permitted an increase in stocking levels, largely for sheep farming. In other areas, principally towards the southern boundary of the study area, some land has been given over to conifer plantation. Other broken tracts of forestry occur to the north of the river Carno.

The study area lies just outside the eastern boundary of the northern part of the Cambrian Mountains Environmentally Sensitive Area designated by the Secretary of State, and there are few constraints at either a national or local level on further upland improvement or afforestation.

Upland improvement has been active in many parts of the study area and yet relatively little archaeological fieldwork had been carried out. Apart from a recent survey carried out in an area to the east of Llyn y Tarw and around Garreg Hir (Dorling 1986), the existing archaeological record for the study area is largely based upon antiquarian references, field notes by the Ordnance Survey and from a rapid parish survey carried out by an MSC-funded field team in 1978 for the Clwyd-Powys Archaeological Trust.

A total of about 200 upland field monuments were already known within the study area. The principal field monument types present include Bronze Age burial cairns, stone circles, standing stones, Medieval and Post-Medieval hafotai, clearance cairns and boundaries of unknown date, and the known distribution suggested a clustering of sites rather than a uniform distribution across the upland. A significant proportion of the sites are fairly indistinct as field monuments, and it is significant, for example, that of the 5 stone circles known within the study area, two at Y Capel, Llanllugan (Butler and Butler 1978), and Llyn y Tarw, Aberhafesp (Dorling 1982), are both composed of small stones, and were only first discovered in recent years. Peter Dorling has already drawn attention to the effects of upland improvement on archaeological sites within the area in a paper published in 1986. A full list of archaeological monuments and an index of monument types within the survey area is presented in Appendix 1

OBJECTIVES OF THE STUDY

The principal objectives of the study were as follows:

- * Evaluation of the completeness of the existing record of archaeological sites in this upland area (in this instance The Powys Archaeological Record maintained by the Clwyd-Powys Archaeological Trust) and an assessment of the present condition of known sites.
- * Identification of archaeological sites and archaeologically sensitive areas which are vulnerable to further upland development.
- * Evaluation of field and office-based techniques of rapid archaeological survey in order to assess the potential of upland areas subject to improvement (principally from the viewpoint of planning control rather than permanent record).
- * Formulation of policies for improving the management, recording and rescue excavation of upland archaeological sites.

PROGRAMMING

Following consultation with the sponsoring bodies, the following programme was devised by which these objectives could be met within the limited time available:

- * Background studies. Preparation of base maps and catalogue of archaeological sites within the study area as shown on the Powys Archaeological Record. Consultation with a limited number of relevant organizations which have carried out upland surveys. Examination of vertical aerial photographic coverage of the study area in order to test their usefulness in the identification of known and unknown archaeological sites. Assessment of recent or impending land-use changes. Selection of varied target areas within the study area for rapid survey. (October 1986-January 1987).
- * Rapid survey of target areas by a combination of fieldwork and specially-commissioned oblique aerial photography with the objective of monitoring the condition of known monuments, confirming new sites identified by the study of the vertical aerial photographs and examining in greater detail the impact of recent and impending land-use changes on archaeological monuments. (February 1987).
- * Preparation of a report on the results of the study. (March 1987).

RESOURCES

The following resources were made available for the study:

- * The project (CPAT 14) was set up at short notice by agreement with Cadw and the MSC, following the cancellation of the Trust's Nant Helen project in the 1986/87 financial year. Overhead costs were met by Cadw from a partial reallocation of project funds, and by the MSC. The study was carried out during a period of six months between October 1986 and March 1987.
- * Staffing was as follows: Kenneth Brassil (Field Officer, CPAT) during a 6-month period, funded by Cadw; 3-month part-time assistance (January-March 1987) by James Thorburn (project supervisor with CPAT's Community Programme scheme), was funded by the MSC; 1 month part-time assistance with drafting by Gary Lancaster (participant with Community Programme scheme).
- * A special grant from Cadw for oblique aerial photography to be carried out for the Trust by C. R. Musson, Investigator (Aerial Photography), RCAHM.

Details of the use of resources during the course of the study are presented in Appendix 2.

RESULTS OF THE STUDY

Archival material resulting from the survey (plans, field notes, photographic records) have been incorporated into the Powys Archaeological Record held in the Trust's Welshpool office).

The methodology and results of each aspect of the study are summarized in the following sections

CONSULTATION

Various upland user groups, conservation bodies and organisations which have undertaken similar surveys in the past were consulted. The Countryside Commission (Newtown) was the primary source of information about groups with interests in the uplands. The RSPB (Newtown), one of the notable conservation bodies with specific interests in the Cambrian Mountains, offered comments on current threats to wild moorland. The Project Officer of responsible for the Northern Area of the Cambrian Mountains Environmentally Sensitive Area (WOAD, Llandrindod Wells). County representatives of the NFU and FWU provided advice on the operation of the Agricultural Improvement Scheme administered by WOAD. Comments on forestry planning procedures and

Forestry Grant Scheme administered by the Forestry Commission were provided by the Forestry Commission (Wales Conservancy, Aberystwyth) and the Conservation Officer attached to the Planning Department, Powys County Council (Llandrindod Wells). Discussions were held with the staff of the Air Photography Unit of the Royal Commission on the Historical Monuments of England (London) who had carried out rapid upland surveys, including that on Dartmoor (Soffe 1985), in order to benefit from their extensive practical experience of the problems involved. Other fieldworkers with direct experience of upland survey in England and Wales who were contacted with regard to general methodology included Nick Johnson (Cornwall County Council) and John Manley (Clwyd County Council).

LAND-USE SURVEY

A recent report by the RSPB (RSPB 1986) provides a useful summary of the broad land-use changes within the study area which was helpful in selecting target areas for fieldwork. It presents details of areas of upland which have been improved or afforested by the early 1970s, together with changes up until 1985. The information is summarized in Figure 3 in the present report.

Fairly extensive areas of unimproved and unafforested upland still survives in the north-east and western parts of the study area (Figure 3). A sizable proportion of the wild upland is common land, although some common land at Trannon and Bryn Fawnog has been improved, and forestry has impinged on common land at two locations in these areas.

The most dramatic instances of recent land improvement in the study area proved to be Newydd Fynyddog and the area around Garreg Hir and Llyn y Tarw (Figure 3). Unimproved land on Newydd Fynyddog, for instance, only survives on its western side and on the steeper slopes. Here, as in the other areas, extensive land-improvement is associated with newly-built grant-aided upland road systems which provide access to the plateau from farms at the foot of the hill.

The main concentrations of forestry lie on the northern and south-western margins of the study area - Trannon Forest, Trefeglwys and Fridd Forest, Cerno. Since the survey of sponsored by the Countryside Commission in 1971 (Sinclair and Parry 1985), the most extensive areas of new afforestation have been as infill and extensions to well-established forests (Figure 3). No assessment has been made of what archeological sites may have been damaged or destroyed when these forests were planted.

AERIAL SURVEY

Several different collections of vertical aerial photographs were consulted. The main source was a vertical 1:10,000 colour survey commissioned by Montgomery District Council by J. A. Storey Photographics Ltd carried out in May 1984. The prints are of good quality and provide a recent record of the landscape at a time of year when vegetation cover is minimal. The study area is covered by 210 prints each covering an area of about 1 sq km. Of these, 150 prints (in the central and western parts) were examined in detail, and the remainder were scanned. Stereoscopic pairs of the whole area were

examined with the aid of a stereoscope in the Montgomery District Council's offices, with the objective of identifying both known monuments and new sites. Sites which could be identified in this way were plotted directly from the photographs onto a series of plastic overlays at a scale of 1:10,000, and were listed on specially-prepared Aerial Photograph Interpretation Record forms. New and improved farm access roads were also recorded since experience has shown that these are often to be seen as the precursor of pasture-improvement and afforestation in Mid Wales.

Parts of the study area are also covered by black-and-white vertical surveys by Cartographical Services Ltd (1980) and Meridian Airmaps Ltd (1981), also at a scale of 1:10,000. A limited number of prints were made available by the Air Photographic Officer of WOAD, Aberystwyth, but due to the poorer quality of the prints and the lack of colour they proved to be less valuable than the Montgomery District Council's colour survey.

In the event, it has proved impossible to undertake the full oblique aerial photography of selected target areas intended as part of the project. It has not been possible to combine the availability of a plane with suitable conditions of low sunlight and clear visibility in the previous 6 months. A preliminary 1-hour flight was carried out over the target areas in October 1986, essentially in order to become familiar with the terrain. This has been followed by only 30 minutes flying of selected areas, carried out in transit on other flights since that time. These flights were carried out in suitable conditions of low sunlight, but with hazy visibility.

Upland field monuments in the survey area tend to be isolated and relatively slight, and are often indistinct even on the ground. Thus, whilst the vertical air coverage within the study area has proved to be useful for studying current land-use, it has been generally unproductive from the point of view of identifying known or new sites. Thus, of a total of 200 known upland monuments within the study area, only 16 could be identified on the vertical photographs, all of which were the larger and more distinct monuments - pillow mounds, enclosures, and the larger cairns. No new sites were positively identified from the aerial photographs, although some were discovered during the course of subsequent fieldwork. The limited amount of oblique aerial photography carried out as part of the survey again suggests that the technique is valuable in monitoring land-use changes affecting known monuments, but the suggestions are that in areas like this, it will be inadequate as a principal means of identifying new sites.

The combination of vertical and oblique aerial photography has proved to be an invaluable adjunct to rapid surveys carried out by the Royal Commission in England in the Cheviots, Dartmoor (Soffe 1985) and Bodmin Moor (Johnson 1984), for example, principally in recording linear monuments such as field systems and settlement enclosures. Even in these instances, however, it has been seen a secondary rather than a primary means of survey (Johnson 1984, 10), and has proved unsatisfactory in identifying small or isolated sites (Soffe 1985, 19).

FIELD SURVEY

Following completion of the background studies involving the examination of the vertical air photographic coverage and recent land-use surveys, five target areas were selected for rapid field survey - Newydd Fynyddog, Llanbrynmair; Trannon, Llanbrynmair; Esgair y Groes, Trefeglwys; Yr Allt, Carno; Carreg Hir - Llyn y Jarw, Llanllugan, Tregynon, Aberhafesp and Llanwnog (Figure 2). The target areas were selected as representing varied terrain and land-use patterns, all of which are under a general threat posed by land improvement or afforestation, with the purpose of assessing both the reliability of the existing record and the effects of past and future land-use changes on archaeological sites within them. Some areas correspond with known concentrations of archaeological sites, whilst others were almost blank.

Each of the target survey areas was covered fairly intensively by a two or occasionally three-person team. Known sites were revisited to record their present condition and current land-use (relevant notes being made on the Trust's Site Visit Forms). A photographic record was made of each site. In addition, the location and brief descriptions were made of the 20 new monuments discovered during the course of the field survey. A total of about 15 kilometre squares were covered in about 30 working days including travelling time.

Brief notes on each of the survey areas is followed by Table 1 which summarizes the numbers of sites visited in each area, together with an assessment of damage or impending threat.

NEWYDD FNYDDOG

This forms an isolated flat-topped hill plateau of some 3 sq km with areas of improved pasture and moorland. Each farmer with land on the hilltop has opened up a new farm access road, of which there are now about eight, largely on the steep western slopes of the hill. This proliferation of new grant-aided roads exemplifies the association with land improvement schemes: two-thirds of the former grouse moor on the hilltop have been improved and reseeded over the last decade, and little unimproved ground survives on the eastern and southern sides of the hill. The target area was selected because of a concentration of known sites corresponding with an area of dramatic land-use changes.

Due to problems of access only half the area could be walked. Known archaeological sites on the hill include the Cerrig Caerau stone circle (SAM Mg 66, PAR 721) and Yr Allor cairn (SAM Mg 67 and 209, PAR 1311), the Lled Croen yr Ych stone circle (SAM Mg 68, PAR 722) two small cairns (PAR 6163, 6164) and two house platforms (PAR 1738, 4286), the latter only metres away from the end of a new access road. Three previously unrecorded sites were noted on unimproved ground, comprising two low cairns and a possible unobtrusive stone alignment (PAR 6163, 6164, 6165).

Specific instances of damage to individual sites involve two of the Scheduled Monuments. The Lled Croen yr Ych stone circle (SAM Mg 66, PAR 721), shows clear evidence of recent damage. The site lies within an area of improved grassland (although the area inside the circle has not been reseeded). The present appearance of the site bears little resemblance to

the plan published by Grimes (Grimes 1963, Fig. 24) from a survey carried out in the 1960s before the heather moor had been improved. Outlying stones have now disappeared, and the circle has probably been added to by stones which have been recently moved. Soil around the base of the stones is being eroded away as a result of current stocking levels of sheep. Yr Allor cairn (SAM Mg 67 and 209, PAR 1311), lies in one of the few remaining unimproved areas on the hilltop; it has been damaged by use as a shooting butt in the past, but the cairn has been affected more recently by the disturbance of stones and by additional stone having been dumped upon it. Further land improvement will probably affect other sites during the course of time.

TRANNON

There are no major rock outcrops on this plateau area, and a mantle of glacial drift gives a smooth undulating profile to a series of low north-south ridges. Over half the area is common land, and little improvement has yet been made to the open landscape of rough grass with extensive areas of peat bog, although an extensive area of afforestation bounds the southern end of the moor. The target area was selected since it is the most extensive area of unimproved rough pasture within the study area, containing local concentrations of monuments.

About 6 sq km of the moorland were surveyed. Known archaeological sites within this area include Twr Gwyn Mewr cairn (PAR 910), Carreg Llwyd stone alignment (PAR 4309) and Blaen y Cwm cairn (PAR 4311). Newly discovered sites include a group of 3 possible clearance cairns near the main cluster of known sites in the vicinity of the Twr Gwyn cairn.

At least four new grant-aided roads have been built since 1984 to give access to the eastern side of the moor, and as in other areas a generalised threat to the archaeological landscape, particularly outside the common, is only to be expected from future land improvement or afforestation.

ESGAIR Y GROES

This is an area with low, undulating ridges; there are no rock outcrops, but occasional boulders protrude from areas of glacial drift. The vegetation is essentially rough grass and heather moor, with some areas of peat bog. Improvement has largely been forestalled since most of it is common land. The southern and western edges of the area is formed by the ffridd boundary, which is skirted by an extensive area of afforestation known as Trannon Forest. Recent land improvement encroaches upon the eastern side of the moor, where rough grazing has been enclosed, ploughed and reseeded, and areas of peat bog have been drained. The target area was selected because of the potential threat from extension to the afforested area on the west and by piecemeal land improvement on the east.

About 1 sq km of the area was covered intensively. Known archaeological sites include isolated cairns (PAR 4874, 4877) and Llyn Fawnog Ddu standing stone (PAR 3583). Newly discovered sites include a short stone setting and an area of possible clearance cairns. Other isolated low standing stones running across a large area of bog and ridge slopes may be boundary markers (PAR 5019). No specific instances of damage to sites was recorded, but sites will become vulnerable with creeping land improvement.

YR ALLT

This ridge forms a spur of unimproved moorland surrounded by forestry and improved pasture. The target area was selected since it is a small area bounded by existing forestry, which might be subject to infill planting in future.

About 1 sq km was covered during the survey. The only known site is a well-preserved unscheduled ring-cairn (PAR 911), obscured by heather. One new site was discovered - a possible recessed house platform. A generalised threat to these sites is posed by any further extension of afforestation or land improvement.

CARREG HIR - LLYN Y TARW

This upland area is formed of a series of parallel, north-south crags with minor scree slopes, and is exceptional within the study area due to the presence of extensive areas of rock outcrop. Areas between the crags have been patchily improved, leaving areas of rough grass littered with boulders, but extensive land improvement has accelerated in recent years at the northern and southern ends of area, involving drainage, stone clearance and reseeded. The target area roughly corresponds with a survey area covered by Peter Dorling (Dorling 1986). Only about 5% of the area had been improved by about 1978, but by early 1984 up to 80% of the area had been or was in the process of being improved (Dorling 1986, 40). The target area was selected since it was one of the few parts of the study area which had seen intensive fieldwork in recent years and allowed the effects of land improvement during the last few years to be monitored in more detail.

An area of about 3 sq km was covered during the field survey. Monuments within the target area have been listed by Dorling (1986). A new small earthwork enclosure site was recorded towards the south-east side of the area in currently unimproved ground.

The small unscheduled Y Glonc kerb ceirn first recorded in 1980 was destroyed unwittingly during the course of pasture improvement in 1983 (Dorling 1986, 43-4; PAR 4798). Other specific instances of damage to individual sites involve three cairns: one (PAR 762) has been cut by a land-drain; a second has been ploughed and reseeded (PAR 5772), and a third has been partly buried beneath a new access road (PAR 1548). Two standing stones near Llyn y Tarw both lie in areas of improved grassland: one of the sites (PAR 4318) is surrounded by an unusual circular kerb of stone which is being disturbed by farm vehicles, the other (PAR 764) is becoming engulfed by large stones which are being dumped around it (cf Dorling 1986, 40). Previous damage is recorded on two further sites which lie just outside the target areas; small amounts of stone have been added in recent years to the Llyn Mawr ring-cairn (SAM Mg 180, PAR 1549), and a possible cairn first recorded in the early 1960s (PAR 1174) on the northern edge of Llyn y Tarw, cannot now be identified, but presumably buried by one of a number of modern stone clearance cairns in the vicinity (Dorling 1986, 40).

TABLE 1: SUMMARY OF FIELD SURVEY RESULTS

area	area surveyed km sq	sites visited			damaged	threat
		unscheduled	scheduled	new		
Newydd Fynyddog	c2	2	3	3	2	4
Trennon	6	9	0	3	-	12
Esgair y Groes	3	6	-	5	-	1?
Yr Allt	1	1	-	1	-	-
Garreg Hir-Llyn y Terw	3	21	-	8	6	3

CONCLUSIONS DRAWN FROM THE SURVEY

Returning to the objectives outlined at the beginning of the study, the following conclusions emerge.

THE COMPLETENESS OF THE EXISTING ARCHAEOLOGICAL RECORD

Twenty new upland field monuments were identified during the course of rapid field survey of selected target areas, and the study clearly shows that further sites await discovery. The Trust's Sites and Monuments Record is seen as an index or non-intensive record of archaeological sites. One of its primary purposes is to monitor developments which affect archaeological monuments in order that they might be protected from damage or excavated in advance of unavoidable destruction. The more complete the record, the more effective the role it will play in these processes.

In common with many other parts of central Wales, the existing Sites and Monuments Record of the uplands within the study area is dominated by Bronze Age burial cairns and other prominent monument types. Recent fieldwork has identified new monuments of this kind, but has also led to the identification of less distinct monuments including clearance cairns, house sites and boundaries, even in areas which are relatively well documented. In many instances the new sites begin to provide us with the first direct evidence of settlement and land-use with which the burial monuments might be just a part.

Most of the new sites have been found in the vicinity of known monuments. Few sites were found in otherwise blank areas, which perhaps indicates that upland monuments in this part of central Wales are nucleated in particular areas. Further fieldwork is necessary to test this hypothesis, however, and it would clearly be rash to assume that blank areas are blank until this has been confirmed by fieldwork. In addition, monuments in some extensive areas may have been obscured by peat growth since their abandonment, and paradoxically are only likely to be identified during drainage work or ploughing prior to afforestation which will potentially destroy them.

THREATS TO SITES AND AREAS BY UPLAND DEVELOPMENT

Damage to individual monuments, both scheduled and unscheduled, has resulted from a variety of different agricultural processes - stone clearance, drainage works, the passage of farm vehicles, the construction of new access roads, and ploughing for reseeded. Generalised threats of this kind will undoubtedly continue and will potentially affect further known sites as additional areas are improved. Unrecorded sites, many of which are probably more ephemeral but which provide our only direct evidence of former settlement and land-use, have and no doubt will continue to be entirely destroyed without record.

Most of the forests within the study area are the result of pre-1970 planting, and the scale of losses of archaeological sites at during that period is unknown. Only small areas have been planted since then, although the current upsurge in subsidized planting-schemes in neighbouring areas of central Wales may well result in infill planting next to several well-

established forests.

In addition to the destruction of field monuments, there is little doubt that further afforestation and land-drainage will continue to deplete the surviving peat bog deposits which record the history of environmental change and land-use of the region.

TECHNIQUES OF RAPID SURVEY

No single organization has assumed responsibility for the definitive record of archaeological monuments in upland areas of Wales to be completed within a timescale which matches the current levels of threat. One element of the present study has therefore been an examination of techniques of rapid survey that might rectify at least some of the deficiencies in the existing record, at levels of expenditure which are likely to be available to the Trust, and designed specifically to meet the needs of conservation, or rescue excavation where preservation is impossible.

The study has shown that available commercial colour and black-and-white vertical aerial coverage was useful in monitoring recent land-use changes and in the selection of target areas for fieldwork, but is of limited value in either assessing the current condition of known monuments or in the identification of new sites.

Only a limited amount of oblique photography could be undertaken as part of the study. This points to its usefulness in both monitoring land-use changes and their effects on known monuments, but would again appear to be less useful in the identification of new sites.

In the present study area, therefore, (which is not untypical of much of central Wales) traditional field survey techniques are likely to continue to play a primary role in monitoring the specific effects of development on known monuments, their recording and interpretation, and in the discovery of new sites. Experience has shown that if oblique photography is to play a part in a survey project, it should be arranged well in advance of ground survey if the two are to be used effectively in conjunction.

Both vertical and oblique photography will continue to play a significant role in the discovery and interpretation of upland landscapes with greater concentrations of field monuments, and particularly those which include linear monuments such as field systems, land divisions and enclosure sites, as for example in the recent discovery of upland field systems in parts of the Berwyns near Llandrillo, Clwyd, during aerial survey work undertaken by the Trust. To date, the potential of the technique has been underestimated in Wales as a whole, though it has played a minor role in upland surveys carried out in Arduwy (Kelly 1982) and Hiraethog (Manley 1985, 86) for example.

IMPROVEMENTS IN THE PROTECTION AND MANAGEMENT OF ARCHAEOLOGICAL SITES

The archaeological monuments of the Welsh uplands comprise a valuable resource which still has much to tell us about the economic livelihood and social organisation of past societies, and it is in the longer term interest of such studies that sites should be protected from unnecessary disturbance.

Given a fuller record of upland monuments than currently exists, the study suggests that an approach to the problem at two different levels will be important - firstly an increase in the number of sites awarded statutory protection, and secondly improvements in the present channels of communication between archaeologists and groups with user or conservation interests in upland areas.

An increase in the number of Scheduled Ancient Monuments will be important in the continued preservation of a greater number of sites. (A list of sites within the present study area recommended for scheduling is presented in Appendix 3.)

Probably no more than a small proportion of known sites fulfill the current criteria for scheduling, however, and even the continued preservation of Scheduled sites is not guaranteed. Experience has shown that the continued preservation of unprotected sites is enhanced by direct and regular contact with landowners or bodies responsible for the administration of forestry and land-improvement schemes affecting the uplands.

The group value of clusters of sites - prehistoric monuments, for example, combining different aspects of past human activity such as land-use, settlement, burial and ritual - can provide a quality of evidence which transcends the single site. The emphasis here - the preservation of selected landscapes including complexes of different kinds of monument and associated environmental evidence could be promoted within local planning departments and might benefit from a coordinated approach with other conservation bodies.

RECOMMENDATIONS

The following recommendations emerge from the study which have wider relevance to upland archaeological monuments throughout Clwyd and Powys. The Trust's area contains the largest single proportion of upland Wales (Darvill 1986a, Table 2), and its scale of activity in this sphere should be commensurate with this responsibility.

- * **The Trust should promote an awareness of the importance of archaeological monuments in upland areas of Clwyd and Powys, and of the potential affects of continued land-use changes upon them**

Work of this kind, carried out with appropriate funding at a local level, would be considerably enhanced by a nationwide campaign targeted at foresters, farmers and local authorities. Leaflets such as Farming and the Historic Landscape distributed by the Historic Monuments and Building Branch, Department of the Environment and Department of Agriculture, Northern Ireland, provide a model which could be adopted as part of such a campaign.

- * **The Trust should continue to comment on schemes affecting archaeological monuments in upland areas in Clwyd and Powys.**

A high proportion of the land-improvement and afforestation applications which the Trust is asked to comment upon, often at short notice, either affect areas which have not been visited for a number of years or which appear to be blank on the archaeological record. It is essential that any recommendations made by the Trust should be well-informed, and yet with increasing pressures upon both staff time and travel costs, it is often difficult to carry out this work effectively. It is therefore recommended that additional resources should be sought to carry out this essential work. In practice, this work is seen as a means of safeguarding individual isolated monuments rather than areas, which are the subject of the following recommendation.

- * **The Trust should define important areas of upland archaeology in Clwyd and Powys and promote their continued preservation.**

It is seen as important to secure the long-term preservation of intact and representative landscapes combining a range of different monument types and environmental evidence. It is recommended that the following programme, suitably funded over a number of years, would achieve this objective. Firstly, the Trust should define (initially on the basis of the existing archaeological record), those upland landscapes within its area which are most worthy of preservation. Secondly, the Trust should promote a prompt and definitive archaeological survey of the areas thus defined (possibly to be undertaken by the National Archaeological Survey of the RCAHM). Thirdly, the Trust should seek to foster the preservation of these areas.

A C K N O W L E D G E M E N T S

The authors are grateful for the assistance given by Dr Lesley Macinnes (Cadw:Welsh Historic Monuments), Mr Chris Musson (Aerial Photography Investigator, Royal Commission of Ancient and Historic Monuments, Wales) and Mr Bill Britnell (Director, The Clwyd-Powys Archaeological Trust), Mr Chris Martin (Records Officer, The Clwyd-Powys Archaeological Trust). Mr Graham Davey and Mr John Napier kindly provided facilities for the study of the vertical air coverage belonging to Montgomery District Council. Further advice was given by Alan Rugman (Countryside Commission); Roger Lovegrove (RSPB); Graham Soffe and Dr Rowan Whimster (Air Photography Unit, NMR England); John Addie (Conservation Officer, Powys County Council); Ieuan Greally (Project Officer, ESA); Jeffrey Robinson (WOAD).

R E F E R E N C E S

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A P P E N D I X 1

CATALOGUE OF ARCHAEOLOGICAL SITES IN THE CAERSWS-LLANBRYNMAIR STUDY AREA

The catalogue of sites is an extract from the Powys Archaeological Record maintained by the Clwyd-Powys Archaeological Trust. It includes a selection of sites listed in the 6-inch Ordnance Survey quarter-sheets SH80SE, SH90SW, SH90SE, SJ00SW, SN89NE, SN89SE, SN99NW, SN99NE, SN99SW, SN99SE, SQ09NW, SQ09SW, which encompass the the limits of the study area. Scheduled Ancient Monument numbers (SAM) are given where appropriate.

The catalogue is followed by an index of site types.

NO.	SITE NAME	GRID REF.	COMMUNITY
0091	Capel (Y) Stone Circle	SH99950004	Llanllugan
0719	Ffridd Cwm Y Ffynnon Barrow	SH91830498	Llanbrynmair
0720	Esgair Priciau Cairn	SH93200413	Llanbrynmair
0721	Cerrig Caerau Circle	SH90280050	Llanbrynmair
0722	Lled Croen Yr Ych Stone Circle	SH90400055	Llanbrynmair
0723	Cuffiau Bach Stone	SN98289156	Trefeglwys
0724	Cae Garreg Stone	SN97469108	Trefeglwys
0762	Pen Y Groes Isaf Cairn	S003569867	Llanwyddelan
0763	Pen Y Groes Uchaf Cairn	S003179835	Tregynon
0764	Carreg Hir Stone	S001419685	Llanwnog
0770	Wyle Cop Hillfort (SAM Mg123)	S002349454	Llanwnog
0771	Gwyn Fynydd Enclosure (SAM Mg64)	S003879361	Llanwnog
0772	Caersws Fort II (SAM Mg1)	S002929198	Llanwnog
0773	Llanwnog Parish Finds	S00293	Llanwnog
0773A	Llanwnog Parish Find I	S00293	Llanwnog
0773B	Llanwnog Parish Find II	S00293	Llanwnog
0774	Park Ferm Kilns	S000939176	Llanwnog
0775	Moat Farm Motte and Bailey (SAM Mg17)	S004659048	Llandinam
0776	Pont Dol Goch Find	S000869383	Llanwnog
0777	Parc Pen Prys House	S000909206	Llanwnog
0778	Henfryn Enclosure I	S002709290	Llanwnog
0910	Twr Gwyn Mawr Cairn	SN91819591	Carno
0911	Braen Y Cwm Ring Cairn	SN98049867	Carno
0912	Nant Cwm Gerwyn Cairn I	SN99509863	Llanwnog
0913	Nant Cwm Gerwyn Cairn II	SN99339859	Llanwnog
0914	Nant Cwm Gerwyn Longhouse	SN99639859	Llanwnog
0915	Craig Y Llyn Mawr Hut I	SN99809835	Llanwnog
0916	Craig Y Llyn Mawr Hut II	SN99799819	Llanwnog
0917	Craig Y Llyn Mawr Hut III	SN99649811	Llanwnog
0918	Carno Cross	SN95769731	Carno
0919	Caer Noddfa Fort (SAM Mg52)	SN96269656	Carno
0920	Garreg Enclosure	SN99309768	Llanwnog
0923	Cil Haul Hoard	SN94569081	Trefeglwys
0966	Cefn Carnedd Hillfort (SAM Mg16)	S001609000	Llandinam
0974	Perth Eiryn Find	S0007936	Llanwnog
1174	Llynitarw Cairn	S001869754	Llanwnog
1308	Cwm Ednant Pillow Mounds	SH862004	Darowen
1309	Domen Fawr Tafolwern Motte (SAM Mg65)	SH89100263	Llanbrynmair
1310	Bont Dolgadfan Find	SH88640021	Llanbrynmair
1311	Allor Cairn I (SAM Mg65)	SH89840040	Llanbrynmair
1320	Talerddig Chapel Site	SH9300	Llanbrynmair
1321	Talerddig Chisel Find	SH9300	Llanbrynmair
1332	Y Foel Mounds	SJ01100180	Llanllugan
1371	Llanbrynmair Find	SN88899878	Llanbrynmair
1372	Mynydd Esgair Enclosure	SN89939807	Llanbrynmair
1373	Mynydd Esgair Enclosure	SN89849913	Llanbrynmair
1378	Penycrocbren Fortlet (SAM Mg106)	SN85609349	Penegoes
1379	Penycrocbren Gibbet (SAM Mg105)	SN85489346	Penegoes
1380	Penfforddilas Barrow I (SAM Mg171A)	SN87829238	Trefeglwys
1381	Penfforddilas Barrow II (SAM Mg171B)	SN87759232	Trefeglwys

CONTINUED

NO.	SITE NAME	GRID REF.	COMMUNITY
1382	Llwyn y Gog Round Barrow (SAM Mg171C)	SN87719203	Trefeglwys
1383	Clap Mawr Barrow (SAM Mg171D)	SN88089158	Trefeglwys
1384	Penffordlas Barrow V (SAM Mg171E)	SN87459087	Trefeglwys
1385	Dylife Flint Chipping Floor	SN860941	Penegoes
1386	Penycrocbren mine	SN85809363	Penegoes
1387	Farmstead Bwlch y Gareg Wen	SN85509245	Trefeglwys
1391	Pen y Cae Cropmarks	SN86959270	Penegoes
1393	Ddwynant Gerig Cropmarks	SN88819376	Trefeglwys
1396	Twr Gwyn Bach	SN91899519	Carno
1397	Castell Carno Hillfort	SN94899610	Carno
1398	Carreg Lwyd Cairn I	SN91909576	Carno
1399	Warren House Junction Find	SN94439657	Carno
1400	Trannon Find	SN9196	Llanbrynmair
1404	Clawdd Y Coed Earthwork	SN92859860	Llanbrynmair
1417	Carno Parish Finds	SN9596	Carno
1417A	Carno Parish Find I	SN9596	Carno
1417B	Carno Parish Find II	SN9596	Carno
1417C	Carno Parish Find III	SN9596	Carno
1417D	Carno Parish Find IV	SN9596	Carno
1418	Tyn Yr Wtra Find	SN9795	Carno
1422	Carno Find I	SN9596	Carno
1428	Cae Garn Cropmarks	SN95909559	Carno
1442	Carneddau Placename	SN99309960	Carno
1446	Carreg Slicen Stone	SN91989384	Trefeglwys
1447	Cefn y Cloddiau Hillfort	SN91889027	Trefeglwys
1448	Gmbyn Mine	SN92409176	Trefeglwys
1449	Carreg Hir Stone Site	SN91949472	Trefeglwys
1450	Glan Yr Afon Find I	SN940910	Trefeglwys
1452	Trefeglwys Parish Finds	SN9790	Trefeglwys
1452A	Trefeglwys Parish Find I	SN9790	Trefeglwys
1453	Cereg Y Terfyn Hut III	SN91449418	Trefeglwys
1456	Maesmor Enclosure	SN91559315	Trefeglwys
1464	Careg Y Tarfyn	SN91279450	Trefeglwys
1548	Mynydd Clogau Cairn	S004059900	Llanwyddelan
1549	Llyn Mawr Ring Cairn (SAM Mg180)	S01369700	Llanwnog
1550	Waen Y Llyn Enclosure	S001439872	Llanwyddelan
1553	Lluestrcerrig Longhouse I	S002299926	Llanllugan
1557	Brynyfawnog Hut	S003959829	Tregynon
1559	Brynfawnog Mound	S0031978	Aberhafesp
1562	Ddified Cropmark I	S001949538	Llanwnog
1563	Garreg Lwyd Placename	S004859555	Aberhafesp
1572	Carnedd Finds	S0022912	Llandinam
1573	Caersws Find I	S00391	Llandinam
1574	Pen Y Borfa Find	S002259270	Llanwnog
1575	Llwyn Y Brain Fort (SAM Mg161)	S004009250	Llanwnog
1576	Cae Carn Placename	S000279041	Llandinam
1577	Cae Doman Placename	S002819041	Llandinam
1578	Cae Clawdd Bach Ugha2Issa Placename	S0038910	Llandinam
1579	Cae Garreg Placename	S000109181	Llanwnog
1717	Carreg Noddfa Stone	SH852025	Darowen

CONTINUED

NO.	SITE NAME	GRID REF.	COMMUNITY
1728	Llanbrynmair Quern Find	SH88420075	Llanbrynmair
1729	Lluest Cethingrych Hafod	SH85790091	Darowen
1730	Cae Sarn Placename	SH864041	Cemmaes
1731	Dol Garn Placename	SH888017	Llanbrynmair
1732	Cae Garreg Placename	SH89970273	Llanbrynmair
1733	Bryn y Groes Placename	SH89250200	Llanbrynmair
1738	Braich Odnant Platform	SH90570109	Llanbrynmair
1739	Dol Lydan Maul Find	SH909021	Llanbrynmair
1740	Cae Y Garreg Placename	SH91190207	Llanbrynmair
1757	Cae Garn Fawr Cairn	SJ02470160	Llanllugan
1758	Llidiardau Mawr Stones	SJ02820234	Llanllugan
1773	Pant y Ffynnon Flint Chipping Floor	SN86909360	Penegoes
1775	Blaen Y Cwm Bank	SN98809860	Carno
1777	Cae Garreg Placename	SN97799562	Carno
1778	Pont Y Sarn Earthwork	SN95289790	Carno
1779	Gwernafon Farm Find	SN925910	Trefeglwys
1780	Pen Y Graig Smelting Site	SN96359090	Trefeglwys
1783	Cil Haul Find	SN9590	Trefeglwys
1784	Sentry Find	SN99159260	Llanwnog
1786	Caersws Bridge Find	S00391	Llandinam
2003	Caeauduon Road	SN94259960	Carno
2195	Moat Lane Ring Ditch I	S004469134	Llandinam
2507	Park Cottage Ring Ditch I	S001829219	Llanwnog
2508	Park Cottage Ring Ditch II	S001859224	Llanwnog
2509	Park Cottage Enclosure	S001859198	Llanwnog
2509A	Park Cottage Enclosure	S001859198	Llanwnog
2509B	Park Cottage Ring Ditch III	S001859196	Llanwnog
2510	Blackhall Cottages Ring Ditch I	S001729315	Llanwnog
3355	Twmpath Melyn Barrow	SH974022	Carno
3356	Twmpath Melyn Stone	SH96100228	Carno
3381	Sarn Meadow Placename	S000059045	Llandinam
3426	Craig y Pit Enclosure	SH89970073	Llanbrynmair
3427	Cerrig Caereu Mounds	SH90200040	Llanbrynmair
3471	Waun Ddeiliog Barrows	SN8696	Llanbrynmair
3472	Wern Gerhynt Village	SN897999	Llanbrynmair
3474	Llyn Mawr Cairns	S00097	Llanwnog
3492	Fuches Earthwork	SN86889258	Penegoes
3493	Ysgubor Pen y Bryn Find	SN881903	Trefeglwys
3494	Nant yr Hafod Oval Earthwork	SN87749088	Trefeglwys
3571	Twr Gwyn Battle Site	SN91819593	Carno
3572	Wtra'r Abbot Placename	SN96709650	Carno
3575	Carno Cockpit	SN96009680	Carno
3576	Pen Y Bryn Castell	SN978972	Llanwnog
3581	Esgairdraenllwyn Cairn	SN92659442	Carno
3582	Wern Pound	SN98159053	Trefeglwys
3583	Llyn Fawnog Ddu Stone	SN95329328	Trefeglwys
3850	Twr Gwyn Cropmark	SN91929601	Carno
3889	Cae Gerrag Fawr Placename	SJ04710136	Llanllugan
4027	Llwyn y Gog Barrow II	SN88009200	Trefeglwys
4028	Lluestrcerrig Longhouse II	S002379922	Llanwyddelan

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NO.	SITE NAME	GRID REF.	COMMUNITY
4029	Pen y Groes Boundary Stone I	S003169838	Tregynon
4041	Cae Lluest Platform	SH86360454	Cemmaes
4042	Cae Lluest Platform	SH86370451	Cemmaes
4043	Moel Eiddew Platform	SH86600483	Cemmaes
4045	Cerrig Caerau Stones	SH90180035	Llanbrynmair
4091	Pistyll Ddu Cairn	SH99700060	Llanllugan
4133	Llanbrynmair Parish Find II	SH8902	Llanbrynmair?
4251	Foel (Y) Farmstead	SJ01740181	Llanllugan
4264	Esgair Carnedd Placename	SH93000330	Llanbrynmair
4284	Llyn y Tarw Stone Circle	S002579762	Aberhafesp
4286	Craig y Pit Platform House	SH89970057	Llanbrynmair
4287A	Llanbrynmair Parish Find I	SH8902	Llanbrynmair
4288	Ffridd Pwll Y Werthol Cairn	SH93470408	Llanbrynmair
4293	Allt Ddu Enclosure	SN89619535	Llanbrynmair
4294	Penygeulan Mound	SN87389037	Trefeglwys
4295	Pen y Ffridd Mound	SN86649170	Trefeglwys
4296	Y Ffridd Mound	SN87189199	Trefeglwys
4301	Penycrocbren Lead Mines	SN85309340	Penegoes
4302	Esgair Garnedd Enclosure	SH92560306	Llanbrynmair
4303	Ffriddystrad Cairn	SN91979900	Llanbrynmair
4304	Trannon Stone	SN91869648	Llanbrynmair
4305	Ystradfawr Cairn	SN91709901	Llanbrynmair
4306	Ystradfawr Mound	SN91889908	Llanbrynmair
4307	Ystradfawr Stone	SN91889907	Llanbrynmair
4308	Trannon Enclosure	SN91999573	Carno
4309	Carreg Llwyd Stone Alignment	SN91949569	Carno
4310	Trannon Moor Cairn	SN92049609	Carno
4311	Blaen Y Cwm Cairn	SN92149599	Carno
4312	Trannon Stones	SN919961	Carno
4316	Gors Goch Stones	SN94189364	Trefeglwys
4317	Llyn Mawr Cairn I	S000199721	Llanwnog
4318	Llyn Mawr Cairn II	S000289718	Llanwnog
4319	Brynyfawnog Enclosures	S0039985	Tregynon
4353	Penrhos Enclosure	SN99099161	Trefeglwys
4358	Twyn Gosod Cairn	SN9195	Carno
4359	Carreg Llwyd Cairn II	SN91899577	Carno
4401	Cae Garn Fach Placename	SJ02750166	Llanllugan
4405	Quakers Garden	SN88929251	Trefeglwys
4406	Rhiw y Felin Stone	SN87429314	Penegoes
4407	Bryncrugog Placename	SN94189228	Trefeglwys
4488	Blackhall Cottage Cropmark	S001709324	Llanwnog
4578	Carnedd Cropmark	S002419123	Llandinam
4579	Gelli Dywyll Enclosure	S003829020	Llandinam
4642	Coed Pen Y Bedw Cropmark	S003429467	Llanwnog
4649	Blackhall Cottages Ring Ditch II	S001769320	Llanwnog
4651	Henfryn Enclosure II	S003309295	Llanwnog
4750	Bryn Du Cairn II	S002799821	Tregynon
4794	Bwlch Y Gors Cairn	S002229901	Llanwyddelan
4795	Cerrig Llwydion Cairn I	S002079883	Llanwyddelan
4796	Cerrig Llwyddion Cairn II	S001779863	Llanwyddelan

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NO.	SITE NAME	GRID REF.	COMMUNITY
4797	Cerrig Llwyddion Long House	S002259889	Llanwyddelan
4798	Glonc (Y) Kerb Cairn	SN99849881	Llanllugan
4799	Gwaenydd Cairns	SJ00150305	Llanllugan
4800	Gwaenydd Cairn	SJ00160295	Llanllugan
4801	Llanllugan Road	SJ04050305	Llanllugan
4802	Mynydd Y Gribin Earthwork	SJ0102	Llanllugan
4803	Bryn Gwyn Potato Store (Marginal)	SH99910245	Llanllugan
4804	Cwm Bank and Ditch	SJ02560249	Llanllugan
4805	Belan Ddu Ditch	SJ03700151	Llanllugan
4806	Pistyll Ddu Longhouse	SH99800050	Llanllugan
4809	Brynfawnog Cairn	S003109757	Aberhafesp
4810	Bryn Du Stona	S002969760	Aberhafesp
4811	Allt Ffynnon Road	S004609600	Aberhafesp
4816	Bryn Du Stone setting	S002609778	Aberhafesp
4834	Pont yr Efail Fach Ridge and Furrow	SN88209770	Llanbrynmair
4835	Cae Gilbert Ridge and Furrow	SN888963	Llanbrynmair
4836	Rhiw Wgan Ridge and Furrow	SN88259845	Llanbrynmair
4837	Cwm Calch Ridge and Furrow	SN91159923	Llanbrynmair
4839	Pandy Rhiw Ridge and Furrow	SH90800445	Llanbrynmair
4840	Ffridd Cwm Ffynnon Cairn	SH91590488	Llanbrynmair
4842	Clawdd Y Coed Water Mill	SN93069856	Llanbrynmair
4863	Carnedd Ridge and Furrow	S0020907	Llindinam
4874	Waungerno Cairn	SN95329435	Carno
4875	Brynyreren Stones	SN93059505	Carno
4876	Brynyreren Cairn II	SN92979481	Carno
4877	Brynygedair Cairn	SN95919409	Carno
4878	Brynyreren Cairn III	SN934957	Carno
4879	Clogiau Clearance Cairns	S0017970	Llanwnog
4881	Stwbl Faen Earthwork	SN99319338	Llanwnog
4882	Lluest Uchaf Stones	S000059834	Llanwnog
4883	Henfryn Mound	S002839270	Llanwnog
4884	Ystrad Faelog Hillfort	SN98909295	Llanwnog
4885	Nant Cwm Garwyn Cairn	SN99609888	Llanwnog
4886	Plas Newedd Hut	SN99849875	Llanwnog
4887	Craig Y Llyn Mawr Cairn	SN99969818	Llanwnog
4888	Craig Y Llyn Mawr Hut VI	SN99769784	Llanwnog
4889	Craig Y Llyn Mawr Hut V	SN99849769	Llanwnog
4890	Lluest Uchaf Cairn I	S000049833	Llanwnog
4891	Lluest Uchaf Cairn II	S000049832	Llanwnog
4892	Llwyn Y Brain Village Site	S004339280	Llanwnog
4967	Moelfre Dam (Marginal)	SN857985	Darowen
4973	Cae Talhaiarn Earthwork	SH85300385	Cemmaes
4987	Ddified Cropmark II	S002059541	Llanwnog
5002	St Davida Church (Site of)	SN86139408	Panegoes
5018	Esgair Y Groes Cairn	SN95619328	Trefeglwys
5019	Esgair Y Groed Stones	SN95429345	Trefeglwys
5020	Maesmor Bank	SN91869321	Trefeglwys
5081	Carreg Y Terfyn Hut I	SN91049466	Llanbrynmair
5082	Carreg Y Terfyn Hut II	SN91289454	Llanbrynmair
5083	Esgairdraenllwyn Enclosure	SN92749433	Carno

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NO.	SITE NAME	GRID REF.	COMMUNITY
5084	Cwm Llymwynt Enclosure I	SN92359335	Trefeglwys
5085	Cwm Llymwynt Enclosure II	SN92259326	Trefeglwys
5086	Garreg Sican Enclosure	SN92689387	Trefeglwys
5088	Geseilfa Ring Ditch	SN94059168	Trefeglwys
5131	Llandinam Hall Enclosure	S003149005	Llandinam
5172	Cae y Garnedd Placename	SH88360407	Llanbrynmair
5249	Bryn Y Castell Earthworks	SH97560491	Llanerfyl
5457	Parc Penprys Find	S001019195	Llanwnnog
5623	Caersws Vicus (SAM Mgl)	S003189208	Llanwnnog
5624	Caersws Vicus (SAM Mgl)	S003229202	Llanwnnog
5648	Dylife Lead Mine	SN859942	Penegoes
5665	Cwm Bryn Moel Enclosure	SN86509498	Penegoes
5750	Lluestddualt Enclosure	SN892906	Trefeglwys
5770	Llynnytarw Cairnfield	S0026975	Aberhafesp
5771	Llynnytarw Hafod	S002349743	Aberhafesp
5772	Mynydd Bwlch Y Gors Cairn	S002749830	Llanwyddelan
5773	Llynnytarw Hut	S001869788	Aberhafesp
5914	Nant yr Hafod Find	SN874912	Trefeglwys
5920	Carreg Hir Find	S001419684	Llanwnnog
5929	Bryn Du Cairn I	S002639763	Tregynon
5934	Nant Cwm Gerwyn Sheepfold	SN99639860	Llanwnnog
5935	Garreg Platform	SN99849784	Llanwnnog
5941	Llanerchyrour Mine	SN867982	Llanbrynmair
5949	Glan yr Afon Find II	SN9491	Trefeglwys
5950	Carno Find II	SN9596	Carno
5951	Carno Find III	SN9596	Carno
5962	Church House Farm Stone II (Marginal)	SN97099067	Trefeglwys
5966	Castle Field (Caersws) Find	S00291	Llanwnnog
5967	Caersws Find II	S00391	Llanwnnog
5968	Caersws Find III	S00391	Llanwnnog
5969	Moat Lane Ring Ditch II	S004449126	Llandinam
5970	Moat Lane Ring Ditch III	S004469124	Llandinam
6065	Ffynnant Isaf Ring Ditch	SN98109120	Trefeglwys
6078	Llynnytarw Clearance Cairns	S00197	Llanwnnog
6079	Pen Y Groes Boundary Stone II	S003569865	Tregynon
6122	Llidiardau Barrow	SJ02300166	Llanllugan
6150	Red House (Caersws) Enclosure II	S004969258	
6151	Wyle Cop Smelting Site	S002389468	
6152	Caersws (Bradley's Garage) Excavations	S003099190	
6163	Allor Cairn II	SH89940040	
6164	Lled Croen yr Ych Cairn	SH904006	Llanbrynmair
6165	Cerrig Cors Hodnant Stones	SH903009	Llanbrynmair
6166	Staylittle Cemetery Barrow	SN883924	Llanbrynmair

SITE TYPE	PERIOD	POWYS ARCHEOLOGICAL RECORD NUMBERS			
Baiting place	Post Medieval	3575			
Barrow cemetery?	Bronze Age	1442			
Barrow cemetery?	Bronze Age?	1428			
Barrow?	Prehistoric	1731	4264	5172	1576
Barrow?	Prehistoric?	4407			
Battlefield	Dark Age	3571			
Boulder	Undated	4312			
Boundary marker	Medieval	1717	4045		
Boundary marker	Post Roman	4029	6079		
Boundary marker?	Post Roman	1777	3356		
Building	Post Medieval?	1396			
Butts?	Post Medieval	3427			
Cairnfield?	Prehistoric?	5770			
Cemetery	Post Medieval	4405			
Chapel	Medieval	1320			
Chipping floor	Prehistoric	1385	1773		
Church	Medieval?	5002			
Coin hoard	Roman	0923			
Cremation?	Prehistoric?	1572			
Cross?	Medieval	1733			
Dam	Post Medieval	4967			
Deserted village	Post Medieval	3472			
Deserted village?	Post Roman?	4892			
Enclosure complex	Post Roman?	4319			
Enclosure complex	Undated	1393			
Enclosure complex?	Undated	1391			
Enclosure	Iron Age?	2509A	4579		
Enclosure	Medieval?	1372			
Enclosure	Post Medieval	4293			
Enclosure	Post Medieval?	5085			
Enclosure	Post Roman?	0920			

CONTINUED

Enclosure	Roman?	4651	5131	6150		
Enclosure	Undated	1456	5750			
Enclosure?	Iron Age?	4308	4353			
Enclosure?	Prehistoric?	4578				
Enclosure?	Roman? 0778					
Enclosure?	Undated	1373	1550	1775	5083	5086
Farmstead	Medieval?	1387	3492			
Farmstead	Post Medieval	4251				
Farmstead?	Post Medieval?	5084				
Field clearance cairn	Modern?	4879				
Field clearance cairn	Post Medieval?	1464	4091			
Field clearance cairn	Post Medieval	4840				
Field clearance cairn?	Prehistoric?	6078				
Field clearance?	Post Roman?	4799	4800			
Field system	Post Medieval	3426				
Field system?	Medieval?	4804				
Field system?	Post Medieval?	5020				
Field system?	Post Roman	1778				
Field system?	Post Roman?	4488				
Find	Bronze Age	1321	1400	1417B	1417D	1422
		1452A	1573	1779	1783	3493
		5920				
Find	Iron Age	1310				
Find	Iron Age?	5951				
Find	Neolithic	0776	0974	1399	1784	5457
Find	Neolithic?	1417A	4287A	5914	5950	
Find	Post Medieval?	4133				
Find	Prehistoric	1371	1418	1450	1574	1739
Find	Prehistoric?	1728	1786	5949		
Find	Roman	5967	0773A			
Find	Roman?	0773B				
Find	Roman?	5968				
Find	Undated	5966				
Find?	Post Roman?	1417C				
Fort	Roman	0772	1378	1575		
Fort?	Roman	0919				
Gallows	Post Medieval	1379				
Gate	Post Roman	1781	5962			
Hafod?	Medieval?	4302				
Hafod?	Post Medieval?	1729	5771			
Hillfort	Iron Age	0770	0966	1397	1447	4884
Hillfort?	Iron Age	0771	3576	4642		

CONTINUED

SITE TYPE	PERIOD	POWYS ARCHEOLOGICAL RECORD NUMBERS				
Hillfort	Iron Age	0770	0966	1397	1447	4884
Hillfort?	Iron Age	0771	3576	4642		
House platform	Medieval?	5665				
House	Medieval?	0914	4806			
House	Post Medieval?	0777				
House?	Medieval	1553				
House?	Medieval?	4028	4797			
Hut	Bronze Age?	4888	4889			
Hut	Medieval?	0915	4886			
Hut	Prehistoric	5773				
Hut	Prehistoric?	0916	0917			
Hut?	Bronze Age?	1557				
Hut?	Prehistoric	5088				
Hut?	Undated	1453	5081	5082		
Incised stone	Dark Age	0918				
Lead mine	Post Medieval	4301	5648			
Lead mine?	Roman?	1448				
Linear earthwork?	Post Roman	1578				
Metal working site?	Post Medieval?	6151				
Milestone	Post Medieval	4406				
Mine	Post Medieval?	1386	5941			
Motte and bailey	Medieval	0775	1309			
Motte?	Medieval	1577				
Multiple site	Multiperiod	0773	1417	1452	4287	
Multiple site	Multiperiod?	2509				
Pillow mound	Post Medieval?	1308	1332			
Platform house	Medieval?	4041	4042	4043		
Platform house	Post Medieval?	1738	4286			
Platform	Post Roman?	5935				
Potato store	Post Medieval	4803				
Pottery kiln?	Roman?	0774				

CONTINUED

SITE TYPE	PERIOD	POWYS ARCHEOLOGICAL RECORD NUMBERS				
Pound	Post Medieval?	3582				
Quarry?	Post Roman?	4881	5249			
Quarrying?	Post Medieval?	4805				
Ridge and furrow	Medieval?	4834	4835	4836	4837	4839
Ring ditch	Bronze Age?	2195	2508	2510	5969	5970
Ring ditch?	Bronze Age	1388				
Road	Medieval?	3572				
Road	Roman	2003	2473			
Road	Roman?	3381				
Road?	Medieval?	4802				
Road?	Post Roman?	1730				
Road?	Roman?	4801	4811			
Round Barrow	Bronze Age	0719	0720	0762	0763	0910
		0911	0912	0913	1311	1380
		1381	1382	1383	1384	1548
		1549	3474	3581	4027	4288
		4303	4305	4311	4317	4318
		4358	4798	4874	4876	4877
		4878	4885	4887	4890	4891
		5018	5929			
Round Barrow?	Bronze Age	1174	1398	1559	1562	1757
		2509B	3355	3471	4294	4295
		4296	4306	4310	4359	4401
		4649	4750	4794	4795	4796
		4809	4816	4987	5772	6122
		6163	6164	6166		
Round Barrow?	Bronze Age?	6065				
Round Barrow?	Undated	2507				
Sheepfold	Medieval?	5934				
Sheepfold	Post Medieval?	1558	1556			
Smelting works?	Roman?	1780				
Spoil heap?	Modern?	4883				
Standing Stone	Bronze Age	0723	0724	0764	1446	1449
		3583	4307			
Standing Stone?	Bronze Age	1563	1740	4304	4810	
Standing Stone?	Bronze Age?	1579	1732	3889		
Stone Alignment	Bronze Age	4309				
Stone Alignment	Medieval?	4316				
Stone Alignment?	Bronze Age	4882				

CONTINUED

SITE TYPE	PERIOD	POWYS ARCHEOLOGICAL RECORD NUMBERS		
Stone Circle	Bronze Age	0091	0721	0722
Stone Circle?	Bronze Age	4284	4875	
Stone Setting	Bronze Age	1758		
Stone Setting	Bronze Age?	5019		
Stone Setting?	Bronze Age?	6165		
Vicus	Roman	5869	6152	
Vicus?	Roman	4000	5623	5624
Water mill	Post Medieval	4842		

A P P E N D I X 2

USE OF RESOURCES DURING THE SURVEY

TABLE 2: SUMMARY OF DAYS SPENT IN EACH ELEMENT OF THE SURVEY

Consultation	20
Land-use survey	10
Aerial survey	25
Field Survey	30
Archive work	10
Drafting	5
Preparation of report	30

TABLE 3: SUMMARY OF EXPENDITURE (EXCLUDING SALARIES)

<u>Air photography grant</u>	750	750
<u>Project grant</u> (CPAT 14)		
Travel	960	
Subsistence	500	
Office consumables	25	
Postage/telephone	10	
Photographic consumables/processing	85	
Excavation survey consumables	10	
Drafting consumables	75	
Copying	60	
Library	25	
total project grant	1750	1750
TOTAL GRANT		2500

A P P E N D I X 3

SITES RECOMMENDED FOR SCHEDULING

The following sites are some of the more notable monuments within the study area which should be considered for scheduling.

CAIRN	Lluest Uchef Cairn II, Llanwnog, SO 00049B32, PAR 4891
STONE ROW	Lluest Uchaf Stones, Llanwnog, SO 00059834, PAR 4882
STANDING STONES	Carreg Hir Stone, Llanwnog, SO 01419685, PAR 764 Llyn Mawr Cairn II, Llanwnog, SO 00289718, PAR 4318
HUT CIRCLES	Craig y Llyn Mawr Hut III, Llanwnog, SN 99649811, PAR 917 Craig y Llyn Mawr Hut VI, Llanwnog, SN 99769784, PAR 4888 Craig y Llyn Mawr Hut V, Llanwnog, SN 99849769, PAR 4889 Brynyfawnog Hut, Tregynon, SO 03959829, PAR 1557 Llyn y tarw Hut, Aberhafesp, SO 98699788, PAR 5773
STONE CIRCLE	Llyn y tarw Stone Circle, Aberhafesp, SO 02579762, PAR 4284

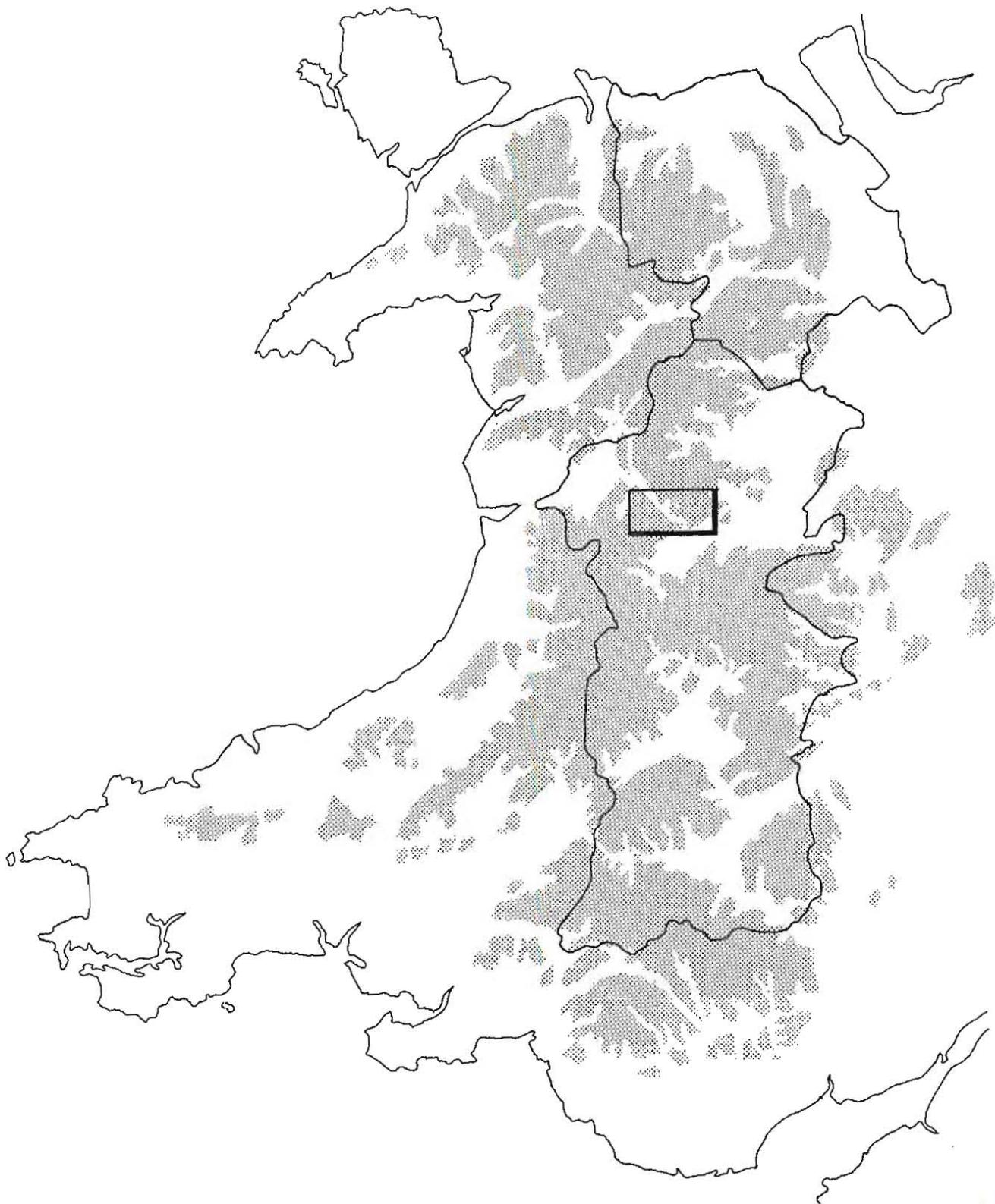


Figure 1 Location of the Caersws-Llanbrynmair study area, showing land over 300 metres.

Figure 2 Topography of the study area showing target field survey areas.

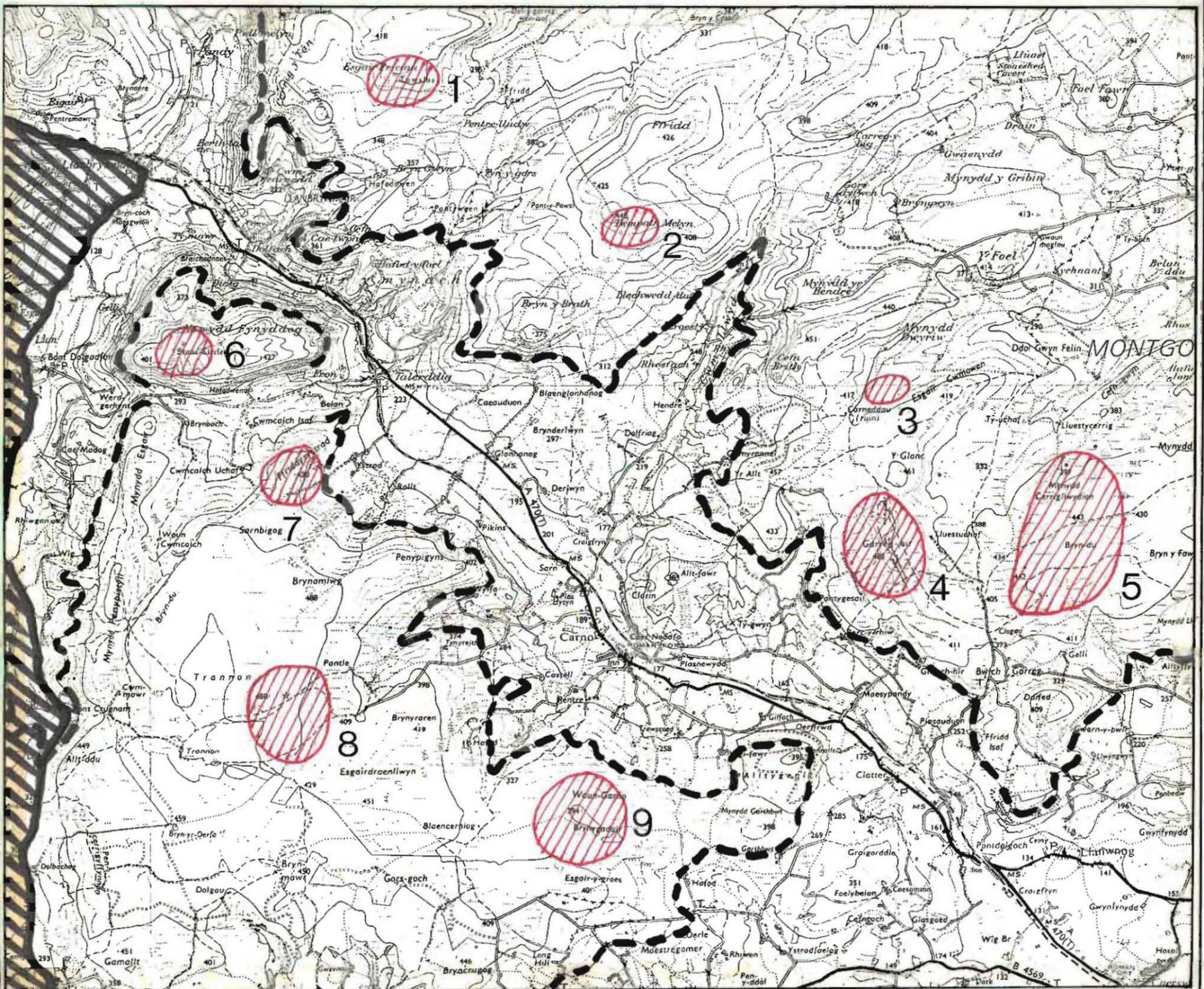
Figure 3 Land-use in the study area (after RSPB 1986).

red - unimproved in 1971
blue - afforestation since 1971
green - agricultural improvement since 1971
black - common land

Figure 4 Distribution of known archaeological sites in the study area indicating those visible on the vertical aerial photographic coverage.

Figure 5 Distribution of archaeological sites in the study area indicating new sites discovered as a result of the recent field survey.

UPLAND ARCHAEOLOGY SURVEY : LLANBRYNMAIR - CAERSWS (CPAT 14)



KNOWN ARCHEAOLOGICALLY SENSITIVE AREAS

- | | | | | | | | | | |
|---|----------------|---|----------------|---|---------|---|------------|---|-----------|
| 1 | ESGAIR PRICIAU | 2 | TWMPATH MELYN | 3 | Y CAPEL | 4 | Y GLONC | 5 | LLYN TARW |
| 6 | NEWYDD FNYDDOG | 7 | FFRIDDYRYSTRAD | 8 | TRANNON | 9 | WAUN GARNO | | |



CAMBRIAN MOUNTAINS ESA



LAND ABOVE 300 METRES