

Greenspace 10- Hetton Park

1.0 Introduction

1.1 Hetton Park is an urban park with amenity areas, sports courts and a play area. The park is in a steep sided, wooded valley, surrounded by housing on all sides. The Hetton Burn flows south to north through the valley. The park is connected to Hetton Bogs SSSI and overall, forms part of a wider Local Nature Reserve. A public consultation carried out by Sunderland City Council demonstrated local residents' appreciation of the park and that they wanted to see improvements.

1.2 There is woodland on the western side of the valley, which is semi-natural, with parts ancient semi-natural, including more interesting areas of wet woodland. Pockets of acid grassland are also present on site, but these have declined since previous surveys (DWS 2018).



2.0 Location and Accessibility

2.1 The site is located within Hetton-le-Hole and is sandwiched between housing estates to its east and west sides. To the north lies Hetton Bogs SSSI and to the south is Hetton town centre. New housing on the west will potentially increase footfall through the park. There is good pedestrian access within the site with a wide surface path running along its length. However, the Park is enclosed with limited entrance points which may deter some people from using it.

3.0 Methodology

3.1 Durham Wildlife Services (DWS) were commissioned to carry out an ecological appraisal of Hetton Park in May 2022. DWS used the following methodology:

- Desk Based Study;
- An Ecological Assessment;
- Protected Species and Other Species of Nature Conservation Importance;
- Controlled Invasive Species.

4.0 Site Context

4.1 There are 3 statutory designated sites within 2km of the site, with The Environmental Records Information Centre (ERIC) consultation revealing a further 9 non-statutory sites. The surveyed site is designated as a Local Wildlife Site (LWS) and lies within Hetton Bogs Local Nature Reserve (LNR). The designated sites within 2km of Hetton Park are listed as follows:

- Hetton Bogs LNR
- Hetton Park LWS
- Hetton Bogs West LWS
- Hetton Bogs SSSI
- Robin House Wood and Moorsley Marsh LWS
- Elemore Golf Course LWS
- Rough Dene LWS
- Hetton Lyons LWS
- Eppleton Quarry LWS
- Eppleton Grassland and Railway SSSI/LWS.

5.0 Strategic Significance

5.1 The site is designated as a LWS as well and an LNR and sits immediately adjacent to a Site of Special Scientific Interest (SSSI). It also acts as protected greenspace and lies within a wildlife corridor within the Sunderland Local Plan. Overall, the site has strong strategic significance and so has been input into the Biodiversity Net Gain (BNG) Metric Calculator as “formally identified in local strategy.” Areas of broadleaved woodland are also identified within the North-East England Nature Partnerships (NEENP) Durham Priority Habitats list.

6.0 Habitat Assessment

6.1 The habitat types found in Hetton Park are set out below.

Habitats	Condition
<p>Urban – urban tree</p> <p>A small number of urban trees are present across the large area of amenity grassland in the north-eastern part of the site. They also line the footpath towards the southern end of the site, again across amenity grassland. Species include mature ash, and sycamore, with recently planted rowan and turkey oak.</p>	Moderate
<p>Line of Trees</p> <p>Primarily to the south of the site, several areas with planted lines of trees were recorded, often in association with boundary features. No veteran or ancient trees were record.</p>	Moderate
<p>Sparsely vegetated - Ruderal/Ephemeral</p> <p>Several dense stands of tall ruderal vegetation are present towards the southwest of the site. Rosebay willowherb is dominant, with Himalayan balsam, bracken and bramble also present but not as significant.</p>	Poor
<p>Woodland – Lowland mixed deciduous woodland</p> <p>There is mature semi-natural woodland, with parts, particularly to the north, which are ‘ancient’. This area is shown as woodland on historic maps including being visible in the mid-19th century. Ancient woodland ground flora has declined, but this survey was carried out late for recording most woodland ground flora. Large amounts of non-native species dominate the canopy, particularly further south, with sycamore prevalent. The woodland lines the banks of the Hetton Burn which flows north through the full site. Therefore, some ground flora is more indicative of wetter areas, and, unfortunately, Himalayan balsam is present through vast areas.</p>	Good
<p>Woodland – wet woodland</p> <p>Several areas to the north are assessed as ancient semi-natural wet woodland. Dominant species include alder with grey willow scrub, crack willow and ash. The waterlogged soils here support an excellent variety of wetland species including stands of great horsetail, lesser pond sedge and herbs including wild angelica, meadowsweet, common valerian, and reed canary grass.</p>	Good
<p>Other woodland; broadleaved</p> <p>A footpath divides the site towards the southern end of the site. On the southern side of the path is an area of broadleaved plantation woodland.</p>	Moderate
<p>Modified Grassland</p> <p>There are large sections of modified grassland through the centre of the site by the main path. This is all managed as amenity grassland and is species poor with perennial rye grass, dandelion, white clover, creeping buttercup, greater plantain, daisy, Yorkshire fog, selfheal and yarrow.</p>	Poor for amenity grassland and moderate in other areas

<p>An area immediately to the northwest of the Cemetery has been planted up with orchard trees. There is a children's play area, situated over amenity grassland.</p> <p>To the west of the site is an area of ranker modified grassland that had been cut prior to the survey. This area was slightly more diverse, with red clover (and also yarrow, common cat's-ear, common sorrel), cow parsley, common bent and white clover (frequent).</p>	
<p>Grassland – lowland acid grassland</p> <p>The acid grassland on site is much reduced compare with previous surveys, with bracken, and rosebay willowherb encroaching. The small area left is of low quality, with the main indicator species heath bedstraw.</p>	Poor
<p>Mixed scrub</p> <p>Areas of dense scrub lie to the southwest of the site. Hawthorn and elder are the dominant species, with bramble and large amounts of tall ruderal vegetation.</p>	Moderate

7.0 Protected Species and Species of Nature Conservation Importance

Breeding and wintering birds

7.1 The Environmental Records Information Centre (ERIC) returned 24,869 records of birds within 2km of site with 2024 of these were for Schedule 1 species. The vast majority of the records are from either Rainton Meadows, Hetton Bogs or Hetton Lyons Country Park. None of the Schedule 1 species fall within Hetton Park, nor any red list species. Woodpigeon, robin, blackbird and jackdaw were recorded during the site visit. These are all common and widespread species; however, it is likely that woodland on site supports a range of birds, providing roosting, nesting and feeding opportunities.

Bats

7.2 Results of the consultation revealed a total of 48 bat records within 2km of site for 4 species, as well as records for unidentified species. Common pipistrelle, soprano pipistrelle, nathusius's pipistrelle and noctule have been identified. None of these records are specific to Hetton Park, but there are numerous from within Hetton-le-Hole including roosts in houses within 100 metres of the park.

7.3 Veteran and ivy-covered trees are present on site, and it is highly likely that suitable features are present to support roosting bats. Additionally, scrub, stream and woodland habitats will provide excellent foraging opportunities and the site is well connected to adjacent additional foraging habitats.

Badger

7.4 No evidence of badger and unlikely due to roads and disturbance.

Western European Hedgehog

7.5 A total of 37 hedgehog records were returned from ERIC dating from 2006 – 2020. None of these records are for the site itself, but the nearest record is from less than 200 metres away. The site provides good habitat for this species, and they are highly likely to be present.

Riparian Mammals – Otter and Water vole

7.6 No signs of otters or water voles were found during the survey of Hetton Park (DWS 2022). However, water voles were found just outside the site boundary to the north and otter signs were found at Hetton Lyons which is linked to the site via the Hetton Burn. It is therefore possible for both species to utilise the site. Habitat is suboptimal for water voles due to it being wooded. They have been recorded in the past.

Great Crested Newt (GCN)

7.7 ERIC provided 8 records of GCN within 2km. All records relate to ponds at Hetton Bogs and are as recent as 2019. An environmental DNA (eDNA) survey was carried out across these ponds in 2022

(DWS 2022). Two ponds within Hetton Bogs were positive for GCN eDNA. These ponds lie 370 and 400 metres from the site boundary.

Invertebrates

7.8 ERIC provided 189 records of invertebrates from within 2km. These are from a range of notable/red list/Natural Environment and Rural Communities (NERC) Act butterflies, moths, beetles, dragonflies, bees and flies. 13 of these records are from the same 1km grid square as the site, with these records a mixture of Hetton Bogs and the site itself. Notable species include Adonis' Ladybird beetle, and fly. Red list species include wall butterfly, common darter and Ctenophora ornata flies. NERC Act species include the wall butterfly and cinnabar moth. The site has potential for rare and threatened invertebrates because of the wetland and mature woodland on site.

8.0 General description and observations

8.1 Hetton Park is a linear urban park set within a valley alongside the Hetton Burn. The Park includes a small children's play area and benches. Some of the sports facilities are no longer used, although the tennis courts have been refurbished and are set to reopen for public use. There is one central tarmac path running alongside the Hetton Burn with access down from the Hetton Centre and from the A182. Feedback from residents demonstrated that they value the natural aspect of the park but wanted to see facilities such as café or skate park which are outside the scope of this project. There is an issue around motorbikes and feelings of insecurity and perceptions about anti-social behaviour.

8.2 The key features in Hetton Park are the mature semi-natural woodland and the Hetton Burn. Hetton Burn is formed at the outfall of a 95m long culvert which is likely to be impassable to fish. There are two fish easements downstream that can allow fish to utilise the burn up to this barrier. Currently, Hetton Burn is constrained in a narrow channel and hidden, in some sections by ornamental shrub planting. The channel is incised and has been revetted with timbers, gabion baskets and block stone throughout. In high rainfall events, sections of the park have flooded which prevents residents using the park and is undermining footpaths and bridges.

8.3 Therefore, the Link Together project has the opportunity to re-naturalise some sections of Hetton Burn by creating meanders and building leaky dams using woody debris. The bank sides will be re-profiled to create areas of hold water. Green Bank Protection and repair of stone work at a bridge crossing the Burn in the centre of the park will help to stabilise collapsing banks. Large Woody Debris (LWD) can enhance channel habitat diversity and there is opportunity to meander the burn where fallen trees and land slips provide an opportunity to work with natural processes.

8.4 This approach uses natural features found within the park to manage potential flood risk by slowing water down and creating greater capacity for water storage. Green engineering techniques using willow will be used to protect and stabilise section of banks, which are beginning to erode and could undermine the park's infrastructure. Ornamental shrubs will be removed to open out sections of water course so that it is more visible. These works will enable residents to reconnect with the Burn by making more a feature within Hetton Park and through opportunities to be involved in practical interventions.

8.5 The woodland on the western side of Hetton Burn is mix of mature semi-natural ancient and wet woodland, which are priority habitats. The quality of these habitats is being undermined by the presence of non-native invasive species, including Himalayan Balsam and Giant Hogweed. Himalayan Balsam is particularly prevalent throughout the park and continues upstream to Hetton Bogs. Therefore, a programme to remove Himalayan Balsam is a priority to help restore the sensitive plant communities within the woodland. This needs to be undertaken along the whole section of Hetton Burn, including areas downstream of the park and link to work in Hetton Lyons Country Park. The work will be undertaken through a mix of physically removing plants (which provides opportunities for volunteer input) and chemical treatment.

8.6 To the south of the footbridge, there is a small area of acid grassland, another priority habitat, adjacent to an area of bracken, which is declining. Action is required to restore this area through vegetation management.

Access and Interpretation

8.7 Anti-social behaviour and use of motorbikes is damaging the woodland. This deters people from using the Hetton Park and continues to create the perceptions that the Park is unsafe and insecure. The motorbikes are entering the park through the woodland down steep banks and then crossing Hetton Burn. Therefore, measures to stop motorbikes, such as fencing will be considered.

8.8 Hetton Park is connected to Hetton Bogs by a continuous footpath and so signage to promote walking routes and enable residents to make those connections and links to other sites will be valuable.

9.0 Existing Management and Maintenance

9.1 Environment Services are responsible for day-to-day management and maintenance of the park, which includes grass cutting, tree work, footpath inspections and repairs, and cleansing. Watercourses are the responsibility of the Lead Local Flood Authority, who inspect watercourses to ensure that all structures are safe.

10.0 Summary of Constraints and Key Issues

Issue	Comment
Planning Policy	Proposals support local policy, enhancing the existing greenspace, Local Wildlife Site and wildlife corridor.
Climate Change and Health	Proposals will support further opportunities for carbon sequestration. Within an area of deprivation nearby- site enhancement will support area.
Greenspace	Area has low quality greenspace. Proposals will reduce deficiency.
Biodiversity	Proposals will further support LWS and LNR within wildlife corridor and improve overall biodiversity.
Invasive Species	Himalayan Balsam- which will be treated. Giant Hogweed is present in the adjacent Hetton Bogs and therefore need to be vigilant that this does not spread into Hetton Park.
Landscape Character	Not an area of higher landscape value. Landscape Character Assessment recommends strengthening settlement boundaries, for example woodland belts.
Historic Environment	Limited historic importance on site. Local importance- Hetton Hall Ice House (at south end of park). Site interpretation to be enhanced.
Water Environment	Large parts of park are subject to Flood Zone 3 (Hetton Burn). Proposals will enhance water quality and help to reduce localised flooding.
Rights of Way / Access	Informal footpaths run north-south and east-west across parkland area. Works to watercourse will help to avoid future pathway erosion.
Soil and Nitrates	No negative impact on soils. No nitrate fertilisers will be used as site lies within Nitrate Vulnerable Zone.
Utilities	Numerous public sewers exist within park. Medium pressure gas pipe runs along southern boundary of park. No other no major utilities identified. Works undertaken will respect necessary easements.

11.0 Habitat Management Proposals for Hetton Park:

11.1 Habitat Management Aims:

- To control the spread of Himalayan Balsam through a programme of removal and control;
- To erect fencing to deter motorcycles;
- To remove ornamental shrubs alongside Hetton Burn;
- To prevent further bankside erosion, including planting locally sourced willow revetment;;
- To re-naturalise and reduce flood risk along Hetton Burn;
- To implement a grassland management programme where appropriate.

11.2 Access and Interpretation

- To devise suitable signage to connect Hetton Park and Bogs to increase the attractiveness of use and appreciation of the area.

12.0 Budget

Source of Funding	Amount (£)
Section 106	13,125
Area Committee	-
NECF	-
NLHF	67,475
Total	80,600

Habitat	Project	Season Completed	Budget
Hetton Burn	Programme to create meanders, and woody debris – WRT combined costs	Meanders – May- Sept Woody debris – Oct-March	45,126
	Programme of bank stabilisation	Year round	-
	Programme of fish easement works	Summer	-
	Stone Bridge protection	Anytime	-
	Removal of ornamental bushes	October to March	1,355
	WRT Management Fees		3,217
	Himalayan Balsam	Treatment of Himalayan Balsam	April – July
Acid Grassland	Cutting of acid grassland and bracken management	August – October	410
Woodland	Protective Fencing	Anytime	4,152
	Understory planting and bulbs	April – June	2,250
	Access	Entrance signage and route markers	Anytime

Contingency – DWT			6,746
Contingency – SCC			1,312
Total			80,600

The specification for each area of work is outlined in the Specifications Link Together document and details of future maintenance and management are outlined in the Maintenance and Management Plan

