

Greenspace 7- Herrington Country Park

1.0 Introduction

1.1 Herrington Country Park (130ha) is a large and very popular country park, created on the site of the former Herrington Colliery. The Country Park is located opposite a regional landmark, the Penshaw Monument. Many local residents visit Herrington Country Park for informal recreation, to go for a walk, cycle and enjoy the wildlife. The Country Park hosts large-scale events such as concerts, sports events and family events. The creation of Herrington Country Park developed in the late 1990s and the park was officially opened in 2001. The mix of habitats include a series of 7 lakes and ponds, which run along the route of the Herrington Burn,



90 Ha of open amenity grassland and meadow, with 40 ha of plantation woodland. Other facilities include an amphitheatre, play area, bike and skate park, Miners Memorial Garden, sculpture trail throughout the park, community space café and toilets. The 'Friends of' Group is well established and play an active role in the park. Herrington Country Park is a Green Flag Park.

2.0 Location and Accessibility

2.1 The site is situated approximately 5km to the west of central Sunderland and the River Wear is approximately 1km to the north of the site. The Country Park is located adjacent to Penshaw Monument (to the north). The park lies within Green Belt, which stretches to the north and east of the site. To the west is Penshaw and Shiney Row, and to the south lies New Herrington and West Herrington.

3.0 Methodology

3.1 Durham Wildlife Services (DWS) were commissioned to carry out an ecological appraisal of Flint Mill 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 The designated sites within 2km of Herrington Country Park are listed as follows:

- Herrington Hill SSSI
- Dawson's Plantation Quarry SSSI
- Hastings Hill SSSI
- Foxcover Plantation LWS
- Carr Hill LWS
- Penshaw Hill LWS
- Penshaw Wood LWS
- Grimestone Banks LWS
- Herrington Hill Woodland LWS
- Wear River Banks Woods LWS

- Penshaw Pallion Railway LWS.

5.0 Strategic Significance

5.1 The site is identified within the Sunderland Local Plan as protected Green Belt and greenspace, and forms part of a strategic wildlife corridor that runs north-south from the River Wear into County Durham. Therefore, the site has been input into the Biodiversity Net Gain (BNG) Metric Calculator as “formally identified in local strategy.” Further, it is also directly adjacent to some Local Wildlife Sites within the wildlife corridor to the north-east so is likely functionally linked. Several habitats (e.g., woodland & scrub, native hedgerows, wetlands) are also identified within the North-East England Nature Partnerships (NEENP) Durham Priority Habitats list.

6.0 Habitat Assessment

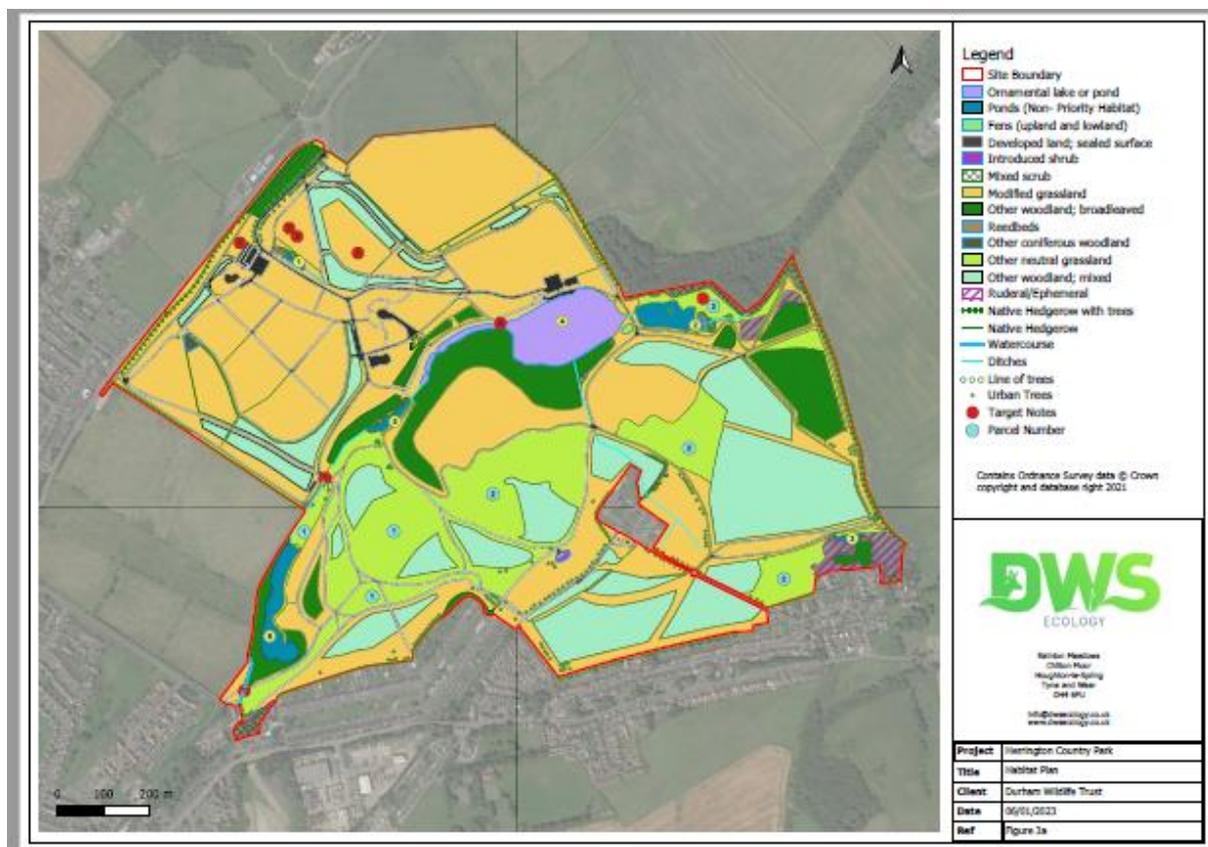
6.1 The habitat types found in Herrington Country Park are set out below.

Habitats	Condition
<p>Urban – urban tree Across the country park, a range of plant trees, usually over amenity grassland, is present throughout. No veteran or ancient trees were recorded.</p>	Moderate
<p>Line of Trees 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 recorded.</p>	Moderate
<p>Sparsely vegetated - Ruderal/Ephemeral Relatively small stands of tall ruderal vegetation are present around the site, typically dominated by rosebay and/or great willowherb, with occasional – frequent occurrences of tall grasses and thistles, such as, false oat-grass, cock’s-foot, common ragwort, and creeping thistle. Overall, the stands were generally species poor and lacked a varied vegetation structure.</p> <p>Larger stands are present around ‘Lily Pond’ to the south-east of the site. This habitat here occurs as part of a mosaic of habitats with scrub and other neutral grassland present. This area was difficult to map accurately due to transitioning of the habitat mosaics across the area and, as such, an estimation was mapped in this area. Species were a mixture of rosebay and great willowherb, both of which were locally dominating, bramble, raspberry, common hogweed, nettle, field bindweed, creeping thistle, mugwort, scattered hawthorn, broad-leaved dock, cock’s-foot, common ragwort and yarrow.</p>	Poor
<p>Grassland: Modified The most dominating habitat across the site is grassland, primarily modified grassland which is typically maintained as amenity greenspace for site visitors. Typically, these areas are mown very short (some ranker swards are also present) and species diversity is likely restricted as a result (other factors, such as, nutrification from dog walking may also contribute). Little variation in the species composition or sward structure was noted across the site and it is likely that the grasslands were seeded with a basic, hardy mix in the past. Species were fewer than 9 species/m² and frequently no more than 6 species/m².</p>	Moderate
<p>Grassland: Neutral</p>	Moderate

<p>Several parcels of other neutral grassland are present, mainly to the south of the site and around some of the more 'natural' water bodies. Whilst there are some variations with species composition across the different parcels, overall, species richness generally exceeds 9 species/m², and with limited influence of undesirable species (e.g., creeping thistle, broad-leaved dock). However, sward structure was typically limited with little to no variation or bare ground.</p> <p>Whilst the essential criterion (i.e., grassland appearance and composition closely match characteristics of the grassland type as described within UK Habitat Classification) was met when these fields were condition assessed, they failed overall on sward structure. As such, only a Moderate condition score was achieved.</p> <p>A separate area of neutral grassland occurs around the 'Nature Pond' to the northeast of the site. The sward height is slightly more diverse in this area with a slight variation in height and minor 'desire lines' creating some bare ground/minimal sward growth; however, there's a greater influx of undesirable species (i.e., creeping thistles) and encroachment from scrub (hawthorn, blackthorn, and willows). A wetland influence was recorded within 2-metres of the water's edge with some sedge and rush species recorded.</p>	Moderate
<p>Other woodland Broadleaved</p> <p>Planted woodland blocks are present throughout the country park. Most woodland blocks are relatively young, and no veteran or ancient trees were recorded anywhere. Due to type and age of the woodland stands, the understory and ground flora was generally limited and often only with bramble cover and grasses such as false oat-grass present. The woodland blocks have frequently been bound with hedge-like features, containing the woodland blocks; however, these appear more like dense, woodland edge scrub through lack of frequent management than actual hedgerows – some have been cut back in the south of the site to allow track access. There was little species variation across the woodland areas.</p>	Poor
<p>Other woodland mixed</p> <p>Similar to the description above, planted stands of mixed woodland – which is the predominant woodland type within the country park – are present across the landscape. The composition is often similar to the deciduous broad-leaved blocks; however, Scots pine <i>Pinus sylvestris</i> and European larch <i>Larix decidua</i> are occasional – frequent.</p>	Moderate
<p>Woodland other coniferous</p> <p>A very small stand of coniferous woodland is present to the north-west of the site. This small block is dominated by Scots pine, and as is typical across the other woodland stands, there is little to no variation in the woodland age structure, nor is there a recognisable ground flora community present.</p>	Poor
<p>Lakes Ornamental Lake</p> <p>A relatively large 'Boating Lake' is present as a feature on site. The waterbody is connected to other smaller waterbodies to the east and west through various ditches and outfalls. The water quality appears susceptible to eutrophication due to the large congregation of geese and other wildfowl, and algal blooms have been noted.</p> <p>Dense mixed woodland is present along the southern bank. A number of artificial features are present around the northern shore and where the waterbody connects</p>	Moderate

<p>to other ponds. The northern bankside is heavily poached through footfall (visitors, dogs, waterfowl); however, two lines of planted willow "hedge" (totalling approx. 80 metres each) have been installed either side of the boating jetty, likely to try and reduce bankside erosion. Generally, shoreline vegetation around this lake is limited but patches with great willowherb, bulrush, meadowsweet, willow and hard rush were recorded; however, amenity grassland is abundant.</p>	
<p>Lakes Non-priority Ponds</p> <p>Near the visitor centre carpark appearing to be the most artificial in design with artificial reinforced banks along one site and an adjoining manmade ditch. Emergent vegetation is present along its northern boundary edges with species such as purple loosestrife, flag iris fleabane, common knapweed, greater willowherb, hard rush, false oat-grass, hemp agrimony, meadowsweet, cock's foot, common reed s and some tree species including alder, willow and silver birch.</p> <p>The eastern pond (connected to the main lake) is similar to the main lake with low banksides of amenity grassland; however, more natural habitat is present along its northern edge and an extensive reedbed (bulrush <i>Typha latifolia</i>) to the east; this appears connected to another very small body of water adjacent which was heavily choked with bulrush; however, this was difficult to determine as site vegetation was very overgrown at the time of the survey. Small, vegetated islands are present within this pond which typically exhibit willows and tall ruderal (willowherb) vegetation. Smaller areas of reed, including both common reed (abundant) and bulrush (occasional – frequent) feature around the northern banksides in several areas. Clumps of hard rush are present throughout.</p> <p>The most undisturbed pond, known as 'Lily Pond,' lies to the southeast corner. This was a small, well vegetated pond with aquatic vegetation recorded (possibly floating heart and some species of water lily). At the time of the survey, while water was present, seasonal drying was evident and exposed mud was visible around the pond. The southern banksides are well vegetated with a mixture of reeds (bulrush and some common reed) and large stands of rosebay willowherb. Beyond this, smaller parcels of willow, hawthorn, and alder scrub are present and broad-leaved woodland of abundant crack willow.</p>	<p>Poor</p> <p>Poor</p> <p>Moderate</p>
<p>Reedbed</p> <p>A dense patch of reeds (dominated by bulrush and common reed) is present to the eastern extent of the pond beside the main lake. The waterbody is choked with vegetation in this area and little variation within the height and density was recorded.</p>	<p>Poor</p>
<p>Heathland and shrub – mixed shrub</p> <p>Whilst the Country Park is generally maintained, small areas of mixed scrub are present in areas where it has naturally formed, often in association with the planted stands of mixed woodland where it exists as edge habitat. It is often fairly dense in these areas and generally species poor with bramble, hawthorn, or blackthorn dominating the canopy.</p>	<p>Poor</p>
<p>Native Hedgerow</p> <p>There are several boundary hedgerows present around the site which are typically abundant – dominant with hawthorn. Other occasional species include blackthorn, dog rose, English oak, apple sp., maple sp., elder, and hazel. Most are largely intact and functional, ranging from approx. 5ft – 8ft in height. The ground flora is typically influenced by the adjacent habitat, which is frequently amenity grassland.</p>	<p>Moderate</p>

<p>Native Hedgerow with Trees Similar to the Native hedgerow descriptions above, several of the hedges were present with trees around the park boundary.</p>	Good
<p>Ditches Several relatively narrow, dry – likely seasonally wet – ditches are present around the Country Park. Most of the ditches have very limited vegetation cover present, most of which is similar in character to poor neutral grassland.</p>	Poor
<p>Fen A very small patch of fen is present adjacent to the main boating lake. The area is not substantial and likely manmade given the site context. Species are dominated by common reed and bulrush with occasional teasel, with young willow, alder, common knapweed, meadow sweet, and purple loosestrife present.</p>	Poor



7.0 Protected Species and Species of Nature Conservation Importance

Breeding and wintering birds

7.1 A variety of common bird species were observed during the initial preliminary ecological assessment, with European robin, common blackbird, Eurasian wren, and mute swan recorded. The scrub and trees across the site will likely provide suitable nesting habitat for a range of relatively common species in the county. The grassland and aquatic habitats will likely provide foraging opportunities and some nesting opportunities in ranker areas. The consultation data suggests the site is important for a range of nationally declining farmland birds. Additionally, a number of passage waders and passerines were also sporadically recorded, suggesting some level of importance as a stopping ground for migrating birds.

Bats

7.2 Although no suitable roosting features in association with trees 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. As such, tree removal should be preceded by a specific tree bat risk assessment.

Badger

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

Western European Hedgehog

7.4 ERIC returned 73 records relating to hedgehog, dated between 2004 – 2021. None of the records mention the country park directly but several are associated with the Herrington area and Penshaw, and/or fall within the same grid square as the site. The Country Park offers many opportunities for hedgehog with wooded and scrubby areas offering suitable habitat for shelter and hibernation, and open grasslands (maintained and rank) offering relatively easy foraging opportunities. The site is extensively used by the general public when walking dogs which may cause disturbance to this species and limit the population size if present; however, given the size of the site and the habitats present, it is likely that the species is able to find relatively quiet areas of the site to reside away from anthropological pressures.

Riparian Mammals – Otter and Water vole

7.5 It is likely that otter, if still present in the area, use the burn at least as a commuting feature and may forage within the water bodies on site (this has been documented in the past). An artificial holt is known to be installed on site, but no clear evidence of use was recorded during the survey.

Great Crested Newt

7.6 Whilst several waterbodies are present on site which may be suitable for this species to utilise, consultation data provided no records of great crested newts for the site or within 2km of the site. The waterbodies on site were environmental DNA (eDNA) tested during the appropriate survey season and a negative result was returned.

Invertebrates

7.7 ERIC provided 137 records of invertebrates from within 2km. Notable species listed for the site include small heath, dingy skipper wall, common darter, and cinnabar moth. Records for the site are dated between 2005 – 2020, with most occurring in 2020. It is possible that habitats on site, particularly the ranker grasslands around the waterbodies, and stream may be utilised by invertebrates.

8.0 General description and observations

8.1 Herrington Country Park is a 130ha site with a variety of habitats including ponds, lakes, grassland and plantation woodland. All of which were created, when the site was reclaimed, from the mid-1990s onwards. Herrington Country Park is of regional significance as a visitor attraction and a venue for many large-scale events including concerts and sports events, attracting large numbers of people. Herrington is adjacent to Penshaw Monument, which is also a regional attraction, but direct habitat connections are separated by a busy road.

8.2 Herrington Country Park is an important local amenity and can be accessed directly from housing via footpaths following Herrington Burn which connect with surrounding open space and countryside to the south and from housing surrounding the southern side of the park.

8.3 The Park attracts many visitors every day, particularly dog walkers. This does create disturbance for wildlife across the park, particularly in the lakes and ponds, where dogs are allowed to roam free,

often entering the water. In addition, many people feed bread to the wildfowl, which will impact water quality and potentially attracts rats.

8.4 The habitats on site are not mature. Herrington is characterised by large areas of amenity grassland and blocks of plantation woodland. This creates a feeling of openness and allows for views across to Penshaw and the surrounding countryside. In the southern part of the park there are corridors of amenity grassland with woodland bounded by hedges. The southern part of Herrington Country Park is very confusing with similar blocks of woodland and amenity grassland. The park would benefit from better signage for new visitors with marker posts identifying trails different routes.

New Hedgerow Creation

8.5 The boundary between Herrington Country Park and new housing would be established with a new mixed species hedge between the two sites.

New woodland and orchard

8.6 The woodland rides that lie adjacent to New Herrington (and directly west of West Herrington) will be improved, including additional occasional trees, wildflower seeding and hedgerow management. Adjacent to the access road leading to Lady Beatrice Terrace an orchard is proposed.

Existing Plantations

8.7 The southern part of Herrington Country Park, adjacent to New Herrington is characterised by large blocks of even-aged plantation woodland. These are bounded by pathways with wide verges of modified amenity grassland. The pathways lack features and the visitor feels excluded for the woodland, with little opportunity for interaction with the woodland. The proposed project would extend the woodland and soften the edge through a mixture of new tree planting within these existing grassland corridors and management of the existing plantations. The grassland has little current biodiversity interest. The new tree planting would add interest by creating more structure and areas of grass will be left uncut between the trees adding interest for invertebrates and creating pollinator corridors. Amenity grass will be scarified and over planted with wildflower seed to create greater interest.

8.8 The woodland plantations are in poor or moderate condition with stands of dying ash within it. Implementation of a woodland management programme to remove dying ash and thin-out some of the stands to allow some regeneration, create a more natural structure so less visible plantation lines, increase amount of standing deadwood and create a more natural woodland edge would be very beneficial. The focus for this work would be the mixed woodland to the south of the site.

Grasslands

8.9 Herrington Country Park has vast tracks of modified and neutral grassland, the majority of which will be designated as an area for Biodiversity Net Gain. However, there are some areas smaller areas of neutral grassland, particularly around the smaller ponds which could be managed as separate units to increase the diversity of the grassland. These would be areas that could be cut and have arisings removed and be manageable for local volunteers. There will also be the opportunity to cut and re-seed with yellow rattle and other plants to increase diversity.

Ponds, Fens and Reeds

8.10 Management of smaller ponds to remove encroaching reeds and manage surrounding ruderal vegetation. Invasive species have also been identified on site – programme of removal is priority for action.

Herrington Burn

8.11 The Herrington Burn, which flows through Herrington Country Park, has been modified to create a series of large lakes and ponds. These wetlands have an important amenity value and are visited by thousands of people each year. The Wear Rivers Trust have identified a series of interventions to slow

flows creating ponds and reducing the amount of silt being deposited into the main lakes. This should help with some localised flooding.

Access and Interpretation

8.12 Herrington Country Park is well-signed in places and has interpretation boards around the site at key entrance points. However, some of the boards have faded and been subject to vandalism. Therefore, Link Together will provide an opportunity to replace and upgrade the interpretation boards.

8.13 The southern half of Herrington Country Park can be confusing to new visitors due to similar layouts and planting. By improving the diversity of the planting blocks this may help visitors navigate the park. In addition, additional signage and some new walking trails that set out routes of varying lengths can encourage visitors from the surrounding conurbations to visit the park.

9.0 Maintenance

9.1 Herrington Country Park is a flagship country park which hosts multiple events and activities with various facilities such as a playground, buildings, Skate Park as well as open spaces. The focus of Link Together is on one small area within the country park.

A team of three staff are based in Herrington Country Park. They are responsible for day-to-day management and deliver functions such as amenity grass cutting, cutting back over hanging woodland vegetation, cleansing and site maintenance of facilities. There is a planned maintenance programme as well as reactive maintenance. The Friends of Herrington Country Park are a very active and proactive group who support work in the country park with litter picks, community activities and keen to develop more opportunities for volunteering with support from other organisations.

10.0 Summary of Constraints and Key Issues

Issue	Comment
Planning Policy	Proposals support local policy, enhancing the Green Belt, existing greenspace 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 deficiencies.
Biodiversity	Proposals will further support stepping stone connectivity within wildlife corridor and improve overall biodiversity.
Invasive Species	Himalayan Balsam present on site and will be treated/removed.
Landscape Character	Not an area of higher landscape value. Landscape Character Assessment recommends more woodland cover to area.
Historic Environment	Limited historic importance on site. Local importance relating to former Lambton Waggonway on site. Site interpretation to be enhanced.
Water Environment	Partly lies within Flood Zone 3 along Herrington Burn. Proposals will improve water quality and help to reduce flooding potential.
Rights of Way / Access	Informal footpaths exist on site. Signing and interpretation may be improved.
Soil and Nitrates	No negative impact on soils. No nitrate fertilisers will be used as site lies within Nitrate Vulnerable Zone.
Utilities	NWL sewer pipes are present. Works undertaken will respect necessary easements.

11.0 Habitat Management at Herrington Country Park

11.1 Management Aims

- To maintain and enhance the variety of habitats in Herrington Country Park, focusing on wetlands around the Herrington Burn and woodlands.
- To improve the habitats along the Herrington Burn
- To manage woodland plantations to create diversity of age structure, woodland edge and increase diversity of ground flora.
- To create additional woodland, orchard and hedgerows
- To manage non-native invasive species e.g., Himalayan Balsam.

11.2 Access and Interpretation

- To give identity to a series of woodland trails through plantation woodland with installation of suitable interpretation/signing.
- To replace and upgrade existing interpretation boards in profile and self-policed locations.

Proposed locations are shown on the map further below.

12.0 Budget

Source of Funding	Amount (£)
Section 106	-
Area Committee	40,355
NECF	48,644
NLHF	22,645
Total	111,644

Habitat	Project	Season Completed	Budget (£)
Woodland Existing	Carry out two year a programme of woodland management by thinning, removing dying ash and creating woodland edge.	October – February	14,400
Streams	Treatment of Himalayan Balsam	April – June	4,618
	Instream treatments to be specified by WRT – could include creating meanders, vegetation management	Anytime	11,645
	WRT Management Fee		3,217
Neutral Grassland	Additional cutting and raking of parcels of grassland	August – October	900
New woodland	Woodland edge, orchard and boundary hedge planting. Grassland rotavating, orchard soil treatment, replacement of tree failures (beating-up) and general maintenance, planting with wildflowers	November - March	40,630
	Design	-	3,150
Interpretation	Trails - Development of series of trails with marker posts and leaflet	Anytime	10,778
	Design and Installation of 6 interpretation boards	Anytime	11,141
Contingency DWT	-		2,265
Contingency SCC	-		8,900
Total			111,644

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.

