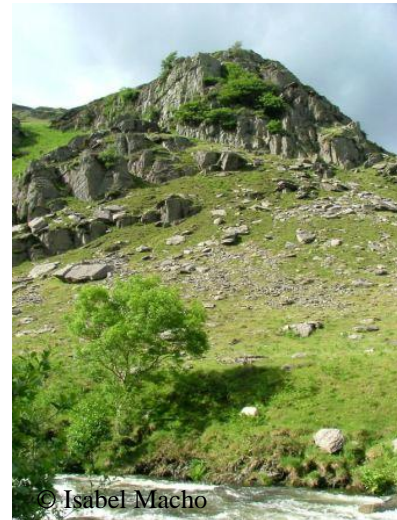


## CARMARTHENSHIRE LBAP UPLAND HABITATS GROUPED ACTION PLAN

### Introduction

The grouped habitat action plan includes upland heathland, blanket bog, upland flushes, fens and swamps and inland rock outcrop and scree habitats.

**Upland heathland** (*Gweundir yr ucheldir*) occurs on mineral soils and thin peats in upland areas of the county, above the upper limit of agricultural enclosure. It includes both 'wet' and 'dry' heath. Dry heath is characterised by a high cover of species such as heather, bell heather, bilberry, crowberry and western gorse. Wet heath is dominated by mixtures of heather, cross-leaved heath, purple moor-grass and deer grass, alongside carpets of mosses (notably *Sphagnum* species). Good-quality heathland has patches of heather at different stages of growth (i.e. is structurally diverse). In Carmarthenshire, heathland has been lost and declined in quality, mainly as a result of heavy grazing, burning and subsequent conversion to grassland, and afforestation.



Upland heathland often forms a mosaic with other habitats such as blanket bog, mires, grassland, bracken, scree, scrub and woodland. Blanket bog can also be dominated by dwarf shrub vegetation, but this habitat typically occurs over deep peat and is the subject of a separate action plan. Similarly lowland heathland which lies below the upper limit of enclosure, is also covered by a separate plan.

The total extent of upland heathland in Carmarthenshire is relatively small. Much of the upland heathland habitats are concentrated in the north and east. Cwm Doethie–Mynydd Mallaen SSSI supports an extensive area of upland heathland and is designated a SAC for its dry heath vegetation. Mynydd Llanllwni, north of Brechfa, is an important non-designated area, mainly of wet heath/wet heath mosaic, which merits further investigation, although it is somewhat over-grazed.

**Blanket bog** (*Gorgors*) is a globally rare habitat, approximately 10–15% of which occurs in Britain and Ireland. In the UK it covers large expanses of the uplands in the north and west, where the climate is typically cool and wet. Peat depth generally exceeds 0.5 m, having accumulated through the slow decomposition of plant material under waterlogged conditions. Studies indicate that most blanket peat in the UK began to develop between 5000 and 6000 years ago.

Bog mosses (*Sphagnum* species) are a prominent component of blanket bog vegetation, alongside dwarf shrubs such as heather, bilberry, crowberry and cross-leaved heath. Other common plants include cotton grasses and deer grass. Blanket bogs can support a rich invertebrate fauna and they are often of ornithological importance.

The carbon trapped in the peat makes this, along with other peat habitats, vital in the challenge to address climate change.

Much of the blanket bog in Carmarthenshire is modified and no longer peat forming. Survey data shows areas of intact blanket bog but much more wet and dry modified bog habitat. Much of this vegetation is concentrated in the upland areas of north Carmarthenshire.

Two SSSIs in Carmarthenshire contain blanket bog vegetation, including the extensive Cwm Doethie–Mynydd Mallaen SSSI. Many areas of blanket bog occur on common land.

**Inland rock outcrop and scree habitats** (*Cynefinoedd brigiadau craig a sgrï mewndiroI*)  
To be added.

**Upland flushes fens and swamps** (*Trylifiadau, ffeniau achorsydd siglennaidd ar dir uchel*)  
To be added.

### **Ffridd**

Although not a UK priority BAP habitat, ffridd has been identified as an important in the county and so is included within this action plan.

Ffridd consists of a mosaic of semi-natural habitat types. It is typically dominated by bracken, and includes a number of the following: wet and dry heath, acid grassland, woodland, scrub and marshy grassland. It usually occurs on the area of land between enclosed fields and the open hill or upland conifer plantation, but can be found within enclosed fields where these have been abandoned, and the ffridd habitat has been able to develop, often on steeply sloping land that is difficult to farm. As a habitat ffridd can cover fairly large areas and thus makes an important contribution to the Welsh landscape.

Ffridd also supports important breeding bird assemblages including species such as linnet, tree pipit, yellow hammer and stonechat. The large small mammal populations that occur provide food for birds of prey.

### **Natural benefits of upland habitats**

As well as the inherent value of these habitats and for the species they support they provide us with a number of natural benefits:

- Climate regulation through carbon storage in peat bogs.
- Pollination – upland heathland.
- Natural flood protection via storage of water in upland bogs and fens.
- Supply of clean water - a significant amount of the UK water supply is sourced from upland rivers lakes and reservoirs, e.g. Llyn y Fan Fach.
- Regulation of water release – heath, bogs, flushes and fens help prevent runoff, a problem on overgrazed uplands.
- Uplands provide us with food - lamb and beef in Carmarthenshire is often produced on our uplands.
- Uplands hold all sorts of secrets of our human and climate history - ancient monuments, evidence of old agricultural systems, evidence of mineral workings and a pollen record preserved within peat soils - revealing past climatic conditions.
- Uplands are great places to experience the wide outdoors and see the landscape open out below you.

**Why are upland habitats changing** (from the *State of Nature* report: [www.rspb.org.uk/stateofnature](http://www.rspb.org.uk/stateofnature))?

- Forestry plantations.
- Atmospheric pollution.
- Farming.
- Climate change.
- Some types of habitat management.

## Vision statement and objectives

The overall vision for this plan is to maintain, restore and extend these habitats and the BAP species associated with them. This is especially important within the context of landscape character and habitat connectivity within the Carmarthenshire landscape and for blanket bog in its role of contributing towards climate change mitigation. A priority is to gather more information on these habitats outside designated sites and on their condition and current management status. Any action would seek to meet one or more of the following objectives:

**UP1** To positively manage these upland habitats in Carmarthenshire and connect and expand where possible.

**UP2** To maintain and expand the range and/or population of species associated with these habitat types.

**UP3** To identify and record priority areas of upland habitats within Carmarthenshire outside SSSIs.

**UP4** To raise awareness of upland habitats and the benefits they bring us.

### Associated LBAP/S42 species (NB this may not be an exhaustive list):

**Birds** - European nightjar, Skylark, Tree pipit, Common linnet, Cuckoo, Yellowhammer, Grasshopper warbler, Curlew, Ring Ouzel, Lapwing, Golden plover

**Mammals** - Brown hare, Water vole

**Invertebrates** - Small Heath, Dark Brocade, Grey Mountain Carpet, Galium Carpet, Neglected Rustic, Heath rustic, The Anomalous

**Reptiles** - Adder

**Plants** - *Euphrasia rosikoviana montana*, Juniper, Bog orchid, *Hieracium* spp., Stag's Horn Club moss, Globeflower, Wood bitter vetch

**Summary of action achieved by LBAP Partners (for more information contact the biodiversity officer – [Biodiversity@carmarthenshire.gov.uk](mailto:Biodiversity@carmarthenshire.gov.uk)) or visit the national Biodiversity Action Reporting System - <http://ukbars.defra.gov.uk>:**

#### 2010-12

- Key sites for Stag's Horn Club Moss identified in the county – BSBI UP2
- Pylliau Collion Common – bog restoration project through ditch blocking – CCC/NRW UP1
- Survey of upland bird species on common land – CBC/CCC UP2

#### 2013

- Training for commoners on upland grassland heathland habitats – Llanllwni – CCC UP4
- Survey of upland bird species on common land finished – CBC/CCC UP2
- Ongoing management of Nant Melyn NR – WTSWW UP1
- Records for water voles found in upland streams in north Carms UP2

### Future proposed action

#### Useful links:

<http://jncc.defra.gov.uk/page-1436>

[www.wildlifetrusts.org/wildlife/habitats/upland](http://www.wildlifetrusts.org/wildlife/habitats/upland)

[www.biodiversitywales.org.uk/en-GB/Uplands](http://www.biodiversitywales.org.uk/en-GB/Uplands)

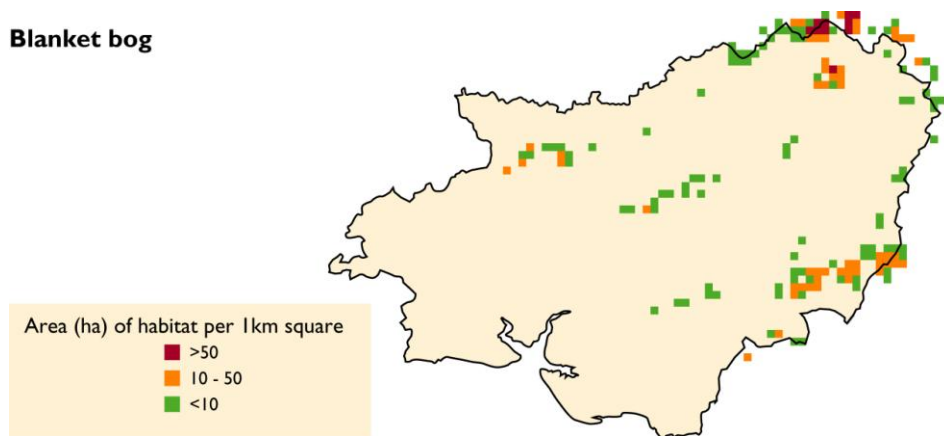
## Where to see these sites in Carmarthenshire:

Mynydd Mallaen, Mynydd Du, Mynydd Llanllwni

Maps used with permission of Countryside Council for Wales 2004. Extracted from *Priority Habitats of Wales: a technical guide*, edited by P. S. Jones, D. P. Stevens, T. H. Blackstock, C. R. Burrows and E. A. Howe., 2003.

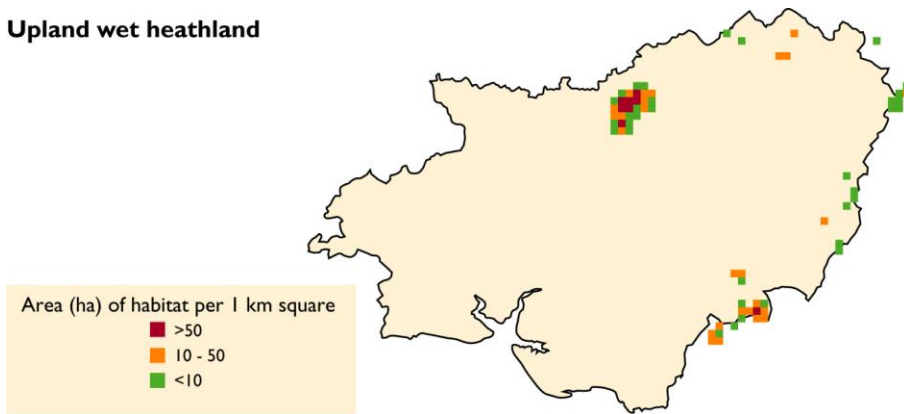
Reproduced from the Ordnance Survey map with the permission of the Controller of HM Stationery Office, Crown Copyright Reserved-LA 0997L

### Blanket bog



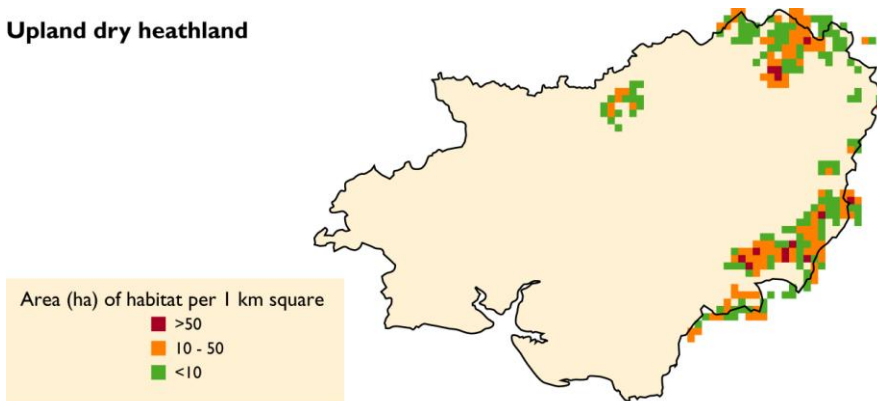
Distribution of 1 km squares with upland and lowland blanket bog within Carmarthenshire. Data are summarised from the NCC/CCW Habitat Survey of Wales (1979-1997) and comprise blanket bog as well as areas of wet and dry modified bog and bare peat assignable to this priority type.

## Upland wet heathland



Distribution of 1 km squares with upland wet heathland within Carmarthenshire. Data comprise wet heath and half the cover of grass/wet heath mosaic, and are summarised from the NCC/CCW Habitat Survey of Wales (1979-1997); survey of this habitat was carried out mainly between 1979 and 1989

## Upland dry heathland



Distribution of 1 km squares with upland dry heathland within Carmarthenshire. Data comprise acid dry heath and half the cover of grass/dry heath mosaic, and are summarised from the NCC/CCW Habitat Survey of Wales (1979-1997); survey of this habitat was carried out mainly between 1979 and 1989.