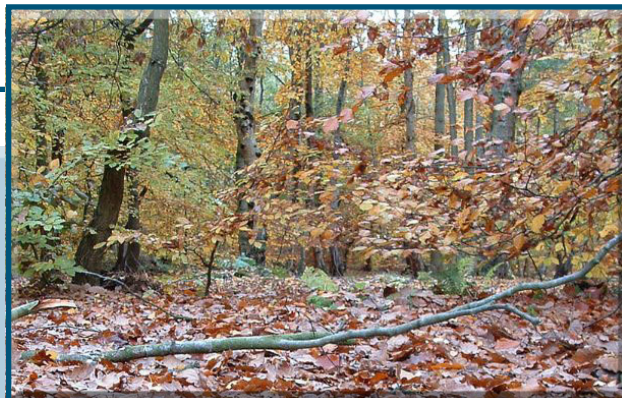


Woodland

Our objectives for this habitat are to:

conserve, maintain, restore and enhance woodland in Harrogate district, and increase woodland cover from 6 per cent to the national level of 11.6 per cent, concentrating on extending and linking existing sites.



Hookstone Wood (E Moss)

Introduction

This action plan covers all woodlands in Harrogate district except Lowland wood pasture and parkland, which is covered in a separate HAP. Ancient woodlands are defined as having continuous woodland cover since 1600 AD. Recent (secondary) woodland is that which has developed on land that has not been continuously woodland since at least 1600.

All woodland in the UK has been influenced by human management. But those that have not been obviously planted and whose composition reflects natural variations in topography (and the soil are described as semi-natural. Ancient Semi-Natural Woodlands (ASNW)) support a wider variety of plants and animals than woods of more recent origin. Some plants, such as Herb Paris, are virtually only found in ancient woodland.

Some woodland species require large blocks of woodland in which to survive and many species do not readily disperse. Fragmentation of woodland is, therefore, a particular threat and protecting, expanding and linking existing woodland blocks is especially important for the conservation of biodiversity.

National status

Great Britain has woodland cover of 11.6 per cent of the land area, whereas 46 per cent of Europe is covered by forest. Only Denmark, the Netherlands and Ireland have less tree cover than the UK.

Regional status

In the regional audit (Selman) the region is stated as having 6.7 per cent of the ancient and natural woodland in England and Wales. The report highlights the fact that the data is very patchy and woodland classes, particularly wet woodland, are under recorded. The figures given in the report for the relevant classes are:

Upland oakwoods	2,946 ha
Upland mixed ashwoods	2,338 ha
Wet woodlands	343 ha

Local status

According to the Phase 1 Habitat survey of the Harrogate district, woodland is calculated to cover 7,659 ha or

6 per cent of the area of the district. Of this, just over a third (2,926 ha or 2.3 per cent) was considered to be semi-natural woodland or dense scrub. In the district, woodland occur predominantly in the Pennine Dales Fringe and on the steeper slopes of the Yorkshire Dales Landscape Character Areas. The Vale of York is particularly poorly wooded.

The provisional Inventory of Ancient Woodland (IAW) (Phillips) identified the fact that around 64 per cent of ancient woodland in the Harrogate, Hambleton, Selby and York areas has been replanted predominantly with conifers (these sites are known as Plantations on Ancient Woodland (PAWs) and are a particular focus for restoration to broad-leaved woodland, as elements of the ground flora may persist in rides, glades etc.).

Harrogate district has examples of five of the UKBAP priority woodland habitats - Upland Oakwoods, Upland Mixed Ashwoods, Wet Woodland and Orchards. There are two broad habitat types - broadleaved, mixed and Yew woodlands and coniferous woodlands.

Upland oak woodland

Upland oak woodland is a national BAP priority habitat associated with the high rainfall zones of north and west of Britain. These woods are characterised by oak (mostly sessile) and birch with varying amounts of rowan, holly and hazel in the understorey. It is especially notable for its mosses, ferns and lichens. These woodlands usually occupy rather sandy, acidic, free-draining sites, often in steep-sided rocky gills and on the crest of valley slopes in the Nidderdale AONB. They have probably persisted because these sites are the least valuable for agriculture (often partly covered by scree). Lower in the dale, most oak-birch woodland will have been cleared at some time and represents secondary re-growth.

Harrogate's upland oak woodlands are generally drier than those to the west of the Pennines. Even so, they have a rich fern and bryophyte ground layer, which includes the rare Killarney fern and Wilson's filmy fern). Birk Gill wood has been described as holding the best woodland rock lichen community in Yorkshire (English Nature, unpublished). These woods also hold birds typifying woodlands of the upland fringe such as Wood warbler and Pied flycatcher.

Some of the best examples of these small woodlands on the upland fringes are protected as part of the North Pennines SAC. These include Guisecliffe Wood, Birk Gill Wood, Arnagill, Grimes Gill, Dallowgill and Skell Gill.

Many of the best of the rest of these woodlands are protected as SINC. These include, Backstone Gill Wood near Lofthouse; Throstle's Nest Bridge Wood, Raven's Gill and Middle Tongue Woods near Pateley Bridge; Braisty and Old Spring Woods, High Wood and Horse Wood near Brimham; Hanging Wood and Dob Park Wood in the Washburn Valley and Holden Gill and West Park Woods in Wharfedale.

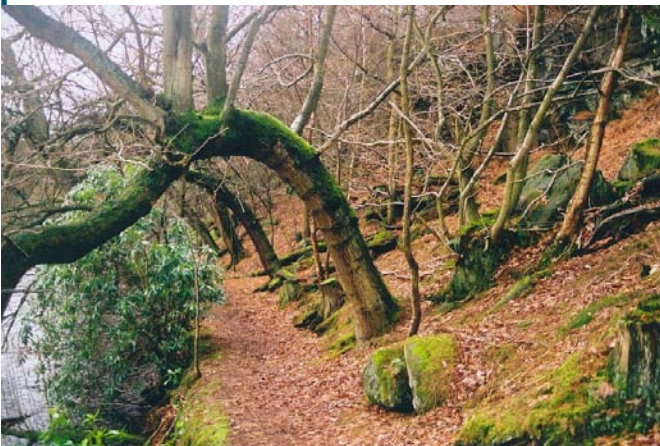
In the lower dales, upland oak gradually intergrades into Lowland Mixed Broadleaved Woodland.

Upland mixed ash woodland

This is a BAP priority habitat, which includes mixed ash woodland on the Magnesian limestone ridge as well as more strictly upland ash woodland.

There are small amounts of upland ash-rowan woodland (NVC W9) on the upper fringes of the gills of the AONB, especially where the soils are influenced by underlying limestone. Stainburn Gill Wood, above the Washburn Valley is a SINC of this woodland type.

On the Magnesian limestone ridge, mixed ash woodland is of the W8 NVC type: more characteristic of the warmer, drier south east lowlands. Prior to the onset of Dutch elm disease, wych elm was often co-dominant in woodlands and it often still persists through suckering. Sycamore is often invasive and may be dominant. The understorey may be very diverse and include shrubs such as geulder rose, dogwood, buckthorn and spindle. The ground flora is often rich but is characterised by dogs mercury and wild garlic in damper woods. Examples in the Harrogate district include the parts of the Ripon Parks SSSI (including the High Batts) and some of the woodland of the Ellington Banks, Nidd Gorge near Harrogate and Lime Kiln Wood near Spofforth (all of which are designated as Sites of Importance for Nature Conservation (SINCs))



Eavesstone woodland (E Moss)

Wet woodland

Remnants of wet woodland, often dominated by alder or willow occur throughout the district, wherever there is impeded drainage, especially in upland gills and along river valleys. The sites, which are generally rather small and fragmented, include: High Thrope Wood at Lofthouse, Cow Mires, Sharow Mires, and Upper Dunsforth and Marton Carrs. Many other woodlands contain important elements of wet woodland. Hackfall Wood (SSSI) and the Nidd Gorge woodlands (SINC) occupy river gorges (of the Ure and Nidd respectively) which cut through a complex geology. Both have acid and calcareous influences and contains elements of wet woodland, which is a habitat for rare species of fern and sedge. More generally, wet woodlands hold scarce species of plant such as Yellow Star of Bethlehem, declining birds such as marsh and willow tits and many rare insects. High Batts, a riparian woodland, hosts nine Red Data Book and 13 nationally scarce species of fly.

Agricultural improvement and drainage have left many lowland wet woodlands extremely isolated. There may be the opportunity to incorporate habitat restoration for wet woodlands into schemes for flood defence and gravel pit restoration, as well as agri-environment schemes.

Broadleaved and mixed woodlands

Mixed Deciduous Woodland is a new (2007 Review) BAP priority habitat which includes woodland growing on the full range of soil conditions, from acidic to base-rich, and takes in most semi-natural woodland in southern and eastern England and the east of Harrogate district. This complements the suite of upland oakwoodland types typical of the west of the district. It encompasses, but is not exclusive to, Ancient Semi-Natural Woodland (ASNW) within the broad habitat type 'broadleaved, mixed and yew woodlands'.

East of a line which runs broadly between Masham and Harrogate, upland oak woodland on acid soils gives way to that falling into the broad-leaved mixed woodland category, typically including elements of both oak (W10) and ash woodland (W8). These lowland woods are characterised by the appearance of field maple (*Acer campestre*) and guelder rose (*Viburnum opulus*). More of these woods tend now to be dominated by a bramble understorey which may reflect a current lack of grazing (most upland woods had been heavily grazed in the recent past and had little bramble at that time.)

The one of the richest examples of lowland broadleaved and mixed woodland in the district is Birkham Wood SSSI at Knaresborough, one of the largest and most diverse examples of an ancient semi-natural broadleaved woodland remaining east of Harrogate. Birk Craggs and Hookstone Woods in Harrogate have been declared Local Nature Reserves. Other examples of this habitat include sites at Laver Banks, in the Nidd Gorge and at Plumpton Rocks.

Conifer plantations

Restoration of plantations on ancient woodland sites to native broadleaves should generally be encouraged. However, conifer plantations can be a valuable wildlife habitat in their own right; Tumble Ings in the Washburn Valley is one such example, which is a SINC. Younger conifer plantations often support populations of nightjar and Tree pipit, while more mature stages may hold populations of Goshawk and Long-eared owl. It would be beneficial for forestry to be managed at a landscape level so that elements of all stages of development are always present. Young conifer plantations on the moorland edge are an important element in the habitat mosaic which may support black grouse (see Moorland edge HAP).



Newby Hall (E Moss)

Orchards

This is another new BAP priority habitat (2007 Review). The Nidderdale AONB Historic Parks and Gardens Study Group has identified nearly 100 former orchards in the AONB. Old orchards are known to occur throughout the district but no data is available.

Local priority species:

- Killarney fern
 - Dutch rush
 - Herb paris
 - Pied flycatcher
 - Wood warbler
 - Marsh tit*
 - Slow worm
 - Otter (see SAP)
 - Wilson's filmy fern
 - Yellow Star of Bethlehem
 - Nightjar
 - Tree pipit
 - Lesser redpoll*
 - Willow tit*
 - Square-spotted clay moth
- (* = new UK BAP)

Status of priority species

Killarney fern - (This was removed from the UKBAP priority list in the 2007 Review) It only occurs in the gametophyte (immature) form in Harrogate district, in the spray zone of streams in upland gill woodlands. Recorded from seven sites.

Wilson's filmy fern - scarce and difficult to find in spray zone of streams in upland gill woodlands in the district.

Dutch rush or Rough horsetail - known from just one locality in the Nidd Gorge. It is a horsetail of shaded open woodland beside rivers and streams.

Yellow star of Bethlehem - a local species of woodland and river banks especially along the Ure and its tributaries.

Herb Paris - indicator of ancient woodland, occurs at scattered sites.

Nightjar - (UKBAP) rare, breeds in small numbers at a minimum of three sites in the district associated with young conifer plantations.

Tree pipit (new UK BAP) - thinly distributed in the district in open woodland and scrub.

Pied flycatcher - occurs in wooded gills in the west of district where it responds well to the provision of nest-boxes.

Wood warbler (UK BAP 2007) a now scarce local summer resident of large woods in the west of the district.

Lesser redpoll (UK BAP 2007) was a relatively common breeding bird in the district the early 1970s. Now scarce, mostly associated with higher ground.

Marsh tit - declined nationally by 50 per cent over 25 years. Thinly distributed in woodland across the district.

Willow tit - declined nationally by 80 per cent over 25 years. Scarce and patchily distributed in damp woodland across the district.

Slow worm - scattered, at suitable locations, especially along disused railway tracks.

Square-spotted clay moth (removed from the UKBAP in 2007 Review) - an open woodland species with a highly significant cluster of records from the High Batts and Bellflask area.

Otter - uses undisturbed woodland close to rivers and streams for breeding (see SAP).

Requirements

- No loss of woodland area.
- Management should aim to maintain natural processes and/or improve the biological diversity of the woodland.

- Management should be in accordance with Forestry Commission guidelines and standards. This may include favouring naturally regenerating native tree species, diversifying the age structure, maintaining dead wood and recognition of the importance of open space within woodlands for conservation purposes.
- Reduction or removal of exotic species where appropriate, particularly rhododendron, cherry laurel, Japanese knotweed and Himalayan balsam. Where tree species such as beech, sycamore and western hemlock are demonstrably exotic, invasive or inappropriate to the type of woodland, then these species should be controlled or removed.
- Where appropriate, reinstate traditional management such as coppicing and pollarding and adopt less intrusive silvicultural systems.
- Limiting damage from sheep, deer and Grey squirrels.
- Need to control alien Grey squirrel which causes severe damage to trees and nesting birds.

Threats

- Clearance of land for other uses.
- Isolation caused by the simplification of the landscape and loss of forest habitat networks.
- Changes in neighbouring land use affecting the hydrology and nutrient levels and creating an invasive seed source.
- Invasion by exotic species. Including severe damage to trees and nesting birds caused by Grey squirrel.
- Increasing deer numbers, poorly controlled farm animals and excessive feeding of gamebirds leading to excessive browsing, failure of natural regeneration and destruction of the ground flora.
- Over-management e.g. removal of dead wood or in some cases neglect of traditional woodland management practices.
- Over-stocking of pheasants: the Game Conservancy Trust provides guidance on stocking levels of pheasants compatible with woodland regeneration and conserving the ground flora.
- Disease of trees, often promoted by poor biosecurity among imported saplings e.g. Dutch elm disease, sudden oak death, phytophthora, ash chalara.

Current local action

- Forestry Commission woodland officers should be consulted when any felling of growing trees from woodland is planned (a felling licence is required for the removal of more than five cubic metres of measurable wood in any calendar quarter).

- The Forestry Commission (as the Forestry Authority) has produced Forest Practice Guides to assist woodland managers.
- The Forestry Commission provides guidance and grants for the planting and management of woodlands. Advice can also be sought from Natural England and the Farming and Wildlife Advisory Group.
- The Nidderdale Tree Wardens are active in planting trees and surveying woodland within the AONB.
- The Regional Forestry Strategy.
- Harrogate Borough Council's Trees and Woodlands Strategy.

Opportunities

- The England Woodland Grant Scheme, operated by the Forestry Commission provides the opportunity for woodland establishment and management, especially the restoration of native broadleaf plantations on Ancient Woodland Sites (PAWS).
- Nidderdale AONB Opportunities Plan (www.nidderdaleaonb.org.uk/nidderdale-62) gives detailed information and analysis of native woodlands in the AONB and maps where woodland extension might best fit. Grants for planting are now available through a scheme managed by the Dales Millennium Trust.
- White Rose Forest.
- Carbon offsetting.

LINKS WITH OTHER HDBAP PLANS:

Wood-Pasture and parkland HAP
(Ancient & Semi-Natural) hedgerows HAP
Chestnut click beetle SAP
Otter SAP
Nidderdale AONB Woodland Opportunities Plan