

Greenspace 6- Herrington Burn

1.0 Introduction

1.1 This area of open greenspaces is composed of amenity grassland, rough grassland, hedges and areas of dense hawthorn scrub. The Herrington Burn, which flows down from Herrington Country Park, dissects the northern and southern parts of the site and is the main feature of the open space. There is a public right of way alongside the edge of the burn and a network of informal paths and routes across the open space and through the scrub. There are three crossing points over Herrington Burn connecting the open space with other greenspaces, relatively small areas of open countryside and residential areas.

1.2 Housing is adjacent and surrounds the northern half of the site, which is openly available for public access, whilst the southern half is fenced off and let out as grazing for horses. Land grazed by horses and used for allotments and small holdings abut the burn on its southern bank.



2.0 Location and Accessibility

2.1 The greenspace is located between Shiney Row (to the north and west) and Success/Philadelphia (to the east) in Houghton-le-Spring, Tyne and Wear. To the south, playing fields/open fields link the greenspace corridor towards Elba Park. It is approximately 7.5km to the south-west of central Sunderland. The greenspace is very open and accessible which causes problems of anti-social behaviour.

3.0 Methodology

3.1 Durham Wildlife Services (DWS) were commissioned to carry out an ecological appraisal of Herrington Burn at Shiney Row 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 is 1 statutory designated site within 2km of the site and 4 non-statutory sites. The designated sites within 2km are listed below.

- Herrington Hill SSSI
- Herrington Hill Woodland LWS
- James Steel Park Mount Pleasant Riverside LWS
- Wear River Banks North LWS
- Penshaw Hill LWS.

Success Railway and Sedgeleth Ponds are proposed Local Wildlife Sites.

5.0 Strategic Significance

5.1 The site lies within a wildlife corridor and is protected from development as greenspace and as a Settlement Break in the city's Local Plan - the Sunderland Core Strategy. As such, it has been input into the Biodiversity Net Gain (BNG) Metric Calculator as "formally identified in local strategy." Areas of broadleaved woodland are identified within the North-East England Nature Partnerships (NEENP) Durham Priority Habitats list.

6.0 Habitat Assessment

6.1 The habitat types found in Herrington Burn are set out below.

Habitats	Conditions
<p>Urban – artificial, unvegetated unsealed surface: bare ground</p> <p>Walkways and footpaths tracks with an unsealed surface or very degraded surface. These were generally compacted gravel or aggregate in composition with areas of encroachment from the grass verges.</p> <p>Further, several 'desire lines' or unofficial tracks were present where regular footfall had worn the surface of the grassland habitats revealing compacted bare ground.</p>	N/A
<p>Heathland and Shrub – Mixed scrub</p> <p>Large parcels of dense mixed scrub, dominated by hawthorn with limited diversity. Structurally, the area has lacked management, and the canopy is tight and of a similar age and size. As a result, the ground flora is very limited; however, several 'desire lines' and rides through the scrub are present and an increased abundance of flowering plants are present in these areas. Evidence of anti-social behaviour was noted throughout this area with fires, destruction of vegetation, and fly tipping</p>	Moderate
<p>Sparsely vegetated - Ruderal/Ephemeral</p> <p>Relatively small areas of tall ruderal were present across the site, often adjacent to patches of scrub where mowing of the sward may not occur. Typically, species diversity was limited, and areas were often dominated by willowherb species.</p>	Poor
<p>Woodland – other woodland; broadleaved</p> <p>Two small parcels of broad-leaved woodland are present to the south-west of the survey area, both are situated along an access track which separates two grassland fields. The largest parcel of woodland is situated to the northern end of this access track, along the southern burn bank The smaller parcel is located to the eastern side of the track, within the grazed field – an overgrown hedge is present to either side of the woodland stand.</p> <p>The north section of woodland is relatively young plantation woodland with a limited ground flora and understory present. Evidence of anti-social behaviour was recorded. The woodland edge here is surrounded by scrub and tall ruderal habitats along the burn providing some structural diversity along the woodland edge.</p>	Moderate
<p>Grasslands Modified</p> <p>Modified grassland forms the most commonly recorded habitat across the site with open areas of poor semi-improved rank grasslands, areas of mown amenity grasslands, and grazed rigg and furrow pasture. Typically, across all grassland swards, species diversity is poor overall with under 9 species per metre square (often fewer than 6-8 species present). However, increased species diversity is noted in ranker, unmown areas typically present within the northern survey area.</p>	Good

<p>Within the southern survey boundary, parcelled between the burn and an area of amenity grassland, a ranker sward was recorded which similar to the ranker sward present to the north, the area has a greater overall species diversity; however, still falls within the 6-8 species per metre squared range for the condition scoring.</p>	
<p>Native Hedgerow Along the boundary of the southern grazed field, two distinct intact hedge lines are present. Hedgerow 1 is species diverse, whereas Hedgerow 2 is limited to hawthorn. Both hedgerows are tall and overgrown.</p>	<p>Poor/Good</p>
<p>River – Other rivers and streams: Herrington Burn The Herrington Burn flows east-west through the survey area. The burn at this location is relatively narrow, typically not exceeding 1.5 – 2-metres in width. At the time of the survey, the water depth was mainly shallow (<10cm) and sluggish with little discernible flow. The bed material was frequently cobbly and some artificial features (e.g., wear/ford, bridges) are also present. The banksides are naturally vegetated with scrub and tall ruderal species along the water course and are often exhibit quite a shallow slope; however, a steeper bank profile is visible in some areas. Issue with dumping and rubbish in the water course.</p>	<p>Not conditions assessed by DWS – part of WRT assessment</p>

7.0 Protected Species and Species of Nature Conservation Importance

Breeding and wintering birds

7.1 ERIC returned over 16,000 records of birds, including 183 species within 2km of the site. The data search returned records relating to both amber-listed and red-listed species of conservation as well as Schedule 1 listed breeding species. None of the records relate to the site.

7.2 Several common bird species have been observed, with common woodpigeon, swallow, European robin, common blackbird, Eurasian wren recorded. The scrub and trees across the site will likely provide suitable nesting and foraging habitat for a range of relatively common species. The grassland habitats will likely provide foraging opportunities and some nesting opportunities in ranker areas.

Bats

7.3 None of the records appear to be listed for the site itself. Although no suitable roosting features were identified during the site walkover, it is possible that trees with cavities are present on or adjacent to site and provide some roosting potential for bats. Additionally, scrub and woodland habitats will provide foraging opportunities and commuting lines for bats.

Badger

7.4 No evidence of badger.

Western European Hedgehog

7.5 None of the records appear to be listed for the site itself. The scrubby and ranker grassland areas on site could provide suitable habitat for shelter and hibernation. The site likely provides foraging opportunities if hedgehogs are present. There is disturbance from the general public when walking dogs. However, given the density of the scrub, it is likely hedgehogs can find relatively quiet areas. The site is also surrounded by residential housing and main roads, which may limit dispersal to and from site.

Riparian Mammals – Otter and Water vole

7.6 Habitat sub-optimal for water vole. Evidence of anti-social behaviour was also recorded including pollution/fly tipping and vegetation damage which may reduce the likelihood of either species being

present along this section. It is likely that otter, if present in the area, use the burn at least as a commuting feature.

Invertebrates

7.7 ERIC NE provided 62 records of invertebrates from within 2km – none are listed on site. Notable species include wall, small heath, rockface beetle, dingy skipper, common darter and several Natural Environment and Rural Communities (NERC) moth species. It is possible that habitats on site, particularly the ranker grasslands and stream may be utilised by invertebrates.

8.0 Existing Management and Maintenance

8.1 SCC manages the areas of greenspace around the Herrington Burn included in Link Together. Gentoo Housing Association manage other areas of amenity grassland. Clean It Green It have been involved in ongoing work to tackle litter and flytipping, organising community clean ups, speaking with residents about the local issues and working with trainees. A section of footpath across the greenspace is a Public Right of Way. The management of Herrington Burn is the responsibility of the Lead Local Flood Authority. Mapping and tackling Non-Native Invasive Species (INNS) will be a key delivery output during Link Together. This will map INNS and remove them where possible. Better information about their location through the catchment and along the watercourse will help make long-term management more sustainable.

9.0 General description and observations

9.1 Herrington Burn, Shiney Row has an urban feel. It is characterised by mixed of amenity grassland, rank grassland, areas of dense scrub and the Herrington Burn Water course, all in close proximity to housing, allotments and small holdings. The site experiences pressure from anti-social behaviour, from excess litter and dumping on the greenspace and in the scrub. The use of motorbikes and quadbikes causes disturbance to wildlife and puts people off from using the greenspace. The footpaths are in poor condition, which is exacerbated by motorbikes. There is evidence that areas of scrub are used as informal gathering spaces. This generates litter and creates an air of insecurity. This will put people off using the burn other than for dog walking or as a cut through. There is no signage, entrance features and the site has no identity. The site is connected with other greenspaces such as Herrington Country Park and Success Railway via the public right of way that runs along the burn and the multiple bridges over the burn. However, there is little information to show the connections and some of the entrances and routes into and out of the greenspace are intimidating.

9.2 Herrington Burn is a key feature of the greenspace. As the Herrington Burn flows through this area of open greenspace, it is subject to dumping of large objects, such as fridges, sofas and bikes. In addition, dropped litter is blown into the water and carried down from further upstream. This rubbish affects Herrington Burn visually, creating a general feeling of neglect, as well as adding pollutants in the water. The burn has steep sides and is surrounded by dense shrub and tree vegetation. Horses graze in a number of fields, on the south side of the burn. Horse manure is stored on the bankside, which results in run off pollution. It will be important to engage with these landowners as the project progresses to raise awareness about pollution and encourage a change in behaviour.

Access and Site Identity

9.3 The greenspace surrounding Herrington Burn is very open with multiple entrances from the surrounding housing and crossing points over the watercourse. Therefore, it is very challenging to keep motorised vehicles off the greenspace. However, the entrance from South View can be improved. The entrance feels unwelcoming, and it looks as if the route leads the visitor into private property. There is evidence of fly tipping from vehicles. Therefore, this entrance point is a priority for improvement to ensure the greenspace is welcoming with a new barrier to deter vehicles.

10.0 Summary of Constraints and Key Issues

Issue	Comment
Planning Policy	Proposals support local policy, enhancing the existing greenspace, Settlement Break 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 is low in greenspace quality and has lower woodland cover. Proposals will reduce deficiencies.
Biodiversity	Proposals will further support stepping stone connectivity within wildlife corridor and improve overall biodiversity.
Invasive Species	Himalayan Balsam was recorded along Herrington Burn along with Montbretia.
Landscape Character	Not an area of higher landscape value. Landscape Character Assessment recommends more woodland cover to area.
Historic Environment	No significant historic features to note.
Water Environment	Partly lies within Flood Zone 3 of Herrington Burn. Proposals will not positively support water quality and biodiversity and help to mitigate for flooding.
Rights of Way / Access	Public footpath runs alongside the burn, and additional pathways cross the burn, joining Shiney Row to Success. Suggested short section of Right of Way could be improved. Currently muddy track.
Soil and Nitrates	No negative impact on soils. No nitrate fertilisers will be used as site lies within Nitrate Vulnerable Zone.
Utilities	NWL Sewer runs immediately to the west of Herrington Burn. Any planting will avoid easements relating to this pipeline.

11.0 Proposed Works (See also map further below)

11.1 Habitat Restoration aims at Herrington Burn at Shiney Row

- To improve Herrington Burn visually and habitat value by a series of in-stream interventions including green bank protection, re-meanders to stream, large woody debris, channel aggradation, fish easement and livestock fencing
- To improve diversity of scrub and create open areas
- To improve grassland quality through management programme
- To improve water quality by reducing run off and litter entering the water.
- To remove Himalayan Balsam, Japanese Knotweed and Montbretia along Herrington Burn from Herrington Country Park.

11.2 Access and Interpretation

- To provide greater identity and quality to routes and connections with surrounding greenspaces.
- To improve entrance from South View to elevate the character of the area to be more welcoming and to deter fly tipping.
- To resurface a 200m section of footpath.

12.0 Budget

Source of Funding	Amount (£)
Section 106	
Area Committee	25,000
NECF	16,900
NLHF	58,500
Total	100,400

Habitat	Project	Season Completed	Budget (£)
Scrub	Ongoing litter picking and removal of flytipping.	To be carried out by volunteers. All year	1,782
	Management to open up areas to improve ground flora, support regeneration and have variety of age structure	October - March	9,000
	Planting understory	April – June	1,800
Grassland	Cut and remove grass arisings	August -September	4,500
New Tree planting	Planting of heavy standards	November - March	13,860
	Design Fee	-	1,350
Water course – WRT costs combined	Green bank protection, channel aggradation, woody debris and re-meander	Anytime	27,415
	Fish Easement	Anytime	-
	Protective Fencing to protect the water course	Anytime	-
	Treat invasive species	April – June	4,937
	WRT management Fees		3,217
Access	Installation of entrance feature to stop vehicles.		4,500
	Installation of signage and directional signage		4,500
	Resurface 200m footpath		13,500
Contingency – DWT			5,850
Contingency – SCC			4,190
Total			100,400

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 document.

Draft

