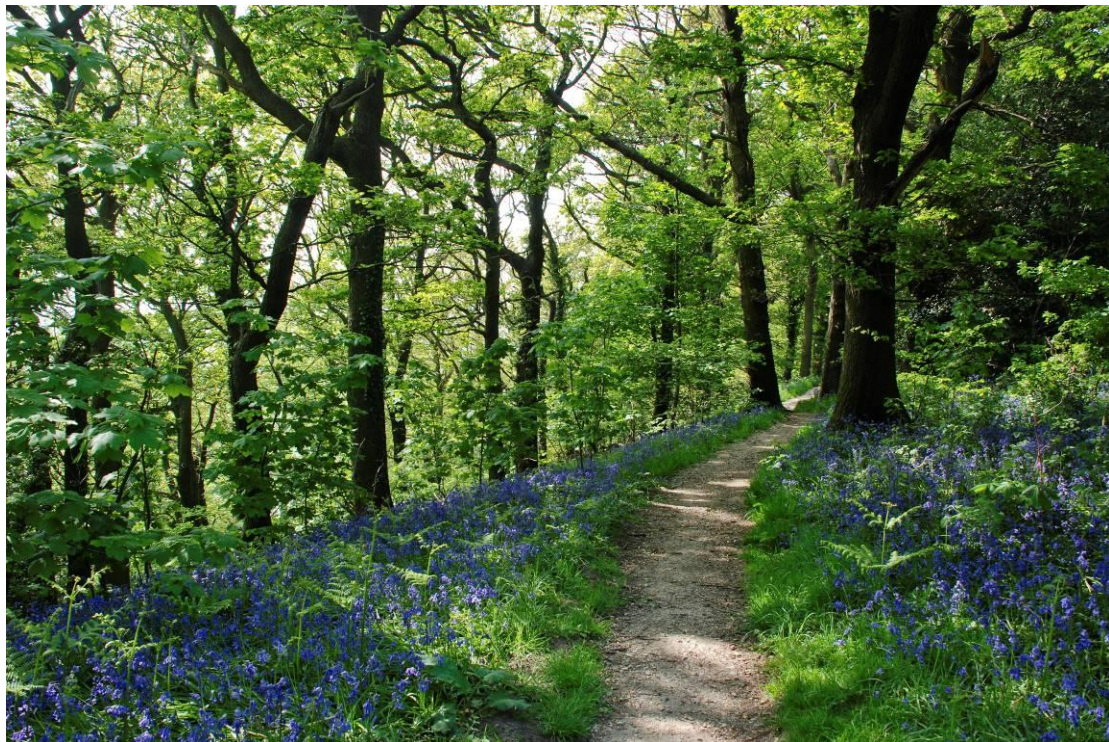




# Sheffield Local Biodiversity Action Partnership

## Woodland Habitat Action Plan



Ladies Spring Wood

Photo: Michael Guy

2011

## 1.0 Habitat Description and Background

All types of woodland can be valuable for biodiversity. This has been recognised in the variety of woodland types which are now defined as UK Biodiversity Action Plan habitats including lowland mixed deciduous woodland and wet woodland. This has been reflected in this Habitat Action Plan in that it has not been restricted to only ancient woodland or one particular woodland type.

The majority of woodland in the Sheffield LBAP area broadly fits within the definition of lowland mixed deciduous woodland. Lowland mixed deciduous woodland grows on the full range of soil conditions, from very acidic to base-rich. It occurs largely within enclosed landscapes, usually on sites with well-defined boundaries at relatively low altitudes, although altitude is not a defining feature.

Ancient woodland and planted ancient woodland form a significant component of the habitat resource. Planted sites can include coniferous planting as well as Victorian beech plantation. Even if not classified as ancient woodland a significant amount of the habitat resource has characteristics which indicate some correlation with an ancient woodland character such as the presence of ancient woodland indicator species. Elements of wet woodland can also be found, though these tend to be restricted to areas adjoining watercourses, around millponds and otherwise lower lying areas.

As well as by type, woodlands can also be further classified according to their age. Ancient woodlands can be defined as those that have had continuous woodland cover for at least the last 400 years though they may have records showing their existence much further back than this. Ancient, broad-leaved woodland supports more UK Biodiversity Priority Species than any other habitat and is often known as Primary woodland.

Much ancient woodland has been subject to management and other human influence but provided some tree cover has remained and soil disturbance has been minimal, the species associated with this type of habitat usually remain. Secondary woodland has arisen more recently and although it may be on the site of former ancient woodland shows signs of once having been open land.

Ancient Semi-Natural Woodlands (ASNW) are those which contain predominantly native vegetation, including the trees and shrubs. Many will contain a suite of plants which are almost exclusively found in this type of habitat and which are considered to be ancient woodland plants. These can act as indicators where the age of a woodland is uncertain. Some ancient woodlands have been re-planted with introduced species and are known as Planted Ancient Woodland Sites (PAWS).

In lowland areas oak (*Quercus sp.*), ash (*Fraxinus excelsior*) and beech (*Fagus sylvatica*) tend to dominate the high canopy of woodlands and can grow on a variety of acidic or calcareous soils. The understorey usually

comprises species such as hawthorn (*Crataegus monogyna*) and hazel (*Corylus avellana*). In upland areas oak woodlands occur on acid soils and these are often rich in mosses and lichens. Wet woodland is a nationally scarce habitat and this is reflected in the Sheffield area. It is found on poorly drained soils and tree species primarily consist of alder (*Alnus glutinosa*), birch (*Betula sp.*) and willow (*Salix sp.*) with an associated wetland ground flora.

Woodlands are not only a priority for nature conservation but also hold immense historical and archaeological interest. Throughout human history woodlands have been used as a natural resource and the timber has been utilised in an enormous variety of ways. This has included building, fencing, fuel and a host of other uses. Locally the use of timber for charcoal production, pit props and provision of winter forage for example through holly hags, has also been of importance.

The strict economic use and value of woodlands in the LBAP area has to a large extent been replaced by recreational use and valuing the woodlands in this respect. However, effective management is still required to maintain woodland as a recreational resource. The focus of management therefore may be refocused to the management of tree safety risk, nature conservation and landscape value rather than purely to provide economically useable timber.

## **2.0 Current status**

The UK is one of the least wooded countries in Europe (Woodland Trust, 2011). Only 12% is covered by woodland compared with up to 44% in other European countries. Sheffield does however buck the trend by being one of the 'greenest' cities and contains the largest proportion of woodland of any city in Europe. The current woodland resource across the whole of Sheffield covers an area in excess of 2700 hectares of which approximately 1547 hectares is managed by Sheffield City Council. The woodland resource within Sheffield (not including the area which falls within the Peak National Park) currently covers approximately 18% of the city.

Much of the semi-natural ancient woodland is found in the south and west of Sheffield in the Ecclesall and Beauchief areas and along the Porter, Rivelin and Loxley Valleys. Other areas in the north include Wharnccliffe, Chapelton, Grenoside and the Upper Don Valley. Smaller pockets exist in the south at Gleadless Valley. Various woods are managed by Sheffield City Council, Sheffield Wildlife Trust, Forest Enterprise or The Woodland Trust.

Many woodland sites are declared as Local Nature Reserves and therefore have some legislative protection. These sites include Great and Little Roe Wood, Woolley Wood and Wheata Wood. Ladies Spring Wood has further protection being designated as a Site of Special Scientific Interest under national legislation.

Many woodlands are designated as Local Wildlife Sites (formerly Sites of Scientific Interest) and many are recognised in the 1991 Sheffield Nature Conservation Strategy.

### **3.0 Current factors causing loss or decline**

- Lack of proactive and appropriate management
- Fragmentation of habitat due to development, building, road construction, etc.
- Spread of invasive species such as rhododendron and Himalayan balsam which can cause the loss of native ground flora diversity and limit tree regeneration.
- Uncontrolled access and recreation at some sites can lead to soil erosion which removes nutrients and undermines the solid soil structures necessary for floral support. Vandalism, littering and disturbance to wildlife can also be issues.
- Past management has often reduced the quantity of veteran trees and dead wood habitat. This has had a limiting affect on species that utilise these habitats such as hole-nesting birds, bats, deadwood invertebrates and fungi.
- Previous re-planting with introduced tree species has often led to a reduction in wildlife interest and species diversity.
- There is often a lack of woodland edge habitat (ecotone) which can have a serious impact on the biodiversity of the woodland as a whole.
- Urbanisation has reduced the water 'catchment' of some woodlands and increased water pollution. Poor water quality in woodland streams and rivers has reduced the associated invertebrate, vertebrate and plant interest. There is also a higher incidence of flash-flooding which has lead to scouring and bank erosion.

### **4.0 Current Action**

#### **4.1 Surveys**

The Sorby Natural History Society collects a variety of data from across the city and has extensively surveyed the Limb Valley and Ladies Spring Wood SSSI (Sorby Natural History, 2011). Data collection for fauna, other floral species and bryophytes is also undertaken.

- Other surveys are undertaken on an ad hoc basis by Sheffield City Council or Sheffield Wildlife Trust as woodland management plans become due for renewal.
- Some survey work is undertaken by 'friends of' and local conservation groups with interests in specific woodlands.

## **4.2 Conservation**

The Sheffield Nature Conservation Strategy of 1991 noted the rarity of tree specimens over 200 years of age (Bownes et al, 1991). A priority must be to monitor the development of veteran trees and to protect against potential removal. In 2007 the Friends of Ecclesall Woods received a grant of £1,700 for maintenance and protection, which is greatly contributing to conservation of veteran trees in Sheffield's largest ancient woodland.

Sheffield Wildlife Trust currently has a target to meet £1million of fundraising for Greno Woods by the end of 2011. The broad plan for the woods is to return the plantation areas to mixed broad-leaved deciduous woodland and thereby increase species diversity throughout a significant area on the north side of the city.

All woodlands owned by the local authority currently receive grants in the form of EWGS (English Woodland Grant Scheme) and FRG (Forestry Resource Grant). Further positive management is also carried out using Bird Woodland Improvement Grant funding. Updating of existing EWGS is planned to replace the 2002 version. Many ancient woodland sites lie within green belt land, as well as being identified as areas of Natural History Interest/Local Wildlife Sites in the Unitary Development Plan. Both help to strengthen their protection from development.

Apart from Sheffield City Council a number of organisations are placing or have placed a number of woodlands across the city into active silvicultural management. These include Sheffield Wildlife Trust, The Woodland Trust and The Forestry Commission

The Sheffield Nature Conservation Strategy (1991) considered all ancient woodland as a Local Biodiversity Priority Habitat. It also identified a number of woodland habitats in the city to be 'at risk'. These include alder woodland, willow carr and over-mature ancient woodland.

## **4.3 Public Awareness**

The South Yorkshire Forest Partnership has initiated the 'Refuelling a Revolution' scheme, a 5 year project to reverse the decline of Sheffield's heritage woodlands. Woodland management is being focused to benefit people and wildlife and to increase access to woodlands as an educational resource.

Sheffield City Council's Ranger Service offer guided walks throughout many of Sheffield's woodlands to help raise public awareness and increase education of natural history and conservation. There is also a programme of health walks which utilise the woodland resource for health benefits.

The Ranger Service is also actively involved in a 'Forest Schools' programme of environmental education and activities for young children which take place in woodlands.

## **5.0 Scope of the updated Woodlands Habitat Action Plan**

The woodland habitat action plan is confined to the Sheffield administrative boundary minus the area within the Peak District National Park which is covered by a separate Biodiversity Action Plan for that area.

- The Sheffield plan encompasses all woodland types together so for example, ancient, secondary, upland or wet woodland are not treated separately or under separate headings in the plan. However this does not preclude separate plans being developed by interested parties for specific woodland types.
- This updated Habitat Action Plan identifies a number of target sites for maintaining, enhancing or creating woodland habitat.
- As part of the plan it was also determined that the compilation of a comprehensive list of woodland sites should be included in the broad aims and objectives.

## **6.0 Relationship to other Biodiversity Action Plan habitats and species**

Woodlands include a range of habitats and habitat features and can support a great diversity of plants, animals and fungi many of which are locally or nationally rare.

As well as trees and shrubs it is also necessary to include all the other features of interest which are present in a woodland when considering management of a particular site. For example, woodland sites may often include other habitats such as grassland-dominated glades and rides and water features such as flushes, ponds and streams, nor should the species which utilise a woodland site and its associated features be ignored. These include invertebrates, mammals, amphibians, reptiles and birds normally associated with scrub or woodland edge habitats. Due to the decline of good quality woodland during the twentieth century, many species associated with this particular habitat type have suffered serious declines and many have acquired a number of conservation status designations such as UK Biodiversity Priority Species, RSPB Red List, etc. Consequently, all these species deserve consideration when planning and implementing specific biodiversity actions for any woodland habitat.

## 7.0 Objectives and Targets

The table below outlines the actions which the Sheffield Biodiversity Partnership aims to deliver over the 10 year period 2012 - 2022. It is felt appropriate given the habitat type that a 10 year period is considered in the plan instead of the 5 year period that has been used for other plans. It is intended that the plan should however be a live document which should have a progress review at least once a year by the Sheffield Biodiversity Partnership and that opportunities will be taken outside of those specifically outlined as and when these arise.

Actions are set out below as 7 objectives and targets which have been defined with an eye very much to implementation and delivery once the Habitat Plan has been adopted. The target sites are outlined at annex 1 and have been selected in consultation with local experts and expert panels such as the Sheffield City Council Trees and Woodlands Team, Sheffield Wildlife Trust and Sheffield Biodiversity Partnership.

- |             |   |
|-------------|---|
| Objective 1 | Determine the extent and viability of the woodland habitats within the Sheffield BAP area. This should also include some assessment of their value for faunal, fungal and lower plant interest.   |
| Target 1    | Secure resources for and develop an on-going programme of woodland habitat assessment and evaluation. Aimed for by 2013.  |
| Objective 2 | Maintain and increase the conservation value of existing woodland habitats through appropriate management and site protection. This also includes managing sites primarily for their bird, invertebrate or fungal interest as well as botanical diversity.  |
| Target 2    | Increase the number of sites under Woodland Grant Scheme management by 10 by 2022.<br>Increase the number of Local Nature Reserves with woodland habitats by 3 by 2022.   |
| Objective 3 | Maintain the extent of the woodland habitat resource as currently identified.   |
| Target 3    | Maintain 381.4 ha of woodland habitat in its current management as outlined in annex 1. N.B. this list of sites should be expected to increase during the lifetime of this plan through the actions outlined under targets 1, 4 and 7.  |
| Objective 4 | Increase the extent and quality of the woodland habitat resource through the creation, enhancement and restoration of woodland sites.   |
| Target 4    | Create 1.1 ha of woodland by 2022. Target sites are outlined in annex 1, although alternative opportunities will also be exploited as and when they present themselves.<br><br>Restore and enhance 585.9 ha of woodland by 2022. Target sites are outlined in annex 1, although alternative opportunities will also be exploited as and when they present themselves. |

In planning the delivery of these targets care should be taken to avoid detriment to areas of archaeological or historical landscape interest.

Objective 5 Link existing woodland habitat through restoration, enhancement and creation of woodland sites.

Target 5 Identify sites for potential physical links between woodlands and implement through restoration and creation by 2022.

Objective 6 Raise awareness of the importance of biodiversity and woodland sites.

Target 6 Create participation opportunities for land managers, volunteers, 'friends of' groups, local residents and the wider public. Also provide publicity via events, leaflets and the website to raise awareness with the public and Sheffield City Council members and managers.

On-going assessment with first year summary as result of Sheffield Biodiversity Partnership review in 2012 and yearly thereafter.

Objective 7 Monitor the extent and quality of woodland habitats within the Sheffield BAP area.

Target 7 Establish a clear, comprehensive woodland monitoring scheme to follow up on baseline surveys by 2014.

Habitat Action Plan prepared and written by Michael Guy, Brian Armstrong and Jordan Blakemore of Sheffield City Council Ecology Service.

#### **References:**

Bownes, J.S. (et al) (1991). *Sheffield Nature Conservation Strategy*.

*JNCC list of UK Priority Species and Habitats*

Kirby K. & Goldberg E. (2002/3), Ancient Woodland: guidance material for local authorities  
English Nature

Peterkin, George (1981). *Woodland Conservation and Management*.  
Cambridge University Press.

Rackham, Oliver (2006). *Woodlands*.  
Collins New Naturalists.

Sellwood, Nick (2002). *Sheffield Ancient Woodland Biodiversity Action Plan*.

Sorby Natural History Society (2011). *Sorby Records* [Online]. Last accessed 14<sup>th</sup> June 2011 at: <http://www.sorby.org.uk/>



Woodland Trust (2011). *Why Woods Matter* [Online]. Last accessed 14<sup>th</sup> June 2011 at: <http://www.woodlandtrust.org.uk/en/why-woods-matter/Pages/woods.aspx>

**With thanks to:**

Sheffield Biodiversity Action Partnership  
Sheffield City Council Ecology Service  
Sheffield City Council GIS team  
Sheffield City Council Parks and Countryside Service  
The Sorby Natural History Society  
Sheffield Wildlife Trust  
Gleadless Valley Wildlife Trust  
South Yorkshire Biodiversity Co-ordinator  
University of Sheffield  
Sheffield Hallam University  
Natural England  
Forestry Commission  
Sheffield Bird Study Group