

## Greenspace 8- Hetton Bogs

### 1.0 Introduction

1.1 Hetton Bogs is a complex wildlife site with a mosaic of unique habitats and multiple designations. Overall, eleven hectares of Hetton Bogs is classed as a Site of Special Scientific Interest (designated since 1984), due to the range of complex habitats present particularly along the waterways. The specific habitat communities include "tall fen, flushed fen-meadow, springhead, swamp and willow carr. Of particular note is the wide range of herb-rich fen communities associated with 'The Bogs' representing a small valley-mire receiving base-rich waters from the Magnesian Limestone escarpment" (Natural England Citation, 1984). Woodland (3.58ha) within the SSSI is semi natural ancient woodland with wetter areas to the east with birch and oak and drier on the western side of the site, characterised by ash, hazel and holly.



1.2 Additionally, a total of 23ha of land is designated as a Local Nature Reserve (which includes adjacent areas such as Hetton Park). Furthermore, a smaller area of site has been designated as a Local Wildlife Site (non-statutory designation) known as 'Hetton Bogs West.'

1.3 The Links with Nature project will focus on land owned by Sunderland City Council (SCC) within the boundary of the Hetton Bogs Local Nature Reserve (and includes the majority of the SSSI designation). It should also be noted that survey work carried out by Durham Wildlife Services (DWS) also investigated adjoining wildlife-protected land).

### 2.0 Location and Accessibility

2.1 Hetton Bogs is located between East Rainton and Hetton-Le-Hole, and south of Houghton-le-Spring. The Hetton Burn flows through the site towards the north and west, and is joined by Rough Dene Burn, which links from the east. The wider area is a mix of greenspace and built-up areas, with Hetton-le-Hole and Houghton-le-Spring residential areas surrounding much of the site. However, to the south-west, woodland areas connect to Hazard Railway and Woodland with expansive greenspace south of this. To the north-east, are green links towards Copt Hill and Houghton-le-Spring golf course which is further surrounded by extensive arable and pasture. The site is approximately 1km east from Durham Wildlife Trust's Rainton Meadows Nature Reserve, though this wildlife corridor link is partly severed by the A690 road that runs between the 2 sites.

### 3.0 General description and observations

3.1 Hetton Bogs is a very significant site, rich in wildlife, and important due to the unique combination of habitats. By entering Hetton Bogs at Broomhill Terrace and walking down the steps to Hetton Burn, the visitor becomes distanced from the surrounding housing. There is a peaceful and relaxed atmosphere, providing a vital opportunity for residents to connect with nature close to where they live. Local residents use Hetton Bogs for dog walking, running, watching wildlife and as a place to escape the hustle and bustle. Not all of the SSSI is on SCC land so therefore suggestions for habitat interventions on private land ownership will be outside the scope of Links with Nature (apart from the

treatment of invasive species, which will be undertaken on private parts of the SSSI and other adjacent land that could lead to spread of the species in this area).

Key priorities were identified from recommendations set out in the DWS report and following discussions on site:

### **Hetton Burn**

3.2 Hetton Burn is an important landscape feature flowing Hetton Bogs as well as providing important habitat for a range of wildlife and particularly water vole and potentially otter. On sections of Hetton Burn, the channel is deep and constrained by the footpath on one side and agricultural land on the other. The bankside is showing signs of erosion. There has been work carried out previously to secure the bank side using willow and green engineering techniques. Work is proposed to reinstate the bankside using similar techniques. Large woody debris will also be used and will be pinned to the channel bed – this will encourage limited bed scour and gravel sorting to help diversify in channel habitat types.



### **Lowland Fen and Ponds**

3.3 Ongoing management of the ponds by removing excess Typha and coppicing some of the willow to increase areas of open water and increase light levels would be beneficial. This would also provide additional refuge for water voles. Maintaining some areas of tree cover alongside the path would provide protection from disturbance from walkers and, particularly, dogs.

### **Grassland Management**

3.4 The grasslands are managed by low intensity grazing by cattle during the winter months. Management can be enhanced by additional scrub control, cutting grasslands and removal of ruderal vegetation, as recommended by DWS. Therefore, for the duration of Links with Nature an additional programme of grassland management will be implemented.

### **Management of Himalayan Balsam**

3.5 Himalayan Balsam is dominating the ground flora within Hetton Bogs and impacting habitat quality throughout the woodland, fen habitat and grasslands. Himalayan Balsam is a very invasive non-native species, which has a damaging impact on the fragile combination of plants, which are noted in the SSSI citation. Therefore, a programme to treat and remove Himalayan Balsam along Hetton Burn, throughout Hetton Park and Hetton Bogs to prevent further spread along the water course and along the catchment is a priority. Wear Rivers Trust will work with local volunteers and communities to identify Himalayan Balsam, as early in the season as possible and then mechanically remove it.

### **Access Improvements. Footpath Upgrade**

3.6 Hetton Bogs is linear and connects seamlessly with Hetton Park. The footpath through Hetton Park continues into Hetton Bogs on the eastern side of Hetton Burn and then crosses over the Burn. This section of footpath is poor quality, unsurfaced and is liable to flooding, becoming muddy and difficult to use at times. The footpath continues through Hetton Bogs on the western side of the burn until reaching the B1284, which is 1Km in total length. Therefore, upgrading the footpath will be delivered as part of Links with Nature to improve the surface and drainage so that it is useable throughout the year. As part of this programme of work, the steps from Broomhill Terrace will be replaced and new gateways will be built at Broomhill Terrace and from the B1284.

### **Woodland Access**

3.7 There are opportunities to leave the footpath and detour along the edge of Hetton Burn and to access the semi-natural ancient woodland via a stile and walk through the woodland using a boardwalk. The boardwalk is in three sections over the wettest sections of the footpath through the woodland. It is very narrow, in poor condition with sections starting to collapse and become unusable. A wider and better quality structure boardwalk will replace the existing boardwalk. The stiles into the woodland are in poor condition and unstable. Therefore, these will be replaced with accessible gates. This would ensure better access to people who are less mobile and make the woodland more inviting. By replacing the boardwalk, it will help to control access through the sensitive woodland (permission from Natural England will be required). Additional interpretation in the woodland will help people to understand and appreciate the woodland.

3.8 Limited woodland management will take place to facilitate the new boardwalk by removing dangerous or overhanging trees and removing encroaching bracken and bramble to improve the diversity of the woodland floor.

### **Interpretation and Signage**

3.9 There are currently two interpretation boards, which inform about Hetton Bogs in general terms. There is one name sign at the entrance to Hetton Bogs. There are no directional signs and no signage at the entrance into from B1284. There is nothing to connect Hetton Bogs to other areas of open space such as Hazard Woodland or Hetton Park. Links with Nature will install new entrance signs from the two major entrance points and from Hetton Park and a series of finger posts directing people through the site and into the woodland along the new boardwalk.

## **4.0 Existing Management and Maintenance**

4.0 Hetton Bogs is a Site of Scientific Interest and Local Wildlife Site and falls within the responsibility of the Countryside Team. The grassland is grazed in winter by cattle at very low intensity and this will continue. The footpath through Hetton Bogs is a Public Right of Way and is managed by SCC as the Highway Authority.

## **5.0 Proposed Works**

Locations of proposed works are shown in the map below.

### **5.1 Habitat Management at Hetton Bogs:**

- To maintain banksides at Hetton Burn and maintain good habitat for water vole;
- To manage and reduce the presence of Himalayan Balsam;
- To enhance areas of grassland;
- To enhance areas of fenland.

### **5.2 Access and Interpretation:**

- To substantially upgrade the footpath through Hetton Bogs in order to capture and support usage increases arising from adjacent housing development;
- To maintain through signing in accordance with the standards expected on definitive PROW ('easy to find and follow and use');
- To improve access into and through semi-natural ancient woodland.

## 6.0 Budget

Source of Funding	Amount (£)
Section 106	-
Area Committee	311,066
NECF	-
NLHF	68,700
<b>Total</b>	<b>379,766</b>

Habitat	Project	Season Completed	Budget (£)
Hetton Burn	Green Bank Protection	Anytime	18,438
	Large Woody Debris	Anytime	-
	WRT management fees	-	3,217
Ponds and Fens	Maintaining areas of open water by removing typha and coppicing willow	Anytime	8,180
Grasslands	Management of ruderal vegetation through ongoing and regular cutting to improve diversity and access	June – September	9,000
	Grassland management and new gate to field and improved fencing	June – September	9,000
Semi Natural Woodland 3.85ha	Woodland management to prepare woodland for new boardwalk – management of dead trees and removal of encroaching bramble and bracken.	October to March	19,627
Management of Himalayan Balsam	Ongoing surveying and removal of Himalayan Balsam	April – August	22,995
Access	Footpath Improvements and upgrade with new gateways.	May – September	171,000
	100m Boardwalk through woodland	August – October	72,000
	2 access gates and connecting fencing	Anytime	2,591
	Interpretation board in the woodland, entrance signage at Broomhill Terrace, B1284, from Hetton Park and finger posts at key intersections.	Anytime	5,741
Contingency – DWT			6,870
Contingency – SCC			31,107
<b>Total</b>			<b>379,766</b>

The specification for each area of work is outlined in the Specifications Links with Nature document and details of future maintenance and management are outlined in the Maintenance and Management Plan document.

