# Brecknock LANDMAP Historic Landscape Aspect

**Technical Report** 



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Report for the Countryside Council for Wales

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#### **EXECUTIVE SUMMARY**

The Historic Landscape aspect of the Brecknock LANDMAP identified 150 separate aspect areas, ranging in size from 0.1 to 184 square kilometres and representing 10 different landscape patterns (at Level 3 in the current LANDMAP Information System handbook). The patterns represented are Irregular fieldscape (19 areas), Regular fieldscape (26 areas), Other fieldscape (10 areas), Woodland (27 areas), Marginal land (27 areas), Water & wetland (7 areas), Nucleated settlement (15 areas), Other settlement (5 areas), Extractive industry (6 areas) and Designed landscape (8 areas). The overall pattern is dominated by a relatively small number of large blocks of mixed irregular field patterns, occupying the main river valleys of the Wye, Usk, Irfon and to a lesser extent the Tawe, and marginal land and forestry, occupying the Brecon Beacons, the Black Mountains, the Black Mountain, Mynydd Epynt and Abergwesyn Common. As might be expected smaller areas of regular single-phase field systems, designed landscapes and to some extent nucleated settlements, occupy the better quality land in the Wye and Usk valleys to the south east of the area. A number of aspect areas surrounding the network of reservoirs constructed to serve the south Wales conurbations were identified on the southern flanks of the Brecon Beacons, and the edges of the Elan Valley complex in the extreme north of the area. The only significant areas of industrial activity and associated settlement lie at the end of the Tawe Valley in the extreme south west of the Powys.

Historic Landscape aspect areas were identified using a number of digital and paper data sources, verified by rapid field visiting and drawn as a digital map against a 1:10,000 OS map background attached to a database of supporting information. These digital elements and this Technical Report contain the results of the Brecknock LANDMAP study and were submitted to the Countryside Council for Wales on completion of the project.

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## 1. INTRODUCTION

The Brecknock *LANDMAP* has been the first project undertaken as part of the wider Powys *LANDMAP*, and forms part of an ongoing pan-Wales project of landscape assessment.

The area studied extends over approximately 1780 square kilometres of southern Powys covering the Brecon Beacons National Park (inside Powys) and the remainder of the former Borough of Brecknock to its north. The Historic Landscape Aspect work, the subject of this report was undertaken by The Clwyd Powys Archaeological Trust (CPAT) working on behalf of the Countryside Council for Wales (CCW), with the National Park Authority and Powys County Council.

The project was initiated in December 2002 and ran, intermittently, to its completion in September 2003.

## 2. HISTORIC LANDSCAPE BACKGROUND

#### Historical and archaeological aspects of the landscape

History and archaeology form important visual components of the modern landscape of Brecknock, illustrating many diverse aspects of human activity since the last glaciation.

Many sources of information are available for the study of the historical and archaeological aspects of the landscape of Brecknock. In addition to prominent field monuments information to be gleaned from historic buildings, parks and gardens, industrial sites, and transport history, as well as from historic documents and maps. Other important sources include the palaeoenvironmental obtained from the study of pollen and plant remains and the evidence of settlement and land use to be derived from analysis of settlement and field patterns.

Historic landscape analysis is still in its infancy in Brecknock, however, and much still remains to be learnt from this wide variety of sources about how the present-day landscape of Brecknock has come about. Relatively little analytical fieldwork has yet been undertaken, for example, and much undoubtedly still remains to be learnt from early cartographic and historical sources.

## **Outline history**

The following provides a brief outline of the historic landscape of Brecknock (see also summary of historical and archaeological periods in Annex A).

- Early Prehistory The earliest evidence of human activity in the area during the Late Upper Palaeolithic period is represented by lithic scatters, which seem to represent seasonal camps occupied during the late glacial period by communities by hunters in pursuit of migrating herds of game. Seasonal occupation by hunter-gatherer groups is also evident during the succeeding Mesolithic Period, together with evidence for woodland clearances in some areas, perhaps relating to hunting practices. Permanent human settlement had been established by the early Neolithic Period when a number of farming communities had emerged who buried their dead in communal tombs, particularly in the area of the Black Mountains.
- Later Prehistory The widespread distribution of Bronze Age funerary and ritual monuments throughout Brecknock provides clear evidence for the growth in population, and though little is yet known in detail about settlement or land use at this period it is probable that a system of farming emerged during the later prehistoric period based upon individual farmsteads based upon a mixed farming economy, with access to arable land, grazing and woodland. Defended hillforts and enclosures probably emerged during the later Bronze Age and Iron Age periods, reflecting the emergence of political units within the tribal territory of the Celtic tribe of the Silures. It seems likely that the hillforts themselves represent tribal centres of this period and that most of the contemporary population occupied dispersed farmsteads in the surrounding countryside.
- Roman Period The period of Roman occupation is represented by the a number of conquest period forts, the establishment of a Roman road system, and the construction of a series of more permanent military bases accompanied by small commercial centres to serve their garrisons. Brecknock, like much of Wales, failed to develop large or enduring nucleated settlements during this period, however, and consequently appears to have continued to have been administered by the Roman army throughout much of the Roman period. Though few civil sites have yet been identified it seems likely that the local economy continued to develop from the mixed farming economies that had already emerged during the later prehistoric period.

- Early Medieval and Medieval Periods The end of Roman administration saw the emergence of a number of political entities from which eventually gave rise to the medieval kingdom of Brycheiniog, probably based on estates and holdings that had arisen during the later Roman period. A pattern of small nucleated church settlements had emerged throughout much of the lowland areas of Brecknock by the medieval period, many representing early manorial centres with open arable fields, with dispersed farmsteads in the surrounding hillier countryside. The medieval kingdom was replaced by marcher lordships following the Norman Conquest, which also led to the creation of a number of Anglo-Norman castle-boroughs such as Hay, Talgarth and Brecon, which became important market towns and from which the territory was administered. The richer lowland areas became the focus of extensive open fields specialising in arable agriculture, with a growth in freehold farms specialising in first cattle and then sheep farming on the surrounding hill land. Woodland clearance continued under the auspices of both ecclesiastical and lay landowners, and it is probable that in many areas the present-day boundary between enclosed land and unenclosed common had already been formed by the end of the medieval period.
- Post-medieval, Industrial and Modern Periods In the rural environment there is evidence for the enclosure of medieval open fields, the growth of country house estates, parks and gardens, agricultural improvement, and continuing enclosure of upland pasture around the upland margins. Medieval centres of population continued to expand, with increasing administrative and commercial functions and the development of local industries and transport systems often in relation to local agricultural production. Coal mines and limestone quarries emerged particularly in the south-east corner of the area as an offshoot of the industrial expansion of the South Wales Coalfield, giving rise to a number of discrete mining communities. The growth of the modern urban centres in South Wales and the Midlands gave rise to the construction of a number of reservoirs during the last century. More recent years have seen the expansion of forestry plantations, some overlying relict farmland, the designation of military training areas, agricultural diversification, conservation and land reclamation schemes, and a rise in the tourist industries and countryside pursuits, all of which have had a visible impact upon the landscape.

#### 3. METHODOLOGY

#### Overview

The study involved the following processes, which are described in more detail in the following sections.

- Preparation
- Generation of base-level polygonal data
- Definition of provisional historic landscape aspect areas
- Field evaluation
- Finalising boundaries of historic landscape aspect areas
- Database entry
- Quality Assurance monitoring
- Local User Information Group meetings

## Preparation

Initial work included familiarization with LANDMAP Information System methodology as outlined in the handbook, the collation of sources of information to be used for the study, and the setting up of workspaces. Changes have been made to the Classification System and working methodology prescribed by the LANDMAP Information System, during this project and these amendments have been taken into account (as far as practicable) as the project has progressed. It should be noted however that this project was completed before either the revised handbook or the LANDMAP Collector software (see below) had been finalised.

The geographical limits of the project were set by a MapInfo table supplied by CCW.

Digital mapped sources that were used were the Ordnance Survey (OS) 1:10,000 and 1:50,000 raster maps and OS vector and contour data for the whole of the study area. A set of OS 1:25,000 folded maps was also consulted for additional topographical information.

Sources of land-use information used for the project included polygonal data for common land and conifer woodland in the Brecon Beacons National Park (BBNP) made available by the National Park Authority, polygonal data giving the boundary of military areas in Brecknock supplied by the Ministry of Defence (MOD table), and the OS Landline polygonal data for buildings. A request was made to the Forestry Commission to supply polygonal data for areas of forestry but this was not forthcoming.

The primary source of historical and archaeological information was the Regional Sites and Monuments Record (SMR), maintained by CPAT. Much of the information in this record is point data, but it also included some polygonal data derived from a number of paper-based sources. These documentary and manuscript sources that were consulted included lists of listed buildings, the register of historic parks and gardens in Powys, and the historic landscapes registers, the historic landscape characterization report for the Middle Wye valley, and reports on historic settlements (see bibliography below).

A decision needed to be made at an early stage about the scale and significance of landscapes to be included in the study, the principal criteria for inclusion being that an historical or archaeological element should have a sufficient visual presence in the landscape. It was considered that this ruled out all individual buildings and archaeological monuments, many of the smaller settlements, a number of the smaller registered gardens, historically and culturally significant places with little landscape definition (e.g. Cilmery) and small or isolated unenclosed commons of less than about a square kilometres.

## Data collection and recording

At the beginning of the project it was decided that wherever possible data collection and recording should be undertaken digitally. From the outset all mapping was complied digitally (using head-up digitising), as was all database compilation. The limited programme of field visiting was designed to check decisions already taken in the desk-based assessment rather to record new data. Adjustments were made to the digital data set on a portable computer in the field and therefore did not generate a paper-based record. No photography was undertaken during the field visiting. Consequently, there are no paper record forms, hand drawn maps or photographs submitted with this report.

Mapping was undertaken in MapInfo Professional Version 6.0. A database was created in Microsoft Access in the format supplied by CCW. Associated texts were prepared in Word 2000, and submitted as both hard copy and Adobe Acrobat (version 5.0) PDF files. Following the introduction of the initial version of the XML-based *LANDMAP Collector* software, which occurred during the project, the Aspect Area data were transferred from the Microsoft Access database to the new format and thereafter edited to reflect the changes in the classification system introduced in the draft revised *LANDMAP Information System* handbook.

## Base-level polygonal data

A preliminary series of 424 contiguous polygons were drawn from the sources listed above according to a discrete list of classes, to which a limited amount of data was attached. These are listed in Annex B. The polygons (which might perhaps be considered to fall between Level 3 and Level 4 data in *LANDMAP* terms) were drawn from a variety of map sources and were used as the basis for defining provisional historic landscape aspect areas. Some of these base-level polygons, particularly those representing more specialist landscape types such as parks and gardens or settlement, could have been used to define Aspect Areas at Level 4. However, as the requirement here was to define a uniform aspect map at Level 3 this was not done, though this data could be refined and drawn on for this purpose in the future.

The use of base-level polygons identifying landscape types, although not prescribed by the LANDMAP Information System, has been trialed in Wales by CPAT to create similar base-level data from which to define Historic Landscape Character Areas in Historic Landscape Characterisation projects promoted by Cadw and CCW, and as a means of presenting historic landscape information within Tir Gofal. In many respects it is a similar process to that currently used to define landscape types in Historic Landscape Characterisation projects promoted by English Heritage.

The accuracy of the base-level polygonal data has not subsequently been checked against a single map-base or verified against definitive sources, however, and has not been supplied with the other digital data produced by the project. This data is illustrated in Annex B.

## Definition of provisional historic landscape aspect areas

A total of 150 Level 3 historic landscape aspect areas were mapped generally by a process of selection, amalgamation and subdivision of the base-level polygonal data described above, and ascribed to the appropriate *LANDMAP* Level 3 Pattern. The general process by which these polygons were derived is summarised in Annex C.

Initially many of the Level 3 polygons were created by copying and amalgamating adjoining base-level polygons. Many of these polygons need extensive editing to meet the 10,000 mapping accuracy required at Level 3. In hindsight, it would perhaps have been better to draw new polygons as the accuracy of many of the base-level areas was poor (particularly those that had themselves been copied from pre-existing digital data sets drawn at inappropriately small scales).

The Level 3 polygons were drawn to match precisely the supplied boundary for Brecknock. As noted below, however, the polygons along this boundary were checked against the boundaries of historic landscape aspect areas for a number of earlier *LANDMAP* studies in contiguous unitary authority areas made available by CCW.

Like the base-level polygonal data, the historic landscape aspect areas varied considerably in size, the smallest being about 0.01 square kilometres and the largest about 184 square kilometres.

A number of particular difficulties were encountered in defining the provisional historic landscape aspect areas at Level 3 that it may be helpful to document here.

- With regard to fieldscapes it was felt that although insufficient study had been undertaken to define different types of fieldscape at Level 4 (historic landscape detail), it would be unsatisfactory to define over 50% of the study area as only three areas at Level 3. The decision was therefore made to define aspect areas on the basis of the different fieldscape types represented in the base-level polygonal data (i.e. military fieldscapes, floodplain fieldscapes, organised fieldscapes, regular fieldscapes, piecemeal enclosure), and then to allocate each of these to one of the three fieldscape classes, but not to conflate adjoining areas of differing types even if they the same pattern at Level 3. While this approach worked well for Regular and Other fieldscapes, defining a number of discrete (probably single phase) systems, it was less successful in defining small blocks of Irregular fieldscape. Five of the 17 defined aspect areas are very large and, while they are areas of irregular fields and therefore correctly classified, further work might identify further discrete areas of regular fields within them.
- Some difficulty was encountered in treating reservoirs with complete consistency due to differences in size, landscape context and the lack of specific guidance in the LANDMAP manual. A number of the reservoirs falling along the northern, western and southern boundaries of the area were ascribed to a Water and Wetland class at Level 3. A number of the reservoirs in the Brecon Beacons and elsewhere, enclosed by modern conifer plantations, were subsumed within a Woodland class at Level 3. Some isolated reservoirs within upland areas were likewise subsumed within a Marginal Land class at Level 3.
- Again, some difficulty was presented in classifying areas of relatively recent large enclosures
  around the margins of some of the unenclosed upland. Some of these areas were consequently
  classed as one of the three types of Fieldscape at Level 3 whereas others were classed as
  Marginal Land at Level 3.
- After some consideration it was decided that there were sufficient grounds to identify the fieldscapes and open upland areas of the Mynydd Epynt military training area as distinct landscape types, which are not described in the LANDMAP classification. At Level 3 these areas have been ascribed to Other Fieldscape, and it is suggested that the term Military Fieldscape might be used to classify these areas at Level 4. Woodland areas within the training area were classed as Woodland at Level 3 however.

#### **Field Evaluation**

Two full days were spent in the field following the definition of the provisional historic landscape aspect area boundaries. Additional time in the field would have been desirable but was not considered essential in order to complete the tasks in hand at the level of detail required, given our background knowledge from working in the area for many years and the fact that we were not required to carry out evaluation, provide management recommendations or to assess tolerance to change.

Rather than attempting to visit each of the provisional historic landscape aspect areas (a task that would probably have required many weeks of work), time in the field was spent in checking a number of specific points of detail that could not be resolved more remotely.

The principal issues that it proved helpful to check in the field were firstly the degree to which there was a sufficiently meaningful visual expression of historical and archaeological processes at particular points in the landscape which would enable boundaries to be defined more closely, and secondly whether some of the smaller provisional aspect areas had a sufficient landscape dimension.

In several instances points in the landscape were sought and which would enable otherwise diffuse aspect areas to be split on rational topographic grounds.

The fieldwork generally tended to confirm the desktop analysis, though a number of relatively minor changes were made including the redefinition of several aspect area boundaries, the amalgamation of several adjacent areas and the subdivision of several others.

#### Finalising boundaries of historic landscape aspect areas

A number of relatively minor changes were made to the provisional aspect area boundaries as a result of fieldwork, as noted above.

Slight boundary changes were also made as a result of checking the distribution of archaeological sites in the Regional Sites and Monuments Record, to avoid unnecessarily placing neighbouring sites that are functionally or chronologically related to each other into different aspect areas.

A number of other relatively minor changes were also made in a number of places in order that the boundaries of aspect areas and those of modern political boundaries might coincide (e.g. the Brecon Beacons National Park boundary)

Polygonal boundaries for historic landscape aspect areas for a number of earlier *LANDMAP* studies in contiguous unitary authority areas were made available by CCW, enabling edge-matching to be undertaken. Data was made available in this way for Carmarthenshire, Rhondda Cynon Taff, Merthyr Tydfil, Caerphilly and Blaenau Gwent. Data for the remaining contiguous areas of Monmouthshire, Radnorshire, Neath and Port Talbot were not available at the time the study was undertaken.

There was generally a reasonably close fit with these earlier studies though slight amendments were made in one or two instances to correspond with previously defined aspect areas. In some instances (as for example in the case of the Carmarthenshire data) some aspect areas had previously been drawn which extended into Powys, which are now superseded by the data produced in the present study. However, no attempt was made as part of the present study to provide edge-matched data extending into adjacent unitary authority areas.

As noted above (see section above on base-level polygonal data) various sources of OS mapping were used for the definition of aspect areas, namely LandLine vector data, 1:10,000 raster data, and 1:25,000 paper maps. Consequently the aspect areas defined in this study do not correspond precisely to any single source of mapping. Care was taken to ensure, however, that the drawn boundaries would be visibly accurate to at least the required scale of 1:10,000 and which it is considered exceed the required accuracy. In the case of some aspect areas which had been initially drawn from datasets supplied by other bodies considerable checking was needed to ensure that a sufficient level of accuracy was obtained. Care was also taken to ensure that there was a perfect match between adjacent polygons.

#### Database entries

Database entries were created for each of the historic landscape aspect areas in the Access database format (revised April 2003) supplied by CCW. As stated above the approach to database compilation was changed by CCW during the life to this project, and the data collection initiated in Access for the Brecknock *LANDMAP* was completed on the assumption that it would be transferred to the *LANDMAP* Collector software, which has a different structure and range of fields - to reflect changes to the classification system. A decision was taken not to fill in those fields that could not be mapped directly to an equivalent in *LANDMAP Collector*, on the assumption that any outstanding data would be added using the new system once the core of the Access database had been transferred.

## **Quality Assurance Monitoring**

The GIS data, associated database and draft of this summary report are to be submitted to the Quality Assurance panel appointed by CCW.

## Local Information User Group (LIUG) meetings

A short written report on progress was submitted to the first LIUG meeting held on 27 January 2003. A fuller Powerpoint presentation on progress was given to the second meeting held on 24 February 2003. A further meeting is anticipated in early October 2003 following the completion of this aspect.

## 4. SUMMARY OF HISTORIC LANDSCAPE ASPECT AREAS

## Hierarchy of Level 3 classes represented in the area of study

A summary list of historic landscape aspect areas is given in Annex D. The classes that are represented are as follows, the Level 3 classes being described in greater detail in the following sections.

LEVEL 1: STRUCTURE LEVEL 2: LAND USE LEVEL 3: PATTERN

Rural environment Agricultural Irregular fieldscape

Regular fieldscape

Other fieldscape

Non-agricultural Woodland

Marginal land

Water & wetland

Built environment Settlement Nucleated settlement

Other settlement

Industrial Extractive

Infrastructure Designed

## Summary description of Level 3 classes represented in area of study

## Irregular fieldscape

A total of 19 irregular fieldscape areas are included, which varied in size from between about 0.01 to 184 square kilometres. The classification of these areas is perhaps the least satisfactory element of this *LANDMAP* project. It is felt that the term Irregular fieldscape was somewhat of a misnomer (at least in terms of the areas drawn here) and that perhaps Mixed fieldscape might have been more appropriate - with the term Mixed/evolved fieldscape, found in Level 4, being altered to Evolved fieldscape.

## Regular fieldscape

A total of 26 regular fieldscape areas are included, which varied in size from between about 0.37 to 30 square kilometres in extent. A number of reasonably distinctive fieldscape types were defined during the course of the study (see Annex B: organised fieldscape; regular fieldscape; enclosed upland (some, selectively); floodplain fieldscape) and although it is felt that insufficient study has been undertaken to enable these data to be presented at Level 4 it is considered that they form an appropriate basis for distinguishing between different contiguous areas of fieldscape at Level 3.

## Other fieldscape

A total of 10 other fieldscape areas are included, which varied in size from between about 0.7 to 48 square kilometres in extent. These are drawn exclusively from the Sennybridge military training area, which include areas of both upland and fieldscape devoted to military use.

#### Woodland

A total of 27 woodland areas are distinguished which vary in size from 0.1 to 32 square kilometres in extent. The areas are almost exclusively the larger modern coniferous plantations, though in some instances the areas encompass contiguous areas of natural, semi-natural or replanted broadleaved woodland.

## Marginal land

Twenty-seven marginal land areas are included which vary in size from 0.4 to 126 square kilometres in extent. A number of smaller areas of unenclosed common were excluded on the grounds of size. Areas of marginal land acting as military training areas were also excluded (see Other fieldscape above). Included in this class were areas of open upland such as the Black Mountains and the Beacons, some areas of recently enclosed upland subdivided into large enclosures, such as Cnewr, and also encompasses various discrete and isolated encroachments surrounded by open upland.

#### Water & wetland

Llangorse Lake is the only natural lake considered to be of sufficient scale to be included in this class, which is about 1.3 square kilometres in extent. Seven reservoirs, varying in size from 0.1 to 1 square kilometre in area, make up the remainder of this class.

#### Nucleated settlement

Twelve of the larger nucleated settlements are included, varying from 0.2 to 4 square kilometres in extent, and are considered to have historical and archaeological significance as well as a sufficient landscape dimension. They comprise Brecon, Hay, Llangorse, Llangynidr, Talgarth, Bronllys, Builth Wells, Bwlch, Crickhowell, Llangattock, Sennybridge, and Talybont-on-Usk, a majority of which originated as medieval political or administrative centres or as medieval market towns.

#### Other settlement

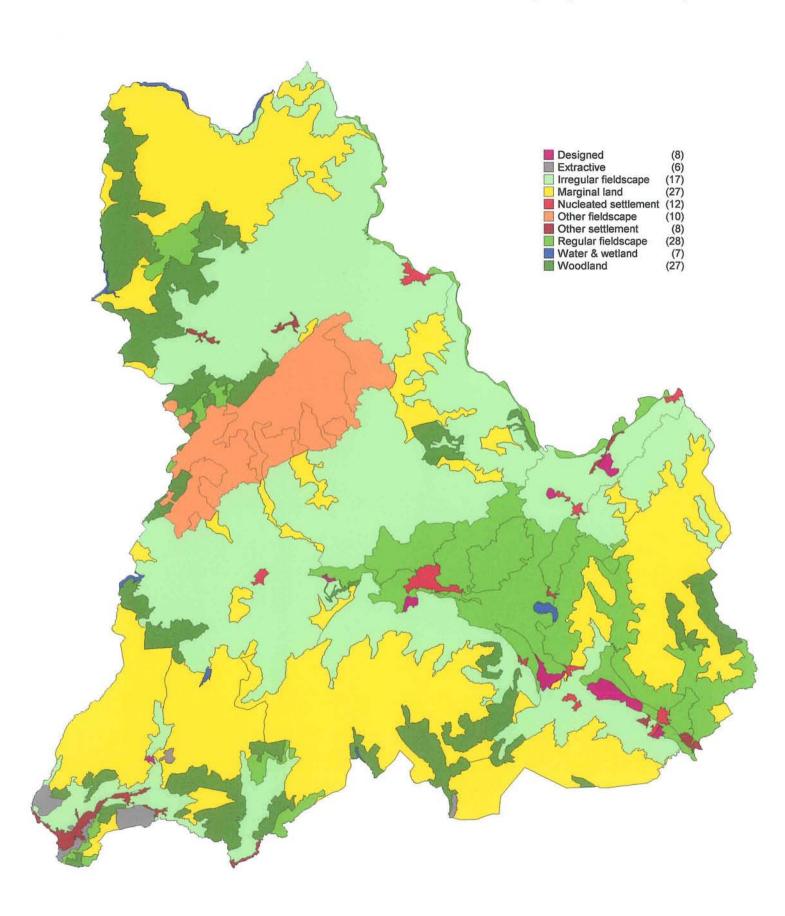
Eight other settlement areas, which like the preceding category, were considered to have historical and archaeological significance as well as a sufficient landscape dimension. They vary in size from about 0.3 to over 4 square kilometres in extent. They comprise Glangrwrny, Three Cocks/Aberllynfi, Ffawyddog, Coelbren, Llangammarch Wells, Llanwrtyd Wells, Pontneddfechan, Ystradgynlais/Abercraf, which originated as modern industrial settlements, as spar towns, as cottage encroachments on areas of open common, or as communications centres.

#### Extractive

Six quarries or former quarries have been classed as extractive, varying from as little as 0.1 to 3.9 square kilometres in extent. These, which are all in the south-east corner of the area, comprise Abercriban, Coronation Park, Hengaer, Onllwyn, Pen-wyllt. Other smaller quarries were not included as separate areas and, as noted above, some reservoirs were either included in marginal or woodland landscapes.

## Designed

These generally only include the larger parks and gardens as defined in the *Register of Landscapes*, *Parks and Gardens* with a more significant landscape dimension, in some instances including setting and/or combining adjacent areas of parkland. Eight areas are represented, comprising the following: Glanusk Park/Gliffaes, Bronllys Hospital, Craig y Nos, Ffrwdgrech, Llangattock Park, Old Gwernyfed, Penpont and Buckland. The areas vary in size from about 0.2 to about 3.7 square kilometres in extent.



Historic Landscape Aspect Areas defined at Level 3 for Brecknock LANDMAP

## Extent and relative proportions of the Level 3 classes represented in the area of study

The extent and relative proportions of the Level 3 classes represented in the area of study are given in the following table.

LEVEL 3: PATTERN	TOTAL AREA SQ KM	PERCENTAGE OF TOTAL AREA
Irregular fieldscape	684.58	38.4%
Regular fieldscape	207.15	11.6%
Other fieldscape	110.14	6.2%
Woodland	174.92	9.7%
Marginal land	562.21	31.6%
Water & wetland	4.91	0.3%
Nucleated settlement	10.72	0.6%
Other settlement	9.53	0.5%
Extractive	10.03	0.6%
Designed	9.04	0.5%

## 5. REFERENCES

Brecknock Borough Historic Settlements, Clwyd-Powys Archaeological Trust Report No 60, 1993

Historic Settlements in the Brecon Beacons National Park, Clwyd-Powys Archaeological Trust Report No 44, 1993

Middle Wye Valley: Historic Landscape Characterization, Clwyd-Powys Archaeological Trust Report No 420, 2001

Powys: Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales, Cadw: Welsh Historic Monuments, 1999

Register of Landscapes of Outstanding Historic Interest in Wales, Cadw: Welsh Historic Monuments, 1998

Register of Landscapes of Special Historic Interest in Wales, Cadw: Welsh Historic Monuments, 2001.

The LANDMAP Information System, Countryside Council for Wales, 2001.

The LANDMAP Information System (draft handbook), Countryside Council for Wales, 2003.

## ANNEX A

## SUMMARY OF HISTORICAL AND ARCHAEOLOGICAL PERIODS

The following provides a summary of the dating of the historical and archaeological periods used in the narrative accompanying this study:

Palaeolithic 50,000 - 10,000 BC

Mesolithic 10,000 – 4,000 BC

Neolithic 4,000 – 2,300 BC

Bronze Age 2,300 - 700 BC

Iron Age 700 BC - AD 43

Roman AD 43 – AD 450

Early Medieval AD 450 - 1066

Medieval AD 1066 – 1547

Post-Medieval AD 1547 - 1700

Industrial AD 1700 – 1900

Modern AD 1900 onwards

#### ANNEX B

## BASE-LEVEL POLYGONAL DATA: DESCRIPTION AND SOURCES

CLASS DESCRIPTION AND SOURCE

open upland Unenclosed upland areas, including small commons on lower land, mapped

from polygonal data defining registered commons inside the BBNP and from

OS 1:10,000 raster maps for areas outside the BBNP.

military upland Open upland areas inside the Sennybridge Training Area, mapped from the

MOD table and from OS 1:10,000 raster maps.

military fieldscape Areas of fields and former fields within Sennybridge Training Area, mapped

from the MOD table and from OS 1:10,000 raster maps.

enclosed upland Larger enclosed areas of marginal land, often with straight-sided boundaries,

lying on and around the edge of open upland areas, generally assumed to have been enclosed in modern times (since about the latter half of the 18th century), sometimes somewhat arbitrarily distinguished from more anciently

enclosed land on lower ground. Mapped from OS 1:10,000 raster maps

encroachment Discrete area of fields, generally on the upland edge and having the

appearance of detached encroachments of medieval or later date on the upland commons. Mapped from 1:10,000 raster and polygonal data defining

registered commons in the BBNP.

water Larger reservoirs and dams, including ancillary works such as treatment

works, water works, filter beds and access roads, and one large natural lake

(Llangorse) mapped from OS 1:10,000 raster maps.

quarry Larger surface quarry workings and opencast workings, tips, levels, disused

and in use and ancillary structures including limekilns, dismantled mineral railway, roads and other quarrying infrastructure. Mapped from OS 1:10,000

raster maps.

settlement All larger settlements of all periods, generally of more than about 20 houses.

Mapped from OS 1:10,000 maps.

cottage landscape A small number of distinctive settlement landscapes comprising scattered

cottages, small fields and paddocks. Mapped from OS 1:10,000 raster maps.

communications/ A number of larger agglomerations of roads, railways, disused

services mineral lines, sewage treatment works etc, drawn from OS 1:10,000 raster

maps

conifer Larger coniferous plantations, mapped from polygonal data defining areas of

conifer forestry inside the BBNP and from OS 1:10,000 raster maps for areas

outside the BBNP, generally only in blocks >1km<sup>2</sup>.

woodland A small number of larger areas of broadleaved woodland mapped from

polygonal data defining areas of broadleaved woodland inside the BBNP and from OS 1:10,000 raster maps for areas outside the BBNP, , generally only

in blocks >1km<sup>2</sup>.

garden Larger gardens and parks, mapped from polygonal data within the SMR

transcribed from the register of historic parks and gardens in Powys, sometimes including and sometimes excluding the boundaries of 'essential

setting'.

floodplain fieldscape Irregular floodplain fields, river meanders, cut-offs etc, including late

enclosure represented by straight-sided fields, mapped from OS 1:10,000

raster maps.

organised fieldscape Lowland fieldscapes, characteristically including larger and more rectilinear

fields with areas of strip fields and reorganised strip fields suggesting,

medieval open field cultivation. Mapped from OS 1:10,000 raster maps,

generally only in blocks >1km<sup>2</sup>.

Contiguous areas of squarish or large strip-shaped fields on upland edge, regular fieldscape

having the appearance of enclosed former open pasture or possibly reorganised formerly irregular field patterns, generally laid out in relation to the contours. Mapped from OS 1:10,000 raster maps, generally only in

blocks >1km<sup>2</sup>.

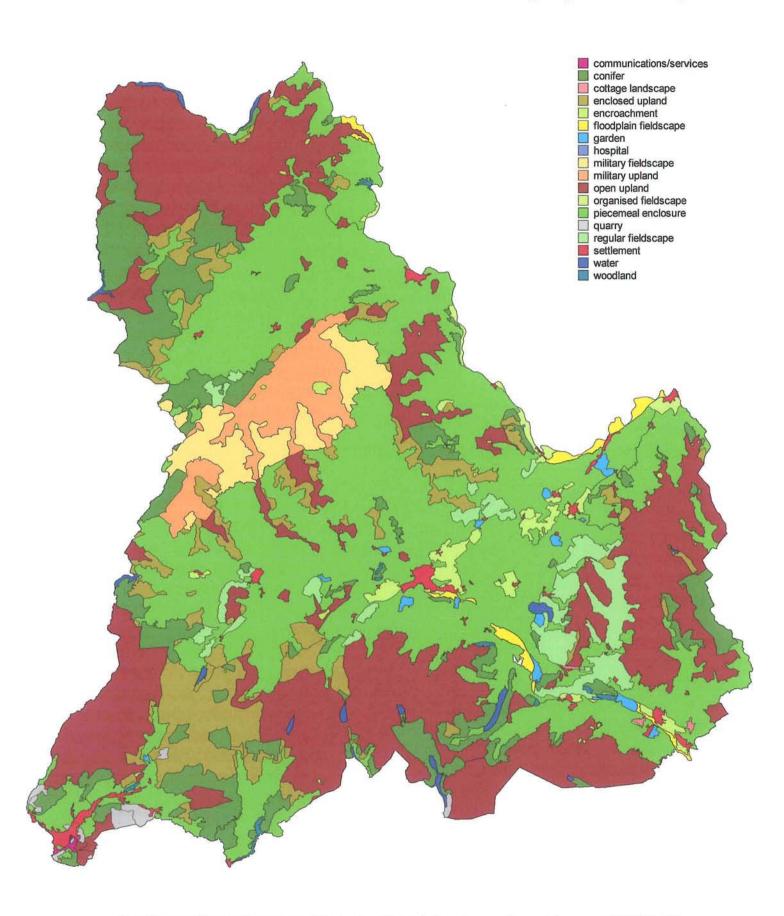
Areas of more irregularly-shaped fields generally on upland edge, hillside piecemeal enclosure

locations and in valleys, suggesting gradual piecemeal woodland clearance and enclosure. Mapped from OS 1:10,000 raster maps, generally only in

blocks >1km<sup>2</sup>.

Rural hospital and former hospital sites (eg Bronllys, Talgarth), mapped hospital

from OS 1:10,000 raster maps.



Landscape Class polygons used to derive Historic Landscape Aspect Areas at LEVEL 3 for Brecknock LANDMAP.

#### ANNEX C

#### PROVISIONAL HISTORIC LANDSCAPE ASPECT AREAS: SOURCES

#### LEVEL 3 PATTERN DERIVED FROM BASE-LEVEL POLYGONALY DATA

LEVEL 1 LEVEL 2 LEVEL 3 FROM BASE-LEVEL Structure Land use Pattern POLYGONAL DATA

Rural environment Agricultural Irregular Mapped from

fieldscape piecemeal fieldscape;

some encroachment; some

enclosed upland

Regular Mapped from

Fieldscape organised fieldscape; regular

fieldscape; some enclosed upland;

floodplain fieldscape

Other fieldscape Mapped from

Military fieldscape; Military upland

Non-agricultural Woodland Mapped from

conifer (selected larger areas); woodland (selected larger areas)

Marginal land Mapped from

open upland; selected areas of enclosed upland; and including

most encroachments

Water & wetland Mapped from

water (natural lakes and

reservoirs)

Built environment Settlement Nucleated Mapped from

settlement (selected larger more

nucleated settlements)

Other settlement settlement (selected larger forms

other than nucleated settlements)

Industrial Extractive Mapped from quarry;

communications/services

(selective)

Infrastructure Designed Mapped, selectively from the

garden polygons, and generally only including the larger parks and gardens with a more

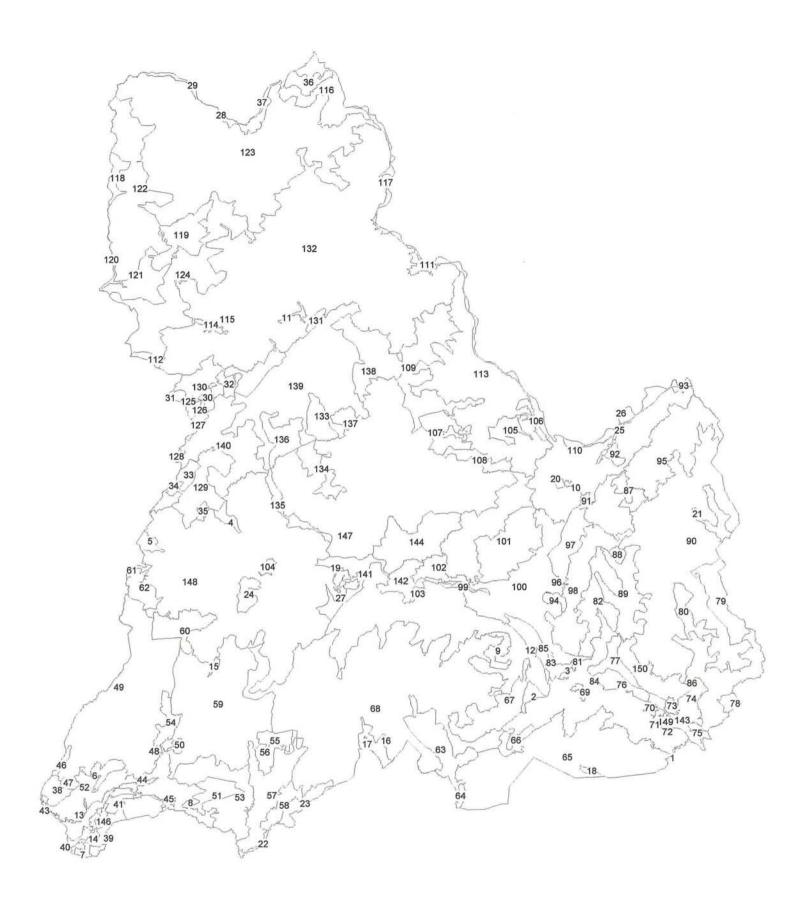
significant landscape dimension.

ANNEX D
SUMMARY LIST OF HISTORIC LANDSCAPE ASPECT AREAS

AREA	AREA	LEVEL 3 CLASS	AREA
NUMBER	NAME	(LANDSCAPE PATTERN)	(SQ KM)
4	Continue	I	0.01
1	Coedcae	Irregular fieldscape	0.01
2	Tor y Foel	Marginal land	1.59
3	Craig-lwyd-fawr	Marginal land	0.46
4	Brynhicet	Marginal land	1.52
5	Mynydd Bach Trecastell	Marginal land	1.58
6	Gierdd Forest	Woodland	2.50
7	Mynydd Marchywel	Woodland	0.82
8	Nant Bryn	Woodland	0.51
9	Coity	Woodland	2.89
10	Bronllys	Nucleated settlement	0.29
11	Llangammarch Wells	Other settlement	0.77
12	Talybont-on-Usk	Nucleated settlement	0.26
13	Coronation Park	Extractive	0.12
14	Farteg	Regular fieldscape	2.72
15	Cray Reservoir	Water & wetland	0.45
16	Coed Taf Fawr	Woodland	3.28
17	Cantref Reservoir	Water & wetland	0.17
18	Cwm Carneilw	Woodland	0.68
19	Penpont	Designed	0.24
20	Bronllys Hospital	Designed	0.40
21	Vale of Ewyas	Irregular fieldscape	3.60
22	Pontneddfechan	Other settlement	0.60
23	Dyffryn Hepste	Regular fieldscape	3.59
24	Fforest Fach	Marginal land	2.86
25	Three Cocks/Aberllynfi	Other settlement	0.71
26	Pipton	Regular fieldscape	4.22
27	Mynydd Illtud	Marginal land	2.82
28	Llannerch Cawr	Irregular fieldscape	2.48
29	Claerwen Reservoir	Water & wetland	1.07
30	Tirabad	Regular fieldscape	1.41
31	Abererbwll	Other fieldscape	0.73
32	Llwynfynwent	Regular fieldscape	1.89
33	Halfway Forest	Woodland	2.08
34	Halfway Forest (part)	Woodland	1.67
35	Pwll-du	Other fieldscape	0.77
36	Carn Gafallt	Marginal land	3.12
37	Caban-coch Reservoir	Water & wetland	0.59
38	Bryn-henllys	Extractive	2.93
39	Twyn Eithinog	Marginal land	2.48
40	Hendre-ladis	Extractive	1.73
41	Nant Pen-rhos	Woodland	1.54
42	Onllwyn	Extractive	3.91
43	Ystradgynlais/Abercraf	Other settlement	4.84
44	Abercrave Farm	Irregular fieldscape	0.10
45	Coelbren	Other settlement	0.10
46		A STATE OF THE STA	0.42
40	Dyffryn Twrch	Irregular fieldscape	0.77

17	Time: Cof	Waadland	0.02
47 48	Tir y Gof	Woodland	0.92 0.26
49	Craig-y-Nos Mynydd Du	Designed Marginal land	57.11
50	Pen-wyllt	Extractive	0.70
51	Cefngwaunhynog	Marginal land	4.50
52	Dyffryn Tawe	Irregular fieldscape	21.20
53	Coed y Rhaiadr	Woodland	16.03
54	Glyntawe	Irregular fieldscape	3.42
55	Blaen Llia	Woodland	2.54
56	Carnau Gwynion	Regular fieldscape	3.39
57	Ystradfellte	Irregular fieldscape	14.79
58	Gwaun Hepste	Woodland	3.82
59	Cnewr	Marginal land	51.68
60	Glasfynydd Forest (part)	Woodland	7.40
61	Usk Reservoir	Water & wetland	0.60
62	Glasfynydd Forest	Woodland	4.07
63	Taf Fechan	Woodland	11.28
64	Abercriban Quarry	Extractive	0.64
65	Mynydd Llangynidr	Marginal land	48.48
66	Dyffryn Crawnon	Woodland	2.57
67	Talybont Reservoir	Woodland	11.08
68	Bannau Bryncheiniog	Marginal land	126.30
69	Llangynidr	Nucleated settlement	0.63
70	Ffawyddog	Other settlement	0.37
71	Llangattock	Nucleated settlement	0.36
72	Llangattock Park	Designed	0.44
73	Crickhowell	Nucleated settlement	0.84
74	Belfountain	Regular fieldscape	4.32
75	Glangrwyney	Other settlement	1.04
76	Glanusk Park/Gliffaes	Designed	3.77
77	Penygaer	Regular fieldscape	4.37
78	Mynydd Pen-y-fal	Marginal land	1.42
79	Mynydd Du Forest	Woodland	8.72
80	Ty CommIns	Woodland	4.54
81	Bwlch	Nucleated settlement	0.53
82	Mynydd Llangorse	Marginal land	12.64
83	Buckland	Designed	1.97
84	Cwmcrawnon	Irregular fieldscape	37.00
85	Gilestone	Regular fieldscape	4.16
86	Vale of Grwyney	Regular fieldscape	18.12
87	Rhos Fawr	Marginal land	3.03
88	Castell Dinas	Regular fieldscape	1.01
89	Dyffryn Rhiangoll	Regular fieldscape	11.82
90	Black Mountains	Marginal land	81.60
91	Talgarth	Nucleated settlement	0.51
92	Old Gwernyfed	Designed	1.26
93	Hay	Nucleated settlement	0.64
94	Llangorse Lake	Water & wetland	1.33
95	Maestorglwydd	Irregular fieldscape	32.91
96	Llangorse	Nucleated settlement	0.22
97	Trefecca	Regular fieldscape	7.76
98	Cathedine	Regular fieldscape	17.71
99	Brynych	Regular fieldscape	0.97

100	I lambam lamb	Damilan Galdasana	30.59
100	Llanhamlach Llechfaen	Regular fieldscape	16.29
101		Regular fieldscape Nucleated settlement	4.00
102	Brecon Efrandersoh	시간 선거로 한 번 기가가 된 해요 하는 하고 하고 하고 있다면 하고 있다.	0.70
103	Ffrwdgrech Sennybridge	Designed Nucleated settlement	0.76
104	Mynydd Fforest		3.03
105	13.16.1.18.17.13.18.13.18.13.18.13.18.13.18.13.18.18.18.18.18.18.18.18.18.18.18.18.18.	Marginal land Woodland	1.69
100	Stockley Wood	Woodland	6.46
	Llaneglwys/Ysgwydd Hwch		3.52
108 109	Llandyfalle Hill	Marginal land	19.90
110	Pant y Llyn Porthamal	Marginal land	36.01
111	Builth Wells	Irregular fieldscape Nucleated settlement	1.68
112			1.20
113	Bryn Nicol Crickadarn	Marginal land	49.24
113		Irregular fieldscape Other settlement	0.78
	Llanwrtyd Wells		
115	Llangoed Llanwrthwl	Regular fieldscape	3.73 11.31
116	Ystrad	Irregular fieldscape	3.01
117		Regular fieldscape	
118	Carreg y Fran	Marginal land	2.64
119	Abergwesyn	Regular fieldscape	9.42 0.70
120	Llyn Brianne	Water & wetland	
121	Mynydd Trawsnant	Marginal land	8.39
122	Tywi Forest	Woodland	32.94
123	Carnau	Marginal land Woodland	110.93 31.07
124	Fforest Irfon		0.46
125	Spite Inn Farm	Regular fieldscape	0.46
126 127	Gledgrydd	Other fieldscape Woodland	0.94
	Fforest Crychan (part)		
128	Graigyrwyddon	Regular fieldscape	0.37
129 130	Mynydd Bwlch-y-Groes	Other fieldscape Woodland	11.38 12.82
131	Fforest Crychan Pennau		0.92
131	1 villian	Marginal land	184.86
133	Dyffyn Irfon Beili-Richard	Irregular fieldscape Other fieldscape	4.62
134	Cefn Bola-maen	Marginal land	5.22
135		Marginal land	3.27
136	Twyn Disgwylfa Cwm Egnant	Other fieldscape	6.34
137	Blaen-Yscir-fawr		1.93
138	Pentre Dolau Honddu	Other fieldscape Other fieldscape	13.70
139		Other fieldscape	48.30
140	Sennybridge Training Area Cae Garw	Other fieldscape	21.43
141	Allt Aber-bran-fawr	Woodland	0.65
142	Llanspyddid	Regular fieldscape	5.74
143	Llanddew	Regular fieldscape	19.12
144	Pen-y-crug	Regular fieldscape	15.61
145	Aberbran	Regular fieldscape	3.98
146	Libanus		52.31
147	Upper Chapel	Irregular fieldscape Irregular fieldscape	108.08
148	Trecastell	Irregular fieldscape	126.71
149	Gilfach	Regular fieldscape	2.88
150		Regular fieldscape	8.49
150	Cwm-gu	Regulai Heluscape	0.49



Historic Landscape Aspect Areas defined at Level 3 for Brecknock LANDMAP

## ANNEX E

The following specification for the project is drawn from the Invitation to Tender issued by CCW, October 2002.

#### ASPECT SPECIALIST TASKS

The successful contractor should complete the mapping and data capture requirements of the History & Archaeology Aspect for the administrative area of Brecknock including that part of the Brecon Beacons National Park within Powys.

Those remaining parts of the National Park, not covered in this contract, will be subject to separate LANDMAP Quality Assurance procedures to produce a complete Quality Assured set of LANDMAP Information that covers Brecknock, the Brecon Beacons National Park and the local authority areas: Rhondda-Cynon-Taff, Caerphilly, Merthyr Tydfil, Blaenau Gwent, Torfaen, Carmarthen and Monmouthshire.

The current methodology to adhere to is specified in the LANDMAP Information System manual. Aspect specialists should work to this manual and any subsequent updates of the manual that can be reasonably accommodated within the resources and timetable for the Aspect.

Aspect Specialists will need to have a detailed knowledge and understanding of the requirements of the History & Archaeology Aspect in order to apply the methodology accurately and consistently. The LANDMAP Wales Manager (CCW) must agree in writing in advance any proposed amendments to the method of approach set out in the manual.

The History & Archaeology Aspect should be prepared to Level 3 of the method using the LANDMAP published hierarchical classification. Digital data entry forms (written in Microsoft Access) should be used for entering information for each Aspect Area. These are available from CCW. Annex paper 1 of the LANDMAP manual details the technical specification for capture, storage and presentation of data.

The appointed Aspect Specialist should seek to achieve consistency and 'fit' with any other History & Archaeology layers with adjoining Authority areas.

In brief, the following should be produced

- A hierarchical classification system, identifying any modifications at Level 3
- A complete, quality assured digital dataset in MapInfo format (or a format compatible with MapInfo), based on the Access digital data entry forms for all the History & Archaeology Aspect Areas identified, including a digitised map at a scale of 1:10,000 in MapInfo format (or a format compatible with MapInfo) showing accurately delineated Aspect Areas. A reasoned justification for the location of all sections of Aspect Area boundaries should be included.
- A technical report ensuring that an explanation and justification of key decisions is transparent. This report should be in a paper as well as in a digital format. The preferred digital format is pdf, but if this proves to be difficult, a Word document for the text-part of the report will be sufficient.

The consultant will be required to assist the LANDMAP Quality Assurance process by submitting the information to the national LANDMAP Quality Assurance Panel. This includes making accurate and

justified data available. The Aspect Specialist generating the information is responsible for achieving the best possible standard of accurate and consistent information within the resources available. Time allowance should be made for the Quality Assurance process to be completed by the end of March 2003. The onus is on the Aspect Specialist to make any necessary adjustments to their data in the light of the Quality Assurance process. A mentoring advisor from the Quality Assurance Panel will be made reasonably available during the contract to minimise the need for late amendments.