

## 2.5 Upland Oak and Wet Woodland

### 2.5.1 Habitat Description

Native upland oak and wet woodland are priority UK Biodiversity Action Plan habitats and habitats listed on the Annex 1 of the EU Habitats Directive. In addition to being important habitats in their own right, they tend to have high biodiversity and are preferential habitats of a number of priority species for nature conservation (e.g. wood warbler, willow tit) and the Biosphere High Focus species red squirrel.

Upland Oak woodlands are found on acidic, usually shallow soil, with a predominance of sessile oak, along with birch, holly, rowan and hazel as the predominant understorey species. They occur in the wetter western and northern areas of the UK. Within the Biosphere there are few large upland oak and wet woods, with those that exist generally found on steep slopes or poor soils in valleys such as along the Cree and Fleet. The best examples are the Buchan and Glenhead Woods (SAC/SSSI) in Glentroot and the Penwhapple Burn, the Fleet woodlands at Castramont and Killiegowan and the Martnaham Loch Woods in Ayrshire (Map 5).

Wet woodland is found by watercourses and lochs on floodplains and contains willows (usually then referred to as carr), birches and alder. Scotland has about half of the wet woodland in the UK and whilst most of this is in the Highlands, Dumfries and Galloway is the second most important area in Scotland. Native wet woods are widespread across the region but are fragmented and generally less than 2ha in size. Examples within the Biosphere include Wood of Cree (SSSI), Dowalton Loch (SSSI), Belston Loch, Tranew Flushes and Kerse Loch (Map 5).

The condition of native woodlands in the Biosphere is only known for woodlands found within the Wood of Cree SSSI and Glentroot Oakwoods SSSI (part of Galloway Oakwoods SAC) where it is in good condition.

### 2.5.2 Conservation Objectives

The main conservation objectives for native upland and wet woodland are:

- Maintain existing areas of native woodland
- Increase the extent of upland oak and wet woodland
- Improve woodland structure and age diversity
- Create links between isolated fragments (without compromising open habitats)
- Re-establish native woodland on sites where they have historically occurred
- Creation and enhancement of woodland along riparian corridors, in areas of dense bracken and on steep slopes. Planting in these areas may also meet wider catchment management objectives eg. flood alleviation

## 2.5.3 Management

The main management tools for native woodland are:

- Planting
- Semi-natural habitat management (managing grazing/browsing)
- Control of invasive, non-native species such as *Rhododendron ponticum*

### 2.5.3.1 New native woodland planting

#### **Suggested Actions:**

- Establishment of new native woodlands should not be carried out in locations where it would compromise priority open ground habitats.
- Mixtures of appropriate species native to the region should be used as opposed to single species, where possible using stock of local provenance.
- Trees should be planted in groups 10-30m across rather than in lines, to create a more natural effect. The spacing also allows for future natural regeneration and should be highlighted in any woodland scheme grant application.
- Shrub (understorey) species should be planted alongside the trees.
- Approximately 20% of the ground should be left unplanted and linked to the surrounding open habitats.
- Trees should be protected against damage by herbivores by appropriate fencing, tree guards or shelters, or densities of grazing animals should be kept low.
- Depending on circumstances weeding or thinning might be required.

### 2.5.3.2 Management of established semi-natural/native woodland

#### **Suggested Actions:**

- Key biodiversity features should be identified and safeguarded during the management operations.
- Management should focus on reducing any immediate threats to key biodiversity (e.g. reducing excessive shade).
- In even aged stands opportunities should be sought to diversify the woodland structure.
- Planting and/or control of grazing by herbivores will be required in woodlands where natural regeneration is slow or absent.
- When restocking by under planting, local provenance should be used, to retain the local genetic variety and reduce biosecurity risks.
- Stocking rates should reflect site conditions, history of the site and woodland objectives. Recommended planting density to regenerate a native tree canopy is 500 – 1000 trees/ha. SRDP Forestry Grant Scheme 2014-20 provides options ranging from 500 to 1600 tree/ha for native woodland.

- Open space areas should be incorporated in woodland management as the highest biodiversity is at the woodland edge/open habitat interface.
- Invasive and non-native species should be removed as appropriate, preferably in collaboration with other woodland owners at a landscape scale (in some cases it may be preferable to retain non-native species such as sycamore).
- Fencing should be used to protect sensitive areas of planting in the absence of other means of herbivore control.

### 2.5.4 Example Projects

- Various Forestry Commission Scotland (FCS) objectives including: barn owl and kestrel nest boxes and monitoring, Aspen FCS project collecting, propagating and planting of up to 75,000 Galloway aspen per year and monitoring of woodland fringe by FCS and Cree Valley Community Woodland Trust (see Section 4.8.6).
- Between 2009 and 2012 the Cree Valley Community Woodlands Trust (CVCWT) carried out broadleaved woodland planting (approximately 120ha) on previously afforested ground in riparian corridors in the Upper Cree catchment (Loch Stroan area).
- Expansion of woodland fringe and native woodlands is incorporated in the restock proposals of the FCS Forest Design Plans, D&G Woodland Plan, Ayrshire & Arran Forestry & Woodland Strategy.
- RSPB have planted native woodlands on Barclye to extend their Wood of Cree reserve.
- Nightjar monitoring by RSPB and FCS, red kite monitoring by RSPB.
- CVCWT and RSPB Scotland woodland management and monitoring, nest box monitoring, volunteer survey, monitoring of planted trees and regeneration, monitoring of non-native species.
- Research study undertaken by the British Trust for Ornithology on moorland fringe proposals (see SNH research report number 456 (<http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=2129>)).

### 2.5.5 Considerations

- Land-Use conflicts, for example between native woodland expansion and commercial forestry or grazing land.
- Need to take into consideration implication for associated wildlife. For example, significant reduction in conifer plantations where red squirrel exist could reduce red squirrel population in these areas thus compromising population viability.

- Cost of invasive species removal, e.g. Rhododendron
- Emerging tree species pests and diseases when establishing new native woodlands.

## 2.5.6 Opportunities

- Current Scottish Government target to plant 10,000ha of woodland in Scotland per annum (100,000ha between 2012 and 2022).
- Availability of funding for woodland planting and management through Forestry Grant Schemes
- Establishment of native woodlands, to link existing woodland, along river valley networks, but not to the detriment of priority open habitats such as bogs. For example, along the Cree Valley, at Changue plantation in the north-west part of the Biosphere; along the area of Carsphairn Lane to the north of Carsphairn; and the area adjacent to the Black Water of Dee.
- Collaboration on native woodland network expansion with the Central Scotland Green Networks initiative for which the northern part of the Biosphere is eligible;
- Increased supply of native trees of local provenance and good genetic variety.
- Research and monitoring of native woodland establishment (e.g. reasons for slow establishment of oak in Dumfries and Galloway are unknown).
- Established collaborations between community groups and Forestry Commission Scotland and RSPB

## 2.5.7 Further Information

The Scottish Forest Strategy: <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/forestry-strategy>

Scottish Forestry Grant Scheme: <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/>

Dumfries and Galloway Forestry and Woodland Strategy:  
<http://www.dumgal.gov.uk/CHttpHandler.ashx?id=15086&p=0>

Land Information Search service (to help landowners to plant trees and improve their management of the natural environment):

[http://map.environment.scotland.gov.uk/landinformationsearch/lis\\_map.html](http://map.environment.scotland.gov.uk/landinformationsearch/lis_map.html)

Ayrshire & Arran Forestry & Woodland Strategy: <http://www.aawp.org.uk/agreed-strategy.html>

Cree Valley Woodlands Community Trust: <http://www.creevalley.com/>

Forestry Commission Scotland New native woodland in Galloway Forest Park:  
<http://scotland.forestry.gov.uk/news/1321-new-native-woodland-in-galloway>