# **Carmarthenshire Nature Recovery Plan**

Woodland habitats include upland oak woodland, upland mixed ash woodland, lowland mixed deciduous woodland, wet woodland and wood pasture and parkland (including veteran trees).

Upland mixed ashwoods have ash as the major canopy species, although oak, birch, elm, small-leaved lime and yew may be locally abundant. The ground flora often includes bluebells, dog's mercury, primrose and wild garlic. The understorey usually contains hazel and various other shrubs. Upland mixed ashwoods can support a rich variety of invertebrates and specialised lichens. The best examples of this habitat tend to occur on limestone (base-rich soils), but fragments of these woodlands can develop on more acidic poorly drained soils where there is localised flushing of nutrients.

Despite the name, upland mixed ashwoods can occur at lower altitudes. The term upland merely reflects the prevalence of this woodland type on base-rich soils in upland Britain.

It is estimated that the Carmarthenshire contains roughly 10% of upland mixed ashwood in Wales. Although dispersed throughout Carmarthenshire, the most important concentrations lie on the narrow strip of carboniferous limestone in the south of the county, on the fringes of the South Wales Coalfield. Particularly good examples are located in the Crwbin, Drefach, Llandybie and Carmel areas. At Carmel National Nature Reserve rare plants such as herb paris and truly wild lily-of-the-valley occur. Small caves in the limestone are used by bats, including the rare greater horseshoe bat, with the mix of old pastures and woodlands at Carmel providing ideal insect-rich feeding habitat.

In 2012 the ash disease *Chalara faxinea* was found on recently planted ash trees near Carmarthen. This fungal disease has now spread widely and will eventually likely infect many of our ash trees.

**Upland oakwoods** occur mainly in the north of the county. They are not strictly confined to upland settings, the name reflecting the abundance of this woodland type in the more upland parts of the country. It is the most common woodland type in Wales.

Upland oakwoods are usually dominated by oak, usually sessile oak but sometimes pedunculate oak, or a hybrid of the two, with downy birch and varying amounts of ash and sycamore. Where an understorey exists this is usually a mix of hazel, holly and rowan. The ground flora varies with the underlying soils and amount of grazing, from

### Woodlands

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## Natural benefits of woodland 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:

- Timber for building and wood for charcoal and firewood.
- Woodlands stabilise soils and accumulate carbon.
- Woodlands cool us down and provide us with oxygen.
- Woodlands provide place for quiet contemplation or mountain biking mania!

Why are woodland habitats changing (from the State of Nature report

www.rspb.org.uk/stateofnature)?

- Reduction/cessation of woodland management.
- Invasive species.
- Overgrazing.
- Loss of veteran trees and deadwood.
- Disease.
- Air pollution.
- Climate change.

bluebell, bramble and ferns on richer soils, to grassy swards where grazing is more intense. Heather, bilberry and mosses dominate on more acidic soils.

The most oceanic of these woodlands (and these include some of the Carmarthenshire upland oak woods) are particularly rich in mosses, liverworts and lichens. They also have a distinctive range of breeding birds with redstarts, pied flycatchers and wood warblers.

Carmarthenshire has the second largest area of this habitat in Wales after Powys. Most sites tend to be on the higher land in the north of the county. Particularly good examples can be found to the north of Rhandirmwyn where woods here provided the last nesting habitat for the red kite when its numbers dropped perilously.

The demand for smelting charcoal and bark for tanning meant that many of these woods were intensively managed until the late 1800s. Many were felled in the two World Wars. Today, the trees in many oakwoods are nearly the same age throughout the wood – dating from the time when the wood was 'clear felled', then allowed to regrow without management.

Wet woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak and beech on the drier riparian areas. Wet woodland occurs in a variety of settings: as a successional habitat on fens and bogs and around waterbodies; along streams and hillside flushes; and in floodplains. Floodplain woodland in particular is now highly fragmented through past clearance for agriculture. A long history of coppice management appears to have maintained some alderdominated woods. Other wet woodlands have developed through natural succession on open wetlands where active management such as grazing has been abandoned.

The high humidity of some wet woodlands and the presence of saturated ground with quantities of dead wood often favours the development of rich bryophyte (mosses and liverworts) and invertebrate communities. Wet woodland can also provide cover and breeding sites for otters.

Scattered areas of wet woodland are found in the county, typically dominated by alder and various willows. Previous surveys suggest that much of this occurs as small linear stands along stream sides, often within larger blocks of drier woodland. Extensive areas of wet woodland are rare and floodplain woodland is very fragmented. It is likely that much of the wet woodland in Carmarthenshire is relatively recent.

Associated priority species (NB this may not an exhaustive list!):

#### **Birds**

Tree pipit European nightjar Lesser redpoll

Hawfinch

Lesser spotted woodpecker

Spotted flycatcher

Dunnock

Willow tit

Marsh tit

Common bullfinch

Common starling

Song thrush

Wood warbler

Pied Flycatcher

#### **Mammals**

Polecat

Brown hare

Red Squirrel

Pine Marten

Bat spp.

Dormouse

#### **Invertebrates**

White Letter Hairstreak Brown Hairstreak Butterflies Flounced Chestnut (moth)

The Sprawler (moth)

Centre-barred Sallow (moth)

Minor Shoulder-knot (moth)

September Thorn (moth)

Brindled Beauty moth

The Sallow (moth)

Pretty Chalk Carpet

#### **Amphibians**

Common toad

#### Plants/Lower plants/Lichens/Fungi

Bird's Nest

Bastard balm

Lesser squirrel-tail moss

Scarce turf-moss

Buellia hyperbolica (lichen)

Caloplaca herbidella (lichen)

Lecanora sublivescens (lichen)

Usnea florida (lichen)

Fragile Amanita (fungus)

Phellodon tomentosus (fungus)

Phylloporus pelletieri (fungus)

Stricta canariensis (lichen)

On riverbanks wet woodlands are a retreat for otters and feeding flocks of redpolls and siskins. Rotten trees are used by the scarce lesser spotted woodpecker and their nest holes are subsequently used by other birds and bats. More extensive areas are found on hillside flushes or on ungrazed wet dunelands; indeed, the young wet woodlands on the dune system between Pendine and Laugharne may be of national significance, as wooded sand dunes are rare in Western Europe.

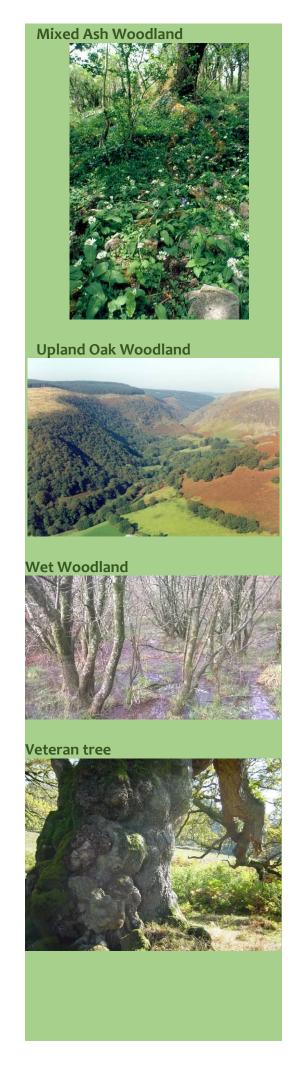
Wood-pastures and parklands are the products of historic land management systems, and represent a vegetation structure rather than a particular plant community. Typically they consist of large, open-grown trees – many of which are of veteran age – over a grassland habitat often grazed by cattle, deer or, sometimes, sheep. Veteran trees are therefore included within in this plan. These are trees that are of interest biologically, culturally or aesthetically because of their age, size or condition. They are normally over 250 years old with a girth at breast height of over 3 metres. However, other factors must be considered such as the location and past management of the tree. Veteran trees are often of high ecological importance.

The range of invertebrates associated with decaying timber can be very diverse and often of exceptional value for conservation. The long-term continuity of 'dead wood' niches in lowland wood-pastures and parklands has resulted in significant numbers of localised or rare invertebrates being dependent upon such habitats. The lichen assemblage can also be of importance, particularly where sites are free from atmospheric pollution. Furthermore, wood-pastures and parklands are often highly valued for their historic, cultural and landscape interests.

The county has limited areas of wood pasture and parkland. Dinefwr Park with its veteran oaks in the Tywi Valley is the most significant and well known, but there are others at Gelli Aur, the Middleton Estate at the NBGW and Dan y Parc near Cynghordy. These havens for veteran trees are crucial for the rare invertebrates and lichens that only live on these aged trees. At Dinefwr, some particularly rare beetles and the pollution-intolerant lichen, lungwort, are found. Old timber, whether standing or fallen is of vital importance for wildlife.

Single and small aggregations of veteran trees are also considered to be of local significance.

**Lowland mixed deciduous woodland** is usually dominated by pedunculate oak or ash. In these woods you may come across trees not often found in the



uplands – wild cherry, sweet chestnut, small-leaved lime and field maple. The more acid soils often have a less varied flora – bluebell, wood anemone, honeysuckle, bramble and bracken are the commonest species. Dog's mercury is a characteristic plant on lime-rich soils, along with enchanter's nightshade, wood avens and arum lily.

Following centuries of management for timber, coppice products, and firewood many of these woods are now neglected. They have the potential to supply high-value timber – from oak, ash and cherry which are native to these woods – and from introduced sycamore, sweet chestnut and beech which now regenerate naturally. The area of this priority type on ancient woodland sites has declined in area by clearance, overgrazing and replanting with non-native species over the last 50 years. Where an understorey, such as hazel exists in these woods it is an important element that contributes to the habitat's structure as well as its diversity.

Carmarthenshire has a good proportion of this habitat in Wales. An excellent example is Castle Woods in Llandeilo. Here you can find a good range of breeding birds including great spotted, lesser spotted and green woodpecker, treecreeper, nuthatch, redstart, pied and spotted flycatcher. Resident birds of prey include sparrow hawk, buzzard and tawny owl.

Where to see these habitats in Carmarthenshire: Ash woodland: Carmel National Nature Reserve.

Oak woodland: Dinas Nature Reserve, Allt Rhyd y Groes NNR in the upper Tywi Valley.

Wood-pastures and parklands/veteran trees: Dinefwr Park, Llandeilo.

Lowland mixed deciduous woodland: Castle Woods in Llandeilo, Tregib Woods, Llandeilo, Green Castle Woods, Carmarthen.

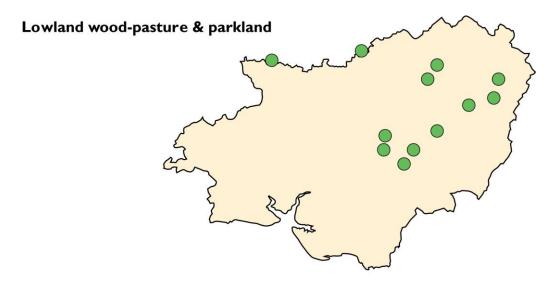
#### Vision statement and objectives

- ► The overall vision 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 connectivit within the Carmarthenshire landscape. Any action would seek to meet one or more of the following objectives:
- ➤ To positively manage these woodland habitats/veteran trees in Carmarthenshire and connect and expand where possible
- To maintain and expand the range and/or population of species associated with these habitat type.
- ➤ To identify and record priority areas of woodland habitats/veteran trees within Carmarthenshire outside SSSIs
- To raise awareness of woodland habitats/veteran trees and the benefits they bring us

#### **Useful links**

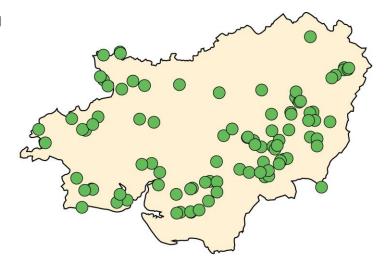
www.coedcymru.org.uk/ http://jncc.defra.gov.uk/page-1437 www.wildlifetrusts.org/wildlife/habitats/woodland https://www.biodiversitywales.org.uk/Woodlands Maps used with permission of Countryside Council for Wales 2004. Extracted from *Priority Habitats of Wales: a technical guide*, edited by P. S. Jones, D. P. Stevens, T. H. Blackstock, C. R. Burrows and E. A. Howe., 2003.

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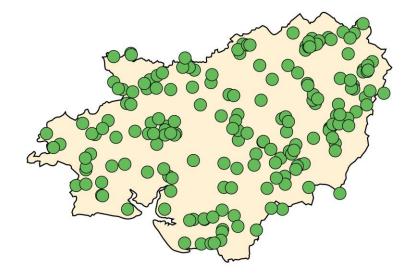
Distribution of records for lowland wood-pasture & parkland within Carmarthenshire. Data are summarised from the provisional inventory of Bray (1994) and probably include a number of sites outwith the Habitat Action Plan definition.

#### Upland mixed ashwood



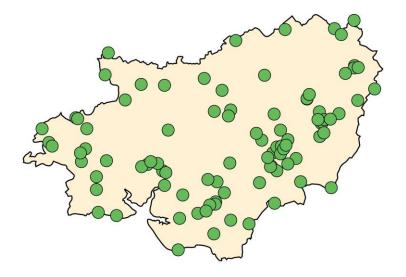
Distribution of records for upland mixed ashwood within Carmarthenshire. Data are summarised from Phase II surveys of Welsh woodlands.

#### **Upland** oakwood



Distribution of records for upland oakwood within Carmarthenshire. Data are summarised from Phase II surveys of Welsh woodlands.

#### Wet woodland



Distribution of records for wet woodland within Carmarthenshire. Data are summarised from Phase II surveys of Welsh woodlands.

