

Habitat Action Plan: Upland Oak Woodland

Current status and Importance

- The upland oak woodlands within the UK are found in the wettest areas in the north and west of Britain and were once part of a much more extensive temperate rain forest, characteristic of the western seaboard of Europe.
- Upland semi-natural woods have declined by about 30-40% in area over the last 60 years as a result of replanting, mainly with introduced conifers from other developments and from conversion to rough grazing.



- Like many woodlands within the UK, upland oak woodlands have probably become more uniform in their structure due to inappropriate management.
- Recent changes to forest management practices have greatly reduced the amount of inappropriate planting in the woods. However, the timescales involved mean that these changes will take time to show their benefits.
- Within Kirklees, the lichen and epiphytic communities have been much impoverished from acid and particulate deposition from air pollution although this trend appears to have now reversed.
- Some of the upland oak woodland sites within Kirklees are protected from development by designation as Local Sites (Sites of Scientific Interest or Sites of Wildlife Significance).
 These tend to be ancient woodland sites.

Species use

- Upland oak woods are characterised by a predominance of oak, most commonly sessile oak (*Quercus petraea*) and birch (*Betula pendula*), with rowan (*Sorbus acuparia*) and varying amounts of holly (*Ilex aquifolium*), and hazel (*Corylus avellana*) as the main understorey species.
- The range of plants found in the ground layer, varies from bluebell-bramble-fern communities through grass and bracken (*Pteridium aquilinum*) dominated ones to more heath type vegetation such as heather (*Calluna vulgaris*) and bilberry (*Vaccinium myrtillus*), or even moss-dominated areas. Often there are areas of more alkaline soils, usually along streams or towards the base of slopes, where much richer communities occur (see section on mixed ash woods).
- Small alder stands may also occur or peaty hollows covered by bog mosses (*Sphagnum species* see Wet Woodland Habitat Action Plan).
- The ferns, mosses, lichens and liverworts found in the most oceanic of these woods are
 particularly rich and the woods have a distinctive breeding bird assemblage, with
 redstarts *Phoenicurus phoenicurus*, wood warblers *Phylloscopus sibilatrix*, and pied
 flycatcher *Ficedula hypoleuca* being associated with them throughout much of their
 range.

• The invertebrate communities are not particularly well studied compared to those in some other woodland types but support a range of notable species. There are data for some sites within Kirklees.

Conservation Issues

- Over-grazing, particularly by sheep.
- Invasion by sycamore, beech and other species which are not native to these woods in most of Britain.
- Invasion by species such as rhododendron (*Rhododendron*), which shades out the ground layers and eliminates much of the conservation interest.
- Development pressures such as quarrying.
- Effects of air pollution, especially on lichen and bryophyte communities.
- Climate change, potentially resulting in changes in the vegetation communities.
- Removal of dead trees, as a public safety measure (properly managed, these represent a beneficial habitat feature).
- Unsympathetic forest management where choice of broadleaf species planted, or methods of working do not yet reflect published guidelines. This is more likely to be a problem outside Forestry Commission administered Woodland Grant Schemes.

Objectives

- Protect existing upland oak woodland from development and inappropriate use or management to prevent habitat deterioration. Maintain policies to prevent habitat loss.
- Manage existing areas of upland oak woodland to create greater structural and species diversity to maximise their value for important species' populations.
- Restore areas of upland oak woodland within a forest habitat network which includes acid grassland, scrub and heath where appropriate to soils, climate and existing species' communities*.
- Reduce fragmentation of the habitat, especially considering the role of woodlands as part of an altitudinal ecological network which stretches from the lowlands to the uplands.
- Monitor the extent and quality of the habitat to gain a more accurate assessment of its status in the district.
- Exploit the role of upland oak woodland as a carbon sink as part of a shift towards a low carbon economy and, also, its role in water resource management.

*Species especially vulnerable to inappropriate development of upland oak woodland are twite (*Carduelis flavirostris*), ring ouzel (*Turdus torquatus*), water vole (*Arvicola terrestris*), common lizard (*Lacerta vivipara*) and green hairstreak butterfly (*Callophrys rubi*).

An especially vulnerable habitat is upland flushes.

Target areas for habitat management and creation

- The habitat is primarily found within the Valley Slopes zone at higher elevations and occasionally extending into the Upland protected area. This network is particularly important for climate change adaptation and helping wildlife adapt to its impacts.
- For further information, please see the Biodiversity Opportunity Zones Map at www.kirklees.gov.uk/biodiversity

NB Natural England must be consulted on any proposal within nationally and internationally designated sites.

Targets

• To be decided.

Key Links and Organisations

- Site protection: Kirklees Council, Peak District National Park Authority, Forestry Commission, Natural England.
- Management and restoration through Woodland Grant Scheme: Forestry Commission.
- Management and restoration of upland oak woodland in Kirklees: White Rose Forest, Colne Valley Tree Society, The National Trust, Yorkshire Water.
- Survey: Kirklees Wildlife and Landscape Advisory Forum, West Yorkshire Ecology.

See Also

- UKBAP: Upland Oak Woodland
- UK BAP Upland Mixed Ashwoods Habitat Action plan
- UKBAP: Lowland Deciduous Woodland
- UKBAP: Wet Woodland
- UKBAP: Upland heathland
- Forestry Commission
- Kirklees Species Action Plan: Twite
- Kirklees Water Vole Species Action Plan
- Guidance for the management of Woodlands: Kirklees Council Environment Unit. (the above three all available at www.kirklees.gov.uk/biodiversity)