

Carmarthenshire Nature Recovery Plan

Lowland Grassland and heathland includes lowland dry acid grassland, lowland meadows, purple moorgrass and rush pastures and lowland heathland.

These habitats all contribute to the rich landscape and habitat diversity within the county and are the habitats of some of our most important and declining species. All were much more widespread in the past and have suffered significant declines.

Lowland heathland is not extensive in Carmarthenshire. Most of this is wet heath, which often occurs in association with marshy grassland. Notable examples occur at Cernydd Carmel Special Area of Conservation, Mynydd Llangydeyrn and Mynydd Ystyfflau-carn.

The majority of lowland dry heath occurs around the upland fringes, just below the limit of enclosure; small scattered stands also occur along the millstone grit ridge in the south of the county (from the Black Mountain to Kidwelly). Here it supports birds such as linnet and stonechat; the only other blocks of similar lowland heathland are small areas on the coast at Marros Mountain and Ragwen Point, near Pendine.

Thanks to its industrial past, the coalfield area of Carmarthenshire has been less intensively farmed and still supports concentrations of unimproved neutral grassland – **lowland meadows**. Scattered examples also occur elsewhere in lowland Carmarthenshire, although generally within a more intensive agricultural setting.

Carmarthenshire has inevitably suffered considerable losses of **purple moor-grass and rush pasture** ('marshy grassland') through agricultural intensification and development, especially around the Cross Hands area. Opencast coal mining has also destroyed a number of sites on the coalfield. More recently a number of sites have become degraded through neglect and lack of management.

The Amman and Gwendraeth Valleys, both lying on coal-bearing rocks still retain a good density of purple moor-grass and rush pasture. Much survives due to patterns of land holdings or physical difficulties of intensive management, which meant the land could not be drained or improved. Further examples are scattered throughout the rest of the county.

In the Cross Hands area the Caeau Mynydd Mawr Marsh Fritillary Project works with local landowners to improve marshy grassland habitat for the marsh

Lowland Grassland and Heathland

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Natural benefits of freshwater habitats

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

- Grasslands provide food for livestock
- Grasslands store carbon
- Damp grasslands act like a sponge, storing water and slow down run off from rain water
- Heather and meadow flowers support important pollinators such as bees - vital in helping our agricultural industry.
- Wild food – e.g. honey and bilberries!
- Cultural – our grassland and heathlands reflect our agricultural history.
- Inspiration and health and well being – art, poetry, relaxation

Why are lowland grassland and heathland habitats changing (from the *State of Nature* report:

www.rspb.org.uk/stateofnature?

- Habitat deterioration.
- Habitat loss.
- Atmospheric pollution.
- Invasive non-native species.
- Habitat fragmentation and isolation.
- Human disturbance of species.
- Climate change.

fritillary butterfly to help ensure the butterfly population can sustain itself in an area of high development. The project has surveyed a large area of land to assess the quality of the marshy grassland habitat in the Cross Hands area, which will inform future development and allow targeting of sites for potential management.

Dry acid grassland is scarce in lowland Carmarthenshire, although there are extensive tracts on the upland plateaux and fringes of Mynydd Du and Mynydd Mallaen. Areas of habitat (with sheep's fescue/tormentil/common bent) occur occasionally at lower altitudes, typically confined to free-draining, nutrient-poor substrates. Generally soils in the Carmarthenshire lowlands are too fertile to support this habitat.

Churchyards and the like are becoming increasingly valuable for their grassland resource and are potential havens for biodiversity. Unlike surrounding farmland these sites in general have had limited applications of chemicals, fertilisers and herbicides and are very rarely drained. Many such grasslands are 'semi-natural', i.e. species rich with a high diversity of plant species. The inclusion of plants such as knapweed, bird's foot trefoil, ox-eye daisy and a range of grasses give the effect of a hay meadow and in some cases rare plants such as orchids are found. These diverse flower-rich grasslands provide in turn a good food source for a variety of invertebrates such as bees, butterflies, hoverflies and moths.

The grassland habitats found in burial grounds and churchyards are some of the most important habitats for the specialised waxcap fungal communities. To date over 200 of these sites have been surveyed in Carmarthenshire and over 80% support at least one species of waxcap. All these sites are very small units of unimproved grassland inter-dispersed between the religious memorials and are of major significance with regard to the number of waxcap fungi these areas can support. These sites include St Anne's Church, Cwmffrwd (14 waxcap species), Pïsgah Chapel, Bancffosfelen (12 species), Eglwys yr Efenglwys, Penygroes (9 species) and the Chapel at Rhos (12 species).

Verges. Within Carmarthenshire there are more than 6000 kilometres of road verges. Whilst the Highway Authorities have a statutory duty to maintain the highway in a safe condition for all road users, the importance of the road verge estate for nature conservation is widely acknowledged. This importance comes about in four ways:

- Verges often represent remnants of semi-natural

Associated priority species

(NB this may not be an exhaustive list):

Birds

Skylark
Tree pipit
Common linnet
Yellowhammer
Common grasshopper warbler
Wood lark
Tree Sparrow
Eurasian curlew
Grey partridge
Common starling
Northern lapwing
European nightjar
Common cuckoo
Common grasshopper warbler
Kestrel
Barn owl

Mammals

Brown hare
Bat spp.

Invertebrates - Marsh Fritillary

Small Pearl-bordered Fritillary
Grizzled Skipper
Grayling

Herpetiles - Slow worm

Common lizard
Grass snake
Adder

Plants/lower plants

Euphrasia rostkoviana montana
Tubular Water dropwort
Lesser Butterfly Orchid
Three-lobed water crowfoot
Globeflower
Wood bitter vetch
Portuguese pocket moss
Toninia sedifolia (a lichen)
Microglossum olivaceum (fungus)
Spreading leaved beardless moss

Invertebrates - Hornet Robber Fly

Brown-banded carder bee
(moths)
the Forester
Dark Brocade
the Crescent
Grey Mountain Carpet
Galium Carpet
Narrow-bordered Bee Hawk-moth
Ghost Moth

habitats that have become increasingly rare within agricultural landscapes.

- They provide wildlife corridors and contribute to the overall network of habitats across the county.
- They provide shelter and a source of food for wildlife.
- They are often occur in conjunction with other habitats important for biodiversity such as ancient and/or species-rich hedgerows and ditches.

The vegetation communities of verges can vary considerably. Many verges, especially those in the rural areas, are typically species-rich and support a natural assemblage of plants. Verges associated with more recently constructed roads may have a modified flora, characterised either by design through seed mixtures and planting schemes, or incidentally by changes in soil structure and chemistry. The management practices adopted by the Highways Authorities can also have a bearing on species composition, and in many cases this has been beneficial. Along some stretches, invasive exotic plants such as Japanese knotweed and Himalayan Balsam now dominate, and to prevent further spread intensive management is often necessary in these problem areas.

Species-rich verges can be an attractive feature of the landscape. Swathes of ox-eye daisies on some of the trunk roads, and banks of bluebells, buttercups and orchids along country lanes, all add to the beauty and quality of the countryside. Such qualities are important to the image of Carmarthenshire and demonstrate that sensitively managed verges can play an important role in attracting tourism to the county.

Ffridd habitat is included in the Uplands habitats description but as it spans the boundary between lowland and upland should be mentioned here as well. Ffridd refers to the vegetation of the, often uncultivated, valley sides; the middle slopes between the upland farms, extensive conifer plantations or unenclosed common land and the valley bottoms. The ffridd is a complex mosaic of heath, bracken, woodland, acid grassland, old workings and wet flushes. These habitats are traditionally grazed by sheep or cattle. Lowland grassland and heath can be found in this zone found in this zone. These valuable areas are threatened by changing agriculture and potentially inappropriate tree planting.

Intensification of agriculture, lack of management, loss to development and loss of heathland to afforestation have all caused a decline in these

Oblique Carpet
Grass Rivulet
Heath Rustic
The Streak
Neglected Rustic
Broom moth

Lowland heathland



Lowland meadow



Churchyard



Verge



habitats, which are part of Carmarthenshire's diverse landscape. All of these habitats host rare and uncommon species that make up a rich species diversity. The remaining habitat contributes to vital wildlife corridors within a wider improved agricultural landscape.

Where to see these habitats in Carmarthenshire

Grasslands: Meadows at Carmel Woods NNR, Caeau Blaen Dyffryn (Plantlife Reserve near Lampeter), Caeau Ffos Fach (Butterfly Conservation Reserve Cross Hands), National Botanic Garden Wales

Heathlands: Llyn Llech Owain Country Park, Mynydd Llangyndeyrn, Mynyddygarreg

Vision statement and objectives

- ▶ The overall vision is to maintain, restore and extend these habitats in the county and the **priority** species associated with them. This is especially important within the context of habitat connectivity within the Carmarthenshire landscape. Any action would seek to meet one or more of the following objectives:
- ▶ To positively manage these grassland and heathland habitats in Carmarthenshire and connect and expand where possible
- ▶ To maintain and expand the range and/or population of species associated with these habitat types
- ▶ To identify and record priority areas of grassland and heathland habitats and associated BAP species within Carmarthenshire outside SSSIs
- ▶ To raise awareness of grassland and heathland habitats and the benefits they bring us

Useful links:

www.wildlifetrusts.org/wildlife/habitats/grassland

www.wildlifetrusts.org/wildlife/habitats/heathland

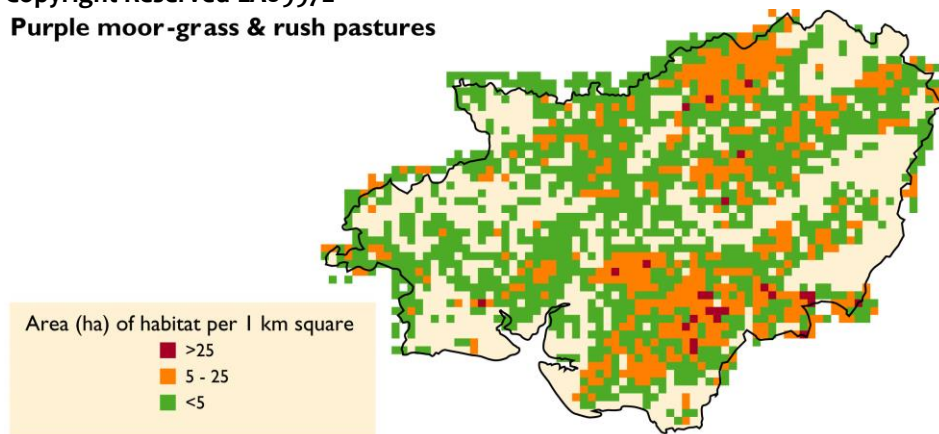
<http://jncc.defra.gov.uk/page-1431>

<https://www.biodiversitywales.org.uk/Lowland-Grassland-Heathland>

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.

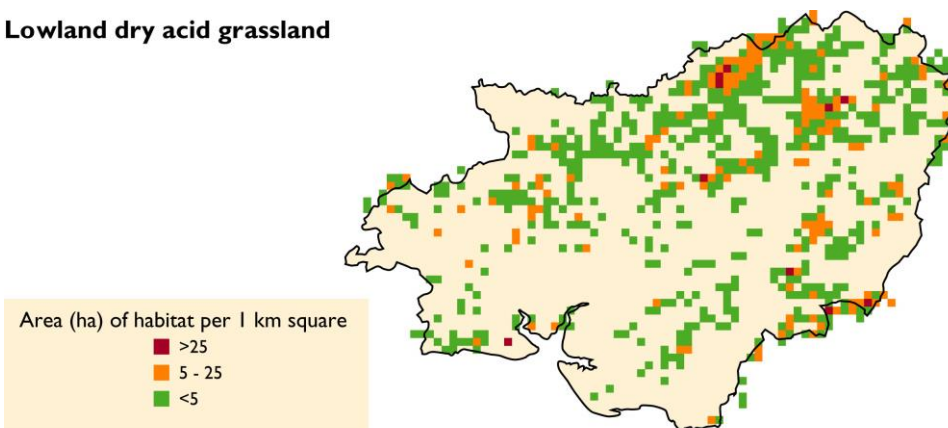
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Purple moor-grass & rush pastures



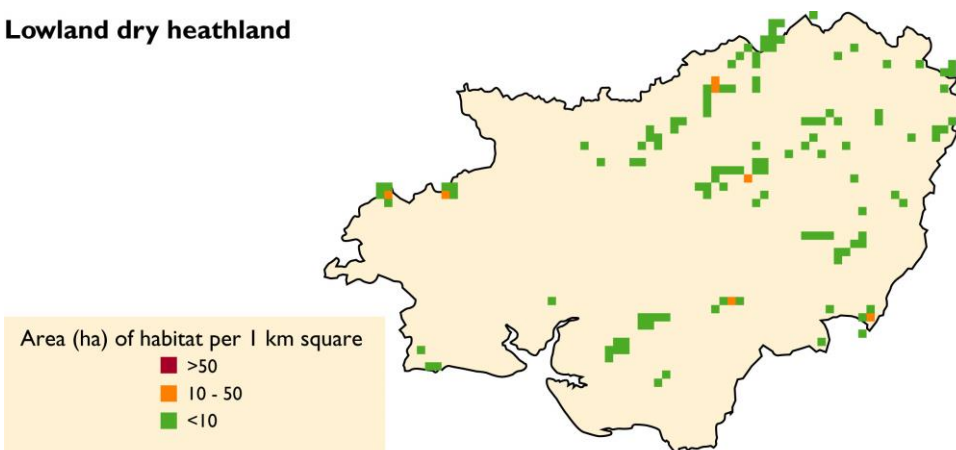
Distribution of 1 km squares with lowland purple moor-grass & rush pastures within Carmarthenshire. Data are summarised from the NCC/CCW Lowland Habitat Survey of Wales (1987-1997) and comprise lowland marshy grassland and half the cover of lowland wet grass/heath mosaic.

Lowland dry acid grassland



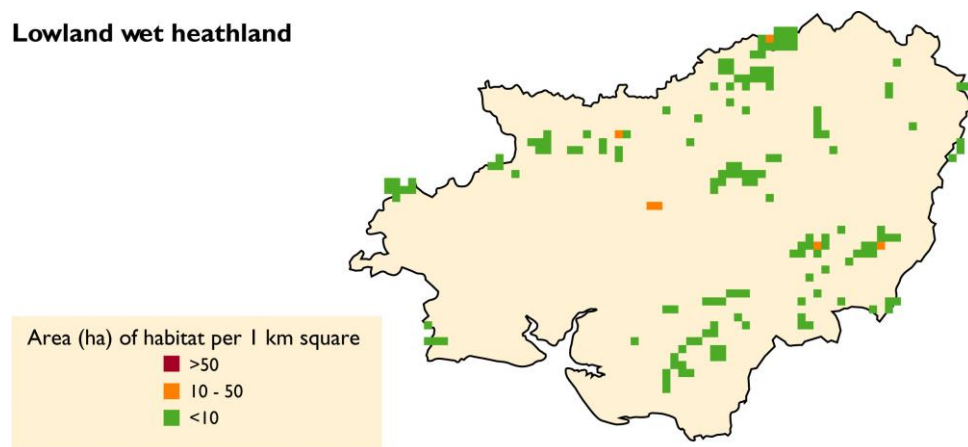
Distribution of 1 km squares with lowland dry acid grassland within Carmarthenshire. Data are summarised from the NCC/CCW Lowland Habitat Survey of Wales (1987-1997) and comprise unimproved and semi-improved lowland acid grassland and half the cover of lowland acid grass/heath mosaic.

Lowland dry heathland



Distribution of 1 km squares with lowland dry heathland within Carmarthenshire. Data comprise acid and basic 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 1987 and 1997.

Lowland wet heathland



Distribution of 1 km squares with lowland 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 1987 and 1997