



# Sheffield Local Biodiversity Action Partnership

## Heathland Habitat Action Plan



Wadsley and Loxley Common

Photo: Michael Guy

2012

## 1.0 Habitat Description and Background

Heathlands are habitats which are dominated by dwarf shrubs such as heather (*Calluna vulgaris*), bell heather (*Erica cinerea*) and gorse (*Ulex spp*). They usually occur on nutrient-poor acidic soils and are generally divided into lowland heath, which occurs at altitudes below 300m and upland heath which is found at altitudes above 300m. Intermediate heathland occurs at altitudes around 300m and holds characteristics of both lowland and upland heath<sup>1</sup>. Most of the heathland in Sheffield outside of the Peak National Park can be considered to be intermediate.

Lowland heaths usually have soils which are of a dry, sandy nature. Areas of heathland in good condition have a varied age structure of heather and other dwarf shrubs but will also include areas of grassland, scrub, scattered trees, bare ground and open water. They support important populations of reptiles, birds, mammals and a number of specialized invertebrate species many of which often act as indicators of habitat quality. Most lowland heaths occur in the south of England.

Upland heaths usually occur on damper, more peaty soils and will include other plants such as cowberry (*Vaccinium vitis-idaea*), crowberry (*Empetrum nigrum*), bilberry (*Vaccinium myrtillus*) and a variety of sedges. They often have very wet areas such as bogs and mires which include plants such as cotton-grass (*Eriophorum spp.*) and sphagnum mosses. Upland heaths generally support rich and diverse bryophyte and lichen communities and provide important summer nesting areas for a wide variety of birds some of which use that habitat almost exclusively such as red grouse (*Lagopus lagopus scoticus*).

Urban Commons can support heather areas, particularly where the substrate is acidic in nature as is often the case on spoil heaps from mine workings although Urban Commons are a different habitat type which has its own Habitat Action Plan. In Sheffield these habitats can be found at places such as Shire Brook Valley, Salmon Pastures and Holbrook. Heath may also occur within a mosaic of other habitats but in order to be classified as heathland the cover of dwarf shrubs must be more than 25%<sup>2</sup>.

Heathland is a semi-natural habitat which has been created by certain human land-use practices. Although it may occur naturally, generally speaking heathland has been created by clearance and then woodland regeneration prevented by stock grazing although soil impoverishment can be an important contributory factor. Historically, grazing and controlled burning have been the most significant factors in maintaining heathland habitats and their cessation one of the main reasons for the decline in both the extent and the quality of heathland. In upland areas, controlled burning is often used to maintain heather moorland whereas over-grazing has often had a negative impact on the quality of heathland habitats.

## 2.0 Current status

There are approximately 1.14 million hectares of upland heath in England and Wales and 58,000 hectares of lowland heath. Between 1800 and the 1980's an estimated 75% of heathland was lost in the UK due to a variety of factors. Dwarf shrub heaths are largely confined to Western Europe and the UK's lowland heathland resource represents approximately 20% of the world total, giving this type of habitat a global importance<sup>3</sup>.

Both lowland and upland heathlands are designated UK Biodiversity Action Plan Priority Habitats in recognition of their scarcity and importance for wildlife. Lowland heath is also listed as a key habitat in the EU Habitats and Species Directive.

The Sheffield Biodiversity Action Plan area includes approximately 170 hectares of heathland habitat, most of it either intermediate or lowland in character. Few of these areas are grazed and all are open to public access. The national decline in the quality of many heathlands is echoed locally where a number of surveys have documented the loss or fragmentation of heathland habitat in Sheffield.

## 3.0 Current factors causing loss or decline

- Abandonment of traditional management techniques such as the use of grazing animals and the use of controlled burning.
- Neglect causing reversion to scrub habitats dominated by invasive species or succession to secondary woodland habitat.
- Loss of heathland habitats due to housing, industrial or recreational development.
- Fragmentation of heathland habitat affecting the continuity and extent of heathland and its associated species. This particularly affects species which require large territories such as nightjar (*Caprimulgus europaeus*) or ones such as common lizard (*Lacerta vivipara*) which are relatively sedentary and cannot move between isolated areas of suitable habitat.
- 'Improvement' by drainage, use of fertilisers, chemical controls and re-seeding with inappropriate seed mixes.
- Accidental fires and uncontrolled burning (vandalism) which has a particularly devastating effect on specialist heathland fauna.
- Excessive recreation pressure leading to erosion and decline in value for wildlife.

## **4.0 Current Action**

### **4.1 Surveys**

The Sorby Natural History Society collects a variety of data on sites from across the city and this includes many heathland sites. Data collection particularly takes place for the specialized fauna which can be found on heathlands such as adder (*Vipera berus*) and common lizard as well as bird and invertebrate species. Data collection of heathland flora including mosses, liverworts and lichens is also undertaken.

- The extensive heathland areas at Loxley and Wadsley Common and Wharnccliffe Heath have been mapped as part of the process of creating management plans for those sites.
- Other surveys are undertaken on an ad hoc basis by Sheffield City Council or Sheffield Wildlife Trust as other management plans become due for renewal or to monitor the condition of Local Wildlife Sites.
- Sheffield Wildlife Trust has surveyed the heathland areas at Wyming Brook, Fox Hagg Nature Reserve and a number of other sites throughout the Rivelin Valley including Blackbrook Wood.

### **4.2 Conservation**

Throughout the UK, many heathland areas have received designations such as Site of Special Scientific Interest, Special Protection Area, Special Area of Conservation or National Nature Reserve status in recognition of their conservation value and wildlife.

- In Sheffield, the most extensive areas of heathland have received statutory protection through designation as Local Nature Reserves. This includes the sites at Wharnccliffe, Loxley and Wadsley Common and Wickfield Heath.
- Many heathland sites have been designated as Local Wildlife Sites and although this offers no statutory protection, it does identify the sites and the wildlife they support as a nature conservation priority.
- Heathland management is currently being carried out on a number of sites throughout the city. This varies from the use of grazing animals at Wharnccliffe to manual control of invasive scrub and felling of trees at many other heathland sites in order to retain their open character.
- The heathland at Loxley and Wadsley Common is part of a Countryside Stewardship agreement designed to benefit the wildlife and habitats on the site. There are plans to include a number of other heathland sites in such beneficial agri-environment schemes.
- Regional initiatives such as the Coalfields Heathland Project which finished in 2010 have achieved positive results in respect of heathland management and public engagement.

### **4.3 Public Awareness**

The Sheffield City Council Ecology Service has undertaken a number of interpretive guided walks on heathland sites to inform and educate members of the public on the ecology of heathlands and appropriate methods of management.

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

Sheffield Wildlife Trust also offers a number of interpretive events and practical work days to help improve heathlands and develop greater understanding of heathland habitats.

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

The heathland 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 which has been produced by Peak Park Planning Authority. This means that all the upland heath (moorland) within the national park is excluded from this plan.

- The Sheffield Plan encompasses all heathland types within the city. Although most of the heathlands within the city fall into the category of intermediate, the various characters of both lowland and upland heath have been considered.
- This updated Habitat Action Plan identifies a number of target sites for maintaining, enhancing or creating heathland habitat across the entire city although there is a slight bias towards the west and north because heathland habitat is more abundant in these parts of Sheffield.

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

Heathland is often species-poor in pure botanical terms and supports abundant populations of a limited number of plants. However, a specialist fauna has developed on heathland sites, many of which rarely use other habitats. Many of these heathland specialists are endangered and this is reflected in their conservation status. Birds such as nightjar have suffered great declines in numbers and are listed as UK and Local Biodiversity Action Plan Priority Species. This is also true of reptiles such as adder and common lizard. Many of the invertebrates found on heathlands are Local Red Data Book Species and some are nationally scarce.

Heath areas can be found on Urban Commons and as with other heathland habitats these areas can often contain significant areas of scrub; both Urban Commons and scrub are Local Biodiversity Priority Habitats. Urban Commons

can support a huge diversity of plants other than those associated with heathlands whilst scrub habitat, often comprising gorse, can be crucial for nesting and feeding birds such as linnet (*Carduelis cannabina*) and other UK BAP Priority Species such as meadow pipit (*Anthus pratensis*) and lesser redpoll (*Carduelis flammea*).

## 7.0 Objectives and Targets

The table below outlines the actions which the Sheffield Biodiversity Partnership aims to deliver over the 5 year period 2012 - 2016. It is intended that the plan should be a live document which should have a progress review at least once a year by the Sheffield Biodiversity Partnership. Opportunities should also be taken outside of those specifically outlined as and when these arise.

Broad 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 Sheffield Wildlife Trust, Sheffield Biodiversity Partnership and Sorby Natural History Society.

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| Objective 1 | Determine the extent and viability of the heathland habitats within the Sheffield Biodiversity Action Plan 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 heathland habitat assessment and evaluation. Aimed for by 2013.  |
| Objective 2 | Maintain and increase the conservation value of existing heathland habitats through appropriate management and site protection. This includes managing sites to sustain or improve all aspects of their biodiversity.                  |
| Target 2    | Increase the number of sites under Higher Level Stewardship by 2 by 2016. Increase the number of Local Nature Reserves with heathland habitats by 1 by 2016.   |
| Objective 3 | Maintain the extent of the heathland habitat resource as currently identified.   |
| Target 3    | Maintain 24.3 ha of heathland 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 heathland habitat resource through the creation, enhancement and restoration of heathland sites, particularly by linking existing heathland habitat.  |
| Target 4    | Create 1.2 ha of heathland by 2016. Target sites are outlined in annex 1, although alternative opportunities will also be exploited as and when they present themselves.   |

Restore and enhance 57.9 ha of heathland by 2016. 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.

Identify sites for potential physical links between heathlands and implement through restoration and creation by 2016.

Objective 5 Raise awareness of the importance of biodiversity and heathland sites.

Target 5 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.

To begin a programme of encouraging land managers to sign up to appropriate management of heathland habitats on Local Wildlife Sites where the land is privately owned. Also, raise their awareness of national schemes encouraging positive management for wildlife.

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

Objective 6 Monitor the extent and quality of heathland habitats within the Sheffield BAP area.

Target 6 Establish a clear, comprehensive heathland monitoring scheme to follow up on baseline surveys by 2014.

<sup>1</sup> Doar, Nigel & Eades, Philip (2002). *Sheffield Upland and Lowland Heath Biodiversity Action Plan*

<sup>2</sup> UK Biodiversity Action Plan Priority Habitat Descriptions

<sup>3</sup> UK Biodiversity Action Plan

Habitat Action Plan prepared and written by Michael Guy of Sheffield City Council Ecology Service.

#### **References:**

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

Doar, Nigel & Eades, Philip (2002). *Sheffield Upland and Lowland Heath Biodiversity Action Plan*

*JNCC list of UK Priority Species and Habitats*

Sutherland & Hill (1995). *Managing Habitats for Conservation*  
Cambridge University Press

*UK Biodiversity Action Plan*

**With thanks to:**

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