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AN ARCHAEOLOGICAL FIELD SURVEY OF PART OF THE BLACK MOUNTAIN IN SOUTH-EAST DYFED: A CONTRIBUTION TO THE INTERPRETATION OF ECONOMY AND SETTLEMENT IN THE REGION FROM PREHISTORY TO THE EARLY MODERN PERIOD

by Anthony H. Ward MA

VOLUME 1

Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy, October 1993.
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Plate 31. Site 816, the principal compartment of the rectangular building in the Twrch Valley.

Plate 32. Site 842, a compartmented rectangular building in the Twrch valley.
The work represented by this dissertation is an element in a twenty-year long transformation from law graduate and trainee solicitor to an academic at the University of Kent, part of whose time can be devoted to teaching archaeology, via a spell as a university administrator at University College Swansea. My career in universities, both as administrator and latterly as lecturer, has been spent entirely within extra-mural, adult education or continuing education departments as they have undergone various changes in nomenclature over fifteen years. The dissertation can be taken as proof that I practise what I preach to mature students, that learning is truly life-long, as I endeavour to obtain a degree in the discipline which I have in fact taught for several years!

The dissertation is focussed on field-work within an area of upland landscape on the Black Mountain in south-east Dyfed. The palaeoenvironmental data and archaeological remains described span a period from the Mesolithic to early Post-Medieval times. The long chronology and diversity of data and monument-forms inevitably promotes unevenness of treatment of some aspects of the dissertation. Also it mitigates against exhaustive analysis of individual themes. The great advantage of the topic as far as I am concerned, given my lack of formal tuition in archaeology, is that breadth has compensated for depth, introducing me to areas of study well away from my previously narrow research focus on the Early Bronze Age, and even encouraging me to teach courses outside
the confines of prehistory. It also provides a springboard for further research into and closer critical analysis of aspects of the work in which I have become particularly interested.

The field-work was carried out during vacations and occasional short periods of leave-of-absence. Writing-up has taken place discontinuously over several years. The discontinuity of the process has proved a particular challenge. Although I have worked at integrating the various sections of the dissertation as fully as possible, I am aware that at times they tend to appear to be bolted together rather than forming a seamless web!

In effect writing-up was completed in final draft by around Easter 1993. I have endeavoured to take account of relevant work appearing in print up until then. I acquired one important publication, the report on the excavations in the Brenig Valley, Clwyd, after that date (Lynch 1993). Although I have made use of some of the material in this report in preparing the final copy of the dissertation, it has not been possible to take full account of its contents. Hence, references remain to some data from these excavations published in interim form.

The germ of the idea of translating field-work on the Black Mountain and elsewhere in south-west Wales into a dissertation came from the late Mr. William H. Morris. I owe an immeasurable debt of gratitude to 'Bill' Morris and also to Muriel Bowen-Evans for their companionship in forays around the Carmarthenshire
countryside over many years, and their inspired knowledge of the diverse aspects of the past of that countryside including the Black Mountain.

Fortuitously at the time I was contemplating formalizing preliminary investigations on the Black Mountain into a long-term project, Mr. Robin Livens suggested that I might like to consider integrating this work with other pieces of recently published field-work and excavation in south-west Wales as a dissertation leading to a higher degree at the University of Nottingham. In his own words, Robin "acted as midwife", facilitating in 1989 my acceptance by the University to work for a higher degree on a part-time basis despite the absence of a first degree in the discipline. I am very grateful for his assistance at the outset.

Mr. James Kenworthy kindly consented to act as my supervisor. My thanks to James for his patient attempts to keep me on the straight and narrow in supervisions over the four year period of registration, his visit to the survey area, his advice and latterly his encouragement to expand the social dimension in Chapters 12, 13, and 14. He has contributed markedly to such strengths as this dissertation may have. Of course, I acknowledge the failings as my own.

There are many who have helped and advised in respect of the work encompassed by this dissertation. My thanks to all but I must name Dr. Stephen Briggs and Mr. David Leighton of the Royal Commission
on Ancient and Historic Monuments in Wales, Miss Frances Lynch, University College of North Wales, Bangor, Mr. Don Benson, Dyfed Archaeological Trust, and his colleagues in Dyfed Archaeological Trust, who are also my good friends, Mrs. Heather James and Mr. Terry James. Mr. Peter Webster of the Department of Extra-mural Studies, University of Wales College, Cardiff, kindly helped with the identification of the one sherd of pottery recovered during fieldwork. I am grateful for the advice received on the geology of the Twrch valley from Mr. T. Sharpe, Department of Geology, National Museum of Wales, and for the helpful correspondence with Mr. Burwyn Wi1iam of the Welsh Folk Museum, St. Fagans with regard to transhumance in Wales.

The Brecon Beacons National Park Authority gave permission for the field-work on the Black Mountain which was funded by the Carmarthenshire Antiquarian Society, the Cambrian Archaeological Association and the University of Wales' Board of Celtic Studies. Acknowledgements in respect of the work annexed to the main text are made in the individual articles. I will, however, mention the Extra-mural students of Swansea who laboured over several years excavating cairns on Cefn Bryn, Gower, and the stimulation provided by those students who I have taught on the University of Kent's Diploma in Archaeology, particularly those who have provided me with an example by progressing to read for both undergraduate and higher degrees in archaeology and allied disciplines.
The several Heads of Department with whom I have worked have always encouraged and supported my archaeological activities. My thanks to them all, Professor Ieuan Williams and Professor Gordon Roderick at University College, Swansea, and Professor Alec Barbrook and Dr. Dorothy Goldman at the University of Kent. Mrs. Lynn Collier and Mrs. Paula Verge who help me run the University of Kent's Centre in Tonbridge have assisted greatly by giving me sufficient freedom from routines to complete the work.

Brigitte, my wife, accepted my absences on field-work with patience and has tolerated the writing-up period without complaint. Caroline and Emily, my young daughters, have suffered too, not always with such patience as their mother. Perhaps in future they will come to understand their father's preoccupations, experiencing for themselves both the frustrations and personal fulfilment involved in the processes of research and writing.

Anthony Ward

September 1993.
ABSTRACT

A survey of archaeological sites was carried out across 60 km$^2$ of the Black Mountain in south-east Dyfed, an upland common. These are described and placed in a putative chronological sequence against a palaeo-environmental backcloth. Sepulchral cairns are the earliest sites recorded, probably belonging to the early second millennium bc. House circles and homesteads may date to later prehistory and the early proto-historic period, while numerous rectangular foundations are probably the remains of Medieval, possibly later Medieval, settlement. Boundaries partition part of the landscape and there are stone clearance heaps and strips.

Land-use is discussed up until the early Post-Medieval period, taking account of both the monuments and the palaeo-environmental data and informed by definition of some parameters within which exploitation of upland environments can take place. Seasonality of resources, the importance of the wider region and the requirements for mobility are amongst the factors considered. The historical model of transhumance which is frequently applied to the Welsh uplands is examined. Periodic hunting, gathering and husbandry is suggested in the area prior to c. 2000bc after which perceptions of the landscape seemingly begin to change with evidence for episodes of more formal management relating to animal husbandry and limited cultivation. Although settlement may frequently have been transient, overwintering or longer periods of continuous occupation are not precluded in response to a combination of economic, social and environmental factors. Suggestions are made for further work.
CHAPTER 1: INTRODUCTION —
THE THEME AND AIMS, THE
SURVEY AREA AND THE SURVEY
METHOD
1.1 THE THEME

"It is as yet impossible to make a comprehensive and definitive statement concerning the evolution and form of rural settlement in Wales, for both in space and time much work has yet to be completed and many theories now current will doubtless have to be modified in the light of further research" (Gareth Thomas and Carter 1965, 141).

The dissertation attempts to make a contribution to meeting this challenge by examining in detail the pre-industrial development of settlement and land-use in one small area of rural Wales. This is an area of unenclosed upland landscape at the western end of the Black Mountain in south-east Dyfed (fig. 1:1). It takes place against a background of increased interest in, and concern for the preservation of, the archaeology of upland landscapes (Darvill 1986). The uplands are generally, taken as areas which lie mostly above 244m OD (Darvill 1986, 4). However, altitude is not an absolute factor in the characterisation of the uplands - other topographical factors, climate, vegetation and land-use are also taken into account.

The Black Mountain study area, with an altitudinal gradient between around 200m and 600m OD, is characteristic of what has been termed "the heartland" of Wales. This is a mountain core distinguished from other landscapes by an altitude generally above 200m OD, mean annual rainfall in excess of 1500mm and a grassland vegetation dominated by sheep's fescue (Festuca ovina), white bent
Fig. 1.1. The location of the survey area at the western end of the Brecon Beacons.
(Nardus stricta) and purple moor grass (Molina caerulea) (Bowen 1965a, 270-272). The "heartland" accounts for around 40% of the landmass of Wales. Investigation of such areas is important in understanding the character of human exploitation of the wider landscape, the interaction between the uplands and surrounding areas at lower altitude.

1.2 LANDSCAPE STUDIES AND THE GENERAL AIMS OF THE PRESENT RESEARCH

1.2.1 Perceptions of Landscape
The Welsh uplands are certainly not 'natural landscapes', a fictitious concept of previous generations of geographers and natural scientists. They are now recognized as relics of earlier land-use which was labour intensive. Minimal present-day economic exploitation should not be taken as evidence in favour of an excessively negative evaluation of the potential of such landscape, present or past. It only indicates that their utilization does not pay in contemporary economic circumstances (Faegri 1988, 1-3). Current geographical thinking has mostly moved well away from simple 'environmental determinism' as an explanation for land-use; social and wider economic phenomena are recognized as important factors concerning the way in which a landscape is used (Byre and Jones 1966, 13-18). However, the physical environment is a most important influence on the character of the cultural landscape; it must continue to be considered as part of the broadly based
interdisciplinary approach through which landscapes are most effectively studied (Coones 1985).

While cultural evidence for past activity is more likely to be seen in 'zones of survival', such as those represented by upland areas which have escaped recent intensification of land-use, it is obvious that the surface evidence will still only present an incomplete view of the story of the landscape (Roberts 1987, 83-5). Much data, environmental and structural, will be contained within the earth. Also, the natural and artificial features, which both contribute to and result from the development of the landscape, are linked to human life, not only in practical economic terms, but also through religious, social and psychological ties which present particular challenges of investigation and analysis (Roberts 1987, 79).

In the context of archaeological studies, therefore, landscapes have increasingly been seen as places of meaning, not just as a locality for activity (C. Evans 1985). Yet the meaning of the landscape as a monument in its own right will change through time and this process needs to be understood (Bradley 1991), as much as the process of change relating to economic exploitation.

Landscape archaeology and landscape history have different emphases through the varying character of the data which is available according to the epoch (Roberts 1987, 85). Studying the evidence from only one epoch in isolation can lead to distorted
interpretations (Coones 1985, 6). A distinctive role has been asserted for archaeology within landscape studies, as a discipline which potentially can allow the process of change in the landscape to be investigated within a uniquely long time-scale, studying the cognitive, the social and the economic (Fleming 1990).

This present study is, therefore, influenced by these themes: recognition that the physical environment underpins the cultural landscape; that the cultural landscape embraces economic and social activity and cognitive values; and that study with a longer chronological perspective is likely to lead to a more coherent appreciation of the landscape.

1.2.2 General Aims of Present Work

It is recognized that there continues to be considerable scope for basic field-work and synthesis in landscape studies (Fleming 1990, 13). As is noted below (1.4), there appears to be a particular requirement for such pioneering work in the Southern Welsh uplands. The primary aim of the current research is, therefore, to describe and classify monuments in the context of one area of landscape on the Black Mountain, within a putative chronological framework argued on the basis of comparative material in similar landscapes elsewhere. The reasons for choosing this area of the Black Mountain are outlined below (1.4).

The monuments are then discussed within a framework of data on the past environment to canvass ideas for the way in which the
landscape may have been used in the pre-industrial past. Regard will be had to factors of seasonality of activity, and social and economic mobility, which in particular often tend to characterise human exploitation of upland zones (Chapter 10 below). An attempt will be made to isolate phases when the data suggests significant change in the usage of the landscape, and then to explore the change in terms of human demands of, and attitudes to, the landscape. Where possible, regard will be had to wider historically attested social and economic contexts.

Finally, suggestions will be made which will contribute to a strategy for further field-work and excavation to elucidate and build upon the primary analysis.

1.2.3 The General Nature of the Investigation and the Data

Archaeological field survey, supplemented by the palaeo-environmental work of others, is the principal tool of the investigation. The form of monuments identified during field-survey is described against the backcloth both of topography and past environments, in so far as the latter can be determined from work within the survey area and analogous landscapes elsewhere.

Broadly, the archaeological data ranges from putative burial cairns, house circles, stone clearance heaps and land division of pre- and proto-historic date, to structures of presumed Medieval or early Post-Medieval date. The data is almost entirely archaeological and environmental. Relevant primary documentary evidence for this
landscape is largely lacking, although reference will be made to secondary historical sources when this is necessary to provide a context, mostly for the archaeological material thought to be of later date.

Field evidence for the extensive industrial exploitation of parts of the area in more recent times is not included. Other obviously recent features such as shooting butts and lambing shelters are also excluded. It is recognized that this does adversely restrict the chronological perspective and that, hence, the totality of the cultural landscape will not be described and evaluated (Cooney 1985, 6). However, the practicalities of limiting field-work to attainable targets suggested that the advent of extensive industrial exploitation of the area, apparently in the Post-Medieval period, was a relatively discrete cut-off point as regards subject matter and interpretative parameters.

Criticisms can be made about the essentially morphological approach with regard to, for example, the incomplete character of a data base derived from surface evidence, uncertainties regarding dating, and possibly unwarranted general assumptions regarding association between form and function, and processes of change. These are legitimate and are explicitly recognized in an attempt to avoid the abuse of extending explanation beyond that which can be legitimately borne by the data (Roberts 1987, 88-9). However, primary field-work and analysis of landscapes within the 'zone of preservation', which has the advantages of being relatively cheap
and non-destructive, is an essential precursor of the more ambitious, and certainly more expensive and more intrusive investigations which will be required if explanation is to be pursued either on the narrower temporal or wider spatial scales (Chapter 16 below).

1.3 SOME CONVENTIONS

Contours and scales on all plans and maps are given in metres. Radiocarbon determinations and epochs such as millennia, defined in terms of a chronology based on radiocarbon determinations, are stated in uncalibrated form indicated by the use of 'bp/bc/ad'. Historical dates and epochs are indicated by the use of AD. Botanical names are given once after the common name of each plant or tree species in each major section; thereafter in those sections they are referred to by their common name only.

Place names are usually accompanied by the county name. This presents some difficulty in Wales in circumstances where the county boundaries and names changed in 1974; but where for many purposes the old county names continued to be used, for example in Archaeology in Wales, the publication of CBA Group 2/Wales, and, importantly, in the publication of Inventories of ancient monuments and buildings by the Royal Commission on Ancient and Historic Monuments in Wales (hereafter RCAHM). Further, yet more change in the organization of local authorities in Wales is imminent, with a return to county boundaries similar in many respects to the pre-1974 re-organization. Therefore, in view of the fluctuating
fortunes of county authorities in Wales over the past two decades, it has been decided to cite the county name used in the original or principal report, survey or reference. Cross-referencing between pre-1974 counties and present counties (as of 1992) is possible via figure 1:2, if so desired.

1.4 CHOICE OF SURVEY AREA

The field-archaeology of the "heartland" in North and Mid-Wales has been relatively well studied. Following the publication of the early County Inventories of RCAHM (1911, 1912, 1913, 1914, 1921 and 1936), there were several decades of field-work recording a range of monuments in upland landscapes (eg. Ellis Davies 1929 and 1949; W. E. Griffiths 1950; Gresham 1954; RCAHM 1956, 1960 and 1964; Bowen and Gresham 1967). This has been consolidated in the last decade by still more systematic survey complemented by subsequent excavation (eg. Kelly 1982, 1988a; Manley 1986 and 1990; Chambers et al 1988).

The coverage of the early County Inventories for South Wales was limited (RCAHM 1917 and 1925). There was little subsequent systematic work in the southern uplands except for that of Sir Cyril and Lady Fox in the late 1920s and 1930s (eg. A. Fox 1937, 1939, 1942-3; C. Fox 1940; Fox and Fox 1934), and Professor Grimes (1936 and 1963). Some later field-work is recorded, for example in the volumes of local societies (eg. Green 1953-4) and Archaeology in Wales, accompanied by occasional excavation (eg. Webley 1958 and 1960-62). Latterly excavation has taken place in response
Fig 1:2. The "Old" (pre-1974) and "New" (boundaries in existence as of July 1992) Welsh Counties (taken from Archaeology in Wales vol. 31, 1991).
to specific threats of destruction (e.g. Dorling 1987; Owen-John 1986). Importantly, the location and distribution of monuments began to be studied specifically in relation to past environments (e.g. Crampton and Webley 1960 and 1963).

The Inventory for the county of Glamorgan (RCAHM 1976a; 1976b; 1982) provides the first recent large scale survey in South Wales while that for Brecknock is in course of publication. The Glamorgan Inventory gives a valuable overview of the character and typology of some of the archaeological remains in parts of the upland zones. Typology seems largely to have been based on description based on visual inspection with only a relatively few monuments being planned (pers. comm. C. S. Briggs). The period divisions and county-wide scope of the Inventory both constrain analysis and result in a record which is too incomplete to be used as a basis for detailed interpretation of a discrete geographic area. For example, recent survey of common land on Cefn Bryn on the Gower Peninsula, West Glamorgan, building on the work of RCAHM, has altered the characterisation of much of the archaeology as published in the Inventory (Ward 1989a). More recently, RCAHM began a series of multi-period landscape surveys in parts of the South Wales uplands (Leighton et al 1986 and 1987) which stimulated consideration of the character of early agriculture in these uplands (Briggs 1985). These recent landscape surveys have not involved the preparation of large scale plans of monuments.
There seemed, therefore, to be scope for an analytical survey of an area of the South Wales uplands which was large enough to embrace a landscape which had a reasonably wide altitudinal range and associated local environments, while being sufficiently compact to allow, within the limits of available resources, comprehensive description and planning of most individual monuments at scales sufficiently large to facilitate comparative analysis. These basic conditions were met by a 60km² area at the western end of the Black Mountain in south-east Dyfed (fig. 1:1) which had the following important combination of advantages:

a) the writer was familiar with the terrain through limited field-work and reconnaissance (Ward 1988a) and already knew that the area, almost entirely unenclosed and relatively undisturbed by modern activity, contained a diversity of archaeological remains ostensibly of various periods.

b) staff of Dyfed Archaeological Trust were actively involved in locating sites within the area both through field-walking (Morgan 1988 and 1989) and aerial photography (T. James pers. comm.) in order to enhance their Sites and Monuments Record, which thus provided a valuable resource.

c) a landscape survey of part of the area had recently been completed by the RCAHM (Leighton et al 1987); this, as well as helping locate sites, also provided accurate plans of features such as linear land divisions which, had they not been available, would have added to the time, technical and personnel requirements and ultimately cost and practicability of the project.
d) a palaeo-environmental back-cloth was available for this area through a recent study (Cloutman 1983).

e) the writer has first-hand knowledge of other areas of open and relatively undisturbed landscape in the same region, but in different environmental zones, which could be drawn upon for comparison (1.5 below).

1.5 OTHER LANDSCAPES SURVEYED IN THE REGION WHICH ARE ANNEXED TO THE DISSERTATION FOR COMPARATIVE PURPOSES

Other areas where the writer has undertaken field-work, and which are useful for comparative purposes, are Mynydd Llangyndeyrn in south-east Dyfed, and Cefn Bryn and Rhossili Down on the Gower Peninsula, West Glamorgan (fig. 1:1). Each is an area of common land. They are landscapes in environmental zones which differ from the Black Mountain survey area on account of either location or altitudinal range. The ridges of Cefn Bryn and Rhossili Down are essentially coastal locations between around 100m and 200m OD, benefiting from warm air off the sea which results in a mild climate providing a long growing season. Mynydd Llangyndeyrn is an inland ridge with an altitudinal range of around 200m OD up to around 260m OD.

Each of the three areas contains a particular type of cairn, a ring cairn, a ritual/ceremonial monument of the early part of the second millennium bc. These have been studied on a comparative basis, and two examples excavated on Cefn Bryn (Appendix 1). The account of the archaeology of Mynydd Llangyndeyrn most relevant to present
purposes is Ward 1989b (Appendix 2). The ridge has evidence for early land allotment, together with funerary and ritual activity indicated by a pair of chambered tombs, cairns and two standing stones (Ward 1976; Briggs and Ward 1979). Excavation has taken place around the two standing stones (Ward 1983). Rhossili Down also has other types of cairn and two chambered tombs, and evidence for early land division and settlement (Appendix 3). Cefn Bryn too has a chambered tomb, a range of cairn forms including many stone heaps which are thought most likely to result from stone clearance for agricultural improvement. These have been studied in relation to the soils on the ridge (Appendix 4).

1.6 THE SURVEY AREA

1.6.1 The Location of the Survey Area, and the Surrounding Region

The Black Mountain (Plate 1) lies at the south-eastern border of Dyfed in South Wales, at the western end of the Brecon Beacons, some 21km north of Swansea. It is not to be confused with the Black Mountains at the eastern end of the Brecon Beacons. In essence the survey area is a broad ridge, comprising some 60km² of unenclosed landscape centred on SN 72 17, at the western end of the Black Mountain (figs. 1:1 and 1:3). The two largest towns adjacent to the area are to the west, Llandeilo in the Towy Valley and Ammanford at the confluence of the rivers Amman and Loughor (fig. 1:1).
The eastern edge of the survey area is defined by rivers, the Sawdde Fechan, Nant y Llyn and Afon Twrch (fig. 1:3). The northern, north-western, and western edges are delimited by enclosed land above the villages of Gwynfe and Trapp (figs. 1:1 and 1:3); and the southern edge by enclosed land above the villages of Glanaman and Brynamman (figs. 1:1 and 1:3). Enclosed land along the southern edge of the survey area generally ends at between 200m and 250m OD. This rises to around 300m OD along the western and north-western periphery, descending to 250m OD to the north-east (fig. 1:3).

North of the Black Mountain lies a trough descending steeply to between 120m and 150m OD, which is drained through a series of small valleys. The rivers include the Cennen to the west, and the Afon Malwch flowing into the Sawdde Fechan to the east. To the north Trichrug ridge rises up to 400m; beyond this lies the Towy Valley, about 7km from the edge of the survey area. Towards the Carmarthenshire Fans some 7km to the east, the Black Mountain ascends to 800m. To the south-west of the survey area, the ridge narrows and decreases in height until it reaches the coastal plain around Kidwelly some 25km away, dividing the valleys of the Gwendraeth Fach and Fawr en route. Immediately south of the survey area is the Amman-Llynfell trough at between 100m and 200m OD. South of this trough is a 10km wide plateau area, attaining an altitude of about 350m OD, flanked by the River Tawe to the east and the River Loughor to the west (fig. 1:1).
The adjoining area to the north is a landscape of scattered farmsteads and hamlets. The agricultural regime is mostly pastoral with dairying and beef rearing on the better pasture. Sheep take advantage of the rougher grazing provided by the adjacent common land. Forestry now occupies tracts of the landscape. To the south agriculture, mostly sheep farming, and small holdings compete with open-cast coal extraction.

The survey area and the valleys immediately to the north are relatively remote despite proximity to the major industrial population centres of the Southern Welsh valleys and coastal belt. It has been noted that the local population has a higher than average frequency of blood group B (Mourant and Morgan Watkin 1952 20-1; Garlick and Pantin 1957). This taken together with anthropometric data has led to the suggestion that the present population is in large measure a survival of early indigenous stock whose antiquity is likely to extend to the prehistoric epoch (Mourant and Morgan Watkin 1952), if not necessarily as far back as the Upper Palaeolithic as once suggested (Fleure and James 1916; Fleure and Whitehouse 1916)! Such results have led to the conclusion that the population, in and around areas such as that surveyed, is a product of continuity and assimilation rather than one of invasion and displacement (Potts 1979, 252-3).

1.6.2 Geology and Geomorphology of the Survey Area

The Black Mountain tapers with decreasing altitude from north-east to south-west at the western end of the Brecon Beacons. At 616m
OD Garreg Lwyd is the highest point in the survey area (fig. 1:3). From the top of the ridge there is an extensive panorama: to the north into mid-Wales; to the east towards the Carmarthen Fans; to the south across the Gower Peninsula into the Bristol Channel; and to the west into Pembrokeshire and the Preseli hills.

The geological sequence is complicated by numerous north to south faults (fig. 1:4). The relatively gentle southern back-slopes (Plate 2) overlap the Coal Measures and ascend northwards on to Millstone Grits which produce the highest crests and plateaux ranging from 600m OD in the east to 450m OD to the west. To the west, the Millstone Grits form precipitous north-facing scarp slopes. North of the Millstone Grits is a narrow Carboniferous Limestone band which forms a high escarpment across the central section of the survey area with Old Red Sandstone slopes beyond. To the east of the area, however, as the Old Red Sandstone deposits become wider, they increasingly dominate the north scarp (Geological Survey 1977; Owen 1971, 17-23). Between the northern escarpment and the southern back-slope are rolling plateaux at varying altitudes (Plate 2). These are littered with till, the product of several episodes of erosion (Croom 1971, 29-32).

Streams rising on the Mountain drain both north and south, often in narrow steep-sided valleys. It is worth highlighting the principal streams clearly at the outset since they will figure prominently in descriptions of the archaeology. The Sawdde Fechan, Afon Clydach and Cennen are the main streams flowing down the
Fig. 1.4. The solid geology of the survey area (following Geological Survey 1977).
Fig. 15. The principal rivers and streams within the survey area.
northern face. Nant Gwythwch and the Berach drain south-western slopes. To the south, the Amman Fach, Amman Fawr and Nant Pydd join to form the River Amman which flows to the west and which feed the Garw and the Pedol. Also rising on the southern slope is the Llynfell, flowing to the south-east, into which drains the Afon Twrch (fig. 1:5).

1.6.3 Soils of the Survey Area

Much of the higher ground is covered by humo-ferric podzols. The southern slopes are mostly dominated by stagnohumic gley soils. Ferric stagnopedzols and humic rankers are also present on the northern face. Thick peat deposits are present at points on the summit plateaux (Plate 3), and at the foot of the northern scarp face. The distribution of the various soils within the survey area is mapped in figure 1:6, following the (Soil Survey 1983). The degraded, frequently waterlogged, soils are associated with much surface stone. In places they have been eroded down to the underlying rock. These soils are characteristic of considerable areas of the Welsh uplands (Taylor 1965a).

1.6.4 Vegetation

The natural vegetation is primarily a grass moorland. Purple moor grass (*Nolina caerula*) favours the flatter, more poorly drained high plateaux, frequently merging with peat bog. White bent (*Nardus stricta*) occupies the hillslopes until at lower elevation, at about 300 m OD, common bent (*Agrostis tenuis*) and sheep's fescue (*Festuca ovina*) are supported. Bracken, too, is present at lower
altitude. Cotton grass and reeds are found in wetter locations. Common bent and sheep's fescue provide grazing of reasonable quality. The flush of grass growth comes towards the end of May and in early June, reviving after rainfall later in the summer (Davies and Miller 1944, 513). The only extensive area of heather moorland is on Drysgol (fig. 1:3). Trees cease to grow much above 250m OD on the southern face of the Mountain but scattered examples are noted up to 330m on the northern face. Again this vegetation is typical of the Welsh uplands (Bowen 1965b, 272; Taylor 1965a, 119; Sumner 1977, 61-64).

1.6.5 Climate and Weather
The climate of the region is maritime, with prevailing south-westerly winds which sometimes swing to the north-west bringing colder air (Sumner 1977, 43). There is little information available on weather which is specific to the survey area but the general conditions are clear across the South Wales uplands where the primary determinant is altitude. On the Black Mountain annual mean rainfall will be around 2000mm with more than 225 rain days. Snow is expected to lie on between five and ten mornings each year. Some precipitation will be lost through evaporation and transpiration, although less than at lower altitudes. There are between 1330 and 1400 hours sunshine each year; and the average daily mean temperature for January will be around 6°C, that for July 16°C. Mean values, providing only a generalised account of conditions, mask extremes. Although the Black Mountain is exposed to strong westerly winds, wind is a relatively insignificant element in the
weather compared to temperature and precipitation. Relief and wind velocity may, however, combine to have significant local effect (Melvyn Howe 1965, 57-91; Sumner 1977, 45-59). Accentuated relief results in local variations. The potential significance of micro-climates, past and present, is noted below (2.2.5).

1.6.6 Present-day Land-use of the Survey Area

The unenclosed landscape of the Black Mountain is common land used only for late spring and summer pasture, supporting mostly sheep and some cattle and horses. On heather-covered Drysgol the stone-built shooting butts indicate former use as a game-moor. Mineral and stone extraction has included coal mining, silica quarrying on the Millstone Grits and extensive limestone quarrying often associated with lime-burning kilns (Strahan et al 1907).

1.7 SURVEY METHOD

The writer had to undertake the field-survey alone. This dictated the method of field-walking employed, both for reasons of good practice and safety, and the way in which monuments and areas of the landscape were planned.

At the outset, the Sites and Monuments Record of Dyfed Archaeological Trust in Carmarthen, including aerial photographic coverage, was consulted. Time was also spent at the offices of RCAHM in Aberystwyth examining the results of its recent landscape survey of parts of the study area. Printouts of the survey record and copies of 10:000 and 1:2500 traces marked-up with monuments.
were generously made available. There was little early field-work in the study area apart from a brief mention of some monumental cairns (RCAHM 1917, no. 250) and other smaller "disturbed and scattered" cairns (RCAHM 1917, no. 436).

Around fourteen weeks were spent field-working within the survey area in 1989, 1990 and 1991 using 10:000 Ordnance Survey sheets as base maps. Field-work undertaken during late March, April and early May, concentrated on land below around 300m OD. Later in the year large parts of these areas would have been infested by bracken. Work at higher altitudes up to 600m, and above the bracken line, took place in the summer when the weather should have been kinder and safer for such activity.

The landscape divided itself naturally into reasonably-sized and discrete field-work units on the basis of topography. These will be used later as convenient divisions for describing the remains (3.2). Each unit was initially "gridded" according to local relief and walked. During field-work the temptation to make straight for known monuments was avoided, in order to cover the ground as thoroughly as possible. Subsequently, monuments were revisited and were planned, described and photographed as appropriate. Often, monuments were revisited on several occasions through the years of the survey so that they and the surrounding landscape could be seen under various stages of vegetation growth. A policy was adopted of avoiding paths, and always trying to take a slightly
different route when revisiting sites in order to re-check as much ground as possible.

No claims are made that such solo survey can be comprehensive. Many sites were added in those areas only recently examined by the RCAHM survey team, and no doubt further monuments will be found in future. However, the writer is reasonably confident that something approaching the full range of field monuments has been identified and that their relative, if not absolute, frequency and distribution in the landscape has been established.

As one of the aims of the project was to build up a data base of detailed site descriptions for comparative analysis, all individual structures apparently pre-dating relatively recent industrial activity were planned at 1:100 or 1:200 by off-set measurements. Some were profiled where this contributed significantly to the record. The state of preservation was generally so good that it was rare that a site could not usefully be planned. Information on the local topography and environment was noted. In excess of two hundred and seventy separate site locations were recorded. At many of these there were several features or structures.

Fortunately, from the view-point of the solo field-worker, extensive early land division in the form of stone banks or strips was identified only in the parts of the study area which had been covered by the RCAHM survey. The present project therefore draws on the laser-assisted surveys of these features at 1:2500 prepared
by the RCAHM team, which have been checked in the field and, when necessary, modified as regards detail. When it was desirable to plan groups of features, such as groups of foundations or clusters of stone piles, this was done by prismatic compass survey usually at 1:500 or 1:1000 (Farrar 1987). While this method is sufficiently accurate for present purposes, and was indeed the only method that was practical in circumstances of survey undertaken by one individual, a new survey by instrument should be made prior to any excavation that might take place.

The lime kiln is the principal monument excluded from the survey by the decision to omit sites of more recent industrial origin. There are many hundreds of such sites, usually close to quarries and sometimes associated with mortared foundations, carters' tracks and, occasionally, tramways. There are several different types of lime-kiln apparent. Some result from intensive commercial production of relatively recent date. Others are probably a consequence of smaller-scale exploitation for local needs which might impinge on the theme of the present survey. However, it was not realistic to begin to record any of the lime-workings in detail. Attempts to construct a typology linked to a relative chronology could be undertaken, taking into account associated building foundations and track systems, but this would be a study in itself. During the survey, however, attention was paid to trackways and paths where these seemed to be linked to the distribution of the monuments recorded.
CHAPTER 2: THE PAST ENVIRONMENT OF THE SURVEY AREA
2.1 INTRODUCTION

This chapter will provide an account of the past environment which will complement the archaeological data in Chapter 3 and assist analysis and interpretation in subsequent chapters. The availability of evidence, often unevenly distributed, will determine the geographic parameters of the account. However, it will concentrate on Wales, focusing where possible on the South Wales uplands, particularly the Black Mountain or adjacent areas whenever the data permits. Such environmental information as is available for the Black Mountain will be used as an indicator of likely past local land-use (Chapters 12, 13 and 14 below).

Environment implies the general condition of plant, animal and soil resources (Taylor 1980b, 311). The condition of these resources will have been influenced by climatic and anthropogenic factors. The detail and character of the interaction of these factors in relation to biological and pedological change is often uncertain and a matter of debate amongst palaeo-environmentalists. In keeping with the main thrust of this project towards the structural remains within the survey area, such issues, for the most part, will usually be considered in general terms only, drawing on authoritative works of synthesis. However, some will be treated in more detail where environmental data of relevance is available from the Black Mountain or adjacent areas, or the issue is of particular significance to the ancient landscapes of the Black Mountain.
The state of environmental archaeology in Wales has recently been conveniently summarised (Caseldine 1990). The main source of data for the upland regions comes from palaeo-botanical studies principally of pollen. The most useful pollen profiles are those linked to radiocarbon determinations although these are relatively few in number. Fewer still are closely integrated programmes of archaeological and palaeo-environmental investigation (Caseldine 1990, 16-19). This account will concentrate on evidence for the development of three closely related facets of past environments, climate, vegetation and soils, commenting when appropriate on the possible consequences of human intervention. Past fauna will not be considered because of the dearth of information.

In order to facilitate both the intelligibility of the account and the subsequent integration of the environmental data with the evidence for the structural remains in the survey area, a bc/ad/BC/AD chronology is used whenever possible instead of pollen zonation or climatic periods which would often require presentation of detail of chronological debate unnecessary for present purposes. The general chronology of the conventional climatic episodes is, however, indicated in 2.2.2. Pollen zones can be extrapolated from figures 2:1 and 2:3 if required.
2.2 THE CLIMATE THROUGH THE MILLENNIA

2.2.1 The Study of the Past Climate

Studies of climate should ideally include all the meteorological elements: atmospheric pressure, humidity, precipitation, hydrological factors, temperature and wind (Whittow 1984, 97). Knowledge and understanding of each of the several meteorological elements varies through time as well as from region to region so the ideal is not readily attained. Temperature and precipitation have tended to be emphasised in studies of past climates. The character of climatic change in the prehistoric and proto-historic past is inferred from changes in the vegetation and faunal populations, together with soil and geomorphological conditions. For the historic periods, documentary data may both directly and indirectly reflect climatic conditions.

Use of these sources has allowed sequences of climatic change to be proposed for the British Isles. The reconstruction of the past climate has been approached at two levels: firstly, with a "broad-brush" looking at long-term trends; and, secondly, via studies which attempt to identify short-term fluctuations within the longer term-trends. This latter approach has been pursued particularly by palaeo-environmentalists working in archaeology who may be concerned to associate climate with relatively short-lived changes in economic, cultural or social phenomena.
2.2.2 An Outline of Climatic Change for the British Isles

The study of long-term trends usefully provides a relatively uncomplicated overview. This is well illustrated by the work of Lamb (e.g., 1965a and 1966) who suggests the following climatic epochs for the period since the Devensian Glaciation - the chronology for the conventional climatic episodes follows that provided by J.G. Evans (1975, 72):

**c. 8300 to 5500 bc embracing the Pre-Boreal and Boreal Episodes**

The retreat of the ice-sheets is followed by a relatively rapid warming until, by about 5000 bc or a little earlier, the so-called "climatic optimum" is attained with summer temperatures 2°C to 3°C above modern averages, and annual temperatures perhaps 2°C above current readings.

**c. 5500 to 3200 bc equating broadly with the Atlantic Episode**

A period of relative climatic stability with the continuation of the "climatic optimum" but an increase in rainfall.

**c. 3200 to 1200 bc equating broadly with the Sub-Boreal Episode**

The climate becomes less stable with a gradual cyclical deterioration

**c. 1200 to 500 bc equating broadly with the Sub-Atlantic Episode**

A marked deterioration in climate with increasing wetness from which there has never been a full recovery.
c. 500 bc to 1300 AD continuing the Sub-Atlantic Episode

A trend towards some improvement in climate, although the values of the 'climatic optimum' are never again attained. This ultimately peaks in a "lesser climatic optimum" between 1000 and 1300 AD.

c. 1300 AD to Present continuing the Sub-Atlantic Episode

A period of climatic instability with some deterioration, and the so-called "Little Ice Age" between the middle of the 16th century and the end of the 18th century.

2.2.3 Medium and Short-Term Variability in the Past British Climate

The potential for fluctuation and episodes of variation within these general trends has been recognized (Lamb 1965a, 7). Palaeo-environmentalists and climatologists have endeavoured to refine this general chronology for climatic change, to address a wider range of climatic factors, and to identify fluctuations within general trends. Summaries of this work are contained in Baillie 1989; Bryson et al 1974; J. G. Evans 1971 and 1975; Lamb 1981; Parry 1978, 25-67, and 1985; Simmons et al 1981, 89-93; A. G. Smith et al 1981, 133-144; Taylor 1965a; Tinsley 1981, 210-217; J. Turner 1981, 251-261 and Whittle 1982. It is often emphasised that considerable uncertainty surrounds attempts to reconstruct climates of the prehistoric past in detail because of the impact that human-kind has had on the environment. This is particularly so once agriculture was widely practised, whereupon it often becomes unclear whether environmental changes are attributable to climatic change, biological developments or human interference, or a
combination of these factors (J. G. Evans 1971, 18-19). Advances in
dendrochronology may pinpoint critical climatic thresholds (Baillie
1989) while the advent of the historical record assists detection
of shorter-term fluctuations (Ingram et al. 1978).

The following more detailed scheme of climatic change, illustrating
short to medium-term variability for the British Isles over the
past 12000 years up until the early Post-Medieval period, is a
tentative compilation of data from the sources cited in the
preceding paragraph:

c. 11500 to 8000 bc - warmer conditions of the Windermere
Interstadial give way to colder period of Loch Lomond Stadial.

c. 8000 to 5000 bc - by c.8000 bc Britain was free from ice. There
was a rapid amelioration of temperature from a below-zero average
to a period of sustained high average temperatures around 12°C by
c.6000 bc. Before c.6000 bc, there was a more anticyclonic climate
with less windy conditions and short hot summers with the rest of
year colder than at present. After c. 5800 bc winter temperatures
ameliorated to 2°C higher than today with longer spring and autumn
seasons. Average precipitation was c. 92% to 95% of present
averages.

c. 5000 to 3200 bc - temperatures continued higher than those of
today, with average summer temperatures of 16.5°C. After c.5000 bc
average precipitation is estimated to increase to 111% of present
figures. More cyclonic conditions resulted in windier weather. Importantly, the increasing impact of human activity on the landscape makes the identification of specifically climatic factors in environmental change much more difficult.

c. 3200 to 2000 bc - possibly a period of declining temperatures which, however, probably continued at 0.5°C to 1°C higher than those of today, with a continuance of higher than present average precipitation, although this decreases with time.

c. 2000 to 1200 bc - a period of fluctuation, particularly as regards rainfall, with some centuries very dry, others very wet, but with mean temperatures still slightly higher than those today, producing a phase of cyclical climatic deterioration.

c. 1200 to 400 bc - a period during which there was a general deterioration in climate with slightly higher levels of precipitation which generally are not quantified, and a marked decline in mean annual temperature of perhaps as much as 2°C. Summers are thought to have been abnormally cool and damp and winters relatively mild. An extraordinary predominance of strong westerly winds is suggested. The deterioration may have been rapid on account of the effects of the eruption of the Icelandic volcano, Mount Hekla.

c. 400 bc to 400 AD - the climate gradually turned somewhat milder, drier and less stormy although there are suggestions of some
severe winters. It has been suggested that the period between 250 and 400 AD had a fairly stable climate, rather warmer and drier than at present.

c. 400 to 1000 AD - summers were colder and wetter by the late 500s. Some improvement was apparent by 700 AD in the form of drier, warmer summers and colder winters resulting from an increasingly anticyclonic trend.

c. 1000 to 1300 AD - becomes warmer with mean summer temperatures between 1150 and 1250 AD around 0.5°C higher than in preceding centuries. This gives rise to the 'lesser climatic optimum', an episode sometimes known as 'the Medieval Optimum'.

c. 1300 to 1600 AD - a cooling phase with reduced anticyclonic activity dominated by rain-bearing westerly winds. There was an increased frequency of cool, wet summers. By 1500 AD, average summer temperatures were perhaps 0.7°C lower, and mean winter temperatures around 1°C lower, than during 'the Medieval Optimum.' The period between c. 1550 and 1750 AD has been described as the "Little Ice Age."

2.2.4 Regional Climatic Variation in Wales

As well as identifying variability within general climatic trends through time, palaeo-environmentalists recognize the capacity of the climate and the character of climatic change to alter according to regional and local topographical circumstances (Taylor 1975).
In general the Welsh uplands form a discrete environmental zone which responds late to a warming climate but early to a cooling climate (Taylor 1980a, 110). The central geographic position of Wales determines its climate since it is the meeting point of warmer air from the west, particularly the south-west, and colder air from the north (Sumner 1977, 43). Lamb has described a number of climatic regimes which have affected Wales through time (1965b, 15-16). These regimes vary according to atmospheric circulation and shifts in the direction of prevailing winds.

When the westerly winds are to the north of the country, anticyclonic conditions will prevail, with lighter winds, higher summer temperatures and probably higher rainfall but with greater levels of evaporation than now. Drought is possible during summer whenever conditions became particularly anticyclonic. Lamb suggests that such conditions prevailed in Wales during the Post-Glacial Optimum, around 5000 bc and during the Medieval Optimum, c.1100 to 1300 AD (1965b, 15). A shift of the westerly winds to more southerly latitudes brings on cyclonic conditions which produce cool summers, mild winters and high rainfall levels at all seasons. Such conditions were prevalent during the first half of the first millennium bc and the fourteenth century AD (Lamb 1965c, 15). A further southerly shift in the prevailing westerly winds may reduce the wetness but allows colder northerly and easterly winds to have more effect. Summers are likely to be variable with winters either dry or snowy. Such conditions contributed to the onset of the later Medieval "Little Ice Age" (Lamb 1965c, 16).
The general scheme proposed for the British climate since the Devensian glaciation has been amended to take account of such considerations for the uplands (Taylor 1975, 10-18). Average climatic trends are compared to those postulated for the highland zone in figure 2:1 (taken from Taylor 1975).

Altitude significantly affects the nature of the climate and the rate and character of change (Taylor 1965b). This is accentuated in Wales by the simple topographic structure of the upland core surrounded on all but the eastern side by a narrow lowland coastal band. The relief has, and probably always has had, the consequence of producing sharp changes in environment and climate over relatively short distances and small increases in elevation (Taylor 1980a, 104 and 110-111). This is clearly a factor of particular relevance to the Black Mountain survey area which has an altitudinal range from around 200/250m OD to around 600m OD.

The capacity for considerable variation in climate within the region is illustrated by present-day average annual rainfall figures for south-west Wales which may be as little as 875mm on the coast, rising to 1500mm in the Vale of Towy to the north of the Black Mountain and up to 2250mm on the Black Mountain itself (Bowen 1965, 336). A present-day precipitation increase of around 80mm for every 30m of altitude has been calculated for the region which includes the survey area (Sumner 1977). As regards temperature, conventionally a lapse of 1°C for every 150m increase in altitude has been suggested. However, local conditions can result
CHRONOLOGY OF ENVIRONMENTAL AND CULTURAL CHANGES
IN BRITAIN SINCE CIRCA 12,000 B.P.

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<tr>
<th>POLENN ZONES</th>
<th>CLIMATIC PERIODS</th>
<th>CULTURE SUCCESS</th>
<th>MEAN AIR TEMPERATURE (°C)</th>
<th>AVERAGE CLIMATIC TRENDS</th>
<th>CLIMATIC DEVIATIONS IN HIGHLAND ZONE</th>
<th>ESTIMATED MEAN ANNUAL RAINFALL DEVIATION (%)</th>
<th>TREND IN GENERAL ATMOSPHERIC CIRCULATION AND SEASONAL CONDITIONS</th>
<th>OCEANIC AND SEA LEVEL CHANGES (m)</th>
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<td>2000</td>
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<td>COOLER</td>
<td>MEDIUM</td>
<td>95% 93%</td>
<td>SHORT AND MEDIUM-TERM OSCILLATIONS IN MARITIME</td>
<td>MINOR CHANGES IN RELATIVE LAND/SEA LEVELS, AS MODIFIED BY LOCAL CRUSTAL DOWNWARPPING OR UPWARPPING, MAXIMUM SEA TEMPERATURES</td>
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<td>MEDIEVAL</td>
<td>WARMER</td>
<td>STEEPEN</td>
<td>103%</td>
<td>INCREASED CYCLIC ACTIVITY AT ALL SEASONS</td>
<td>ISOSTATIC UPLIFT OUTSTRIPS EUSTATIC RISE IN SEA-LEVEL</td>
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<td>COOLING</td>
<td>GENTLER LAPSE RATES</td>
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<td>COOL SUMMER/WARM, INCREASED CYCLIC</td>
<td>FIRST MAJOR MARINE TRANSFORMATION INCREASED CYCLIC</td>
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<td>ANGLO-SAXON</td>
<td>INCREASED</td>
<td>CONTINENTALITY</td>
<td>97%</td>
<td>INCREASED CYCLIC</td>
<td>PROGRESSIVE INUNDATION OF LOW-LYING LITTORAL PLAINS, SEVERING OF LAND BRIDGES: SMALL NORTH SEA, LARGE PRUTO-BALTIC SEA-POSSIBLE LAND BRIDGES TO CONTINENT AND IRELAND</td>
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<td>MILDLY RAPID DRYNESS</td>
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Fig. 2.1: Climatic and cultural change since the late Devensian taking account of variation in the Highland Zone (taken from Taylor 1975).
in a lapse of 1°C for a height increase of rather less than 150m - an average lapse rate of 1°C for 134m has been suggested for the region which includes the survey area (Oliver 1971, 55-56). The consequences of sharp climatic variation across a distance of only 35km is indicated by a growing season of around 365 days on the Gower Peninsula which reduces to less than 200 days on the peaks of the Black Mountain. The decrease in growing season is not in proportion to height through the altitude spectrum. It decreases most rapidly in the lowest altitudes at about 14 days per 100m of height (Perry 1979, 6; Sumner 1977, 56).

2.2.5 Local Climates

Local climate can be affected by factors such as aspect, slope, soil, vegetation and land-use (Taylor 1975, 8; 1980, 111). For example, accentuated relief results in lifting and deflection of air masses giving rise to local variation in wind direction and speed, precipitation, cloud and visibility (Melvyn Howe 1965, 57). It is entirely probable that micro-climate was a significant factor in determining land-use on a local basis in earlier times (Parry 1975, 2). However, it is difficult to expand on this in the context of the Welsh uplands, as a result of the paucity of integrated environmental/archaeological studies which compare contrasting adjacent localities.
2.3 POST-GLACIAL VEGETATIONAL CHANGE

2.3.1 Post-Glacial Vegetational Change in Britain

It is unnecessary for the purposes of this study to provide a general account of the vegetational history of the British Isles since the end of the Devensian Glaciation. There are numerous accounts which describe the changes in vegetation through time in response to the complex interaction of climatic, topographical and biological factors, as well as human intervention (eg. Pennington 1974; contributors to Simmons and Tooley 1981; A. G. Smith 1970; Turner 1970). Considerable regional variation in the detail of post-glacial forest development has been recognized (J. G. Evans 1975, 81-83; Birks et al 1975).

2.3.2 Early Post-Glacial Vegetational Change in Wales

Post-glacial colonization of Wales by vegetation was retarded both on account of its relatively distant location from Continental sources and by the effects of altitude (Taylor 1980a). The succession of trees which follows the post-glacial warming has been recognized as showing a similar pattern over most of Wales (P. D. Moore 1977), but with local variation in response to topographical characteristics already noted in relation to climate.

Juniper (Juniperus) was soon followed by hazel (Corylus) towards the close of the Devensian Glaciation around 8000bc. The early arrival and expansion of three main tree species, birch (Betula), pine (Pinus) and willow (Salix) was accompanied initially by only a
l little oak (*Quercus*) and elm (*Ulmus*). Between c. 7500 and 5000 bc there was an expansion in oak and elm woodland and a decline in hazel. Pine survived and increased in the uplands towards the 'climatic optimum.' Late in the sequence there was a rapid expansion of alder (*Alnus*).

In the period c. 5000 to 3500 bc, mixed deciduous woodland of alder, oak and elm, with occasional lime (*Tilia*) and ash (*Fraxinus*), attained its maximum extent while pine continued to occur at altitude. (Taylor 1980a 111-117). Forest cover up to 750 m OD has been suggested for the British Isles at this time (Pennington 1974, 60). Pollen analysis in the southern Welsh uplands can be taken to support this (Crampton 1966, 49-50), although a more conservative altitude of 610±60 m OD has also been argued (Taylor 1980a, 117). It has been proposed that minimally 75% of the Welsh landmass carried woodland at this time (Eldin 1960, 39). Pollen maps constructed for the period around 3000 bc suggest an abundance of alder, birch and hazel with some oak in the forest cover across South Wales (Birks et al 1975).

Of course, there would have been variations in the composition and extent of woodland in response to regional and local factors such as soil, aspect, exposure and slope (Birks et al 1975, 103). For example, towards the end of this sequence, it has been suggested that oak was more prevalent in the uplands of south and west Wales compared to Snowdonia, where alder and birch were more common (Moore 1977, 79-80). In Cardiganshire, local variation is recorded.
in respect of pine which was successful in the uplands but not at lower altitudes where it was in competition with oak (Moore 1972).

Interference by the hunter-gatherer communities of the Mesolithic in the development of the woodland landscape through deliberate burning is now accepted as likely (Mellars 1976) although naturally ignited blazes could account for quantities of the charcoal recovered in pollen preparations (K. J. Edwards 1989a 148). In Wales evidence for such early woodland disturbance and burning is rarely associated with artefacts (Caseldine 1990, 35). Often human agency is only inferred as a possibility. For example, on Mynydd y Drum near Ystradgynlais, Powys, 6km south-east of the survey area, woodland clearance, indicated by charcoal and dated to between c. 6000bc and 4500bc, has been interpreted as a result of activity by a Mesolithic population (Chambers et al 1990). However, at Waun-Fignen-Felen on the Black Mountain, 4km east of the survey area, Mesolithic flints have been found in an area which pollen evidence suggests was relatively open at around 6000bc (Smith and Cloutman 1988, 198). This site will be discussed more fully in later sections (2.3.3, 2.4.2 and 12.3.4 below).

2.3.3 Vegetational Change after c. 3000bc
The variable interaction of climatic and pedological factors, combined with human activity, began a process which led in succeeding millennia to the extensive deforestation of much of Wales, particularly at altitude. The arrival of agriculturally-based subsistence accelerated woodland clearance and vegetational
change, though again it is not possible to quantify the impact of this relative to changes occasioned by environmental and biological factors. There is, however, majority agreement that the general reduction in woodlands later in the fourth millennium BC primarily reflects human interference and is not climatically induced (J. G. Evans 1975, 113; Smith et al. 1981, 139), although dendrochronology suggests that a volcanic eruption around 3600 BC could have produced a dust cloud with detrimental effects on vegetation (Baillie 1989, 313).

It has traditionally been claimed that the early impact of food production coincided with a particularly substantial reduction in elm pollen relative to other arboreal species (J. G. Evans 1975, 109; Smith et al. 1981, 134). The elm-decline has, therefore, been taken as a particularly significant threshold in the palaeobotanical record for both the environmentalist and the archaeologist. In Britain dates for the 'elm-decline' fall in the period just before and around 3000 BC (Smith et al. 1981, 159).

However, the status of the 'elm-decline' in the context of the transition to food production in Britain is uncertain (Edwards 1988). Firstly, it is probable that food production was taking place to some extent prior to the decline although distinguishing between grass and cereal pollen presents challenges (Edwards and Hrons 1984; K. J. Edwards 1988, 259-61). Secondly, the causes of the elm-decline are disputed.
The elm-decline is no longer perceived as climatically induced since it is unlikely that a colder climate would have affected only one of the several climatically sensitive trees in the woodland (J. G. Evans 1975, 109; Smith et al 1981, 157-160; Huntley and Birks 1983, 415). The nature and extent of human influence is, however, unclear. Even when a human contribution to the elm-decline is allowed, a connection with agriculture cannot be assumed (Bradley 1978, 10-16; Kinnes 1988, 2-4). For example, in the north-west of England late Mesolithic fodder collection has been suggested as prompting an early phase in the decline of elm prior to a more substantial decline accounted for by Neolithic pastoralism (Bonsall et al 1989, 203).

However, doubts remain as to whether selective human activity, such as use of elm leaves as fodder (Smith et al 1981, 152; Bonsall et al 1989, 203) or even as a carbohydrate staple for human consumption (Dimbleby 1978, 29), is a relevant factor in the especially marked decline of elm, particularly in view of its relative synchronicity across Britain (Rowley-Conwy 1982, 205-6; K. J. Edwards 1988, 261-2). It has been maintained that, for collection to have had a substantial impact, unrealistically high population levels are required (Rowley-Conwy 1982, 205-6). There is a strong possibility that disease accounted for, or exacerbated, the process (Girling and Greig 1985; P. D. Moore 1985). By way of summarising current thinking, the interplay of anthropogenic factors and disease are likely to explain the decline of elm (Huntley and Birks 1983, 414-15).
The 'elm-decline' occurs in Wales, too, around 3000 bc (Caseldine 1990, 45), although a variability of ± 500 years has been argued for the Welsh uplands (Taylor 1980a, 123). At Mynydd y Drum, Ystradgynlais, the primary elm-decline occurred in one profile immediately prior to 3130±80 bc (Car-1146) and at a second at 2990±80 bc (Car-1154) (Chambers et al 1990, 243). At Waun-Fignen-Felen on the Black Mountain, the elm-decline is dated at ten of the sixteen sample sites to between c.3500 bc and 3000 bc. Variability in the date of, and the influence of local events, on the elm-decline are noted as possible (Smith and Cloutman 1983, 201-203).

In Wales, there is scanty evidence for cereal pollen either prior to or coinciding with the elm-decline. The pollen evidence suggests the prevalence of pastoralism rather than cereal production in the early phase of food production in the uplands (Caseldine 1990, 43-4). This will be discussed further in relation to the interpretation of land-use in the survey area (12.4.3 and 12.4.4 below).

The retreat of woodlands from the upland landscapes was frequently interrupted by episodes of re-generation, followed by further woodland clearance with an overall trend towards an open landscape in which woodland with time became less and less significant (eg. P. D. Moore 1968). By the second millennium bc, the Welsh uplands were becoming increasingly clear of woodland at least on a local basis (Taylor 1980a, 123), a process more generally extended following pronounced climatic deterioration in the centuries around 1000 bc (2.2.3 above).
There is some evidence for the appearance of later prehistoric and early historic landscapes in the vicinity of the survey area. Cairns assumed to date to the second millennium bc on Mynydd y Drum, Ystradgynlais, were constructed in a substantially deforested landscape, a heathland or hazel scrubland, possibly at a habitat boundary between these environments (Chambers et al 1990, 244). At Waun-Fignen-Felen on the Black Mountain, there is evidence for some local woodland regeneration during the earlier 1st millennium bc with renewed clearance later in the millennium continuing into the early centuries ad (Smith and Cloutman 1988, 203). Radiocarbon determinations from this location provide unusual chronological precision for the on-going cycle of woodland and scrub regeneration and clearance culminating in open landscapes. Evidence for woodland clearance continues into the Medieval period (Caseldine 1990, 95).

2.4 SOILS

2.4.1 Post-Glacial Soil Development

During the post-glacial period, brown forest soils probably developed throughout most of the upland region (Limbrey 1975, 156). These were then altered by a combination of biological, climatological and anthropogenic factors (Bridges 1978), the relative significance of which varied through time. The nature of soil change through the prehistoric period is discussed by contributors to Simmone and Tooley (1981). Human intervention in the process occurred through modification of the woodland and the
instigation of herding and cultivation (Limbrey 1975, 117-126). Generally this led to the degradation of soils through hydrological changes and reductions in nutrient levels, and also in some circumstances their erosion. However, it has been argued that human intervention only served to modify natural trends of soil formation in the highland zone (Ball 1975).

2.4.2 Soil Degradation in Upland Wales

Podzolisation, gleying and peat formation are the major interrelated processes which have affected development of the original post-glacial brown forest soils in the uplands (Ball 1975, 22-23). A podzol results from the leaching of iron, aluminium and most weatherable minerals from the upper horizons to horizons of deposition lower down the profile. Gleying results from the waterlogging of soils allowing the reduction of iron from a ferric to a ferrous state (Ball 1975, 22-23; Limbrey 1975, 137-145). Peat is a soil comprising slightly decomposed or undecomposed vegetable matter. Peat formation may be topogeneous or ombrogenous, the former depending on impeded drainage which is a consequence of topography, the latter requiring high levels of rainfall. Ombrogenous peat may take the form of raised bog or blanket bog (Godwin 1981, 4-12). These processes result in upland landscapes covered by acid soils with poor nutrient levels capable of supporting only an impoverished vegetation.

It has been suggested that the beginning of the podzolisation of brown earths and onset of mor peat formation in Wales dates from
early woodland clearance coinciding with higher rainfall levels (Taylor 1980a, 119). This would place the beginnings of degradation around the sixth millennium bc, in common with other parts of Britain (Dimbleby 1962, 17; J. G. Evans 1975, 99; Limbrey 1975, 159). Also it is suggested that soil degradation occurred earliest at altitudes where there was no cover of mixed deciduous oak forest (Limbrey 1975, 157). This is supported locally by work at Waun-Fignen-Felen to the east of the survey area where clearance of lighter woodland as early as c.6000bc produced heathland conditions with podzolisation on the more permeable soils (Smith and Cloutman 1988). A Bronze Age date for podzolisation under oak forest on cold slopes at around 300m OD, and an Iron Age date for the process under oak forest on warmer slopes at around 140m OD, has been proposed (Crampton and Webley 1964), indicating the potential of chronological variability in pedological change according to aspect and altitude.

A date of around 3000bc for general blanket peat initiation in the uplands has been argued (P. D. Moore 1975), but again extensive variability is indicated in which altitude is one significant factor (Chambers 1982, 457). For example, peat initiation is noted from c. 3000bc at 715m OD in the Brecon Beacons, and at c. 600ad at 400m OD in the Glamorgan hills (Chambers 1981). At Waun-Fignen-Felen, to the east of the survey area, ombrogenous peat appears to have formed as early as c.5600bc at one location, with formation at most sites between c.3800 and 3500bc, but an initial onset as late
as c.2000bc at other locations. Very local considerations seem to have influenced the process (Smith and Cloutman 1988).

During the second millennium bc the podzolic soils both matured and spread in extent in the uplands. Climatic deterioration from the end of the second millennium bc led both to the initiation of peat growth in new areas and the recurrence of formation within existing bogs (Godwin 1981, 193-196; Taylor 1980a, 125). The nature of the use to which the land was put would have continued to contribute to the evolution of soils and generation of peat bog, with the differential effects of cultivation, when and where possible, and the contrasting impact of grazing by different species of domesticates, notably sheep and cattle. It is possible that many upland soils attained their essential present-day characteristics during later prehistory although it has been suggested that the gleying of podzols is a later development, probably from the early Middle Ages onwards (Crampton 1965, 224). However, the character of soils from the early historic period through to early modern times has generally received little attention (Caseldine 1990, 109).
2.5 THE PAST ENVIRONMENT OF THE SURVEY AREA

2.5.1 Introduction

As mentioned above (1.4), choice of the survey area was influenced by the availability of a recent study of the past vegetational history of this part of the Black Mountain by Edward Cloutman (1983). The work within the survey area was part of a wider project which also involved sampling at Waun-Fignen-Felen, 4km east of the survey area, to which reference has already been made (Smith and Cloutman 1988). Cloutman sampled peat deposits and the top of any underlying mineral soils at six locations more-or-less at the centre of the survey area (fig. 2:2). The following account synthesises Cloutman's study and interpretations. Pollen analysis has also been carried out in a valley location just south of the survey area near Cwmllynfell (Trotman 1963), and this also is briefly summarised (2.5.5 below). Comments on the environmental data and its interpretation by Cloutman will be reserved for Chapters 12, 13 and 14 which are concerned with questions of land-use within the survey area.

2.5.2 The Location of the Sites Chosen for Environmental Study

Five of the six sampling locations are situated within a 200m by 600m area in a col between Pen Rhiw-du at 525m OD and Garreg Lwyd at 617m OD, centred on SN 732 183 (fig. 2:2) (Plate 2). These are all on the west-facing slope of Garreg Lwyd known as Pen Rhiw-wen, an area of Carboniferous Limestone. The sixth site is on a plateau on top of Garreg Lwyd, an area of Millstone Grit. The
Fig. 2d. Location of sites sampled by Trotman and Cloutman for pollen data within and adjacent to the survey area.
altitudinal range of the sampling sites lies between 491m and 610m OD (Cloutman 1983, 26-28). The sites were distinguished alphabetically. Their designation in order of decreasing altitude is as follows:-

Site N at 610m OD - on top of Garreg Lwyd
Site M at 539m OD
Site L at 513m OD
Site H at 510m OD - on west facing slope of Pen Rhiw-wen
Site K at 496m OD
Site J at 491m OD

Sites N, L, and K contained shallow blanket peats with basal mor deposits over a podzolised mineral soil. Sites N and H also comprised peat deposits but these lay directly on bedrock. Site J was a swallow hole filled with a 4m deep topogenic peat (Cloutman 1983, 6).

2.5.3 Aspects of the Methodology
The aims of the study, and methods adopted in their pursuit, have been fully described (Cloutman, 1973, 4-34). One objective is of particular relevance to the present archaeological survey, which covers a relatively extensive area of landscape around Cloutman's sampling sites. This was to evaluate an approach intended to differentiate between "local" and "regional" pollen components. "Local" pollen is defined as that produced by vegetation growing at or close to the sampling site, characterised by the most widely
fluctuating pollen curves. "Regional" pollen, taken as coming from vegetation on the surrounding slopes and valleys, exhibits a comparatively stable pollen curve. An "extra-regional" pollen component comes from outside the immediate catchment area (Cloutman 1983, 4-5).

While pollen from the sample site provides information on the environment of the immediate area, interpretation in relation to the surrounding landscape becomes more difficult with distance (Cloutman 1983, 5). To assist in distinguishing between local and regional pollen components, the modern pollen rain was studied. Pollen data was collected from surface samples and compared with modern vegetation and the results applied to provide parameters for the interpretation of fossil data (Cloutman 1983, 28-33). The close location of several sample sites was aimed at producing a "three-dimensional" approach to the vegetational history of the area. Radiocarbon determinations were used to provide an absolute chronology to assist correlation between sampling sites (Cloutman 1983, 5), and as a basis for the calculation of pollen deposition rates at each site (Cloutman 1983, 18-22).

It was concluded that in circumstances where every sampling site has unique pollen catchment characteristics, the use of modern pollen diagrams provides an useful parallel for the fossil data, and also that the three-dimensional approach, combined with radiocarbon correlation, assists in the detection of local variability. As well as allowing local events to be detected, this
prevents results from one site distorting the picture more generally applicable to the area as a whole (Cloutman 1983, 176-177).

Cloutman, therefore, sought to reconstruct the history of both the local vegetation in the immediate vicinity of the sampling sites, and the regional vegetation on the surrounding slopes. This is relevant to the present study for two reasons. Firstly, it can provide information on human activity in the area at a time when this was not leaving a cultural record in the form of identifiable field-remains. Secondly, it contributes to the provision of an environmental context for the structures to be described in Chapter 3.

2.5.4 An Outline Environmental History For the Western Area of the Black Mountain Correlated to Landuse

This outline environmental history takes account principally of Cloutman's interpretation of changes in vegetation and soil with particular reference to the onset of degradation through podzolisation and peat initiation. It follows Cloutman's phasing, the chronology of which is based on both radiocarbon determinations and pollen deposition rate diagrams (see 2.5.3). The account synthesises the data from the six sampling sites (Cloutman 1973, 35-76, and 82-92), the results from which will only be referred to individually when any local variation from the general picture is particularly significant.
**Phase 1 - prior to c. 6000bp/ 4000bc**

Locally, it appears that the uplands were dominated by hazel (*Corylus*) with birch (*Betula*) and pine as the major trees. The woodland was fairly open supporting a ground flora of bracken (*Pteridium*) and heather (*Erica*), together with umbellifers, plantains and ferns (*Dryopteridaceae*). It is impossible to say how long the vegetation had been like this. The presence of some charcoal is taken as indicating the possibility of human intervention in perpetuating hazel scrub through burning to encourage good grazing grounds.

Regionally, following a birch woodland, a mixed deciduous woodland is suggested with oak (*Quercus*) the dominant species accompanied by elm (*Ulmus*), lime (*Tilia*), birch, pine (*Pinus*) and alder (*Alnus*) present.

**Phase 2 - c. 6000 to 5000bp/ 4000 to 3000bc**

Locally, the hazel component in the mineral soil declines between c. 4000 and 3800bc followed by a period of grassland giving way to heather and ling (*Calluna*) heathland. Podzolization of mineral soils, which were initially relatively freely-drained, followed increased leaching after the removal of deep-rooted vegetation. Leaching may have resulted in an iron pan formation which obstructed drainage, with consequent waterlogging, leading to the creation of an acid mor humus.
The abundance of charcoal seems too great and too consistent to be due to natural fires. It is suggested that human intervention, through burning to encourage optimum grazing, is significant in serving as a catalyst for vegetational and pedological change.

Regionally, a mixed woodland of oak, elm and lime occupied the better soils, with alder on heavier soils close to rivers. It is suggested that birch and alder may have colonised the cooler north-facing slopes of Garreg Lwyd with a transition zone of hazel between heathland and woodland.

**Phase 3 - c. 5000 to 3300bc/ 3000 to 1300bc**

Locally, ombrogenous blanket peat forms over the mor deposit at sites M, L and K. At site M this occurs around 2820±70bc (CAR-12); at site L around 2770±70bc (CAR-17); and at site K the humified mor deposit grades into blanket peat between 3495±70bc (CAR-38) and 2850±85bc (CAR-37). Cloutman favours anthropogenic influence in the initiation of peat at these locations. He suggests that this was in the form of sustained clearance through burning to promote on-going grazing, which catalysed or accelerated natural processes involving climatic, edaphic and vegetational factors (1983, 78-80). Locally, the vegetation was varied, with grasses dominant, succeeded by heather at some sites, while hazel scrub bordered areas of reed. Oak and alder were in evidence near some sites. At site H humified peat did not begin to form until right at the end of this phase via a process of lateral movement over podzols, c.
1450±70bc (CAR-26). Peat initiation was topogenic in the swallow hole, site J, and could not be dated at site N.

Regionally, elm values declined early in this phase. There are some indications that oak, birch and hazel values were also in decline. At site N, radiocarbon determinations of 2980±60bc (CAR-85) and 2905±75bc (CAR-84) indicate the approximate date of the regional elm decline. The contention that the initial elm-decline lasted 75 years (Cloutman 1983, 88) cannot be sustained since this is to treat the radiocarbon determinations from site N as real dates without regard to the margin of error. Results from site L, although ambiguous, could indicate a secondary elm decline at about 2700bc (Cloutman 1983, 89). A rise in grasses at Site N, interpreted in part as a consequence of grassland taking over from woodland on regional basis, is taken as evidence of early minor clearance in the region (Cloutman 1983, 37). Arboreal pollen, however, together with shrub pollen, still constitutes in excess of 50% of the pollen count at all sites throughout this phase, except site L where heathland was dominant (Cloutman 1983, 89).

Climatically sensitive lime does not generally decline until later in the phase which leads Cloutman to exclude climatic change as a principal cause of the early decrease in arboreal pollen. High percentages of plantains and buttercup (Ranunculus) pollen early in this phase at site N are taken as suggesting pastoral activity, possibly in the upland region (Cloutman 1983, 42). Two cereal-type pollen grains were noted early in this phase at Site N.
The elm-decline at site N is followed by what appears to be oak woodland regeneration. However, later in this phase the appearance of significant quantities of plantains and a rise in ash (Fraxinus) pollen, a species favoured by human interference, together with a fall in the hazel pollen curve, suggests more widespread clearance, possibly on the intermediate slopes (Cloutman 1983, 38).

Regeneration of oak woodland is again noted, around 1910±85bc (CAR-36), at site K. The explanation may lie in the location of the site at the base of the col just above the relatively sheltered valley of the Want Garw which could have brought the forest margins into the immediate vicinity (Cloutman 1983, 65).

Subsequent declines in alder and oak, and the rise of light demanding species such as ash, birch and willow, again indicate more widespread minor woodland clearance in the region. Plantains are also in evidence in significant quantities, earlier than elsewhere, with a cereal-type grain observed towards the end of the phase. Locally, it is suggested that heather and grasses dominated the site, and that both arable and pastoral farming are indicated close-by in a particularly favoured location in the saddle of the col (Cloutman 1983, 50-51 and 90).

In general, until the end of phase 3, it is suggested that most human attention was devoted to the uplands (Cloutman 1983, 90), with only minor clearance of, or interference with, the vegetation on the lower slopes.
Phase 4 - c. 3300 to 2600bp/ 1350 to 650bc

Locally, increased wetness of the bog surface is indicated by the rise in sedge (Cyperaceae) pollen values. This apparently led to the spread of ombrogenous blanket peat to site H. The boundary where the humified peat grades into the ombrogenous peat produced a radiocarbon determination of 1015±65bc (CAR-25). Topogenic peat within the swallow hole at site J also grades into ombrogenous peat at around 850bc (Cloutman 1983, 57-58 and 81). An increase in the values of Bog Asphodel (Narthecium) at several sampling sites may also indicate climatic deterioration around 1000bc (Cloutman 1983, 72).

Regionally, it is suggested that an increase in alder values also shows climatic deterioration. The phase includes the common appearance of bracken and plantains and a general decline in trees and shrubs (Cloutman 1983, 90).

Marked decreases in oak values at site H, and at sites near the southern end of the col, are taken to indicate widespread reductions in woodland, concentrated on the lower slopes (Cloutman 1983, 38). While climatic deterioration may have been in part responsible for changes in the woodland composition, human intervention is also seen as important, given the rise in species such as bracken and clearance indicators such as plantains, Sorrel (Rumex), Mugwort (Artemisia) and Goosefoot (Chenopodiaceae), with charcoal noted at several sites (Cloutman 1983, 51 and 72-74). Hazel was relatively abundant at site K and J which may be
explained by coppicing (Cloutman 1983, 66 and 74). A little cereal-type pollen at sites L and H indicates arable activity, although the rise in bracken and plantains suggests pastoralism is most common. Evidence for oak woodland decline from the southerly sites alone argues for change on the southern slopes. The remaining woodland on the Old Red Sandstone and limestone to the north may not have suffered such increased levels of clearance (Cloutman 1983, 90-91).

Phase 5 - c. 2600 to 1200 BP / 650 BC to 750 AD
Locally, heather and grass moorland dominates in what is by now an essentially open upland. The bog surface seems to have become wetter (Cloutman 1983, 60, 66 and 91).

Regionally, there is widespread clearance of woodland and expansion of birch and ash pollen values, although there are indications of episodes of oak regeneration. At site K, after signs of some initial woodland regeneration, arboreal pollen declined from around 105±65 BC (CAR-34), a phase lasting around 1000 years (Cloutman 1983, 67). Generally, it seems the upper slopes became completely deforested although trees remained in the shelter of the valley heads. The most dramatic reduction in arboreal pollen is seen at the southerly sites, reflecting activity on the southern slopes (Cloutman 1983, 91).

Plantains continue to indicate intensified pastoralism (Cloutman 1983, 61), but the phase is marked by an increase in weeds of
cultivation and cereal-type pollens. The evidence is particularly strong from site L during a sub-phase, claimed on the basis of the deposition rate diagram, to be Romano-British. An increased requirement for cereals during this period is cited in support of the claim. Although this pollen may be derived from widespread regional clearance "on a massive scale" with farming practised over much of the adjacent landscape, it is concluded that cultivation was taking place very close to the sampling site because no other site shows a similarly dramatic rise in grasses, plantains and cereals at this time (Cloutman 1983, 53).

Phase 6 - c. 1200bp/750ad to Modern period

Locally in the open uplands, grasses tend to displace heather through time reflecting the transition to the present poor grassland. Regionally, woodland clearance continues until some late afforestation is indicated by a rise in pine and beech (Fagaceae) levels.

Grazing pressures seem to intensify while cereal pollen regularly appears. A radiocarbon determination of 1175±55ad (CAR-21) provides a mid-date for a sub-phase at site H, assessed on the basis of deposition rates to span a period around 1050 to 1300ad. A rise of cereal pollen is noted during this sub-phase (Cloutman 1983, 61).
2.5.5 Pollen Analysis at Cwmllynfell

In the early nineteen-sixties pollen analysis was carried out by Trotman (1963) on peat deposits some 400m south of the southern boundary of the survey area at SN 738 136 towards the village of Cwmllynfell. The valley floor site is located at around 175m OD some 4km south-south-east of Cloutman's sampling area (fig. 2:2). It thus provides a useful comparison for Cloutman's attempted extrapolation of regional environmental change. Trotman follows the conventional pollen zonation for her sequence which is unsupported by radiocarbon determinations (1963, 125-126 and 151-156). Approximate dates are applied to her sequence following J. G. Evans 1975 (Table 4, 72).

Zones IV and V – c. 10,200 to 9000bp/ 8300 to 7000bc

The immediate post-glacial is poorly characterised in the pollen record. A slight rise in pine pollen is noted prior to the rise of the main deciduous forest.

Zone VI – c. 9000 to 7500bp/ 7000 to 5500bc

Oak forest increases with birch, pine and elm.

Zone VIIa – c. 7500 to 5200bp/ 5500 to 3200bc

Within the deciduous oak forest, alder values rise while pine and birch fall. Elm and lime, generally poorly represented in the region, are at their most abundant.
Zone VIIb - c. 5200 to 3200bp/ 3200 to 1200bc

Initially there is a decline in elm which then continues to remain low. A few plantains are present but remaining tree-curves are unaffected. Increased birch and grass values probably represent pollen brought in from a distance since no change in the local succession could be detected. Subsequently reduction in oak values with increasing grass and high bracken values suggest local clearance is probable. Oak and alder values continue to be relatively high with rising birch and hazel curves. Thinning of woodland with a sharp increase in bracken levels is interpreted as coppicing rather than clearance. At the end of the phase increasing ash and grass pollen are seen as suggesting continuation of pastoral farming with minor arable activity.

Zone VIII - 3200bp/ 1200 bc onwards

Hazel and ash increase while oak and alder decline. Weed pollens increase while cereal become more abundant.

2.5.6 Summation of Environmental Data for the Survey Area

Figure 2:3 provides a general summation of the environmental data drawn from Cloutman's work. Trotman confirms in general terms the deductions made by Cloutman as regards land-use away from the slopes immediately adjacent to his sampling area - only limited clearance of woodland in the period c. 3000bc to 1000bc with increasing clearance and evidence of arable farming in the first millennium bc.
Fig. 2.3. Summary of environmental data and potential landscape drawing mostly on Cloutman (1983) but also on Trotman (1963).
It is emphasised that, in the context of the present study, the regional pollen component can only provide a general environmental back-cloth to the archaeological monuments given the scale of the survey area. Away from the zone of the sampling sites there is capacity for a mosaic of variations dictated by local topographical characteristics which will not necessarily be reflected in the regional pollen component at Cloutman's sampling locations.

2.5.7 Comparison of Aspects of the Environmental Data for the Survey Area with Data from other Areas of the Welsh Uplands

Early indications of some destruction of woodland, in the form of charcoal around 5000bc to 3000bc, mirror those from other areas although they have been detected rather earlier elsewhere (2.3.2). It is noticeable that the survey area lies close to the boundaries between pollen frequencies for several arboreal species on pollen maps prepared for the period around 3000bc (Birks et al 1975). This is likely to reflect the position of the survey area close to significant environmental thresholds determined by a combination of topography, altitude and climate (2.2.4 above).

A relatively early onset for podzolisation at this altitude, following the beginnings of woodland clearance, is indicated but again not as early as elsewhere (2.4.2). The beginnings of peat formation around 3000bc and its spread and recurrence in succeeding centuries match the general view of the process in the southern Welsh uplands. However, the onset of peat formation appears a little later than at the neighbouring area of Waun-
Fingen-Felen (2.4.2). Elm begins to decline around 3000 BC within the context of a general decline in arboreal pollen which accords with data elsewhere (2.3.3). The pollen record suggests climatic deterioration towards the end of the second millennium BC continuing into the first millennium, corresponding with a widespread phenomenon (2.2.3). The on-going process of woodland clearance, accelerating in the first millennium BC and culminating in a much more open landscape by the early historic period broadly parallels such development across the upland region.

By way of conclusion, the environmental data from the survey area accords well with, and generally complements, recent environmental work in the Welsh uplands. Aspects of its interpretation will be considered in Chapters 12, 13 and 14.
CHAPTER 3: THE DATA FROM THE ARCHAEOLOGICAL FIELD SURVEY
3.1 INTRODUCTION

3.1.1 Division of the Survey Area for Purposes of Description

Part 3 of the dissertation presents the data recorded during the field survey following the methodology described in 1.7 above. For the convenience of description, the survey area has been divided into the following zones (fig. 3:1):

3.2 AREA A - Sites 1 to 29. The west and north-west slopes as far east as the valley of the Nant Oesglyn.

3.3 AREA B - Sites 100 to 142. The northern face east of Nant Oesglyn to Cylchau.

3.4 AREA C - Sites 200 to 215. The western bank of Cwm Sawddee Fechan.

3.5 AREA D - Sites 300 to 309. The main ridge of the Black Mountain.

3.6 AREA E - Sites 400 to 416. The south-western slopes from the Afon Berach to the west bank of the Nant Pedol.

3.7 AREA F - Sites 500 to 514. The southern slopes from the east bank of the Nant Pedol to Craig Derlwyn west of Nant Garw.

3.8 AREA G - Sites 600 to 641. Nant Garw on the southern slopes and the slopes east of Nant Garw.

3.9 AREA H - Sites 700 to 752. The southern slopes from the Nant Pydd to east of the Nant Llynfell.

3.10 AREA I - Sites 800 to 858. The slopes west of the Afon Twrch.
Fig. 3.1. The division of the survey area for purposes of description in Chapter 3.
The description of the archaeological evidence in each area is prefaced by an outline topographical description, the length of which will vary according to the topographical complexity of the area. Supplementary topographical description is provided when necessary for the locality or the immediate environs of sites.

3.1.2 Conventions Used on Maps and Site Plans

The maps in this section are intended to serve only as location maps, not for purposes of analysis. However, different symbols have been used to distinguish between major monument-types to assist recognition of sites. While not intending to anticipate the analytical sections (chapters 4, 5, 6 and 7), it is thought that the description of sites will be clarified by making a basic distinction at the outset between *monumental cairns* (with the implication of a sepulchral or ceremonial function) and *stone heaps* which are judged most likely to result from stone clearance for agricultural improvement. It is recognised, however, that such distinctions may be far from clear-cut in reality (Yard 1989a, 12-13), and the problem will be addressed further in the analysis of this category of monument in Chapter 5. A distinction is also made between *linear banks of stone* which usually extend for a distance across the landscape, and *stony strips* which are usually relatively short in length, often irregular in form and which on occasions seem to define small plots or incipient fields. These again are considered to be most likely a consequence of localised stone clearance for agricultural improvement.
Conventions Used on Location Maps

--- linear stone bank

--- --- --- stone strip or lynchet

• monument cairn

• stone heap

•• cluster of stone heaps

○ annular/sub-annular enclosure

○ annular/sub-annular foundation

□ rectangular/sub-rectangular/squarish foundation

rectangular/sub-rectangular/squarish foundation which has associated lesser foundation often of irregular form

▲ other structures
A key to the position of the location maps is provided in figure 3:2. All contours on the location maps are in metres and scales are in kilometres and metres.

**Conventions Used on Figures Illustrating Structures and Sites**

- **Stony bank**
- **Mostly grass-covered stony bank**
- **Coursed stone or boulder walls**
- **Tumbled stone**
- **Orthostat**
- **Slab laid flat on the ground**
- **Rock exposure**
- **Surface stone**
- **Stream**

The scales on all plans are in metres.
3.1.3 Layout of Site Descriptions

Each monument or site is preceded by its own unique identification number for the dissertation followed by a number in brackets (f) which is the number allocated in the field record. This is followed by any relevant figure or plate number and the National Grid Reference.

3.2 AREA A: THE WEST AND NORTH-WEST SLOPES AS FAR EAST AS THE VALLEY OF THE NANT OESGLYN (SITES 1 TO 29)

3.2.1 Outline Topography

This section of the survey area extends from Banwen Gwythwch at the western edge of the survey area across to Nant Oesgllyn in the east (fig. 3:1). The present-day enclosure stops at between 250m and 300m OD. Generally the archaeological remains above the modern enclosure are situated either on fairly open north or north-west facing slopes, or in valleys, ravines and gullies below the major scarp face. This rises to around 450m OD dominating this section of the Mountain. Drainage is mainly via the Nant Gwythwch to the west, and to the north by the Nant Cwmtawe and Nant Oesgllyn (figs. 1:5 and 3:11).

The geology is varied (fig. 1:4). Old Red Sandstone deposits to the north are largely outside the survey area, within the present-day enclosure. A narrow band of Limestone south of the Old Red Sandstone widens slightly to the east rising to become the main scarp face to the south-east. However, it is the Millstone Grit,
underlying the greater part of the area, which forms most of the steep, dominant scarp face. Limestone faults penetrate the Millstone Grit, frequently giving rise to foundered strata with associated sink holes. Deposits of the Carboniferous Coal Measures extend across the extreme western edge of the area, giving way to the Millstone Grits where the Mountain mass begins to form to the east. Amongst the soil-types present, humo-ferric podzols predominate on the Millstone Grits with areas of cambic stagnohumic gleys and thin brown and humic rankers on the Limestone (fig. 1:6).

The vegetation is typical upland grassland with bracken locally pervasive, and cotton grass and reeds in wetter areas. Peat bogs have formed in particularly poorly drained areas.

3.2.2 The Archaeological Remains (Sites 1 to 29)

On Banwen Gwythwch (Site 1) (figs. 3:2 and 3:3)

Banwen Gwythwch is a slope on the Millstone Grit. It forms part of the western edge of the Mountain where the scarp face begins rapidly to rise in height. Humo-ferric podzols cover the slope.

1. (317) (fig. 3:3.) [centred SN 6740 1646]. A linear stony bank, 1m to 1.5m wide and up to 0.3m high runs north-east to south-west down a bracken-covered slope from just above 350m OD to 330m OD for a distance of about 270m. In terms of remains presently
visible on the surface, this is an isolated feature on the west slope of the Mountain.

Fig. 3:3. Location of site 1, a linear bank, on Banwen Gwythwych, and linear banks 5, 8, 9, 15, 16, and 20 to 24 (after RCAHM Wales Landscape Survey, with amendments) (fig. 3:2).

**On the South Bank of the Nant Gwythwych (Sites 2 and 3) (figs. 3:2, 3:4 and 3:5)**

Much of the valley of the Nant Gwythwych is poorly drained with peat formation on the valley floor over the Millstone Grit. The slopes to the south of the stream ascend over Coal Measures, which extend in front of the main Millstone Grit scarp face. These are covered with cambic stagnohumic gley soils which give way to humo-ferric podzols on the south bank of the stream. Close to the south bank are a sub-circular enclosure containing a building platform (2) and a sub-circular foundation (3) (fig. 3:4)
2. (230) (fig. 3:5) (Plate 4) [SN 6808 1757]. A sub-circular enclosure lies at 310m OD, sheltered within a gully between two Millstone Grit cuestas. The enclosure measures 27m NW-SE by 31m E-W, with internal dimensions of 21m NW-SE by 28.8m E-W. The north-west and south-east sides of the enclosure cut across the floor of the gully, with the north-east and south-west walls built along its slopes. The interior slopes quite severely from south-east to north-west. The stone and boulder walls are well-preserved, up to 1m wide and up to 5 courses (1.2m) high. The inner face is consistently higher than the outer. A noticeable construction technique is that of boulders laid lengthways across the width of the wall as tie-stones. There is a 1m wide entrance defined by boulders in the south-east arc, with a possible opposed entrance in the north-west wall indicated by a marked widening of the wall.
Fig. 3.5. Sites 2 and 3, south of Ynant Gwythwch.
either side of a constriction coinciding with a reduction in height. A building platform, 6m N-S by 6m E-W, edged by a 1m wide stony bank abuts the inner face of the south-west wall.

3. (231) (fig. 3:5) [SN 6823 1765]. A sub-circular boulder and stone foundation is built on level ground amongst surface stone close to the south bank of the Nant Gwythwch at 320m OD. The flat-topped foundation, 0.3m-0.4m high, measures 5.6m NW-SE by 5.6m E-W enclosing an area 3.4m NW-SE by 3m E-W. There is a 0.6m wide entrance break in the northern arc.

To the North of the Nant Gwythwch (Sites 4 and 5) (figs. 3:4 and 3:6)

A sub-oval enclosure (4) incorporating a round foundation lies on rising ground with a westerly and north-westerly aspect to the north of the Nant Gwythwch. There is also evidence for land division and stone clearance extending east along the crest of a Millstone Grit ridge (5) (fig. 3:6). The slopes are covered by humo-ferric soils which give way on local crests to peat directly overlying rock.

4. (223) (fig. 3:7) [SN 7620 1763]. The sub-oval enclosure is located on gently sloping ground below a minor Millstone Grit scarp face at 260m OD. It measures 22m N-S by 25m E-W overall. The interior, with dimensions of 18.4m N-S by 22m E-W, contains several low terraces. The stony bank is between 1m and 2.2m wide and 0.2m and 0.6m high; it is most substantial along the south-east
and north-western arcs. There are hints of a facing of larger stones beneath the vegetation. A likely entrance around 1m wide lies in the south-east arc; its east side is marked by a swollen terminal incorporating larger retaining stones. A sub-circular foundation with a 0.8m wide south-west facing entrance is incorporated in the north-eastern corner of the enclosure. Internally this measures 5m N-S by 5.4m E-W.

Fig. 3:6. Sites 4 and 5, north of Nant Gwythwych (after RCAHM Wales Landscape Survey with amendments).
Fig. 3.7. Site 4, north of Nant Gwythwch and sites 6 and 7 on Garreg Las.
A roughly circular setting of boulders 6m in diameter lies around 50m to the west. This is thought to be most likely a fortuitous natural formation although it has been regarded as a possible house circle (RCAHM Wales, Landscape Survey SN 61 NE no. 3, unpublished).

5. (318 to 323) (fig. 3:6) [centred SN 6730 1760]. South and east of 4 is evidence for stone clearance and land allotment, in the form of clearance heaps and strips and linear stone banks, which lie between 260 and 310m OD.

a) (323) [SN 6717 1759]. At 260m OD, around 23m south of 4, is a likely plot about 15m NE to SW by 6m NW-SE, defined by an 'L'-shaped bank of stones, 1m to 2m wide by 0.2m to 0.6m high.

b) (325) [SN 6720 1756]. A cairn, 6m NE-SW by 2m NW-SE by 0.5m to 0.7m high, lies at around 265m OD.

c) (324) [SN 6725 1758]. A stony accumulation, 5m N-S by 6m E-W and 0.2m high, lies at 270m OD.

d) (326) [SN 6729 1753]. Short lengths of stony strips, around 1.5m wide by 0.2m high, extend in a line over a distance of around 20m at about 270m OD.

e) (322) [SN 6722 1763]. A 10m long stony strip, 1.5m wide by 0.3m high, lies 10m north-east of 4.
f) (321) [centred SN 6727 1564]. A stony bank, 1.5m to 2m wide by 0.3m high, can be traced for a distance of about 50m between the 270m and 280m contours on a west-north-west slope.

g) (320) Several discontinuous lengths of stony bank appear to combine to divide an area of land on an essentially north-east to south-west axis between 260 and 310m OD. Natural boundaries to the area containing the banks are formed by the Nant Gwythwch to the south and a locally dominant steep Millstone Grit ridge to the north. A 1.4m wide by 0.4m high stone and boulder bank is visible running west to east along a minor Millstone Grit cuesta immediately above the northern edge of the Nant Gwythwch [starting at about SN 6728 1740]. A short length of bank heads off south-east towards the stream at a point where there is a 1.5m to 2m break in the main bank, but it becomes lost in an apparently natural stony accumulation. After some 85m the main bank swings upslope to the north [at about SN 6736 1739]. It follows a sinuous course for around 74m before disappearing for 70m in an area of peaty soil and seepages. Two further lengths reappear on this alignment over a distance of 65m before the bank, now a convex stony spread 2.2m wide by 0.3m high, turns north-east [at about SN 6731 1759]. It then follows the main axis of the ridge upslope for around 210m. About 90m along this stretch there is a 1.5m wide gap which appears to be a possible deliberate break; each side of the gap is flanked by boulders laid across the line of the wall. The bank turns to the north-west [at about SN 6746 1773], running for about 110m across the rocky crest of the ridge and then down
the very steep north scarp face before disappearing in concentrations of surface boulders (around SN 6740 1782).

h) (327) Running north-east along the ridge crest from the northernmost length of g) is a line of rock exposure and boulders. After 160m this natural feature is continued [at about SN 6754 1789] by a 1.5m wide by 0.2m high stony bank which can be traced proceeding downslope for a distance of about 70m. About 15m along its length, a sinuous bank branches off to the west over a distance of around 100m.

Garreg Las (sites 6 to 8) (figs. 3:4 and 3:7)

6 and 7. (224 and 225) (fig. 3:7) [centred SN 6802 1797]. Two sub-annular stony foundations are situated 18m apart on a terrace at 310m OD at the upper end of a wide gully in the south facing backslope of the Millstone Grit ridge (fig. 3:4), with humo-ferric soils in the vicinity.

6. (224) This, the south-western of the two foundations, comprises a grass and bracken-covered stony bank between 0.3m and 0.6m high, measuring 10.5m N-S by 8.8m E-W. The area enclosed is 7.6m N-S by 6.4m E-W. The bank is at its highest on the down-slope side where it may be constructed on an artificial platform. Its eastern arc is obscured by peat growth. A slight slump in the south-western arc marks the potential position of an entrance.
7. (225) A flat-topped stony bank, measuring 7.7m N-S by 8.3m E-W and 0.2m to 0.3m high, encloses an interior 5.2m N-S by 5.6m E-W. Its western arc is obscured by reeds, the south-eastern arc by peat. A slight depression in the south-south-western arc in which rather less stone is visible may indicate the position of an entrance.

8. (316 and 317) Two lengths of stone and boulder bank lie on the ridge crest between 100m and 200m north-east of 6 and 7 in an area disturbed by modern quarrying between 350m and 360m OD (fig. 3:4).

a) (316) [centred SN 6812 1812]. This feature, a line of loose stone around 80m long, is potentially the remains of a much eroded bank running east to west across slope. Where most clearly seen, it is about 1m wide by 0.3m high.

b) (317) [centred SN 6825 1806]. This 85m long convex grass-covered stony bank runs north to south across the rocky local summit of the ridge. The southernmost 30m section comprises a 1.4m wide by 0.3m to 0.4m high bank flanked to the east by a shallow ditch, 0.7m to 1m wide by 0.3m deep. The northern section, around 50m long is a slight 1m wide by 0.2m high grassy bank which may continue down the steep northern scarp face.
East of Garreg Las and towards Banc VernoGAN (sites 9 to 11) (fig. 3:4)

The Millstone Grit ridge continues to the east, fronted to the north by the Limestone Belt which extends towards the Old Red Sandstone slope of Banc VernoGAN. Linear stone banks (9) are again present on the Millstone Grit, continuing to the edge of the Limestone band, with small stone heaps located on the Brown Rankers of the Limestone (10 and 11).

9. (313-315) (figs. 2:4 and 2:8) [centred SN 6875 1810]. A 200m sinuous length of stone and boulder bank ascends the slope of a hollow from around 360m OD [starting at about SN 6861 1810]. It follows the rocky crest of a Millstone Grit cuesta to the east at around 370m OD. After turning north, it fades at a point where the rock exposure capping the ridge becomes more prominent forming a low cliff to the north. There are no unambiguous remains of the bank along the 120m long cliff top. However, a further 30m length of 1m wide by 0.2m to 0.4m high convex grass-covered stony bank runs north-east from the end of the cliff across the edge of the hollow.

Two other 30m lengths of bank run from the base of the cliff across the floor of the hollow. These three northerly off-shoots each become lost in relatively recent quarry pits. They create two enclosures on the floor of the hollow about 60m east to west by perhaps originally a similar dimension north to south.
There is a cluster of stone heaps, apparently the product of clearance for agricultural improvement, between the 350m and 370m contours on an undulating north-easterly slope on which there is much surface stone and outcropping. They are centred around 200m north-east of 9. Many stony accumulations in this area are probably entirely natural in origin and it is not easy to distinguish those involving human agency. The following, however, appear to be wholly or partly man-made.

a) [SN 6894 1833]. This stony pile, edged with boulders, is around 3.8m N-S by 3.8m E-W by 0.4m high.

b) [SN 6895 1838]. The stony heap, perhaps in part at least an artificial accumulation, is around 5m across and up to 0.5m high.
c) [SN 6901 1843]. A stony mound with loose surface stone, 4m N-S by 3.5m E-W and 0.2 to 0.3m high, is retained by larger boulders.

d) [SN 6902 1843]. The flat-topped mound with loose surface stone measures 4m N-S by 4m E-W by 0.3 to 0.4m high.

e) [SN 6903 1847]. This oval heap of stone and boulders has a concave profile and measures 8.5m N-S by 10.5m E-W and is 0.5m high.

11. (233) (fig. 3:4) [SN 6888 1864] This cairn, 5m N-S by 4.4m E-W and between 0.2m and 0.3m high, is sited in apparent isolation on a slope south of Banc Wernwgan at around 335m OD.

On Pant Want-ffarchog (sites 12-21) (figs. 3:4 and 3:9)
Most of this north-facing slope is underlain by foundered strata of Millstone Grit and Limestone. There are many sink holes. The lower parts of the slope are covered with cambic stagnohumic gley soils, the upper steeper areas by humo-ferric podzols. The archaeological remains, including compartmented rectangular structures (12-14), linear banks (15, 16, 20 and 21) and a D-shaped foundation (19), are on the lower part of the slope (fig. 3:9).

12. (55) (fig. 3:10) [SN 6910 1862]. A compartmented rectangular foundation of drystone and boulder build is sited on a platform at 320m OD, towards the top of the steep east slope of a very narrow dry valley. It is sub-divided into three compartments, the
southernmost of which is partially overlain by spoil from an adjacent limekiln. Overall it measures at least 10m NE-SW and is 6m wide SE-NW, with the walls between 0.4m and 1m high. The central compartment, 3m N-S by 3.8m E-W internally, is entered via a 0.6m wide gap at the northern end of the eastern wall. The
northern compartment, 1.3m N-S by 3m E-W internally, is at a higher level, and appears to be built on a platform scarpd into the slope with the northern wall revetting the scarp face. Such of the southern compartment as can be seen is defined by a line of spaced boulders. It measures 5m east to west with the north to south dimension at least 2m. Set against an outcrop 6m north of the foundation is a setting of boulders which speculatively can be seen as a crude structure around 2m across.

13 and 14. (53 and 54) (figs. 3:9 and 3:10) [SW 6932 1863]. Two drystone and boulder built structures lie side by side at 320m OD on the floor of a narrow steep sided valley which is dry at present.

13. (53) This compartmented rectangular foundation measures 14.3m N-S by 5m E-W and is sub-divided into three compartments. The walls of the central compartment, in which coursed stonework survives, stand at around 0.5m high; those of the southern compartment are around 0.2m high, and those of the northern compartment around 0.3m high. A fourth unit, formed by a platform, lies on the same alignment to the north but seems not to be attached to the main structure. This gives the range an overall length of 20.8m. The central compartment is 4.2m N-S by 2.6m E-W internally, with a 0.5m wide entrance in the east wall. A suggestion that this compartment is a later sheepfold imposed on the structure is unwarranted (RCAHM Wales Landscape Survey, unpublished); the central compartment is integral to the original
structure. The southern compartment is built largely of boulders which often are not contiguous. There is a 0.6m wide entrance in the east wall. The interior of the northern compartment is obscured by much tumbled stone but its dimensions are estimated at 4m N-S by 2.8m E-W. A possible entrance is located at the south end of the east wall. The platform, scarped into the slope and edged by irregularly positioned boulders, lies 2m to the north and measures 3m N-S by 2m E-W.

14. (54) This ill-defined, apparently compartmented rectangular structure, is 4m east of and roughly parallel to 13. It is divided into two, possibly three compartments. Overall it measures at least 14m N-S by 5.5m E-W. It comprises turf-covered stony banks no more than 0.3m high. The central compartment is 5m N-S by 3m E-W, and is entered by a 1m wide gap at the south end of the east wall. The southern compartment is poorly preserved with no clear indication of its southern extremity. The possible northern compartment takes the form of a bank curving to the north-west. The contrast in the preservation of 13 compared with 14 suggests that the structures may be sequential.
Fig. 3:10. Sites 12, 13 and 14, and 18 and 19 on Pant Nant-fforchog.
15. (305) (fig. 3:9) [centred SN 6916 1848]. A convex band of stone up to 2.1m wide by 0.3m high, broken half-way along its length by a sink hole, runs north-east to south-west along level ground at between 350m and 360m OD for around 60m. At either end it fades into the peaty surface.

16. (307). (fig. 3:9) (Plate 5). Three lengths of sinuous stone bank emerging from the peaty surface probably combine to form an east to west linear boundary crossing some 360m of a north facing slope between the 350m and 360m contours.

a) The westernmost bank starts from the edge of a sink hole [at around SN 6936 1841] and curves first to the south and then to the north over a distance of 130m to 140m, ending at the edge of a deep sink hole [at around SN 6947 1844]. It comprises a 1.8m wide by 0.3m to 0.5m high stone and boulder strip.

b) To the east of the sink hole the bank is again visible for a distance of some 40m before disappearing in wet, peaty ground.

c) The bank reappears after an interval of about 35m with a slightly bulbous terminal which turns slightly to the north. The main bank continues to the east for 160m as a 2m wide by 0.5m high boulder and stone strip, crossing concentrations of surface stone before fading in a stony area at a point where the incline increases markedly.
17. (306) (fig. 3:9) [SN 6939 1844]. A boulder cairn, 2.8m N-S by 3.1m E-W by 0.5m high, is situated at 350m OD around 58m north of 16a.

18. (235) (figs. 2:9 and 2:10) [centred SN 6956 1849]. There is an ephemeral 1m wide and 0.1m high irregular stony strip apparent amongst surface stone running south to north across level ground. It becomes visible 10m north of the western terminal of 16c which has a slight twist to the north. This possible off-shoot ends in an oval accumulation of stone 7.5m N-S by 3m E-W and between 0.5m and 0.6m high, close to the edge of a deep sink hole.

19. (234) (figs. 3:9 and 3:10) (Plate 6) [SN 6955 1852]. This D-shaped foundation is located 3m north of 18, on a slight terrace at the edge of a sink hole at 350m OD. It measures 9m N-S by 6.4m E-W with internal dimensions of 6.9m N-S by 4.4m E-W. The grass-covered stone banks are between 0.2m and 0.4m high. A slight undulation halfway along the bow-sided eastern bank could indicate an entrance.

20. (308) (fig. 3:9) [centred SN 6964 1863]. A length of stone bank up to 2.2m wide with a flattish profile up to 0.4m high runs north-east to south-west across the slope between the 340m and 350m contours. Towards its south-western end it passes along the edge of a water-filled sink hole and has been eroded by overflowing water.
21. (309) (fig. 3:9). A sinuous stone and boulder strip, around 1.3m wide by 0.3m to 0.4m high, obscured in places by peat growth and eroded by seepage, runs downslope between the 330m and 310m contours, for at least 160m south to north. Both ends fade into the peaty surface [at about SN 6949 1867 and SN 6945 1884].

**Pentir Blaencennen (sites 22 to 24) (figs. 3:2, 3:4 and 3:11)**

Linear banks are located on a slope at the foot of the main scarp face comprising an area of foundered Millstone Grit and Limestone strata with cambic stagnohumic gley soils.

22. (312) (fig. 3:4) Sections of stone bank, obscured by peat growth and broken by erosion, can be traced over a distance of around 200m running south-west to north-east at the foot of a very steep slope at 330m OD [starting at about SN 6977 1887 and ending around SN 6995 1895]. The western section, about 80m long, is a much dilapidated boulder strip 1.7m to 1.8m wide by 0.3m to 0.4m high; the central section is up to 2m wide with traces of a regular boulder facing; the eastern end crosses an area of sink holes and is difficult to see in the peaty surface.

23. (311) (figs. 3:11). A 170m length of boulder and stone bank, 1.6m wide and 0.3m to 0.4m high, runs south to north down a peaty slope from just above the 320m contour to just below the 300m contour [approximately SN 6998 1905 to SN 6995 1921]. The northern end is lost in a stone and boulder spread but there is a slight suggestion of a 10m off-shoot to the east.
24. (310) (fig. 3:11) This stone bank, about 160m long with a north to south-east curve, lies between 300m and 290m OD on a north-facing slope [between SN 6995 1932 and SN 7038 1922]. The northern section, 1.5m wide by 0.4m to 0.5m high, crosses an area of sink holes before ending on the edge of a deep gully. As it ascends the slope, it increasingly becomes obscured by peaty growth.

**Banc Melyn (sites 25 to 28) (figs. 3:2 and 3:11)**

This is a north-westerly facing slope at the foot of the main scarp face. Geologically it is an area of founded Millstone Grit and Limestone strata, with a cambic stagnohumic gley soil giving way to a humic ranker to the east.
25. (242) (figs. 3:11 and 3:12) [SN 7018 1932]. A sub-annular stone and boulder foundation is in the lee of a locally steep slope with a northerly aspect at 290m OD. The structure measures 6.4m N-S by 5.4m E-W with internal dimensions of 4.2m N-S by 3.2m E-W. The bank is highest, at about 0.5m, along the inner edge of the south-eastern arc although the outer edge is obscured by hill-wash. The height reduces to about 0.2m to the north-west, fading away almost completely along the northern arc. There is a west facing entrance about 0.5m wide flanked by two large boulders.

26. (237) (figs. 3:11 and 3:12) [SN 7064 1900]. An annular foundation is located at the foot of the main and very steep northerly scarp face at 380m OD, sheltered by a spur to the west. The grass-covered stone bank, 4m N-S by 4.6m E-W, encloses an area 2.5m N-S by 2.5m E-W. The ring, up to 0.4m high, is edged in places with boulders. There is a 0.6m wide south-east facing entrance flanked by boulders.

27. (236) (figs. 3:11 and 3:13) [centred SN 7060 1925]. A cluster of stony accumulations, apparently the result of stone clearance, is distributed over an area roughly 100m by 100m both on a gentle west-south-west grassy slope and a north facing terrace between the 350m and 360m contours.

   a) A L-shaped boulder accumulation, 20m N-S by 15m E-W and between 0.3m and 0.5m high.
b) An oval stone and boulder pile, 4.2m N-S by 3.5m E-W by 0.3m to 0.4m high, has eroded down slope to the west.

c) A flat-topped grassy cairn with stone showing through its broken surface measuring 4.5m N-S by 3.5m E-W by 0.3m high.

d) A circular grassy cairn with loose stone on the surface measures 3.5m N-S by 3.5m E-W by 0.3m high.

e) A roughly triangular boulder spread, 6.3m N-S by 5.3m E-W by 0.3m high.

f) A stone and boulder strip up to 47m long, 1m to 1.5m wide by 0.4m high.

g) It is unclear to what extent this discrete boulder accumulation, 5m N-S by 4m E-W and up to 0.3m high, on a short steep north facing slope, may result from human activity.

h) An oval grass-covered stony spread which is ill-defined and possibly disturbed lies alongside a shallow sink hole. It measures 5m N-S by 4m E-W by 0.3m high.

i) An oval cairn, 6m N-S by 5m E-W and 0.4m high, has several large boulders along its southern edge.
Fig. 3: Sites 25, 26 and 28 on Banc Helyyn and site 29d and 29c east of Nant Oesglyn.

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28. (56) (figs. 3:11 and 3:12) [SN 7083 19041]. A sub-annular foundation is located immediately at the foot of a north facing slope on a broad terrace at 385m OD. The structure comprises a 0.3m high band of stone 7m NE-SW by 4.5m NW-SE. Internally it measures 5.7m NE-SW by 3.2m NW-SE.

**Nant Oesglyn (site 29) (fig. 3:11)**

29. (67-69) (figs. 3:12 and 3:13) [centred SN 7125 1887]. A trapezoidal enclosed area, defined by discontinuous stony banks, is associated with two drystone and boulder built foundations and other features. It is at 420m OD on a broad terrace with a north-westerly aspect in the steep east slope of the valley of the Nant Oesglyn coinciding with an area of foundered Millstone Grit and Limestone strata.

a) The discontinuous stone bank encloses an area 43m N-S by 69m E-W. It varies in width from 1m to 2m and in height from 0.2m to 0.4m. At several points boulder facing can be seen; elsewhere the bank appears simply as a stony strip. The 7m break in the north-west arc appears to have afforded access to the enclosure since it is approached by a slight track. A spring, surrounded by an oval stone setting, is located at the south-east edge of the area enclosed.

b) A squarish cairn of boulders, 3.5m N-S by 4m E-W by 0.5m high, is situated in the eastern half of the area enclosed.
c) At the south-western corner is a rectangular structure measuring 6m NW-SE by 4.8m NE-SW, internally 3.6m NW-SE by 2.5m NE-SW. Some coursed stonework survives in the walls which are between 0.2m and 0.6m high. There is a break at the northern end of the east wall which may be an entrance although spoil and potential disturbance from an adjacent quarry pit make identification uncertain.

d) A penannular structure lies 4.5m north-west of c), measuring 5m NW-SE by 6m NE-SW. The banks are 0.4m to 0.6m high and the interior is 3m across. The structure has an entrance in the north-west arc, flanked to the east by a 1.4m high orthostat which tilts to the west at a 60° angle. A triangular boulder 1.7m long lies 1m in front of the west terminal; it is likely that this was once upright marking the western side of the entrance.

e) Immediately east of c) and d) is a quarry pit 6m N-S by 5m E-W with a 1.5m high face cut into limestone outcrop. A 1.5m high spoil heap lies north and west of the pit. This encroaches slightly on building c). A 5m long L-shaped bank, 1.2m wide, projects from beneath the northern edge of the spoil heap.

It appears that the quarry represents a second phase of activity at this site, encroaching as it does on building c) and overlying a further structure represented by the L-shaped bank. Although not physically connected to the discontinuous enclosure banks, both c)
and d) lie on their circuit, and hence are probably associated with the enclosed area.

3.3 AREA B: THE NORTHERN WALL ENUFF OF NANT OESGLYN TO CYLCHAU (SITES 27 & 29)

3.3.1 Outline Topography

This area extends westwards from Bane Melyn to Cylchau, at the north-eastern corner of the basin. It is composed mostly of the higher and wider, western slopes to the east are more rugged, of steep quartzite breccia. Near Ystafellty the slopes to the north-east of the valley, up to 480m OD, with The eastern slopes are composed of the grey siltstone by hand-sorting methods. On the western slopes to the east are more rugged, of steep quartzite breccia by hand-sorting methods. On the eastern slopes to the north-east of the valley, up to 480m OD, with the upper part of the valley, up to 480m OD, with:

Fig. 3:13. Site 27 on Banc Melyn and site 29 east of Nant Oesgllyn.
3.3 AREA B: THE NORTHERN FACE EAST OF NANT OEESGLYN TO CYLCHAU (SITES 100 to 143)

3.3.1 Outline Topography

This area extends from east of Nant Oesglyn to Cylchau, at the north-eastern corner of the survey area (fig. 3:1). It is composed mostly of the northern scarp face of the Mountain. To the west, the narrow Carboniferous Limestone band forms an escarpment, up to 480m OD, with Old Red Sandstone lower slopes to the north. In the east of the area, however, the Old Red Sandstone deposits become wider and higher, dominating the northern scarp (fig. 1:4).

The western section of the Limestone is covered by humic rankers which give way to humo-ferric podzols as the escarpment increases in height to the east. The major Old Red Sandstone slopes to the east are largely covered by ferric stagnopodzols, their summits by humo-ferric podzols, and the foot slopes by cambic stagnohumic gley soils (fig. 1:6).

The area is drained to the north, principally by the Afon Clydach and Afon Ceulan, although there are many minor streams and seepages (fig. 1:5).
3.3.2 The Archaeological Remains (Sites 100 to 143) (fig. 3:14)

Structures in the Vicinity of the Afon Clydach (Sites 100 to 126) (fig. 3:14)

The Afon Clydach rises at around 530m OD from the Lower Limestone Shales on the southern face of Blaenclwydach beneath the main Limestone escarpment. It flows west along the hollow corresponding with the Lower Limestone Shales before turning north beneath Noel Gornach. A deep narrow-sided valley is cut through the Old Red
Sandstone, the stream falling from 450m to 300m OD over a distance of some 700m (Plate 7). The valley opens out at Pont Clydach as the stream flows across the gentler slope of Waun Lwyd before entering enclosed land (fig. 3:14). The slopes around the upper reaches of the Clydach are covered by humo-ferric podzols, the lower slopes by ferric stagnopodzols.

- on Blaenclydach (100 and 101) (fig. 3:14)

Two drystone and boulder built structures are situated on the upper reaches of the Afon Clydach.

100. (89) (figs. 3:14 and 3:15) [SN 7543 1895]. This sub-rectangular structure lies on the north bank of the Afon Clydach at 500m OD. It measures 7.6m NE-SW by 4.6m NW-SE and has internal dimensions of 5.5m NE-SW by 3.8m NW-SE. Two or three courses of stone survive up to 0.5m high. There is a hollow about 1m across amongst the tumble in the south-west corner, partially defined by orthostatic slabs up to 0.5m high, and an ill-defined 0.6m wide entrance in the south-east wall.

101. (90) (figs. 3:14 and 3:15) [SN 7534 1889]. Some 125m to the west of 100 at 490m OD on the north bank of the Afon Clydach, a sub-rectangular structure lies at right-angles to the slope on a platform which is probably at least partly artificial. It measures 6.6m NE-SW by 5m NW-SE, internally 4.8m NE-SW by 3.1m NW-SE, with drystone banks 0.2m to 0.5m high. There is a 0.5m wide entrance in the south-east wall.
Fig. 3:15. Sites 100 and 101 on Blaenclydach, and sites 102 and 105 to 108 north of Noal Gornach.
north of Moel Gornach (102 to 108)

102 to 108. (figs. 3:14 and 3:15) [centred SN 7424 1884]. A number of drystone and boulder foundations are grouped below Moel Gornach where the Clydach swings north.

102. (4) (fig. 3:15) (Plate 8) [SN 7423 1882]. A compartmented foundation lies on a largely natural platform at right-angles to the slope at 460m OD above a tributary of the Afon Clydach. It is 20m NW-SE by 5m NE-SW and is divided into three compartments. The north-west compartment, measuring internally 4.4m NW-SE by 2.3m NE-SW, is defined by spaced-boulders. The banks of the central and south-east compartments, in which some coursed stonework survives, are 0.3m to 0.4m high. There is a 0.6m wide entrance in the south-west wall of the south-east compartment which has internal measurements of 4m NW-SE by 2.3m NE-SW. The slightly rounded end-wall of this compartment is set in a recess scarped into the slope. The central compartment measures internally 4.4m NW-SE by 2.3m NE-SW and lacks an apparent entrance; abutting the north-east wall is a 2m wide cell. An irregular boulder bank forms a bow-shaped annexe, up to 10m across and around 40m², to the north-east.

103. (159) [SN 7423 1883]. Around 12m to the north-east of 102 is a possible foundation crudely built of limestone blocks, 3.7m E-W by 2.7m N-S, sub-divided by a boulder.
104. (6) [SN 7422 1889]. Some 50m north-west of 102, on the west bank of the same tributary, is a poorly preserved linear structure, 3m N-S by 7.2m E-W, with a possible internal division 2.5m from the west end.

105. (5) (fig. 3:15) [SN 7427 1889]. On the north bank of the Clydach, around 60m north-east of 102, there is a rectangular structure, 3.4m N-S by 5.6m E-W, with an entrance in the north wall.

106 to 108. (7 to 9) (figs. 3:14 and 3:15) [centred SN 7411 1881]. At 460m OD, on a terrace above a dry gully on the north-east slope of Moel Gornach, lies a compartmented rectangular building (106) and two other structures (107 and 108).

106. (7) The rectangular structure, 21m N-S by 5m E-W, is divided into three compartments which are defined by 0.4m to 0.5m high turf-covered stony banks. The southern compartment, measuring internally 4.8m N-S by 3m E-W, has a 1m wide break in the east wall, and a step in the floor suggesting a possible division. The west wall kinks outwards at the junction of the southern and central compartments. The central compartment, with internal dimensions of 6m N-S by 2.8m E-W, has a 0.8m wide entrance in the east wall. The long sides of the structure extend for a further 2m defining a northern compartment abutted by a stony pile 0.4m high and 4.4m N-S by 5.2m E-W, perhaps a collapsed circular structure.
107. (8) A semi-circular stone bank, 6.6m NW-SE by 4m SV-NE, is built against a rock face on a platform scarped in the slope 5m west of 106.

108. (9) An oval drystone structure 7m east of 106, which still stands up to 0.8m high, is probably a relatively recent sheep shelter. It overlies earlier structures defined by turf-covered stony banks of the same character as, and partly parallel to, those comprising the adjacent rectangular foundation suggesting contemporaneity.

109. (276) (fig. 3:14) [SN 7412 1892]. An isolated stone heap, 3m across by 0.4m high, lies on relatively level ground at 450m OD.

- in the Valley Between Cefn y Truman and Tyle Du (110 to 115) (fig. 3:14)

As the Afon Clydach turns north, it descends into a narrow, steep-sided valley between Cefn y Truman to the east and Tyle Du to the west. A track runs north to south just below the crest of Cefn y Truman between the 460m and 430m contours. In places it is delineated by bands of cleared stone to either side, and sometimes takes the form of a hollow cut into the slope.

110 to 112. (1 to 3) (figs. 3:14 and 3:16) [centred SN 7424 1914]. On the east slope, high above the river on a terrace at 440m OD,
are two compartmented rectangular foundations (110 and 111), and one other structure.

110. (1) (Plate 9) [SN 7423 1910]. This rectangular building, 10m NW-SE by 5m NE-SW, is divided into three compartments. The western compartment, which measures internally 2m NW-SE by 2.2m NE-SW, is connected by a 0.3m break in a cross-wall to the central compartment, which has internal dimensions of 2m NW-SE by 2.9m NE-SW. The walls are of coursed drystone build up to 0.5m high. External access is via a 0.5m gap in the north wall of the west compartment. The east compartment, internally 3m NW-SE by 2.8m NE-SW, is defined by spaced boulders. It is built on a platform scarped into the slope which may extend, less obviously, under the other compartments.

111. (2) [SN 7424 1912]. Across a marshy terrace, some 20m north-east of 110, is a rectangular dry-built structure, 6.6m NW-SE by 4.8m SW-NE, which is divided into two compartments. Surface boulders are incorporated into the walls which stand to 0.4m. No entrances were noted to either the north-west compartment which measures internally 1.6m NW-SE by 2.4m NE-SW, or to the south-east compartment which internally is 2.4m NW-SE by 1.8m NE-SW. Both compartments are full of tumble.
Fig. 3:16. Sites 110 to 112, and 116 in the valley of the Afon Clydach.
112. (3) [SN 7425 1917]. Built against a large boulder 70m north-west of 111 is a penannular structure, 4m NW-SE by 3.8m NE-SW, with a south-east facing entrance 0.6m wide. It is mostly collapsed but in parts up to three courses of drystone wall survive to a height of 0.5m.

113. (10) (fig. 3:14) [SN 7412 1922]. A 'L'-shaped boulder bank, 4.4m by 5.6m, its south-west corner in the shape of a right-angle, lies on the west bank of the Afon Clydach at 340m OD. There is a concentration of boulders within the angle.

114. (11) (fig. 3:14) [SN 7412 1926]. Around 30m north of 113, on the same bank, is an oval setting of contiguous boulders, 2.4m N-S by 3.3m E-W, with a gap in the north-west arc.

115. (12) (fig. 3:14) [SN 7400 1943]. Another oval boulder setting, 6.3m N-S by 5m E-W, with a gap in the south-east arc, is on an elevated section of the east bank of the Afon Clydach at 340m OD.

- on the north-east bank of the Afon Clydach below Pont Clydach (115 to 119) (fig. 3:14)

The river emerges from the steep-sided valley (Plate 7) into a more open landscape at Pont Clydach (fig. 3:14).

116. (13) (figs. 3:14 and 3:16) [SN 7385 1968]. At 300m OD on the north-east river bank is a compartmented rectangular structure,
18m NW-SE by 6m NE-SW, of drystone and boulder construction. It is divided into three compartments defined by 0.4m high turf-covered stone banks. The north-west compartment, which internally measures 4.6m NW-SE by 2.8m NE-SW, has a 0.5m wide entrance mid-way along the north-east wall, with a possible opposed entrance in the south-west wall. The central compartment, internally 5m NW-SE by 3.8m NE-SW, is entered by a break 0.4m wide in the north-east wall. The south-east compartment, with internal dimensions of 4m NW-SE by 3m NE-SW, has a boulder-flanked entrance, about 0.6m wide, in the north-east wall; it is constructed more massively with large boulders up to 0.9m high some of which are displaced. The south-west sides of the central and south-east compartments are built against a natural boulder accumulation.

To the north and east the environs may have been altered by the construction of the adjacent main road, the A4069. To the south is an annexe perhaps up to 190m², bounded on the west by a boulder line on top of a short steep slope, and to the south by the river. There are suggestions of hand-digging of uncertain antiquity within the interior of the annexe. A pottery sherd, identified by Mr. P. Webster as part of a Romano-British flagon, was found in an eroded surface 2m to 3m north-west of the building.

117 and 118. (14 and 15) (figs. 3:14 and 3:17) [centred SN 7372 1981]. Around 150m north of 116, on an elevated section of the eastern river bank at 290m OD, are two drystone structures 11m
apart, a compartmented rectangular building (118) and an oval foundation (117).

117. (14) The oval structure measures 5.8m NE-SW by 4m NW-SE. A dilapidated boulder bank up to 0.3m high forms its south-west arc with the north-east end scarped into the slope.

118. (15) This compartmented rectangular structure, with grass-covered stony banks 0.2m to 0.4m high, measures 11m N-S by 5m E-W. While its north-west corner has been eroded by the collapse of the river bank, originally it probably comprised three compartments. Only the north-east section of the north compartment survives with an entrance around 0.6m wide in the east wall. The north-west corner of the central compartment, internally 3.8m N-S by 2.6m E-W, has also been destroyed. Its surviving walls, faced with large stones, are more substantial than those of the southern compartment, the internal dimensions of which are 2m N-S by 2.6m E-W. A stone bank, obscured by reeds, but at least 5m long projects east from the north compartment, possibly defining an annexe up to around 50m².

119 to 120. (37 and 38) (fig. 3:14) [centred SH 7362 1988]. Further down the east bank of the Afon Clydach at 275m OD, 150m from 118, are indistinct traces of a compartmented rectangular building (119) and a smaller structure (120).
Fig. 3:17. Sites 117 and 118 in the valley of the Afon Clydach, and 124 to 126 on Waun Lwyd.
119. (37) This rectangular drystone building is divided into two, possibly three compartments. Stone robbing to build a fold immediately to the south-east probably accounts for the ephemeral nature of the structure which measured at least 11m NW-SE by 5m NE-SW.

120. (38) Some 5m south-east of 119 is a oval boulder-built structure on the edge of river bank, 3.5m NW-SE by 2.3m NE-SW, with an entrance in the north-west arc.

- on Waun Lwyd south-west of the Clydach (sites 121 to 126) (fig. 3:14)

Waun Lwyd, south-west of the Clydach, is a north facing slope of open aspect down which flow tributaries of the Clydach.

121 to 123. (16 to 19) (figs. 3:14 and 3:18) [centred SW 7358 1974]. A compartmented rectangular structure (121) and a lesser structure (122) lie on the elevated west bank of a stream at 300m OD. There is evidence for a cultivation plot (123) on the slope to the west of the rectangular building.

121. (16) The rectangular drystone structure, 13.5m N-S by 5.4m E-W, is divided into three compartments with walls up to 0.6m high. It is built at right-angles to the slope with the south and central compartments on artificial platforms stepped at different levels. The walls of the south compartment, which measures internally 4.6m N-S by 2.4m E-W, have collapsed inwards although some coursed
stone survives on the external face. There is an entrance about 0.5m wide midway along the west wall. No entrance is visible to the rubble-filled central compartment, the internal dimensions of which are 3m N-S by 3m E-W. The west wall of this compartment kinks outwards at right-angles where it joins the south compartment. Although partly hidden by reeds, the north compartment, internally 2m N-S by 4m E-W, is defined by spaced boulders on a stony platform projecting from the slope.

122. (17) On a platform scarped in to the slope, 8m south of 120, is an 'L'-shaped structure of turf-covered boulders 3m across.

123. (18 and 19) A 2m line of boulders runs across slope from the south-west corner of the rectangular building (121), merging with a slight 10m long bank. The bank appears artificial, probably a lynchet produced by the action of plough or, more likely, a spade. There are two further examples down-slope, adjacent to a stream which provides a natural boundary to the west. Credence is given to these indications of a cultivation plot, which is around 600m², by two clearance piles about 3m across at its apparent northern and southern edges.
Fig. 3.18. Sites 121 to 123 on Waun Lwyd.
124. (20) (figs. 3:14 and 3:17) [SW 7353 1983]. This bow-sided compartmented rectangular structure, 20m N-S by 6m E-W, lies at 290m OD on an artificial platform at right-angles to the slope on the west bank of a tributary of the Afon Clydach. The four compartments are of drystone build incorporating larger boulders, three or four courses of which survive up to 0.6m to 0.7m high. The profile of the structure suggests that the floor levels of the compartments are stepped. The south compartment, internally 1.6m N-S by 3.2m E-W, has a 0.7m wide entrance in the west wall. The south-central compartment, internally 3.2m N-S by 3.2m E-W, is also approached by an entrance, 0.5m wide, in the west wall. There is no entrance now apparent to the north-central compartment which measures internally 2.4m N-S by 2.4m E-W. The north compartment, with internal dimensions of 7.2m N-S by 2m E-W, is on a stony platform projecting from the slope and has an entrance about 0.5m wide in the west wall.

125 and 125. (21 and 22) (figs. 3:14 and 3:17) [centred SW 7323 1991]. Two drystone and boulder built structures, one of which is a compartmented rectangular building (124), are located just below a locally steep ascent in the north facing slope at 290m OD.

125. (21) The rectangular building, 10m N-S by 5.8m E-W with walls up to 0.7m high, is on a slight platform scarped into the slope at 290m OD. A cross-wall divides the interior into two interconnected compartments. External access to the south compartment, which measures internally 4.5m N-S by 3m E-W, is from
the west via a 0.6m wide break. There is a low stone step across the floor of the compartment. The north compartment, which has internal dimensions of 1.6m N-S by 2.2m E-W, is entered by a 0.5m gap at the west end of the cross-wall. A 3m long boulder bank abuts the west wall just north of the entrance.

126. (22) About 10m south-west of 125 is a building platform scarped into the slope on which boulders delineate a structure about 7m N-S by 4.5m E-W.

On Truman (sites 127 to 132) (fig. 3:14)
Truman is an area of moderately sloping ground below 400m OD. It lies beneath the steep ascent of Cefn y Truman, which here forms the northern scarp face of the mountain. It has an open aspect to the north and north-west and is largely covered by cambic stagnohumic gley soils, although ferric stagnopodzols are present to the east on higher slopes.

127. (241) (figs. 3:14 and 3:19) [SN 7419 2016]. A sub-annular stony foundation is sited at 350m OD on a gentle north facing slope. It measures 6m N-S by 6m E-W with internal dimensions of 4m N-S by 4.8m E-W. The bank is between 0.2m and 0.4m high, and has been eroded by a sheep track along the south-eastern arc.

128. (243) (fig. 3:14) [SN 7423 2021]. A cairn, 2.5m N-S by 2.6m E-W by 0.2m high, lies on a grassy terrace 75m north-north-east of 127 at 350m OD.
Fig. 3:19. Sites 127, 131 and 132 on Truman, together with 134 in Fforch Ceulan.
129. (36) (fig. 3:14) [SN 7432 2060]. A cairn, 3m across and 0.3m high, is sited on a gentle slope at 300m OD.

130. (35) (fig. 3:14) [SN 7436 2061]. This 6m wide by 0.3m to 0.4m high stone heap is 30m east of 129, at 300m OD. It has a surface of loose stone.

131 and 132. (33 and 34) (figs. 3:14 and 3:19) [centred SN 7454 2068]. Two structures of drystone build, one a compartmented rectangular structure (131), are located in a slight hollow towards the foot of the north slope of Truman at 300m OD. There is no source of running water close to the structures at present.

131. (33) This building, which measures 13.8m NW-SE by 4.8m NE-SW, is divided into two compartments. The mostly grass-covered stony banks, 0.3m to 0.5m high, show some signs of being edged with larger stones and boulders. The southern compartment, measuring internally 3.4m N-S by 2.4m E-W, has a 1m wide entrance in the east wall. A slight bank curves away northwards for 7m to 8m from the south-east corner of this compartment. The northern compartment is 6m N-S by 2.6m E-W internally. It has a 0.6m wide entrance in the east wall. A break in the west wall appears to be the result of disturbance which is also evident in the southern part of the interior.

132. (34) A building platform, 3.2m N-S by 8.2m E-W, is scarp ed into the slope some 10m east of 131. Traces of a structure, 3.2m N-
S by 4.6m E-W, delineated by a low bank and stones can be made out on the eastern half of the platform.

133. (244) (fig. 3:14) [centred SW 7507 2045]. Three possible stone clearance piles are located on a grass and heather-covered terrace at 360m OD.

a) An oval heap, 5m N-S by 4m E-W by 0.3m high, with loose stone on the surface.

b) An ill-defined stony accumulation with a flattish surface, 4m N-S by 3.5m E-W by 0.2m high, lies 38m north-east of a).

c) A stony heap, perhaps only in part the result of human activity, 5m N-S by 5.6m E-W by 0.4m high, is sited 28m north of a) on a locally steep slope.

A number of other features have been recorded in this area (Morgan 1988, 42). They are almost certainly either natural or the result of prospecting. The three stone heaps described are the most likely features to result wholly or in part from stone clearance for agricultural improvement.

Along the Afon Ceulan (sites 134 to 139) (fig. 3:14)
The Afon Ceulan flows down the steep northern scarp face of the Mountain through a deep and wide gully known as Fforch Ceulan. The slopes to either side of the upper reaches are covered by
ferric stagnopodzols. After the stream leaves Fforch Ceulan, it cuts a steep sided narrow valley through a gentler slope covered by cambic stagnohumic gley soils.

134. (27) (figs. 3:14 and 3:19) [SN 7531 2018]. This compartmented rectangular building is at 390m OD on top of the western edge of a steep sided promontory flanked by streams of the Afon Ceulan. The promontory is well sheltered within Fforch Ceulan. The building, measuring 11.8m NE-SW by 5m NW-SE, is defined by drystone banks up to 0.6m high edged in places by boulders. The south-western compartment measures internally 5.3m NE-SW by 2.4m NW-SE; the north-west wall has eroded down-slope. The north-east compartment, internally 3.1m NE-SW by 2.4m NW-SE, is clearly a separate, less careful build, with its floor at a lower level. There is a gap in the north-east end wall, either an entrance or perhaps the slump of the wall into an underlying feature such as a drain.

135 to 137. (28 to 30) (figs. 3:14 and 3:20) [centred SN 7534 2067]. This group of three foundations, including a compartmented rectangular structure, is clustered around the steep gully containing the Afon Ceulan at around 310m OD.

135. (28) [SN 7533 2068]. This compartmented rectangular building is sheltered in a hollow on top of an elevated section of the steep west bank of the river. Poorly preserved drystone walls up to 0.5m high delineate a building measuring 11m N-S by 4.4m E-W which is sub-divided into four compartments. The southern end of
the building is divided into two compartments by a wall along the main axis of the structure. Both of these are around 2m N-S by 1.5m E-W internally, with east and west facing entrance breaks respectively identifiable amongst tumble. The central compartment measures 3.4m N-S by 3.1m E-W. Its western wall revets a face cut into the side of the hollow. The northern compartment is constructed mostly of spaced-boulders. Internally it measures 2m N-S by 5m E-W.

136. (29) [SN 7534 2067]. There is a rectangular structure on the edge of the west bank of the Afon Ceulan at the foot of the steep slope below 134. It is defined by large boulders (some of which may be naturally positioned) and is 6m N-S by 4m E-W. The southern side may have been open.

137. (30) [SN 7535 2066]. This penannular stone foundation is sited across the stream from 136, on the edge of the east bank of the Afon Ceulan. It measures 4m N-S by 4m E-W, and is 1.6m across internally. The bank is about 0.3m high and is broken to the north-east by an entrance marked by a 0.6m orthostat.

138. (31) (fig. 3:14) [SN 7534 2073]. This sub-circular structure, 5m N-S by 4.5m E-W, is recessed into the west slope of the valley of the Afon Ceulan at 310m OD. The drystone walling is up to 1m high. There is a north facing entrance.
Fig. 3:20. Sites 135 to 137 along the Afon Ceulan, and 143 on Cylchau.
139. (32) (fig. 3:14) [SW 7533 2075]. On top of the west bank of the Afon Ceulan at 300m OD is a squarish boulder accumulation, 5.3m across by 0.4m to 0.5m high, with a 1.5m boulder and stone strip running north-east for 40m along the top of the river bank. A 4m long stone strip projects from its south-west corner.

On Cylchau (sites 140 to 143) (fig. 3:14)
This slope rises from the edge of the present-day enclosed land, at about 270m OD, to Cefn y Cylchau at 550m OD, which is at the north-western end of the steep valley down which flows the upper reaches of the Sawdde Fechan. The soils of the lower areas of the slope, below about 350m OD, are cambic stagnohumic gleys, those of the upper parts humo-ferric podzols. The grass and bracken covered surface is frequently stony with wetter areas of reed and cotton grass. The local name for this area was Tir y beddau, "land of the graves," and the remains of small cairns were noted earlier in the century (RCAHM 1917, no. 436). These are likely to be the stone clearance heaps noted below, nos. 141 and 142.

140. (247) (fig. 3:14) [SN 7558 2109]. This roughly crescent-shaped mound, opening on to a stream at 275m OD, measures 11m N-S by 9m E-W. It is 0.8m to 1m high. No burnt material is visible. It has been identified as an example of a 'burnt mound' or 'cooking-mound' (RCAHM Wales Landscape Survey, unpublished).

141. (246) (fig. 3:14) [SN 7576 2106]. This grass-covered cairn with loose stone exposed at the centre lies at 280m OD on a north
facing slope. It measures 5m N-S by 5m E-V and is 0.4m high. There are other stone and boulder accumulations in the vicinity. These have been identified as the product of human activity (RCAHM Wales Landscape Survey, unpublished). While there always remains the possibility that some may result from or have been modified by clearance, it is thought that their origin is most likely natural.

142. (245) (figs. 3:14 and 3:21) [centred SN 7572 2087]. Up to fourteen potential stone clearance heaps are located on a terrace in the north facing slope between 310m and 320m OD. The area associated with the heaps is about 0.25ha. The slope around the terrace is littered with boulder and stone accumulations which are probably natural in origin, although some have been seen as a consequence of human activity (RCAHM Wales Landscape Survey, unpublished). Cumulatively, the group on the terrace seems to form the most likely examples of clearance heaps in the area, even if some are natural in origin and have been only modified by clearance, particularly as they tend to be consistently positioned at the rear of the terrace. This group well illustrates the difficulties which arise in distinguishing between stone accumulations that are natural, partly natural and entirely the result of human activity.

a) Grassy boulder pile, 4.2m N-S by 4.6m E-W by 0.3m high.

b) Grassy boulder heap, 2.8m N-S by 2.3m E-W by 0.4m high.

c) Grassy boulder heap, 2m N-S by 2.6m E-W by 0.6m high.
d) A concentration of loosely piled boulders, 3.8m N-S by 3.4m E-W by 0.5m high.

e) A squarish boulder pile, partly edged with larger stones, 6m N-S by 6.8m E-W by 0.7m high.

f) A boulder accumulation, 3.7m N-S by 3.4m E-W by 0.4m high.

g) This boulder accumulation, 2.5m N-S by 3m E-W by 0.7m high, projects from the slope. It is perhaps natural in origin with some stone added as a result of clearance.

h) A stony spread, 3.7m N-S by 4m E-W by 0.8m high. Again, perhaps natural in origin, with subsequent modification.

i) A stone pile, 2.4m N-S by 2.5m E-W by 0.2m high.

j) A stony pile 3m N-S by 3.2m E-W by 0.6m high.

k) A flat-topped stony mound, 3.3m N-S by 3.4m E-W by 0.3m high.
1) This stony pile, 2.2m N-S by 2.5m E-W by 0.3m high, may be partly natural.

m) This grass-covered stone mound, 3.2m N-S by 3.8m E-W by 0.5m high, is edged with larger stones.

n) A clearance strip, up to 3.5m wide by 0.3m high, runs downslope for 14.2m.

143. (240) (figs. 3:14 and 3:20) (Plate 10) [SN 7591 2074]. An enclosure which incorporates the foundations of three structures is located on a north-east facing terrace at 330m OD. Overall it measures 12m N-S by 20m E-W. The drystone and boulder banks are up to 0.7m high, with up to three courses of fairly carefully laid facing stone surviving in places. The irregularly shaped, centrally positioned, large enclosure is 9.4m N-S by 10.5m E-W internally, with a 0.5m wide boulder-edged entrance in the south wall. A 0.6m wide break in the north-east corner of the central enclosure gives access to a sub-circular foundation about 4m N-S by 5m E-W, measuring 3m N-S by 3.4m E-W internally. The south-east arc of this foundation butts against a rectangular structure conjoined to the eastern wall of the central enclosure. It is around 7m N-S by 4.5m E-W, with internal dimensions of 4.5m N-S by 3m E-W. No entrance is visible to this element of the monument. Against the external face of the south-western wall of the central enclosure is a sub-circular foundation measuring 5m N-S by 4m E-W, about 3m across internally. It is entered from the south-east via by a boulder-flanked gap.
3.4 AREA C: THE WESTERN SLOPES OF CWM SAWDDE FECHAN
(SITES 200 to 215)

3.4.1 Outline Topography
The deep valley of the upper reaches of the Sawdde Fechan cuts through the Old Red Sandstone which forms the dramatic northern scarp face of the Mountain. Its upper end, at about 450m OD, is in the form of a cirque down which the stream tumbles northwards, fed by tributaries rising on the Limestone escarpment behind (figs. 1:4, 3:1 and 3:22).

Fig. 3:22. Sites 200 to 215 in Area C (fig. 3:2).
3.4.2 Description of the Archaeological Remains

*Cwm Sawdde Fechan (sites 200 to 208) (fig. 3:22)*

The slope descends steeply from Cefn y Cylchau, which forms the western side of Cwm Sawdde Fechan, to the west bank of the river. The soils on the Old Red Sandstone slope are ferric stagnopodzols (fig. 1:6).

200 and 201. (75 and 76) (figs. 3:22 and 3:23) [centred SN 7641 1982]. Two drystone and boulder built structures, including a compartmented rectangular foundation (200), are located 22m apart on the west bank of the Sawdde Fechan at 350m OD.

200. (75) The rectangular building measures 14.5m N-S by 5m E-W and is sub-divided into three compartments. The southern compartment has internal dimensions of 6.5m N-S by 3m E-W, with walls in which some coursed stone stands up to 0.6m high. There is a 0.6m entrance in the east wall. A pile of stone in the north-west corner of this compartment incorporates a setting of outward leaning orthostats up to 0.6m high. The walls of the central compartment, which measures 3m N-S by 3m E-W internally, are, at 0.2m, consistently lower than those of the southern compartment. The northern wall of the central compartment is distinctly rounded. A setting of spaced boulders defines the northern compartment which measures 1.5m N-S by 3m E-W and is open to the east.
Fig. 3:23. Sites 200 to 202 in the valley of the Sawdde Pechan.
201. (76) A sub-rectangular boulder-built structure, 6.5m N-S by 4.5m E-W and up to 0.6m high, with a south facing entrance, lies 22m north of 200.

202. (77) (figs. 3:22 and 3:23) [SN 7644 1961]. This sub-rectangular structure is built on an artificial platform at right-angles to the slope on a north-east facing terrace above the west bank of the Sawdde Fæchan at 360m OD. The building, 8m NE-SW by 5m NW-SE with internal dimensions of 6m NE-SW by 3m NW-SE, is defined by turf-covered drystone and boulder-built banks up to 0.6m high. There are opposed entrances midway along the north-west and south-east walls, 0.8m and 1.2m wide respectively.

203 to 208. (figs. 3:22 and 3:24) (78 to 82). Six drystone and boulder-built structures are situated on a relatively well drained and fairly gentle slope between 390m and 400m OD, west of the Sawdwe Fæchan, at the foot of a cirque at the head of the valley. The location is exceptionally well protected from winds except those from the north-east. The local slope is covered by grass, apparently more luxuriant than is usual elsewhere on the Mountain. Site 203, a compartmented rectangular building in a very good state of preservation, and adjacent structures 204 and 205, are on the edge of the river bank at 390m OD. The other structures (206, 207 and 208) are scattered across the grassy slope to the west, towards the foot of the very steep ascent of Cefn y Cylchau. A trans-ridge path, in places deliberately hollowed into the slope with banks of cleared stone to the side, zig-zags down the
precipitous slope at the head of the valley. It then passes between
the two groups of structures before forking to follow the east and
west banks of the river respectively (fig. 3:22).

203. (78) (Plate 11) [SN 7645 1930]. This rectangular building,
measuring overall 14.5m N-S by 4m E-W, is divided into two main
sections, each of which is partially sub-divided. The southern
compartment is the more substantial with walls containing up to
ten courses of stone still standing 1.5m high. Internally it
measures 7m N-S by 2.7m E-W and is entered through a 0.7m wide
break in the west wall containing a sill stone. Large flat slabs
pave the floor (Plate 12) which is at two levels with a step just
south of the entrance. Above this step, a 0.8m high cross-wall
projects from the west wall, partially partitioning the
compartment. The northern end-wall of this compartment is between
1m and 1.4m high except for the central section which abruptly
reduces to 0.6m in height as if collapsing into an underlying
feature, for example, a drain.

The walls of the northern compartment are consistently lower than
those of the southern and greater use is made of boulders in its
construction, especially at the slightly rounded northern end. There
is a 0.6m wide entrance at the south end of the west wall. The
internal dimensions are 4.9m N-S by 2.6m E-W. It is partially sub-
divided into two roughly equal sections by a cross-wall projecting
from the west wall.
Fig. 3:24. Sites 203 to 206 in the valley of the Sawdde Fechan.
To the south of the main structure is an elliptical annexe (Plate 1 comprising a stony bank between 0.3m and 0.4m high, measuring 10m N-S by 9m E-W, around 58m². There is a 1m wide entrance in the east wall. This annexe appears to be of the same phase as the compartmented building since the component stones of its walls are tied into the end wall of the main structure.

The exceptional state of preservation of this structure enables aspects of the building technique to be described:
- larger boulders are consistently used at corners and as footing for the walls.
- on top of the footings are laid courses of smaller stones, two to three stones wide, with an occasional longer tie-stone running through the wall.
- towards the northern end of the external face of the east wall of the southern compartment is a straight joint running vertically down the height of the wall. While, at first sight, this appears to be a possible blocked entrance, the absence of any corresponding joint forming the opposing side of the potential entrance suggests that the feature results from a degree of casualness in the building technique.

204. (79) (Plate 14) [SN 7645 1931]. Some 8m north of 203 is a rectangular foundation measuring 7.5m NW-SE by 4.6m NE-SW, with internal dimensions of 5.2m NW-SE by 2.6m NE-SW. The stone and boulder banks, in which coursed stone survives, are between 0.3m
and 0.8m high. There is no obvious entrance although the northern section of the eastern wall is badly spread.

205. (80) (Plate 14) [SN 7645 1931]. Five metres north-east of 204 is an annular structure defined by a single course of boulders up to 0.5m high. It measures 4m N-S by 3.5m E-W and is about 2m across internally.

206. (81) [SN 7638 1931]. This rectangular foundation, 3.8m NW-SE by 5.4m NE-SW, with internal dimensions of 2.2m NW-SE by 3.2m NE-SW, has walls still standing to 1m high. There is a 0.6m wide entrance in the north-west wall. An annexe constructed of boulders, 4.8m NW-SE by 3m NE-SW, abuts the structure to the north-west. It is sited around 80m west-north-west of 204.

207. (82) [SN 7639 1936]. A sub-oval structure, with a 0.5m wide break in the eastern end, and stony banks around 0.4m high, measures 3.8m N-S by 5.4m E-W, with internal dimensions of 2.2m N-S by 3.2m E-W. It is located 33m north of 206.

208. (83) [SN 7638 1928]. This crudely constructed feature, built against outcrop, measures about 4.5m NE-SW by 3.8m NW-SE. Its banks vary from 0.3m to 0.6m high enclosing an interior about 3.8m NE-SW by 2m NW-SE. There is a gap at the south-eastern corner. It lies 50m south-south-west from 206.
Blaen y Cylchau (sites 209 to 215) (figs. 3:22 and 3:25)

One of the major western tributaries of the Sawdde Fechan rises on the Lower Limestone Shales of Blaen y Cylchau at about 500m OD, just above the head of the valley. Blaen y Cylchau lies below the steep Limestone escarpment of Foel Fraith. The soils of this area are humo-ferric podzols (fig. 1:6).

Fig. 3:25. Measured sketch of the location of sites 209 to 215 beneath Blaen y Cylchau.
A group of seven drystone and boulder built structures, including three compartmented rectangular buildings (209, 212 and 215), are located at 480m OD alongside tributaries of the Sawddee Fechan.

This compartmented rectangular building is sited at the foot of a steep stone-strewn slope below a limestone cliff. It comprises five conjoined compartments, measuring overall 25m E-W. A further structure only one metre to the west, on the same alignment, can be regarded as a sixth compartment and part of the range, extending the length of the structure to 29.5m. The width of each of the units is between 4m and 4.8m except for the easternmost unit which is up to 7m wide.

The largest compartment (Plate 16) has internal dimensions of 2.8m N-S by 9.2m E-W. The walls are mostly of coursed stone, up to 1.1m high on the north side, 0.3m to 0.5m to the south. Two 0.5m high slabs on edge retain the west wall. There is a 1m wide entrance at the east end of the south wall. The three compartments to the west are defined by much lower grass-covered stone banks between 0.2m and 0.3m high; internally, they measure 3m N-S by 3.5m E-W, 3m N-S by 1.5m E-W and 2.6m N-S by 3.5m E-W. The compartment at the eastern end of the range is built of spaced-boulders. It measures 7m N-S by 4.2m E-W and it may have been sub-divided into two roughly equal sections. The apparently discrete westernmost sub-
oval foundation has grass-covered stony banks 0.2m to 0.3m high. It measures 3.8m N-S by 3.2m E-W, with internal dimensions of 2.5m N-S by 2.2m E-W.

A bank abuts the south wall of the largest compartment, curving south and then west, before swinging north around the western end of the range. It defines a bow-shaped annexe south of the building, around 8m N-S by 19m E-W and about 120m². There are many stones on the surface of the annexe, much of which slopes quite steeply. To the east the annexe-bank is boulder-built and up to 0.5m high, becoming less substantial, 0.2 to 0.3m high, as it ascends the slope to the south. As it swings north, it becomes grass-covered and 0.3m to 0.4m high. About 2m beyond the northern terminal, there is a further arc of grassy bank, now a broader and more irregularly shaped feature, 0.2m to 0.5m high, which continues north-east and east for 10m. There is also a possible short length of bank, only 1.3m long, projecting north-west from the north-east corner of the building.
Fig. 3:26. Sites 209 and 210 beneath Blaen y Cylchau.
210. (130) (figs. 3:25 and 3:27) [SN 7625 1882]. This trapezoidal foundation, a grass-covered boulder bank 0.2m to 0.4m high, is 4m west of 209. It measures 7m NW-SE by 5m NE-SW, with internal dimensions of 4m NW-SE by 3.6m NE-SW.

211. (131) (figs. 3:25 and 3:27) [SN 7630 1884]. A sub-circular 0.4m high boulder bank, built up against rock at the foot of the slope, measures 3.5m NW-SE by 4m NE-SW. The interior is about 2.2m across.

212. (132) (figs. 3:25 and 3:27) [SN 7631 1884]. This compartmented rectangular structure, 10.6m NE-SW by 4m NW-SE, is sited on the southern edge of a seepage at the foot of a slope. It is sub-divided into three compartments. The north-eastern and central compartments survive as stone and boulder banks 0.4m to 0.5m high. Internally the north-eastern compartment is 2m NE-SW by 2.6m NW-SE, the central, 3.4m NE-SW by 2.2m NW-SE. Both have south-east facing entrances about 0.5m wide. The north-west wall kinks at the junction of the two main compartments. The south-western compartment is much smaller, only about 1.5m across internally, and is constructed of spaced-boulders. It appears to be open to the south-east.
Fig. 3:27. Sites 211 to 215 beneath Blaen y Cylchau.
213. (133) (figs. 3:25 and 3:27) [SN 7633 1885]. This rectangular foundation is built at right-angles to the slope 9m north-east of 212. The banks, 0.3m to 0.4m high, define a structure 7.3m NW-SE by 4.4m NE-SW, with a 2m wide break in the south-west wall. Internally it measures about 3.6m NW-SE by around 2m NE-SV; much of the interior is obscured by tumble.

214. (134) (figs. 3:25 and 3:27) [SN 7634 1886]. A sub-rectangular foundation, 5.2m NW-SE by 3.8m NE-SW, constructed of boulder walls surviving 0.2m to 0.4m high, lies 26m north-east of 213. There is a 0.6m wide break in the south-west wall. It measures 3.9m NW-SE by 2.4m NE-SW internally.

215. (135) (figs. 3:25 and 3:27) [SN 7636 1889]. This compartmented rectangular building is located on a promontory between two tributaries of the Sawdde Fechan. It measures 10.2m NE-SW by 4.5m NW-SE. The south-western compartment has internal dimensions of 4.2m NE-SW by 3m NW-SE, with walls 0.4m to 0.6m high. There is a 0.6m wide south-east facing entrance. The north-eastern compartment is of slighter build with stone banks about 0.2m high. There is no visible entrance to this compartment which measures internally 2.8m NE-SW by 2m NW-SE. There is a right-angled kink in the north-west wall at the point the two compartments join.
3.5 AREA D: THE MAIN RIDGE OF THE MOUNTAIN (SITES 300 to 309)

3.5.1 Outline Topography

The central Millstone Grit ridge is up to a kilometre or more wide. Rising from about 400m to 600m OD, it extends east to west across the survey area (figs. 1:4, 3:1 and 3:28). Between the northern escarpment and the southern back-slope are plateaux at various altitudes, with a number of local eminences separated by north to south passes. Several streams rise on these plateaux, draining both north and south (fig. 1:5). The humo-ferric podzols and thick peat deposits (Plate 3) are frequently eroded exposing areas of rock and surfaces littered with stone (fig. 1:6).

Fig. 3:28. Sites 300 to 309 on the main ridge of the Mountain in Area D (fig. 3:2).
3.5.2 Description of the Archaeological Remains

North-west of Tair Carn Isaf (site 300) (fig. 3:28)

300. (275) (fig. 3:28) [SN 6805 1682]. This sub-circular cairn, built of Millstone Grit boulders, is located at 410m on a secondary ridge crest north of the main ridge. It measures 10m N-S by 9m E-W, by 1m to 1.2m high. There is a major central disturbance with lesser disturbance around the edges.

Tair Carn Isaf (sites 301 to 303) (fig. 3:28)

301 to 303. (272 to 274) (fig. 3:28) [centred SN 6838 1680]. This group of three large but badly disturbed cairns (too badly disturbed to warrant planning) lies on a local eminence around 460m OD at the western end of the main ridge crest. The ground surface around the cairns is littered with Millstone Grit boulders and stone, and has little soil cover. The cairn group can be seen for a goodly distance along the main ridge to the east but is also particularly notable from lower ground north of the Mountain.

301. (274) [SN 6831 1673]. The cairn has been massively disturbed, much of it remodelled into a conical heap. The spread of Millstone Grit boulders and stone suggests a monument originally around 15m across. The original height cannot even be estimated on account of the disturbance.

302. (272) [SN 6840 1681]. This sub-circular cairn, constructed with Millstone Grit boulders, measures 13m N-S by 14m E-W and is
between 1.5m and 1.8m high. There is a major central disturbance, with superficial disturbance around the flanks. It is around 100m north-east of site 301.

303. (273) [SN 6845 1686]. The centre of this sub-circular Millstone Grit stone and boulder cairn has been entirely removed leaving a 1.2m high shell measuring 10m N-S by 11m E-W. It is located about 60m north-east of site 302.

_Tair Carn Uchaf (sites 304 to 306) (fig. 3:28)_

304 to 306. (269 to 271) (figs. 3:28, 3:29 and 3:30) (Plate 17) (centred SN 6936 1745). A group of three cairns is sited around 1km north-east of the Tair Carn Isaf monuments (301 to 303) on a local summit on the main ridge crest at between 470m and 480m OD. Erosion of soil and peat in the vicinity of the cairns has exposed a surface of Millstone Grit stone and boulders. The location of the cairn group is such that they are readily visible for a considerable distance along the main Mountain ridge, but are also very noticeable from the valleys which flank the Mountain to the north and south.
Fig. 3:29. Sites 304 and 305 from the Tair Carn Uchaf cairn group.
304. (271) (figs. 3:28 and 3:29) (Plate 18) [SN 6924 1736]. This cairn is well-preserved with a sub-circular ground plan and a profile in the form of a truncated cone. It is built of Millstone Grit boulders and stones, measures 16.6m N-S by 15.6m E-W, and is up to 3m high. There is a central disturbance, 4.8m across by 1m deep, with superficial damage to the south and south-east faces. Slight hollows around the southern and western edges may indicate locations where stone was gathered for the construction of the cairn.

305. (270) (figs. 3:28 and 3:29) [SN 6935 1737]. This is another well-preserved cairn built of Millstone Grit stone and boulders, with a sub-circular ground plan and the profile of a truncated cone. It is 20m N-S by 18m E-W and up to 3.8m high. There is a small disturbance in the flattish top and minor disturbance to the south-east face. A small shelter has been carved out of the northern edge of the cairn. It is around 100m east of site 304.

306. (269) (figs. 3:28 and 3:30) [SN 6949 1755]. This sub-circular cairn of Millstone Grit stone and boulder-build is located on the top edge of a low outcrop cliff to the south and south-east. At the foot of the cliff is a massive sink hole. It is about 230m north-east of 305. The cairn measures 16m N-S by 17m E-W and is up to 2.5m high. The centre has been gutted by a trench dug into the heart of the cairn from the north-west. Material from the disturbance masks the original north-western edge. Some larger boulders are present around the edge of the cairn, particularly
along the southern margin. This edge, however, is built on rock exposure so it is unclear whether the boulders are incorporated deliberately or fortuitously. Irregular hollows and undulations in the surface around the cairn may well indicate removal of boulders for construction, and perhaps scarping to enhance the natural platform on which the cairn is raised.

**Pen-y-Clogau (site 307) (fig. 3:28)**

307. (267) (figs. 3:28 and 3:30) [SN 7166 1858]. This sub-circular cairn is sited on a minor rise at 523m OD on the peat and stone covered plateau, set well back from the edge of the main ridge crest to the north. It is built of Millstone Grit stones and boulders, measures 18m N-S by 17.2m E-W and is up to 3.6m high. There is a small central disturbance with minor disturbance of the south-east face. The edge is grass-covered.

**Pen Rhiw-ddu (site 308) (fig. 3:28)**

308. (268) (fig. 3:28) [SN 7275 1890]. This cairn, of Millstone Grit stone and boulder build, is located on top of a low cliff, just south of the main ridge crest at 530m OD. It has a sub-circular ground plan and a rounded profile. It measures 9m N-S by 9.4m E-W and is around 2m high. There is no sign of significant disturbance.
Fig. 3:30. Site 306, Tair Carn Uchaf Cairn group, and site 307, Pen-y-Clogau.
Garreg Lwyd (site 309) (fig. 3:28)

309. (266) (fig. 3:28) [SN 7404 1792]. The cairn is built of Millstone Grit stones on rock exposure at 619m OD. This is the highest point of a peat and stone-covered plateau, and also the highest point of the survey area. The cairn is very dilapidated, the original form much altered by the construction of a 3m high stone drum at the western edge. Originally it would have measured around 20m N-S by 18m E-W.

3.6 AREA B: THE SOUTH-WESTERN SLOPES OF THE MOUNTAIN FROM THE AFON BERACH ACROSS DRYSGOL TO THE WEST BANK OF NANT PEDOL (SITES 400 TO 416)

3.6.1 Outline Topography

This section of the survey area extends eastwards from the valley of the Afon Berach, across Drysgol, to the west bank of the Nant Pedol (figs 1:5, 3:1 and 3:31.) The predominantly Millstone Grit geology of the valleys of the Berach and Pedol flanks the rounded sandstone massif of Drysgol which rises to 393m OD (fig. 1:4). The diverse soils within this area (fig. 1:6) are noted below in local topographical descriptions.
Fig. 3:31. Sites 400 to 416 in Area E from the Afon Berach across to the west bank of the Afon Pedol (fig. 3:2).

3.6.2 Description of the Archaeological Remains

Afon Berach (site 400) (fig. 3:31)

The Afon Berach, rising in an area of peat bog south of the main ridge, quickly enters a narrow high-sided gorge which cuts through
a bracken and reed-covered marshy area between the main ridge of the Mountain to the north-west and Drsygol to the south-east (fig. 3:31). The soils of the area are cambic stagnohumic gleys (fig. 1:6).

\[\text{fig. 1:6}\]

400. (71) (figs. 3:31 and 3:32) [SN 6803 1577]. A compartmented rectangular structure is situated alongside a seepage on a terrace high in the very steep western slope of the valley of the Afon Berach at 270m OD. The stone and boulder-built foundation, measuring 10m NE-SW by 6.5m NW-SE, is divided into two compartments. The boulder walls of the north-east compartment are between 0.2m and 0.5m high; the end wall is slightly rounded. It measures 3.8m NE-SW by 4m NW-SE internally, and is entered by a 0.6m wide break at the southern end of the west wall. The south-west compartment is more carefully built with greater use of coursed stone in walls which survive to between 0.3m and 0.7m high. There is no entrance apparent but the west wall, particularly at its southern end, has been badly eroded by the adjacent seepage. There is slight kink in the east wall of the structure where the two compartments join.

A 1m wide by 5m long bank projects from the south-east corner of the structure towards a slightly curved 17m long bank which runs parallel to, and to the south-west of the building. This creates an annexe up to 6m wide, around 65m². There is a 7.5m long bank on an east-west alignment to the south of the building.
Fig. 3:32. Site 400 on the west bank of the Afon Berach, and site 405 on Drysgol.
Drysgol (sites 401 to 411) (figs. 3:31 and 3:33)

This sandstone massif rises steeply to 393m OD from the valley of the Afon Berach to the west and north, and from the valley of the Nant Pedol to the east. It has a rounded summit and relatively gentle southern slopes. The humo-ferric podzols of the higher ground give way to typical brown podzolic soils on the lower slopes (fig. 1:6). Heather moorland predominates on the higher ground with bracken infested land at lower altitudes.

On the lower reaches of the southern slope of Drysgol, between 244m and 305m OD, is a group of archaeological remains comprising three rectangular foundations, together with circular and sub-circular foundations associated with curvilinear stone banks defining three 'fields.' There is also a number of small stone heaps (figs. 3:31 and 3:33).

401 to 405. (286 to 304) (figs. 3:32, 3:33 and 3:34) [centred SN 6910 1505]. Curvilinear stone banks are present between the 250m and 280m contours. The slope is stony, heavily infested by bracken and, in places, the surface has been eroded by seepages. These factors have resulted in the partial loss of the line of the banks. However, they appear to combine to define or enclose three contiguous, relatively large 'plots' or 'fields' totalling around 3.5ha. Four annular or sub-annular foundations, sites 402 to 405, are on the line of, or adjacent to various of the stone banks. There are a number of stone heaps within the enclosed areas. Rectangular structures 406 and 407 lie within enclosure 401a, with
another, site 408 beyond the enclosures to the north. Two other structures, 411 and 412, are sited to the south.

401a. (fig. 3:33) [centred SN 6905 1504]. Stone banks delineate an area around 1.5ha in extent. The north-western and northern sections of the sinuous bank ascend the slope over a distance of about 220m. This section is 1.8m to 2m wide, 0.2m to 0.4m high and is, today, discontinuous. The two largest breaks coincide with seepages. After the bank swings to the north, the inner edge is abutted by a flat-topped stony pile, 4.1m N-S by 2.4m E-W and up to 0.4m high.

The bank forming the west side of the enclosure runs down-slope for about 60m. It remains visible even where the central section is badly eroded in a seepage. The south-eastern end terminates against sub-circular foundation 402. Sub-circular foundation 402, however, is not apparently connected to the adjacent 66m long, 1.3m wide and 0.3m high bank which forms the southern side of the enclosure.

The banks forming the east and south-eastern boundaries are shared with enclosures 401b and 401c respectively. The eastern bank, a convex stone band with a flattish top, up to 2.4m wide and 0.5m high, runs down-slope over a distance of 60m. The discontinuous south-eastern bank runs across the slope over a distance of about 140m. It is often no more than a slight step in the slope but,
where most evident, is around 1.4m wide by 0.3m high. Sub-annular foundation 403 abuts this bank mid-way along its length.

401b. (fig. 3:33) [centred SN 6918 1520]. Abutting 401a to the west, the northern edge of this enclosure, which is about 0.7ha in extent, comprises a discontinuous stone bank with convex profile up to 2m wide and 0.5m to 0.6m high.

The southern edge is defined by a bank, shared with enclosure 401c, running across slope. This is about 85m long, and up to 2.3m wide by 0.5m high. There are indications of a face of coursed stone towards its western end. The eastern end is continued by a 0.3m high lynchet which connects with a 50m length of stone bank, up to 2m wide by 0.5m high, which curves up-slope to the north-west. Annular foundation 405 is incorporated within this bank towards its northern end. The rest of the eastern side of this area appears open.

A 20m long bow-shaped stone and boulder bank, which is broken mid-way by a 1.8m gap flanked by boulders, is located on a terrace within the area, together with three stony accumulations between 3m and 6m across.
Fig. 3:33. Sites 401 to 409 on Drysgol (after RCAHM (Wales) Landscape Survey with additions and amendments).
401c. (fig. 3:33). This enclosed area, around 1.3ha in extent, abuts 401b to the north and 401a to the north-east. The bank forming the south-eastern side can be traced running down-slope over a distance of about 190m, firstly as a 1.5m to 2m wide stony band 0.2m to 0.4m high, and then, as it crosses a steeper slope to the south-west, as a pronounced lynchet 0.4m high. The sinuous 1.8m wide and 0.6m high bank which forms the south-western side is eroded by a seepage towards its south-eastern end. A stone heap, 2.7m N-S by 3.1m E-W and up to 0.7m high, is located on the edge of scree close to the bank forming the north-western boundary.

Within this enclosure lies annular foundation 404 with associated stone banks. It is 30m to the south of sub-annular foundation 403 which is set in the bank common to enclosures 401a and 401c.

402. (301) (figs. 3:33 and 3:34) (SM 6898 1497). This penannular foundation is located at the foot of a locally steep slope, with a terrace to the south, at about 250m OD. It comprises a stony bank around 0.5m high, measuring 6m NW-SE by 4.6m NE-SW, defining a tumble-filled central area 3.2m NW-SE by 2.6m NE-SW. There is a boulder flanked break, 0.6m wide, in the north-eastern arc. The structure abuts the south-eastern end of the western boundary of enclosure 401a. However, there is now no indication that the structure is physically joined to the bank to the east which forms the southern boundary of the enclosure. The 1.5m wide gap between the foundation and the boundary may be an original break.
Fig. 3:34. Sites 402 to 404 on Drysgol.

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403. (297) (figs. 3:33 and 3:34) [SN 6910 1503]. This penannular foundation is located at the foot of a locally steep and rocky slope at 260m OD. The stone bank measures 4.5m N-S by 6m E-W and is up to 0.5m high. It encloses a tumble-filled internal area 2.2m N-S by 3m NE-SW. The entrance appears to be in the south-east arc but is obscured by tumble. There are slight traces of the bank common to enclosures 401a and 401c running up to and probably abutting the structure north of the entrance. Access to the structure, therefore, is from enclosure 401c.

404. (298) (figs. 3:33 and 3:34) [SN 6911 1499]. Thirty metres south-south-east of 403, across a level but now very wet terrace, is a further penannular foundation. The stony bank, up to 0.4m high, measures 4.3m N-S by 3.8m E-W, with internal dimensions of 2.6m N-S by 2.3m E-W. There is a 0.8m wide entrance in the northern arc. Stone banks and heaps, probably the result of clearance, suggest that there was a cultivation plot about 400m² on the terrace between structures 403 and 404.

405. (291) (figs. 3:32 and 3:33) [SN 6925 1510]. This penannular foundation, 7.5m NW-SE by 6.3m NE-SW, is set within the boundary running down-slope at the eastern edge of enclosure 401b at 275m OD. The stony bank of the structure is between 0.2m and 0.4m high and encloses an area 4.2m NW-SE by 3.7m NE-SW. There is a 1m wide entrance break in the south-western arc opening on to enclosure 401b.
406. (72) (figs. 3:33 and 3:35) (Plate 19) [SN 6899 1499]. This rectangular structure is built at right-angles to the slope at 250m OD, on a slight artificial platform. Defined by heather-covered drystone banks between 0.3m and 0.5m high in which some facing stones can be seen, it measures 13.5m N-S by 6.5m E-W with internal dimensions of 11.5m N-S by 3.5m E-W. There are opposed entrances, around 1.5m wide, in the east and west walls. The south, down-slope, wall slumps half-way along its length, suggesting the presence of an underlying feature such as a drain. It is built within enclosure 401a.

407. (73) (figs. 3:33 and 3:35) [SN 6907 1507]. The compartmented rectangular structure is located at 270m OD on the outer edge of a wide south facing terrace within enclosure 401a. The building measures 14.5m NE-SW by 7m NW-SE and is divided into two compartments, the heather-covered drystone walls of which range from 0.3m to 0.5m high. The eastern compartment measures 8m NE-SW by 3.5m NW-SE internally and is entered via a 0.8m wide break in the south wall. The less substantial western compartment is defined by two sections of bank enclosing an area around 2.8m NE-SW by 4m NW-SE. It apparently is not attached to the eastern compartment; it is separated from it by two opposed breaks which provide access to the interior.
Fig. 3.35. Sites 406 to 408 on Drysgol.
408. (74) (figs. 3:33 and 3:35) (Plate 20) [SN 6917 1523]. This rectangular structure is built at right-angles to the slope at 295m OD, perhaps on a slight platform. Heather-covered drystone banks between 0.2m and 0.4m high, in which some facing stones can be seen, define a building 13m N-S by 5.6m E-W, measuring 11m N-S by 4m E-W internally. There are 1m wide opposed entrances about half-way along the east and west walls.

409. (277 to 285) (fig. 3:33) (centred SN 6923 1532). Some of a number of stony accumulations on a south facing slope north-east of 408 at around 300m OD probably result from stone clearance. They are distributed across an area around 160m N-S by 130m E-W.

a) [SN 6917 1528]. A pile of stones, 4m N-S by 3.5m E-W by 0.4m high, edged with larger stones.

b) [SN 6919 1527]. A stone heap, 2.7m N-S by 3m E-W by 0.3m high with a central disturbance.

c) [SN 6919 1529]. An oval stony spread, 4.6m N-S by 2.9m E-W by 0.3m high with ill-defined edges.

d) [SN 6920 1539]. A stony pile, 3.1m N-S by 3.1m E-W by 0.3m high, on a terrace in the gentle slope.

e) [SN 6926 1534]. Two linear stony features, 3.2m N-S by 6m E-W by 0.7m high, and 2.5m N-S by 4.5m E-W by 0.6m high.

f) [SN 6930 1530]. A heather-covered stony step is present along the up-slope edge of a south-east facing terrace 16m N-S by 8m E-W.
g) [SN 6921 1526]. A stone heap, 3.7m N-S by 3m E-W by 0.5m high.

h) [SN 6926 1524]. A linear stony heap, 6m N-S by 2.3m E-W and up to 0.6m high, runs down-slope.

410. (182) (figs. 3:33 and 3:36) [SN 6916 1490]. A sub-rectangular boulder and stone-built structure is located at the bottom of a narrow scree-filled gully at the foot of a steep south facing slope at 240m OD. It measures 5m N-S by 6.2m E-W, with internal dimensions of 3m N-S by 4m E-W, and walls 0.3m to 0.4m high. There is a 0.5m wide break in the north wall giving access into what may be a boulder-built annexe 8m N-S by 4.8m E-W. However, the eastern side of this potential annexe was obscured by thick dead bracken, a naturally stony surface and a rusting car. A sinuous stone and boulder bank runs north-north-east up-slope for 26m from the north-eastern corner of the possible annexe. The bank is 1m to 2m wide and between 0.2m and 0.5m high. There is also a 10m length of bank some 5m east of the structure.

411. (181) (figs. 3:33 and 3:36) [SN 6923 1483]. A drystone rectangular foundation lies at 240m OD on a terrace in a very steep south facing slope. It measures 7.8m N-S by 5m E-W, with internal dimensions of about 6.2m N-S by 3.8m E-W and walls 0.2m to 0.4m high. The structure is dilapidated with much stone within the interior and there is no certain indication of the position of any entrance.

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Fig. 3:36. Sites 410 and 411 on Drysgol, and sites 412 to 416 between the tributaries of the Nant Pedol.
Between Tributaries of the Nant Pedol to the East of Drysgol (sites 412 to 416) (fig. 3:31)

The Nant Pedol rises on the main ridge and descends, in places through a narrow gorge, between Drysgol to the west and Foel Deg-arbedol to the east. The cambic stagnohumic gley soils of the area (fig. 1:6) are frequently thin with much surface stone and areas of rock exposure. The soil supports an impoverished vegetation of bracken, some gorse and a little grass.

412 to 413. (160 and 161) (figs. 3:31 and 3:36) [centred SW 6939 1601]. Two drystone and boulder built foundations lie 3m apart at 280m OD on a south-east facing slope above a tributary of the Nant Pedol.

412. (161). This sub-annular foundation measures 7m NW-SE by 4m NE-SW with internal dimensions of 5m NW-SE by 2.4m NW-SV. The walls, 0.3m to 0.4m high, are edged by larger boulders in places. There is a suggestion of a possible internal division 1m from the south-east wall.

413. (160). The original sub-annular structure has been modified by the construction of a sheep-shelter within the interior. It measures 5.6m NW-SE by 4.4m NE-SV. Internally the dimensions are 3.4m NW-SE by 2.4m NE-SV. The stone banks are 0.3m to 0.5m high, except down-slope where the wall is up to 0.7m high with a footing of substantial boulders.
414. (228) (figs. 3:31 and 3:36) (Plate 21) [SN 6906 1602]. This penannular foundation, 5.5m N-S by 5.4m E-W, is located on a slight natural terrace at 270m OD. The interior, 3m N-S by 3m E-W, comprises a shallow peat-filled depression. The bank, 0.3m to 0.5m high, is broken by a 0.4m wide entrance in the north-eastern arc.

415 and 416. (114 and 115) (figs. 3:31 and 3:36) [centred SN 7041 1692]. Two drystone and boulder-built structures are located 18m apart on the west bank of a tributary of the Pedal which flows down a shallow ravine at 370m OD.

415. (115). The east wall of this compartmented rectangular structure has been completely eroded by the stream. Overall it measures 7.6m N-S by around 5m to 6m E-W, and is divided into two compartments. The west wall, the internal face of which is up to 1.1m high, revets the face of a terrace cut in the side of the gully. The northern compartment measures 2.5m N-S by around 3.5m E-W internally, the southern compartment 2.8m N-S by around 3.8m E-W. The walls are 0.7m to 0.9m high. There is a 0.5m wide entrance in the southern end-wall which is flanked by two boulders, and protected by a curved length of stone wall to the south-west.

416. (114). This rectangular structure is built into the slope of the western side of the gully. Its eastern wall has been washed away by the stream. Overall it measures 4.5m N-S by 5m to 6m E-W, with internal dimensions of 2m N-S by 4m to 5m E-W. The walls stand to between 0.5m and 0.7m high. A 0.3m high wall forms a
conjoined annexe about 4m across to the south. This is open to the west; it measures internally 3m N-S and around 3m E-W.

3.7 AREA F: THE SOUTHERN SLOPES OF THE MOUNTAIN FROM THE EAST BANK OF NANT PEDOL TO CRAIG DERLWYN (SITES 500 to 514)

3.7.1 Outline Topography
This area extends from the east bank of the Nant Pedol, taking in the sandstone massifs of Foel Deg-arbedol, to Craig Derlwyn, west of the Nant Garw (figs. 1:5, 3:1 and 3:37). There is a marked change from a relatively well-drained landscape on the sandstones to a much wetter one over the slopes of the Lower Coal Measures to the south (fig.1:4). The soils within this area are recorded below in local topographical descriptions.

Fig. 3:37. Sites 500 to 514 in Area F from the east bank of the Nant Pedol to Craig Derlwyn (fig. 3:2).
3.7.2 The Archaeological Remains

On Foel Deg-arbedol (sites 500 to 502) (fig. 3:37)

Foel Deg-arbedol is an extended sandstone ridge rising to 385m OD. There is an intrusion of Millstone Grit where the geology faults at its eastern end (fig. 1:4). The humo-ferric podzols of the massif and its foot slopes support grassland with occasional areas of bracken (fig. 1:6). There is much surface stone.

500. (256) (fig. 3:37) [SN 7018 1567]. This sub-rectangular stone heap, 5.3m N-S by 6.1m E-W by 0.9m high, lies at 355m OD on a stony grassy slope with a south-westerly aspect. A grass-covered edge incorporating some larger stones surrounds the central boulder pile.

501. (255) (fig. 3:37) [SN 7035 1578]. The stone pile, 5m N-S by 5.6m E-W and up to 0.5m high, is located on a south facing grassy slope at 370m OD. The southern section contains larger boulders. The grass-covered edge includes loose larger boulders along the northern and eastern arcs.

502. (254) (fig. 3:37) [SN 7051 1589]. This cairn is located just behind the crest of a south facing slope at the edge of a grassy plateau at 380m OD. The roughly circular grass and reed-covered stone and boulder spread is about 12m across, with an irregular boulder pile over the south-western sector up to 1m high.
At the Foot of Foel Deg-arbedol (sites 503 to 505) (fig. 3:37)

There is a narrow band of humo-ferric podzols at the foot of Foel Deg-arbedol. The grassy vegetation and relatively well-drained, if stony, terrain are in marked contrast to the poorly drained very marshy area, with bog, reeds and cotton grass, on the stagnohumic gley soils of the Lower Coal Measures immediately to the south (figs. 1:4 and 1:6).

503. (257) (figs. 3:37 and 3:38) [SN 7005 1524]. This much disturbed enclosure is on a terrace at the foot of a south facing slope within a sheltered hollow at 280m OD. Probably originally sub-annular in shape, it would have measured around 26m to 27m N-S by 23m to 24m E-W. It is defined by a drystone and boulder bank. This is best preserved around the northern arc where it is about 2m wide. There are some larger stones in the face of the bank which is between 0.2m to 0.3m high along the outer edge, 0.6m to 0.7m high along the inner. Around most of the circuit the bank has been disturbed, probably to extract stone. In consequence, it generally takes the form of a 3m to 4m wide band of loose stone in which an occasional earthfast boulder survives. Along the south-west arc this accumulation of stone is spread up to 9m wide, extending into the interior, and partially obscured by reeds. A 4m arc of earthfast boulders in this spread suggests the possible former presence of a structure abutting the bank. The interior would originally have measured around 21m N-S by 17m to 18m E-W.

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Fig. 3: Sites 503 to 505 at the foot of Foel Deg-arpedol.

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A number of small cairns noted by RCAHM Wales Landscape Survey to the south of this structure were not located.

504. (156) (figs. 3:37 and 3:38) [SN 7044 1531]. This sub-rectangular drystone and boulder-built structure is at the foot of the slope at 285m OD. The outer faces of both the northern and eastern sides are built into the slope. Overall it measures 9m N-S by 8.5m E-W, with banks 0.2m to 0.3m high, and comprises two conjoined units. The east bank of the northern unit, internally 2.8m N-S by 4.2m E-W, extends to the south-west creating an annexe about 2m N-S by 6m E-W which is open to the west.

505. (258) (figs. 3:37 and 3:38) [SN 7058 1542]. The trapezoidal enclosure, roughly built of boulders and stones, is constructed amongst scree towards the foot of a south facing slope at 290m OD. It measures 10.5m N-S by 9.8m E-W with the banks 0.3m to 0.5m high. There is 1.8m break at the west end of the south bank. The stony interior measures up to 7m N-S by 7.8m E-W.

**Nant Gwinau (site 506) (fig. 3:37)**

The Nant Gwinau rises in marsh over the the Lower Coal Measures. Unusually for the area, it flows west-south-west along a shallow valley. The vegetation of reeds and cotton grass, with a little grass and bracken on drier islands, grows on cambic stagnohumic gleys (fig. 1:6).
This compartmented drystone and boulder rectangular structure is built at right-angles to the south facing slope at 220m OD, just above the floor of the valley. The environs are wet with raised bog encroaching from the west. The main range of the structure comprises three compartments on a north to south axis, with the northern compartment separated from the other two by a "passage" around 1m wide. A fourth compartment abuts the west side of the central unit.

Overall the structure measures 16m N-S. The width of the main range is up to 5m E-W, increasing to 9m where the western compartment abuts the central compartment. The central compartment measures 5m N-S by 2.6m E-W internally, with banks 0.5m to 0.6m high. There is a 0.5m wide entrance break in the east wall. The southern compartment is less substantially constructed, with banks 0.3m to 0.4m high abutting the end wall of the central unit. Internally it measures 2m N-S by 2.5m E-W. The western compartment is trapezoidal in shape with banks 0.2m to 0.3m high defining an area 3.2m N-S by 3m E-W. The detached northern unit of the range comprises a grass-covered stony bank 0.1m to 0.3m high which is obscured by encroaching bog. Internally it measures 3m N-S by 3.2m E-W, with a 1.6m break at the south-west corner opening on to the "passage" between this and the central unit.
Fig. 3.39. Sites 506 close to Nant Gwinau, and sites 510 and 511 alongside the Nant Melyn.
There is possibly a stone built sub-circular structure, around 2m across, some 6m south-west of site 506. However, the character of the stony accumulation is unclear on account of the encroachment of the bog.

In the Vicinity of the Nant Melyn (sites 507 to 512) (fig. 3:37)
The Nant Melyn rises in boggy ground overlying the Millstone Grit fault at the eastern end of Foel Deg-arbedol. It then enters a ravine cutting through the Lower Coal Measures (fig. 1.4 and 1:5). The soils in the vicinity are predominantly cambic stagnohumic gleys supporting a wetland vegetation, although there is an area of better drained humo-ferric podzols supporting grass on ground rising north-west of the stream (fig. 1:6).

507 and 508. (208 and 209) (figs. 3:37, 3:40 and 3:41) (centred SW 7141 1605). A sub-oval enclosure (507), and a plot partially defined by a stony band (508), are sited some 30m apart on a south facing scree-covered slope broken by Millstone Grit rock exposure at around 330m OD west of the Nant Melyn.

507. (208) (fig. 3:41). The sub-annular enclosure measures 21m N-S by 19m E-W. It comprises a stone and boulder bank, 1m to 2m wide and between 0.1m and 0.3m high. The western arc includes an area of scree against the inner edge of which has been built a boulder face 0.3m to 0.4m high, although this may not be an original feature. South of this, a section of the bank has been disturbed by a sheep track. There is a 4m wide entrance in the
Fig. 3:40. Sites 507 and 508 in the vicinity of Nant Melyn, and sites 513 and 514 on Craig Derlyn.
southern arc of the bank, the eastern terminal of which turns slightly outwards. The interior, 18m N-S by 15m E-W, slopes steeply in a series of steps. It contains two small disturbances, perhaps a consequence of stone prospecting. There is a platform in the slope, around 4m to 5m across, adjacent to a distinct bulge in the south-east arc of the enclosing bank.

A 0.2m high by 1m wide stone bank runs down-slope from the outer face of the south-east arc of the bank for a distance of about 22m, terminating against a boulder accumulation which may be natural.

508. (209) (fig. 3:40). Thirty metres south-south-west of site 507 is a plot defined on three sides by a stone and boulder strip, 2m to 3m wide and between 0.3m and 0.5m high. The northern or up-slope side appears to be open. The stone bank along the southern or down-slope edge coincides with a lynchet up to 0.7m high. Overall the plot measures 23m N-S by 30m E-W with an area of about 300m² enclosed. The interior, which slopes to the south-east, contains two small disturbances surrounded by spoil.

The area between sites 507 and 508 is bounded to the east by the sinuous bank which extends from enclosure 507, and to the west by areas of scree which may just possibly have been modified through stone collection.
Fig. 3.41. Sites 507 in the vicinity of Nant Melyn, and site 513 on Craig Derlwyn.
509. (210) (fig. 3:37) [SN 7148 1597]. A partially grass-covered cairn, 6.5m N-S by 5m E-W and up to 1m high, is sited 75m south-east of plot 508 on a south facing slope at 320m OD.

510. (157) (figs. 3:37 and 3:39) [SN 7137 1544]. This rectangular structure, 13m NE-SW by 10m NW-SE, lies at 290m OD on level stone-covered ground at the top of the high, steep-sided west bank of the Nant Melyn. The flat-topped stone and boulder bank is between 0.2m and 0.4m high. The interior, which contains a heap of loose stones about 2.5m across and 0.4m high, measures 8.2m NE-SW by 6.8m NW-SE. There is no obvious entrance into the interior.

511. (158) (figs. 3:37 and 3:39) [SN 7137 1538]. An oval foundation built of stone and boulders lies some 60m south of site 510 at 290m OD on level stone-covered ground at the top of the high, steep-sided west bank of the Nant Melyn. It measures 7.2m NW-SE by 4m NE-SW, with internal dimensions of 5m NW-SE by 2.2m NE-SW. There is no obvious break in the bank which is around 0.3m to 0.4m high.

512. (259) (fig. 3:37) [SN 7154 1525]. A 0.7m high boulder is positioned off-centre within a discrete stony spread, measuring 6.4m N-S by 7.5m E-W, which is no more than 0.1m high. This feature is sited at 260m OD on a grassy shelf which appears to be relatively free of surface stone.
Craig Derlwyn (sites 513 to 514) (fig. 3:37)

This sandstone massif rises to 320m OD. Cambic stagnohumic gleys cover its grassy slopes (fig. 1:6) which are scarred by quarrying.

513. (201) (figs. 3:37, 3:40 and 3:41) [SN 7214 1576]. A sub-circular grass-covered stony bank, 0.1m to 0.2m high and measuring overall 13m N-S by 14m E-W, is located at 320m OD on a gentle north-east facing slope, just below the summit of the hill. The bank varies considerably in width from 0.8m to 3m. Its inner edge is irregular and in places shows signs of disturbance. The enclosed area, 9m N-S by 11m E-W, contains grass-covered stone. There is a 1.6m wide break in the north-north-west arc of the bank; its western edge is defined by larger earthfast stones, the eastern edge by similar sized but loose stones. A short length of the south-eastern arc of the bank is not visible on the surface although probing indicates stones beneath the vegetation. Just outside this section of the bank is a 3.8m long by 0.4m wide stony feature running to the east.

514. (figs. 3:37 and 3:40) [SN 7220 1575]. Sixty-five metres south-east of site 513 at 320m OD is a stone band, 30m long by 1m wide and up to 0.4m high. Both terminals of the stony strip turn slightly to the south-west, towards a grassy, relatively gentle slope mostly free of surface stone which contrasts with the stone-covered, steeply sloping ground to the north-east.

3.8.1 Outline Topography
The Nant Garw flows south through a deep narrow valley (Plate 22) which forms a gorge to the south-east of Craig Derlwyn (figs. 3:1 and 3:42). Flood plains have developed at points where the valley floor broadens. The valley cuts through Millstone Grit beds along the upper reaches of the stream, and through sandstone lower down in the lee of Craig Derlwyn. The slopes to the east overlie Millstone Grit, while those south-east of the lower reaches of the stream have formed over the Lower Coal Measures (fig. 1:4). Many tributaries drain into the Nant Garw, particularly from the eastern slopes (fig. 1:5). The grassy vegetation with patches of bracken and reeds grows in cambic stagnohumic gley soils (fig. 1:6).

3.8.2 Description of the Archaeological Remains

The Nant Garw (sites 600 to 631) (fig. 3:42)
600 to 603. (23 to 26) (figs. 3:42 and 343) [centred SH 7239 1689].
A group of four drystone and boulder-built structures, including a compartmented rectangular structure (600), is located at 320m OD, at the foot of a steep slope on a promontory at the confluence of the Nant Garw and a tributary.
Fig. 3:42. Sites 600 to 641 in Area G along the Nant Garw and the slopes east of the Nant Garw (fig. 3:2).

600. (23) This compartmented rectangular structure measures 12.5m N-S by 4m E-W. It is divided into two principal units with the southern unit further partitioned by a cross-wall of slighter construction. The walls of the northern compartment, up to 0.8m high, are massively built with boulders. Internally it measures 5.2m N-S by 2.4m E-W. There is a 0.6m wide entrance in the east wall flanked by a pair of boulder jambs. The southern unit is much less
substantially constructed with walls between 0.4m and 0.5m high. Overall it measures 4.5m N-S by 4.4m E-W and is divided into two compartments by a cross-wall, each internally about 2m N-S by 2m E-W, and each with an east facing entrance.

601. (24) An annular stone bank is sited on a terrace cut into the high steep bank of the tributary of the Nant Garw some 6m west of site 600. The ring is 2.4m across, 0.4m high and encloses an area 1.5m wide.

602. (25) A sub-rectangular structure is located on a terrace in the bank of the tributary around 9m west of site 600 and 3m north-east of site 601. The terrace has been enlarged to the north and the east by a cutting which is revetted by the walls of the structure. Overall it measures 4.8m N-S by 2.8m E-W, internally 2.3m N-S by 1.6m E-W, with walls 0.4m to 0.8m high.

603. (26) A roughly triangular-shaped structure is built against a naturally positioned slab on a platform in a steep slope 15m north-east of site 600. It measures 4m NE-SW by 3m maximum NW-SE, enclosing an area 1.6m N-S by 2.2m E-W. The entrance is at the apex of the structure to the west. The south-east wall has eroded down-slope but elsewhere the stone bank survives up to 0.8m high.
Fig. 3:43. Sites 600 to 603 alongside the Nant Garw.
Three drystone and boulder-built structures are located on the banks of the Nant Garw at 310m OD at a point where the valley is narrow and particularly steep-sided. A compartmented rectangular building (604) lies on the east bank. The other structures lie around 15m upstream on the west bank.

604. (47) The rectangular building, 8.4m NE-SW by 5m NW-SE, is built on a natural platform at the foot of the east slope of the valley. It is divided into two compartments. The southern compartment, internally 3.6m NE-SW by 3m NW-SE, is substantially built with walls up to 0.8m high. There is a 0.5m wide entrance in the west wall. The northern compartment is of slighter build, measuring internally 2m NE-SW by 2.5m NW-SE, with the floor at a lower level. The collapse of a discrete section of the northern end-wall suggests the possibility of an underlying feature such as a drain.

605. (48) An annular stone bank, up to 0.3m high and 3.8m across, enclosing an area up to 1.9m across, is built against the slope.

606. (49) A penannular stone bank, open to the south, is built at the foot of the slope 1.2m north-east of 605. It measures 4m N-S by 3.4m E-W, enclosing an area 2m N-S by 1.4m E-W.
Fig. 3:44. Sites 604 to 606 alongside the Nant Garw.
607 to 613. (39 to 45) (figs. 3:42 and 3:45) (Plates 23 and 24) (centre SW 7233 1680). A group of seven drystone and boulder-built structures, including at least one rectangular compartmented building (607), lie along a 70m stretch of the west bank of the Nant Garw at 310m OD (Plate 23). They are sheltered by the high sides of the valley.

607. (39) This rectangular building, 12.8m NE-SW by 4.8m NW-SE, is divided into two compartments (Plate 24). The north-eastern unit measures 5.2m NE-SW by 3m NW-SE internally with coursed stonework standing 0.8m high. There is a 0.6m wide entrance in the east wall. A 1.3m long stone slab just inside the entrance is probably either a fallen jamb or lintel. Although the south-western compartment seems to have been built at the same time as the north-eastern, it is less massively constructed with walls up to 0.5m high. Internally it measures 4m NE-SW by 2.8m NW-SE. There is a 0.5m wide entrance roughly mid-way along the eastern wall, the southern edge of which is formed by a 0.6m high orthostat.

608. (40) An annular structure is built in a hollow behind a knoll some 22m north-west of site 607. The stony bank, 0.5m high, measures 5m across enclosing an area 2.6m N-S by 3m E-W. The eastern arc of the bank has collapsed.
Fig. 3: Sites 607 to 613 alongside the Nant Garw.
609. (41) This ill-defined structure, obscured by reed growth, comprises two compartments formed by a double line of boulders. It is built against the side of the knoll 5m south-west of site 608. Overall it measures 7m NE-SW by a maximum of 4m NW-SE. The northern compartment measures 2.6m NE-SW by 1.2m NW-SE internally, the southern 3m NE-SW by 2m NW-SE. There is possibly a north-west facing entrance to the southern unit.

610. (42) An annular structure, 3m N-S by 3.8m E-W, enclosing an area 1.8m N-S by 2m E-W, is built against rising ground 5m south-west of site 607 (Plate 23). The stone and boulder bank is up to 0.8m high. A setting of spaced-boulders 1m to 2m outside the ring suggests a possible outer demarcation around 8m across NE-SW by 4m NW-SE.

611. (43) A sub-oval structure, 5.2m NW-SE by 3.8m SW-NE, with internal dimensions of 2.8m NW-SE by 1.8m NE-SW, is located 4m south-west of 610 (Plate 23). The stone bank is up to 0.5m high.

612. (44) This rectangular building, 6.2m NE-SW by 4.2m NW-SE, stands to a height of 0.7m. It is located on the edge of the river bank some 30m south-west of site 607. Internally it measures 4m NE-SW by 2.2m NW-SE and has a 0.6m wide entrance mid-way along the east wall. A 5m long stony bank extends from the north-east corner. This turns to the south-east becoming spread and ill-defined. It is possible that this feature may represent the remains of a conjoined compartment partially eroded by the stream.
613. (45) Six metres south-west of 612 is a setting of boulders forming three sides of a rectangle, with the north-west side open. The boulders are up to 0.6m high and delineate an area 5.6m NE-SW by 4.6m NW-SE.

614. (46) (fig. 3:42) [SN 7235 1675]. An annular boulder bank is located on the west bank of the river at 310m OD. It measures 3m across, is up to 0.5m high and encloses an area 1.7m N-S by 1.3m E-W. There is a possible entrance break in the eastern arc. An accumulation of boulders some 5m to the south-west is probably a natural feature.

615 to 617. (50 to 52) (figs. 3:42 and 3:46) [centred SN 7221 1654]. Three drystone and boulder-built structures, including a rectangular compartmented building (50), are located at the foot of the steep western slope of the valley of the Nant Garw at 290m OD, close to the edge of river bank which is particularly marshy at this point.

615. (50) This building, which comprises two conjoined units of very different character, measures 15.4m NE-SW by 5m NW-SE. The northern compartment is substantially built, measuring overall 6m NE-SW by 4.6m NW-SE with internal dimensions of 4.4m NE-SW by 2.6m NW-SE. Coursed stonework consistently stands to between 0.8m and 1m high, although the north-east corner has collapsed. There is a 0.6m wide entrance in the east wall flanked to the north by a 0.8m high orthostat. A 6m grass-covered stony bank extends up-
slope from the south-west corner. It appears to be integral to the build of the compartment. Another stony bank extends for 7m from the south-east corner of the compartment towards the edge of the river bank. It appears to abut, rather than to be built into, the main structure.

The reed-infested southern compartment measures 9.6m NE-SW by 5m NW-SE, with internal measurements of 8m NE-SW by 2m NW-SE. It comprises flat-topped grass-covered banks, 0.3m to 0.4m high, markedly lower than the walls of the northern compartment. The south-east corner is ill-defined, possibly either an entrance or the consequence of stream erosion.

The relationship between the two compartments is unclear. The substantial 1m high south wall of the northern compartment seems to be built on the terminals of the longitudinal walls of the southern compartment. The two compartments are also built on slightly different alignments. It may be that the northern compartment in its present form is a re-build or an addition.

616. (51) Four metres south-west of site 615 is a rectangular structure measuring 6m NW-SE by 4.4m NE-SW, with internal dimensions of 4m NW-SE by 2.8m SW-NE and walls 0.7m to 0.8m high. There is a boulder-flanked 0.5m wide entrance mid-way along the north-eastern wall. Built at right-angles to the slope, the downslope or south-eastern wall has particularly substantial boulder footings.
Fig. 3: Sites 615 to 617 alongside the Nant Garw.
617. (52) This annular structure is around 3m across and 1m high. The form is largely obscured by collapsed material within the interior. It is adjoined by an oval enclosure to the north measuring 5m N-S by 3m E-W defined by a stony bank 0.2m to 0.3m high. It is built into the eastern side of a natural boulder bank, some 21m north-east of site 615.

618. (63) (figs. 3:42 and 3:47) [SN 7219 1644]. This drystone rectangular structure is built on a promontory at 290m OD between the Nant Garw and a tributary joining from the west. It measures 6.6m N-S by 4.1m E-W, with internal dimensions of 4.6m N-S by 2.2m E-W. The banks are up to 0.4m high. The east wall is broken by a 0.8m wide entrance. Immediately south of the structure is a stone strewn platform 5m N-S by 3m E-W which may be in part artificial.

619. (62) (figs. 3:42 and 3:47) [SN 7214 1643] This compartmented rectangular drystone and boulder structure, measuring overall 7.2m NW-SE by 4.2m NE-SW, is located at 290m OD on the south bank of a tributary of the Nant Garw. Much of the north-eastern wall has slipped down the eroding stream bank but elsewhere walls survive to between 0.3m and 0.5m high. The surviving south-eastern wall is strongly buttressed by a broad foundation against the steep slope. Internally it measures 5.5m NW-SE by 2.5m NE-SW with a 1.8m long cross-wall partially sub-dividing the interior.
Fig. 3:47. Sites 618 to 622, and site 625 alongside the Nant Garw.
Three drystone and boulder-built structures are located on the broad marshy valley floor west of the Nant Garw at 280m OD where the valley widens.

The rectangular structure, measuring 8m N-S by 4.6m E-W, is situated on the present day edge of the river bank. Grass-covered stone banks between 0.3m and 0.6m high define an interior 5.6m N-S by 2m E-W. While there is no obvious entrance, a reduction in the height and constriction of width about two-thirds of the way down the eastern wall suggests the possible location of a break. A 1m long internal projection midway along the east wall is not sufficiently differentiated from tumble to be described as a cross-wall with any conviction.

This annular structure, 5.8m N-S by 4.8m E-W, is located on a boulder knoll about 15m west of site 620. It comprises a bank, two or three boulders wide and between 0.2m and 0.7m high, surrounding an area 4m N-S by 2.8m E-W.

This sub-annular structure, a grass-covered boulder bank 0.3m to 0.4m high, is located at the foot of a south facing slope, 30m south-west of site 620. It measures 4.8m N-S by 5.8m E-W, with internal dimensions of 2m N-S by 3.4m E-W. A slight break in the south-east arc may indicate an entrance.
623. (58c) (fig. 3:42) [SN 7233 1603]. On the floor of the valley at around 270m OD, on the east bank of the stream, is a boulder pile 3.5m NW-SE by 3m NE-SW and 0.4m high. The valley floor is at its widest at this point, forming a flat grassy flood plain about 50m across in a loop of the stream. Access to this area is formalised via a short length of track to the north which is revetted by boulders.

624. (58b) (fig. 3:42) [SN 7239 1592]. A 'L' shaped drystone wall is located on the very edge of the east bank of the stream at about 270m OD. It represents one corner of a structure which has been largely demolished by erosion of the bank.

625. (58a) (figs. 3:42 and 3:47) [SN 7243 1591]. Forty metres south of site 624 on the east bank of the stream around 260m OD is a compartmented rectangular building of drystone and boulder construction. It is situated on a narrow ledge between the steep valley side and the river. A seepage now flows through the structure. It is divided into two units measuring overall 11m E-W by 4.5m N-S. The eastern compartment measures internally 5m E-W by 2.5m N-S, with the walls between 0.2m and 0.5m high. There is an entrance midway along the south wall flanked by large boulders. The south wall is built on a wide boulder footing which projects beyond the outer face of the superstructure. Water seepage through the western compartment has caused the collapse of the walls except where they butt the eastern unit. They comprise boulders stacked up to three courses or 0.9m high. The compartment had internal
dimensions of around 2m N-S by 3.6m E-W, and its end wall may have been rounded.

On the west bank of the stream, opposite 624 and 625, is an area of stony rubble beneath a high cliff. It has been suggested that there is evidence for an enclosure with internal sub-divisions amongst this stone (RCAHM Wales Landscape Survey, unpublished). This seems unlikely. The "form" within the accumulation probably results from a combination of stream action, the excavation of a trench for a water pipe which runs down the valley, and dumping of material from a road cut into the side of the valley above the cliff.

626 to 629. (64 to 66) (figs. 3:42, 3:48 and 3:49) [centred SN 7252 1584]. A group of structures of drystone and boulder construction, including a compartmented rectangular building (626), is associated with plots defined by stone clearance (629). They are located on a rocky promontory at around 250m OD between tributaries of the Nant Garw, at the top of a cliff forming the east side of a gorge.

626. (66) (fig. 3:49) [SN 7250 1584]. This compartmented rectangular building with an annexe is located on a terrace tucked into the west face of the promontory immediately above the Nant Garw. The river has eroded much of the western side of the structure which possibly was built in two phases, or at least in two contrasting styles.
Fig. 3:48. Sites 626 to 629 alongside the Nant Garw.
The northern component, 7.6m N-S by around 4m E-W, is divided into two compartments. The northern compartment measures internally 1.2m N-S by 1.5m E-W, the southern 3.2m by 2.8m E-W. It is terraced into the slope to the east; the east wall revets the slope with an external height of 0.5m and an internal height of 1.2m. There is a 0.8m wide entrance in the end-wall of the southern compartment.

The south-western corner of the northern component is much more massively built, with carefully coursed stonework just over 1m wide and surviving to 1m high. The construction of this corner is more akin to that of the southern part of the building.

The southern component measures 9m N-S by 6m E-W, with substantially constructed walls up to 1.5m wide which still stand to 0.8m high. Internally the dimensions are 7m N-S by 3m E-W. There is a 1.2m wide entrance in the southern end-wall.

An annexe abuts the east side of the southern component. It measures internally 4.2m N-S by 3.7m E-W and is around 14m², with a bow-sided eastern bank, the inner face of which is up to 1.5m high. This revets a cutting in the slope.

An attenuated bank continues from the south-eastern corner of the southern component for some 7m before swinging west in the form of a line of boulders ending on the edge of the river. This seems to form a second annexe around 50m².
Fig. 3:49. Sites 626, 627, 630 and 631 alongside the Nant Garw.
It is clear from the butt joint where the north-eastern corner of the southern component meets the northern component that the former is a later build. Of course the time which elapsed between the construction of the two elements is uncertain, although the generally different scale and character of construction suggests a real interval between the two phases. The structural similarities between the south-western corner of the northern component and that of the southern component can be interpreted as indicating a re-build of that corner coinciding with the addition of the southern element.

The entrances in the end-walls of the compartments are exceptional features in the rectangular buildings recorded in the survey area. Speculatively, the putative rebuilding could be connected with encroachment of the river bank giving rise to a need to move an entrance from the west wall of the northern component where it faced the river.

Five metres north of the building, parallel to its end-wall, is a 3m long stone bank, the western end of which now terminates in erosion at the edge of the river bank.

627. (65) (fig. 3:49) [SN 7254 1585]. Some 25m west-north-west of site 626 lies a structure measuring 13m NW-SE by 8.8m NE-SW containing five roughly circular units. It is built within an accumulation of scree at the foot of the slope. The boulder walls, 0.3m to 0.7m high, are dilapidated with little formal structure.
now apparent. The internal units range in size from around 2.5m by 2.5m to 3.4m by 2.5m. There is evidence for a 0.8m wide entrance from the south-west to the two inter-connected central units.

628. (65) (fig. 3:48) [SN 7254 1585]. Three metres north-west of site 627 is an annular stone bank 3m NW-SE by 4m NE-SW, and up to 0.4m high, enclosing an area 1.5m NW-SE by 2m NE-SW. Five metres north-west, set at the base of the slope, is a platform which may be at least partly artificial, measuring 10m NW-SE by 5m NE-SW.

629. (64) (fig. 3:48) [centred SN 7252 1584]. Three conjoined plots are defined either by stone and boulder strips or by boulder lines. The stony bands are up to 2.5m to 3m wide. One boulder line ends in a stone pile 2.5m NW to SE by 3m NE to SW by 0.5m high. There is one 10m length of bank in which formal structure is apparent, a face comprising two courses of stone 0.4m high, at the north-western edge of the clearance. The total area associated with the plots is around 0.1ha. West and south-west of the plots, at the foot of a scree-covered slope, is a relatively stone-free terrace bounded by the gorge which may have been cleared of surface stone.

630 to 631. (57) (figs. 3:42 and 3:49) [centred SN 7258 1576]. Two drystone and boulder-built structures, one a compartmented rectangular building (630), are sited on a terrace at around 250m OD above the flood plain west of the Nant Garw.
630. This rectangular structure, 10.6m N-S by 4.2m E-V, is divided certainly into two, probably into three units. It is dilapidated with much tumbled stone within the interior, the walls surviving to between 0.2m and 0.4m high. The northern compartment measures internally 3m N-S by 1.8m E-W. There may be a 0.8m wide entrance at the southern end of the west wall. However, two lumps of concrete at this point together with loose stone to the south suggest that the break could be recent in origin.

The east wall of the structure kinks outwards where the northern and central compartments join. The central compartment measures around 3m N-S by 3m E-W. A 1.2m length of wall projects southwards from the south-west corner of the central compartment. This, taken with some boulders visible through the grass cover and an ephemeral rise in the surface projecting from the south-east corner of the central compartment, suggests the presence of a third compartment of less substantial build, measuring about 1.8m N-S by 2.4m E-W internally.

Attached to the east wall of the building is an enclosure, 5m N-S by 3m E-W around 10m², defined by a grass-covered stony bank 0.2m to 0.3m high.

631. South and south-east of site 631 is a further annexe, partially open to the west, its eastern bank running along the edge of the terrace. This bank is up to 1.5m wide and 0.4m high, with boulders apparent at its edge. The outer face of the southern
end has collapsed onto the flood plain. Internally the annexe is up to 12m N-S by 5m E-W with an area around 50\(m^2\) enclosed. It does not appear to be physically attached to building 630. The short length of bank forming the south and south-western side terminates in a penannular structure, open to the west, measuring 3m N-S by 2m E-W.

The Slopes East of the Nant Garw (sites 632 to 641) (fig. 3:42)
The grassy and very stony slopes east of the Garw overlie Millstone Grit rock (fig. 1:4). The soils are cambic stagnohumic gleys (fig. 1:6). There are areas of particularly poorly drained soil in the vicinity of the many streams and seepages which drain these slopes into the Nant Garw.

632 to 638. (202 to 204 and 226 and 227) (figs. 3:50 and 3:51) (Plate 25) [centred SW 7233 1655]. A cluster of five sub-annular stone foundations, one of which (632) is associated with a linear stone band, is located on a south-west facing slope between the 310m and 320m contours along with two possible stone heaps. The slope is grassy with areas of reed, and concentrations of surface stone and boulders. Four of the structures (sites 632 to 635) are on a broad terrace around 50m N-S by 60m E-W. The other is on the periphery of the terrace. It has been suggested that some other stony accumulations in the vicinity result from human activity (RCAHM Wales Landscape Survey, unpublished). However, none of these is particularly convincing.
632. (202) [SN 7231 1654]. This penannular grass-covered stony foundation, 10.5m N-S by 10.5m E-W and about 0.3m high, encloses an area 7.6m N-S by 8m E-W (Plate 25). A square arrangement of loosely set stones and other irregularities in the northern arc probably result from disturbance. There is a 1.5m wide entrance break in the eastern arc. The bank forming the northern terminal of the entrance extends as a sinuous stony strip, 1m to 2m wide and
0.2m to 0.3m wide, for a distance of 20m to the north-east. Eventually it merges with an area of scree.

633. (203) [SN 7236 1657]. The penannular grass-covered stony foundation, 6.4m N-S by 7m E-W and 0.2m to 0.3m high, enclosing an area 3.4m N-S by 4m E-W, is set on a slight platform in the slope. There is a 1m wide entrance in the north-west arc.

634. (204) [SN 7235 1654]. This penannular grass-covered stony foundation, 7.2m N-S by 7.6m E-W and up to 0.3m high, enclosing an area 5.3m N-S by 5.5m E-W, is sited on a small local terrace. There is a 1.2m wide break in the north-west arc. An undulation in the south-east arc may be a disturbance rather than a second entrance.

635. (227) [SN 7232 1657]. This probable grass-covered annular foundation, 4.4m N-S by 5m E-W, internally 2.6m N-S by 2.8m E-W, is now only about 0.1m to 0.2m high. The north-eastern arc is ill-defined.

636. (226) [SN 7238 1656]. A grass-covered stony foundation without any visible entrance is sited on a moderately steep slope just above the terrace on which sites 632 to 634 are located. It measures 7m N-S by 6m E-W; the interior is a grassy depression 4.4m N-S by 3.4m E-W. The south-eastern external edge is obscured by hill-wash and is only about 0.1m high. The north-western, downslope edge, is 0.3m to 0.4m high.
Fig. 3:51. Sites 632 to 636, and sites 640 and 641 on slopes east of the Nant Garw.
637. (202b) [SN 7231 1652]. Around 18m south of site 632 is a squarish stone pile to the east of an apparently natural band of surface stone. It measures 2.6m N-S by 2.2m E-W and is up to 0.4m high.

638. (202c) [SN 7230 1654]. About 40m south of site 632 is a stone heap, potentially the result of human activity, 2.3m N-S by 2.8m E-W and up to 0.5m high.

639 to 641. (248 to 250) (figs. 3:42, 3:51 and 3:52) [centred SN 7287 1570]. A cultivation plot (639) and at least two annular foundations (sites 640 and 641) are located on a gentle slope with a south-westerly aspect between 270m and 300m OD.

639. (248) (fig. 3:52) [centred SN 7287 1570]. An area of a gentle well-drained grassy slope, about 1 ha in extent, contains evidence for stone clearance indicative of the presence of a cultivation plot or plots. It is bounded to the south-west by a marshy area and to the north-west and south-east by tributaries of the Nant Garw with poorly drained soils beyond. There are stone accumulations on the slope which are probably entirely natural in origin. Some, however, may have been modified by clearance. An apparently artificial edge of stone, or a boulder line may indicate such modification. There is also unambiguous evidence for stone clearance in the form of stony banks and stone heaps. The following features are sufficiently clear to be described individually.
Fig. 3:52. Sites 639 to 641 on slopes east of the Nant Garw.

a) a pile of loose stone 3m across by 0.4m high.

b) an oval heap of stone 4.1m NE-SW by 3.3m NW-SE by 0.4m high.

c) a flattish trapezoidally shaped stone pile with a concave interior, 7m NW-SE by 9.3m NE-SW by 0.4m high.

d) a band of stone, 1m to 2.2m wide and 0.1m to 0.3m high, curves along the south and south-east edge of the area with poorly drained soil beyond.
e) an apparently natural accumulation of stone, the north-western, northern and eastern edges of which have evidently been modified by the addition of boulders forming an "edge" up to 0.4m wide.

f) a stony strip, 1m to 2m wide and 0.1m high, extends north-north-west from a natural accumulation of stone for a distance of around 10m. It may be extended for a further 20m by a line of boulders.

640. (249) (figs. 3:51 and 3:52) [SN 7293 1571]. The grass-covered penannular foundation, between 0.1m and 0.4m high, measures 8.4m N-S by 11m E-W with internal dimensions of 5.4m N-S by 9m E-W. The north-eastern arc fades beneath the vegetation and may be the location of the entrance. A stony strip, 0.1m high and 1.4m wide, runs north-east for a distance of 5m from the north-eastern terminal of the ring. The structure is located towards the north-eastern edge of the potential cultivation plot, site 639, at 290m OD. Thirty metres to the north-east is a penannular boulder setting some 5m across and open to the south-east which could be a further structure.

641. (250) (figs. 3:51 and 3:52) [SN 7289 1571] Thirty-seven metres west-north-west of site 640 at 290m OD is a sub-annular stone foundation, 0.2m to 0.4m high, measuring 8.4m N-S by 8m E-W with internal dimensions of 5m N-S by 5.4m E-W. A grassy section of the south-east arc where the height of the bank is reduced suggests a possible entrance. A bank, 0.1m high by 1.4m wide,
extends east-north-east before merging with natural accumulations of stone which may have been modified by clearance, as indicated by a possible boulder edge terminating at a small grassy mound.

Other "clearance features" have been identified on this slope (RCAHM Wales Landscape Survey, unpublished). However, the distinction between natural and artificial accumulations can be so vague as to make description very arbitrary. In particular various features have been noted in an area to the east of sites 639 to 641 centred on SN 7325 1560. However, apart from some apparently recent lambing shelters, nothing seems sufficiently unambiguous to allow meaningful description.

3.9 AREA H: The SOUTHERN SLOPES OF THE MOUNTAIN FROM THE NANT FYDD, EAST TOWARDS THE NANT LLYNFELL (SITES 700 to 722)

3.9.1 Outline Topography
This section of the survey area covers the valley of the Nant Fydd, the southern slopes of Foel Deg, the valleys of the Afon Amman Fach, the Afon Amman Fawr and the first few hundred metres of the Afon Amman, the ridges of Twyn y Moch and Waun y Ddraenen, the upper reaches of the Nant Llynfell and slopes to the south-east of the Nant Llynfell (figs. 3:1 and 3:53).

The Nant Fydd rises on the Millstone Grit but along most of its course it cuts a ravine through the Lower Coal Measures. The Afon
Amman Fach, Amman Fawr and Nant Llynfell each rise on the Millstone Grit. The Afon Amman Fach flows down a ravine while the Afon Amman Fawr descends a broader valley, before they combine to form the Afon Amman in a deep ravine between Foel Deg and Twyn y Moch. The river continues along a broad flood plain beneath the southern foot slopes of Foel Deg which overlie the Lower Coal Measures. The Nant Llynfell follows a shallow ravine cutting through the Millstone Grit and sandstones. The southern slopes of Foel Deg and the massifs of Twyn y Moch and Waun y Ddraenen are comprised of sandstones (figs. 1:4 and 1:5). The soils are mostly cambic stagnohumic gleys with an extensive area of humo-ferric podzols on Foel Deg and Twyn y Moch (fig. 1:6).

Fig. 3:53. Sites 700 to 752 in Area H from the Nant Fydd to Nant Llynfell (fig. 3:2).

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3.9.2 Description of the Archaeological Remains

**Slopes North of the Nant Fydd (sites 700 to 702)** (fig. 3:53)

These grassy but stony slopes overlie Millstone Grit deposits (fig. 1:4). There are restricted areas of apparently better drained ground on the generally poorly drained slopes covered by cambic stagnohumic gleys (fig. 1:6).

700 and 701. (205 and 206) (figs. 3:53 and 3:54) [centred SN 7380 1560]. Two annular foundations are located 23m apart on a grassy stony slope with a south-easterly aspect at 320m OD.

700. (205) This stone and boulder foundation, 0.2m to 0.3m high, measuring 5.2m N-S by 4.9m E-W, encloses an area 2.2m N-S by 2.6m E-W. There is no break apparent in the circuit.

701. (206) A stone and boulder foundation, 0.2m to 0.3m high, measuring overall 4.9m N-S by 5.6m E-W, encloses an area 2.7m N-S by 3.6m E-W. There is a "compartment", 2m across, within the north-west arc. Two parallel accumulations of loose stone, 1.6m apart, project up to 3.8m beyond the south-west arc. Loose stone is stacked up to 0.5m high where these features abut the bank. The original annular structure seems to have been modified, perhaps to form a lambing shelter.
Fig. 3:54: Sites 700 and 701 on slopes north of Nant Fydd; and sites 703 to 707, 709, and 711 to 713 alongside the Nant Fydd.
702. (207) (fig. 3:53) (SN 7378 1550). An oval spread of stone and boulders, 14.5m N-S by 8.3m E-W, is sited on a terrace in the south-west facing slope at 305m OD some 100m south-south-west of site 701. Stone is loosely piled up to 0.9m high at the centre. Elsewhere it is 0.3m to 0.4m high. This feature is at least in part an artificial accumulation. It is unclear whether any of the other concentrations of stone in the vicinity also result from human activity.

In the Valley of the Nant Fydd (sites 703 to 713) (fig. 3:53)
The ravine down which the Nant Fydd flows, west and south-west of Foel Deg, is relatively shallow, but constricted with steep sides and narrow banks flanking the stream.

703. (89a) (figs. 3:53 and 3:54) (SN 7349 1505). A sub-rectangular drystone and boulder-built structure is tucked against the steep valley side on the narrow west bank of the Nant Fydd at 250m OD. It measures 5.9m N-S by 3.5m E-W, with internal dimensions of 4.2m N-S by 2m E-W. The walls survive at about 0.3m high and there is a 0.4m wide entrance break, flanked to the south by a boulder, in the east wall. The outer face of the curved northern wall has been eroded by the stream.

704. (70) (figs. 3:53 and 3:54) (SN 7347 1501). This rectangular drystone and boulder-built structure is sited with its long axis at right-angles to the steep valley side, perched on the narrow west bank of the Nant Fydd at around 250m OD. It measures 5m NE-SW by
7.9m NW-SE, with internal dimensions of 6m NW-SE by 3m NE-SW. The walls range from 0.4m to 0.6m high, although the internal face of the west wall, which revets the slope, is up to 1m high. A depression and constriction in the south wall may indicate an entrance. A 1m wide by 2.2m long bank projects from the north wall.

705 to 710. (84 to 88) (figs. 3:53, 3:54 and 3:55) [centred SN 7347 1490]. Several drystone and boulder-built structures, including a compartmented rectangular building (705), are situated on a flood plain where the valley floor of the Nant Fydd broadens at around 235m OD. Now the area is wet and overgrown with reeds.

705. (84) (figs. 3:54 and 3:55) [SN 7346 1492]. This reed-infested compartmented rectangular building measures 21.5m NE-SW, by 5m maximum NW-SE at the southern end, tapering to 3m wide at the northern end. It is located in a slight hollow at the foot of the western slope of the valley. The walls now vary in height from 0.2m at the northern end to 0.4m to 0.5m at the southern end. It is sub-divided into five compartments; the central compartment is partially sub-divided by a cross wall. All compartments contain much tumbled stone. The southernmost compartment measures internally 3m NW-SE by 2.4m NE-SW and has a 0.5m wide entrance in the east wall. The next compartment measures 2.8m NW-SE by 2.8m NE-SW but there is no entrance apparent. The central compartment, partially divided by a cross-wall into roughly equal halves, has internal dimensions of 5.9m NE-SW by 2.5m NW-SE; a 0.6m wide entrance in the east wall provides access. The compartment to the
north is without an apparent entrance, and measures 2.1m NW-SE by 1.8m NE-SW. The northernmost compartment, measures 3.7m NE-SW by 2m NE-SW, and has a slightly rounded end-wall. It is of slighter build than the rest of the structure and there is a wide 1.8m gap in the east wall.

Fig. 3.55. Sites 705 to 710 alongside the Nant Fydd.
Three stone and boulder banks radiate from the east wall of the building towards the river bank (fig. 3:55). The northern and southern banks seem to demarcate an area between the building and the river. The northern boundary is 0.2m to 0.3m high and 0.5m wide, and can be traced for a distance of 12m before disappearing at the edge of the steep river bank. Its point of origin is alongside a 0.6m high orthostat in the outer face of the building.

A shorter bank has its point of origin alongside a 0.5m orthostat in the outer face at the junction of the central and southern compartments and takes the form of a right-angle. It is 16m long, 0.5m wide and 0.2m to 0.3m high (fig. 3:54). The southernmost bank, 0.5m wide and up to 0.4m high, runs from the south-east corner of the building over a distance of 26m before connecting with structure 706. Five metres before site 706, it forks to the south-east, visible for a distance of 3m (fig. 3:55).

706. (85) (figs. 3:54) [SN 7346 1491]. This structure is sited at the top of the steep west bank of the stream. It comprises three units defined by 0.2m to 0.4m high grass-covered stone banks which are edged with larger boulders. Overall it measures 8m NW-SE by 6.5m NE-SW. The northern or central unit measures internally 2.6m NW-SE by 3m NE-SW, with a 1m wide north-facing entrance break. Abutting this unit to the south-west is a structure to which there is no apparent entrance, with internal dimensions of 1.6m NW-SE by 1.6m NE-SW. The south-eastern unit, which is open to the south-east, has internal dimensions of 5.6m NE-SW, by up to 4m NW-SE.
707. (86) (fig. 3:54) [SN 7346 1491]. A square structure lies 5m NE of site 706. Measuring 6.3m NW-SE by 5.8m NE-SW, it has internal dimensions of 4.6m NW-SE by 4m NE-SW, and a 0.5m wide entrance in the north-east wall. The coursed stonework ranges from 0.2m to 0.5m in height with sections of the face comprised of boulders.

708. (87) (figs. 3:55) [SN 7346 1490]. A curved section of stone walling, 0.3m high and 4m NE-SW, is built against the steep west bank of the river 7m south of site 706. It encloses an area 2.5m NE-SW by 2.6m NW-SE.

709. (88) (fig. 3:54) [SN 7348 1490]. An annular stone bank, 0.3m high and 4.6m NE-SW by 4m NW-SE, is sited on the edge of the east bank of the Nant Fydd. The interior is slightly concave and measures 2.5m across. There is a 0.4m wide entrance in the south-west arc.

710. (fig. 3:55) [centred SN 7348 1498]. Two substantial and well-defined linear accumulations of boulders are located on the west bank of the Nant Fydd, some 50m upstream from site 705. The northern bank, which runs parallel to the edge of the river, is 15m long, 1.5m to 2m wide and about 0.5m high. The southern bank, which is 15m to the south, is 20m long, up to 3m wide and 0.5m high, and runs down the steep west side of the valley.
While these features may be partially created by boulders moved by water, it is difficult to account for them entirely in these terms. The southern bank in particular, running up to the crest of the valley slope, seems likely to have involved human agency. Perhaps stone clearance from the relatively stone free, well-drained and level grassy area to the west of the valley contributed to their formation. Their shape and position may have been intended to consolidate this section of river bank, helping to prevent erosion which could have allowed the stream to flow across the flood plain on which structures 705 to 708 are built.

711 to 713. (117 to 119) (figs. 3:53 and 3:54) [centred SN 7339 1449]. Three drystone and boulder-built structures, including one compartmented sub-rectangular building (711), are located at around 205m OD on the east bank of Nant Fydd.

711. (118) (fig. 3:54) [SN 7339 1449]. This sub-rectangular building is located at the foot of the slope forming the valley side. Divided into two compartments, it measures 10m NE-SW by 5m NW-SE. The grass-covered banks are between 0.2m and 0.7m high. The northern compartment measures 5.8m NE-SW by 3.1m NW-SE. There is a 0.8m wide entrance mid-way along the west wall, flanked to the south by a 0.8m high orthostat. The southern compartment is more slightly built, measuring 2.4m NW-SE by 1.3m NE-SW, with a 0.5m wide west facing entrance.
712. (117) (fig. 3:53) [SN 7340 1453]. Some 30m north of site 711, on top of the east side of the shallow river valley, is a structure comprising a boulder bank 0.3m to 0.4m high, measuring 5.6m N-S by 4.4m E-W, with internal dimensions of 4m N-S by 3m E-W. There is a 0.5m wide south facing entrance break.

713. (119) (fig. 3:54) [SN 7338 1447]. About 20m south of site 711 is a structure with 0.3m to 0.4m high grass-covered banks, mostly made up of one tier of boulders. The long axis is at right-angles to the east slope of the valley. The inner face of the eastern end-wall which revets the slope is around 0.8m high. The western end of the structure has been eroded by the stream. It measures 4.8m N-S and at least 6m E-W. There is possibly a 0.4m wide entrance in the south wall.

On the Southern Slopes of Foel Deg (sites 714 to 717) (fig. 3:53)
The rounded summit of Foel Deg at 320m OD is comprised of Millstone Grit but the slopes and terraces immediately south of the summit are of sandstone (fig. 1:4) with a thin soil cover of humo-ferric podzol (fig. 1:6) supporting a mostly grassy vegetation.

714. (213) (fig. 3:53) [SN 7365 1526]. An apparently isolated stone heap lies on a grassy south-west facing slope at 280m OD, measuring 2.7m N-S by 2.6m E-W by 0.3m high.

715. (216) (figs. 3:53 and 3:56) [centred SN 7390 1513]. There are stone heaps and strips, together with a possible circular
foundation, on south facing grassy terraces between 290m and 300m OD beneath the summit of Foel Deg. The soil in this area frequently appears thin and there is much surface stone and rock exposure. Therefore interpretation of stone accumulations as a consequence, wholly or partially, of human activity is far from straightforward. There are, however, fourteen concentrations of stone, together with the possible foundation (no. 715m), distributed across an area around 140m N-S by 180m E-W. These appear likely to be the product in whole or part of stone clearance, presumably for agricultural improvement. It is difficult to estimate how much of this area may
actually have been subject to use and improvement on account of topographical characteristics such as slope, rock exposure and areas of stone which are most likely entirely natural accumulations.

a) a circular pile of stones with grass-covered edge, 3.6m N-S by 3.8m E-W by 0.3m high.

b) an oval heap of stones, 4.5m N-S by 5m E-W by 0.4m high, with diffuse grass-covered stony accumulations to north-east and north-west.

c) a pile of stones, 2m N-S by 2m E-W by 0.3m high, possible combining with b) to form a single accumulation.

d) a heap of stone with a grass-covered edge, 3.1m N-S by 3.3m E-W by 0.3m high.

e) an oval heap of stones with a grass-covered edge, 4.8m N-S by 3.5m E-W by 0.4m high.

f) a stony accumulation, 3.5m N-S by 4m E-W by 0.4m high, on a steep slope, possibly modified by the addition of cleared stone.

g) a concentration of stones, 6m N-S by 4m E-W by 0.3m high, within an area of surface stone, probably enhanced by the addition of cleared stone.

h) a concentration of stones, 4m N-S by 5.5m E-W by 0.5m high, within an area of surface stone, probably enhanced by the addition of cleared stone.

i) a grass-covered stony heap, 2.5m N-S by 2.5m E-W by 0.2m high.

j) a heap of stones 6.6m N-S by 6.3m E-W by 0.4m high.
k) a spread of stone, 13m N-S by 5m E-W and between 0.2m and 0.6m high, on a locally steep slope, which is probably natural in origin. However, it seems to have been modified by the addition of cleared stone represented by a 0.6m high built-up edge at its south-west corner.

l) a discrete band of stone, 16.5m NN-SW by 2.5m to 3m NW-SE and around 0.3m high.

m) a possible penannular grass-covered stone bank, open to the east, 5m across by 0.2m high, enclosing a slightly concave interior. It is difficult to be certain that this results from human agency on account of its ephemeral character and the patterning of surface stone occurring naturally in the vicinity.

n) a rocky outcrop modified by stone accumulation and an irregular boulder ring surrounding an open central area, 4.5m N-S by 3.4m E-W by 0.5m high.

o) a discrete stony strip, 1m wide by 0.3m to 0.4m high, which originates at the edge of the outcrop by 715n and continues south-east down-slope for around 42m with a break of around 2m towards the end.

716. (253) (fig. 3:53) (SH 7423 1505]. A stone pile, 4m N-S by 4.5m E-W by 0.4m high, with a flattish top containing loose stones and a grass-covered edge of larger stones, is sited on a slight terrace in the east face of Foel Deg at 280m OD.

717. (214) (fig. 3:53) (SH 7417 1468]. A pear-shaped stone and boulder heap, 8m N-S by 9m E-W and up to 0.4m high, with a surface
mostly of loose stone, is located on a small level terrace on the stony south-east face of Foel Deg at around 245m OD. The terrace, in extent around 23m NE-SE by 13m NW-SE, appears relatively free of surface stone in contrast to the surrounding slope; it may be a cultivation plot.

**Along the Valley of the Afon Amman Fach (sites 718 to 727) (fig. 3:53)**

The valley of the Afon Amman Fach, cut through the Millstone Grit (fig. 1:4), is narrow and steep-sided. The narrow river banks are subject to erosion from the fast-flowing stream. The valley becomes a gorge close to the river's confluence with the Afon Amman Fawr. The soils on the slopes to either side are cambic stagnohumic gleys (fig. 1:6).

718. (252) (figs. 3:53 and 3:57) [SN 7462 1628]. A sub-annular stony foundation, edged with boulders, is located on a south facing slope east of the valley of the Amman Fach at 400m OD. It measures 6m N-S by 5.5m E-W and encloses a slightly concave interior with dimensions of 4.6m N-S by 3.5m E-W. The bank, 0.2m to 0.4m high, fades along the eastern arc possibly indicating the position of an entrance.
Fig. 3:57. Sites 718 to 720, and 725 to 727 alongside the Afon Amman Fach, and 734 alongside the Afon Amman.
719 and 720. (143 and 144) (figs. 3:53 and 3:57) [centred SN 7432 1523]. Two drystone and boulder-built structures, including one rectangular compartmented building (719), are located 50m apart on the edge of the very narrow west bank of the stream at the foot of the valley slope between 270m and 280m OD.

719. (144) [SN 7433 1527]. This rectangular building, 9.4m NE-SW by 4.6m NW-SE, is divided in two compartments. The northern compartment has internal dimensions of 5.6m NE-SW by 2.3m NW-SE, and a 0.5m wide entrance in the east wall. The partially grass-covered stone and boulder banks contain some orthostatic elements up to 0.5m high; elsewhere the walls survive from 0.2m to 0.7m high. The western wall revets a cutting into the foot of the slope. The southern compartment measures internally 2m NW-SE by 1.8m NE-SW; its eastern wall is inset from that of the northern unit.

720. (143) [SN 7432 1522]. The rectangular structure is built in a hollow between a water-scarped boulder accumulation on the edge of the river bank and the valley side. It measures 7.2m N-S by 3.6m E-W, with internal dimensions of 5.7m N-S by 2.4m E-W. The internal faces of the walls are consistently higher, at around 0.6m, compared to the external faces at 0.1m to 0.3m. The east wall revets a cutting into the natural boulder bank. There is a 2.5m break in the west wall, where the line is represented only by a slight rise and a 0.4m high orthostat.
721 to 724. (139 to 142) (figs. 3:53 and 3:58) (Plates 26 and 27) (SW 7433 1513). Four drystone and boulder-built structures, including a rectangular compartmented structure (721), are sited on a terrace above a gorge to the west of the Amman Fach at 260m OD.

721. (139). The main axis of this building, which is overgrown with reeds, is north-east to south-west. Overall it measures 15m NE-SW by 8m NW-SE and comprises four compartments (Plate 26).

The two northern compartments are side-by-side forming an unit at right-angles to the main axis. Together they measure 7.8m NW-SE by 3.8m NE-SW. The south-eastern compartment has banks 0.3m to 0.4m high, enclosing an area 4m NW-SE by 2.2m NE-SW, and an end-wall which has partially eroded down-slope. There is a 1m wide entrance in the northern wall. The north-western compartment has internal dimensions of 2m NW-SE by 2.2m NE-SW. Its walls are around 0.5m high but contain several orthostats up to 1m in height. The north-western corner is built against rocky outcrop and there is a 0.5m gap in the northern side which seems to be comprised of a single substantial upright slab.
Fig. 3:58. Sites 721 to 724 alongside the Afon Amman Fach.
The central and south-western compartments abut the two northern compartments at a right-angle. The central unit measures 6.7m NW-SE by 4.8m NE-SW, with internal dimensions of 5.3m NW-SE by 4m NE-SW. The walls, which contain a substantial number of large boulders, are around 0.5m high. A reduction in the height of the northern end of the east wall may indicate an entrance around 1.2m wide. The south-western compartment measures 6m NE-SW by 3.2m NW-SE. Walls 0.3m to 0.5m high enclose an area 5m NE-SW by 2.4m NW-SE. There is a 0.8m entrance in the east wall.

722. (141). A pennanular structure, open to the south, and measuring 3m N-S by 2.4m E-W with an interior 1.8m N-S by 1.2m E-W, is sited on a shelf 11m north of building 721. The bank is 0.3m high and contains an orthostat 0.7m high (Plate 27).

723. (140) This structure comprises a partially grass-covered boulder bank, 0.5m high, in part revetting the face of the cutting on which it is constructed. It measures 4.8m N-S by 5m E-W with internal dimensions of 3m N-S by 3.2m E-W. There is a 1m wide entrance at the south-eastern corner. It lies 17m north of building 721.

724. (142). An annular boulder structure 0.2m to 0.4m high, 2.4m N-S by 2.4m E-W, enclosing an area 1.5m across, is sited on a terrace 24m north of site 721.
725 to 727. (136 to 138) (figs. 3:53 and 3:57) (Plate 28) [centred
SN 7436 1507]. Three drystone and boulder-built structures,
including a compartmented rectangular building (725), lie on a
terrace at around 250m OD on top of the east side of the gorge
through which flows the Amman Fach. They are located just up-
stream of a deep pool known as Pwll y Merched which forms at the
confluence of the Amman Fach with the Amman Fawr.

725. (136) [SN 7439 1505]. This compartmented building is sited
in a slight hollow towards the end of a promontory between the
rivers Amman Fach and Fawr (Plate 28). The east walls of the
structure revet a cutting made into the side of the hollow. It
measures overall 20m NW-SE by 7.2m NE-SW and is divided into two
compartments built at a right-angle to each other.

The northern compartment is built across the long axis,
measuring 5.4m NW-SE by 7.2m NE-SW with internal dimensions of
2.6m NW-SE by 5.6m NE-SW. The walls are between 0.5m and 0.6m
high. The north-west end-wall comprises two parallel rows of
boulders, stacked two or three high in places. There is just the
possibility of a north-west to south-east partition but tumble
prevents a definitive judgement.

The southern compartment is constructed at a right-angle to the
northern compartment. It measures 15m NW-SE by 7m NE-SW and
internally 13.6m NW-SE by 4.4m NE-SW. The walls, up to 0.7m high,
are massively constructed of boulders.
Entrances cannot be identified with certainty. There may be an entrance, now obscured by tumbled stone, at the northern end of the west wall of the southern compartment. There is also a possible internal connection between the two compartments at the north-west corner of the southern compartment but again this is obscured by tumble.

726. (137) [SN 7436 1509]. This sub-rectangular structure is located some 40m north of building 725. It is defined by a stone bank 0.4m to 0.5m high and spaced-boulders. It measures 2.5m NE-SW by 7m NW-SE.

727. (138) [SN 7434 1510]. This annular stone and boulder bank, 0.3m to 0.4m high, is located about 50m north of building 725 on the edge of the terrace above the Amman Fach. It measures 4.8m NE-SW by 2.5m NW-SE, enclosing an area 2.8m NE-SW by 2m NW-SE. There is a break in the eastern arc opening on to an area 2m across partly enclosed by a slight stone bank.

Along the Valley of the Afon Amman Fawr (sites 728 to 729) (fig. 3:53)

The valley of the Amman Fawr is generally wider than that of the Amman Fach, with a more gently flowing stream and a relatively wide flood plain along its lower reaches.

728. (163) (fig. 3:53) [SN 7504 1554]. An oval boulder built structure with an entrance in its northern side, measuring 4.6m N-S
by 5.8m E-W, is located on a terrace above the west bank of the stream at 320m OD.

729. (162) (fig. 3:53) [SN 7451 1505]. This rectangular boulder built structure measures 5m N-S by 3m E-W and lies on the north bank of the Amman Fawr, about 120m east of site 725. The walling survives up to 0.4m high, but the structure has been modified by the superimposition of a sheep shelter.

**Along the Banks of the Afon Amman (sites 730 to 736) (fig. 3:53)**
The Afon Amman flows through a deep ravine with almost sheer sides to the east between the massifs of Foel Deg and Twyn y Koch, before crossing more open ground beneath the foot slopes of Foel Deg.

730. (145) (fig. 3:53) [SN 7439 1501]. A squarish pile of stones, 3m across by 0.5m high, is located on the edge of a terrace above the west bank of the Afon Amman at 245m OD. This may be a clearance heap although the suggestion that it is a collapsed structure (Morgan 1988, 42) cannot be discounted.

731. (146) (fig. 3:53) [SN 7438 1498]. On the west bank of the Amman at 245m OD is an area, 10m N-S by 14m E-W, delineated by stony strips, 1m to 1.5m wide by 0.5m high, on all but the northern side. The stony bands, probably the result of stone clearance, seem to define a cultivation plot around 140m².
732. (147) (fig. 3:53) [SN 7431 1474]. A boulder-built rectangular structure, with banks 0.6m high, measuring 3.5m N-S by 3m E-W, lies on the east bank of the river at 235m OD. It is apparently isolated although there has been substantial erosion of the valley floor at this point on account of the river shifting course.

733. (148) (fig. 3:53) [SN 7421 1478]. A boulder-built penannular structure with a 1.2m wide west facing break, measuring overall 4.3m N-S by 4.5m E-W and up to 0.6m high, lies on the east bank of the river at 230m OD. It has been suggested that there is a rectangular building, 8.2m N-S by 4.2m E-W, some 30m north of this structure at the edge of the stream (Morgan 1988, 42). There is certainly a roughly rectangular accumulation of stone at this point but it appears that the form results from water sculpting.

734 to 736. (149 and 155) (figs. 3:53 and 3:57) (centred SN 7378 1430). Three drystone and boulder-built structures, including a compartmented rectangular building (734), are located on the flood plain close to the northern edge of the River Amman at 200m OD.

734. (155) (fig. 3:57) [SN 7378 1429]. The compartmented building measures around 5m N-S by 15m E-W. It is defined by stony banks up to 0.3m high and slight grassy rises in the encroaching marsh in which stonework can be detected by probing. It is probably divided into three compartments. The eastern is the most clearly visible, with internal dimensions of 3m N-S by 5m E-W and a south facing entrance 0.5m wide. The central compartment is around 2.4m
N-S by 5m E-W, again with a south facing entrance around 0.8m wide. The western compartment, 2m N-S by 1.5m E-W, appears to be open to the south.

735. (149) (fig. 3:53) [SN 7378 1432]. Some 30m north of building 734 are the ill-defined remains of a rectangular structure, with stone and boulder banks 0.3m to 0.6m high, measuring 6m NE-SW by 4m NW-SE. There is a possible entrance in the south-east side.

736. (149a) (fig. 3:53) [SN 7378 1432]. Grass-covered banks, 0.2m to 0.3m high, delineate a poorly preserved sub-rectangular structure 2.7m north of site 735. There is no clear indication of the south-east wall if ever one existed. Overall it measures 7m NE-SW by about 2.5m to 3m NW-SE.

On Twyn y Moch (737 to 740) (fig. 3:53)
The sandstone massif of Twyn y Moch attains a height of 288m OD. The humo-ferric podzols (fig. 1:6) support a grass vegetation. There is much surface stone.

737. (251) (figs. 3:53 and 3:59) [centred SN 7462 1469]. Up to fifteen stone piles, most likely the product of stone clearance for agricultural improvement, are scattered across an area some 110m N-S by 90m E-W on the west and south-west slopes of Twyn y Moch at around 260m OD. This area, beginning just below the hill crest is grassy, well-drained and relatively free of surface stone although some outcrop does penetrate the thinnish soil. As well as
likely clearance cairns, there are low grassy mounds coinciding with slight hollows which may be the results of prospecting. Further down-slope, the surface becomes noticeably stonier.

Fig. 3:59. Site 737 on Twyn y Moch.

a) a grass-covered stone heap, 2m N-S by 2m E-W by 0.2m high.

b) a stone pile, 3.7m N-S by 4.5m E-W by 0.3m high, with loose surface stone and a concave centre.

c) a grass-covered stone pile, 2.8m N-S by 3.2m E-W by 0.3m high, with some loose surface stone and a central hollow.

d) a stone heap, 4.5m N-S by 4.5m E-W by 0.4m high, with a grass-covered edge and a central hollow.
e) a partly grass-covered rectangular stone heap, 9.2m N-S by 6m E-W by 0.5m high, with a concave profile.

f) a grass-covered stone pile, 2.8m N-S by 3m E-W by 0.2m high, with some loose surface stone.

g) a sub-rectangular grass-covered stony pile, 1.8m N-S by 3.8m E-W by 0.3m high, with some larger boulders at the edge.

h) a stony accumulation up to 2.2m wide which is probably mostly natural. However, part of the western edge appears deliberately modified by a line of larger boulders.

i) a squarish stone pile, 1.5m N-S by 1.7m E-W by 0.2m high, edged with boulders.

j) a stone heap, 4.6m N-S by 4.3m E-W by 0.4m high, with a grass-covered edge and loose surface stone.

k) a grass-covered stony heap, 3.6m N-S by 3m E-W by 0.3m high, with loose surface stone.

l) a grass-covered stone pile, 2.2m N-S by 2m E-W by 0.3m high, with an edge of larger stones.

m) a band of stone some 15m long by 3.8m wide with a build-up of soil, against the north-east edge. Also against the north-east edge, there is a grass-covered stony mound 2.3m N-S by 3.7m E-W by 0.4m high. It appears to be a natural feature in origin but possibly modified by human agency.

n) a grass-covered stone pile, 3m N-S by 3.6m E-W by 0.3m high, with loose surface stone.

o) a stone heap, 3.4m N-S by 2.6m E-W by 0.2m high, with a grass-covered edge and a central hollow.
p) a stone pile, 2.5m N-S by 2.8m E-W by 0.3m high, with loose surface stone.

738. (261) (fig. 3:53) [SN 7449 1431]. This roughly circular spread of stone measures 7.2m N-S by 7.8m E-W, and is 0.1m to 0.2m high. It has an uneven surface in which loose stone is visible and the rim is edged with a raised lip. It is sited on a grassy east facing slope, just below the crest of a minor ridge, at 220m OD.

739. (260) (figs. 3:53 and 3:60) [SN 7461 1442]. This sub-trapezoidal foundation is located at 245m OD on a grassy terrace in a south facing slope which is littered with surface stone. However, an area, some 30m across, to the west of the structure is noticeably free of surface stone. The structure measures 11m NE-SW by 8.5m NW-SE, with a slightly concave interior 9.6m NE-SW by 6m NW-SE. There is a 1m wide entrance midway along the east wall; the northern terminal of the entrance is in-turned. The flat-topped bank is 0.1m to 0.2m high and is mostly grass-covered. However, in places it can be seen that it is constructed with thin slabs, laid flat, which form a carefully stacked edge.

740. (265) (fig. 3:53) [SN 7479 1448]. A band of stone, 1m to 2m wide by 0.2m to 0.3m high, probably the result of stone clearance for agricultural improvement, runs for 19m north-east to south-west in a hollow in the south facing slope at about 260m OD. Immediately to the north-east is a 10m wide platform.
Fig. 3:60. Site 739 on Twyn y Koch; site 741 south of Vaun y Ddraenen; and sites 743 to 746 alongside the East Llynfell.
appears to be a slight bank around the top edge of the slope at the rear of the platform.

South of Waun y Ddraenen (site 741) (fig. 3:53)

The slopes of Waun y Ddraenen tend to be wet with thick peat deposits, except for the southern slopes on the sandstones which are rather drier. They are covered by cambic stagnohumic gleys (fig. 1:6) supporting a vegetation of grass and reeds.

741. (211) (figs. 3:53 and 3:60) [SN 7548 1468]. This penannular foundation is located at 270m OD on a level, peat-covered shelf in the south slope. It comprises a ring of stones only just protruding through the peat accumulation. Probing indicates a more substantial stone structure beneath the surface. Overall it measures 6m N-S by 7m E-W with internal dimensions of 5m N-S by 5.6m E-W. There is a superficial break in the south-western arc of the ring; probing indicated the presence of stone but at a greater depth than elsewhere.

Stone heaps and short lengths of stone bank are present in outcrop to the north of the structure but appear relatively recent in origin and are probably associated with sheep management. About 30m south-west of site 741 is a pile of loose stone around 4m across and 0.4m high at the end of a band of apparently naturally accumulated stone. This may result from clearance for agricultural improvement.
Along Nant Llynfell (sites 742 to 751) (fig. 3:53)

The valley tends to be steep-sided and deep to the north with fairly broad river banks, becoming shallower to the south, although still steep-sided, with narrower river banks.

742 and 743. (150 and 151) (figs. 3:53 and 3:60) (centred SN 7580 1624). Drystone and boulder-built foundations, including a sub-rectangular structure (742), are located on the flood plain to the west of Nant Lynfell at 390m OD.

742. (150) (SN 7580 1622). This sub-rectangular structure is located on the very edge of the river which has eroded the outer face of its eastern side. It measures 8m NE-SW by, at least, 5.6m NW-SE, with internal dimensions of 6m NE-SW by 4.2m NW-SE. It has slightly rounded corners and the banks survive to between 0.2m and 0.5m high.

743. (151) (SN 7580 1625). Fourteen metres north of foundation 742 lies a 27m-long range of up to six structures built against an accumulation of boulders and massive stone blocks at the foot of the slope. Crudely constructed of boulder and stone banks which vary widely in height from 0.3m to 1m, they range from 4m to 6m across with internal dimensions of 2m to 3m.

744 and 745. (152 and 153) (figs. 3:53 and 3:60) (centred SN 7582 1606). Two drystone and boulder-built structures, including a sub-
oval foundation (744), are located on the flood plain east of the Nant Lynfell at 380m OD.

744. (152) [SN 7581 1607]. This sub-oval foundation, defined by grass-covered stony banks 0.3m to 0.5m high, measures 8.2m NE-SW by 4.8m NW-SE, with internal dimensions of 6.4m NE-SW by 2.8m NW-SE. There is a 0.5m entrance break in the north-west side and the southern-third of the interior is marked off by a slight stony step.

745. (153) [SN 7583 1605]. Forty-four metres south-west of 744, in the southern lee of rock exposure, is an annular bank, 0.3m to 0.5m high, measuring 5.7m N-S by 5m E-W with internal dimensions of 3.8m N-S by 3.2m E-W. There is a 1m wide break in the western arc. Abutting the eastern arc is a structure about 3m N-S by 3m E-W, entered from the south. It is defined partly by boulders and partly by a grass-covered stony bank.

746. (154) (figs. 3:53 and 3:60) [SN 7570 1529]. A rectangular building of drystone and boulder construction is sited on the edge of the west bank of the river at 310m OD. It measures 9m N-S by 5m E-W, with internal dimensions of 7m N-S by 3.2m E-W. The walls survive to between 0.4m and 1.3m high. They are most severely depleted at the north-east corner and along the east side. Up to nine courses of stone are in place, with larger boulders predominating in the lower courses. There is a 1m wide entrance towards the southern end of the east wall. A boulder bank 0.5m wide
and between 0.4m and 0.7m high extends from the southern side of the entrance for some 15m north-east along the edge of the river bank.

747 to 751. (172 to 175) (figs. 3:53, 3:61 and 3:62) [centred SN 7568 1468]. Structures including an enclosure (747), a compartmented rectangular building (748) and stone clearance strips defining plots (750) are located on two terraces above the west bank of the Nant Llynfell. They lie between 260m and 270m OD just beyond the edge of the present-day enclosure.

747. (172) (figs. 3:61 and 3:62) [SN 7568 1472]. This sub-annular enclosure, 24.6m NW-SE by 18m NE-SW, is delineated by a partly grass-covered stony bank, 1m to 2m wide and 0.2m to 0.3m high. It is sited on the upper of the two terraces. The area enclosed is around 22.5m NW-SE by 17m NE-SW. There is a 1.6m wide break in the south-western arc. There are undulations in the grassy surface within and outside the enclosure which are most likely natural accumulations of stone or rock exposure under a thin soil. However, it just possible that a slight grass-covered rise combining with an outward bulge in the south-eastern enclosure bank might indicate an internal feature around 5m across.
Fig. 3:51. Sites 747 to 751 alongside the Nant Llynfell, and site 752 south-west of Nant Llynfell.
Fig. 3:62. Sites 747 and 748 alongside the Rant Llynfell.
748. (173) (figs. 3:61 and 3:62) [SN 7570 1469]. This compartmented rectangular building is constructed on a natural reed-infested platform at the northern edge of the lower terrace, some 22m south of enclosure 747. It is of drystone and boulder-build with banks surviving to between 0.3m and 0.6m high. Divided into two compartments, it measures 5m N-S by around 10m E-W. The outer face of the eastern end-wall has collapsed into an adjacent small modern quarry. The eastern compartment measures 2.7m N-S by 4m E-W, the western 3m N-S by 2.8m E-W. Both are entered from the south through breaks roughly 0.5m wide either side of the partition wall.

749. (174) (fig. 3:61) [SN 7569 1468]. A crudely constructed boulder bank, up to 0.8m high, has been excavated out of the natural boulder platform to form a structure 3.3m N-S by 4m E-W, situated some 7m south-west of building 748.

750. (175) (fig. 3:61) [centred SN 7568 1465]. Three stony strips about 17m to 18m apart on the lower terrace presumably result from stone clearance for agricultural improvement. They seem to define two plots, the northern about 300m², the southern perhaps up to 500m².

a) a curved stony band, 0.2m to 0.4m high and 0.75m to 1.5m wide, merges to the north with a natural boulder accumulation.

b) a sinuous stony strip, 0.2m to 0.4m high, 1m to 1.5m wide and 21m long.

c) a stony strip, 0.2m high by 1.5m wide and 24m long.
Several roughly penannular accumulations of stone on the slope to the west appear to be natural formations.

751. (175a) (fig. 3:61). [SN 7568 1463]. Just north of the eastern end of clearance strip 750c is a rectangular structure, 2.7m N-S by 4.1m E-W, defined by drystone banks 0.2m high.

South-east of Nant Llynfell (site 752) (fig. 3:53)
The slopes south-east of the Nant Llynfell are covered with cambic stagnohumic gley soils (fig. 1:6) which are waterlogged.

752. (176) (figs. 3:53 and 3:62) [centred SN 7583 1455]. A stone pile and two bands of stone are located on an "island" of relatively well-drained soil on a gentle, very boggy slope with a south-west aspect at 225m OD. The grass-covered stone heap, 4.3m N-S by 4m E-W by 0.4m high, has loose stone visible at the centre. Twenty-five metres south, across an apparently natural spread of stone, is a band of stones and boulders, 1.5m wide and up to 0.4m high, curving for about 25m around the north side of a slight knoll. After a break of 3.5m to the south-east, the stony strip can be traced for 19m running down-slope to the south to the edge of a stream. The area enclosed by these strips is around 350m².
3.10 AREA I: WEST OF THE AFON TWRC (SITES 800 to 858)

3.10.1 Outline Topography

This section of the survey area is bounded to the north-east by Nant y Llyn, and to the east by the Afon Twrch. It embraces the western slopes of the valley of the Afon Twrch and the ground above these slopes including Cefn Carn Fadog, Pen yr Helyg and Derlwyn Isaf (figs. 1:3, 3:1, 3:2 and 3:63).

The Afon Twrch rises high in the Brecon Beacons above the Carmarthenshire Fans. It enters the survey area at the point where it is joined from the north-west by its tributary, the Nant y Llyn. Within the survey area it flows south-west through a steep-sided valley, descending from about 320m OD to 200m OD. It is fed by several tributaries, notably in the vicinity of the Ffrydiau Twrch (fig. 3:63).

The precipitous and rocky Millstone Grit slopes of the valley rise sharply from the narrow river bank up to around 500m OD (Plate 29). A narrow band of Carboniferous Limestone outcrops along a fault down the western valley slope. Below the abandoned farm house of Sarn Fan, the river flows down a gorge cut through rocks of the Coal Measures (figs. 1:4 and 3:63).

The rocky landscape in the area up-valley of Sarn Fan is dominated by humo-ferric podzols producing poor grass with areas of bracken.
The soils of the areas around Sarn Fan and Cyllie farms are cambic stagnohumic gleys (figs. 3:63 and 1:6).

Fig. 3:63. Sites 300 to 858 in Area I west of the Afon Twrch (fig. 3:2).
3.10.2 Description of the Archaeological Remains

North of Cyllie Farm (sites 800 to 805) (fig. 3:63)

800 and 801. (218 and 219) (figs. 3:63 and 3:64) [centred SN 7625 1404]. A sub-annular enclosure (800), and another structure (801) which is probably of recent origin, lie on a grassy terrace with a south-westerly aspect at 225m OD on top of the west slope of the valley of the Afon Twrch.

800. (218). A sub-annular enclosure, 26.4m N-S by 25.2m E-W, is delineated by a grassy, flat-topped stony bank with an ill-defined edge, 1m to 1.5m wide by 0.2m to 0.3m high. There is a 3.5m wide break in the south-west arc of the bank. The inner edge of the bank has been disturbed to the east of the entrance. The enclosed area, which slopes gently north-east to south-west, measures 22.5m N-S by 22m E-W.

801. (219). A stone structure, 4.2m N-S by 4.2m E-W, is sited 17m north of 800 at just under 230m OD. Small boulders are loosely piled to construct the 0.5m high bank which defines the southern half of the structure. These apparently derive from an excavation into a natural boulder accumulation which forms the northern half of the structure. A band of stone on the slope to the east is probably part of the natural accumulation, emphasised by erosion caused by a sheep-track. The feature has the appearance of a relatively recent construction of very different character to that of site 800, with which it is unlikely to be connected.
Fig. 3.54. Sites 800 and 801 north of Cyllie Farm.
802. (220) [SN 7625 1410] (fig. 3:63). Around 40m north of site 801 at 230m OD is a grass-covered stony heap, 4.4m E-W by 4.1m N-S by 0.3m high. Other stone piles may lie amongst bands of naturally accumulated stone on the slope to the east, but these are too ill-defined to plan or describe. A 17m long boulder strip, 0.1m to 0.2m high, lies 12m north of site 802, aligned north-east to south-west. It disappears to the north-east into a marshy area.

803. (263) [SN 7635 1409] (figs. 3:63 and 3:65). A sub-annular foundation, 12m N-S by 11m E-W, lies sheltered in a hollow at 240m OD at the foot of a southerly slope. The partly grass-covered stony bank is up to 1m wide and 0.1m to 0.3m high. Arcs of boulder-facing, one or two stones high, are visible. The interior, roughly 8m across, contains boulders displaced from a shallow trench containing loose stone which cuts across the southern section of the enclosure. Spoil from this disturbance, which perhaps is a prospecting trench, obscures the south-western arc of the bank.

804. (177) [SN 7658 1419] (figs. 3:63 and 3:65). A sub-rectangular foundation, 7.4m N-S by 4.2m E-W at the foot of a southerly slope in a deep sheltered hollow at 240m OD. It lies to the south of a 19th century AD aqueduct (Gerwyn Thomas 1966). The 0.2m high, partially grass-covered banks, which are edged in places by boulders, define an interior 4.8m N-S by 2.4m E-W. Four boulders mark a 0.6m to 0.8m wide entrance in the east wall.
Fig. 3.65. Sites 803 to 805 north of Cyllie Farm.
A building platform is located at 250m OD at the top of a steep slope with an easterly aspect above a cliff which rises from the Afon Twrch. The platform is aligned north-west to south-east at right-angles to the slope. It measures 17m NW-SE from the base of the 1.6m high scarp face to the top of the 1.4m high lower edge. It is 5m NE-SW. Some stone breaks through the grassy surface along the north-east edge and at the south-west corner of the platform. A hollow-way approaches the platform from the north-west.

On the Southern Slopes of Derllyn Isaf (sites 806 to 808) (fig. 3:63)
There is evidence for what appears to be stone clearance on a slope with a southerly aspect on which there is considerable surface stone and some rock exposure.

At around 270m OD, on a gentle south facing grassy slope with much surface stone, is a cultivation plot of around 0.18 ha which is defined by cleared stone. The D-shaped plot, c.35m N-S by 60m E-W, is bisected by a 19th century AD tramway. The discontinuous stone and boulder strips which demarcate the plot are between 0.1m and 0.4m high and 1.5m to 2m wide. The longest continuous strip, some 40m in length, is that bounding the south and south-western edge. About 3m south-west of the 30m long band forming the south-east boundary is a grass-covered stone pile, 3.7m by 3.3m by 0.3m to 0.4m high.
807. (221) [SN 7660 1470] (fig. 3:63). A sub-oval stone heap lies on the north-west slope of a locally prominent summit at 300m. It measures 7m N-S by 8.2m E-W by 0.4m high. The flat top has been disturbed by the construction of a sheep shelter. South of this local summit is a slope on which there are bands and arcs of stone. These appear to be of natural origin rather than the result of human activity.
At least six small stone piles are spread across an area around 150m by 30m on a south facing grassy terrace at around 310m OD. Each pile is a discrete grass-covered stony mound which appears to result from human activity. Also present are stony accumulations which appear more likely to be natural in origin.

The six piles measure:

- 2.8m by 3m by 0.3m high
- 2.7m by 3m by 0.3m high
- 3.2m by 3.6m by 0.3m high (centred on SN 7641 1488)
- 3.3m by 2.7m by 0.3m high
- 4.8m by 4.8m by 0.3m high
- 3.5m by 3m by 0.2m high - outlier at SN 7632 1483

On the Farm of Sarn Fan (809 to 826) (figs. 3:63 and 3:67)

Sarn Fan farm and the farm house, which is now derelict (Plate 30), appear on a 1770s estate map and can be traced through estate records to the early eighteenth century when it is described as Sarn Faen (K. Bowen Evans pers. comm.). The farm house itself is set within a small enclosure with gardens and paddocks delineated by banks to the north-east and east. There are the remains of fields to the north which are now abandoned and which merge with the adjacent commonland, often imperceptibly. (fig. 3:67).
Fig. 3:67. Sites 809 to 826 on Sarn Fan Farm (contours at 10m intervals).
south-west of Sarn Fan farm house (809 to 810) (fig. 3:67)

809 and 810. (179 and 180) (figs. 3:67 and 3:68) [centred SN 7692 1484]. Two structures, of drystone and boulder-build, are located on a terrace in a slope with a south-westerly aspect at 250m OD.

809. (179) (fig. 3:68). This rectangular foundation measures 7.8m WNW-SSE by 4.8m NNE-SSW. The interior, 5.8m by 3m, contains tumbled stone. There is a 0.7m wide entrance in the south-west wall. The south-east wall retains its coursed facing up to 0.5m high, while two orthostatic slabs, one 1m high, are the surviving elements of the inner facing of the north-east wall. The north-west corner of this wall is built against two large naturally positioned slabs.

810. (180) (fig. 3:67). A simple boulder structure, roughly oval in shape, lies 34m south-west of site 809. The west and north-west sides are built against rock exposure. It measures 4.8m N-S by 3.5m E-W and its walls survive up to 0.5m high.

- on the west bank of the Afon Twrch north-east of Sarn Fan farm house (811 to 812) (fig. 3:67)

811. (183) [SN 7715 1507] (figs. 3:67 and 3:68). A compartmented rectangular drystone and boulder-built structure lies on a terrace at 240m OD in the very steep west bank of the Afon Twrch. It is a particularly sheltered location. The building measures 12m NW-SE by 5.8m NE-SW and is divided into two compartments. The north-western compartment, internally 6.8m by 3.4m, comprises boulder walls up
to 1m high with a 0.8m wide entrance at the south-eastern corner. The external face of the rounded north-western end-wall is recessed into the slope and is only 0.2m high in contrast to the 0.9m high interior face. The south-eastern compartment measures 2m by 4m with walls constructed of stones which stand between 0.5m and 1m high. It is partially sub-divided and is entered across a sill stone through a 1m wide entrance in the end-wall.

The building platform is at right-angles to the slope and appears to be partially artificial, taking advantage of the natural terrace. An 11m long stone and boulder bank, up to 0.6m high, revets the slope immediately west of the structure. This continues for a further 7m to the south-west, terminating at a track approaching from the south which is scarped into the slope. The face of the terrace north-west of the building is also revetted by a 12m long boulder wall up to 0.9m high.

A boulder bank up to 1m wide and 0.5m high runs for 10m along the outer edge of the terrace, away from the south-west corner of the building. It then turns south-east for a further 22m down a very steep slope. A similar bank also runs along the outer edge of the terrace north of the building for 11m, before swinging east. It continues down the southern side of a steep gully for some 30m ending close to the edge of the Afon Twrch. Just before the end of the bank, there is a 15m long offshoot to the south, parallel to the river. The purpose of these banks (fig. 3:67) is unclear since the ground they enclose is rocky and precipitous in the extreme.
Fig. 3.68. Sites 809 and 811 on Sarn Fan Farm.
812. (184 to 186) (fig. 3:67) [centred SN 7714 1502]. Stony accumulations on the steep slope south of site 811 appear to result wholly or partially from human activity.

   a) (184) [SN 7714 1504]. A boulder pile, 6m across by 1m high, is located below the crest of the slope at 240m OD. A 35m band of boulders, 2m to 3m wide and 0.5m high, snakes away from it down a very steep slope.

   b) (185) [SN 7712 1502] A sub-oval boulder and stone pile is located just below the crest of a very steep slope at 250m OD. It measures 18m N-S, and is up to 6m wide E-W by 1.5m high. The down-slope edge of the accumulation has been constructed with great care, a line of boulders end-to-end revetting the heap.

   c) (186) [SN 7715 1500] An irregularly shaped boulder and stone pile, 15m N-S by 20m E-W and up to 1.5m high, is located on a steep slope at just above 230m OD.

812b appears to be a stone clearance heap, with revetting on the down-slope side to prevent slippage. The boulder pile, 812a also appears to result from human activity, although the origin of both the stony band extending down-slope and of feature 812c is less certain. They may be natural in origin with cleared stone possibly added. The slope on which they lie is particularly steep and appears an unlikely location for improvement. Some of the stone
may derive from improvement of level ground immediately beyond the top of the slope, which has obviously been cleared and cultivated.

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**- at the north-eastern edge of Sarn Fan farm on the west bank of the Afon Twrch (site 813) (fig. 3:67)**

813. (187) (fig. 3:63) [SN 7724 1540]. On a terrace at 250m OD set back from the river bank stands a rectangular structure of drystone-build, 3m N-S by 4m E-W. Although the south-east corner is dilapidated, the walls generally stand to 1m high.

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**- at the northern edge of the enclosed area of Sarn Fan Farm (sites 814 to 826) (fig. 3:67)**

814 and 815. (107 and 108) (figs. 3:67 and 3:69) [centred SN 7678 1564]. Two structures of drystone-build lie in the lee of rocky outcrop on a terrace at 365m OD on the crest of an east facing slope.

814 (107). The rectangular structure measures 7m SW-NE by 4.6m NW-SE. The coursed stone of the north-east wall stands up to 1.2m high. Elsewhere little more than the footings survive to 0.2m high. These are of distinctive construction, parallel facings of boulders or slabs, end-to-end, retaining a rubble fill. The position of any entrance could not be identified. The interior, 5m NE-SW by 2.4m NW-SE, contains quantities of tumble, particularly at the north-eastern end.
Fig. 3.69. Sites 814, 815, 821 and 823 to 826 on Sarn Fan Farm.
815 (108). This simple structure is crudely built against the low cliff face of rocky outcrop 1.2m north-west of site 814. The two walls, around 1m high, arc towards each other, their terminals separated by an east facing gap 0.8m wide. It measures 5.8m N-S by 4.4m E-W, internally 3.2m N-S by 3.6m E-W.

816 to 820. (97 to 100 and 188) (figs. 3:67 and 3:70) (centred SN 7694 15681). These structures, which include a compartmented rectangular building (816), are located close to the face of a low east facing cliff on a terrace at between 340m and 360m OD.

816. (97) (SN 7694 15651) (fig. 3:70) (Plate 31). This compartmented rectangular building, with maximum dimensions of 18m NW-SE by 5m NE-SW, comprises two units of contrasting form. The northern compartment is well-preserved with up to ten courses of drystone-build standing to a height of 1.5m (Plate 31). There is a 1.4m wide entrance at the south-eastern corner with a sill of two flat stones. Two flat slabs within the interior suggest a paved floor. Internally the compartment measures 7.7m NW-SE by 2.8m NE-SW. There are slight suggestions that the northern one-third of the interior may have been sub-divided; a bank partially extends across the interior although the visible stones are so loose that they could simply be tumble from the main wall.

The southern compartment, which butts against the northern unit, measures 8.4m NW-SE by 5.2m NE-SW. The interior is sub-divided into two sections by a wall through which there is a gap. The
northern section measures internally 4.8 m NW-SE by 3 m NE-SW, the southern 2 m NW-SE by 2.7 m NE-SW. The walls at around 0.3 m high are much lower than those of the northern unit and are built with a very different drystone technique. They comprise parallel facings of boulders and slabs which retain a rubble core. The south-eastern down-slope end is constructed of larger boulders forming a platform up to 1.2 m high which roughly levels the interior of the structure.

817. (98) (fig. 3:70). This structure is immediately south-west of the southern compartment of site 816. A drystone rectangular foundation, 8.8 m NW-SE by 3.8 m NE-SW, is built of parallel facing slabs retaining a stony core. Internally it measures 7 m NW-SE by 2.2 m NE-SW. A row of boulders running from the north-western corner of the structure connects with a much more simply constructed drystone shelter, up to 1.1 m high, built against the cliff face. This measures 4.8 m N-S by 4.8 m E-W and is entered by a gap in the south-eastern corner.

818. (99) (fig. 3:70) [SW 7695 1562]. A large rectangular drystone enclosure lies 22 m south of 816 at 340 m OD. Overall it measures 22 m NW-SE by 12.5 m NE-SW and internally 18.8 m NW-SE by 10.2 m NE-SW. The walls comprise slab and boulder facing between which is a packing of stone. These survive from 0.2 m to 0.3 m high along the southern side and up to 1 m high at points along the western side. There is a 0.8 m wide entrance in the northern wall.
Fig. 3:70. Sites 816 to 818 on Sarn Fan Farm.
819. (188) (fig. 3:67) [SN 7693 1569]. Around 10m north of site 816 is a possible structure, 2.6m N-S by 2.4m E-W by 1m deep, excavated out of fractured rock exposure.

820. (100) (fig. 3:67) [SN 7694 1574]. About 50m north of site 816 is a semi-circular drystone wall, up to 0.9m high, forming a structure 4.5m N-S by 3m E-W, built against the cliff-face.

821 to 826. (101 to 106) (figs. 3:67 and 3:69) [centred SN 7699 1568]. A group of structures, including a compartmented rectangular building (823) and another large rectangular building (826), lie on a terrace between 320m and 340m OD above a precipitous rocky slope.

821. (102) (fig. 3:69) [SN 7696 1570]. This sub-oval structure, 5m N-S by 3.5m E-W, is excavated into a boulder spread in the lee of a rock outcrop. The drystone walls are between 0.4m and 0.7m high.

822. (101) (fig. 3:67) [SN 7698 1574]. An oval structure, with tumbled drystone walls 0.3m to 0.4m high, measures 3.8m NW-SE by 6m NE-SW. There is a north-west facing entrance.

823. (103) (figs. 3:69) [SN 7700 1572]. A compartmented rectangular structure, 10.2m N-S by 4.8m E-W, lies at the edge of the terrace on top of a low rocky cliff face. The tumbled drystone walls are between 0.3m and 0.6m high. It is sub-divided into two compartments. The northern measures 5.2m N-S by 2.5m E-W and is
entered by a 1m wide break in the west side. The southern compartment, which contains much tumble, is around 2.6m N-S by 2m E-W.

824. (104) (fig. 3:69) A drystone sub-annular structure, 4.6m N-S by 4m E-W, lies 4m west of site 823 against rock outcrop and boulders. The collapsed walls, which enclose an area 3m N-S by 2.6m E-W, are between 0.2m and 0.5m high.

825. (105) (fig. 3:69) [SN 7702 1563]. This rectangular structure, 5.2m N-S by 8m E-W, is built in the lee of rock exposure. The western end is on a platform scarped into the slight slope. The boulder and coursed drystone walls survive to between 0.5m and 0.8m high. There is a 1.3m wide entrance in the south wall. A step runs across the interior which measures 2.5m N-S by 6m E-W.

826. (106) (fig. 3:69) [SN 7702 1562]. Around 15m south of site 825 is a rectangular building in the lee of rock exposure. It measures 12.4m NW-SE by 6m NE-SW with internal dimensions of 9m NW-SE by 4m NE-SW. The drystone and boulder walls range from 0.3m to 1.2m high, with up to eight courses in place. The southeast wall is constructed on a platform of apparently naturally accumulated boulders. A large naturally positioned boulder is incorporated in the north wall. There is a 1m wide entrance in the south wall.
Between the northern boundary of Sarn Fan Farm and Ffrydiau Twrch
(sites 827 to 833) (fig. 3:63) (Plate 29)

827 to 831. (109 to 113) (figs. 3:63 and 3:71) [centred SW 7703 1605]. A group of drystone and boulder-built structures, including one compartmented sub-rectangular building (827), lies at 330m OD on a small boulder-strewn terrace with an easterly aspect half-way up the steep western flank of the valley of the Afon Twrch. There does not now appear to be a supply of running water in the immediate vicinity.

827. (109). This sub-rectangular structure, 12m NW-SE by 5m NE-SW, is divided into three compartments. Internally, the south-eastern and central compartments measure respectively, 2m NW-SE by 3m NE-SW, and 3m NW-SE by 3m NE-SW. The collapsed stone walling is 0.2m to 0.4m high. There is a 0.9m wide entrance at the north-west corner of the central compartment. The north-western compartment is defined by a 0.6m to 1.2m high curved wall of coursed stonework enclosing an area 3.2m NW-SE by 3.1m NE-SW. It is built against the south-eastern face of a shallow gully, about 0.8m below the level of the central compartment.

828. (110). One metre north-west of building 827 is a semi-circular boulder setting, 5m NW-SE by 3m NE-SW, abutting a steep rocky slope.

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Fig. 3:71. Sites 827 to 831 between the northern boundary of Sarn Fan Farm and Pfydiasu Twrch.
829. (111). An annular structure, up to 0.3m high and 2.8m across with an interior 1.8m in diameter, is located 7.5m north-east of building 827.

830. (112). This sub-rectangular structure, defined by banks up to 0.3m high and entered by a break at the north end of the west side, measures 7m N-S by 4m E-W. It lies 7m south-west of building 827.

831. (113) A sub-circular stony bank, 0.3m to 0.4m high, defines a structure 7m N-S by 6.5m E-W. It is located 1.5m west of foundation 830. A 0.5m high stony bank extends for 6m to 7m from its western arc towards the foot of a steep slope.

832 and 833. (238 and 239) (figs. 3:63 and 3:72) [centred SN 7688 1611]. Two sub-annular foundations, 3.5m apart, are sited on an east facing slope at 390m OD immediately north-east of an area of surface stone. About 30m to the south-east, a setting of boulders circumscribes an open area. This could be another structure but it merges with an obviously natural accumulation and is best regarded as natural in origin.

832. (238). A sub-annular boulder foundation, 0.3m to 0.6m high, measures 4.5m N-S by 5.8m E-W with internal dimensions of 2.5m N-S by 4m E-W. There is no entrance visible.
833. (239). This sub-annular boulder foundation, 0.1m to 0.3m high, measuring 4.25m N-S by 3.5m E-W, defines an interior 2.75m N-S by 1.9m E-W. Again there is no entrance apparent.

Ffridiau Twrch (sites 834 to 844) (fig. 3:63)
834 to 836. (120 to 121) (figs. 3:63 and 3:72) [centred SN 7713 1622]. This group of three drystone and boulder-built structures, including a compartmented rectangular building (834), lies on the banks of small streams flowing from springs (the Ffrydiau Twrch) on the west side of the valley at around 300m OD.

834. (121) [SN 7716 1622]. A rectangular building divided into two compartments lies in a slight hollow on a small island between two streams at 290m OD. Overall it measures 10.7m NW-SW by 5.3m NE-SW. The largely collapsed stone and boulder walls, in which a little coursed stonework can be seen, survive to between 0.3m and 0.7m high. The north-west and south-west walls of the western compartment are cut into the slope. This compartment measures 5.2m NW-SE by 3.7m NE-SW internally, and is entered by a 0.5m wide break in the north-east wall. The eastern compartment is less substantial, has a slightly rounded end-wall, and its floor is at a lower level than that of the other compartment. The tumble-filled interior measures 3.4m NW-SE by 3m NE-SW, and it is entered via a 0.5m wide boulder-edged break from the north-east.
Fig. 3:72. Sites 832 and 833 between the northern boundary of Sarn Fan Fara and Pfydibau Twrch; and sites 834 to 836 alongside Pfydibau Twrch.
835. (120) [SN 7713 1624]. The rectangular structure is on a platform on the north bank of a stream at 305m OD, about 30m north-west of building 834. It is 8.8m NW-SE by 4.4m NE-SW, with collapsed walls of coursed boulders 0.3m to 0.7m high. Internally it measures 6m NW-SE by 2m NE-SW with a 0.5m wide entrance in the north-east wall.

836. (122) [SN 7716 1626]. This circular structure is on the south bank of a stream at 290m OD, about 15m distant from building 834. The bank, up to 0.6m high, includes orthostats between 0.2m and 1m high. It measures 2.5m NW-SE by 3m NE-SW, enclosing an area around 1.6m across. There is a possible break in the north-north-east arc.

837 to 840. (95 and 96) (figs. 3:63, 3:73 and 3:74) [centred SN 7712 1637]. Four structures of drystone and boulder build, including a compartmented rectangular structure (837), are located at 320m OD on a south-east facing slope at the top edge of a dry gully, some 100m north of Fryddiau Twrch above a tributary of the Afon Twrch.

837. (95) (fig. 3:74) [SN 7712 1635]. This compartmented rectangular building, 8.7m NW-SE by 3.9m NE-SW, is built at right-angles to the slope. It comprises three compartments. Up to five courses of stones and boulders survive in the walls of the two main compartments which are between 0.8m and 1m high. The north-western compartment, internally 4.5m NW-SE by 2m NE-SW, is entered
through a 0.5m break in the north-east wall. Two metres beyond the entrance is a 5m curved length of wall comprising five courses standing to 1m high. The south-eastern compartment measures 2m NW-SE by 1.6m NE-SW internally, and has an entrance in the north-eastern wall. The end-wall is built on a 1m high stone and boulder platform.

The third compartment abuts the south-west wall. Of much less substantial construction, it comprises a grass-covered stone foundation 0.2m to 0.6m high in which larger boulders are apparent. It is square, measuring 4m across, with internal dimensions of 2.6m NW-SE by 3.5m NE-SW.

Fig. 3:73. Measured sketch map of location of sites 837 to 844 north of Pfyrdiau Twrch.
Fig. 3:74. Sites 837 to 844 north of Ffrydiau Twrch.
838. (fig. 3:74). A 6m long boulder bank connects this rectangular structure, which is divided into two compartments, with the south-west corner of building 837. Overall it measures 7.6m NW-SE by 5m NE-SW. The walls, in which coursed stonework and boulder facing survives, are between 0.3m and 0.9m high. The compartments are approached through 0.5m wide breaks in the north-east wall. The wall which connects this structure with building 837 radiates outwards from between the two entrances, thereby emphasising the separation of the compartments. The northern compartment measures 2.8m NW-SE by 2.9m NE-SW internally, the southern 2.2m NW-SE by 3.1m NE-SW.

839. (fig. 3:74). One-and-a-half metres to the south-east of 838 is a foundation, 3.2m NW-SE by 4m NE-SW, internally 1.8m NW-SE by 2.6m NE-SW, defined by a 0.2m to 0.3m high boulder bank.

840. (fig. 3:73) [SI 7714 1638]. An arc of boulders edges a platform scarped into the slope on which there is a 0.3m to 0.4m high boulder. Overall this feature measures 4.5m N-S by 5m E-W. It lies 40m north-east of 837.

841 to 844. (91 to 94) (figs. 3:63, 3:73 and 3:74) (Plate 32) [centred SN 7720 1640]. Four drystone and boulder structures, including two compartmented rectangular buildings (841 and 842), are located on rising ground at around 320m OD to the east of a tributary of the Afon Twrch, and some 200m north-east of Ffrydiau Twrch.
841. (94) (fig. 3:74) [SN 7717 1639]. This rectangular building, comprising three compartments with a detached unit 1m to the south which seems to be part of the range, is built at right-angles to the slope on the edge of the eastern bank of the tributary. Overall the range measures 19m N-S by 4m E-W, with the three conjoined compartments measuring 12.8m N-S. Each conjoined compartment is entered through a west facing break around 1m wide. The walling, in which some coursed stonework remains, is between 0.5m and 1m high. Internally the northern compartment measures 2.8m N-S by 2.4m E-W; the central compartment, 4.4m N-S by 2m E-W; and the southern-most, 3m N-S by 2m E-W. There is a 0.2m high step in the floor of the central compartment. Against the southern wall of the central compartment are two 0.2m high flat slabs, possibly an internal fitting.

The detached unit, 1m to the south, is on the same alignment as the conjoined compartments but is much less well constructed. It is mostly built of boulders placed around the edge of a slight platform except for a bowed 0.8m high southern wall comprised of up to five courses of stonework. It measures 4.8m N-S by 4m E-W.

842. (91) (fig. 3:74) (Plate 32) [SN 7718 1641]. This rectangular structure, sub-divided into three compartments, is built at right angles to the slope, in part on a scarped platform. It is some 15m north-east of building 841. Overall it measures 15.2m N-S by 4.4m E-W, with walling which partially preserves coursed stone and boulder facing 0.5m to 0.9m high. Each compartment is entered from
the west via 1m to 1.5m wide breaks. The northern compartment is sub-divided by a cross-wall, the northern section measuring 2.4m N-S by 1.8m E-W, the southern 1m N-S by 2.7m E-W. The central compartment is 5m N-S by 2.6m E-W internally, the southern 3m N-S by 2.4m E-W. A 1.5m length of wall projects outwards from the western face at the junction between the northern and central compartments.

843. (92) (fig. 3:74) [SN 7720 1639]. Twelve metres south-east of building 842 lies a stone structure in the lee of a large naturally positioned boulder. It measures roughly 8m NE-SW by 4.6m NW-SE. The stony banks, 0.4m to 0.5m high, define three sub-circular open areas, the northernmost of which, measuring 2.5m NW-SE by 2m NE-SW, is apparently open to the north-east. The central area is 2.2m NW-SE by 2.6m NE-SW, the southern 1.8m NW-SE by 1.6m NE-SW. Perhaps a 0.2m high grassy bank to the west defines a fourth enclosed area about 1.6m across.

844. (93) (fig. 3:74) [SN 7724 1642]. This structure is 50m east of building 842. It comprises three conjoined units measuring overall 14.5m NE-SW by 5m NW-SE. The northern unit is oval, 7m NE-SW by 3.8m NW-SE, with internal dimensions of 4.2m NE-SW by 1.8m NW-SE. There is a 1m break in the north-west wall. The boulder and stone banks are 0.4m to 0.8m high. The southern unit is circular and connected with the northern by a 3m bank. It measures 4.2m N-S by 4.4m E-W with internal dimensions of 3.8m N-S by 3.4m E-W. There is a narrow break in the north-east arc flanked by a 0.6m
orthostat. Elsewhere the bank, 0.4m to 1.1m high, is made of stonework of which six courses survive along the southern arc. The central unit is constructed of a 0.2m to 0.3m high boulder bank defining an area 5m NE-SW by 3.6m NW-SE between, but partly offset to the west of the northern and southern units.

_Limestone Belt North of Ffrydiau Twrch (sites 845 to 853) (fig. 3:63)_

On the west side of the valley to the north of Ffrydiau Twrch is a belt of limestone 1.3km long and between 50m and 150m wide. The entire area is scarred by hundreds of small prospecting pits. Amongst the prospecting pits are three small stone-built structures that appear to be associated with the workings (845 to 847), and one complex containing several structures including a compartmented rectangular building (848 to 850). This complex too, has certainly been connected with the limestone quarrying since it contains two simple limekilns – the only ones identified in association with this outcrop. However, it appears that the limekilns are not the primary phase of activity at the site. This is probably represented by the compartmented rectangular building (848), similar to those described elsewhere in the valley, into which one of the limekilns has been inserted.

Mudstone as well as limestone appears to have been extracted from these workings. Samples taken from the prospecting pits have been identified as mudstone (Sharpe pers. comm.) The date of the workings is unknown. Mudstone extraction from the valley of the
Twrch is documented in the nineteenth century AD. How much earlier than this, however, both the mudstone and limestone working commenced is unknown. Although, therefore, some of these structures (ie. nos. 845, 846, 847 and 849) along this limestone belt probably fall outside the chronological scope of the dissertation, each is described to provide a full overview.

845. (127) (fig. 3:63) [SN 7704 1631]. This square drystone structure is built against a large boulder, which forms its western side, on a slight terrace at 340m OD alongside prospecting pits. It measures 3.4m N-S by 3.7m E-W. Entry is from the north. The eastern wall is massively constructed of very carefully laid dry-stone, 1.4m high and up to 1m thick. There is what appears to be a fireplace recessed in the south wall.

846. (164) (fig. 3:63) [SN 7708 1653]. The rectangular drystone structure is built in a quarry pit at around 350m OD. It measures 3.6m N-S by 4.3m E-W. Up to nine courses of stone survive to 1.3m in height. The north wall is built into the side of the pit while the east (downslope) wall is substantially buttressed by quarry spoil. There is an entrance gap at the west end of the south wall.

847. (168) (fig. 3:63) [SN 7714 1696]. This rectangular structure is sunk almost entirely into the ground adjacent to prospecting pits at 410m OD. It comprises a stone-lined chamber, 1.3m deep approached by a sunken path descending to a gap in the east wall. The chamber measures 2.5m N-S by 3.5m E-W.
848 to 850. (165 to 167) (figs. 3:63 and 3:75) [centred SN 7714 1689]. This group of structures is sited on a terrace at 400m OD on which there has been some small-scale quarrying.

848. (165). This compartmented rectangular building of drystone and boulder-build is constructed at right-angles to the slope on the fairly level floor of the terrace. It seems to have been modified subsequent to initial construction, in particular by the insertion of a limekiln at the north-western end of the building.

The original building measured around 13m NW-SE by 5.4m NE-SW, and was probably divided into two compartments. There is a 0.8m wide entrance in the south-west wall of the western compartment which seems to have measured around 7m NW-SE by 3.5m NE-SV internally. The tumble-filled eastern compartment measures 2.4m NW-SE by 3.4m NE-SV. The tightly packed stone banks are between 0.4m and 0.6m high.

Debris from the collapse of the simple limekiln built over the western end-wall extends into the interior. Burnt stone, fuel, lime and half a fire-brick are present. The western compartment was modified, probably when the limekiln was built, by the insertion of a cross-wall. This is readily distinguishable from the original construction by its rather precarious build, and the manner in which it butts loosely against the original walls of the compartment. Also probably associated with the modification is a
1m wide entrance cut through the upper stones of the north-east wall of the building which gives access to the later sub-division.

A rectangular enclosure adjoins the building to the north. It measures 13.6m NE-SW by 8.6m NW-SE, 12.8m NE-SW by 6m NW-SE internally. The southern section of the west wall is built of two parallel stone and boulder faces retaining a rubble in-fill. Elsewhere the 0.4m to 0.9m high enclosure wall is largely boulder built.

It is suggested that this enclosure is likely to have been broadly contemporary with the original rectangular building on account of the symmetry of its arrangement with the western compartment of the building. The enclosure, too, was modified by the construction of a loosely built stone wall in an arc between the building and the east wall of the enclosure. Both ends of this insertion butt only very loosely against the other structures.

A limekiln was constructed against the north-eastern wall of the enclosure. It is better preserved than the other, with a drystone bowl and a draw hole facing east.
Fig. 3:75. Sites 848 to 850 within the limestone belt north of Ffrydiau Twrch.
849. (166). This rectangular structure, 5m NW-SE by 3m NE-SW, lies 3m south-west of building 848. The western end of the structure is built into the slope. The walls are made of carefully split sandstone, up to ten courses of which survive to between 0.6m and 1.4m high. The gaps between the stone contain a gritty powdery fill of small stone, burnt wood and coal. There is a 0.6m wide entrance in the south wall. The interior measures 3.8m NW-SE by 1.8m NE-SW and contains a fire-reddened fireplace recessed into the west wall. The particular structural characteristics of the building contrast markedly with those of the dilapidated compartmented rectangular building 848, as does its better preservation. It is likely to be later than the compartmented structure, and it probably belongs to the phase during which the limekilns were built and used. The presence of a fireplace suggests a comparison with site 845. The structure is isolated from the rest of the terrace by a 17m long earth and stone bank.

850. (167). Some 25m south of building 848, is a grass-covered rectangular boulder foundation, 0.2m to 0.4m high, with a narrow entrance in the south wall. It measures 6.4m NW-SE by 4.2m and 4.8m NW-SE by 2.6m NE-SW internally.

851 to 853. (169 to 171) (fig. 3:63) [centred SW 7716 1686]. Three crudely built drystone and boulder structures lie on a terrace at 380m OD, 40m south-east of building 848.
851. (169). An ill-defined sub-rectangular enclosure, with an entrance in the north-east side, measures 5.4m NE-SW by 4.6m NW-SE. It is demarcated by stone and boulder banks up to 0.4m high, except for the north-west side which is comprised of two large naturally positioned boulders.

852. (170). A poorly preserved structure comprising two units, made of spread boulder banks up to 0.5m high, and measuring 9m N-S by 8m E-W, lies 12m south of structure 851.

853. (171). This sub-circular boulder bank, up to 0.6m high and 2.5m across, has a north-east facing entrance flanked by orthostats, 0.7m and 0.5m high. It is 19m south-west of structure 852.

Towards Want y Llyn, the north-eastern edge of the survey area (854 to 858) (fig. 3:63)

854 and 855. (123 and 124) (figs. 3:63 and 3:76) (centred SN 7753 1700). Two drystone and boulder-built structures, 7.5m apart, are located at 340m OD at the top of a gully running down to the Afon Twrch.

854. (123). The south-eastern end of this rectangular structure is built on an artificial platform up to 0.3m high. Overall it measures 8m NW-SE by 4.8m NE-SW, with internal dimensions of 6.5m NW-SE by 3.4m NE-SW. There is a 1m wide entrance in the south-west wall. Coursed stonework survives up to 1m high at the south-
west corner, but elsewhere the tumbled walls range from 0.2m to 0.4m high.

855. (124). This sub-oval structure, 6.8m NE-SW by 5m NW-SE, is divided into two units, each with an entrance to the south-east. The south-western compartment, which is recessed into the slope, measures 3m NE-SW by 2.4m NW-SE internally, the north-eastern unit measures 1.6m NW-SE by 1.6m NE-SW. The walls range from 0.9m to 1.1m high.

856 and 857. (125 and 126) (figs. 3:63 and 3:76) [SW 7768 1709]. Two boulder built structures, 3m apart, are located on a natural platform on the west bank of the Afon Twrch at 310m OD at the foot of a steep slope.

856. (125). This oval structure, with a boulder bank 0.2m to 0.4m high, measures 6.6m NW-SE by 3.6m NE-SW. It has internal dimensions of 5m NW-SE by 2.4m NE-SW. There is a 0.5m gap in the south wall. This may be opposed by a break in the north wall which is indicated by a slight constriction in the width and reduction in the height of the bank.

857. (126). This 0.2m high boulder structure, 3.2m NW-SE by 3m NE-SW, projects from scree at the base of the slope.
Fig. 3. Site 854 to 857 in the vicinity of Nant y Llyn.
This conical cairn, known as Carn Fadog, is located on the edge of outcrop at 508m OD at the north-east end of the ridge which rises west of the valley. Built of Millstone Grit blocks, it measures 9.6m N-S by 10.6m E-W. The height varies from around 1.6m to 2.2m because of the uneveness of the surface on which it is built. There is a major central disturbance up to 1.3m deep and 2.8m across.
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