SEMI-NATURAL WOODLAND

The type of woodland in any location depends on the geology, soil type, hydrology, climate and altitude of the site. Local conditions can be such that a woodland can have more than one of these types, and new planting should also reflect this.

UK Priority Habitats covered by this statement:

Upland oakwood Upland mixed ashwoods Wet woodland Lowland beech and yew woodland Lowland mixed deciduous woodland

Cumbria Biodiversity Action Plan habitats covered by this statement:

Upland oak woodland Upland mixed ashwood Wet woodland



Borrowdale woods © John Hooson

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Description

Semi-natural woods are composed of locally native trees and shrubs which generally derive from natural regeneration or coppicing; some high value woods were planted in the 18th century on ancient sites. Ancient semi-natural woodlands (woodland composed of native species which has been in existence since before 1600AD) are of special value because of their long, continuous history. They are the nearest we have to our original natural woodland and may include remnants of the post-glacial forest which have never been cleared. They are irreplaceable assets which support many rare plants and animals and make a vital contribution to conserving biodiversity.

Woodland types are defined by their tree species, shrubs and ground flora. The type of woodland that develops in any location depends on the soil, geology, hydrology, climate and altitude. Any woodland area can support more than one woodland type if the geology and conditions are variable.

Cumbria is particularly important for upland oakwoods found on steep valley sides with thin soils over acid rock. Characteristic species are Sessile Oak, Downy Birch and Rowan, Bilberry and Wavy Hairgrass, and a rich variety of mosses, liverworts and ferns.

Where limestone occurs, upland mixed ashwoods are also particularly notable in Cumbria, with Ash and Hazel and a ground flora of Dog's Mercury. Wild Garlic, Primrose and Herb Robert.

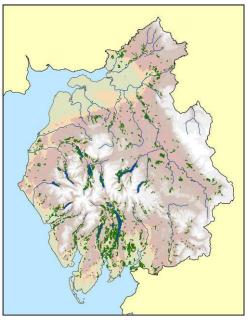
In the lowlands, where soils are deeper, a mixed deciduous woodland may be found, with Oak (Pedunculate and/or Sessile), Ash, Birch (mainly Silver), Hazel, and Hawthorn, with a ground flora of Bramble, Bracken and Bluebells.

In wetter areas, wet woodland with Alder, willows and Downy Birch is found. These woods and their ground flora can vary immensely depending on the situation of the wood. Wet woods are found around waterbodies and in wet hollows, on floodplains, on the edges of raised bogs and fens, and on wet hillsides with seepages and springs. Reeds, rushes, sedges, Meadowsweet, nettles and bogmosses can occur.

Woodland supports a wide range of birds, mammals and invertebrates, including Wood Warbler, Pied Flycatcher, Spotted Flycatcher, woodpeckers, Buzzard, Marsh Tit, bats, Dormouse, Netted Carpet Moth, Pill Woodlouse and Oak Bush-cricket. Many rare and uncommon plants can also be present, including Touch-me-not Balsam, Angular Solomon's-seal, Mezereon and a range of rare mosses, liverworts and lichens.

Distribution and Extent

There are nearly 20,000ha of semi-natural broadleaved woodland in Cumbria with the highest densities in the south and west of the county. Of the 15,000 plus hectares of ancient woodland in the county some 62% is within the Lake District National Park. Particularly good examples of upland oakwood can be found in the Duddon and Borrowdale valleys, whilst large areas of ashwood are to be found on the limestone hills around Morecambe Bay. Good examples of wet woodland can be found along the Rivers Irthing and Lyne and fringing many lakes.



Distribution of semi-natural woodland in Cumbria (provided for illustrative purposes only)

Conservation Issues

Inappropriate management (including under management or a lack of management, as well as management when non-intervention is more appropriate) limits the conservation value of woodlands. Examples include removal of large old trees, removal of dead wood, abandonment of coppicing in traditionally coppiced woods, introduction of woodland management in woods which have historically been unmanaged and excessive disruption through large scale harvesting and other insensitive changes in management regime.

Grazing by deer and domestic livestock commonly occurs, particularly in the uplands. It can change groundflora species composition, promoting grasses over other groundflora species, including mosses and liverworts, and can reduce or prevent natural regeneration of trees and shrubs.

The replacement of native tree species with non-native ones, particularly conifers, beech (not native to northern England) and sycamore, has commonly occurred over the past century, either

when replanting after clear felling, or through under-planting. This is detrimental as non-native tree species support fewer animal species and can cast intense shade which limits groundflora growth. The introduction of non-native shrub species such as rhododendron and snowberry also has an adverse impact on the biodiversity of woodlands, often smothering out the groundflora completely. Recreational activities such as motorcycle scrambling, off-road vehicle courses and mountain bike racing can damage woodland groundflora and disturb breeding birds.

Planning Considerations

- Any development that may impact upon woodland habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.
- Development can lead to direct loss of habitat area and habitat fragmentation which can seriously affect woodland species which require large areas of woodland for their survival.
- Small woodlands can form important links through the landscape for migration, dispersal and genetic exchange. This is recognised by the Habitats Directive & Habitats Regulations.
- The ecological interest of woodland can be lost or seriously compromised not just by direct landtake, but also by disturbance of the groundflora from recreational activities, compaction of soils around the edge of the woodland or the storage of materials and machinery in the wood during construction on adjacent land.
- Conversion of woodland to wooded garden is also a problem, as whilst tree cover may be maintained the groundflora and even shrub layer may be removed, such that the site is no longer a functional woodland.
- Noise disturbance from new roads/ industrial sites can adversely impact on breeding birds.
- Cumbria supports woodland that is of national and international importance with some of the best examples of the resource designated as Special Areas of Conservation (SACs) and Sites of Special Scientific interest (SSSIs).
- Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.
- Due to the extent of woodland within the county a very large proportion of this habitat lies outside the SSSI system. Most ancient woodlands are likely to qualify as Cumbria Local Wildlife Sites, as will other woodlands with good structure and species composition.

Enhancement Opportunities

- Creation of new native woodland adjacent to existing ancient woodland or connecting two or more areas of woodland.
- Fencing of woodlands grazed by livestock.
- Replacement of non-native canopy species with native woodland species, particularly on Plantations on Ancient Woodland Sites (PAWS).

Key Species

The following Key Species could benefit from enhancement of this habitat, or be negatively impacted upon by inappropriate developments on or near this habitat:

a lichen Lobaria amplissima Oak Hook-tip Moth Badger a lichen Usnea florida Willow Tit Caterpillar-hunter Yellow Bird's-nest Red Wood Ant Wood Warbler High Brown Fritillary Scarce Yellow Splinter Dormouse Pearl-bordered Fritillary **Black Grouse** Red Squirrel White-letter Hairstreak Lesser Redpoll Natterer's Bat **Duke of Burgundy** Lesser Spotted Woodpecker Noctule bat

Netted Carpet Moth Marsh Tit Brown Long-eared Bat

Further Information

Countryside Stewardship Scheme

Planning and Development: Protected Sites and Species

JNCC: Habitat Protection, Designation and Advice

Forestry Commission woodland management guides

English Woodland Grant Scheme

Flora Locale

Buglife-Habitat management for Invertebrates

Contacts

- Natural England Cumbria Team 0300 060 3900 Email: cumbria@naturalengland.org.uk
- Cumbria Wildlife Trust, 01539 816300 Email: mail@cumbriawildlifetrust.org.uk
- Forestry Commission, 0300 067 4190. Email: nwwm@forestry.gsi.gov.uk

Current Action in Cumbria

- The Countryside Stewardship Scheme run by Natural England provides financial incentives to manage land in a way that is sympathetic to its nature conservation interest with specific woodland options.
- The Forestry Commission offer a range of woodland management and new woodland grants.