

Greenspace 13 - Success Railway

1.0 Introduction

1.1 Success Railway is a 1km linear disused railway that has been landscaped into a green walking route. There is a central surfaced path, which is in need of repair, with wide buffers of grassland, wet flushes, woodland plantations and hedges.

2.0 Location and Accessibility

2.1 Success Railway is located just south of Success village, Shiney Row and Philadelphia, approximately 7.5km to the south-west of central Sunderland. The linear site extends west-east for approximately 1km between the A182 to the north-east and Blind Lane to the west and a public footpath links to two roads. Directly to the south of the site lies woodland plantation, with pasture to the north and scrub to the east and west.



2.2 The site is close to residential development, but areas of open countryside are present as a buffer around much of the site. These provide links through vegetated corridors to the wider landscape, albeit the corridors are partly hindered by road networks in the immediate and wider area.

3.0 Site Context

3.1 A list of designated sites within 2km of Success Railway are mentioned below and details for each are included in the detailed DWS Survey Report.

- Herrington Hill SSSI
- Herrington Hill Woodland LWS
- Houghton Hill Cut and Scarp LWS
- Morton Wood LWS
- Lumley Woods LWS
- The Clouds LWS
- Proposed Local Wildlife Sites at Success and Sedgeleth Ponds.

4.0 Methodology

4.1 Durham Wildlife Services (DWS) were commissioned to carry out an ecological appraisal of the site (DWS, 2022). The methodology was carried out as three main steps as set out below:

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

5.0 Strategic Significance

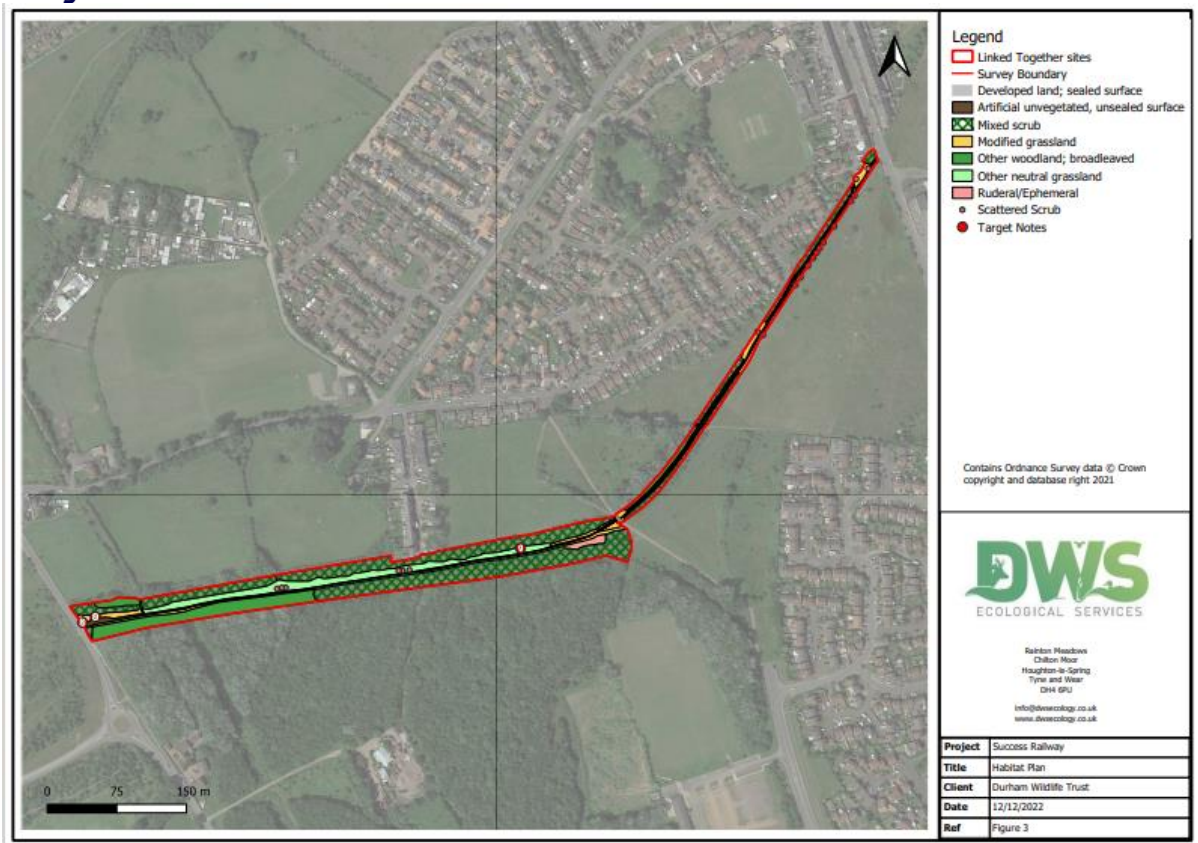
5.1 The site lies within a wildlife corridor and is protected from development as greenspace and as a Settlement Break in the city's Local Plan- the Sunderland Core Strategy.

5.2 As it lies within a wildlife corridor within the Sunderland Local Plan it has been inputted 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 Success are set out in the table below, and their locations are mapped further below.

Habitats	Conditions
<p>Heathland and shrub – mixed shrub.</p>	Moderate
<p>Ruderal/Ephemeral These areas are species poor and lack any diversity. Abundant and frequent species include rose bay willow herb, cock’s foot and common hogweed.</p>	Poor
<p>Woodland – Broad leaved woodland The old railway embankments are frequently lined with narrow areas of plantation (broad-leaved woodland) which is often directly linked to denser woodland stands outside of the survey boundary. Since previous surveys, scrub has matured into woodland to over 5-metres in height with a younger scrub understorey and transitions from young woodland to mature scrub. In all the woodland, there is a lack of any significant ground flora, and the understory is typically underdeveloped.</p> <p>Tree species include sycamore, horse chestnut, white beam, silver birch, rowan, alder and crack willow. Scrub species include hawthorn, hazel, dog-wood, dog rose and elder.</p>	Moderate
<p>Grasslands Modified Adjacent to the track, there is poor, semi-improved grassland (modified grassland) present along the verges, often extending up the banksides of the old railway embankment to the western extent of the site in areas where scrub and trees are absent. Typically, few species were present per metre square with approximately 5 species frequently noted. There is an increase in ranker species in the sward and some scrub encroachment into the sward.</p> <p>Species present within the sward limited to perennial ryegrass, creeping buttercup, cock’s foot, common yarrow, white clover, and cow parsley. More diverse areas were noted but were generally limited in their extent and species never exceeded 6-8 per square metre.</p>	Poor
<p>Neutral Grassland Wide variety of herbaceous species present. The grass species present were generally similar across this habitat. Sward often varied in the composition of flowering plants suggesting substrate influences across the area with some damper areas likely to be present, seasonally.</p> <p>Grassland is rank with limited variation in structure. However, the desire lines were present which had created shorter, bare areas and shorter swards were noted where the substrate was stonier. Encroachment of scrub and trees was recorded throughout. Historically, the site had been assessed (McLay & Durkin, 2009) as having a species rich grassland in the “level track bed area”; however, at the time of the survey, these areas, whilst having a greater species diversity overall, appeared to be in a declining condition with negative grassland invasive present (Ref DWS).</p>	Moderate but declining
<p>Mixed scrub Various areas along the track have patches of dense, mixed scrub. These areas are typically species poor with an abundance of hawthorn. The age structure is limited, and the overall diversity is low.</p> <p>Dominant species include hawthorn and blackthorn with other species present such as hazel, blackthorn, broom, elder and dog rose.</p>	Moderate



7.0 Protected Species and Species of Nature Conservation Importance

7.1 Breeding and wintering birds

ERIC around 13,000 records of birds relating to 184 species within 2km of the site. None of the records appear to relate directly to the site itself; however, very few provide full grid references or more than a general area name. The closest listed records (c.300-metres away in adjacent woodland) relate to long-eared owl and barn owl, both of which were recorded foraging in the area in 2008.

A variety of common bird species were observed during the initial PEA, with European robin, common blackbird, Eurasian wren, common whitethroat, and Western jackdaw 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.

7.2 Bats

ERIC returned 73 records relating to bat species within 2km of the site. Three identified species of bat were listed: noctule bat, pipistrelle and soprano pipistrelle. None of the records appear to be listed for the site itself.

Although no suitable roosting features were identified, 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; woodland that runs north of site borders the train line, and this may also provide suitable commuting lines for bats

7.3 Badger

No evidence of badger on site.

7.4 Riparian Mammals – Otter and Water vole

None present on site.

7.5 Great Crested Newt

None present on site.

7.6 Invertebrates

Notable species found within 2km 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 more diverse areas of grassland and wetter swards) may be utilised by invertebrates.

8.0 Existing Management and Maintenance

8.1 Success Railway is an important countryside site. It is a green wildlife corridor with a variety of habitat, acting as a wildlife stepping-stone between large areas of greenspace. The path through Success Railway is a Public Right of Way and is therefore maintained by SCC's Rights of Way Team (part of the Highways Team).

9.0 General description and observations

9.1 Success Railway is a linear greenspace and is part of a local network of greenspaces used by residents for dog walking, running, cycling and general informal recreation. Running up the length of the railway line, there is a dolomite footpath which runs the length of the site. The path surface has become worn so that it is lower than the surrounding vegetation. Water is no longer draining off the surface but is collecting in large puddles. Encroaching surface vegetation has reduced the width of the path. This has resulted in the path becoming muddy, so walkers are avoiding the path and creating desire lines across the grassland. The quality of the grassland is deteriorating due to this use by walkers, cyclists and potentially motorbikes.

9.2 At various points through the site, there are ruts in the grassland from previous unauthorised vehicle use of Success Railway. This has reduced due to additional barriers. These ruts are collecting water and creating small ponds where wetland plants such as sedges and rushes are colonising. If water were managed, so that it drained from the newly surfaced path into these wet areas, they could be enlarged by creating a series of shallow scrapes and ponds.

9.3 There is a pond, which is drying out and so by reinstating drainage across the path, water draining into the pond could increase. Excess pond vegetation could be cleared to create an increased area of open water.

Access and Interpretation

9.4 There is no signage or interpretation on Success Railway and no identity. Success Railway connects via a network of footpaths to the open space around Herrington Burn as well as to linear walkway/cycleways to Philadelphia and Houghton. Following the Herrington Burn northwards will connect to Herrington Country Park. Heading southwest across Blind Lane connects to Elba Park.

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. Proposals will reduce deficiency.

Biodiversity	Proposals will further support stepping stone connectivity within wildlife corridor and improve overall biodiversity.
Invasive Species	None on site.
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. Local historic interest relating to the former Lambton Waggonway that ran along this route, linking to Philadelphia Workshops and Houghton Colliery.
Water Environment	No significant water quality/flooding issues. Proposals will positively support water quality and biodiversity and help to mitigate for flooding.
Rights of Way / Access	Informal multi-user route follows the former railway corridor, linking Elba Park to Philadelphia Workshops.
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 along the southern edge of the multi-user route. Any planting will avoid easements relating to this pipeline and footpath improvements will not unduly impact on the sewer alignment.

11.0 Proposed Works

11.1 Habitat Restoration aims at Success Railway:

- Improve quality of grassland by managing access to reduce desire lines, improve drainage and change cutting regime.
- Improve structural diversity of woodland by thinning of non-native species, opening-up canopy and underplanting with ground flora and woodland plants.
- Increase diversity of habitats through creation of additional scrapes and wetland areas and reinstating existing pond.

11.2 Access and Interpretation

- To upgrade signage to give Success Railway greater identity and connect the greenspace with other routeways.
- To resurface the bridleway including channelling path surface drainage into wet scrapes for micro wetland habitat creation and obstruction of motor vehicle misuse, and to encourage people to remain on the path

12.0 Budget

Source of Funding	Amount (£)
S106	62,123
Area Committee	19,000
NLHF	-
NECF	-
Total	81,123

Habitat	Project	Season Completed	Budget (£)
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Neutral Grassland	Carry out additional cut of meadow to address presence of rank grasses and removal of encroaching scrub	August – September	3,129
Ponds and Wetland	Reinstate existing pond	January – March	2,700
	Dig out three wetland scrapes at intervals along the length of Success, using existing ruts and depressions, as location and will be linked to improved path drainage.		-
Existing Woodland & Scrub	Carry out woodland thinning and scrub clearance	October – March	11,250
	Removal of ruderal vegetation and clearance of bramble.	April – September	2,599
	Under planting with plug plants	April – June	3,832
Access	Installation of signage and waymarks	Anytime	4,500
	Resurface 577 m of footpath to reinstate the path width (3.5 m) and camber with additional drainage onto adjacent grassland to support specification to be agreed.		45,000
Contingency – DWT			-
Contingency – SCC			8,112
Total			81,123

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.

