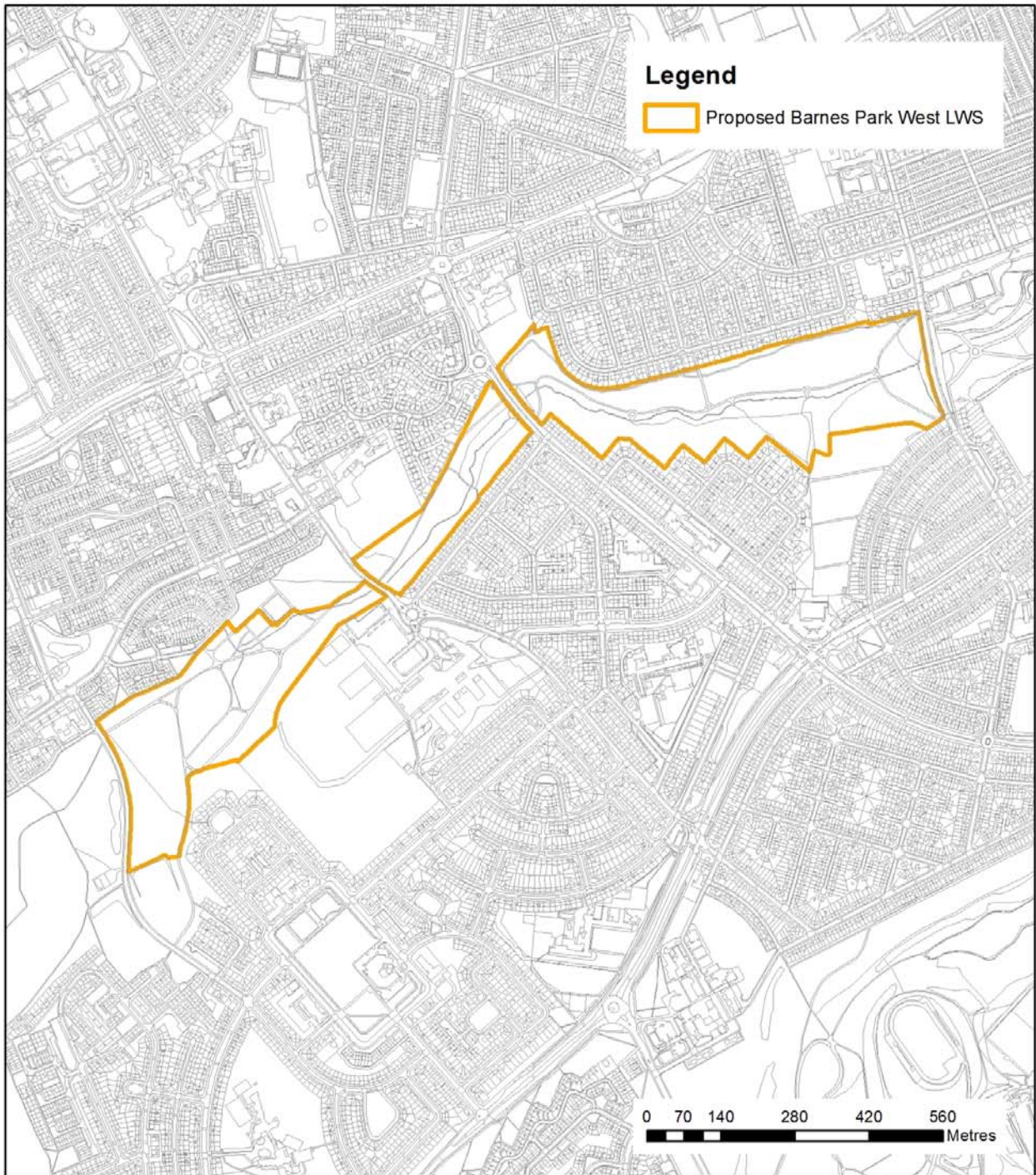


Local Wildlife Sites Evidence Report



December 2020



Contents	Page No.
Barnes Park West	1
Bowes Railway	6
Bunny Hill	11
Cherry Knowle Dene	17
Colbeck Burn	26
Downhill Meadows	32
Elemore Vale	40
Eppleton Railway	53
Foxhole Woods	73
Fulwell Meadows	77
Grindon Sandhills	83
Hendon Promenade	90
Hendon Railway	98
Hendon Sidings and Docks	103
Hetton Bogs	111
Hetton Lyons Country Park	121
High Barmston	135
High Wood	141
Houghton Hill	155
Hylton Colliery Pond	165
Hylton Dene	173
Pattison South Pond	185
Philadelphia Pond	193
Princess Anne Park	197
Rainton Meadows Nature Reserve	217
Reach Wood	223
Redburn Marsh	231
River Don	236
Ryhope Dene	240
Ryhope Village Dene	248
Seaton Bank	254
Sedgeleth Ponds	262
Severn Houses	271
Silksworth Fishing Lake	281
South Hylton Dene	289
Springwell Quarry Ponds	300
Success Railway Cutting	308
The Children's Forest	315
The Heughs	322
Tilesheds	330
Upper Don Tributaries	339
Usworth Burn	347
Vigo Wood and Railway Embankment	353
Washington Wildfowl and Wetlands Centre	361
Wearmouth Riverside	377
Worm Hill	390



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 357 543	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 10.08.2020 Scale 1: 10,000
	Project Local Wildlife Site Boundary Review 2020	Subject Proposed Barnes Park West LWS
Drawing No. UF 5.36.01.07.001.01		

SITE NAME	Barnes Park West
SITE No.	UF 5_36_01_07_001
LOCATION	Grindon NZ373555
STATUS	Proposed Local Wildlife Site
AREA	27 ha
DATE OF SITE VISIT	June 2009 and 2019
OWNERSHIP	Sunderland City Council and Private

SITE DESCRIPTION

Open space along two kilometres of the Barnes Burn, with species-rich Magnesian Limestone grassland, the Barnes Burn, and small areas of woodland along the burn.

REASONS FOR DESIGNATION

National and Local BAP Habitats:

Habitats	Hectares
Lowland meadow and Pasture	27
Rivers and streams	0.1

National and local BAP species:

English Name	Scientific Name	Notes
Hedgehog	<i>Erinaceus europaeus</i>	Present
Reed Bunting	<i>Emberiza schoeniclus</i>	Nests
Song Thrush	<i>Turus philomelos</i>	Nests

DETAIL

The site is based on a two-kilometre length of the Barnes Burn and the corridor of open parkland alongside it, between Grindon and Thorney Close. This includes an area of species rich Magnesian Limestone grassland.

The burn itself has clean water and a natural appearance, supporting a variety of wildlife. There is a good range of aquatic and emergent plants, including branched bur-reed, yellow flag iris, brooklime, marsh marigold and meadowsweet. In places there are small copses of long-established woodland, providing habitats for small mammals and nesting birds.

Towards the Barnes Burn there are small flushes with rushes and meadowsweet. The burn here supports nesting birds such as sedge warbler and reed bunting. The open space further away from the burn is more intensively managed and has planted standard trees set among improved grassland. There are small areas of semi-improved grassland, often with plantains and self-heal.

Immediately east of Tay Road, there is a large area of semi-improved calcareous grassland with a flush supporting sedges and meadowsweet. This area has meadow oat grass, sedges, birds foot trefoil, yellow rattle and cowslips, as well as small numbers of pyramidal and bee orchids.

CONDITION ASSESSMENT

The grassland meets the Local Wildlife Site criteria

CONNECTIVITY

Barnes Park is an important component of the Barnes Burn wildlife corridor, through which wildlife is able to move from the wider countryside into the urban area of Sunderland.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in 2009 by John Durkin and in 2019 by Durham Wildlife Services.

SITE MANAGEMENT

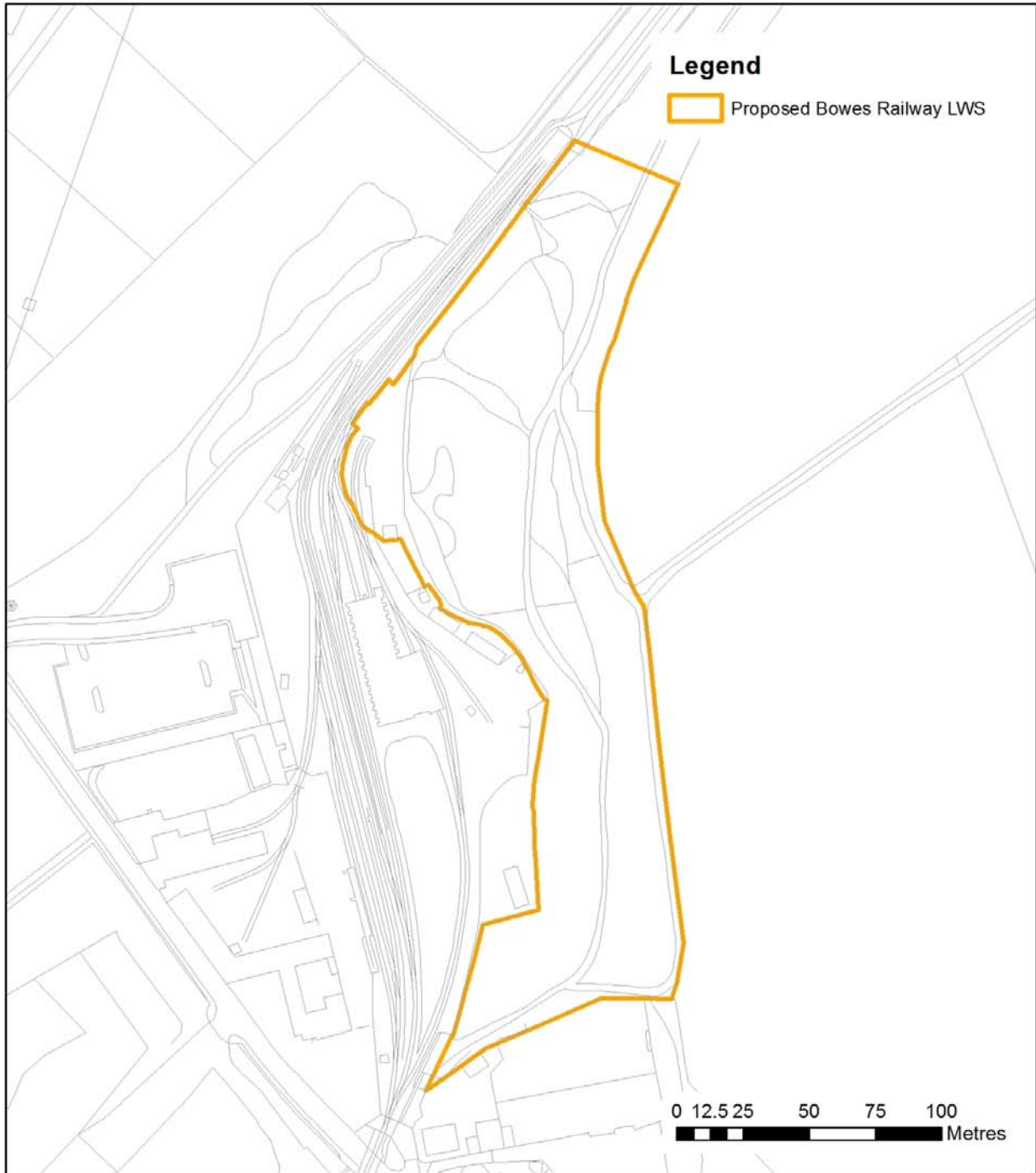
The site is managed by Sunderland City Council.

- Litter removal and maintenance of footpaths.
- Annual cut and rake of grassland.



Barnes Park West species list

BAP Habitat:		
Common Name	Botanical Name	Abundance (DAFOR)
Autumn Hawkbit	<i>Leontodon autumnalis</i>	Occasional
Bee Orchid	<i>Ophrys apifera</i>	Rare
Betony	<i>Stachys officinalis</i>	Occasional
Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Black Medick	<i>Medicago lupulina</i>	Occasional
Blue Moor-grass	<i>Sesleria caerulea</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Occasional
Cat's-ear	<i>Hypochaeris radicata</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Poppy	<i>Papaver rhoeas</i>	Occasional
Common Restharrow	<i>Ononis repens</i>	Frequent
Common Sedge	<i>Carex nigra</i>	Occasional
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Cowslip	<i>Primula veris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
Crested Hair-grass	<i>Koeleria macrantha</i>	Occasional
D. fuchsii x purpurella	<i>Dactylorhiza x venusta</i>	Occasional
Daisy	<i>Bellis perennis</i>	Occasional
Dandelion	<i>Taraxacum agg.</i>	Occasional
Dotted Loosestrife	<i>Lysimachia punctata</i>	Occasional
Fairy Flax	<i>Linum catharticum</i>	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Field Scabious	<i>Knautia arvensis</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Occasional
Goat's-beard	<i>Tragopogon pratensis</i>	Occasional
Great Burnet	<i>Sanguisorba officinalis</i>	Frequent
Greater Knapweed	<i>Centaurea scabiosa</i>	Occasional
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Italian Alder	<i>Alnus cordata</i>	Rare
Jointed Rush	<i>Juncus articulatus</i>	Occasional

Ladies Mantle	<i>Alchemilla vulgaris</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Occasional
Lesser Stitchwort	<i>Stellaria graminea</i>	Occasional
Lesser Trefoil	<i>Trifolium dubium</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Fescue	<i>Festuca pratensis</i>	Occasional
Meadow Oat-grass	<i>Helictotrichon pratense</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Mouse-ear-hawkweed	<i>Pilosella officinarum</i>	Occasional
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Frequent
Pepper-saxifrage	<i>Silaum silaus</i>	Occasional
Pepper-saxifrage	<i>Silaum silaus</i>	Frequent
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Occasional
Pyramidal Orchid	<i>Anacamptis pyramidalis</i>	Frequent
Quaking-grass	<i>Briza media</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Occasional
Sheep's-fescue	<i>Festuca ovina</i>	Occasional
Slender St John's-wort	<i>Hypericum pulchrum</i>	Frequent
Small Scabious	<i>Scabiosa columbaria</i>	Occasional
Smooth Meadow-grass	<i>Poa pratensis</i>	Occasional
Timothy	<i>Phleum pratense</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Waterer's Cotoneaster	<i>Cotoneaster x watereri</i>	Rare
White Clover	<i>Trifolium repens</i>	Frequent
Wild Thyme	<i>Thymus polytrichus</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow Oat-grass	<i>Trisetum flavescens</i>	Occasional
Yellow-rattle	<i>Rhinanthus minor</i>	Occasional
Yorkshire-fog	<i>Holcus lanatus</i>	Occasional
Zigzag Clover	<i>Trifolium medium</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 075 84274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 286 590	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 23.11.2020 Scale 1: 2,000	
	Project Local Wildlife Site Boundary Review 2020		
	Subject Proposed Bowes Railway LWS		
	Drawing No. UF 5.36.01.07.002.01	Revisions 1	

SITE NAME	Bowes Railway
SITE No.	UF 5_36_01_07_002
LOCATION	Springwell NZ286590
STATUS	Proposed Local Wildlife Site
AREA	2.18 ha
DATE OF SITE VISIT	July 2009
OWNERSHIP	Sunderland City Council

SITE DESCRIPTION

Grassland, heath and scrub communities developed on former colliery spoil heaps and adjacent derelict railway sidings.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Early successional brownfield community	0.12
Lowland heath	0.54
Lowland meadows and pasture	0.64

National and local BAP species:

English Name	Scientific Name	Notes
Dunnock	<i>Prunella modularis</i>	Breeds
Linnet	<i>Carduelis cannabina</i>	Breeds
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds
Song Thrush	<i>Turdus philomelos</i>	Breeds

DETAIL

The colliery shales support a remnant lowland heath community dominated almost entirely by heather. The only other ericoid present is a single specimen of bell heather, a very uncommon plant in Sunderland. The heathland areas are typically associated with pockets of acid grassland containing wavy hair grass, early hair grass, sheep's sorrel, common catsear and hawkweed species. Scattered scrub and large stands of tall ruderal species such as rosebay willowherb are colonising the heathland area.

CONDITION ASSESSMENT

The Lowland heath habitat meets the Local Wildlife Site criteria:

Elsewhere, the thin soils support a species-rich grassland community that is characteristic of sparsely vegetated brownfield sites. Plant species include fairy flax, blue fleabane, hawkweeds, yellow rattle, birdsfoot trefoil and eyebright. An area of derelict railway line at the northern end supports a colony of wood small reed, which is scarce in the DBAP area. Unusually, the normally coastal sand sedge is also present. Sand Sedge is also scarce in the DBAP area.

The Early successional brownfield habitat meets the Local Wildlife Site criteria:

The derelict railway sidings towards the southern end of the site have been partly landscaped by amenity tree plantings but the remaining areas of open grassland now support a colourful and herb-rich lowland meadow community. Knapweed and yellow rattle grow with cowslip, goatsbeard, meadow vetchling, birdsfoot trefoil, oxeye daisy, common centaury and yellow oat grass. This area is particularly notable however for the large population (100+) of common broomrape which grows here as a parasite of red clover. This species is currently known from only four locations in the DBAP area.

The Lowland meadows habitat meets the Local wildlife Site criteria:

The site is known to be important for invertebrates and the following butterfly species were recorded during the present survey – common blue, small skipper, small heath, meadow brown, wall, painted lady and large white. The scrub habitat and plantation woodland supports willow warbler, bullfinch, linnets and reed bunting.

CONNECTIVITY

Springwell Bowes Tip forms part of the Springwell Green Corridor and is an important link with the Follingsby and River Don Green Corridors to the north.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed by V.Howard in 2005 and by A. McLay in 2009.

SITE MANAGEMENT

The future favourable condition of the lowland heath and the associated grassland communities will depend upon active management to maintain the essential open and unshaded conditions needed by these habitats. Scrub and coarser vegetation should be removed, as well as some planted non-native trees.

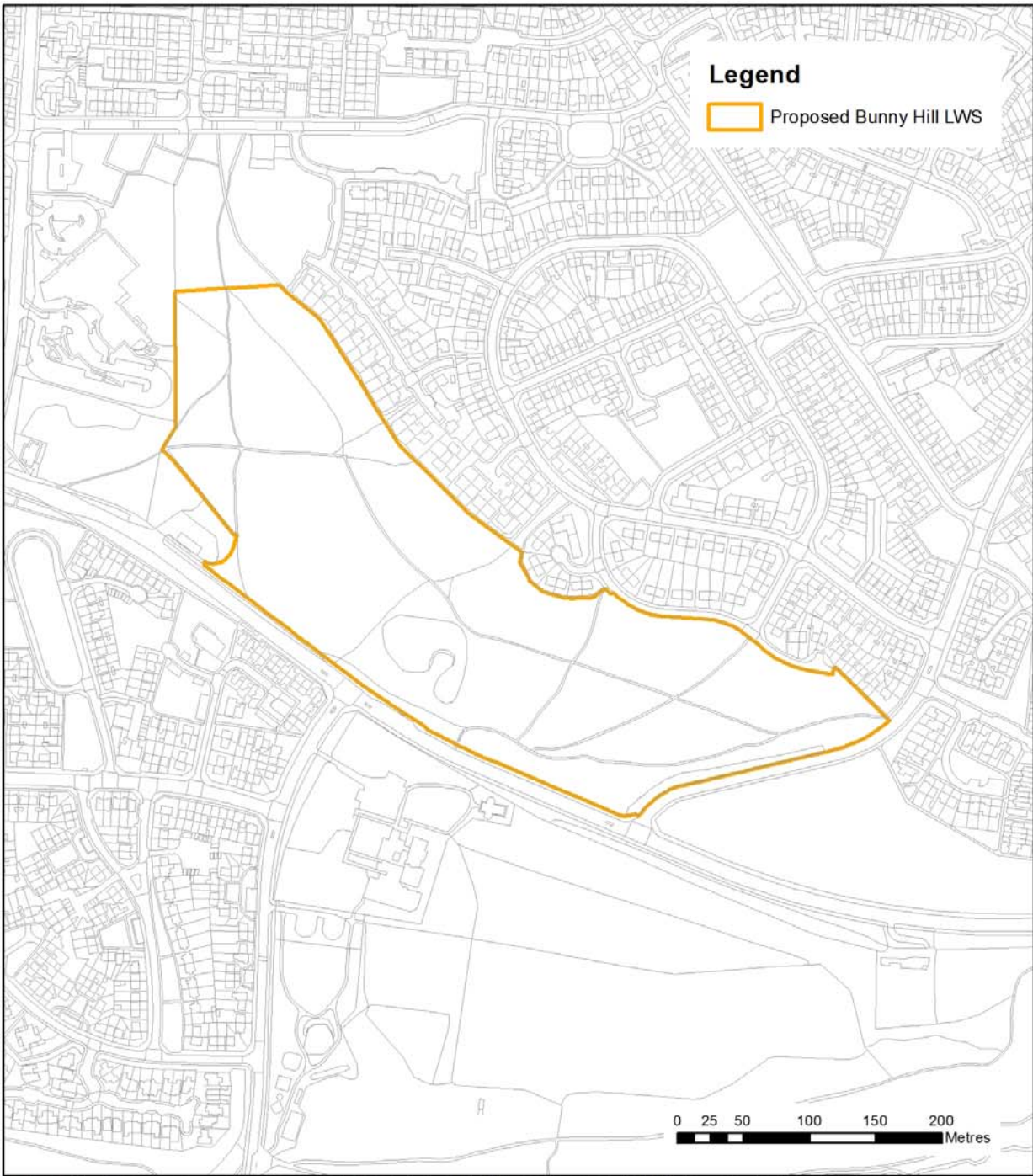
For details of grassland and heathland management, refer to the Local Wildlife Site “Management Guidelines and Monitoring Notes”.

Bowes Railway species list

BAP Habitat: Ancient Semi-Natural Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
a cotoneaster	<i>Cotoneaster sp.</i>	Rare
Bell Heather	<i>Erica cinerea</i>	Rare
Blue Fleabane	<i>Erigeron acer</i>	Rare
Broom	<i>Cytisus scoparius</i>	Occasional
Cat's-ear	<i>Hypochaeris radicata</i>	Rare
Chinese Mugwort	<i>Artemisia verlotiorum</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Broomrape	<i>Orobanche minor</i>	Occasional
Common Centaury	<i>Centaureum erythraea</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Cowslip	<i>Primula veris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
Daisy	<i>Bellis perennis</i>	Rare
Early Hair-grass	<i>Aira praecox</i>	Occasional
Eyebright	<i>Euphrasia officinalis agg.</i>	Occasional
Fairy Flax	<i>Linum catharticum</i>	Rare
False Oat-Grass	<i>Arrhenatherum elatius</i>	Occasional
Field Wood-rush	<i>Luzula campestris</i>	Rare
Garden Lady's-mantle	<i>Alchemilla mollis</i>	Rare
Goat's-beard	<i>Tragopogon pratensis</i>	Rare
Ground-elder	<i>Aegopodium podagraria</i>	Rare
Hawkweed	<i>Hieracium agg.</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Heather	<i>Calluna vulgaris</i>	Locally Abundant
Lady-fern	<i>Athyrium filix-femina</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mouse-ear-hawkweed	<i>Pilosella officinarum</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Abundant
Sand Sedge	<i>Carex arenaria</i>	Rare
Sheep's-fescue	<i>Festuca ovina agg.</i>	Occasional

Silver Birch	<i>Betula pendula</i>	Occasional
Smooth Hawk's-beard	<i>Crepis capillaris</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Frequent
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Tansy	<i>Tanacetum vulgare</i>	Rare
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Occasional
Wild Mignonette	<i>Reseda lutea</i>	Rare
Wood Small-reed	<i>Calamagrostis epigejos</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare
Yellow Oat-grass	<i>Trisetum flavescens</i>	Frequent

Common Name	Botanical Name	Abundance (DAFOR)
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Rare
Male-fern	<i>Dryopteris filix-mas</i>	Rare
American Willowherb	<i>Epilobium ciliatum</i>	Rare
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Rare
Field Horsetail	<i>Equisetum arvense</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional
Common Ivy	<i>Hedera helix</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Rare
Holly	<i>Ilex aquifolium</i>	Rare
White Dead-nettle	<i>Lamium album</i>	Rare
Common Toadflax	<i>Linaria vulgaris</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Rare
Black Medick	<i>Medicago lupulina</i>	Rare
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Rare
Bracken	<i>Pteridium aquilinum</i>	Rare
Dog-rose	<i>Rosa canina agg.</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Frequent
Common Sorrel	<i>Rumex acetosa</i>	Rare
Annual Pearlwort	<i>Sagina apetala</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Sticky Groundsel	<i>Senecio viscosus</i>	Rare
White Campion	<i>Silene latifolia</i>	Rare
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Dandelion	<i>Taraxacum agg.</i>	Rare
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Zigzag Clover	<i>Trifolium medium</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Rare
Common Vetch	<i>Vicia sativa</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Yellow-rattle	<i>Rhinanthus minor</i>	Frequent
Yorkshire-fog	<i>Holcus lanatus</i>	Abundant



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 359 589</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 06.05.2020 Scale 1: 4,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Bunny Hill LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5.36.01.06.005.01</p>		

SITE NAME	Bunny Hill (formerly Hylton Castle Grassland)
SITE No.	UF 5_36_01_06_005
LOCATION	Hylton Castle NZ359589
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised in 2020
AREA	8.47 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Magnesian Limestone grassland, scrub and coarse grassland communities developed on a south-facing hillside.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Magnesian Limestone grassland	0.80

National and local BAP species:

English Name	Scientific Name
Hedgehog	<i>Erinaceus europaeus</i>
Skylark	<i>Alauda arvensis</i>

DETAIL

The site consists of small pockets of Magnesian limestone grassland within a larger area of coarser species-poor grassland. To the north of the current designation is a mixture of rank grassland, scrub and species rich magnesian limestone grassland. Areas of hawthorn scrub lie to the west of this area, towards the bottom of the slope. At the top of the slope, by the houses, lies rank species poor grassland. The area immediately south of the current designation is made up of rank semi-improved grassland with occasional desirable herb species such as common knapweed, great knapweed, lady's bedstraw, wild marjoram and oxeye daisy. The areas of scrub, again, have occasional desirable herbs present along the edge, with similar species composition to the rank semi-improved grassland detailed above. These areas seem to be a mixture of neutral grassland indicator species and magnesian limestone indicator species. To the far north of the site lies the most interesting grassland, with a shorter sward and an abundance of magnesian limestone indicator species. Frequent through this area are greater knapweed, marjoram and lady's bedstraw. Cowslip and salad burnet are occasional, with kidney vetch and restharrow rare.

A small area of secondary woodland is present at the sites southern end and scrub is in the early stages of regeneration across the lower slopes. Part of the original designation has now been developed with houses.

The area to the southeast of the current designation, sandwiched between the current designation and the SSSI (and across part of the SSSI as well) is made up of rank species poor grassland with scattered hawthorn and dog rose scrub. False oat-grass and cock's-foot are dominant. This area of grassland is non-BAP habitat, but does provide a buffer to the SSSI, as well as the current LWS designation.

CONDITION ASSESSMENT

The Magnesian limestone grassland meets the Local Wildlife Site Criteria:

Areas of Magnesian limestone grassland are limited on site to small areas where soils are evidently thinner. Species include wild marjoram, lady's bedstraw, hoary plantain, harebell, kidney vetch, greater knapweed, salad burnet, cowslip, burnet saxifrage, quaking grass and fairy flax.

The Magnesian limestone grassland is in good condition. The ranker areas on site hold potential to become more diverse with management, given the indicator species already present within them.

CONNECTIVITY

Bunny Hill lies to the north of a complex of Local Wildlife Sites. These include: Hylton Dene, an area of broadleaf woodland, grassland and wetland habitat; Tiledsheds, an area of broadleaf woodland and species rich calcareous grassland; and Hylton Colliery Pond, an area of scrub, secondary broadleaf woodland and wetland habitat. Hylton Castle Cutting Site of Special Scientific Interest (SSSI) lies just 50 metres to the south. Bunny Hill LWS, along with the above LWS's and the SSSI are all designated as a Local Nature Reserve and links the site with the River Wear, which lies 1.1km to the south. Again, a complex containing several semi-natural habitats are present along the banks of the River. Overall, the site is well connected to the wildlife corridor that follows the River Wear.

LANDSCAPE

The grassland forms an important area of open green space within a heavily urbanised part of the city.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

Surveyed for the MAGical Meadows Project by A. Mclay in 2006, in 2010 by A. Mclay, and in 2018 and 2020 by Durham Wildlife Services.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Grassland:

- Selective scrub removal.
- Annual cut and rake of areas of grassland.
- Bare earth creation for grassland recolonisation.

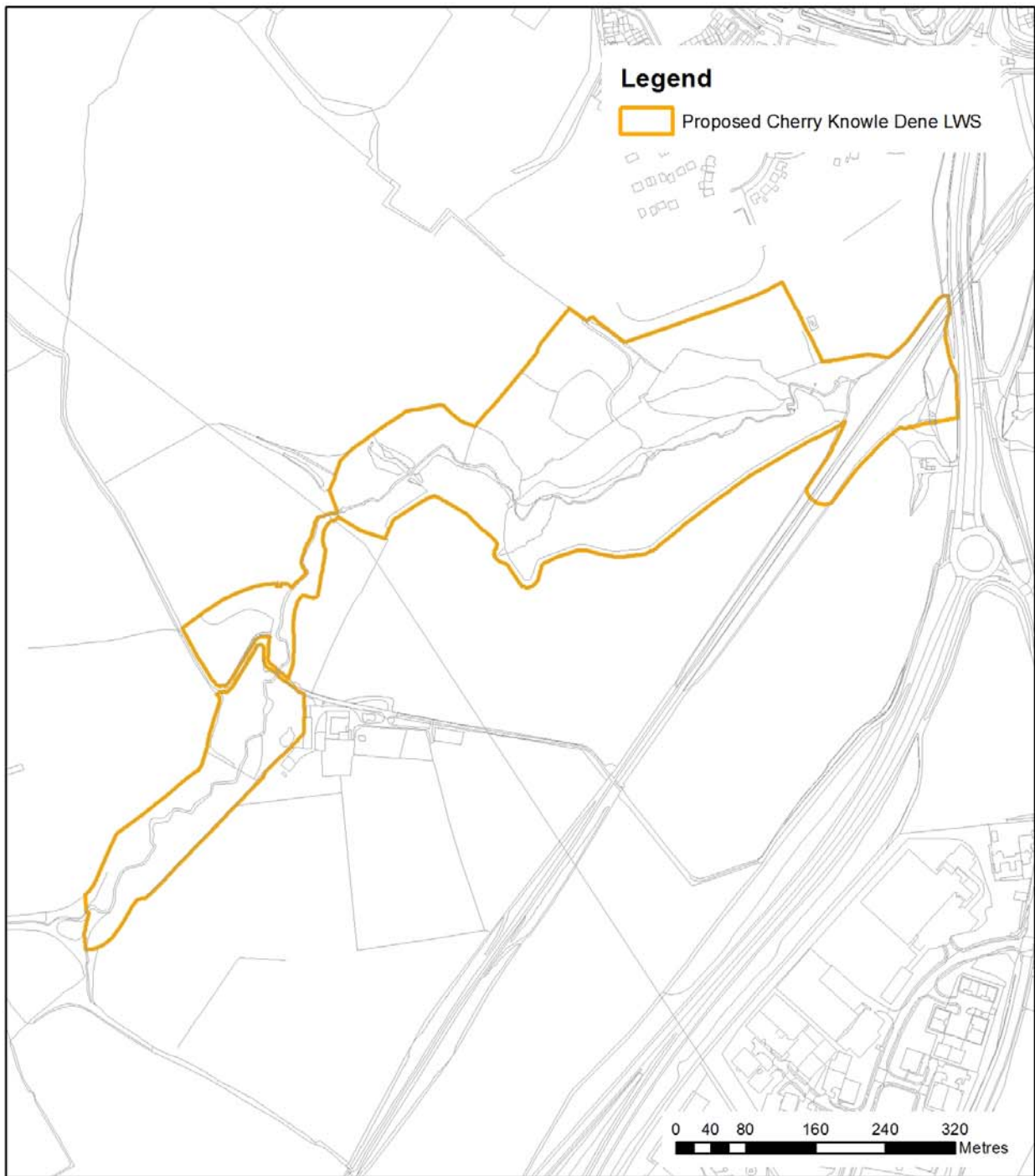
Bunny Hill species list

BAP Habitat: Magnesian Limestone Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Clustered Bellflower	<i>Campanula glomerata</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Locally Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Frequent/ Locally Abundant
Common Cowslip	<i>Primula veris</i>	Occasional
Common Dandelion	<i>Taraxacum officinale</i>	Occasional
Common Eyebright	<i>Euphrasia nemorosa</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Locally Frequent
Downy Oat-grass	<i>Avenula pubescens</i>	Abundant
European Ash	<i>Fraxinus excelsior (sdg)</i>	Occasional
Fairy Flax	<i>Linum catharticum</i>	Occasional - Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional - Frequent
Field Scabious	<i>Knautia arvensis</i>	Occasional - Frequent
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Locally Frequent
Greater Knapweed	<i>Centaurea scabiosa</i>	Locally Frequent
Harebell	<i>Campanula rotundifolia</i>	Occasional
Hoary Plantain	<i>Plantago media</i>	Occasional
Hoary Ragwort	<i>Senecio erucifolius</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Occasional - Rare
Lady's Bedstraw	<i>Galium verum</i>	Frequent
Meadow Brome	<i>Bromopsis erectus</i>	Rare
Meadow Crane's-bill	<i>Geranium pratense</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Locally Frequent
Perennial Ryegrass	<i>Lolium perenna</i>	Locally Frequent
Quaking-grass	<i>Briza media</i>	Abundant
Red Clover	<i>Trifolium pratense</i>	Frequent
Red Fescue	<i>Festuca rubra</i>	Dominant
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rough Hawkbit	<i>Leontodon hispidus</i>	Abundant
Salad Burnet	<i>(Sanguisorba minor)</i>	Locally Frequent
Selfheal	<i>Prunella vulgaris</i>	Occasional
Timothy-grass	<i>Phleum pratense</i>	Occasional - Rare
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Rare
Wild Marjoram	<i>Origanum vulgare</i>	Occasional/ Locally Abundant
Yarrow	<i>Achillea millefolium</i>	Occasional - Frequent


Yellow Oatgrass	<i>Trisetum flavescens</i>	Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat Type: Non-BAP Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Bramble	<i>Rubus fruticosus</i>	Occasional
Cock's-Foot	<i>Dactylis glomerata</i>	Abundant
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Frequent
Couch Grass	<i>Elymus repens</i>	Occasional/ Locally Abundant
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Curled Dock	<i>Rumex crispus</i>	Rare
Dandelion	<i>Taraxacum officinale</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Goatsbeard	<i>Tragopogon pratensis</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hedge Mustard	<i>Sisymbrium officinale</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Occasional
Large Bindweed	<i>Calystegia silvatica</i>	Occasional/ Locally Abundant
Meadow Cranesbill	<i>Geranium pratense</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Musk Thistle	<i>Carduus nutans</i>	Rare
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Frequent
Red Clover	<i>Trifolium pratense</i>	Occasional
Ribbed Melilot	<i>Melilotus officinalis</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rough Meadowgrass	<i>Poa trivialis</i>	Occasional
Sheep's Fescue	<i>Festuca ovina</i>	Rare
Smaller Cat's-tail	<i>Phleum bertolonii</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Weld	<i>Reseda lutea</i>	Rare
White Clover	<i>Trifolium repens</i>	Frequent

Wild Carrot	<i>Daucus carota</i>	Occasional
Wild Marjoram	<i>Origanum vulgare</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Frequent
Yellow Oatgrass	<i>Trisetum flavescens</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 400 516	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 04.05.2020 Scale 1: 6,000
	Subject Proposed Cherry Knowle Dene LWS	Sheet size A4
	Drawing No. UF 5.36.01.06.007.01	Revisions 1



SITE NAME	Cherry Knowle Dene
SITE No.	UF 5_36_01_06_007
LOCATION	Ryhope NZ400516
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised in 2020
AREA	16.11 ha
DATE OF SITE VISIT	June 2017 and 2019
OWNERSHIP	Private

SITE DESCRIPTION

A dene surrounded by ancient semi-natural woodland rich in ground flora, with lowland meadows and pasture to the west of the site and other broadleaf woodland to the north and east.

REASONS FOR DESIGNATION

National and local BAP habitat:

Habitats	Hectares
Ancient semi-natural woodland	5.27
Lowland meadows and pasture	0.45
Other broadleaf woodland	4.33
Pond	0.022
Rivers and streams	0.32

National and local bap species:

English Name	Scientific Name	Notes
Badger	<i>Meles meles</i>	Regularly present
Bats	<i>Unknown</i>	Regularly present
Grasshopper Warbler	<i>Locustella naevia</i>	
Hedgehog	<i>Erinaceus europaeus</i>	
Lapwing	<i>Vanellus vanellus</i>	
Otter	<i>Lutra lutra</i>	Occasionally present
Song Thrush	<i>Turdus philomelos</i>	

Other protected species:

English Name	Scientific Name	Notes
Ghost Moth	<i>Hepialus humuli</i>	

DETAIL

Cherry Knowle Dene is an area of ancient semi-natural woodland, located in the steep sided valley of the Burdon Burn. The burn runs from west to east through the site. The site is under private ownership with no public access other than via a Public Right of Way (PRoW) that crosses between West Cherry Knowle and Cherry Knowle Dene. However, there are signs of informal paths through the woodland and the site appears to be well used by the public, particularly by bikes. The site suffers from

some vandalism, with evidence of fires in at least two locations, rubbish and other evidence that the site is being used for anti-social behaviour.

Species present include ash, oak and wych elm. Non-native species such as beech and sycamore are frequent and dominant in the canopy layer. There are several veteran trees, particularly towards the western half of the site. The shrub layers include hazel, holly and hawthorn. Ground flora include several ancient woodland indicator species such as bluebell and sanicle; with primrose also recorded. Wood avens, herb-robert, enchanter's nightshade and ferns such as broad buckler and male fern are frequent. Non-native, invasive Himalayan balsam is also abundant throughout the site.

There are a few clearings in the wood, particularly created by the informal footpaths and bike tracks. These paths also provide a "woodland edge" habitat. Most of the clearings are dominated with rank, species-poor grassland and bramble. The largest clearing (in the centre of the site to the east) is the most diverse; but does not qualify as a BAP habitat. It includes a stand of meadowsweet but overall, is rank and eutrophic. A small, poor quality seasonal pond is present towards the south of the site.

A number of woodland birds have been recorded, although variety is limited, likely due to the high levels of disturbance the site experiences. Blackcap (*Sylvia atricapilla*), chaffinch (*Fringilla coelebs*), song thrush and chiffchaff (*Phylloscopus collybita*) have been recorded in the past.

CONDITION ASSESSMENT

The woodland habitat meets the Local Wildlife Site criteria:

The site has lost most of its ancient woodland ground flora and non-native species such as sycamore and beech are frequent across the site. Cover of native species across all the woodland on site is as low as 45%, the DBAP woodland condition assessment states that native cover must be greater than 90%. Cherry Knowle Dene therefore fails on this condition, meaning that the site is currently in unfavourable condition. The site also suffers from antisocial behaviour resulting in fires being lit at the base of a couple of the veteran trees and litter being left.

The Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

The pasture on site qualifies as lowland meadows and pasture, but is in poor condition. It is a well-managed horse paddock, quite closely grazed but with reasonable flowering.

CONNECTIVITY

Cherry Knowle Dene currently forms part of an extensive area of greenspace along the edge of the city of Sunderland. It is well connected with other good quality wildlife habitats, being immediately adjacent to Burdon Dene LWS to the west and Ryhope Dene LWS to the east, with Blakeney Woods LWS 1.9km to the north west, it is also linked to a disused railway line and the A1018 both of which have sections of woodland along their verges.

Overall, Cherry Knowle Dene is an important habitat, in an area of few good quality wildlife habitats. The site, in conjunction with surrounding LWS' creates an important wildlife corridor in a relatively open area of greenspace. What connectivity exists needs to be retained and if possible, enhanced to ensure the site does not become completely isolated through further development.

LANDSCAPE

The woodland is prominent from the edge of Ryhope.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

The wood was surveyed in 1992 by Gordon Graham; in 2008 by the DBAP woodland survey and in 2017 and 2019 by Durham Wildlife Services for an updated management plan.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

This private wood has no official public access, however, can be viewed from a PRoW that crosses the dene at one point and a cycleway which overlooks it.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Woodland:

- Reduce the number of non-native species.
- Cut and rake and/or graze the grassland clearing within the centre of the woodland.
- Control Himalayan balsam.
- Remove litter.
- Increase deadwood habitat.

Grassland:

- Annual hay-cut and aftermath grazing.

Hedgerow:

- Maintain existing hedgerow areas.

Stream:

- Himalayan balsam control.
- Remove litter.

Badgers:

- Reduce public access.
- Ensure no impact through management proposals.

Cherry Knowle Dene species list

BAP Habitat Type: Ancient Semi-Natural Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
European Ivy	<i>Hedera helix</i>	Frequent and Locally Abundant
Ivy-Leaved Speedwell	<i>Veronica hederifolia</i> subsp. <i>lucorum</i>	Occasionally Rare
Alpine Currant	<i>Ribes alpinum</i>	Very Locally Frequent
Bearded Couch	<i>Elymus caninus</i>	Rare
Bluish Veilwort	<i>Metzgeria fruticulosa</i>	Rare
Borrer's Scaly Male Fern	<i>Dryopteris borreri</i>	Occasionally Rare
Bracken	<i>Pteridium aquilinum</i>	Very Locally Abundant
Broad Buckler-Fern	<i>Dryopteris dilatata</i>	Abundant
Broad-Leaved Dock	<i>Rumex obtusifolius</i>	Rare
Broad-Leaved Garlic	<i>Allium ursinum</i>	Locally Dominant
Broad-Leaved Willowherb	<i>Epilobium montanum</i>	Rare
Bruch's Pincushion	<i>Ulota bruchii</i>	Rare
Bugle	<i>Ajuga reptans</i>	Very Locally Frequent
Capillary Thread-Moss	<i>Bryum capillare</i>	Rare
Catherine's Moss	<i>Atrichum undulatum</i>	Very Locally Frequent
Chickweed	<i>Stellaria media</i>	Occasional
Clustered Feather-Moss	<i>Rhynchostegium confertum</i>	Abundant
Cock's Foot	<i>Dactylis glomerata</i>	Occasionally Rare
Common Bluebell	<i>Hyacinthoides non-scripta</i>	Occasional
Common Dandelion	<i>Taraxacum officinale</i>	Rare
Common Dug-Violet	<i>Viola riviniana</i>	Occasional
Common Feather-Moss	<i>Kindbergia praelonga</i>	Locally Abundant
Common Figwort	<i>Scrophularia nodosa</i>	Rare
Common Gorse	<i>Ulex europaeus</i>	Occasionally Rare
Common Hawthorn	<i>Crataegus monogyna</i>	Frequent
Common Hazel	<i>Corylus avellana</i>	Occasionally Rare
Common Lime	<i>Tilia x vulgaris</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Striated Feather-Moss	<i>Eurhynchium striatum</i>	Occasionally Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Feather-Moss	<i>Amblystegium serpens</i>	Present
Creeping Soft Grass	<i>Holcus mollis</i>	Very Locally Abundant
Crescent-Cup Liverwort	<i>Lunularia cruciata</i>	Locally Frequent
Cypress-Leaved Feather Moss	<i>Hypnum cupressiforme</i>	Rare

Dog's Mercury	<i>Mercurialis perennis</i>	Locally Dominant
Downy Birch	<i>Betula pubescens</i>	Very Locally Frequent
Downy Currant	<i>Ribes spicatum</i>	Rare
Elderberry	<i>Sambucus nigra</i>	Occasional
Enchanter's Nightshade	<i>Circaea lutetiana</i>	Locally Frequent
Endive Pellia	<i>Pellia endiviifolia</i>	Locally Frequent
European Ash	<i>Fraxinus excelsior</i>	Frequent
European Beech	<i>Fagus sylvatica</i>	Locally Dominant
European Blackberry	<i>Rubus fruticosus</i>	Locally Dominant
False Brome	<i>Brachypodium sylvaticum</i>	Occasional
Forked Veilwort	<i>Metzgeria furcata</i>	Rare
Fragrant Crestwort	<i>Lophocolea fragrans</i>	Rare
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Occasional
Golden Shield Fern	<i>Dryopteris affinis</i>	Rare
Gooseberry	<i>Ribes uva-crispa</i>	Rare
Goosegrass	<i>Galium aparine</i>	Occasionally Rare
Great Scented Liverwort	<i>Conocephalum conicum</i>	Very Locally Abundant
Greater Pocket Moss	<i>Fissidens taxifolius</i>	Occasional
Grey Poplar	<i>Populus x canescens</i>	Rare
Hair-Pointed Feather-Moss	<i>Cirriphyllum piliferum</i>	Rare
Hart's-Tongue Fern	<i>Phyllitis scolopendrium</i>	Occasionally Rare
Hart's-Tongue Thyme-Moss	<i>Plagiomnium undulatum</i>	Locally Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Abundant
Hogweed	<i>Heracleum sphondylium</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Locally Frequent
Hybrid Bluebell	<i>Hyacinthoides x massartiana</i>	Rare
Lady Fern	<i>Athyrium filix-femina</i>	Rare
Lateral Cryphaea	<i>Cryphaea heteromalla</i>	Rare
Lesser Celandine	<i>Ficaria verna</i>	Locally Abundant
Lesser Pocket-Moss	<i>Fissidens bryoides</i>	Occasionally Frequent
London Pride	<i>Saxifraga x urbium</i>	Very Locally Abundant
Long-Beaked Water Feather-Moss	<i>Platyhypnidium riparioides</i>	Very Locally Frequent
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Mamillate Plait-Moss	<i>Hypnum andoi</i>	Very Locally Frequent
Many-Fruited Thyme-Moss	<i>Plagiomnium affine</i>	Occasional
Matted Feather-Moss	<i>Brachythecium populeum</i>	Present

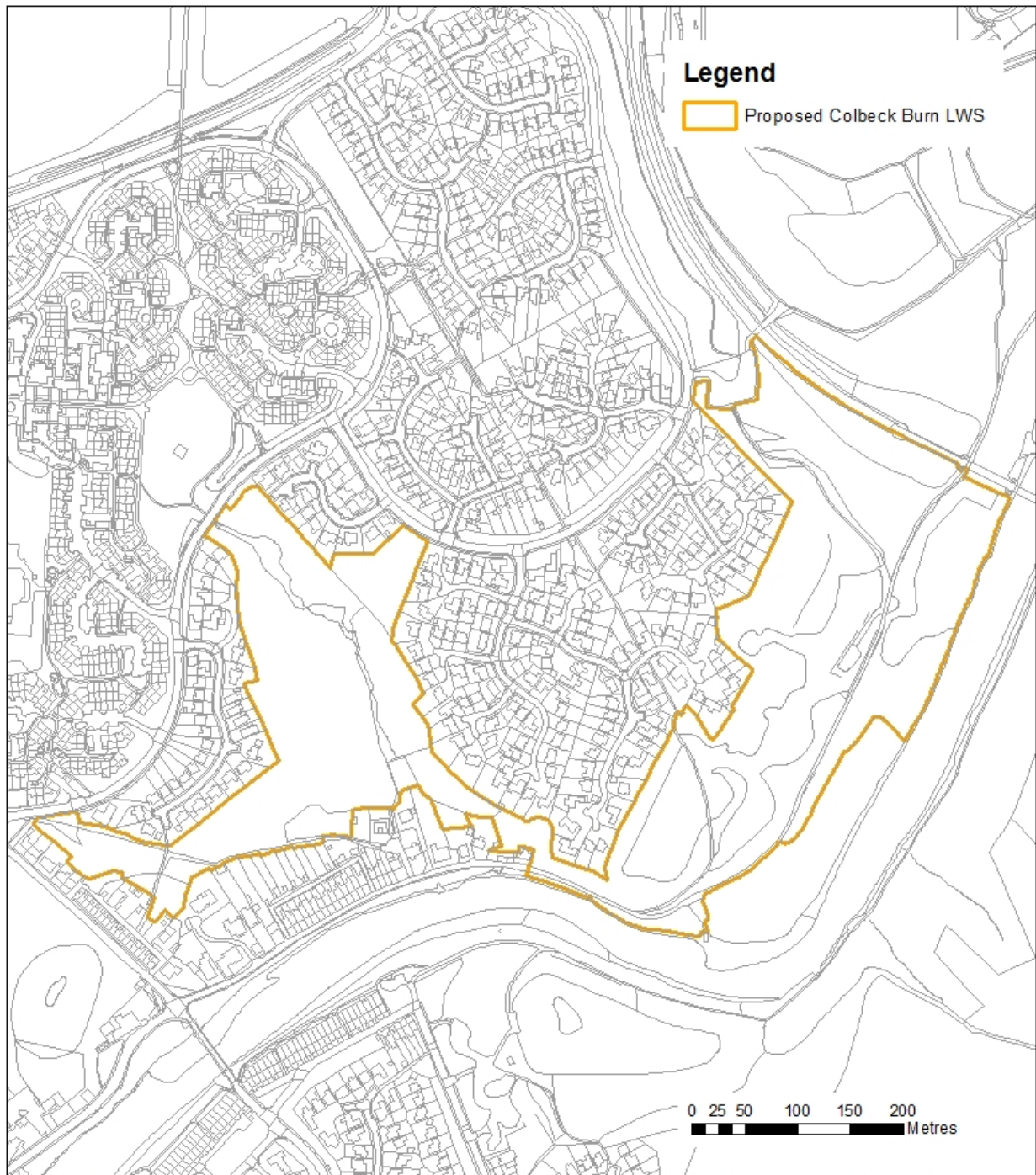
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Notched Pouchwort	<i>Calypogeia arguta</i>	Rare
Pink-Fruited Thread-Moss	<i>Pohlia melanodon</i>	Rare
Primrose	<i>Primula vulgaris</i>	Locally Abundant
Rough Meadow grass	<i>Poa trivialis</i>	Occasionally Frequent
Rough-Stalked Feather-Moss	<i>Brachythecium rutabulum</i>	Abundant
Rowan	<i>Sorbus aucuparia</i>	Occasionally Rare
Sanicle	<i>Sanicula europaea</i>	Locally Abundant
Sessile Oak	<i>Quercus petraea</i>	Rare
Silky Forklet-Moss	<i>Dicranella heteromalla</i>	Rare
Swan's-Neck Thyme-Moss	<i>Mnium hornum</i>	Locally Frequent
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Locally Frequent
Three-Nerved Sandwort	<i>Moehringia trinervia</i>	Occasional
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Occasional
Watercress	<i>Nasturtium officinale</i>	Rare
Wavy Bittercress	<i>Cardamine flexuosa</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Arum	<i>Arum maculatum</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Rare
Wild Strawberry	<i>Fragaria vesca</i>	Rare
Wood Anemone	<i>Anemone nemorosa</i>	Very Locally Frequent
Wood Avens	<i>Geum urbanum</i>	Occasionally Frequent
Wood Bristle-Moss	<i>Orthotrichum affine</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Occasionally Frequent

BAP Habitat Type: Other Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Apetalous Sandwort	<i>Moehringia trinervia</i>	Locally Frequent
Barren Strawberry	<i>Potentilla sterilis</i>	Occasional
Broad-Buckler Fern	<i>Dryopteris dilatata</i>	Occasional
Broad-Leaved Dock	<i>Rumex obtusifolius</i>	Rare
Catherine's Moss	<i>Atrichum undulatum</i>	Occasional
Clustered Feather-Moss	<i>Rhynchostegium confertum</i>	Occasional
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Dandelion	<i>Taraxacum officinale</i>	Occasional
Common Dog-Violet	<i>Viola riviniana</i>	Locally Frequent
Common Feather-Moss	<i>Kindbergia praelonga</i>	Occasional
Common Hawthorn	<i>Crataegus monogyna</i>	Frequently Abundant
Common Lime	<i>Tilia x vulgaris</i>	Occasionally Frequent


Common Nettle	<i>Urtica dioica</i>	Locally Abundant
Common Sorrel	<i>Rumex sanguineus</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Elderberry	<i>Sambucus nigra</i>	Frequent
European Ash	<i>Fraxinus excelsior</i>	Occasional
European Blackberry	<i>Rubus fruticosus</i>	Locally Frequent
European Ivy	<i>Hedera Helix</i>	Abundant
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Goosegrass	<i>Galium aparine</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Frequent
Himalayan Balsam	<i>Impatiens glandulifera</i>	Frequently Abundant
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Lesser Celandine	<i>Ficaria verna</i>	Locally Frequent
Lesser Pocket-Moss	<i>Fissidens bryoides</i>	Frequent
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Rough-Stalked Feather-Moss	<i>Brachythecium rutabulum</i>	Occasional
Rough-stalked Meadow grass	<i>Poa trivialis</i>	Frequently Abundant
Sycamore	<i>Acer pseudoplatanus</i>	Dominant
Wood Avens	<i>Geum urbanum</i>	Frequently Abundant
Wych Elm	<i>Ulmus glabra</i>	Frequently Abundant

BAP Habitat Type: Lowland Meadow and Pasture (including hedgerow)		
Common Name	Botanical Name	Abundance (DAFOR)
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	Occasional/Locally Frequent
Ash	<i>Fraxinus excelsior</i>	Occasional
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Locally Frequent
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	Occasional
Burnet Saxifrage	<i>Pimpinella saxifraga</i>	Very Locally Frequent
Bush Vetch	<i>Vicia sepium</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Centaury	<i>Centaureum erythraea</i>	Rare
Common Dog-violet	<i>Viola riviniana</i>	Very Locally Frequent
Common Gorse	<i>Ulex europaeus</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Mouse-ear	<i>Cerastium fontanum</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Rare
Common Ragwort	<i>Jacobaea vulgaris</i>	Rare
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Cowslip	<i>Primula veris</i>	Very Locally Frequent
Creeping Bent	<i>Agrostis stolonifera</i>	Abundant
Creeping Buttercup	<i>Ranunculus repens</i>	Locally Frequent

Creeping Cinquefoil	<i>Potentilla reptans</i>	Locally Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Abundant
Crosswort	<i>Galium cruciata</i>	Rare
Daisy	<i>Bellis perennis</i>	Abundant
Dandelion	<i>Taraxacum officinale agg.</i>	Occasional
Dog rose	<i>Rosa canina agg.</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Scabious	<i>Knautia arvensis</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Abundant
Great Plantain	<i>Plantago major</i>	Occasional
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Locally Frequent
Lesser Hawkbit	<i>Leontodon saxatilis</i>	Rare
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Frequent
Meadow Vetchling	<i>Lathyrus pratensis</i>	Locally Frequent
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Perennial Ryegrass	<i>Lolium perenne</i>	Abundant
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Frequent
Prickly Sowthistle	<i>Sonchus asper</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Abundant
Red Fescue	<i>Festuca rubra</i>	Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Rough-stalked Feather Moss	<i>Brachythecium rutabulum</i>	Frequent
Selfheal	<i>Prunella vulgaris</i>	Abundant
Sherard's Downy-rose	<i>Rosa sherardii</i>	Rare
Small Timothy	<i>Phleum bertolonii</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Rare?
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Occasional
White Clover	<i>Trifolium repens</i>	Abundant
Wild Strawberry	<i>Fragaria vesca</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Locally Frequent
Yellow Oat-grass	<i>Trisetum flavescens</i>	Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City and Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 315 545</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 28.09.2020 Scale 1: 5,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>
	<p>Subject Proposed Colbeck Burn LWS</p>	
	<p>Drawing No. UF 5.36.01.06.009.01</p>	<p>Revisions 1</p>

SITE NAME	Colbeck Burn
SITE No.	UF 5_36_01_06_009
LOCATION	Fatfield NZ315545
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993, revised 2020
AREA	15.25 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Private and Sunderland City Council

SITE DESCRIPTION

An old ash woodland with some elm and sycamore and small conifer plantation; a stream with flushed areas runs through the site.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Ancient semi-natural woodland	4.22
Other broadleaf woodland	8.27

National and local BAP species:

English Name	Scientific Name	Notes
Song Thrush	<i>Turdus philomelos</i>	Nests

DETAIL

Colbeck Burn is a small ancient semi-natural and other broadleaf woodland dene with neutral soils. The site is part of a larger area of woodland, which comprises largely of mature other broadleaf woodland but also of an additional area of ancient semi-natural woodland. The additional area of ancient semi-natural woodland extends southeast from the current designation. Large stands of Himalayan balsam are present along the riverbanks, largely outside of the proposed designation but do extended into the proposed designation in places. Japanese rose and Japanese knotweed, also listed in Schedule 9 of the Wildlife and Countryside Act 1981, is also present within the site.

The ancient woodland is dominated by veteran ash and wych elm, with veteran crack willow present. Ground flora included male fern, dog's mercury and hairy brome. This area of ancient woodland lacks in deadwood habitat but otherwise is in good condition. The other broadleaved plantation woodland adjacent to this includes frequent ash, silver birch, sycamore, hawthorn and hazel. Ground flora is poor, with ivy, bramble, ground elder, hedge woundwort, wood dock, nettle, wood speedwell, male fern and wood avens.

The other broadleaf woodland west of the current designation (species list for area 1) is dominated by non-natives, sycamore and beech. Cherry, hawthorn, ash and silver

birch are occasional to frequent. Ground flora includes wood avens, herb robert, hedge woundwort, wood speedwell, with frequent nettles, brambles and occasional ivy.

The small area of other broadleaf plantation woodland to the northeast of the current designation is leggy and in need of thinning (area 2 species list). Large numbers of non-natives are also present in this area, with sycamore and beech. Cherry, elder and ash are occasional. There are also several introduced shrubs present within this area including snowberry and cotoneaster. Ground flora is poor, with ivy frequent, bramble and wood avens occasional and herb robert rare.

CONDITION ASSESSMENT

The Ancient semi-natural woodland habitat meets the Local Wildlife Site criteria:

Good condition.

The Broadleaf woodland habitat meets the Local Wildlife Site criteria:

All the other broadleaf woodland on site is in poor condition, with very little deadwood habitat, lack of woodland indicators, large numbers of non-native species and lack of veteran trees.

CONNECTIVITY

The wood is in close proximity to the River Wear Woodlands LWS, James Steel Park and Washington Wildfowl and Wetlands Centre.

LANDSCAPE

The woodland is a prominent feature of the edge of the built-up area.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

Surveyed in 2019 by Durham Wildlife Services

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The woodland has a public access and a footpath running through it.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Ancient semi-natural woodland:

- Remove invasive species – Japanese knotweed, Himalayan balsam, Japanese rose.
- Increase deadwood habitat.

Other broadleaf woodland:

- Remove invasive species – Snowberry, Japanese knotweed, Himalayan balsam, Japanese rose.

Colbeck Burn species list

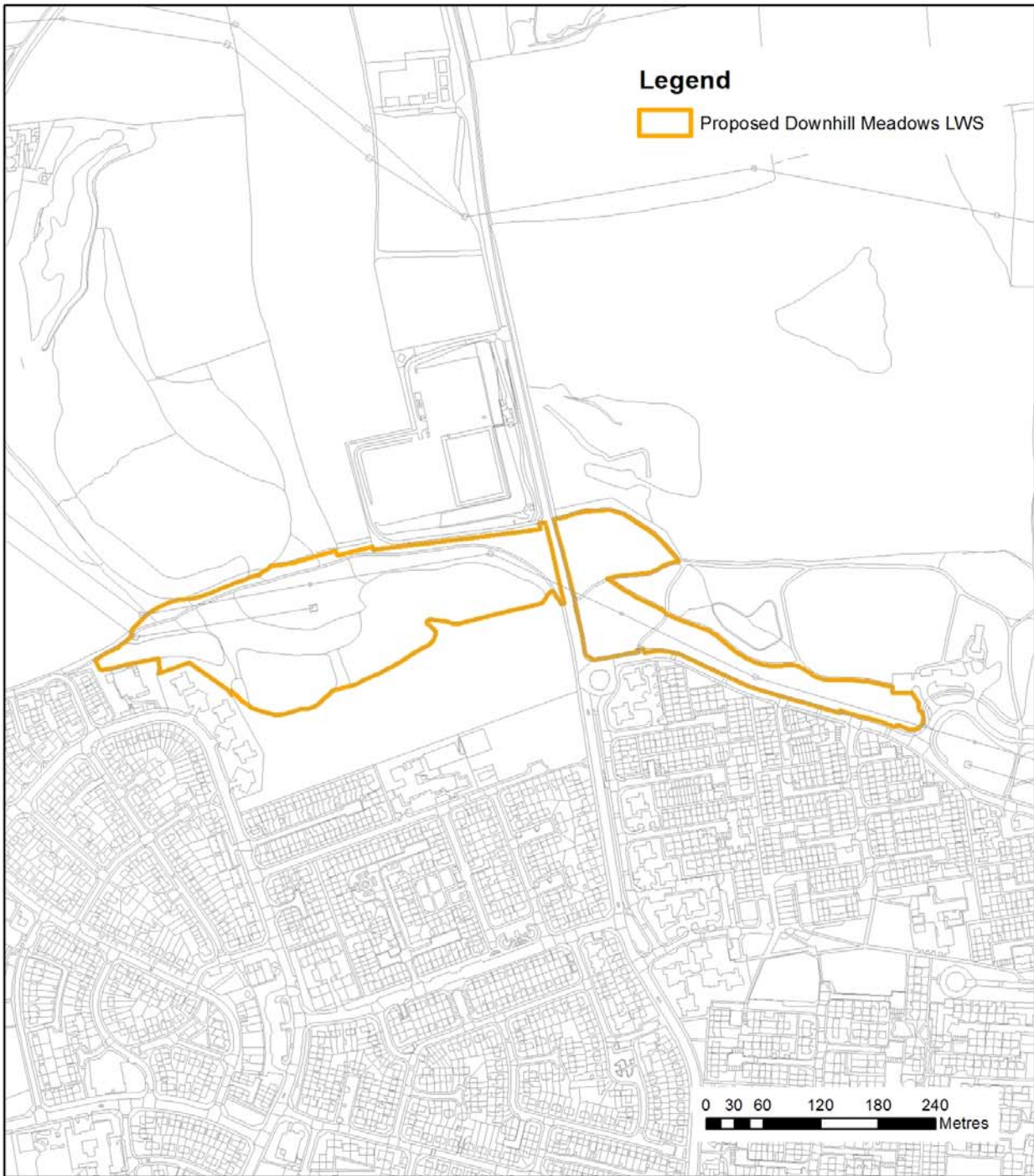
BAP Habitat Type: Other Broadleaf Woodland Area 1		
Common Name	Botanical Name	Abundance (DAFOR)
Beech	<i>Fagus sylvatica</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Frequent /Locally Abundant
Cherry	<i>Prunus avium</i>	Frequent
Cherry Laurel	<i>Prunus laurocerasus</i>	Occasional
Common Hawthorn	<i>Crataegus monogyna</i>	Frequent
Common Hogweed	<i>Heracleum sphondylium</i>	Rare / Locally Frequent
Common Nettle	<i>Urtica dioica</i>	Frequent
Elder	<i>Sambucus nigra</i>	Occasional
European Ash	<i>Fraxinus excelsior</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Occasional
Ivy	<i>Hedera helix</i>	Occasional/Locally Frequent
Large Bindweed	<i>Calystegia silvatica</i>	Rare/Locally Abundant
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Rare
Yew	<i>Taxus baccata</i>	Rare

BAP Habitat Type: Other Broadleaf Woodland Area 2		
Common Name	Botanical Name	Abundance (DAFOR)
Beech	<i>Fagus sylvatica</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Occasional
Cherry	<i>Prunus avium</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
European Ash	<i>Fraxinus excelsior</i>	Occasional
European Larch	<i>Larix decidua</i>	Rare
Franchet's Cotoneaster	<i>Cotoneaster Franchetii</i>	Rare
Hedge Parsley	<i>Torilis japonica</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Herb-Robert	<i>Geranium robertianum</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent /Locally Dominant
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Rare



Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Occasional

BAP Habitat Type: Ancient Semi Natural and Other Broadleaf Woodland Area 3		
Species with a * were found in the ancient woodland only.		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus exelsior</i>	Frequent/ Locally Abundant
Aspen	<i>Populus tremula</i>	Rare
Beech	<i>Fagus sylvatica</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Occasional/Locally Frequent
Bracken	<i>Pteridium aquilinum</i>	Rare/Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequent/Locally Abundant
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Butterbur	<i>Petasites hybridus</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent/Locally Abundant
Crack Willow	<i>Salix x fragilis</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Dogs Mercury *	<i>Mercurialis perennis</i>	Rare/Locally Abundant
Elder	<i>Sambucus nigra</i>	Frequent
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Ground Elder	<i>Aegopodium podagraria</i>	Occasional/Locally Abundant
Hairy Brome *	<i>Bromopsis ramosa</i>	Rare
Hawkweed sp.	<i>Hieracium sp.</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Frequent/Locally Abundant
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Frequent/Locally Dominant
Holly	<i>Ilex aquifolium</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent/ Locally Dominant
Japanese Knotweed	<i>Reynoutria japonica</i>	Rare
Japanese Rose	<i>Rosa rugosa</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Nipplewort	<i>Lapsana communis</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional/Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Occasional

Scots Pine	<i>Pinus sylvestris</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Frequent/Locally Abundant
Snowberry	<i>Symphoricarpos rivularis</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Tansy	<i>Tanacetum vulgare</i>	Rare
White Deadnettle	<i>Lamium album</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Frequent/Locally Abundant
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Occasional/Locally Frequent
Yarrow	<i>Achillea millefolium</i>	Rare
Yew	<i>Taxus baccata</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 City and Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 351 599	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 28.09.2020
	Subject Proposed Downhill Meadows LWS	Scale 1: 5,500
	Drawing No. UF 5.36.01.06.011.01	Sheet size A4  Revisions 1

SITE NAME	Downhill Meadows
SITE No.	UF 5_36_01_06_011
LOCATION	Downhill NZ352599
STATUS	Local Wildlife Site
FIRST NOTIFIED	1995, revised 2020
AREA	6.98 ha
DATE OF SITE VISIT	October 2019
OWNERSHIP	Sunderland City Council and private

SITE DESCRIPTION

Magnesian limestone and Lowland meadows grassland and scrub communities developed on south-facing hillside. The site also contains areas of plantation woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland meadows and pasture	0.61
Magnesian limestone grassland	0.69
Other broadleaf woodland	3.7

National and local BAP species:

English Name	Scientific Name	Notes
Grasshopper Warbler	<i>Locustella naevia</i>	Territorial
Grey Partridge	<i>Perdix perdix</i>	Present

DETAIL

Downhill Meadows is divided into two sections by Hylton Lane. To the west of this road, the site comprises a south-facing hillside containing Magnesian limestone grassland and Broadleaf plantation woodland interspersed with scrub and areas of tall, coarse grasses. To the east of Hylton Lane is a small area of Lowland meadow. The main interest of the site is that of the calcareous grassland in the centre of the western section of the site, which supports several typical calcareous species such as fairy flax, cowslip, small scabious, burnet-saxifrage, rough hawkbit and common spotted orchid. Harebells are also present.

The maturing broadleaf woodland compartments consist of both native and non-native tree species; field maple forms a major component with ash, crack willow and holly in amongst hawthorn, and white poplar are also planted.

The Lowland meadow to the east of Hylton Lane contains lady's bedstraw, meadow cranesbill, field scabious and cowslip, although is becoming overgrown with false oat-grass, creeping thistle and rosebay willowherb. A small number of species of conservation concern occur within Downhill Meadows LWS; grey partridge have previously been recorded within the meadow to the east and singing grasshopper warbler have in the past been noted. Kestrel are occasionally seen.

CONDITION ASSESSMENT

The Magnesian limestone grassland habitat meets the Local Wildlife Site criteria:

The Magnesian limestone grassland community within Downhill Meadows is confined to a south-facing slope and is of high regional significance. It supports a large number of plants with a preference for calcium-rich soils, however, many of the finer grasses and plants with a preference for uncrowded, open swards which were once present here (as indicated during the botanical survey of 2010), such as quaking grass and kidney vetch, appear to have been lost from this habitat over recent years. Following the abandonment of grazing a taller sward has developed, characterised by false oat-grass, greater knapweed, hoary ragwort, field scabious and hedge bedstraw. Bramble and scattered scrub have also spread widely across the hillside, to the detriment of the grassland. Although the Magnesian limestone grassland within the site is of value, the distribution and quantity of notable plant species appears to be in decline and the extent of this habitat type is reducing in area. The remainder of the grassland within the site consists of a mosaic of denser stands of hawthorn scrub, bramble thickets and areas of tall species-poor grassland dominated by false oat-grass, cocksfoot, stinging nettle and hogweed. Scattered stands of the alien Chinese mugwort are also present. A proportion of this vegetation has developed over the more important Magnesian limestone grassland and management is required to recover these areas. Therefore, this habitat must be recorded as being in poor condition.

Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

An area of grassland to the east of the site has in the past been re-seeded and is now established. Although artificially created, this area of grassland habitat reflects that of a Lowland meadow. The grassland here lacks management however and as a result has become degraded through the growth of more vigorous grasses and plants, such as false oat-grass, rosebay willowherb and creeping thistle. Hawthorn scrub has also begun to impinge on the grassland area. The condition of the meadow is therefore poor and appears to have declined since it was last surveyed.

The broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland blocks currently receive little management and as a result the trees have grown tall and thin to reach the light. The tree canopy has become dense, casting shade and preventing the growth of shrubs and plants beneath. Much of the woodland floor is made up of bare ground. Where present, the limited ground flora is composed of weed species such as hogweed and stinging nettle, with bramble and ground elder in places. The woodland appears to be subject to anti-social behaviour, with evidence of fires, litter and unauthorised felling of trees. The woodland habitat on site does not qualify as a priority habitat of conservation concern and therefore a condition assessment under the Durham Biodiversity Action Plan Priority Habitats Definitions is not appropriate and has not been made. However, the woodland within Downhill Meadows LWS does connect the woodland compartments to the north-west of the site with woodland to the east, thereby providing a link within the wider environment. The woodland within the site also provides habitat for small mammals and nesting bird and therefore does hold some ecological value.

CONNECTIVITY

Downhill Meadows forms an important link within the Boldon Hills Green Corridor. This is a regional corridor which falls largely within the borough of South Tyneside but spans the northern boundary of the district of Sunderland, from north of Washington in the west to the North Sea coast in the east. Downhill Meadows forms a buffer between the belt of open green space to the north and urban settlements within Sunderland to the south. The site is complemented to the north by Downhill Quarry (disused), which now supports a varied flora across the developing grassland, interspersed with pockets of gorse scrub and to the east, where sports pitches are bordered by grassland of moderate species diversity. The grassland to the east falls within the administrative boundary of Sunderland City Council and would benefit from a programme of management, to form one continuous block of wildlife habitat, however recommendations for such management are not included within this management plan.

LANDSCAPE

The south-facing hillside is a prominent landscape feature above a densely populated built-up area.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed for the MAGical Meadows Project by A. Mclay in 2006 and 2010, in 2016 by Dendra Consulting Ltd for the Management Plan and in 2019 by Durham Wildlife Services.

SITE MANAGEMENT AND OBJECTIVES

Magnesian Limestone grassland:

- Remove encroaching scrub and invasive non-native species.
- Cut grassland on rotation.
- Protect grassland against anti-social behaviour.

Lowland meadows and pasture:

- Remove encroaching scrub and trees.
- Cut grassland on rotation.

Other broadleaf woodland:

- Restructure woodland by thinning.

Hedgerow:

- Plant up gaps in hedge.
- Trim hedge.
- Cut hedgerow margin on rotation.

Birds:

- Conduct a breeding bird survey on site.

Downhill Meadows species list

BAP Habitat: Magnesian Limestone Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Agrimony	<i>Agrimonia eupatoria</i>	Rare
Autumn gentian	<i>Gentianella amarella</i>	Rare
Bird's foot trefoil	<i>Lotus corniculatus</i>	Rare
Bramble	<i>Rubus fruticosus</i> agg.	Abundant
Burnet-saxifrage	<i>Pimpinella saxifraga</i>	Rare
Cat's ear	<i>Hypochaeris radicata</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common knapweed	<i>Centaurea nigra</i>	Frequent
Common mouse-ear	<i>Cerastium fontanum</i>	Rare
Common ragwort	<i>Senecio jacobaea</i>	Rare
Common sedge	<i>Carex nigra</i>	Rare
Common spotted orchid	<i>Dactylorhiza fuchsii</i>	Rare
Common toadflax	<i>Linaria vulgaris</i>	Rare
Cowslip	<i>Primula veris</i>	Rare
Creeping thistle	<i>Cirsium arvense</i>	Frequent
Crosswort	<i>Cruciata laevipes</i>	Rare
Dog rose	<i>Rosa canina</i>	Rare
Eyebright	<i>Euphrasia officinalis</i>	Rare
Fairy flax	<i>Linum catharticum</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field scabious	<i>Knautia arvensis</i>	Occasional
Glaucous sedge	<i>Carex flacca</i>	Rare
Greater knapweed	<i>Centaurea scabiosa</i>	Rare
Harebell	<i>Campanula rotundifolia</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hedge bedstraw	<i>Galium mollugo</i>	Occasional
Hoary ragwort	<i>Senecio erucifolius</i>	Occasional
Lady's bedstraw	<i>Galium verum</i>	Rare
Red clover	<i>Trifolium pratense</i>	Rare
Red fescue	<i>Festuca rubra</i>	Occasional
Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
Rough hawkbit	<i>Leontodon hispidus</i>	Rare
Self heal	<i>Prunella vulgaris</i>	Rare
Sheep's fescue	<i>Festuca ovina</i>	Rare
Small scabious	<i>Scabiosa columbaria</i>	Rare
Tall fescue	<i>Festuca arundinacea</i>	Rare
Tufted vetch	<i>Vicia sepium</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional

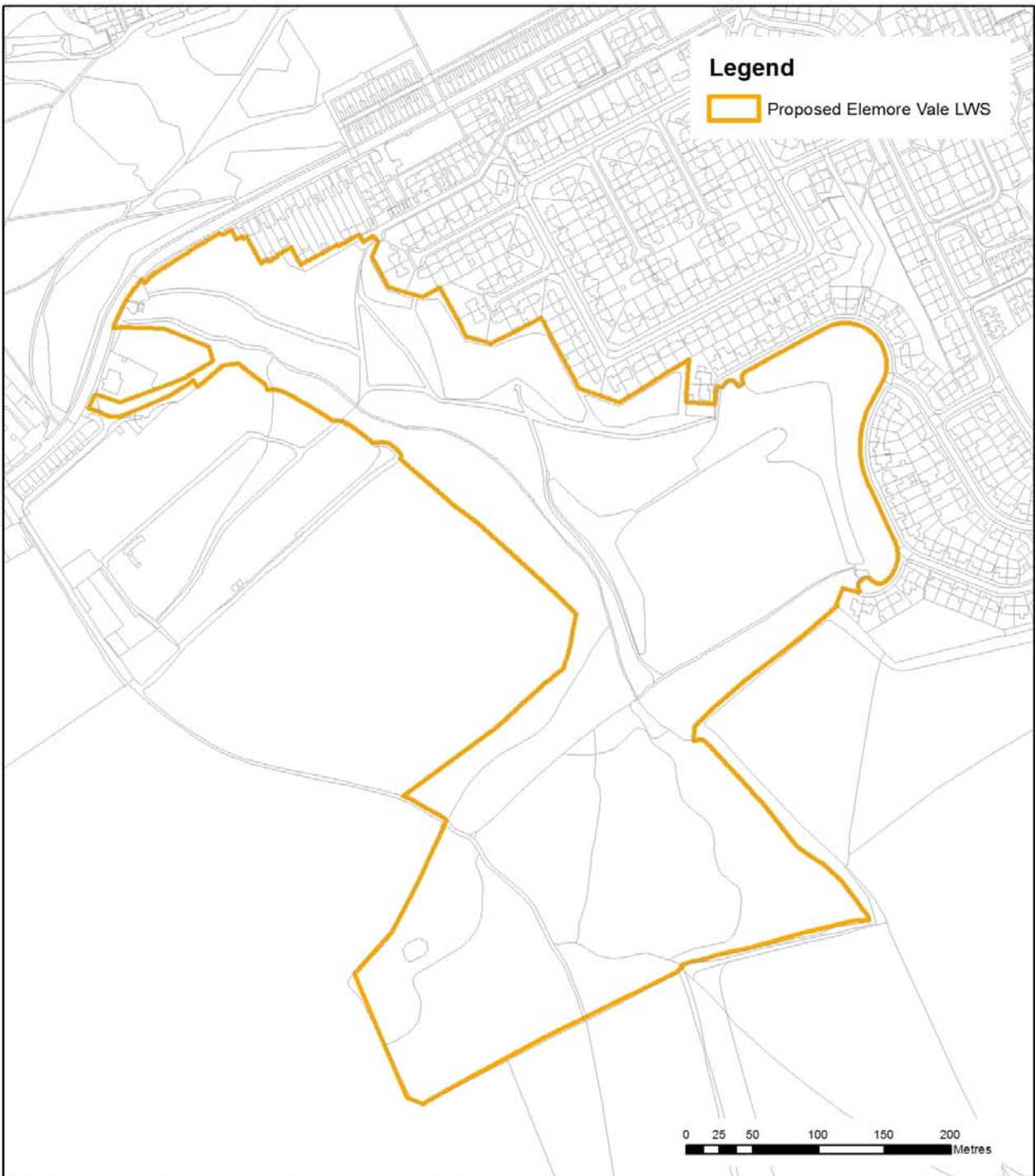
Yellow wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire fog	<i>Holcus lanatus</i>	Rare

BAP Habitat: Broadleaved Plantation Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Bramble	<i>Rubus fruticosus agg.</i>	Present
Cocksfoot	<i>Dactylis glomerata</i>	Present
Coltsfoot	<i>Tussilago farfara</i>	Present
Common ash	<i>Fraxinus excelsior</i>	Present
Crack willow	<i>Salix fragilis</i>	Present
Creeping buttercup	<i>Ranunculus repens</i>	Present
Field maple	<i>Acer campestre</i>	Present
Ground elder	<i>Aegopodium podagraria</i>	Present
Hawthorn	<i>Crataegus monogyna</i>	Present
Hazel	<i>Corylus avellana</i>	Present
Holly	<i>Ilex aquifolium</i>	Present
Plum	<i>Prunus sp.</i>	Present
Sessile oak	<i>Quercus petraea</i>	Present
Stinging nettle	<i>Urtica dioica</i>	Present
White poplar	<i>Populus alba</i>	Present
Wild cherry	<i>Prunus avium</i>	Present
Wood avens	<i>Geum urbanum</i>	Present
Yorkshire fog	<i>Holcus lanatus</i>	Present


BAP Habitat: Lowland Meadows and Pasture		
Common Name	Botanical Name	Abundance (DAFOR)
Black medick	<i>Medicago lupulina</i>	Occasional
Chinese mugwort	<i>Artemisia verlotiorum</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Rare
Common knapweed	<i>Centaurea nigra</i>	Occasional
Common mouse-ear	<i>Cerastium fontanum</i>	Rare
Common ragwort	<i>Senecio jacobaea</i>	Rare
Common sorrel	<i>Rumex acetosa</i>	Occasional
Cowslip	<i>Primula veris</i>	Rare
Creeping cinquefoil	<i>Potentilla reptans</i>	Rare
Creeping thistle	<i>Cirsium arvense</i>	Occasional
False oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field scabious	<i>Knautia arvensis</i>	Rare

Greater knapweed	<i>Centaurea scabiosa</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Rare
Lady's bedstraw	<i>Galium verum</i>	Rare
Meadow cranesbill	<i>Geranium pratense</i>	Rare
Meadow vetchling	<i>Lathyrus pratensis</i>	Rare
Red clover	<i>Trifolium pratense</i>	Rare
Red fescue	<i>Festuca rubra</i>	Rare
Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay willowherb	<i>Chamerion angustifolium</i>	Locally abundant
Self heal	<i>Prunella vulgaris</i>	Rare
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	Rare
Tufted hair-grass	<i>Deschampsia caespitosa</i>	Rare
Tufted vetch	<i>Vicia cracca</i>	Rare
White clover	<i>Trifolium repens</i>	Rare
Wild angelica	<i>Angelica sylvestris</i>	Rare
Scrub, Tall Grassland and Hedge		
Common Name	Botanical Name	Abundance (DAFOR)
Agrimony	<i>Agrimonia eupatoria</i>	Present
Bramble	<i>Rubus fruticosus</i> agg.	Present
Chinese mugwort	<i>Artemisia verlotiorum</i>	Present
Cocksfoot	<i>Dactylis glomerata</i>	Present
Common ash	<i>Fraxinus excelsior</i>	Present
Common knapweed	<i>Centaurea nigra</i>	Present
Common toadflax	<i>Linaria vulgaris</i>	Present
Couch grass	<i>Elymus repens</i>	Present
Creeping cinquefoil	<i>Potentilla reptans</i>	Present
Creeping thistle	<i>Cirsium arvense</i>	Present
Dandelion	<i>Taraxacum</i> agg.	Present
Dog rose	<i>Rosa canina</i>	Present
Elder	<i>Sambucus nigra</i>	Present
English elm	<i>Ulmus minor</i>	Present
False oat-grass	<i>Arrhenatherum elatius</i>	Present
Field maple	<i>Acer campestre</i>	Present
Hawthorn	<i>Crataegus monogyna</i>	Present
Hedge bedstraw	<i>Galium mollugo</i>	Present
Herb Robert	<i>Geranium robertianum</i>	Present
Hogweed	<i>Heracleum sphondylium</i>	Present
Large bindweed	<i>Calystegia silvatica</i>	Present
Meadow vetchling	<i>Lathyrus pratensis</i>	Present
Perennial rye-grass	<i>Lolium perenne</i>	Present

Perennial sow-thistle	<i>Sonchus arvensis</i>	Present
Red clover	<i>Trifolium pratense</i>	Present
Red fescue	<i>Festuca rubra</i>	Present
Rosebay willowherb	<i>Chamerion angustifolium</i>	Present
Stinging nettle	<i>Urtica dioica</i>	Present
White clover	<i>Trifolium repens</i>	Present
White dead nettle	<i>Lamium album</i>	Present



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 363 453	Contact C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Approved by C. Dewson
	Subject Proposed Elemore Vale LWS	Drawn by E. Smith
	Drawing No. UF 5.36.01.06.013.01	Date 27.05.2020
		Sheet size A4
		Revisions 1



SITE NAME	Elemore Vale
SITE No.	UF 5_36_01_06_013
LOCATION	Easington Lane NZ363453
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993, revised 2020
AREA	16 ha
DATE OF SITE VISIT	December 2017
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

A large site containing varied grassland and wetland habitats with areas of scrub and plantation woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland acid grassland	2.62
Lowland fen	1.80
Lowland meadows and pasture	1.36
Other broadleaf woodland	5.20
Ponds	0.006
Rivers and streams	0.09

National and local bap species

English Name	Scientific Name	Notes
Badger	<i>Meles meles</i>	
Grasshopper warbler	<i>Locustella naevia</i>	
House Sparrow	<i>Passer domesticus</i>	
Linnet	<i>Carduelis cannabina</i>	
Song thrush	<i>Turdus philomelos</i>	
Wall	<i>Lasiommata megera</i>	
Water vole	<i>Arvicola terrestris</i>	Previously recorded
Willow tit	<i>Parus montanus</i>	Present
Willow warbler	<i>Phylloscopus trochilus</i>	
Yellowhammer	<i>Emberiza citrinella</i>	Present

Other protected species:

English Name	Scientific Name	Notes
Common frog	<i>Rana temporaria</i>	Breeds

DETAIL

Elemore Vale is an area of open access grassland and plantation woodland, well used by local people, particularly for dog walking. The grassland is largely unmanaged and is a mixture of lowland acid grassland, lowland meadows and fen. Although much of this is rank, with high frequencies of coarse grasses such as cocksfoot and tall ruderal species such as rosebay willowherb and hogweed present. Some areas are also suffering from large amounts of scrub encroachment, particularly hawthorn. A stand of Japanese knotweed is present at NZ 36149 5282.

Acid grassland is now the more dominant grassland type on site, with a range of indicator species present including catsear, betony, autumn hawkbit, heath bedstraw, harebell, devil's bit scabious, tormentil, mouse-eared hawkweed and hawkweed.

An area of lowland meadows and pasture is present towards the southern end of the site. It is rank, with large amounts of scrub present. Indicator species include glaucous sedge, common birds-foot-trefoil, common knapweed, fairy flax, tufted vetch, autumn hawkbit, common spotted orchid and zigzag clover. Of note are more calcareous species such as kidney vetch and quaking grass. The grassland to the east by the houses is poor semi-improved amenity grassland and does not qualify as BAP habitat. There are also several other pockets of non-BAP rank grassland and scrub present across the site.

A small pond is present towards the south of the site, as well as a small shallow stream, flowing from southeast to northwest. Fen habitat is concentrated around both waterbodies and is diverse. It is still largely dominated by species such as great willowherb, soft rush and meadowsweet. Also present is sneezewort, clustered dock, marsh marigold, greater birdsfoot trefoil and marsh bedstraw. Sharp flowered rush, jointed rush, compact rush and hard rush also occur with glaucous sedge, common sedge, oval sedge, long-stalked yellow sedge and bladder sedge. Pond species include common duckweed, ivy-leaved duckweed, branched burred, water plantain and water forget-me-not.

The woodland itself is dense plantation broadleaved woodland. It can be divided into two different types, with willow dominated plantations along stream sides and mixed shelterbelt plantations on drier slopes. Amongst these are two very small areas of relic semi-natural woodland present to the west. The latter are alder and wych elm dominated. Species present across the plantations include white willow, grey willow, osier willow, field maple, ash, hawthorn, oak and aspen. Ground flora is poor, with bramble, ivy and ground elder a locally frequent and male fern, broad buckler fern and herb robert occasional. Of note, broadleaved helleborine was present within the willow plantations. A small number of birds and common butterflies have been previously recorded on site including willow tit, yellowhammer, goldfinch, blackcap, long-tailed tit, small copper, wall, painted lady, peacock, red admiral and green-veined white butterflies. Small copper and meadow brown were recorded during the 2018 site walkover. Water vole have also been previously recorded on the stream on site.

CONDITION ASSESSMENT

The Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

There is one large area of lowland meadow and pasture towards the southern end of the site. It is in poor condition, with low forb cover with large amounts of rank grasses present and undesirable species. The large amount of scrub invading is its main threat.

The Lowland acid grassland habitat meets the Local Wildlife Site criteria:

There are several small areas of acid grassland on site and one large main area. The latter, towards the east, is of better quality because of previous management (cut and rake). Grasses present include sheep's fescue, wavy hairgrass and mat grass. An area of acid grassland of this size is quite a rare occurrence. This grassland is in unfavourable condition due to the presence of scrub and rosebay willowherb. There is also a low forb cover in many areas, with 60% in the main area but as little as 20% in some of the smaller areas of acid grassland, with over 20% of coarse grasses present.

The Lowland fen habitat meets the Local Wildlife Site criteria:

A large amount of fen habitat is present on site, particularly along the stream bank and around the pond. There is no condition assessment for lowland fen within the Durham BAP habitat definition; however, this area of fen seemed to be in unfavourable condition due to the dominance of taller competitive species such as meadowsweet.

The Broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland is immature and dense, greatly in need of thinning. Overall, the woodland is in unfavourable condition due to the lack of deadwood habitat, veteran trees and the number of non-native species present.

CONNECTIVITY

The site does not fall within an obvious wildlife corridor but does lie within a green belt around the edge of a series of linked towns within the Sunderland City boundary. The watercourse within the site does not link through to other sites and is largely culverted once it leaves Elemore Vale LWS. The site is very well connected via woodland to the south. The plantation woodland immediately south of the site joins with Elemore Wood LWS. Immediately below this is Pig Hill SSSI, designated for its Magnesian Limestone grassland. Elemore Wood joins with several other woodlands to the south, west and north. In total, these areas of woodland continue for over four miles. Beyond this, connectivity becomes poorer, where it is mostly open farmland. The exception to this is to the west, where the pockets of woodland are numerous, often with connecting hedgerows. However, even in this direction connectivity is eventually broken by small towns and villages. East of Elemore Vale is housing and housing/open farmland to the west, therefore connectivity is poor in these directions. To the north of Elemore Vale LWS lies Elemore Golf Course, which includes numerous pockets of woodland and some wetlands as well as Elemore Golf Course LWS designated for its acid grassland and wetland habitat. However, beyond the golf

course lies housing to the north and east and open arable farmland to the west; therefore, connectivity in this direction is also poor.

LANDSCAPE

The mosaic of semi-natural habitats provides a welcome interruption within an intensively farmed and largely uniform landscape.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed in 1995 and 2010 by A. Mclay and again in 2017 by Durham Wildlife Trust for an updated management plan.

SITE MANAGEMENT

Lowland acid grassland:

- Graze and/or annual cut and rake
- Scrub removal

Stream:

- Remove litter
- Improve water retention

Lowland meadows and pasture:

- Graze and/or annual cut and rake
- Scrub removal
- Japanese knotweed removal

Other broadleaf woodland:

- Remove non-native species
- Improve woodland structure
- Remove litter

Elemore Vale species list

Common Name	Botanical Name	Abundance (DAFOR)	Abundance (DAFOR) in Streamside Planting	Abundance (DAFOR) in Slope Shelterbelt Planting
<u>Woodland Canopy and Shrub Layer</u>				
Field Maple	<i>Acer campestre</i>	Occasional		Occasional
Common Alder	<i>Alnus glutinosa</i>	Occasional	Occasional	
Silver Birch	<i>Betula pendula</i>	Rare		Rare
Downy Birch	<i>Betula pubescens</i>	Rare	Rare	
Hazel	<i>Corylus avellana</i>	Occasional		Occasional
Common Hawthorn	<i>Crataegus monogyna</i>	Occasional - Frequent	Occasional	Frequent
European spindle	<i>Euonymus europaeus</i>	Occasional	Occasional	
Common Ash	<i>Fraxinus excelsior</i>	Locally Frequent	Locally Frequent	Locally Abundant
Golden King Holly	<i>Ilex x altaclerensis</i>	Rare		Rare
Aspen	<i>Populus tremula</i>	Locally Frequent	Locally Dominant	Locally Frequent
Wild Cherry	<i>Prunus avium</i>	Rare	Rare	
Damson Plum	<i>Prunus domestica subsp. insititia</i>	Locally Frequent		Locally Frequent
Bird Cherry	<i>Prunus padus</i>	Rare		Rare
Hybrid Oak	<i>Quercus x rosacea</i>	Occasional	Rare	Occasional
Gooseberry	<i>Ribes uva-crispa</i>	Rare	Rare	
Flowering Current	<i>Ribes uva-crispa</i>	Rare		
Bramble	<i>Rubus fruticosus</i>	Locally Frequent	Locally Frequent	Locally Frequent
Raspberry	<i>Rubus idaeus</i>	Rare	Rare	
White Willow	<i>Salix alba</i>	Locally Frequent Occasional	Locally Frequent	
Goat Willow	<i>Salix caprea</i>	Occasional		Occasional - Frequent
Grey Willow	<i>Salix cinerea</i>	Rare Occasional	Occasional	
Purple Osier Willow	<i>Salix purpurea</i>	Occasional Frequent Rare	Occasional	

Common Name	Botanical Name	Abundance (DAFOR)	Abundance (DAFOR) in Streamside Planting	Abundance (DAFOR) in Slope Shelterbelt Planting
<u>Woodland Canopy and Shrub Layer Cont.</u>				
Elder	<i>Sambucus nigra</i>	Rare Occasional	Occasional	
Rowan	<i>Sorbus aucuparia</i>	Occasional - Frequent Rare	Occasional	Occasional
Wych Elm	<i>Ulmus glabra</i>	Rare Rare	Locally Frequent	Occasional
Wayfaring Tree	<i>Viburnum lantana</i>	Occasional	Occasional - Frequent	
Gelder Rose	<i>Viburnum opulus</i>		Rare	Rare

Elemore Vale species list

Common Name	Botanical Name	Abundance (DAFOR)
<u>Acid Grassland</u>		
Common Yarrow	<i>Achillea millefolium</i>	Occasional
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Abundant
False Oat-grass	<i>Arrhenatherum elatius</i>	Locally Frequent
Betony	<i>Betonica officinalis</i>	Rare
Harebell	<i>Campanula rotundifolia</i>	Very Locally Frequent
Common Knapweed	<i>Centaurea nigra</i>	Locally Frequent
Common Mouse-ear	<i>Cerastium fontanum</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Pignut	<i>Conopodium majus</i>	Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Locally Frequent
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Locally Frequent
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Rare
Eyebright	<i>Euphrasia nemorosa</i>	Occasional - Rare
Sheeps Fescue	<i>Festuca ovina</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Dominant
Common Hemp-nettle	<i>Galeopsis tetrahit</i>	Rare
Heath Bedstraw	<i>Galium saxatile</i>	Locally Frequent
Lady's Bedstraw	<i>Galium verum</i>	Occasional - Rare
Hawkweed	<i>Hieracium sect. sabauda</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant
Creeping Soft-grass	<i>Holcus mollis</i>	Locally Abundant
Common Cats-ear	<i>Hypochaeris radicata</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Rare
Common Birds-foot-Trefoil	<i>Lotus corniculatus</i>	Occasional
Field Woodrush	<i>Luzula campestris</i>	Frequent
Mat Grass	<i>Nardus stricta</i>	Locally Abundant
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional - Frequent
Smooth Meadow-grass	<i>Poa pratensis</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Common Tormentil	<i>Potentilla erecta</i>	Frequent
Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	Occasional
Common Sorrel	<i>Rumex acetosa</i>	Frequent
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Rare
Lesser Stitchwort	<i>Stellaria graminea</i>	Rare
Devil's Bit Scabious	<i>Succisa pratensis</i>	Frequent/Locally Abundant
Zigzag Clover	<i>Trifolium medium</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
White Clover	<i>Trifolium repens</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional - Rare

Common Name	Botanical Name	Abundance (DAFOR)
<u>Lowland Meadow and Pasture</u>		
Yarrow	<i>Achillea millefolium</i>	Occasional-Frequent
Creeping Bent	<i>Agrostis stolonifera</i>	Abundant
Cow Parsley	<i>Anthriscus sylvestris</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Locally Dominant
Downy Oat-grass	<i>Avenula pubescens</i>	Abundant
Quaking Grass	<i>Briza media</i>	Very Locally Frequent
Pointed Sparmoss	<i>Calliergonella cuspidata</i>	Locally Abundant
Glaucous Sedge	<i>Carex flacca</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional-Frequent
Common Centaury	<i>Centaureum erythraea</i>	Occasional - Rare
Common Mouse-ear	<i>Cerastium fontanum</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Cocksfoot	<i>Dactylis glomerata</i>	Frequent
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Wild Carrot	<i>Daucus carota</i>	Rare
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Dominant
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Hawkweed	<i>Hieracium Sect. Hieracium</i>	Locally Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent
Slender St John's Wort	<i>Hypericum pulchrum</i>	Rare
Des Etangs' St John's wort	<i>Hypericum x desetangsii</i>	Occasional
Common Catsear	<i>Hypochoeris radicata</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Occasional
Common Birds-foot-Trefoil	<i>Lotus corniculatus</i>	Occasional
Black Medic	<i>Medicago lupulina</i>	Occasional
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Locally Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Smooth Meadow-grass	<i>Poa pratensis</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Creeping Cinqfoil	<i>Potentilla reptans</i>	Locally Abundant
Selfheal	<i>Prunella vulgaris</i>	Locally Frequent
Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	Occasional Curled
Dock	<i>Rumex crispus</i>	Occasional Autumn
Hawkbit	<i>Scorzoneroides autumnalis</i>	Occasional - Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Devil's Bit Scabious	<i>Succisa pratensis</i>	Locally Frequent
Zigzag Clover	<i>Trifolium medium</i>	Locally Frequent
Red Clover	<i>Trifolium pratense</i>	Occasional
Yellow Oatgrass	<i>Trisetum flavescens</i>	Occasional
European Gorse	<i>Ulex europeus</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Occasional-Frequent

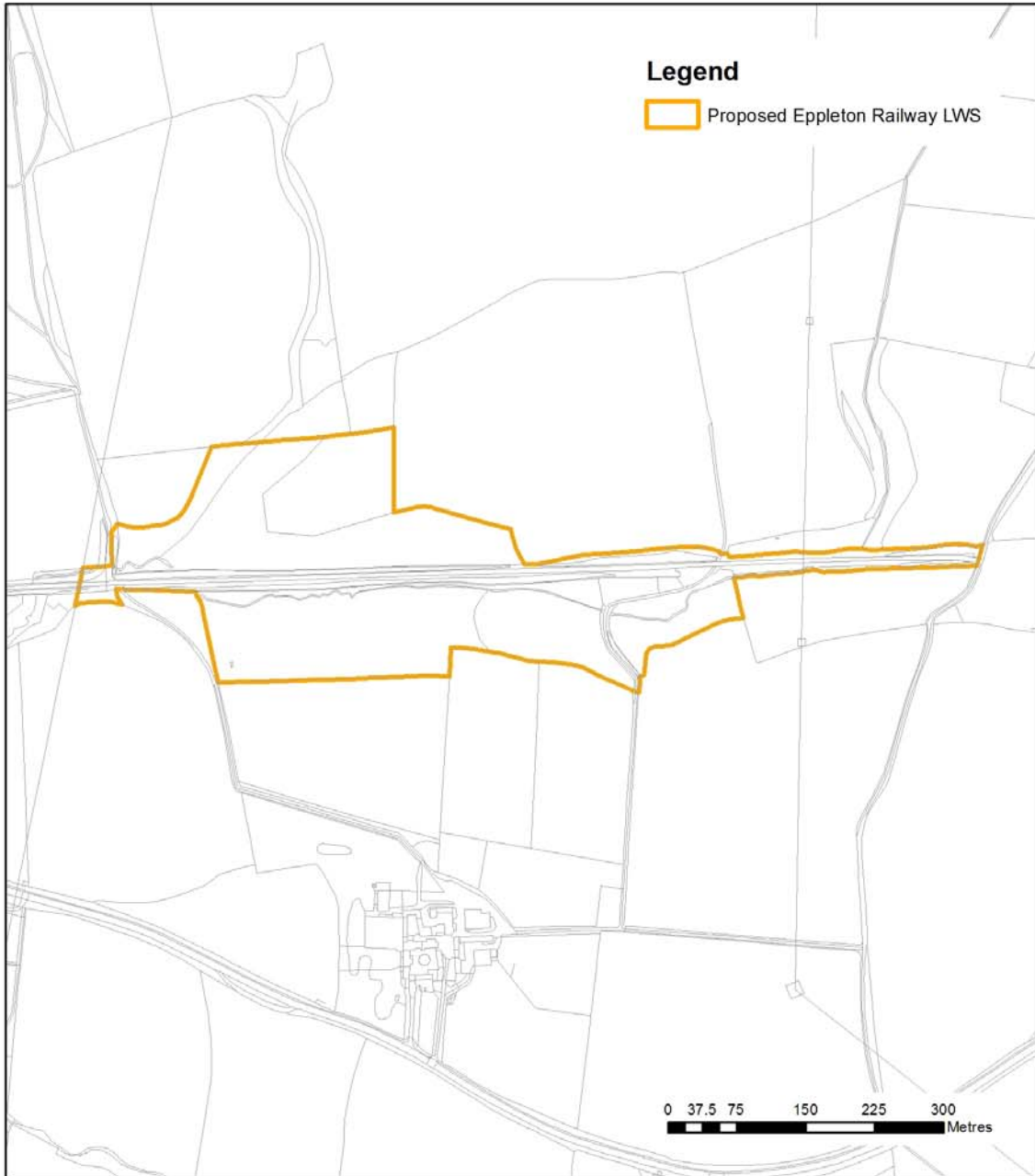
Common Name	Botanical Name	Abundance (DAFOR)
<u>Pond and Lowland Fen</u>		
Sneezewort	<i>Achillea ptarmica</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Water Plantain	<i>Alisma plantago-aquatica</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Locally Frequent
Flowering Rush	<i>Butomus umbellatus</i>	Rare
Marsh Marigold	<i>Caltha palustris</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Rare
Long-stalked Yellow-sedge	<i>Carex lepidocarpa</i>	Rare
Oval Sedge	<i>Carex leporina</i>	Rare
Common Sedge	<i>Carex nigra</i>	Occasional-Rare
Bladder-sedge	<i>Carex vesicaria</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Dominant
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Dominant
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Marsh Thistle	<i>Cirsium palustre</i>	Occasional Frequent/Locally Dominant
Tufted Hair Grass	<i>Deschampsia cespitosa</i>	Dominant
Common Spike-rush	<i>Eleocharis palustris</i>	Occasional - Rare
Couch Grass	<i>Elytrigia repens</i>	Occasional
Great Willowherb	<i>Epilobium hirsutum</i>	Frequent
Water Horsetail	<i>Equisetum fluviatile</i>	Very Locally Frequent
Marsh Horsetail	<i>Equisetum palustre</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Locally Dominant
Marsh Bedstraw	<i>Galium palustre</i>	Occasional
Water Avens	<i>Geum rivale</i>	Rare
Floating Sweet-grass	<i>Glyceria fluitans</i>	Rare
Creeping Soft-grass	<i>Holcus mollis</i>	Locally Frequent
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Locally Frequent
Jointed Rush	<i>Juncus articulatus</i>	Locally Frequent
Compact Rush	<i>Juncus conglomeratus</i>	Occasional
Soft Rush	<i>Juncus effusus</i>	Rare
Hard Rush	<i>Juncus inflexus</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional - Frequent
Common Duckweed	<i>Lemna minor</i>	Occasional
Ivy-leaved Duckweed	<i>Lemna trisulca</i>	Dominant
Kneiff's feathermoss	<i>Leptodictyum riparium</i>	Rare
Greater Birds-foot-trefoil	<i>Lotus (pedunculatus)</i>	Locally Frequent

Pond and Lowland Fen Cont.


Purple Loosestrife	<i>Lythrum salicaria</i>	Rare
Water Forget-me-not	<i>Myosotis scorpioides</i>	Occasional - Rare
Red Bartsia	<i>Odontites vernus</i>	Rare
Reed Canarygrass Frequent	<i>Phalaris arundinacea</i>	Very Locally
Timothy	<i>Phleum pratense</i>	Rare
Rough Meadow-Grass	<i>Poa trivialis</i>	Frequent
Silverweed	<i>Potentilla anserina</i>	Locally Frequent
Lesser Spearwort	<i>Ranunculus flammula</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Watercress	<i>Rorippa nasturtium-aquaticum</i>	Locally Frequent
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Clustered Dock	<i>Rumex conglomeratus</i>	Occasional
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Marsh Ragwort	<i>Senecio aquaticus</i>	Rare
Ragged Robin	<i>Silene flos-cuculi</i>	Rare
Bittersweet	<i>Solanum dulcamara</i>	Occasional - Rare
Branched Bur-reed	<i>Sparganium erectum</i>	Locally Dominant
Common Nettle	<i>Urtica dioica</i>	Locally Frequent
Water Speedwell	<i>Veronica anagallis-aquatica</i>	Rare
Brooklime	<i>Veronica beccabunga</i>	Very Locally Frequent
Tufted Vetch	<i>Vicia cracca</i>	Occasional

BAP Habitat Type: Other Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Field Maple	<i>Acer campestre</i>	Abundant
Common Alder	<i>Alnus glutinosa</i>	Occasional
Silverweed	<i>Argentina anserina</i>	Rare
Silver Birch	<i>Betula pendula</i>	Occasional
Large Bindweed	<i>Calystegia silvatica</i>	Rare/ Locally Frequent
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Hawthorn	<i>Crataegus monogyna</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
European Ash	<i>Fraxinus excelsior</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Rare
Holly	<i>Ilex aquifolium</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Rare/ Locally Frequent
Aspen	<i>Populus tremula</i>	Frequent/ Locally Abundant
Cherry	<i>Prunus avium</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Rare/ Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Rare
Broadleaved Dock	<i>Rumex obtusifolius</i>	Rare
Goat Willow	<i>Salix caprea</i>	Rare
Oiser Willow	<i>Salix viminalis</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Dandelion	<i>Taraxacum officinale</i>	Rare/ Locally Frequent
Red Clover	<i>Trifolium pratense</i>	Rare
Coltsfoot	<i>Tussilago farfara</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent

BAP Habitat Type: Other Broadleaf Woodland - by the houses.		
Common Name	Botanical Name	Abundance (DAFOR)
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Hazel	<i>Corylus avellana</i>	Frequent
European Ash	<i>Fraxinus excelsior</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Rare
Aspen	<i>Populus tremula</i>	Rare
Dog Rose	<i>Rosa canina</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Broadleaved Dock	<i>Rumex obtusifolius</i>	Rare
Goat Willow	<i>Salix caprea</i>	Rare
Hedge Parsley	<i>Torilis japonica</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	National Grid Reference NZ 366 472	Contact C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Approved by C. Dewson
	Subject Proposed Eppleton Railway LWS	Drawn by E. Smith
	Drawing No. UF 5.36.01.06.014.01	Date 04.05.2020
		Scale 1: 6,000
		Sheet size A4
		Review 1

SITE NAME	Eppleton Railway
SITE Ref.	UF 5_36_01_06_014
LOCATION	Hetton-le-Hole NZ366472
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised 2020
AREA	11.73 ha
DATE(S) OF SITE VISIT(S)	August 2020
OWNERSHIP	Private and Sunderland City Council

SITE DESCRIPTION

Disused railway with adjacent permanent pastures, marsh, scrub and deciduous woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland acid grassland	5.71
Lowland fen	1.37
Lowland meadows and pasture	1.40
Other broadleaved woodland	1.79
Rivers and Streams	0.13

National and local BAP species:

English Name	Scientific Name	Notes
Badger	<i>Meles meles</i>	Feeding signs
Bullfinch	<i>Pyrrhula pyrrhula</i>	Breeds
Song Thrush	<i>Turdus philomelos</i>	Breeds
Water Vole	<i>Arvicola terrestris</i>	Previously recorded
Willow tit	<i>Parus montanus</i>	Regularly seen
Yellowhammer	<i>Emberiza citrinella</i>	Breeds

DETAIL

South of the disused railway, the well-grazed slopes support a species-rich grassland community typical of old unimproved pastures. Devils bit scabious, knapweed, betony, sneezewort, autumn hawkbit, zigzag clover, common centaury, rough hawkbit and heath grass are found on the drier slopes, which display the pronounced rigg and furrow feature characteristic of ancient grassland sites. There are small pockets of acid grassland with mat grass, tormentil, heath bedstraw and small quantities of grazed heather also present.

Following the west hand side of a farm track, lies a hedgerow. This is intact and mostly hawthorn, but occasional blackthorn and plum are present. A small area of Other broadleaf woodland lies at the western end of the railway, just south of the bridleway. Species include ash, English oak, hawthorn and Swedish whitebeam

The woodland to the south is semi-mature broadleaf woodland, largely made up of silver birch and hawthorn, with elder, rowan and oak. Bracken dominates the ground flora across large areas, scattered across other parts, with bramble, cock's-foot and common hogweed also present. Overall, ground flora is poor, the woodland also lacks any deadwood habitat and veteran trees so fails its condition assessment. Tree creepers were seen and heard during the site visit.

Localised flushes occur on the slopes and support important mire and fen plant communities. Locally uncommon or rare species such as star sedge, marsh hawksbeard, bulbous rush and sphagnum mosses grow with marsh marigold, water avens, ragged robin, water horsetail, common sedge, sharp-flowered rush and large clumps of lady fern. Associated grazed "fen meadow" habitat contains lawns of marsh horsetail, marsh arrowgrass, carnation sedge, glaucous sedge, toad rush and bristle club-rush.

Areas of lightly grazed, marshy grassland adjacent to the stream support a rich wet meadow community with great burnet, brown sedge, hairy sedge, cuckoo flower, meadowsweet, ragged robin and water avens present. At the eastern end, there is an unmanaged area adjacent to the stream which contains dense scrub habitat and an area of tall damp grassland. A large colony of purple loosestrife is found here, along with common fleabane, yellow iris and reed canary grass. The stream banks through the pasture also support a rich flora including lemon-scented fern, at one of its few stations in east Durham. The tall ungrazed banks have water figwort, yellow loosestrife, wild angelica, meadowsweet and an area of lesser pond sedge swamp. Beds of watercress and brooklime are more characteristic of the grazed sections. The bank sides look suitable in places for water vole, but a search proved difficult due to the closed vegetation cover resulting from livestock exclusion by fencing.

To the north lies a large field of good quality acid grassland, which is sympathetically managed by domestic horses. Sheep's sorrel, eyebright, autumn hawkbit, heath bedstraw, common bird's-foot-trefoil and frequent tormentil were present, as well as a small number of very small heather plants.

CONDITION ASSESSMENT

The Lowland meadows and pasture habitat and associated Lowland fen habitats meet the Local Wildlife Site criteria:

An area of adjacent woodland is dominated by silver birch and appears to be of relatively recent origin. It is similarly grazed, and the herb layer contains a high grassland element. The canopy also contains a little oak, rowan, goat willow and sycamore with male fern, broad buckler fern, common dog violet and greater stitchwort in the ground layer. A good variety of woodland fungi were recorded.

Scattered and dense scrub occurs locally within the grazed pasture. Hawthorn and gorse are the principal components with some grey, goat and eared willow in the damper parts by the stream. Willow tit, long-tailed tit and bullfinch were recorded from this habitat.

The area north of the railway is largely a mosaic of acid grassland/lowland heath with associated scattered to dense scrub habitat. Important lowland fen communities are well developed on the lower slopes beside the railway. Acid grassland dominated by mat grass is a rare habitat type in east Durham and this site holds one of the largest remaining examples in the region. Grazed heather occurs frequently here within the grassland along with a number of locally rare species such as pill sedge, heath woodrush, heath groundsel and wavy hair grass. Dense areas of gorse scrub occur on the slopes, but recent control measures have proved beneficial to the grassland community. A stand of aspen grows amongst scrub in the north-west corner and may well be native.

The Lowland acid grassland habitat meets the Local Wildlife Site criteria:

The grazed lowland fen habitat is similar to areas on the south side of the railway. Star sedge and marsh hawksbeard are similarly found here with the addition of purple moor grass, another local rarity of unimproved wetland habitat.

The banks of the disused railway itself are also herb-rich and support a number of species more typical of calcicolous grasslands which were not recorded elsewhere on the site. These include greater knapweed, field scabious, wild mignonette and great mullein together with fairy flax, great burnet and zigzag clover.

Bird species recorded included willow tit and bullfinch whilst late summer vanessid butterflies- peacock, red admiral, small tortoiseshell and painted lady were conspicuous.

CONNECTIVITY

Eppleton Railway is an important component of the Penshaw-Houghton-Hetton Green Corridor and also links directly via the disused railway to the Green Corridor at Moorsley.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed by D.Hall in 1976, Veronica Howard in 2005, by A. McLay in 2009 and in 2020 by Durham Wildlife Trust.

SITE MANAGEMENT

The habitat integrity here is entirely dependent upon continued livestock grazing. Maintaining favourable condition requires any changes to the present management regime to be made with careful consideration.

For details of grassland and fen management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".

Eppleton Railway species list

2009 Survey Results

English Name	Scientific Name	DAFOR
American Willowherb	<i>Epilobium ciliatum</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Rare
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Rare
Broom	<i>Cytisus scoparius</i>	Rare
Bugle	<i>Ajuga reptans</i>	Rare
Carnation Sedge	<i>Carex panicea</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Abundant
Common Centaury	<i>Centaurea erythraea</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Common Sedge	<i>Carex nigra</i>	Rare
Common Yellow-sedge	<i>Carex viridula subsp. oedocarpa</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Rare
Crosswort	<i>Cruciata laevipes</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Eyebright	<i>Euphrasia officinalis</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Rare
Floating Sweet-grass	<i>Glyceria fluitans</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Hairy Sedge	<i>Carex hirta</i>	Occasional
Hard-fern	<i>Blechnum spicant</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Heath Bedstraw	<i>Galium saxatile</i>	Rare
Heather	<i>Calluna vulgaris</i>	Occasional
Heath-grass	<i>Danthonia decumbens</i>	Rare
Herb-Robert	<i>Geranium robertianum</i>	Rare
Hoary Willowherb	<i>Epilobium parviflorum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Rare
Lady-fern	<i>Athyrium filix-femina</i>	Occasional
Lesser Pond-sedge	<i>Carex acutiformis</i>	Rare
Marsh Hawk's-beard	<i>Crepis paludosa</i>	Rare
Marsh Horsetail	<i>Equisetum palustre</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Occasional
Marsh Willowherb	<i>Epilobium palustre</i>	Rare

Marsh-marigold	<i>Caltha palustris</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	0
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Sheep's-fescue	<i>Festuca ovina</i> agg.	Frequent
Silver Birch	<i>Betula pendula</i>	Rare
Smooth Lady's-mantle	<i>Alchemilla glabra</i>	Rare
Sneezewort	<i>Achillea ptarmica</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Star Sedge	<i>Carex echinata</i>	Rare
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
Water Avens	<i>Geum rivale</i>	Rare
Water Horsetail	<i>Equisetum fluviatile</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare

English Name	Scientific Name	DAFOR
an oak	<i>Quercus sp.</i>	Rare
Annual Meadow-grass	<i>Poa annua</i>	Rare
Autumn Hawkbit	<i>Leontodon autumnalis</i>	Abundant
Betony	<i>Stachys officinalis</i>	Frequent
Bog Stitchwort	<i>Stellaria uliginosa</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Occasional
Bristle Club-rush	<i>Isolepis setacea</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Bulbous Rush	<i>Juncus bulbosus</i>	Rare
Cat's-ear	<i>Hypochaeris radicata</i>	Occasional
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Chickweed	<i>Stellaria media</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Soft-grass	<i>Holcus mollis</i>	Rare
Devil's-bit Scabious	<i>Succisa pratensis</i>	Abundant
Dog-rose	<i>Rosa canina agg.</i>	Rare
Dog's Mercury	<i>Mercurialis perennis</i>	Rare
Eared Willow	<i>Salix aurita</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Rare
Goat Willow	<i>Salix caprea</i>	Rare
Greater Bird's-foot-trefoil	<i>Lotus pedunculatus</i>	Rare
Greater Plantain	<i>Plantago major</i>	Rare
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hawkweed	<i>Hieracium agg.</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Jointed Rush	<i>Juncus articulatus</i>	Occasional
Lesser Spearwort	<i>Ranunculus flammula</i>	Occasional
Marsh Arrowgrass	<i>Triglochin palustre</i>	Occasional
Mat-grass	<i>Nardus stricta</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Rare
Procumbent Pearlwort	<i>Sagina procumbens</i>	Rare
Ragged-Robin	<i>Lychnis flos-cuculi</i>	Occasional

Red Bartsia	<i>Odontites vernus</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Frequent
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Occasional
Soft-rush	<i>Juncus effusus</i>	Rare
Square-stalked St John's-wort	<i>Hypericum tetrapterum</i>	Rare
Toad Rush	<i>Juncus bufonius</i>	Occasional
Tormentil	<i>Potentilla erecta</i>	Frequent
Tufted Forget-me-not	<i>Myosotis laxa</i>	Rare
Water Mint	<i>Mentha aquatica</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
Yorkshire-fog	<i>Holcus lanatus</i>	Occasional
Zigzag Clover	<i>Trifolium medium</i>	Occasional

English Name	Scientific Name	DAFOR
Bittersweet	<i>Solanum dulcamara</i>	Present
Branched Bur-reed	<i>Sparganium erectum</i>	Present
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Present
Brooklime	<i>Veronica beccabunga</i>	Rare
Brooklime	<i>Veronica beccabunga</i>	Present
Bush Vetch	<i>Vicia sepium</i>	Rare
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Dog-violet	<i>Viola riviniana</i>	Rare
Common Figwort	<i>Scrophularia nodosa</i>	Present
Common Fleabane	<i>Pulicaria dysenterica</i>	Present
Common Hemp-nettle	<i>Galeopsis tetrahit</i>	Present
Common Nettle	<i>Urtica dioica</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Present
Common Valerian	<i>Valeriana officinalis</i>	Rare
Compact Rush	<i>Juncus conglomeratus</i>	Present
Creeping Buttercup	<i>Ranunculus repens</i>	Present
Creeping Thistle	<i>Cirsium arvense</i>	Present
Crosswort	<i>Cruciata laevipes</i>	Present
False Oat-Grass	<i>Arrhenatherum elatius</i>	Present
Floating Sweet-grass	<i>Glyceria fluitans</i>	Present
Germander Speedwell	<i>Veronica chamaedrys</i>	Rare
Gorse	<i>Ulex europaeus</i>	Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Present
Greater Bird's-foot-trefoil	<i>Lotus pedunculatus</i>	Present
Hard Rush	<i>Juncus inflexus</i>	Present
Hawthorn	<i>Crataegus monogyna</i>	Present
Hawthorn	<i>Crataegus monogyna</i>	Present
Lady-fern	<i>Athyrium filix-femina</i>	Present
Lemon-scented Fern	<i>Oreopteris limbosperma</i>	Present
Lesser Pond-sedge	<i>Carex acutiformis</i>	Present
Male-fern	<i>Dryopteris filix-mas</i>	Present
Marsh-marigold	<i>Caltha palustris</i>	Present
Meadowsweet	<i>Filipendula ulmaria</i>	Present
Oval Sedge	<i>Carex ovalis</i>	Present
Purple-loosestrife	<i>Lythrum salicaria</i>	Present
Raspberry	<i>Rubus idaeus</i>	Present
Redshank	<i>Persicaria maculosa</i>	Present
Reed Canary-grass	<i>Phalaris arundinacea</i>	Present

Russian Comfrey	<i>Symphytum x uplandicum</i>	Present
Silver Birch	<i>Betula pendula</i>	Present
Tall Fescue	<i>Festuca arundinacea</i>	Present
Timothy	<i>Phleum pratense</i>	Present
Tufted Forget-me-not	<i>Myosotis laxa</i>	Present
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Present
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Present
Tufted Vetch	<i>Vicia cracca</i>	Rare
Water Avens	<i>Geum rivale</i>	Present
Water Figwort	<i>Scrophularia auriculata</i>	Present
Water Mint	<i>Mentha aquatica</i>	Present
Water-cress	<i>Rorippa nasturtium-aquaticum</i>	Present
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Present
Wild Angelica	<i>Angelica sylvestris</i>	Present
Yellow Iris	<i>Iris pseudacorus</i>	Present
Yellow Loosestrife	<i>Lysimachia vulgaris</i>	Present
Yellow Oat-grass	<i>Trisetum flavescens</i>	Rare

English Name	Scientific Name	DAFOR
an oak	<i>Quercus sp.</i>	Present
Betony	<i>Stachys officinalis</i>	Present
Bifid Hemp-nettle	<i>Galeopsis bifida</i>	Rare
Bracken	<i>Pteridium aquilinum</i>	Present
Bramble	<i>Rubus fruticosus agg.</i>	Present
Bristle Club-rush	<i>Isolepis setacea</i>	Present
Brown Sedge	<i>Carex disticha</i>	Present
Cat's-ear	<i>Hypochaeris radicata</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Present
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Crab Apple	<i>Malus sylvestris</i>	Present
Creeping Soft-grass	<i>Holcus mollis</i>	Occasional
Cuckooflower	<i>Cardamine pratensis</i>	Present
Devil's-bit Scabious	<i>Succisa pratensis</i>	Present
Devil's-bit Scabious	<i>Succisa pratensis</i>	Rare
Dog-rose	<i>Rosa canina agg.</i>	Present
Field Wood-rush	<i>Luzula campestris</i>	Rare
Floating Sweet-grass	<i>Glyceria fluitans</i>	Present
Goat Willow	<i>Salix caprea</i>	Present
Great Burnet	<i>Sanguisorba officinalis</i>	Present
Greater Bird's-foot-trefoil	<i>Lotus pedunculatus</i>	Present
Greater Stitchwort	<i>Stellaria holostea</i>	Present
Greater Stitchwort	<i>Stellaria holostea</i>	Rare
Hairy Sedge	<i>Carex hirta</i>	Present
Harebell	<i>Campanula rotundifolia</i>	Rare
Hawkweed	<i>Hieracium agg.</i>	Occasional
Heath Bedstraw	<i>Galium saxatile</i>	Frequent
Heath Groundsel	<i>Senecio sylvaticus</i>	Rare
Heath Wood-rush	<i>Luzula multiflora</i>	Rare
Heather	<i>Calluna vulgaris</i>	Frequent
Herb-Robert	<i>Geranium robertianum</i>	Present
Honeysuckle	<i>Lonicera periclymenum</i>	Present
Lesser Pond-sedge	<i>Carex acutiformis</i>	Present
Lesser Stitchwort	<i>Stellaria graminea</i>	Present
Mat-grass	<i>Nardus stricta</i>	Abundant
Meadowsweet	<i>Filipendula ulmaria</i>	Present
Pignut	<i>Conopodium majus</i>	Rare
Pill Sedge	<i>Carex pilulifera</i>	Rare

Procumbent Pearlwort	<i>Sagina procumbens</i>	Rare
Ragged-Robin	<i>Lychnis flos-cuculi</i>	Present
Rowan	<i>Sorbus aucuparia</i>	Present
Rusty Willow	<i>Salix cinerea subsp. oleifolia</i>	Present
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Present
Sheep's Sorrel	<i>Rumex acetosella</i>	Occasional
Sheep's-fescue	<i>Festuca ovina agg.</i>	Occasional
Slender St John's-wort	<i>Hypericum pulchrum</i>	Rare
Smooth Lady's-mantle	<i>Alchemilla glabra</i>	Present
Sneezewort	<i>Achillea ptarmica</i>	Present
Sneezewort	<i>Achillea ptarmica</i>	Occasional
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Occasional
Tormentil	<i>Potentilla erecta</i>	Frequent
Water Avens	<i>Geum rivale</i>	Present
Water Avens	<i>Geum rivale</i>	Present
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Present

English Name	Scientific Name	DAFOR
Bog Stitchwort	<i>Stellaria uliginosa</i>	Rare
Bramble	<i>Rubus fruticosus</i> .	Present
Bristle Club-rush	<i>Isolepis setacea</i>	Rare
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Present
Brooklime	<i>Veronica beccabunga</i>	Rare
Broom	<i>Cytisus scoparius</i>	Present
Bulbous Rush	<i>Juncus bulbosus</i>	Rare
Carnation Sedge	<i>Carex panacea</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Rare
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Dog-violet	<i>Viola riviniana</i>	Present
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Present
Common Valerian	<i>Valeriana officinalis</i>	Occasional
Common Yellow-sedge	<i>Carex viridula oedocarpa</i>	Occasional
Compact Rush	<i>Juncus conglomeratus</i>	Abundant
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Rare
Cuckooflower	<i>Cardamine pratensis</i>	Rare
Devil's-bit Scabious	<i>Succisa pratensis</i>	Occasional
Elder	<i>Sambucus nigra</i>	Present
Fairy Flax	<i>Linum catharticum</i>	Present
Field Bindweed	<i>Convolvulus arvensis</i>	Present
Field Scabious	<i>Knautia arvensis</i>	Present
Glaucous Sedge	<i>Carex flacca</i>	Frequent
Gorse	<i>Ulex europaeus</i>	Present
Great Burnet	<i>Sanguisorba officinalis</i>	Present
Great Mullein	<i>Verbascum thapsus</i>	Present
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Greater Bird's-foot-trefoil	<i>Lotus pedunculatus</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Present
Hairy Sedge	<i>Carex hirta</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Present
Heath-grass	<i>Danthonia decumbens</i>	Rare
Herb-Robert	<i>Geranium robertianum</i>	Present
Honeysuckle	<i>Lonicera periclymenum</i>	Present
Jointed Rush	<i>Juncus articulatus</i>	Occasional

Lesser Spearwort	<i>Ranunculus flammula</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Present
Marsh Hawk's-beard	<i>Crepis paludosa</i>	Rare
Marsh Horsetail	<i>Equisetum palustre</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Occasional
Marsh-marigold	<i>Caltha palustris</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Abundant
Oval Sedge	<i>Carex ovalis</i>	Rare
Purple Moor-grass	<i>Molinia caerulea</i>	Rare
Ragged-Robin	<i>Lychnis flos-cuculi</i>	Occasional
Soft-rush	<i>Juncus effusus</i>	Occasional
Square-stalked St John's-wort	<i>Hypericum tetrapterum</i>	Occasional
Star Sedge	<i>Carex echinata</i>	Rare
Swedish Whitebeam	<i>Sorbus intermedia</i>	Present
Toad Rush	<i>Juncus bufonius</i>	Rare
Tufted Forget-me-not	<i>Myosotis laxa</i>	Rare
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Rare
Water Mint	<i>Mentha aquatica</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Frequent
Wild Mignonette	<i>Reseda lutea</i>	Present
Wild Strawberry	<i>Fragaria vesca</i>	Present
Zigzag Clover	<i>Trifolium medium</i>	Rare
Zigzag Clover	<i>Trifolium medium</i>	Present

2020 Survey Results

Non-BAP Habitat - Tall Ruderal by farm track to west		
Common Name	Botanical Name	Abundance (DAFOR)
Barley	<i>Hordeum vulgare</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Occasional
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Occasional
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Rare / Locally Frequent
Common Couch	<i>Elymus repens</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field Horse-tail	<i>Equisetum arvense</i>	Rare / Locally Frequent
Goat's-beard	<i>Tragopogon pratensis</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hedge Mustard	<i>Sisymbrium officinale</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Knotgrass	<i>Polygonum aviculare</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Rare / Locally Frequent
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Pineapple-weed	<i>Matricaria discoidea</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Rare
Redshank	<i>Persicaria maculosa</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Abundant
Silverweed	<i>Argentina anserina</i>	Occasional

Timothy	<i>Phleum pratense</i>	Occasional
White Clover	<i>Trifolium repens</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare / Locally Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat - Other Broadleaf Woodland to west, south of cycleway		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare
English Oak	<i>Quercus robur</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare

BAP Habitat - Acid Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Rare
Bracken	<i>Pteridium aquilinum</i>	Rare / Locally Frequent
Bramble	<i>Rubus fruticosus</i>	Rare / Locally Frequent
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Centaury	<i>Centaurium erythraea</i>	Rare
Common Mouse-ear	<i>Cerastium fontanum</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Daisy	<i>Bellis perennis</i>	Rare
Eyebright	<i>Euphrasia nemerosa</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Heath Bedstraw	<i>Galium saxatile</i>	Occasional
Heather	<i>Calluna vulgaris</i>	Rare
Marsh Thistle	<i>Cirsium palustre</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional

Sheep's Fescue	<i>Festuca ovina</i>	Rare
Sheep's Sorrel	<i>Rumex acetosella</i>	Rare / Locally Frequent
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Rare
Tormentil	<i>Potentilla erecta</i>	Frequent
White Clover	<i>Trifolium repens</i>	Occasional
Yorkshire Fog	<i>Daucus carota</i>	Frequent / Locally Abundant

BAP Habitat - Tall Herb Fen and stream - north of cycleway to the east		
Common Name	Botanical Name	Abundance (DAFOR)
Bush Vetch	<i>Vicia sepium</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Common Valerian	<i>Valeriana officinalis</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Elder	<i>Sambucus nigra</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Great Burnet	<i>Sanguisorba officinalis</i>	Occasional
Great Willowherb	<i>Epilobium hirsutum</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Rare
Meadowsweet	<i>Filipendula ulmaria</i>	Abundant
Perforate St John's-wort	<i>Hypericum perforatum</i>	Rare
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional / Locally Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Frequent / Locally Dominant
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Frequent

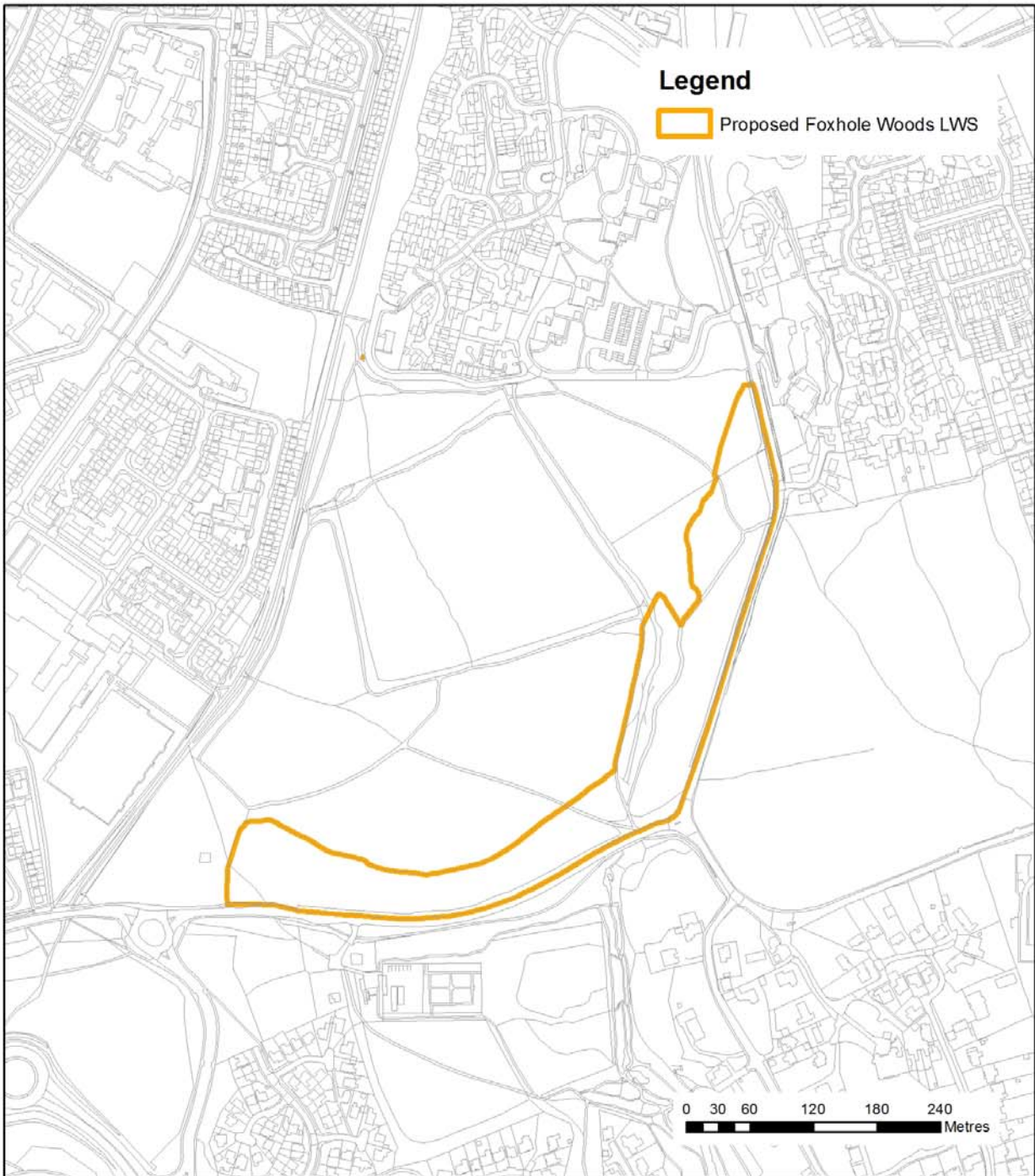
BAP Habitat - Tall Herb Fen and stream - south of cycleway		
Common Name	Botanical Name	Abundance (DAFOR)
Bittersweet	<i>Solanum dulamara</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent
Bulrush	<i>Typha latifolia</i>	Rare / Locally Abundant
Cleavers	<i>Galium aparine</i>	Rare
Common Comfrey	<i>Symphytum officinale</i>	Occasional/ Locally Abundant
Common Hemp-nettle	<i>Galeopsis tetrahit</i>	Abundant
Common Knapweed	<i>Centaurea nigra</i>	Occasional
		Rare

Common Nettle	<i>Urtica dioica</i>	Frequent
Common Valerian	<i>Valeriana officinalis</i>	Occasional
Compact Rush	<i>Juncus conglomeratus</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Abundant
Gorse	<i>Ulex europaeus</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Abundant
Greater Bird's-foot-trefoil	<i>Lotus pedunculatus</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Meadow Vetching	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional / Locally Abundant
Mugwort	<i>Artemisia vulgaris</i>	Abundant
Reed Canary-grass	<i>Phalaris arundinacea</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare / Locally Abundant
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Locally Dominant
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Rare
		Frequent

Non-BAP Habitat - north of stream, south of cycleway		
Common Name	Botanical Name	Abundance (DAFOR)
Blackthorn	<i>Prunus spinosa</i>	Rare
Bulrush	<i>Typha latifolia</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Dog-rose	<i>Rosa canina</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
Field Horse-tail	<i>Equisetum arvense</i>	Rare / Locally Abundant
Gorse	<i>Ulex europaeus</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Pineappleweed	<i>Matricaria discoidea</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Dominant
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Occasional

Yellow Loosestrife	<i>Lysimachia vulgaris</i>	Rare
--------------------	----------------------------	------

BAP Habitat - Other Broadleaf Woodland south of stream		
Common Name	Botanical Name	Abundance (DAFOR)
Bracken	<i>Pteridium aquilinum</i>	Frequent / Locally Dominant
Bramble	<i>Rubus fruticosus</i>	Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Privet	<i>Ligustrum vulgare</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Dogrose	<i>Rosa canina</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Heath Bedstraw	<i>Galium saxatile</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Reed Canary-grass	<i>Phalaris arundinacea</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Rare
Silver Birch	<i>Betula pendula</i>	Frequent - Abundant
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385, Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 373530</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 04.05.2020 Scale 1: 5,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>N ↑</p>
	<p>Subject Proposed Foxhole Woods LWS</p>	
	<p>Drawing No. UF 5.36.01.07.015.01</p>	<p>Review 1</p>

SITE NAME	Foxhole Woods
SITE No.	UF 5_36_01_07_015
LOCATION	South of Silksworth Fishing Lake
STATUS	Local Wildlife Site
FIRST NOTIFIED	2020
AREA	4.83 Ha
DATE OF SITE VISIT	24 th June 2020
OWNERSHIP	Sunderland City Council

SITE DESCRIPTION

Broadleaf plantation woodland surrounded by semi-improved neutral grassland, playing fields, and an old native overgrown hedgerow.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Other broadleaf woodland	4.83

National and local BAP species:

English Name	Scientific Name	Notes
Speckled wood	<i>Pararge aegeria</i>	On the grassland around the site
Small tortoiseshell	<i>Aglais urticae</i>	As above
Small copper	<i>Lycaena phlaeas</i>	As above

DETAIL

Foxhole Woods is a large area of open space grassland and woodland, located in an urban area within the City of Sunderland. The site is situated within the centre of the regions of Farrington, Gilley Law, and Doxford Park. Housing and a school lie to the west, housing to the north, housing and additional greenspace to the east and the park Doxford Park to the south. The Walney to Wear & Whitby cycle route runs along the western edge of the site. Numerous formal and informal footpaths intersect the site and it is well used by locals and dog walkers.

The woodland is in very poor condition, with planting rows very obvious and large numbers of non-natives. It is semi-mature and very leggy and uniform in age. The exception to this is a small number of mature sycamore, beech (*Fagus sylvatica*) and ash are present towards the road, which have obviously been in situ for longer than the rest of the plantation. The woodland lacks any deadwood habitat and ground flora is poor, but includes broadleaved willowherb (*Epilobium montanum*), male fern (*Dryopteris filix-mas*), wood avens (*Geum urbanum*), and herb Robert (*Geranium robertianum*). However, bramble is most abundant. The woodland canopy mostly comprises of frequent English Oak (*Quercus robur*), ash, beech and sycamore. Shrub layer includes occasional elder, holly *Ilex aquifolium*, and blackthorn and hazel (*Corylus avellane*) rare.

CONDITION ASSESSMENT

The woodland meets the Local Wildlife Site criteria:

The woodland on site is in very poor condition, with limited no woodland flora, no deadwood habitat and non-native species present such as beech and sycamore. The planting rows are very obvious in places.

CONNECTIVITY

The site lies within a wildlife corridor as shown in the Sunderland Council Local Plan. The wildlife corridor forms a link from the coast to the A19. This includes a variety of habitats including woodland, lakes and ponds and a golf course. It also includes a number of designated sites, including Gilleylaw Quarry SSSI (140 metres to the northeast), and Tunstall Hills LNR & SSSI (1.8km to the east. These sites are designated for their geological and botanical interest. Along the coast itself are a number of designations including SPA, Ramsar, SAC and SSSI. Silksworth Fishing Lake, proposed LWS also lies within this corridor, just 800 metres to the north. The other closest LWS is Blakeney Woods which lies 1km to the south. Overall, the site is well connected and situated within an important and strategic wildlife corridor.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in 2020 by Durham Wildlife Services for a site management plan.

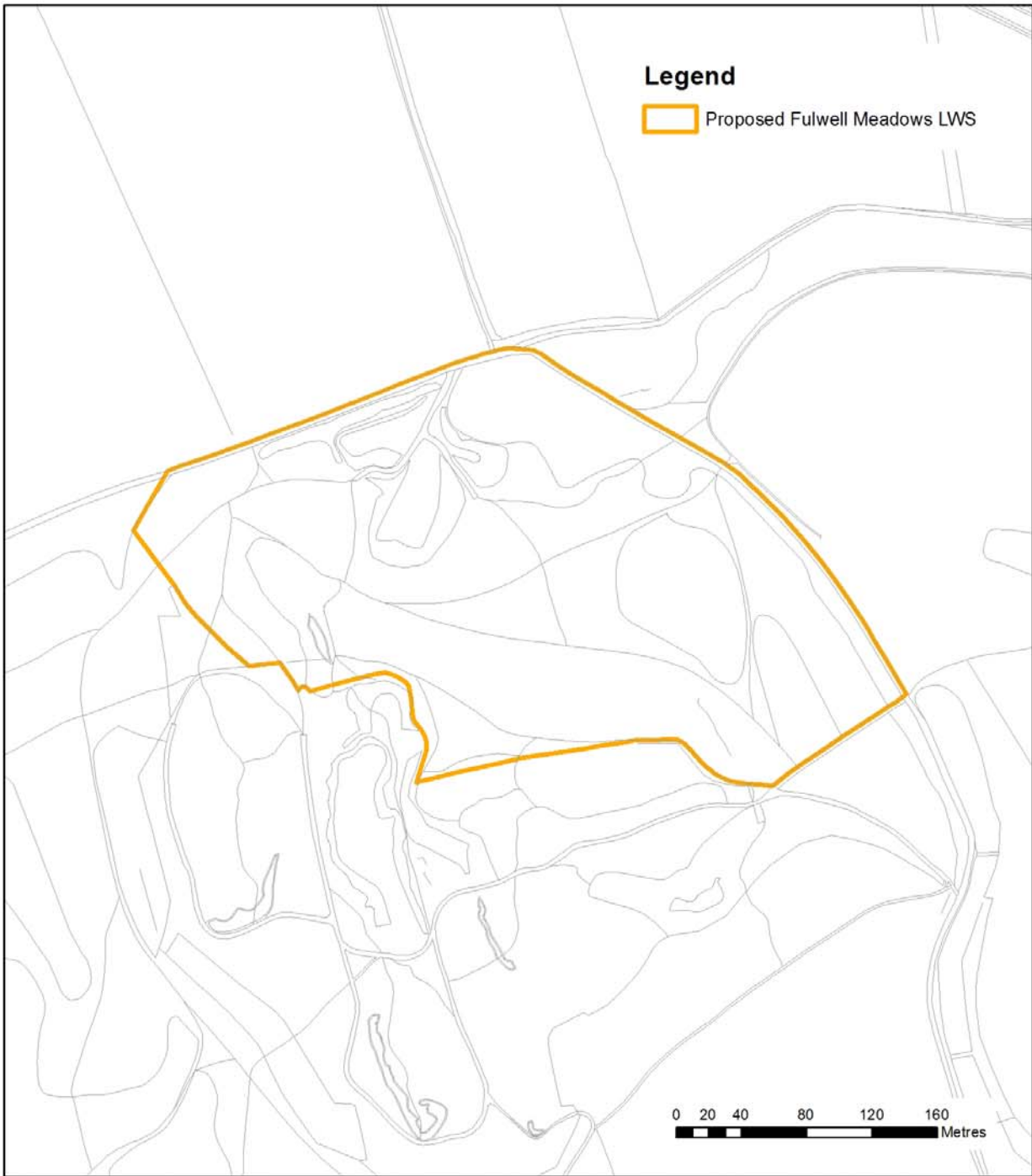
SITE MANAGEMENT

Other broadleaf woodland:

- Remove non-native species
- Improve woodland structure
- Remove litter

Foxhole Wood species list

BAP Habitat: Other Broadleaved Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Beech	<i>Fagus sylvatica</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Abundant / Locally Dominant
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Burdock sp.	<i>Arctium sp.</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Rare
Hazel	<i>Corylus avellana</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Rare
Holly	<i>Ilex aquifolium</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Sessile Oak	<i>Quercus petraea</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Wood Avens	<i>Geum urbanum</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc (2020)

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 383 600</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 12.06.2020 Scale 1: 3,000</p>	<p>N</p> 
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Fulwell Meadows LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5.36.01.06.016.01</p>		

SITE NAME	Fulwell Meadows
SITE No.	UF 5_36_01_06_016
LOCATION	Fulwell NZ382601
STATUS	Local Wildlife Sites
FIRST NOTIFIED	1995, Revised 2020
AREA	7.83 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council

SITE DESCRIPTION

Disused Magnesian Limestone quarry supporting calcicolous grassland and scrub communities.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Ha
Magnesian limestone grassland	0.88

National and local BAP species:

English Name	Scientific Name	Notes
Song Thrush	<i>Turdus philomelos</i>	Breeds

DETAIL

Magnesian limestone grassland is well developed on the floor, rim and rock faces of the derelict quarry. A small population of tor grass, a species with a mostly southern distribution in the UK, is also present. Above the quarry a large area of level grassland now supports a coarser community dominated by false oat grass and cocksfoot with only small quantities of herb species like greater knapweed, yellow rattle and birdsfoot trefoil present.

The rest of the grassland across the site is semi-improved and varies in quality. Some areas have potential for enhancement. The grassland to the west of the current designation is more neutral than calcareous, with yellow rattle, common knapweed, common bird-foot-trefoil, and common spotted orchid present. Given the very low frequencies and the rankness of this area, is not of BAP quality but has potential to be, if brought into better management. This area is largely bare ground or very low sward (amenity grassland height), with some evidence it had been grazed by horses (dung) and it also appeared that this area was being used by off road bikes. The better-quality habitat was on mounds to the south, before scrub takes over (hawthorn and bramble), or to the north where the vegetation is ranker, often becoming too rank to have many species of value.

Small pockets of woodland are located across this area. They are poor in structure, have a high proportion of non-native species and lack veteran trees, deadwood habitat and indicator species. However, they are so limited in size that they would

struggle to have all these elements. Species include hawthorn, alder, sycamore, white polar, and rowan. The edges of the woodland, along path edges, could be quite diverse with ox-eye daisy, greater knapweed, yellow rattle, common knapweed and common bird-foot-trefoil all present in places.

An over-grown species poor hawthorn hedgerow lines the site boundary to the east

CONDITION ASSESSMENT

The Magnesian limestone grassland habitat meets the Local Wildlife Site criteria.

Scattered to dense scrub habitat is now widespread in and around the grassland areas and consists largely of hawthorn with some dog rose, elder, sycamore, Swedish whitebeam and naturalised cotoneaster species on the cliff faces. The denser stands of mature scrub support shade-loving plants such as male fern, red campion, wild strawberry and honeysuckle. Large stands of aggressive ruderals like rosebay willowherb, early goldenrod and large bindweed have spread widely within the quarry area.

This sheltered site is important for butterflies with wall, ringlet, speckled wood, small skipper, small tortoiseshell, meadow brown and large white recorded. Two families of grey partridge were also recorded including one pair with 12 newly fledged young, dunnock also breeds on site.

CONNECTIVITY

The Local Wildlife Site forms a part of Fulwell Quarry Local Nature Reserve. The remaining area of the LNR is a designated SSSI (Fulwell and Carley Hill Quarries) which supports the larger area of Magnesian Limestone grassland habitat within the site. Fulwell Meadows is an important link to Boldon Hills.

OTHER SCIENTIFIC IMPORTANCE

Rock exposures within Fulwell Quarries LNR show the variety of late Permian Concretionary Limestone that was formed some 230 million years ago and includes the famous "cannonball" rock formations.

RECORDED HISTORY

Surveyed in 2006 and 2009 by A McLay as part of the MAGical Meadows project and in 2018 and 2020 by Durham Wildlife Services.

SITE MANAGEMENT

Magnesian limestone grassland:

- Selective scrub removal.
- Annual cut and rake of areas of grassland.
- Bare earth creation for grassland recolonization
- Control of motorised access

Fulwell Meadows species list

BAP Habitat: Magnesian Limestone Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Bee Orchid	<i>Ophrys apifera</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Common Catsear	<i>Hypochoeris radicata</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Milkwort	<i>Polygala vulgaris</i>	Rare
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Common Toadflax	<i>Linaria vulgaris</i>	Rare/ Locally Frequent
Cowslip	<i>Primula veris</i>	Occasional
Daisy	<i>Bellis perennis</i>	Occasional
False Brome	<i>Brachypodium sylvaticum</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Occasional
Greater Knapweed	<i>Centaurea scabiosa</i>	Frequent
Hoary Ragwort	<i>Senecio erucifolius</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mouseeared Hawkweed	<i>Pilosella officinarium</i>	Rare
Quaking Grass	<i>Briza media</i>	Abundant
Red Clover	<i>Trifolium pratense</i>	Occasional
Restharrow	<i>Ononis repens</i>	Rare / Locally Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Selfheal	<i>Prunella vulgaris</i>	Occasional
White Clover	<i>Trifolium repens</i>	Occasional
Yellow Oat-grass	<i>Trisetum flavescens</i>	Rare
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare

Non-BAP Habitat: Semi-improved Neutral Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Bush Vetch	<i>Vicia sepium</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Rare

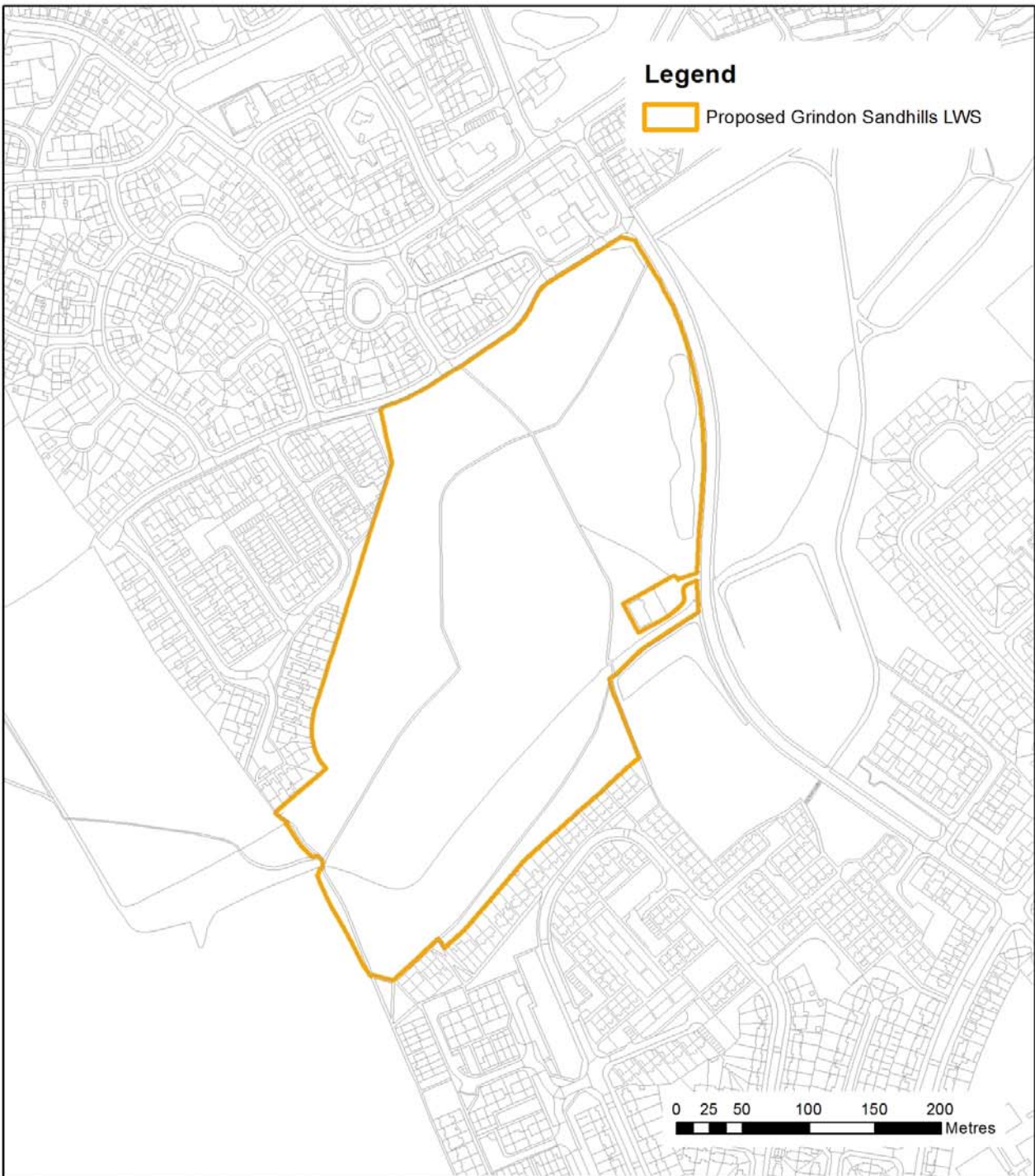
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Germander Speedwell	<i>Veronica chamaedrys</i>	Frequent
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Yellow Rattle	<i>Rhinanthus minor</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

Non - BAP Habitat: Newly Planted Trees	
Common Name	Botanical Name
Field Maple	<i>Acer campestre</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Rowan	<i>Sorbus aucuparia</i>
Sessile Oak	<i>Quercus petraea</i>
Silver Birch	<i>Betula pendula</i>


Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Occasional
Annual Meadow-grass	<i>Poa annua</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent / Locally Abundant
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Birds-foot-Trefoil		
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Greater Knapweed	<i>Centaurea scabiosa</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Occasional
Quaking Grass	<i>Briza media</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional

Sycamore	<i>Acer pseudoplatanus</i>	Frequent
White Poplar	<i>Populus alba</i>	Frequent
Yellow Rattle	<i>Rhinanthus minor</i>	Rare / Locally Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

Non - BAP Habitat: Rank Poor Semi-improved Grassland & Scrub		
Common Name	Botanical Name	Abundance (DAFOR)
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Dogwood	<i>Cornus sanguinea</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Hawthorn - hedgerow	<i>Crataegus monogyna</i>	Locally Dominant
Hazel	<i>Corylus avellana</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 366 552</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 10.08.2020 Scale 1:4,000</p>	<p>N</p> 
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Grindon Sandhills LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5.36.01.07.003.01</p>		

SITE NAME	Grindon Sandhills
SITE No.	UF 5_36_01_07_003
LOCATION	Grindon NZ 357543
STATUS	Proposed Local Wildlife Site
AREA	10.43 ha
DATE OF SITE VISIT	August 2015
OWNERSHIP	Sunderland City Council

SITE DESCRIPTION

Species-rich Magnesian Limestone grassland and a section of the Barnes Burn.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Magnesian limestone grassland	10.03
Other broadleaf woodland	0.21
Rivers and streams	375m length

National and local BAP species:

English Name	Scientific Name	Notes
Song Thrush	<i>Turus philomelos</i>	Nests
Reed Bunting	<i>Emberiza schoeniclus</i>	Nests
Skylark	<i>Alauda arvensis</i>	Present
Hedgehog	<i>Erinaceus europaeus</i>	Present

DETAIL

The site is composed of Grindon Hill, a small hill vegetated with Magnesian limestone grassland, and Barnes Burn which flows along a ditch, through the southern section of the site, from south-west to north-east. The site also contains a small pocket of broadleaved woodland to the east, and a number of scattered mature trees.

The main interest of the site is that of the calcareous grassland on Grindon Hill itself, which contains a variety of species such as small scabious, rough hawkbit, harebell and orchids. The burn and associated bank sides contain brooklime, glaucous sedge, sharp-flowered rush and jointed rush, whilst an area of damp grassland alongside the burn is dominated by stands of hairy sedge, meadowsweet and yellow flag iris.

A small number of species of conservation concern occur within the site; skylark and reed bunting are known to nest.

CONDITION ASSESSMENT

The Magnesian limestone grassland meets the Local Wildlife Site criteria:

On Grindon Hill itself, there is a large area of species-rich secondary Magnesian limestone grassland, which has developed following the restoration of this area. Although this area once contained most of the typical species of high-quality calcareous grasslands, such as quaking grass, yellow oat grass, meadow oat grass, crested hair grass and the nationally scarce blue moor grass, in recent years species have more typically included crested dog's-tail, sweet vernal grass and red fescue. The flora includes sedges, birds' foot trefoil, yellow rattle, cowslip, rough hawkbit, harebell, greater knapweed and small scabious. Small numbers of bee orchids have been recorded in the recent past (2009), as well as many common spotted orchids, northern marsh orchids and pyramidal orchids. The best areas are the thinner soils at the top of the hill and on the steeper slopes. Lower down the hill, the soils are richer and coarser species become more frequent. Towards Barnes Burn there are small flushes with rushes and meadowsweet.

Although the Magnesian limestone grassland within the site meets the habitat criteria, the proportion of indicator species is such that this habitat must be recorded as being in poor condition.

The Rivers and streams habitat meets the Local Wildlife Site criteria:

The burn has clean water and a natural appearance, supporting a variety of wildlife. Past surveys have indicated a good range of aquatic and emergent plants, including branched bur-reed, water-cress, common water- starwort, marsh marigold and reed canary-grass. However, in 2015, the banksides had become dominated by stands of tall, dense vegetation, such as great willowherb and creeping thistle, to the exclusion of many of the smaller, less competitive plants beneath. Where bankside vegetation is less dense, species such as brooklime and sharp-flowered rush persist. This decline in aquatic and emergent plants may indicate a drying of the ditch over time. Although water was found to be present at the time of survey, the burn was heavily shaded, resulting in a lack of submerged plants. Along the margins of the Barnes Burn are small flushes dominated by hard rush and hairy sedge and containing yellow flag iris and meadowsweet. There is no formal condition assessment for streams and ditches under the Durham Biodiversity Action Plan Priority Habitats Definitions, however this feature appears to be in decline and requires management.

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

Due to the high content of non-native species within the woodland, this habitat does not qualify as a priority habitat of conservation concern. Nor does the woodland within the site provide a link with the wider environment, as there are few areas of woodland with which to connect locally. The woodland area and trees on site do however provide habitat for small mammals and nesting birds, and therefore carry some ecological value.

CONNECTIVITY

Grindon Sandhills sits within the Barnes Burn Local Wildlife Corridor, which extends north-east along the Barnes Burn, to Barnes Park. The site is strategically placed to provide a link within the environment from this local wildlife corridor to the Usworth-Penshaw-Houghton-Hetton Regional Wildlife Corridor. The regional corridor runs perpendicular to the local Barnes Burn Corridor, from north to south. It is important to consider the site in the context of a link within a chain of suitable wildlife habitat, as well as a stand-alone site. Grindon Sandhills allows and extends the movement of species between wildlife rich areas within the regional corridor to the west and beyond, into the urban and semi-urban areas along the Barnes Burn to the east. For species which require a large territory or home range, this may maintain viability.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in 2009 by John Durkin.

SITE MANAGEMENT

Magnesian limestone grassland:

- Cut grassland.
- Control noxious weeds.

Stream/Burn:

- Cut bankside vegetation.
- Control invasive species.

Other broadleaf woodland:

- Remove non-native trees.
- Retain scattered trees along the north and west boundaries.

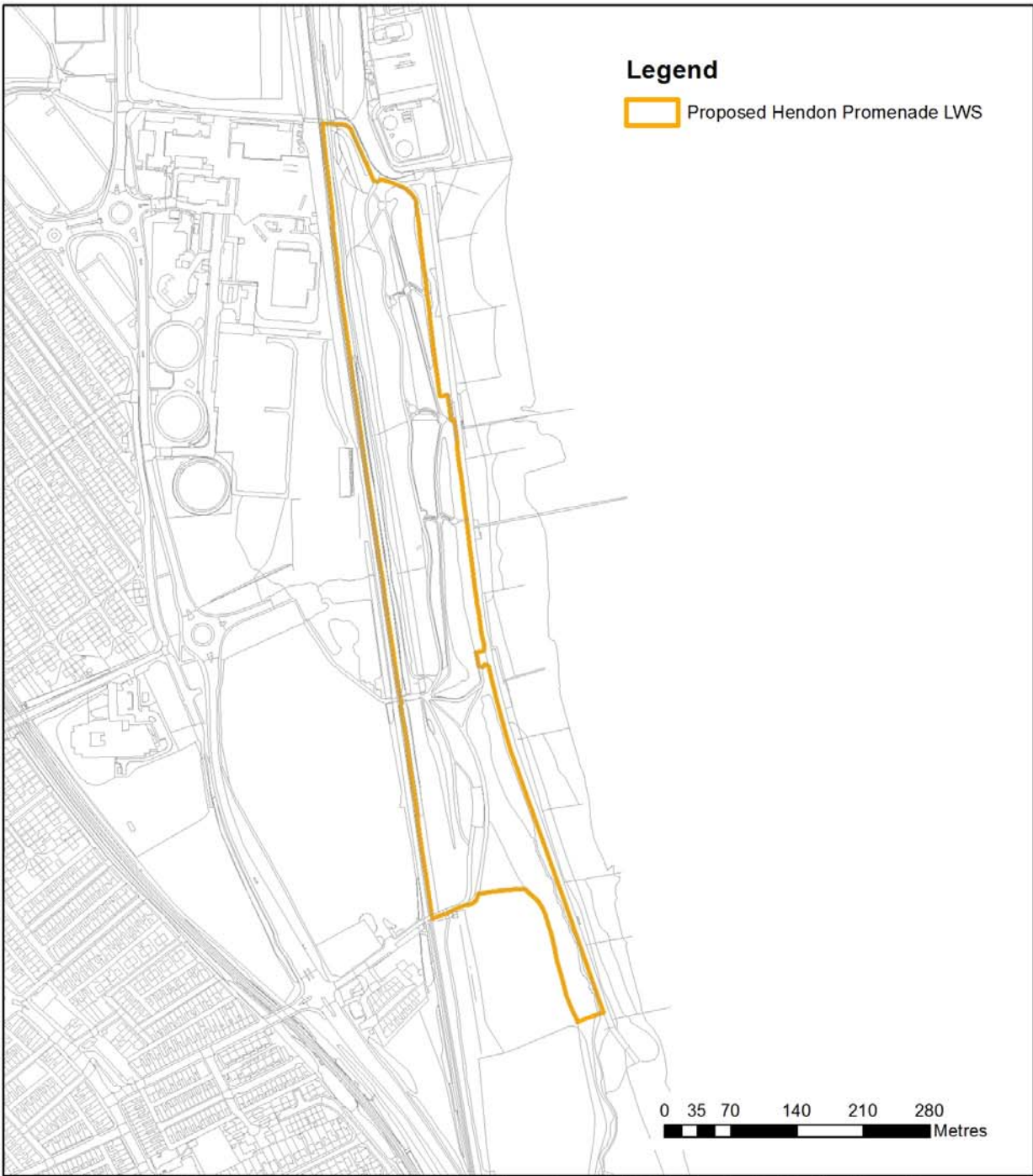
Grindon Sandhills species list

BAP Habitat: Magnesian limestone grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Autumn gentian	<i>Gentianella amarella</i>	Rare
Autumn hawkbit	<i>Leontodon autumnalis</i>	Rare
Bird's foot trefoil	<i>Lotus corniculatus</i>	Occasional
Black medick	<i>Medicago lupulina</i>	Occasional
Bramble	<i>Rubus fruticosus</i> agg.	Rare
Broad leaved dock	<i>Rumex obtusifolius</i>	Occasional
Bush vetch	<i>Vicia sepium</i>	Occasional
Cat's ear	<i>Hypochaeris radicata</i>	Occasional
Cleavers	<i>Galium aparine</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Rare
Common knapweed	<i>Centaurea nigra</i>	Frequent
Common mouse-ear	<i>Cerastium fontanum</i>	Occasional
Common ragwort	<i>Senecio jacobaea</i>	Rare
Common sedge	<i>Carex nigra</i>	Rare
Common sorrel	<i>Rumex acetosa</i>	Rare
Cow parsley	<i>Anthriscus sylvestris</i>	Rare
Cowslip	<i>Primula veris</i>	Rare
Creeping buttercup	<i>Ranunculus repens</i>	Rare
Creeping cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping thistle	<i>Cirsium arvense</i>	Locally abundant
Crested dog's tail	<i>Cynosurus cristatus</i>	Occasional
Daisy	<i>Bellis perennis</i>	Rare
Dandelion	<i>Taraxacum</i> agg.	Rare
Dog rose	<i>Rosa canina</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
Eyebright	<i>Euphrasia officinalis</i>	Rare
Fairy flax	<i>Linum catharticum</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field horsetail	<i>Equisetum arvense</i>	Rare
Flowering currant	<i>Ribes sanguineum</i>	Rare
Germander speedwell	<i>Veronica chamaedrys</i>	Rare
Glaucous sedge	<i>Carex flacca</i>	Rare
Goat's beard	<i>Tragopogon pratensis</i>	Rare
Great willowherb	<i>Epilobium hirsutum</i>	Rare
Greater knapweed	<i>Centaurea scabiosa</i>	Rare
Greater plantain	<i>Plantago major</i>	Occasional

Harebell	<i>Campanula rotundifolia</i>	Rare
Hedge bindweed	<i>Calystegia sepium</i>	Rare
Hedge woundwort	<i>Stachys sylvatica</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Rare
Ivy	<i>Hedera helix</i>	Rare
Lesser trefoil	<i>Trifolium dubium</i>	Occasional
Lucerne	<i>Medicago sativa</i>	Rare
Meadow buttercup	<i>Ranunculus acris</i>	Rare
Meadow grass	<i>Poa sp.</i>	Occasional
Meadow vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Perennial rye-grass	<i>Lolium perenne</i>	Rare
Pineappleweed	<i>Matricaria discoidea</i>	Rare
Red clover	<i>Trifolium pratense</i>	Frequent
Red fescue	<i>Festuca rubra</i>	Abundant
Ribwort plantain	<i>Plantago lanceolata</i>	Abundant
Rosebay willowherb	<i>Chamerion angustifolium</i>	Rare
Rough hawkbit	<i>Leontodon hispidus</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional
Silverweed	<i>Potentilla anserina</i>	Rare
Small scabious	<i>Scabiosa columbaria</i>	Rare
Smooth sow thistle	<i>Sonchus oleraceus</i>	Rare
Snowberry	<i>Symphoricarpos albus</i>	Rare
Spear thistle	<i>Cirsium vulgare</i>	Rare
Stinging nettle	<i>Urtica dioica</i>	Locally abundant
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	Occasional
Timothy	<i>Phleum pratense</i>	Frequent
Tufted vetch	<i>Vicia sepium</i>	Rare
White clover	<i>Trifolium repens</i>	Frequent
Yarrow	<i>Achillea millefolium</i>	Abundant
Yellow rattle	<i>Rhinanthus minor</i>	Frequent
Yorkshire-fog	<i>Holcus lanatus</i>	Rare

BAP Habitat Type: Rivers and streams – Barnes Burn ditch		
Common Name	Botanical Name	Abundance (DAFOR)
Bent	<i>Agrostis sp.</i>	Rare
Brooklime	<i>Veronica beccabunga</i>	Frequent
Coltsfoot	<i>Tussilago farfara</i>	Occasional

Common knapweed	<i>Centaurea nigra</i>	Occasional
Creeping buttercup	<i>Ranunculus repens</i>	Rare
Creeping cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping thistle	<i>Cirsium arvense</i>	Frequent
False oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field horsetail	<i>Equisetum arvense</i>	Occasional
Glaucous sedge	<i>Carex flacca</i>	Occasional
Great willowherb	<i>Epilobium hirsutum</i>	Frequent
Hairy sedge	<i>Carex hirta</i>	Locally abundant
Hard rush	<i>Juncus inflexus</i>	Locally abundant
Hedge woundwort	<i>Stachys sylvatica</i>	Rare
Hoary willowherb	<i>Epilobium parviflorum</i>	Rare
Jointed rush	<i>Juncus articulatus</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Montbretia	<i>Crocsmia x crocosmifolia</i>	Rare
Self heal	<i>Prunella vulgaris</i>	Rare
Sharp-flowered rush	<i>Juncus acutiflorus</i>	Rare
Soft rush	<i>Juncus effusus</i>	Rare
Tufted hair-grass	<i>Deschampsia caespitosa</i>	Rare
Tufted vetch	<i>Vicia cracca</i>	Rare
Willow	<i>Salix sp.</i>	Rare
Yellow flag iris	<i>Iris pseudacorus</i>	Rare
Yorkshire fog	<i>Holcus lanatus</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 410 554</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 28.09.2020 Scale 1: 6,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>		
	<p>Subject Proposed Hendon Promenade LWS</p>		
	<p>Drawing No. UF 5.36.01.06.020.01</p>	<p>Sheet size A4 Revisions 1</p>	

SITE NAME	Hendon Promenade
SITE No.	UF 5_36_01_06_020
LOCATION	Grangetown NZ 411550
STATUS	Proposed Local Wildlife Site
AREA	8.34 Ha
DATE(S) OF SITE VISIT(S)	14th July 2017
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Magnesian limestone grassland and coastal cliffs supporting grassland habitats and varied bird populations. As of 2020, the site has been extended towards the south to include a small section of Maritime magnesian limestone habitat that was once a part of the now de-designated Hendon Cliffs LWS.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Maritime magnesian limestone grassland	4.97

National and local BAP species:

English Name	Scientific Name	Notes
Curlew	<i>Numenius arquata</i>	Migrant
Grasshopper Warbler	<i>Locustella naevia</i>	
Grey Partridge	<i>Perdix perdix</i>	
Kestrel	<i>Falco tinnunculus</i>	
Linnet	<i>Carduelis cannabina</i>	
Purple Sandpiper	<i>Calidris maritima</i>	Winter visitor
Reed Bunting	<i>Emberiza schoeniclus</i>	
Skylark	<i>Alauda arvensis</i>	Breeds
Snipe	<i>Gallinago gallinago</i>	
Song Thrush	<i>Turdus philomelos</i>	
Swallow	<i>Hirundo rustica</i>	
Swift	<i>Apus apus</i>	
Turnstone	<i>Arenaria interpres</i>	Winter visitor
Yellow Wagtail	<i>Motacilla flava</i>	

Other protected species:

English Name	Scientific Name	Notes
Black-tailed Godwit	<i>Limosa limosa</i>	
Common Blue	<i>Polyommatus icarus</i>	
Common Scoter	<i>Melanitta nigra</i>	
Goldfinch	<i>Carduelis carduelis</i>	
Lapland Bunting	<i>Calcarius lapponicus</i>	
Meadow Brown	<i>Maniola jurtina</i>	
Peregrine	<i>Falco peregrinus</i>	
Red-throated Diver	<i>Gavia stellata</i>	
Redwing	<i>Turdus iliacus</i>	
Small Skipper	<i>Thymelicus sylvestris</i>	
Snow Bunting	<i>Plectrophenax nivalis</i>	

DETAIL

The site consists of large areas of Maritime magnesian limestone grassland. Typical species of the cliff top areas include sea plantain, yellow-wort, common centaury, kidney vetch and red bartsia. The larger areas of Magnesian limestone grassland away from the cliff top include lady's bedstraw, common knapweed, rest harrow, kidney vetch, salad burnet, field scabious, small scabious, common birds-foot-trefoil, quaking grass, yellow wort, greater knapweed, eyebright, cowslip and rough hawkbit.

CONDITION ASSESSMENT

The Magnesian limestone grassland habitat meets the Local Wildlife Site criteria:

The Magnesian limestone grassland on site varies a little in quality, with all areas meeting the definition but some areas are a little ranker and these areas would benefit from some management to prevent undesirable tall ruderal species from further encroaching. Given the lack of management on site, large areas of grassland are in good condition, with good frequencies of indicator species.

Scrub is not currently an issue on site, however, there are several areas of grassland within the proposed LWS boundary that are rank, with areas to the southwest dominated with tall ruderal species such as rosebay willowherb, creeping thistle and broadleaved dock, with the occasional Magnesian limestone grassland species present including greater knapweed.

Areas to the southeast, around the carpark and towards the sea, are a mixture of tall ruderal and rank semi-improved grassland, with species such as bee orchids, common catsear, common birds-foot-trefoil and common knapweed present but not in high enough frequencies to qualify as a BAP habitat. These areas would benefit from undergoing some management which would increase their species diversity and stop the spread of the undesirable species into the areas of Magnesian limestone grassland.

Numerous common butterflies were seen on site during the walkover including meadow brown, common blue and small skipper. Dingy skipper butterfly have been recorded on Hendon railway sidings to the north of the site and the site does have suitable habitat for this species, so it is highly likely they will be present on this site as well.

Overall, this habitat is currently in favourable condition, being free from scrub and lacking in negative indicator species and bare ground. However, some areas are ranker with higher percentage of negative indicators and management is required to prevent further encroachment of the negative indicators.

CONNECTIVITY

Proposed Hendon Sidings LWS to the north and Hendon Railway LWS to the south form a major part of the Sunderland Coast Green Corridor. Within this corridor also lie Northumbria Coast SPA, Durham Coast SAC & SSSI and Northumbria Coast Ramsar sites, all of which are situated just a few metres south of the Proposed Hendon Promenade LWS site boundary.

LANDSCAPE

The cliffs within the site boundary form an important landscape feature and the site forms an integral part of the open landscape character of the coast through Sunderland and into Durham.

OTHER SCIENTIFIC IMPORTANCE

The site will be of ornithological importance, within just a few metres of SPA and Ramsar sites, designated for their importance for birds. Wintering bird surveys carried out since 2014 recorded purple sandpiper and turnstone roosting and feeding along the coast and around the site. However, the site itself is intersected with numerous footpaths and includes a carpark so will suffer from high levels of disturbance. The site is also likely to be of importance to invertebrates, with calcareous grassland known to be home to a range of rarer species. Dingy skipper butterfly (local BAP and NERC act species) have also been recorded to the north of the site and are likely to be present on the site itself given the suitable habitat present for this butterfly.

RECORDED HISTORY

There is no survey history of the site. Parts of the site to the north have been seeded in the past and the occasional rigid common birds-foot-trefoil can be seen which is often associated with sown grasslands. However, overall the grasslands are well established and appear naturalised, with species present matching with areas that have not been sown.

SITE MANAGEMENT

Parts of the site are rank and in desperate need of management before species diversity is lost. An annual late summer/early Autumn (late August/September) cut and rake should be carried out across the site (where funds allow). If funds are restricted, a rotational cut and rake should be carried out, with just part of the site managed each year. However, attention should be paid to ranker areas/areas with more tall ruderal species present and these areas should receive more frequent cut and rakes to stop these undesirable species spreading and setting seed.

Hendon Promenade species list

BAP Habitat: Maritime grassland		
Common Name	Botanical Name	DAFOR
Black Medic	<i>Medicago lupulina</i>	Rare
Bladder Campion	<i>Silene vulgaris</i>	Rare
Cat's-ear	<i>Hypochaeris radicata</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Common Centaury	<i>Centaureum erythraea</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Abundant
Common Mallow	<i>Malva sylvestris</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Restharrow	<i>Ononis repens</i>	Frequent
Cowslip	<i>Primula veris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent/Locally Abundant
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinqfoil	<i>Potentilla reptans</i>	Occasional/Locally Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Occasional
Curled Dock	<i>Rumex crispus</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Eyebright	<i>Euphrasia officinalis agg.</i>	Rare
False Oatgrass	<i>Arrhenatherum elatius</i>	Occasional
Field Scabious	<i>Knautia arvensis</i>	Occasional
Fox & Cubs	<i>Pilosella aurantiaca</i>	Rare
Goatsbeard	<i>Tragopogon pratensis</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Occasional
Harebell	<i>Campanula rotundifolia</i>	Rare
Hedge Bedstraw	<i>Galium mollugo</i>	Rare
Hedge Parsley	<i>Torilis japonica</i>	Rare
Hop Trefoil	<i>Trifolium campestre</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Frequent/Locally Abundant
Lady's Bedstraw	<i>Galium verum</i>	Frequent/ Locally Abundant
Meadow Cranesbill	<i>Geranium pratense</i>	Rare
Meadow Oatgrass	<i>Helictotrichon pratense</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Nettle	<i>Urtica dioica</i>	Occasional
Northern Marsh Orchid	<i>Dactylorhiza purpurella</i>	Rare

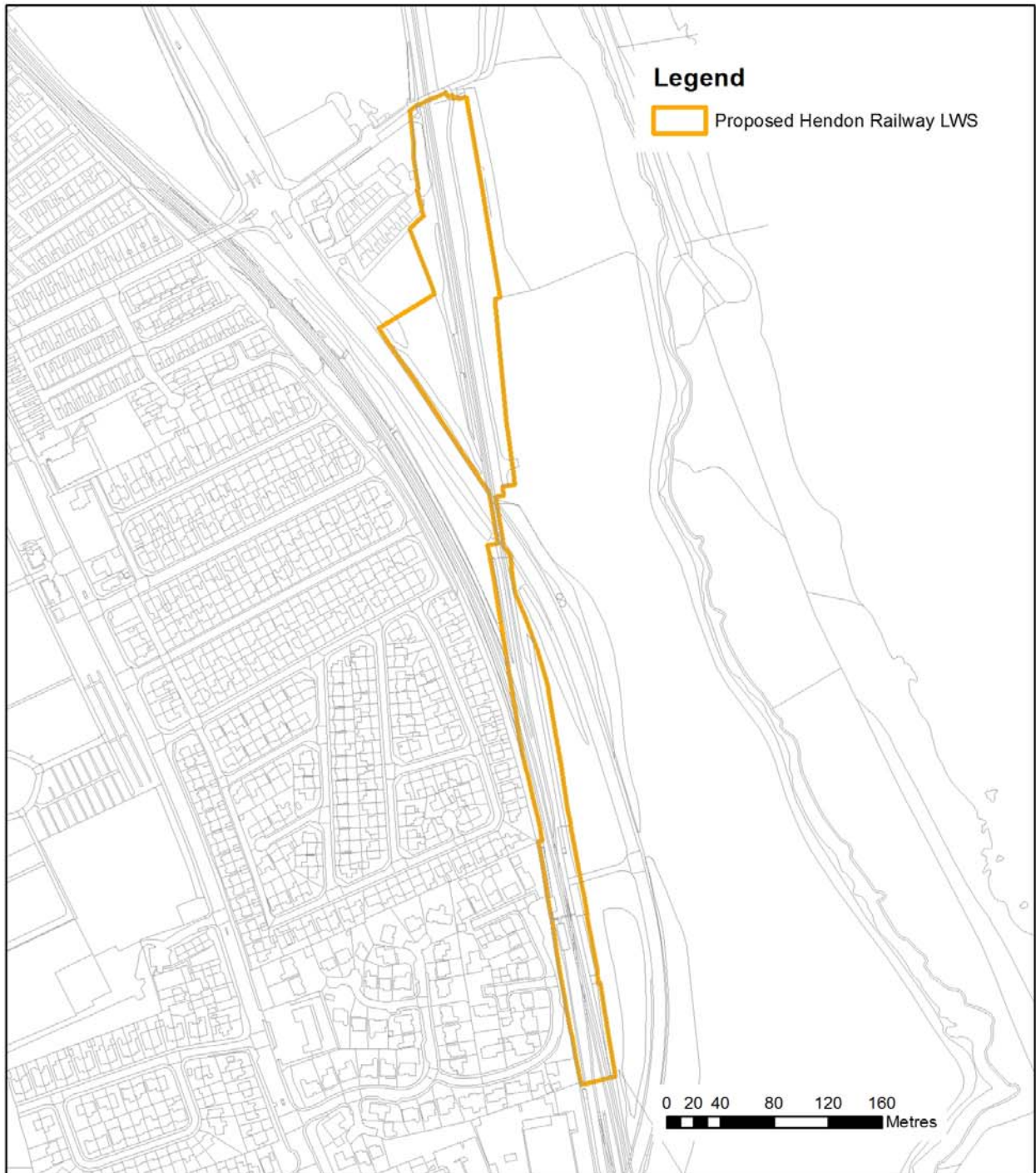
Perennial Rye Grass	<i>Lolium perenne</i>	Rare
Quaking Grass	<i>Briza media</i>	Occasional/Locally Frequent
Red Bartsia	<i>Odontites vernus</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Frequent
Red Fescue	<i>Festuca rubra</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Rough Meadow Grass	<i>Poa trivialis</i>	Occasional
Salad Burnet	<i>Sanguisorba minor</i>	Frequent
Sea Plantain	<i>Plantago maritima</i>	Frequent
Silverweed	<i>Argentina anserina</i>	Rare
Small Scabious	<i>Scabiosa columbaria</i>	Occasional
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Occasional
Toadflax	<i>Linaria vulgaris</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Occasional
White Clover	<i>Trifolium repens</i>	Frequent
Wild Marjoram	<i>Origanum vulgare</i>	Rare
Wild Mignonette	<i>Reseda lutea</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Frequent
Yellow Rattle	<i>Rhinanthus minor</i>	Rare
Yellow-wort	<i>Blackstonia perfoliata</i>	Occasional/Locally Abundant
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

Non-BAP habitat		
Common name	Botanical name	DAFOR
Bee Orchid	<i>Ophrys apifera</i>	Rare
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Burdock	<i>Arctium sp.</i>	Rare
Catsear	<i>Hypochaeris radicata</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Frequent
Coltsfoot	<i>Tussilago farfara</i>	Locally Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Dandelion	<i>Taraxacum officinale</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Rare


False Oatgrass	<i>Arrhenatherum elatius</i>	Frequent
Field Bindweed	<i>Convolvulus arvensis</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Rare
Golden Rod	<i>Solidago sp.</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Rare
Greater Plantain	<i>Plantago major</i>	Rare
Ground Elder	<i>Aegopodium podagraria</i>	Rare/ Locally Frequent
Lady's Bedstraw	<i>Galium verum</i>	Rare
Large Bindweed	<i>Calystegia sepium</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Nettle	<i>Urtica dioica</i>	Locally Frequent
Perennial Ryegrass	<i>Lolium perenne</i>	Occasional
Red Bartsia	<i>Odontites vernus</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamaenerion angustifolium</i>	Locally Abundant
Scentless Mayweed	<i>Tripleurospermum inodorum</i>	Rare
Sea Plantain	<i>Plantago maritima</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Teasel	<i>Dipsacus fullonum</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
White Poplar	<i>Populus alba</i>	Rare
Whitebeam	<i>Sorbus sp.</i>	Rare
Willow	<i>Salix sp.</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Frequent
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

Grassland on the sloped cliff sections to the south		
Common name	Botanical name	DAFOR
Black Medic	<i>Medicago lupulina</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Catsear	<i>Hypochoeris radicata</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Rare
Hawkweed sp.	<i>Hieracium sp.</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Frequent

Red Bartsia	<i>Odontites vernus</i>	Frequent
Red Fescue	<i>Festuca rubra</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Frequent
Yellow-wort	<i>Blackstonia perfoliata</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 411 545</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 28.09.2020 Scale 1: 4,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>
<p>Subject Proposed Hendon Railway LWS</p>	<p>Drawing No. UF 5.36.01.06.021.01</p>	<p>Revisions 1</p>

SITE NAME	Hendon Railway
SITE No.	UF 5_36_01_06_021
LOCATION	Grangetown NZ411547
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985 and revised in 2020
AREA	2.53 ha
DATE OF SITE VISIT	September 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Railway cutting displaying exposures of Magnesian Limestone rock.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Magnesian limestone grassland	1.39

National and local BAP species:

English Name	Scientific Name	Notes
Corn Bunting	<i>Emberiza calandra</i>	
Grasshopper Warbler	<i>Locustella naevia</i>	
Kestrel	<i>Falco tinnunculus</i>	
Linnet	<i>Carduelis cannabina</i>	
Peregrine	<i>Falco peregrinus</i>	
Reed Bunting	<i>Emberiza schoeniclus</i>	
Skylark	<i>Alauda arvensis</i>	
Starling	<i>Sturnus vulgaris</i>	
Swallow	<i>Hirundo rustica</i>	

DETAIL

The disused northern section of the railway contains small remnants of Magnesian limestone grassland developed on rock exposures and adjacent ballast substrates. Sea plantain, rough hawkbit and birdsfoot trefoil are locally frequent with lesser quantities of other calcicoles such as fairy flax, greater knapweed, restharrow, field scabious, kidney vetch, hoary ragwort and wild mignonette.

The herb-rich grassland community is now much reduced due to the spread of scrub and negative indicator species such as rosebay willowherb, large bindweed and bramble.

An area of magnesian limestone grassland lies between the railway line and the adjacent road. This area of unmanaged rank grassland has an abundance of indicator species for both lowland meadow and pasture and for Magnesian limestone grassland, but overall it has been classified as the latter. For the former, common knapweed is abundant, with ox-eye daisy frequent, meadow cranesbill occasional and goatsbeard rare. Magnesian limestone indicators include abundant lady's

bedstraw, frequent salad burnet, and rare on site is small scabious, restharrow, yellow-wort and kidney vetch. Additional indicator species, that can be found in both habitat types, include common birds-foot-trefoil, betony, and rough hawkbit. Along the edge of the site, at the top of the steep road verge, lies a row of planted scrub including guelder rose, holly, hawthorn and Japanese rose. The latter is listed on Schedule 9 of the Wildlife and Countryside Act, which makes it illegal to plant this plant in the wild, or otherwise cause to grow in the wild.

CONDITION ASSESSMENT

The Magnesian limestone grassland habitat meets the Local Wildlife Site criteria:

Despite the lack of management, the grassland is largely in good condition, with plenty of indicator species, only a small number of undesirables and a good cover of wildflowers in the sward. However, the quality of the grassland greatly decreased to the north towards the houses, where rank grasses are more prevalent and less herbs present. This is also true along the boundary with the adjacent railway line, which is very rank with large numbers of undesirables which are spreading through the fence line.

* **Note** – the railway section of the site was not surveyed due to access restrictions and is thought to be in a poor condition due to scrub and other undesirable species.

CONNECTIVITY

Hendon Railway sits back from the coastal corridor neighbouring the Durham Coast SSSI and SAC and the Northumbria SPA and RAMSAR. A series of nationally important cliffs and foreshore, the Durham Coast SSSI supports important para-maritime magnesian limestone grassland and numerous bird species. Though interrupted in part, the SSSI extends from South Shields in the north to Crimdon in the south. The east coast train line borders arable farmlands to the west. To the north east of this site lies Proposed Hendon Promenade, to the south is Ryhope Villiage Dene LWS and Ryhope Denemouth LWS, a further area of maritime magnesian limestone grassland and Ancient semi-natural woodland. The Denemouth continues to the west and includes the LWS's of Ryhope Dene and Cherry Knowle Dene. Ryhope Dene Railway Cutting LWS also lies to the south.

LANDSCAPE

Hendon Railway contributes to the open landscape character of this section of the Durham coast.

OTHER SCIENTIFIC IMPORTANCE

Hendon railway exhibits exposures of the Upper Permian Concretionary Limestone which are of geological interest.

RECORDED HISTORY

Surveyed in 1995 and by A.Mclay in 2010 and again in 2019 by Durham Wildlife Services.

SITE MANAGEMENT

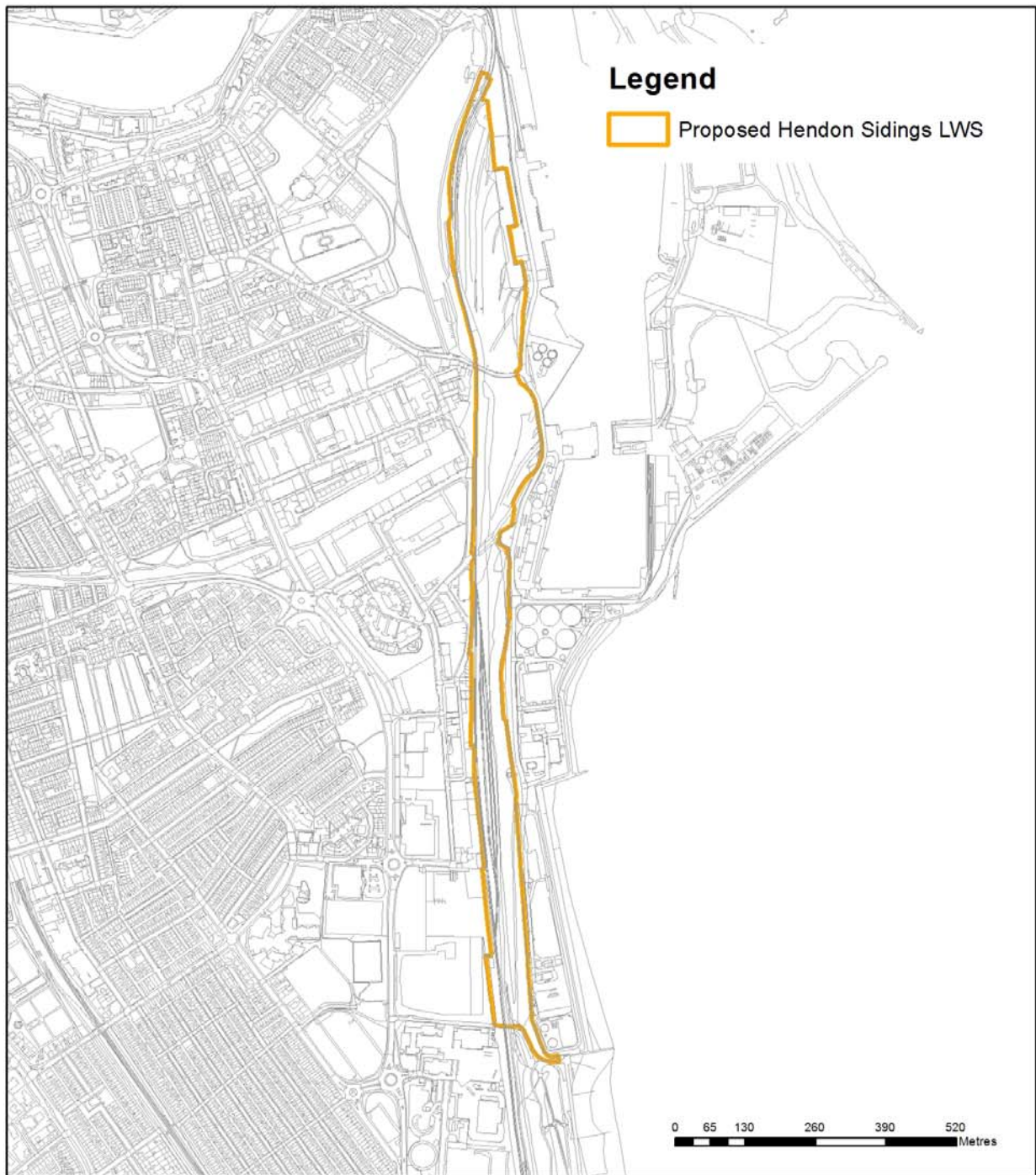
Magnesian limestone grassland:

- Late summer cut annually

Hendon Railway species list

BAP Habitat Type: Magnesian Limestone Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Betony	<i>Stachys officinalis</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Rare/ Locally Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	Occasional/ Locally Frequent
Common Hogweed	<i>Heracleum sphondylium</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Abundant
Common Ragwort	<i>Jacobaea vulgaris</i>	Occasional
Common Toadflax	<i>Linaria vulgaris</i>	Occasional
Common Vetch	<i>Vicia sativa</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Rare/Locally Frequent
Dandelion	<i>Taraxacum officinale</i>	Rare
Dog Rose	<i>Rosa canina</i>	Occasional
Doves-foot Cranesbill	<i>Geranium molle</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Field Forget-me-not	<i>Myosotis arvensis</i>	Rare
Goatsbeard	<i>Tragopogon pratensis</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Rare
Japanese Rose	<i>Rosa rugosa</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Abundant
Meadow Buttercup	<i>Ranunculus acris</i>	Rare
Meadow Cranesbill	<i>Geranium pratense</i>	Occasional
Mouse-eared Hawkweed	<i>Pilosella officinarium</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Rare
Musk Mallow	<i>Malva moschata</i>	Occasional
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Frequent
Perennial Wall Rocket	<i>Diplotaxis tenuifolia</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Occasional
Restharrow	<i>Ononis repens</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent

Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Salad Burnet	<i>Poterium sanguisorba</i>	Frequent
Selfheal	<i>Prunella vulgaris</i>	Rare
Small Scabious	<i>Scabiosa columbaria</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 408 574</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 19.11.2020 Scale 1: 15,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Hendon Sidings LWS</p>	<p>Revisions</p>	
	<p>Drawing No. UF 5.36.01.07.004.01</p>		

SITE NAME	Hendon Sidings and Docks
SITE No.	UF 5_36_01_07_004
LOCATION	Hendon NZ4056, NZ4957
STATUS	Proposed Local Wildlife Site
AREA	14.35 ha
DATE OF SITE VISIT	July 2009
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

The local wildlife site consists of a large area of species-rich grasslands associated with the former Hendon Docks and the railway line and sidings that serviced the docks.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland heath	0.14
Lowland meadows and pasture & Early successional brownfield habitats	13.70 (mosaic habitats totalling)

National and local BAP species:

English Name	Scientific Name	Notes
Dingy Skipper	<i>Erynnis tages</i>	Present
Hedgehog	<i>Erinaceus europaeus</i>	Present
Song Thrush	<i>Turdus philomelos</i>	Breeds

DETAIL

The grasslands are quite variable in nature because they have developed on a number of different substrates derived over many years from railway ballast, ships' ballast and the former industries of the site. There are some that would best be described as "brownfield" habitats, mostly along the remaining railway track, along the length of the site. These soils are neutral in nature. Elsewhere, particularly at the northern end of the site and the slopes on the eastern side, the grasslands have developed beyond the brownfield stage and are mostly calcareous in nature. At the northern end there are some quite acidic soils supporting heathland species. Small areas have been planted with trees or have been colonised by trees from the planted areas.

The neutral grassland of the railway line supports brownfield species such as coarse grasses, bird's foot trefoil, plantains, cinquefoils and clovers, together with scarcer species such as red valerian, perennial wall-rocket and wood small-reed. There is quite a lot of developing "brownfield scrub", with buddleia and cotoneaster species. There are still open areas along the track bed and the adjacent, well used footpath. This combination of features provides habitat for a number of butterfly species, notably the BAP species Dingy Skipper, with ringlet and speckled wood. The latter two species are recent colonists and will probably become more common in future

years. Another BAP species, Grayling, which is spreading along the coast, would be expected to colonise in the near future.

The calcareous grasslands cover most of the LWS. These are mostly derived from brownfield grasslands, though in places from older, coastal calcareous grasslands. They are very variable in composition, with patches of particular communities rarely covering more than a few hundred square metres. This makes the grassland one of the richest calcareous grassland areas in the Sunderland area.

Typical calcareous grassland species include field scabious, greater knapweed, eyebright, yellow-wort, birds foot trefoil, glaucous sedge, centaury, blue fleabane, fairy flax and restharrow. Restharrow is particularly common here. Orchid species include common spotted, northern marsh and bee orchid. Sea plantain is present in most of the grasslands. There are some species uncommon in the DBAP area, such as common broomrape, hare's foot clover and small cudweed, all of which are locally frequent in parts of the grassland.

The acid grassland is an unusual habitat in Sunderland. It is limited in area, at the northern end of the sidings, but it has patches of heather which appear to be spreading, together with lady fern, male fern and sneezewort.

All of the grasslands are currently uncut and grazed only by rabbits, so colonisation by scrub is proceeding.

CONDITION ASSESSMENT

All of the grasslands meet the Local Wildlife Site criteria:

At the northern end of the site, there are small planted areas of mostly non-native trees, and adjacent areas that have been colonised from these areas. These are mostly on steep, east-facing slopes. The woodland adds to the variety of habitats for wildlife.

CONNECTIVITY

Hendon Sidings and Docks is an important component of the wildlife corridor along the Sunderland coast.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in July 2009 by J L Durkin

SITE MANAGEMENT

Grassland:

- Annual grazing or cut and rake.
- Scrub management around the acid grassland

For details of grassland management, refer to the Local Wildlife Site “Management Guidance and Monitoring Notes”.

More detailed species surveys are recommended for the site and they include badger and common lizard.

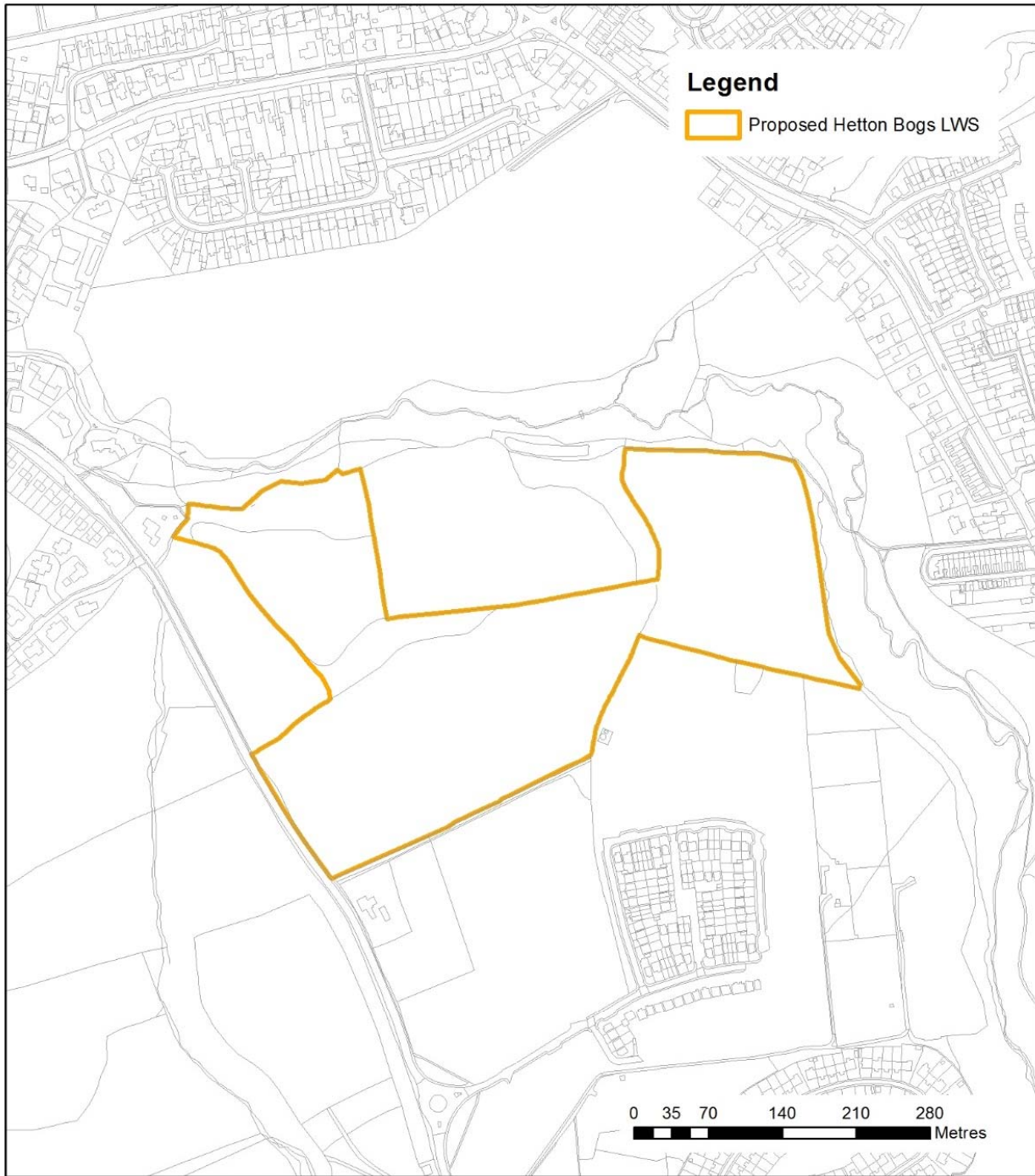
Hendon Sidings species list

BAP Habitat: Ancient Semi-Natural Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
American Elder	<i>Sambucus canadensis</i>	Rare
Annual Meadow-grass	<i>Poa annua</i>	Occasional
Ash	<i>Fraxinus excelsior</i>	Occasional
Autumn Hawkbit	<i>Leontodon autumnalis</i>	Occasional
Bee Orchid	<i>Ophrys apifera</i>	Occasional
Biting Stonecrop	<i>Sedum acre</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Black Medick	<i>Medicago lupulina</i>	Occasional
Blue Fleabane	<i>Erigeron acer</i>	Occasional
Bracken	<i>Pteridium aquilinum</i>	Occasional
Bramble	<i>Rubus fruticosus agg.</i>	Occasional
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Broom	<i>Cytisus scoparius</i>	Occasional
Butterfly-bush	<i>Buddleja davidii</i>	Occasional
Cat's-ear	<i>Hypochaeris radicata</i>	Frequent
Charlock	<i>Sinapis arvensis</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Centaury	<i>Centaureum erythraea</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mallow	<i>Malva sylvestris</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Restharrow	<i>Ononis repens</i>	Frequent
Common Shrew	<i>Sorex araneus</i>	Occasional
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Common Toadflax	<i>Linaria vulgaris</i>	Occasional
Common Whitebeam	<i>Sorbus aria</i>	Rare
Corsican Pine	<i>Pinus nigra</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Occasional
D. fuchsii x purpurella	<i>Dactylorhiza x venusta</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Daisy	<i>Bellis perennis</i>	Frequent
Dog-rose	<i>Rosa canina agg.</i>	Occasional


Elder	<i>Sambucus nigra</i>	Occasional
Eyebright	<i>Euphrasia nemorosa</i>	Occasional
Fairy Flax	<i>Linum catharticum</i>	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Occasional
Feverfew	<i>Tanacetum parthenium</i>	Occasional
Field Bindweed	<i>Convolvulus arvensis</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Field Scabious	<i>Knautia arvensis</i>	Frequent
Field Vole	<i>Microtus agrestis</i>	Occasional
Fly Honeysuckle	<i>Lonicera xylosteum</i>	Rare
Fox-and-cubs	<i>Pilosella aurantiaca</i>	Frequent
Garden Lady's-mantle	<i>Alchemilla mollis</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Occasional
Goldenrod	<i>Solidago virgaurea</i>	Rare
Gorse	<i>Ulex europaeus</i>	Frequent
Grass-leaved Goldenrod	<i>Solidago graminifolia</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Greater Knapweed	<i>Centaurea scabiosa</i>	Occasional
Greater Plantain	<i>Plantago major</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Rare
Grey Willow	<i>Salix cinerea</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hare's-foot Clover	<i>Trifolium arvense</i>	Frequent
Heather	<i>Calluna vulgaris</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Hollyberry Cotoneaster	<i>Cotoneaster bullatus</i>	Rare
Hop Trefoil	<i>Trifolium campestre</i>	Occasional
Hybrid Bluebell	<i>Hyacinthoides x massartiana</i>	Present
Italian Alder	<i>Alnus cordata</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Occasional
Lady-fern	<i>Athyrium filix-femina</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Occasional
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Occasional
Montbretia (C. aurea x pottsii)	<i>Crocsmia x crocosmiiflora</i>	Rare
Mouse-ear-hawkweed	<i>Pilosella officinarum</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Musk Thistle	<i>Carduus nutans</i>	Rare
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Frequent
Perennial Sow-thistle	<i>Sonchus arvensis</i>	Occasional

Perennial Wall-rocket	<i>Diplotaxis tenuifolia</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Occasional
Pineappleweed	<i>Matricaria discoidea</i>	Occasional
Polypody	<i>Polypodium vulgare</i>	Rare
Rabbit	<i>Oryctolagus cuniculus</i>	Occasional
Red Bartsia	<i>Odontites vernus</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Present
Red Valerian	<i>Centranthus ruber</i>	Present
Ribbed Melilot	<i>Melilotus officinalis</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Rowan	<i>Sorbus aucuparia</i>	Occasional
Russian Comfrey	<i>Symphytum x uplandicum</i>	Present
Sea Plantain	<i>Plantago maritima</i>	Occasional
Shasta Daisy	<i>Leucanthemum x superbum</i>	Rare
Silver Birch	<i>Betula pendula</i>	Occasional
Silverweed	<i>Potentilla anserina</i>	Frequent
Small Cudweed	<i>Filago minima</i>	Frequent
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	Occasional
Sneezewort	<i>Achillea ptarmica</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tall Melilot	<i>Melilotus altissimus</i>	Occasional
Tansy	<i>Tanacetum vulgare</i>	Occasional
Timothy	<i>Phleum pratense</i>	Frequent
Tutsan	<i>Hypericum androsaemum</i>	Rare
Wallspray	<i>Cotoneaster horizontalis</i>	Rare
Weld	<i>Reseda luteola</i>	Occasional
Wetted Thistle	<i>Carduus crispus</i>	Rare
White Champion	<i>Silene latifolia alba</i>	Rare
White Clover	<i>Trifolium repens</i>	Frequent
White Dead-nettle	<i>Lamium album</i>	Present
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Mignonette	<i>Reseda lutea</i>	Occasional
Wild Strawberry	<i>Fragaria vesca</i>	Occasional
Willow-leaved Cotoneaster	<i>Cotoneaster salicifolius</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Small-reed	<i>Calamagrostis epigejos</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Rare

Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Occasional
Yorkshire-fog	<i>Holcus lanatus</i>	Frequent
Zigzag Clover	<i>Trifolium medium</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 344 486</p>	<p>Contact C. Dewson</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Approved by C. Dewson</p>	
	<p>Subject Proposed Hetton Bogs LWS</p>	<p>Drawn by E. Smith</p>	
	<p>Drawing No. UF 5.36.01.06.023.01</p>	<p>Date 08.06.2020</p>	
		<p>Scale 1: 5,000</p>	
		<p>Sheet size A4</p>	
		<p>Revisions 1</p>	

SITE NAME	Hetton Bogs – formerly Hetton Bogs West
SITE No.	UF 5_36_01_06_023
LOCATION	Rainton Bridge NZ343484
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993, revised 2020
AREA	11.32 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Private

SITE DESCRIPTION

The site consists of a large wetland area with associated scrub, unmanaged coarse grassland and large blocks of broadleaf woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares in 2019
Lowland fen	1.06
Other broadleaf woodland	9.24
Ponds	0.029

National and local BAP species:

English Name	Scientific Name	Notes
Cuckoo	<i>Cuculus canorus</i>	
European eel	<i>Anguilla anguilla</i>	
European otter	<i>Lutra lutra</i>	
Grasshopper warbler	<i>Locustella naevia</i>	
Great Crested newt	<i>Triturus cristatus</i>	
Grey partridge	<i>Perdix perdix</i>	
Hawfinch	<i>Coccothraustes coccothraustes</i>	
Hedgehog	<i>Erinaceus europaeus</i>	
Hen Harrier	<i>Circus cyaneus</i>	
Lapwing	<i>Vanellus vanellus</i>	
Lesser redpoll	<i>Acanthis cabaret</i>	
Linnet	<i>Linaria cannabina</i>	
Merlin	<i>Falco columbarius</i>	
Peregrine	<i>Falco peregrinus</i>	
Red kite	<i>Milvus milvus</i>	
Reed bunting	<i>Emberiza schoeniclus</i>	
Ring ouzel	<i>Turdus torquatus</i>	
Skylark	<i>Alauda arvensis</i>	
Snipe	<i>Gallinago gallinago</i>	
Song thrush	<i>Turdus philomelos</i>	
Spotted flycatcher	<i>Muscicapa striata</i>	
Starling	<i>Sturnus vulgaris</i>	
Wall	<i>Lasiommata megera</i>	
Water vole	<i>Arvicola amphibius</i>	
Yellow hammer	<i>Emberiza citrinella</i>	

Other protected species:

English Name	Scientific Name	Notes
Black-tailed godwit	<i>Limosa limosa</i>	
Fieldfare	<i>Turdus pilaris</i>	
Firecrest	<i>Regulus ignicapilla</i>	
Goshawk	<i>Accipiter gentilis</i>	
Green sandpiper	<i>Tringa ochropus</i>	
Greenshank	<i>Tringa nebularia</i>	
Grey heron	<i>Ardea cinerea</i>	
Hobby	<i>Falco subbuteo</i>	
Kingfisher	<i>Alcedo atthis</i>	
Little egret	<i>Egretta garzetta</i>	
Marsh harrier	<i>Circus aeruginosus</i>	
Redwing	<i>Turdus iliacus</i>	
Whimbrel	<i>Numenius phaeopus</i>	
Whooper swan	<i>Cygnus cygnus</i>	
Wryneck	<i>Jynx torquilla</i>	

DETAIL

The site supports Lowland fen habitat most notable by its dominance of bulrush, as well as a diverse assemblage of herbs throughout, including meadowsweet, hard and soft rush, ragged robin, wild angelica, common spike rush, sharp flowered rush, meadow vetchling and marsh willowherb. The northern marsh orchid is occasionally frequent through the site. Associated with this habitat is the occurrence of alder and willow scrub mainly forming a central band from the northwest to the south-east corner and scattered occasionally thereafter. The habitat is wet under foot, however there is no significant open water present, only a small amount of standing water exists. The site has many records of birds, including merlin, kingfisher, greenshank and whimbrel to name a few. There are several records of Durham BAP and English NERC species such as spotted flycatcher, ring ouzel, lapwing and the wall butterfly, as well as several mammals such as otter, water vole and hedgehog. The mosaic of habitats surrounding the site itself is likely a contributing factor to the variation of protected species associated with the site.

The eastern area of woodland is densely packed, with leggy semi-mature trees. A small number of veteran sycamore trees are along the edge by the SSSI woodland. Non-native sycamore is abundant through this woodland, as is ash, however a lot of ash dieback is present. Also present is aspen, cherry, silver birch, hazel, elder, English and sessile oak and hawthorn. Ground flora includes male fern, scaly male fern, broad buckler fern, tufted hairgrass, wood avens and broadleaved willowherb. Himalayan balsam is occasional through this woodland. This woodland fails its condition assessment due to the lack of deadwood, lack of veteran trees and percentage of non-native trees present.

The area of woodland south of the current designation is less dense and leggy than the woodland above but is still in desperate need of thinning works. It is also semi-mature but is largely native species with more oak, silver birch and blackthorn the more dominant species. Woodland ground flora is poorer, with no ferns like the previous woodland and nettles and brambles frequent. This woodland is wet in places, with small areas of standing water at the time of the survey as well as a spring flowing through, however there had been a lot of rain and species present did not indicate that it is always wet. This woodland also fails its condition assessment, due to the lack of veteran trees and lack of deadwood habitat.

CONDITION ASSESSMENT

The Lowland fen habitat meets the Local Wildlife Site criteria:

The fen habitat on site are from wet ground water depressions. They support a mixture of tall herb fen and short fen vegetation. There is no condition assessment for lowland fen within the Durham BAP habitat definition. However, this area of fen seemed to be of reasonable quality with a diverse vegetation assemblage.

The Other broadleaf woodland meets the Local Wildlife Sites criteria:

Both woodlands fail the condition assessment due to the lack of deadwood, lack of veteran trees and percentage of non-native trees present.

CONNECTIVITY

Hetton Bogs LWS is surrounded by a mixture of habitats. To the north of the site, a pathway leads through long grassland and into Hetton Houses Wood, which lines the east boundary, consisting of broadleaved semi-natural woodland. Woodland and scrub habitat extends from the east boundary around to the southern boundary. Adjacent the site to the west there is semi-improved grassland which is occasionally grazed by livestock. Beyond the immediate boundaries the site is set within an agricultural landscape and there is residential housing further afield to the north. Hetton Bogs LWS is located immediately to the West of the Hetton Bogs Local Nature Reserve (LNR) and Site of Special Scientific Interest (SSSI) offering habitat of high ecological value as well as direct connectivity for dispersal to a range of species. The burn adjacent the northern boundary provides connectivity between Hetton Bogs LWS towards the north-west of the site where there is woodland and arable land and to the south of this is Joe's Ponds SSSI. Based on habitats present on site and the surrounding area, as well as the proximity to several statutory designated sites of high ecological value, Hetton Bogs LWS is sited within an important wildlife corridor.

LANDSCAPE

Hetton Bogs LWS is an intrinsic part of a well-wooded wetland valley complex forming a major landscape feature between Rainton Bridge and Hetton-le-Hole.

OTHER SCIENTIFIC IMPORTANCE

Directly to the north of Hetton Bogs LWS, lies Hetton Bogs SSSI, designated for its rich fen meadow communities.

RECORDED HISTORY

Surveyed in 1995 and by A. Mclay in 2010 and again by Durham Wildlife Services in 2017 and 2019.

SITE MANAGEMENT

Lowland fen:

- Remove non-native daffodils.
- Reduce scrub encroachment.

Hetton Bogs species list:

BAP Habitat Type: Fen		
Common Name	Botanical Name	Abundance (DAFOR)
Rosebay Willowherb	<i>Chamaenerion angustifolium</i>	Locally Dominant
Hybrid Orchid	<i>Dactylorhiza fuchsii x venusta</i>	Occasional
	<i>Rosa mellis</i>	Rare
Softstem Bulrush	<i>Schoenoplectus tabernaemontani</i>	Occasional
Great Hairy Screw-Moss	<i>Syntrichia ruralis subsp.ruralis</i>	Rare
Aster Spp	<i>Aster</i>	Very Locally Abundant
Bank Haircap Moss	<i>Polytrichum formosum</i>	Rare
Bog Bead-Moss	<i>Aulacomnium palustre</i>	Rare
Bog Stitchwort	<i>Stellaria alsine</i>	Occasional
Bracken Fern	<i>Pteridium aquilinum</i>	Very Locally Abundant
Branched Bur- Reed	<i>Sparganium erectum</i>	Rare
Brooklime	<i>Veronica beccabunga</i>	Occasional
Bulrush	<i>Typha latifolia</i>	Locally Dominant
Bush Vetch	<i>Vicia sepium</i>	Occasional
Clustered Dock	<i>Rumex conglomeratus</i>	Occasional
Cock's Foot	<i>Dactylis glomerata</i>	Occasional
Coltsfoot	<i>Tussilago farfara</i>	Occasionally Rare
Common Duckweed	<i>Lemna minor</i>	Very Locally Abundant
Common Feather Moss	<i>Kindbergia praelonga</i>	Present
Common Figwort	<i>Scrophularia nodosa</i>	Rare
Common Hazel	<i>Corylus avellana</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Occasionally Rare
Common Liverwort	<i>Marchantia polymorpha</i>	Frequent
Common Mouse Ear	<i>Cerastium fontanum</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Locally Frequent
Common Self-Heal	<i>Prunella vulgaris</i>	Occasionally Rare
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Common Spike-Rush	<i>Eleocharis palustris</i>	Locally Frequent
Common Vetch	<i>Vicia sativa</i>	Occasionally Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Crack Willow	<i>Salix fragilis</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Rare

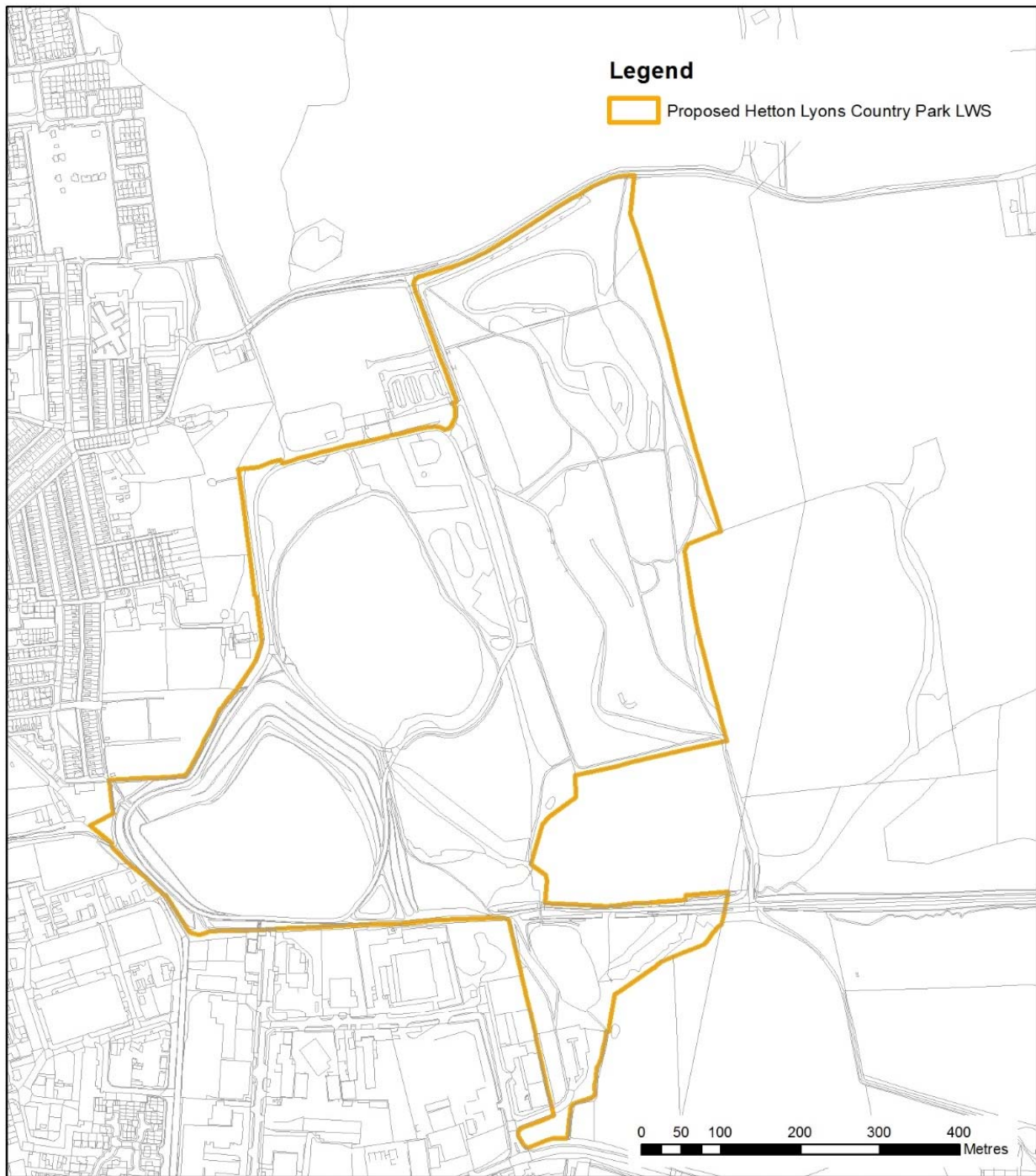
Cuckooflower	<i>Cardamine pratensis</i>	Occasionally Frequent
Curled Dock	<i>Rumex crispus</i>	Occasionally Rare
Daffodil	<i>Narcissus cultivar</i>	Rare
Dotted Thyme Moss	<i>Rhizomnium punctatum</i>	Occasional
European Alder	<i>Alnus glutinosa</i>	Occasional
European Blackberry	<i>Rubus fruticosus</i>	Occasional
European Raspberry	<i>Rubus idaeus</i>	Very Locally Abundant
European Water-Plantain	<i>Alisma plantago-aquatica</i>	Occasional
False Fox-Sedge	<i>Carex otrubae</i>	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Locally Abundant
Fern-Leaved Hook-Moss	<i>Cratoneuron filicinum</i>	Locally Frequent
Field Horsetail	<i>Equisetum arvense</i>	Frequent
Floating Crystalwort	<i>Riccia fluitans</i>	Very Locally Abundant
Fragrant Crestwort	<i>Lophocolea fragrans</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasionally Rare
Glittering Wood-Moss	<i>Hylocomium splendens</i>	Rare
Goosegrass	<i>Galium aparine</i>	Locally Frequent
Great Blue-Bottle	<i>Centaurea montana</i>	Rare
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Frequently Locally Dominant
Greater Plantain	<i>Plantago major</i>	Rare
Greater Stitchwort	<i>Stellaria holostea</i>	Very Locally Frequent
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hart's-Tongue Thyme-Moss	<i>Plagiomnium undulatum</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Heart-Leaved Spear-Moss	<i>Calliergon cordifolium</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Abundant
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Hybrid Oak	<i>Quercus x rosacea</i>	Rare
Hybrid St. John's Wort	<i>Hypericum x desetangsi</i>	Locally Frequent
Ivy-Leaf Duckweed	<i>Lemna trisulca</i>	Very Locally Abundant
Jointed Rush	<i>Juncus articulatus</i>	Frequent
Least Duckweed	<i>Lemna minuta</i>	Very Locally Abundant
Lesser Spearwort	<i>Ranunculus flammula</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Marsh Bryum	<i>Bryum pseudotriquetrum</i>	Occasional
Marsh Ragwort	<i>Senecio aquaticus</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Occasionally Frequent
Marsh Willowherb	<i>Epilobium palustre</i>	Locally Frequent
Meadow Buttercup	<i>Ranunculus acris</i>	Occasionally Frequent
Meadow Foxtail	<i>Alopecurus pratensis</i>	Occasional

Meadow Vetchling	<i>Lathyrus pratensis</i>	Locally Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Frequently Locally Dominant
Mugwort	<i>Artemisia vulgaris</i>	Rare
Northern Marsh Orchid	<i>Dactylorhiza purpurella</i>	Occasionally Frequent
Pointed Spear-Moss	<i>Calliergonella cuspidata</i>	Abundant
Ragged Robin	<i>Silene flos-cuculi</i>	Frequent
Red Bartsia	<i>Odontites verna</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasionally Rare
Red Fescue	<i>Festuca rubra</i>	Occasional
Reed Canary Grass	<i>Phalaris arundinacea</i>	Very Locally Dominant
River Feather-Moss	<i>Brachythecium rivulare</i>	Present
Rough- Stalked Meadow Grass	<i>Poa trivialis</i>	Occasionally Frequent
Rough-Stalked Feather Moss	<i>Brachythecium rutabulum</i>	Present
Russian Comfrey	<i>Symphytum uplandicus</i>	Rare
Rusty Willow	<i>Salix cinerea subsp. oleifolia</i>	Frequent
Silver Birch	<i>Betula pendula</i>	Rare
Smooth Meadow-Grass	<i>Poa pratensis</i>	Occasional
Soft Rush	<i>Juncus effusus</i>	Occasional
Springy Turf-Moss	<i>Rhytidiadelphus squarrosus</i>	Occasionally Frequent
Sweet-Grass Spp	<i>Glyceria</i>	Occasionally Rare
Thyme Moss	<i>Plagiomnium spp.</i>	Very Locally Frequent
Toad Rush	<i>Juncus bufonius</i>	Locally Frequent
Tufted Hair Grass	<i>Deschampsia cespitosa</i>	Frequent
Tufted Vetch	<i>Vicia cracca</i>	Locally Frequent
Water Mint	<i>Mentha aquatica</i>	Occasionally Rare
White Nettle	<i>Lamium album</i>	Occasionally Rare
Wild Angelica	<i>Angelica sylvestris</i>	Frequently Abundant
Wood Bristle-Moss	<i>Orthotrichum affine</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasionally Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Locally Abundant

Broadleaved Willowherb	<i>Epilobium montanum</i>	Occasional
Brooklime	<i>Veronica beccabunga</i>	Rare
Bulrush	<i>Typha latifolia</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Compact Rush	<i>Juncus conglomeratus</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
False Fox-Sedge	<i>Carex otrubae</i>	Rare
Goat Willow	<i>Salix caprea</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Marsh Horsetail	<i>Equisetum palustre</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Rare
Selfheal	<i>Prunella vulgaris</i>	Rare
Sharp Flowered-Rush	<i>Juncus acutiflorus</i>	Abundant

BAP Habitat Type: Other Broadleaf Woodland – Eastern Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Abundant
Aspen	<i>Populus tremula</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Broadbuckler Fern	<i>Dryopteris dilatata</i>	Occasional
Broadleaved Willowherb	<i>Epilobium montanum</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Dandelion	<i>Taraxacum officinale</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
Franchet Cotoneaster	<i>Cotoneaster franchetii</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Occasional
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Ivy	<i>Hedera helix</i>	Rare/Locally Abundant
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Rare
Nettle	<i>Urtica dioica</i>	Abundant
Red Oak	<i>Quercus rubra</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Scaly Male Fern	<i>Dryopteris borreeri</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Rare
Silver Birch	<i>Betula pendula</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Abundant
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Frequent
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Rare
Willow sp.	<i>Salix sp.</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Abundant

BAP Habitat Type: Other Broadleaf Woodland – Southern Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Occasional/ Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequent
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Common Comfrey	<i>Symphytum officinale</i>	Rare
Common Knotgrass	<i>Polygonum aviculare</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Couch Grass	<i>Elymus repens</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Rare/Locally Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Abundant
Field Horsetail	<i>Equisetum arvense</i>	Rare
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Rare
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare/ Locally Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Nettle	<i>Urtica dioica</i>	Frequent
Red Clover	<i>Trifolium pratense</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Rare
Silver Birch	<i>Betula pendula</i>	Frequent
Smooth Sowthistle	<i>Sonchus oleraceus</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Timothy Grass	<i>Phleum pratense</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
White Clover	<i>Trifolium repens</i>	Rare
White Deadnettle	<i>Lamium album</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]


Sunderland City Council
 City Development
 P.O. Box 102, Civic Centre
 Sunderland, SR2 7DN
 Telephone: 07584274028
 Email: emma.smith2@sunderland.gov.uk
 Web: www.sunderland.gov.uk

National Grid Reference NZ 363 475
Project Local Wildlife Site Boundary Review 2020
Subject Proposed Hetton Lyons Country Park LWS
Drawing No. UF 5.36.01.06.024.01

Contact	C. Dewson
Approved by	C. Dewson
Drawn by	E. Smith
Date	05.05.2020
Scale	1: 6,600
Sheet size	A4
Revisions	1



SITE NAME	Hetton Lyons Country Park
SITE No.	UF 5_36_01_06_024
LOCATION	Hetton-le-Hole NZ363475
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993, revised in 2020
AREA	45.56 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council

SITE DESCRIPTION

A reclaimed former colliery site supporting a lake, several ponds, plantation woodland and a variety of wetland and grassland habitats.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares in 2019
Lake	5.38
Lowland acid grassland	0.32
Lowland fen	0.90
Lowland meadows and pasture	2
Other broadleaf woodland	21.22
Pond	0.81
Rivers and Streams	0.002

National and local BAP species:

English Name	Scientific Name	Notes
Barn Owl	<i>Tyto alba</i>	
Bat unknown species		
Bittern	<i>Botaurus stellaris</i>	
Black-necked Grebe	<i>Podiceps nigricollis</i>	
Corn Bunting	<i>Emberiza calandra</i>	
Cuckoo	<i>Cuculus canorus</i>	
Curlew	<i>Numenius arquata</i>	
Dunlin	<i>Calidris alpina</i>	
Golden Plover	<i>Pluvialis apricaria</i>	
Grasshopper Warbler	<i>Locustella naevia</i>	
Hawfinch	<i>Coccothraustes coccothraustes</i>	
Hen Harrier	<i>Circus cyaneus</i>	
House sparrow	<i>Passer domesticus</i>	
Lapwing	<i>Vanellus vanellus</i>	
Linnet	<i>Linaria cannabina</i>	
Little Ringed Plover	<i>Charadrius dubius</i>	
Merlin	<i>Falco columbarius</i>	
Peregrine	<i>Falco peregrinus</i>	
Red Kite	<i>Milvus milvus</i>	
Redshank	<i>Tringa totanus</i>	
Reed bunting	<i>Emberiza schoeniculus</i>	
Ring Ouzel	<i>Turdus torquatus</i>	
Skylark	<i>Alauda arvensis</i>	

Snipe	<i>Gallinago gallinago</i>	
Song Thrush	<i>Turdus philomelos</i>	
Spotted Flycatcher	<i>Muscicapa striata</i>	
Starling	<i>Sturnus vulgaris</i>	
Tree pipit	<i>Anthus trivialis</i>	
Tree sparrow	<i>Passer montanus</i>	
Turtle Dove	<i>Streptopelia turtur</i>	
Wall	<i>Lasiommata megera</i>	
Water vole	<i>Arvicola terrestris</i>	Present
Yellow Wagtail	<i>Motacilla flava</i>	
Yellowhammer	<i>Emberiza citrinella</i>	

Other protected species:

English Name	Scientific Name	Notes
Bearded Tit	<i>Panurus biarmicus</i>	
Bewick's Swan	<i>Cygnus columbianus bewickii</i>	
Black Redstart	<i>Phoenicurus ochruros</i>	
Black Tern	<i>Chlidonias niger</i>	
Black-tailed godwit	<i>Limosa limosa</i>	
Black-throated Diver	<i>Gavia arctica</i>	
Brambling	<i>Fringilla montifringilla</i>	
Common Crossbill	<i>Loxia curvirostra</i>	
Common Scoter	<i>Melanitta nigra</i>	
Dotterel	<i>Charadrius morinellus</i>	
European Greater White-fronted Goose	<i>Anser albifrons</i>	
Fieldfare	<i>Turdus pilaris</i>	
Firecrest	<i>Regulus ignicapilla</i>	
Garganey	<i>Anas querquedula</i>	
Goshawk	<i>Accipiter gentilis</i>	
Green Sandpiper	<i>Tringa ochropus</i>	
Greenshank	<i>Tringa nebularia</i>	
Hobby	<i>Falco subbuteo</i>	
Honey-buzzard	<i>Pernis apivorus</i>	
Kingfisher	<i>Alcedo atthis</i>	
Lapland bunting	<i>Calcarius lapponicus</i>	
Little Gull	<i>Hydrocoloeus minutus</i>	
Marsh Harrier	<i>Circus aeruginosus</i>	
Mediterranean Gull	<i>Ichthyaetus melanocephalus</i>	
Osprey	<i>Pandion haliaetus</i>	
Red-throated Diver	<i>Gavia stellata</i>	
Redwing	<i>Turdus iliacus</i>	
Ruff	<i>Philomachus pugnax</i>	
Scaup	<i>Aythya marila</i>	
Slavonian Grebe	<i>Podiceps auritus</i>	
Snow Bunting	<i>Plectrophenax nivalis</i>	
Spotted Crake	<i>Porzana porzana</i>	
Whimbrel	<i>Numenius phaeopus</i>	
Whooper Swan	<i>Cygnus cygnus</i>	
Wood Sandpiper	<i>Tringa glareola</i>	
Wryneck	<i>Jynx torquilla</i>	

DETAIL

Hetton Lyons Country Park LWS is located to the south of the local authority area, on the south-eastern outskirts of Hetton-le-Hole. It is bordered to the north-west and south by amenity grassland, residential housing and industrial estates, whilst further north lies Eppleton Quarry. To the west of the site, land use is woodland and farmland.

The site is a reclaimed former colliery site supporting a large lake, several ponds, plantation woodland and a variety of wetland and grassland habitats. What is thought to be a tributary of Hetton Burn flows along the southern section of the site, from east to west. The main interests of the site are areas of Lowland meadow, Lowland acid grassland and wetlands. The large areas of Lowland meadow contain a variety of species such as common knapweed, field scabious, bird's-foot-trefoil and grasses such as sweet vernal grass, false oat grass and common bent. The smaller areas of Lowland acid grassland contain heath bedstraw, great burnet rough hawkbit, harebell and orchid, which are indicators of unimproved soils. Wetlands and associated riparian habitats contain large stands of common reed and reedmace. Meadowseet, great willowherb, horsetail, common spike-rush, jointed rush and yellow iris are found within areas of Lowland fen and damp grasslands. Many bird species of conservation concern occur within the site and both migratory and breeding bird species have been recorded, including garganey, black turn and little gull. The site also contains a small number of scattered mature trees.

The other broadleaf woodland to the south is semi-mature plantation woodland. It is in poor condition due to lack of standing and lying deadwood and lack of veteran trees. Ground flora is also poor, largely consisting of nettle, bramble and herb Robert. A small number of introduced non-native shrubs lie along the fence-line by the entrance into the industrial estate. Scots pine is also more frequent in the plantations either side of the entrance. A small area of broadleaf woodland, east of the northern main lake, comprises of the same habitat type, with similar species composition.

CONDITION ASSESSMENT

The Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

Two large areas of Lowland meadows are located within the country park. A large area of grassland is situated at the centre of the site, intentionally reseeded in the past this area is now well established. Although artificially created, this grassland habitat reflects that of a lowland meadow and contains species such as common knapweed, oxeye daisy and birdsfoot trefoil with wild carrot, field scabious, tufted vetch and creeping cinquefoil also present. The outer edges of the grassland are regularly cut, however the rest of the grassland seems to have undergone little past management and as a result has become degraded through the growth of more vigorous grasses and plants, such as false oat-grass and creeping thistle. A second, smaller area of grassland is located to the east of Stephenson Lake to the south-east of site. The grassland here also supports several Lowland meadows species, including a small number of orchids. A lack of any formal management in this area has led to a thick dense layer of leaf litter and matted vegetation developing beneath the existing sward, preventing the growth and development of finer plant species within the meadow. A small amount of hawthorn scrub has also begun to impinge on the grassland. The condition of the grassland is therefore unfavourable and declining.

The Lowland acid grassland habitat meets the Local Wildlife Site criteria:

Within the site boundary of Hetton Lyons Country Park there is a small area of formerly grazed lowland acid grassland, located either side of the main access path leading towards Blossom Pond from the south. This area contains most of the typical species associated with lowland acid grasslands, such as heath bedstraw, betony, pignut, sheep's fescue, harebell and devilsbit scabious. Other strong indicators of unimproved soils are also present these include great burnet, common bent, lady's bedstraw, field scabious and hairy sedge. The extent of acid grassland has reduced in area over recent years due to encroachment of more dominant species such as rosebay willowherb, hogweed, false oat grass and yorkshire fog, all spreading as the soils develop a more neutral aspect in the absence of grazing management.

Although the lowland acid grassland within the site meets the condition assessment as set out under the 'Durham Biodiversity Action Plan Priority Habitats' definitions, the distribution and quantity of indicator species and the extent of the site appears to be in decline. Combined with the encroachment of undesirable and negative indicator species, this habitat has been recorded as being in unfavourable condition and in decline.

The Lowland fen habitat meets the Local Wildlife Site criteria:

Within Hetton Lyons Country Park lowland fen habitat is extensively developed around the margins of the ponds, lakes and within the associated inter-connecting ditches. Within these margins large stands of common reed occur especially around Blossom Pond and Stephenson Lake. This is in association with reed canary grass, meadowsweet, yellow iris, great willowherb and common valerian. A variety of smaller wetland plants are found in the more open margins of the wetlands where tall fen species have yet to colonise. However due to lack of management these smaller plant species are beginning to dwindle in numbers. These include water forget-me-not, false fox sedge, northern marsh orchid, water mint, jointed rush and common spike-rush. A small area of fen to the east of Lyons Lake also supports a rare inland population of the usually maritime sea club-rush. The fen within the site provides nesting habitat for birds such as bittern and reed bunting and cover for birds such as bearded tit, green sandpiper, greenshank and spotted redshank. The abundant vegetation is also known to support large numbers of aquatic invertebrates like dragonflies and water beetles. No formal condition assessment criteria exists for this habitat. However due to the current condition, size and diversity found within the site; currently this habitat type has been recorded as being in good condition and stable.

The open water habitats meet the Local Wildlife Site criteria:

Three ponds and one lake are found within the site boundary of Hetton Lyons Country Park, all of which are in different stages of succession. Lyons Lake is the largest water body, this lake is less vegetated at the margins than the other ponds but supports a large population of wetland bird species. Both recent and past surveys of Blossom pond and Stephenson Lake have indicated a good range of aquatic and emergent plants, including un-branched bur-reed, reedmace, water mint, yellow iris and spiked water-milfoil meadowsweet, jointed and compact rush. A small unnamed pond bordering an area of broadleaf woodland to the east show signs of periodic desiccation and encroachment from tree species such as willow, alder and ash. Several amphibians, invertebrate and bird species are known to utilise all the wetland areas within the site. No formal condition assessment criteria could be found for lakes and pond habitat. However due to the current condition, size and diversity of these habitats found within the site, currently this habitat type has been recorded as being in good condition and stable.

The other broadleaf woodland habitat meets the Local Wildlife Site criteria:

Several established broadleaf plantation woodland compartments can be found within the site boundary. These woodlands mainly consist of a variety of both native and non-native species including silver birch, alder, grey alder, dogwood, ash and a variety of willow species. A few of the woodland compartments are quite dense and of an even age, indicating little or no management over recent years. Due to this lack of management and associated dense canopy light levels within the woodlands are somewhat restricted, resulting in a lack of woodland plants and ground flora. Currently ground flora comprises of nettles, bramble, false oat-grass and one or two secondary woodland indicator species like wood avens and hedge woundwort. The woodland compartments make up an important element of the site's mosaic of habitats. A loss of this feature would diminish the site's overall ecological value. Due to the high content of non-native species within the plantation woodlands and a lack of management creating poor species diversity and stand structure, this habitat has been recorded as being in unfavourable condition and in decline.

CONNECTIVITY

Hetton Lyons Country Park LWS sits within the Usworth to Hetton Regional Wildlife Corridor. This important Wildlife Corridor takes in the areas of Usworth, Barmston, River Wear, Penshaw, Houghton and Hetton. It is instrumental in the movement of species north and south and by crossing the Wear, it helps wildlife movement east and west through Sunderland. The site is also well placed to provide a good level of connectivity between the Usworth - Hetton Regional Wildlife Corridor and Lumley Park Burn Catchment. Lumley Park Burn Catchment runs to the west of the Usworth - Hetton corridor and incorporates sites such as Hetton Park LWS and Hetton Bogs SSSI. Where possible links between these two corridors should be strengthened and enhanced in order to increase connectivity within the local environment. It is important to consider Hetton Lyons Country Park in the context of a link within a chain of suitable wildlife habitat, as well as a stand-alone site. Hetton Lyons Country Park allows and extends the movement of species between wildlife rich areas within the regional corridor and beyond, into the urban and semi-urban areas along Hetton Burn to the south and east. For species which require a large territory or home range, this may help maintain viability and reduced fragmentation and isolation of vulnerable species. Large areas of land lie to the east and south-west boundary of Hetton Lyons Country Park LWS. These areas are made up of woodland compartments, grasslands and areas of scrub creating a mosaic of valuable habitats that complement the LWS. These areas fall within the administrative boundary of Sunderland City Council and would benefit from a programme of management that complements the management of Hetton Lyons Country Park LWS. This would increase the size, diversity and connectivity of the site.

LANDSCAPE

The mosaic of habitats at Hetton Lyons greatly enhances this post-industrial landscape.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed in 1995 and by Andy Mclay in 2010 and again in 2015 and 2019 and 2020 by Durham Wildlife Services.

SITE MANAGEMENT

Lowland meadows and pasture:

- Remove scattered trees.
- Graze annually.

Lowland acid grassland:

- Cut annually.
- Control noxious weeds.

Lowland fen:

- Cut or mow annually.
- Winter fen management when appropriate.
- Summer fen management when appropriate.
- Tree and scrub control.
- Control invasive plants.

Streams:

- Cut bankside vegetation.
- Control invasive plants.

Other broadleaf woodland:

- Remove non-native trees and shrubs.

Scrub:

- Control invasive plant species – Japanese knotweed, Himalayan balsam, cotoneaster and giant hogweed.

Hetton Lyons species list

BAP Habitat: Lowland meadow and pasture		
Common Name	Botanical Name	Abundance (DAFOR)
Angelica	<i>Angelica sylvestris</i>	Frequent
Betony	<i>Stachys officinalis</i>	Occasional
Bird's foot trefoil	<i>Lotus corniculatus</i>	Occasional
Bramble	<i>Rubus fruticosus</i> agg.	Present
Broad-leaved dock	<i>Rumex obtusifolius</i>	Occasional
Bush vetch	<i>Vicia sepium</i>	Occasional
Cat's ear	<i>Hypochaeris radicata</i>	Occasional
Cleavers	<i>Galium aparine</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common bent	<i>Agrostis capillaris</i>	Abundant
Common knapweed	<i>Centaurea nigra</i>	Frequent
Common mouse-ear	<i>Cerastium fontanum</i>	Rare
Cow parsley	<i>Anthriscus sylvestris</i>	Rare
Creeping cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping thistle	<i>Cirsium arvense</i>	Locally abundant
Dandelion	<i>Taraxacum</i> agg.	Rare
Eyebright	<i>Euphrasia officinalis</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Dominant
Field horsetail	<i>Equisetum arvense</i>	Rare
Field scabious	<i>Knautia arvensis</i>	Occasional
Germander speedwell	<i>Veronica chamaedrys</i>	Rare
Great willowherb	<i>Epilobium hirsutum</i>	Rare
Greater knapweed	<i>Centaurea scabiosa</i>	Rare
Greater plantain	<i>Plantago major</i>	Occasional
Harebell	<i>Campanula rotundifolia</i>	Rare
Hedge woundwort	<i>Stachys sylvatica</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Marsh thistle	<i>Cirsium palustre</i>	Rare
Meadow grass	<i>Poa</i> sp.	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Northern marsh orchid	<i>Dactylorhiza purpurea</i>	Rare
Oxeye daisy	<i>Leucanthemum vulgare</i>	Occasional
Perennial rye-grass	<i>Lolium perenne</i>	Rare
Ragwort	<i>Jacobaea vulgaris</i>	Rare

Red campion	<i>Silene dioica</i>	Rare
Red clover	<i>Trifolium pratense</i>	Rare
Ribwort plantain	<i>Plantago lanceolata</i>	Frequent
Rosebay willowherb	<i>Chamerion angustifolium</i>	Occasional
Self heal	<i>Prunella vulgaris</i>	Rare
Spear thistle	<i>Cirsium vulgare</i>	Rare
Stinging nettle	<i>Urtica dioica</i>	Rare
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	Rare
Trefoil sp.	<i>Trifolium sp.</i>	Occasional
Tufted vetch	<i>Vicia sepium</i>	Rare
Vetch	<i>Vicia sp.</i>	Occasional
Wild carrot	<i>Daucus carota</i>	Rare
Wild cherry	<i>Prunus avium</i>	Present
Yarrow	<i>Achillea millefolium</i>	Abundant

BAP Habitat: Other broadleaved woodland & scattered trees		
Common Name	Botanical Name	Abundance (DAFOR)
Bramble	<i>Rubus fruticosus agg.</i>	Present
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common alder	<i>Alnus glutinosa</i>	Present
Common ash	<i>Fraxinus excelsior</i>	Present
Common beech	<i>Fagus sylvatica</i>	Present
Common dandelion	<i>Taraxacum officinale</i>	Occasional
Cow parsley	<i>Anthriscus sylvestris</i>	Occasional
Crack willow	<i>Salix fragilis</i>	Present
Dogwood	<i>Cornus sp.</i>	Present
Elder	<i>Sambucus nigra</i>	Present
False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field maple	<i>Acer campestre</i>	Present
Hawthorn	<i>Crataegus monogyna</i>	Present
Hazel	<i>Corylus avellana</i>	Present
Hedge bindweed	<i>Calystegia sepium</i>	Present
Hedge woundwort	<i>Stachys sylvatica</i>	Occasional
Herb robert	<i>Geranium robertianum</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Lesser celandine	<i>Ranunculus ficaria</i>	Occasional
Plum	<i>Prunus sp.</i>	Present
Red campion	<i>Silene dioica</i>	Occasional

Rowan	<i>Sorbus aucuparia</i>	Present
Scots pine	<i>Pinus sylvestris</i>	Present
Silver birch	<i>Betula pendula</i>	Present
Stinging nettle	<i>Urtica dioica</i>	Present
Swedish whitebeam	<i>Sorbus intermedia</i>	Present
Sycamore	<i>Acer pseudoplatanus</i>	Present
Vetch	<i>Vicia sp.</i>	Occasional
White poplar	<i>Populus alba</i>	Present
Wild cherry	<i>Prunus avium</i>	Present
Willow	<i>Salix spp.</i>	Present
Wood avens	<i>Geum urbanum</i>	Present
Yorkshire fog	<i>Holcus lanatus</i>	Occasional

BAP Habitats: Wetlands and riparian habitats		
Common Name	Botanical Name	Abundance (DAFOR)
Common alder	<i>Alnus glutinosa</i>	Present
Common mugwort	<i>Artemisia vulgaris</i>	Occasional
Deadly nightshade	<i>Atropa belladonna</i>	Rare
Sea club-rush	<i>Bolboschoenus maritimus</i>	Present
Hedge bindweed	<i>Calystegia sepium</i>	Present
False fox sedge	<i>Carex otrubae</i>	Present
Common knapweed	<i>Centaurea nigra</i>	Occasional
Cypress	<i>Chamaecyparis Sp</i>	Rare
Rosebay willowherb	<i>Chamerion angustifolium</i>	Present
Hawthorn	<i>Crataegus monogyna</i>	Present
Common spike-rush	<i>Eleocharis palustris</i>	Present
Great willowherb	<i>Epilobium hirsutum</i>	Frequent
Hoary willowherb	<i>Epilobium parviflorum</i>	Rare
Field horsetail	<i>Equisetum arvense</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Abundant
Herb robert	<i>Geranium robertianum</i>	Occasional
Himalayan balsam	<i>Impatiens glandulifera</i>	Present
Yellow flag iris	<i>Iris pseudacorus</i>	Rare
Ragwort	<i>Jacobaea vulgaris</i>	Rare
Jointed rush	<i>Juncus articulatus</i>	Frequent
Compact rush	<i>Juncus conglomeratus</i>	Present
Soft rush	<i>Juncus effusus</i>	Frequent

Hard rush	<i>Juncus inflexus</i>	Frequent
Water mint	<i>Mentha aquatica</i>	Occasional
Water forget-me-not	<i>Myosotis scorpioides</i>	Rare
Common Reed	<i>Phragmites australis</i>	Abundant
Pulmonaria	<i>Pulmonaria officinalis</i>	Rare
English oak	<i>Quercus robur</i>	Rare
Creeping buttercup	<i>Ranunculus repens</i>	Occasional
Rosehip	<i>Rosa canina</i>	Rare
Bramble	<i>Rubus fruticosus</i> agg.	Present
Crack willow	<i>Salix fragilis</i>	Present
Willow	<i>Salix</i> sp.	Present
Perennial sow-thistle	<i>Sonchus arvensis</i>	Occasional
Unbranched bur-reed	<i>Sparganium emersum</i>	Present
Red clover	<i>Trifolium pratense</i>	Occasional
White clover	<i>Trifolium repens</i>	Occasional
Bulrush	<i>Typha latifolia</i>	Abundant
Common valerian	<i>Valeriana officinalis</i>	Rare
Bush vetch	<i>Vicia sepium</i>	Occasional

BAP Habitat: Tall and rough grassland habitats		
Common Name	Botanical Name	Abundance (DAFOR)
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common mugwort	<i>Artemisia vulgaris</i>	Occasional
Common sorrel	<i>Rumex acetosa</i>	Occasional
Creeping buttercup	<i>Ranunculus repens</i>	Occasional
False oat-grass	<i>Arrhenatherum elatius</i>	Present
Field scabious	<i>Knautia arvensis</i>	Rare
Greater plantain	<i>Plantago major</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Perennial rye-grass	<i>Lolium perenne</i>	Present
Ragwort	<i>Senecio jacobaea</i>	Present
Red bartsia	<i>Odontites vernus</i>	Occasional
Red clover	<i>Trifolium pratense</i>	Occasional
Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay willowherb	<i>Chamerion angustifolium</i>	Present
Rough meadow grass	<i>Poa trivialis</i>	Rare
Spear thistle	<i>Cirsium vulgare</i>	Present
Stinging nettle	<i>Urtica dioica</i>	Present

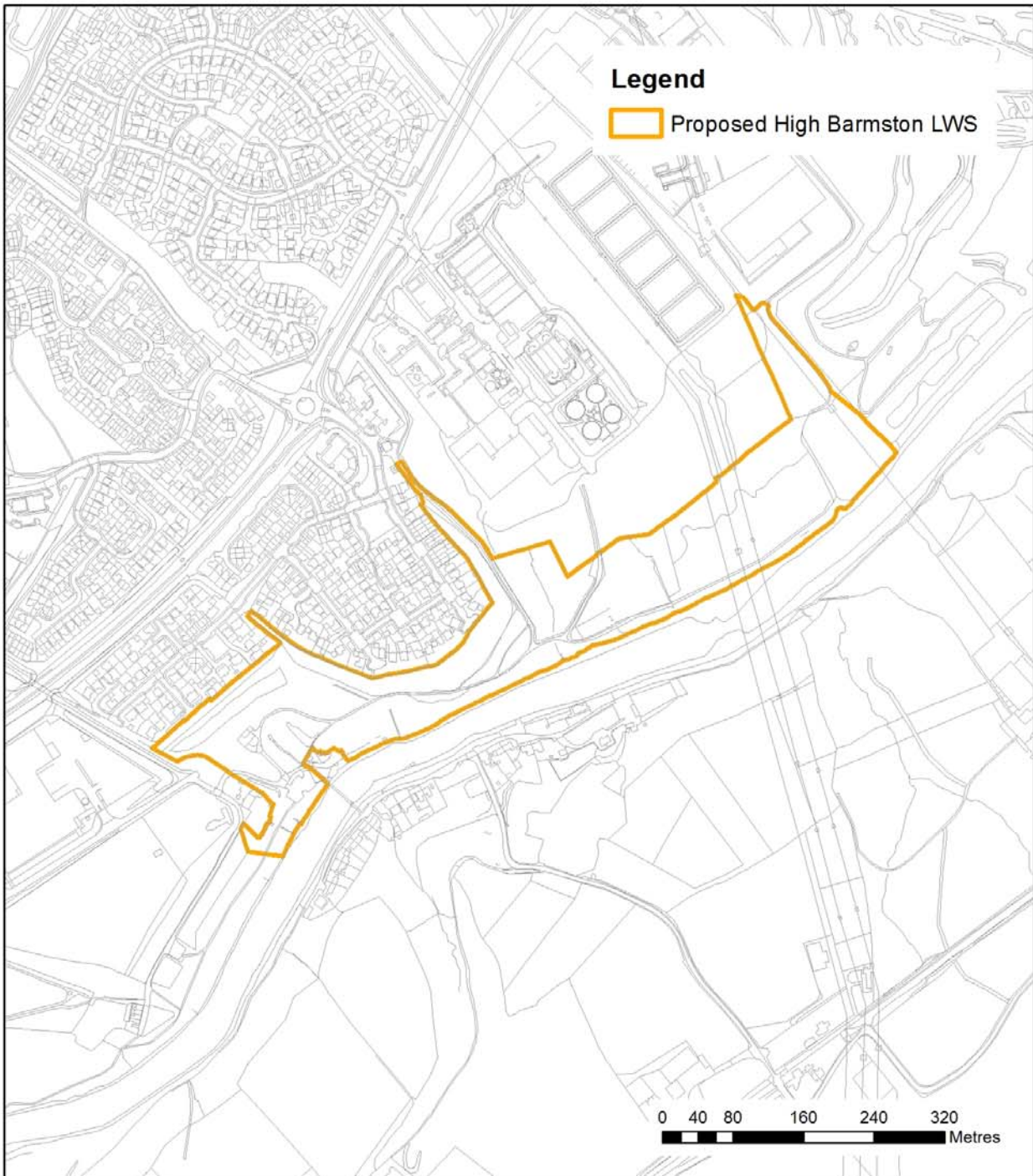
Timothy	<i>Phleum pratense</i>	Present
Tufted vetch	<i>Vicia sepium</i>	Rare
Vetch sp.	<i>Vicia</i>	Occasional
White clover	<i>Trifolium repens</i>	Occasional
White dead-head nettle	<i>Lamium purpureum</i>	Present
Yarrow	<i>Achillea millefolium</i>	Occasional

BAP Habitat: Acid grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Yarrow	<i>Achillea millefolium</i>	Abundant
Common bent	<i>Agrostis capillaris</i>	Frequent
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Common mugwort	<i>Artemisia vulgaris</i>	Rare
Harebell	<i>Campanula rotundifolia</i>	Frequent
Hairy sedge	<i>Carex hirta</i>	Occasional
Common knapweed	<i>Centaurea nigra</i>	Rare
Rosebay willowherb	<i>Chamerion angustifolium</i>	Present
Pignut	<i>Conopodium majus</i>	Rare
Sedge sp.	<i>Cyperaceae sp.</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Sheeps fescue	<i>Festuca ovina</i>	Abundant
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Heath bedstraw	<i>Galium saxatile</i>	Occasional
Ladys bedstraw	<i>Galium verum</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Present
Hawkweed sp.	<i>Hieracium</i>	Occasional
Yorkshire fog	<i>Holcus lanatus</i>	Occasional
Field scabious	<i>Knautia arvensis</i>	Rare
Meadow vetchling	<i>Lathyrus pratensis</i>	Rare
Autumn hawkbit	<i>Leontodon autumnalis</i>	Frequent
Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
Cowslip	<i>Primula veris</i>	Rare
Common sorrel	<i>Rumex acetosa</i>	Rare
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Betony	<i>Stachys officinalis</i>	Occasional
Devils-bit scabious	<i>Succisa pratensis</i>	Occasional


Red clover	<i>Trifolium pratense</i>	Occasional
Vetch sp.	<i>Vicia</i>	Rare

Other Broadleaf Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ground Elder	<i>Aegopodium podagraria</i>	Rare/Locally Abundant
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Mugwort	<i>Artemisia vulgaris</i>	Rare
Silver Birch	<i>Betula pendula</i>	Occasional
Downy Birch	<i>Betula pubescens</i>	Rare
Butterfly Bush	<i>Buddleia davidii</i>	Rare
Large Bindweed	<i>Calystegia silvatica</i>	Rare/Locally Abundant
Common Knapweed	<i>Centaurea nigra</i>	Rare
Dogwood	<i>Cornus sanguinea</i>	Occasional
Wall Cotoneaster	<i>Cotoneaster horizontalis</i>	Rare/ Locally Abundant
Common Hawthorn	<i>Crataegus monogyna</i>	Occasional
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Field Horsetail	<i>Equisetum arvense</i>	Rare
European Ash	<i>Fraxinus excelsior</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Occasional
Hawkweed sp.	<i>Hieracium sp.</i>	Rare
White Deadnettle	<i>Lamium album</i>	Rare
Common Toadflax	<i>Linaria vulgaris</i>	Rare
Daisy Bush	<i>Olearia x haastii</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Frequent/Locally Abundant
Aspen	<i>Populus tremula</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Occasional/ Locally Frequent
Bramble	<i>Rubus fruticosus</i>	Occasional
White Willow	<i>Salix alba</i>	Rare
Crack Willow	<i>Salix fragilis</i>	Frequent/Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Hedge Parsley	<i>Torilis japonica</i>	Occasional

Common Nettle	<i>Urtica dioica</i>	Frequent
Laurustinus	<i>Viburnum tinus</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 328 555	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13.05.2020 Scale 1: 6,000	
	Project Local Wildlife Site Boundary Review 2020 Subject Proposed High Barmston	Sheet size A4	
Drawing No. UF 5.36.01.07.016.01			

SITE NAME	High Barmston
SITE No.	UF 5_36_01_07_016
LOCATION	NZ 328556
STATUS	Local Wildlife Site
FIRST NOTIFIED	2020
AREA	10.28 ha
DATE OF SITE VISIT	July 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

A pond surrounded by mature plantation other broadleaf woodland and species rich grassland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen	0.22
Other broadleaf woodland	7.95

National and local BAP species:

English Name	Scientific Name
Bat	<i>Pipistrellus pipistrellus</i>
Common toad	<i>Bufo bufo</i>
Otter	<i>Lutra lutta</i>

Other protected species:

English Name	Scientific Name
Common Frog	<i>Rana temporaria</i>

DETAIL

High Barmston wood consists of a strip of older woodland growing on the steep slopes alongside the river Wear, with mixed and broadleaved plantation dating from the mid-1960s to the mid-1980s growing on level ground mid slope and along the upper slopes. The wood is bound by the River Wear to the south and new residential housing to the north with semi-improved grazing land to the east and amenity grassland and public highway to the west. A bridleway runs through the wood and forms part of the C2C national cycle route and the River Wear Trail.

The woodland is leggy in places, in need of thinning works. However, the age structure is good, with mature trees through to saplings, with plenty of regeneration evident. Ground flora is largely poor. Ivy is frequent, as is bramble. Also present is frequent herb robert, occasional wood avens, wood dock, lady fern, and male fern, and one clump of dog's mercury was present.

The banksides of the river have less tree cover, but are largely bramble dominated, with giant hogweed and Himalayan balsam a major issue throughout. Reed canary grass, meadowsweet and marsh thistle are also present through this part of the site.

The woodland opens up into a wet meadow in the east. This meadow was largely dry at the time of the survey but the presence of species such as bulrush, and great willowherb in three areas indicate that these areas of species poor, tall herb fen habitat can be seasonally wet. The rest of the meadow was rank and unmanaged, and dominated by cock's-foot, false oat-grass, common hogweed, nettles, and creeping thistle. Giant hogweed and Himalayan balsam are also an issue in this meadow area. Overall, this meadow area does not qualify as BAP habitat but is included as a buffer to the woodland, and to connect the site to the adjacent Washington Wildfowl and Wetlands Centre LWS. To the north of the meadow is an area of hawthorn dominated scrub. Along the path edge adjacent to the meadow area are more desirable species such as lady's bedstraw and common knapweed.

CONDITION ASSESSMENT

The lowland fen meets the Local Wildlife Site criteria:

Currently, there is no condition assessment for Lowland fen

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland is in poor condition due to the frequent of non-native species, with sycamore frequent/abundant and grey alder occasional. However, native species such as ash, hawthorn, cherry, elder, and guelder rose are frequent/occasional. The woodland lacks in veteran trees, with the exception of a small number of veteran sycamore near the river. The woodland also lacks standing and lying deadwood habitat.

CONNECTIVITY

The proximity of James Steel Park to the Wear corridor ensures good connectivity with a wide range of other LWS, some of them large, such as Princess Anne Park and Washington Wildfowl Park. The presence of reflexed saltmarsh-grass may be evidence of wildfowl occasionally arriving at this LWS from the coast.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

SITE MANAGEMENT

Other broadleaf woodland:

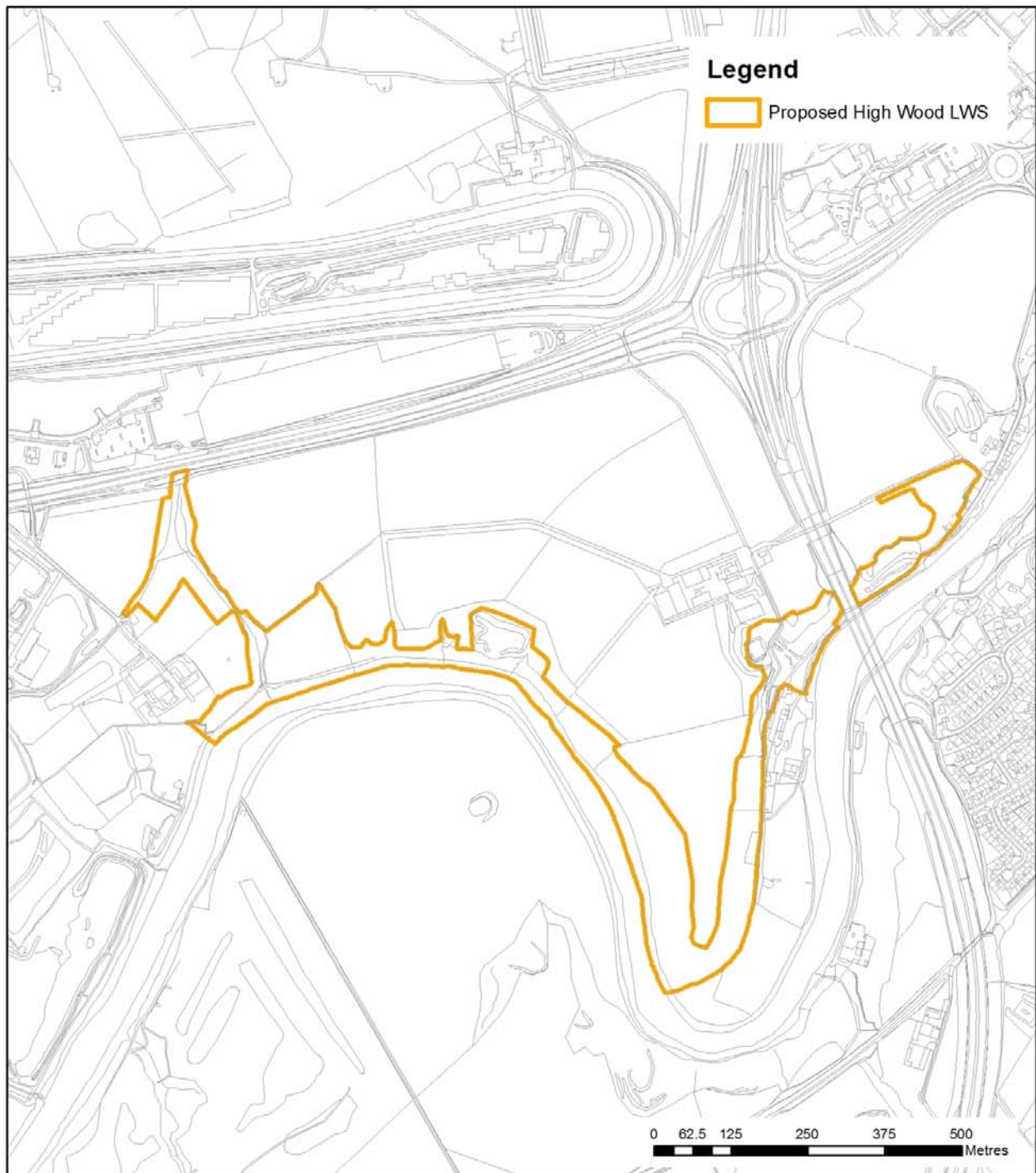
- Increase deadwood habitat
- Reduce non-native species

High Barmston species list



BAP Habitat Type: Other Broadleaf Woodland (* plants found along riverbank)		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Rare
Bittersweet	<i>Solanum dulcamara</i>	Rare
Black Medic	<i>Medicago lupulina</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Rare / Locally Frequent
Bramble	<i>Rubus fruticosus</i>	Frequent / Locally Dominant
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent / Locally Dominant
Common Privet	<i>Ligustrum vulgare</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Dandelion	<i>Taraxacum officinale</i>	Rare
Dog Rose	<i>Rosa canina</i>	Occasional
Dogs Mercury	<i>Mercurialis perennis</i>	Rare/ Locally Frequent
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Garden Syringa	<i>Syringa vulgaris</i>	Rare
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Giant Hogweed	<i>Heracleum mantegazzianum</i>	Occasional
Greater Plantain	<i>Plantago major</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Occasional
Guelder Rose	<i>Viburnum opulus</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Occasional
Hedge Parsley	<i>Torilis japonica</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Frequent

Himalayan Balsam	<i>Impatiens glandulifera</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent / Locally Dominant
Lady Fern	<i>Athyrium filix-femina</i>	Rare
Male Farn	<i>Dryopteris filix-mas</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Nipplewort	<i>Lapsana communis</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Plum	<i>Prunus sp.</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Red Currant	<i>Ribes rubrum</i>	Rare
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional / Locally Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rose sp.	<i>Rosa sp.</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional / Locally Abundant
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Rare
Silverweed	<i>Argentina anserina</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent - Abundant
Teasel	<i>Dipsacus fullonum</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
White Deadnettle	<i>Lamium album</i>	Rare
White Poplar	<i>Populus alba</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional / Locally Frequent
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Yew	<i>Taxus baccata</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat Type: Scrub and Rank Meadow		
Common Name	Botanical Name	Abundance (DAFOR)
Bulrush	<i>Typha latifolia</i>	Locally Abundant
Cleavers	<i>Galium aparine</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Dominant
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Giant Hogweed	<i>Heracleum mantegazzianum</i>	Occasional
Great Willowherb	<i>Epilobium hirsutum</i>	Locally Abundant
Hawthorn	<i>Crataegus monogyna</i>	Locally Abundant
Himalayan Balsam	<i>Impatiens glandulifera</i>	Locally Abundant
Lady's Bedstraw	<i>Galium verum</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Rare
Perforate St John's-wort	<i>Hypericum perforatum</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Wild Carrot	<i>Daucus carota</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 339 567</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13.05.2020 Scale 1: 8,500</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4 </p>
<p>Subject Proposed High Wood LWS</p>		
<p>Drawing No. UF 5.36.01.06.026.01</p>		

SITE NAME	High Wood (Formerly part of the Wear River Bank Woods)
SITE No.	UF 5_36_01_06_026
LOCATION	Barmston NZ340567
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised 2020
AREA	15.40 ha
DATE OF SITE VISIT	May 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Ancient semi-natural and other broadleaf woodland on the steep banks of the River Wear, upstream of the A19 bridge. The composition of the woodland varies with the geology, which is mostly neutral but calcareous in places, with small streams flowing into the river, and with the tidal river frontage. These factors have produced a variety of woodland types.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Ha
Ancient semi-natural woodland	8.66
Other broadleaf woodland	6.59
Lowland meadows and pasture	0.08
Ponds	0.16

National and local BAP species

English Name	Scientific Name	Notes
Bats		Regularly present
Hedgehog	<i>Erinaceus europaeus</i>	Present
Linnet		
Otter	<i>Lutra lutra</i>	Regularly present
Song Thrush		

DETAIL

High Wood is mix of an ancient semi-natural and other broadleaf woodland. Present are areas of ash dominated woodland with small amounts of associated woodland herbs. The ground flora becomes more representative under oak canopy with the presence of bluebell, and wavy-hair grass.

On the higher plateau areas are secondary in nature and in places more typical of plantation woodland. The eastern end of the site has a more obviously disturbed substrate with an impoverished flora.

Sycamore and beech make up the remaining canopy trees, with, hazel, holly, hawthorn and elder represented through the shrub layer.

Previously unrecorded species of note include adder's tongue fern. Non-native rhododendron and Japanese rose are also present.

A small pond is present but is now drying and starting to suffer from succession. Wetland plants present include brooklime, false fox-sedge, common duckweed, wild angelica, soft rush and hard rush.

The woodland block to the east of the A19 is particularly crowded and darkly shaded, which has had an impact on ground flora development, with species such as ivy and bramble often dominating. The age composition of the canopy was quite uniform, and no veteran trees were recorded in this section. Little dead wood was noted (either standing or fallen). While oaks and ash were frequent within the canopy, undesirable species, such as, sycamore and beech were also noted. Typical understorey species, such as, hawthorn, blackthorn, and gorse were recorded around the woodland edge and leading up to the A19 overpass.

The western block of woodland is separated from the eastern block by the A19 overpass. The landform in this section holds more interest with cliff sections being present. In the accessible areas, an abundance of ash, sycamore, and hawthorn were noted. The canopy is marginally more open and less shaded in this woodland block, in comparison to the eastern block, but it does become denser towards the western extent of the boundary area. As with the eastern woodland, the ground flora here is often dominated by ivy, brambles and nettles or is frequently bare earth with impoverished flora. Mature trees were recorded in the accessible areas; however, there very few mature enough to be classed as veteran.

On the northern boundary of this woodland, a small pond is present which is surrounded by mature goat and crack willow, and ash and hawthorn. Open water was visible but due to the height of the surrounding vegetation, a full condition assessment could not be made. Common reed was dominant around the pond edge and some bulrush was also noted (rare). A typical assortment of wetland edge species was noted with horsetail spp, bittersweet and willowherb species.

The western offshoot of the site has sessile oak, ash, wych elm, dog rose, and hawthorn present within the canopy. The trees are mature in stature; however, no veteran trees or dead wood could be seen from the vantage point. The ground flora was typically overgrown with bramble, nettle and ivy and runoff into the main woodland was evident. The visible canopy composition in eastern offshoot includes ash, sycamore, hawthorn, and elder. As with the last, ivy and bramble were abundant in the ground flora; however, bluebell spp and wood spurge were noted.

To the north-west, an area of 'Other Broadleaf Woodland' is present. The woodland is relatively young with a relatively uniform age structure. The narrow shelter belt extends for a short distance (approx. 280 metre) and was likely planted as a buffer from adjacent Sunderland Highway. Species here consist of typical native woodland and scrub planting with a mixture of hawthorn, blackthorn, ash, cherry, elder, dog wood, dog rose, holly, and some Scots pine (<10%) also present.

A small area of 'Lowland Meadows and Pasture' was noted between the shelter belt woodland. The presence and abundance of the indicator species observed would put the grassland in a favourable condition; however, significant encroachment by scrub and ruderal species was evident, thereby reducing the favourable condition assessment.

Further, a narrow belt of 'Other Broadleaf Woodland' present to the south of the grassland, adjacent to the existing LWS. A foot path runs through this narrow section

and an overgrown hedge provides much of the canopy on the western edge. It's particularly shaded which has had a limiting impact on the ground flora with ivy and bramble being abundant throughout, but typical floral species also included occasional wood avens and frequent herb Robert.

CONDITION ASSESSMENT

The Ancient semi-natural woodland habitat meets the Local Wildlife Site criteria:

Non-native species including sycamore and beech are frequent across the site. Cover of native species across the site is as low as 45%, the DBAP woodland condition assessment states that native cover must be greater than 90%. High Wood therefore fails on this condition meaning that the site is currently in unfavourable condition.

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland habitat is currently in an unfavourable condition due to the amount of non-native species present.

The Pond habitat meets the Local Wildlife Site criteria:

The feature is in an unfavourable condition due to the reduction of open water habitat of one of the ponds on site.

CONNECTIVITY

Formally designated as part of the Wear River Bank Woods, this site lies on the northern bank of the River Wear west of the A19. It is bounded to the north by arable and pastoral farmland. A number of broadleaf woodland sites are found along the Wear valley immediately adjacent. As such the site is situated within an important wildlife corridor, at the heart of a wider woodland landscape, linked to the River Wear corridor with areas of salt marsh also present along the rivers banks.

Numerous designated sites lie to the west and east connected to High Woods LWS along the river corridor, including Wear River Bank Site of Special Scientific Interest (SSSI), Wear River Bank Woods LWS, Washington Wildfowl and Wetlands LWS, Barons Quay LWS, and Claxheugh Riverside LWS.

LANDSCAPE

The wood is very prominent from the south side of the river and from the A19.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The wood has a public footpath running along its length and is quite accessible to the public. Being an ancient semi-natural woodland makes High Wood an important site, especially given its location at the edge of an urban environment.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Ancient Semi-natural Woodland:

- Maintain the area of the woodland.
- Aim to meet the “favourable condition” criteria; in this case by decreasing the proportion of non-native species and increasing the amount of standing and fallen dead timber.
- Consider the feasibility of restoring/enhancing the pond area.
- General principles of woodland management are given in the “Woodland management guidance and monitoring notes”.

High Wood species list

Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Canopy		
Ash	<i>Fraxinus excelsior</i>	Locally Frequent
Beech	<i>Fagus sylvatica</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Locally Dominant
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Oak	<i>Quercus taxa</i>	Locally Dominant
Silver Birch	<i>Betula pendula</i>	Rare
Sweet Chestnut	<i>Castanea sativa</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Locally Dominant
Wild Cherry	<i>Prunus avium</i>	Rare
Shrub		
Wych Elm	<i>Ulmus glabra</i>	Occasionally/Locally Frequent
Apple	<i>Malus pumila</i>	Rare
Beech	<i>Fagus sylvatica</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Very Locally Frequent
Broom	<i>Cytisus scoparius</i>	Locally Frequent
Common Elder	<i>Sambucus nigra</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Dog Rose	<i>Rosa canina</i>	Occasional
English Elm	<i>Ulmus procera</i>	Rare
Field Maple	<i>Acer campestre</i>	Rare
Goat Willow	<i>Salix caprea</i>	Rare
Gorse	<i>Ulex europaeus</i>	Locally Frequent
Grey Willow	<i>Salix cinerea</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Locally Frequent
Holly	<i>Ilex aquifolium</i>	Rare
Japanese Rose	<i>Rosa rugosa</i>	Rare
Orange Whitebeam	<i>Sorbus croceocarpa</i>	Rare
Osier Willow	<i>Salix viminalis</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional - Frequent
Yew	<i>Taxus baccata</i>	Rare
Ground Flora		
Adder's Tongue	<i>Ophioglossum vulgatum</i>	Rare
Barren Brome	<i>Anisantha sterilis</i>	Rare
Bifid Crestwort	<i>Lophocolea bidentata</i>	Rare
Bird's-Foot-Trefoil	<i>Lotus corniculatus</i>	Rare

Bitter Vetch	<i>Lathyrus linifolius</i>	Rare
Bittersweet	<i>Solanum dulcamara</i>	Rare
Bluebell	<i>Hyacinthoides non-scripta</i>	Abundant
Bowles' Golden Grass	<i>Milium effusum</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Abundant
Broad Buckler Fern	<i>Dryopteris dilatata</i>	Locally Frequent
Brooklime	<i>Veronica beccabunga</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Chickweed	<i>Stellaria media</i>	Rare
Cleavers	<i>Galium aparine</i>	Locally Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Rare
Common Dog-Violet	<i>Viola riviniana</i>	Frequent
Common Duckweed	<i>Lemna minor</i>	Rare
Common Feather-Moss	<i>Kindbergia praelonga</i>	Frequent
Common Hemp-Nettle	<i>Galeopsis tetrahit</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Honeysuckle	<i>Lonicera periclymenum</i>	Locally Frequent
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Locally Frequent
Common Nipplewort	<i>Lapsana communis</i>	Occasional
Common Striated Feather-Moss	<i>Eurhynchium striatum</i>	Rare
Common Tamarisk-Moss	<i>Thuidium tamariscinum</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional - Rare
Creeping Soft Grass	<i>Holcus mollis</i>	Locally Frequent
Crosswort	<i>Cruciata laevipes</i>	Rare
Cylindric Beard-Moss	<i>Didymodon insularis</i>	Rare
Cypress-leaved Plait-Moss	<i>Hypnum cupressiforme</i>	Rare
Daffodil	<i>Narcissus (cultivar)</i>	Rare
Dogs's Mercury	<i>Mercurialis perennis</i>	Very Locally Abundant
False Brome	<i>Brachypodium sylvaticum</i>	Abundant
False Fox-Sedge	<i>Carex otrubae</i>	Rare
False Oat-Grass	<i>Arrhenatherum elatius</i>	Occasional
Field Wood-Rush	<i>Luzula campestris</i>	Rare
Fox-Tail Feather-Moss	<i>Thamnobryum alopecurum</i>	Rare
Garlic Mustard	<i>Alliaria petiolata</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Rare
Goldilocks Buttercup	<i>Ranunculus auricomus</i>	Rare
Great Wood-Rush	<i>Luzula sylvatica</i>	Locally Abundant
Greater Stitchwort	<i>Stellaria holostea</i>	Occasional - Frequent
Ground Ivy	<i>Glechoma hederacea</i>	Occasional - Frequent
Hairy Brome	<i>Bromopsis ramosa</i>	Rare
Hairy St John's-Wort	<i>Hypericum hirsutum</i>	Occasional - Rare

Hairy Vetch	<i>Vicia hirsuta</i>	Hairy Vetch
Hard Rush	<i>Juncus inflexus</i>	Rare
Hart's-Tongue Thyme-Moss	<i>Plagiomnium undulatum</i>	Locally Frequent
Hawkweed	<i>Hieracium sp.</i>	Rare
Heath Speedwell	<i>Veronica officianalis</i>	Very Locally Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Hemlock Water Dropwort	<i>Oenanthe crocata</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Frequent
Ivy	<i>Hedera helix</i>	Abundant
Ivy-Leaved Speedwell	<i>Veronica hederifolia</i>	Rare
Lesser Celandine	<i>Ficaria verna verna</i>	Locally Abundant
Lesser Pocket-Moss	<i>Fissidens bryoides</i>	Frequent
Lords-and-Ladies	<i>Arum maculatum</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Rare
Pignut	<i>Conopodium majus</i>	Rare
Ramsons	<i>Allium ursinum</i>	Very Locally Abundant
Red Champion	<i>Silene dioica</i>	Occasional - Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Occasional
Red-Veined Dock	<i>Rumex sanguineus</i>	Occasional - Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional - Rare
Rough-Stalked Feather-Moss	<i>Brachythecium rutabulum</i>	Frequent
Rough-Stalked Meadow-Grass	<i>Poa trivialis</i>	Frequent
Sanicle	<i>Sanicula europaea</i>	Occasional
Scaly Male Fern	<i>Dryopteris borrieri</i>	Occasional
Smooth-Stalked Meadow-Grass	<i>Poa pratensis</i>	Occasional - Rare
Soft Rush	<i>Juncus effusus</i>	Rare
Soft Shield Fern	<i>Polystichum setiferum</i>	Rare
Spurge Laurel	<i>Daphne laureola</i>	Locally Frequent
Swan's-Neck Thyme-Moss	<i>Mnium hornum</i>	Occasional - Rare
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Occasional - Rare
Three-Nerved Sandwort	<i>Moehringia trinervia</i>	Rare
Tufted Hair Grass	<i>Deschampsia cespitosa</i>	Rare
Velvet Feather-Moss	<i>Brachythecium velutinum</i>	Rare
White Dead-Nettle	<i>Lamium album</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Strawberry	<i>Fragaria vesca</i>	Occasional - Rare
Wood Anemone	<i>Anemone nemorosa</i>	Very Locally Frequent
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Burdock	<i>Arctium nemorosum</i>	Rare
Wood Melick	<i>Melica uniflora</i>	Occasional
Wood Sage	<i>Teucrium scorodonia</i>	Occasional
Wood Sedge	<i>Carex sylvatica</i>	Occasional
Wood Small-Reed	<i>Calamagrostis epigejos</i>	Rare

Wood Sorrel	<i>Oxalis acetosella</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional
Saltmarsh		
Celery	<i>Apium graveolens</i>	Occasional
Common Saltmarsh-Grass	<i>Puccinellia maritima</i>	Rare
Field Sow-Thistle	<i>Sonchus arvensis</i>	Rare
Orache	<i>Atriplex sp.</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Locally Dominant
Sea Arrow-Grass	<i>Triglochin maritima</i>	Occasional
Sea Aster	<i>Aster tripolium</i>	Occasional
Sea Club-Rush	<i>Bolboschoenus maritimus</i>	Locally Dominant
Sea Couch	<i>Elytrigia atherica</i>	Locally Dominant

BAP Habitat Type: Other Broadleaf Woodland (Eastern Woodland)		
Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional - Frequent
Beech	<i>Fagus sylvatica</i>	Frequent
Blackthorn	<i>Aesculus hippocastanum</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Abundant – Locally Dominant
Broad-leaved dock	<i>Rumex obtusifolius</i>	Occasional
Cherry	<i>Prunus avium</i>	Occasional - Frequent
Cleavers	<i>Galium aparine</i>	Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Occasional
Common nettle	<i>Urtica dioica</i>	Frequent
Common sorrel	<i>Rumex acetosalatum</i>	Rare - Occasional
Cow parsley	<i>Anthriscus sylvestris</i>	Occasional
Dog rose	<i>Rosa canina</i>	Frequent
Elder	<i>Sambucus nigra</i>	Frequent - Abundant
European Gorse	<i>Ulex europaeus</i>	Locally Frequent
False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Garlic mustard	<i>Alliaria petiolata</i>	Rare - Occasional
Greater stitchwort	<i>Arum maculatum</i>	Rare - Occasional
Hawthorn	<i>Crataegus monogyna</i>	Abundant
Hazel	<i>Corylus avellana</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Occasional
Honey suckle	<i>Lonicera spp.</i>	Rare
Horse chestnut	<i>Aesculus hippocastanum</i>	Rare
Ivy	<i>Hedera helix</i>	Abundant – Locally Dominant
Laurel	<i>Laurus spp.</i>	Rare
Lords and Ladies	<i>Arum maculatum</i>	Rare - Occasional
Male fern	<i>Anthriscus sylvestris</i>	Rare - Occasional
Meadow foxtail	<i>Alopecurus pratensis</i>	Occasional
Pignut	<i>Conopodium majus</i>	Rare - Occasional
Sessile oak	<i>Quercus petraea</i>	Occasional - Frequent

Snowberry	<i>Symphoricarpos albus</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Occasional - Frequent
Wood speedwell	<i>Veronica montana</i>	Rare - Occasional
Wych elm	<i>Ulmus glabra</i>	Frequent

BAP Habitat Type: Other Broadleaf Woodland* (Western Wood) *not fully assessed due to restricted access

Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Occasional – Locally Frequent
Board-leaved dock	<i>Rumex obtusifolius</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent – Locally abundant
Burdock	<i>Arctium spp.</i>	Rare
Cleavers	<i>Galium aparine</i>	Frequent
Cock's-foot	<i>Dactylus glomerata</i>	Locally Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Occasional
Common mouse-ear	<i>Cerastium fontanum</i>	Locally Occasional
Cotonaster species	<i>Cotoneaster spp.</i>	Rare
Creeping buttercup	<i>Ranunculus repens</i>	Locally Occasional
Creeping thistle	<i>Cirsium arvense</i>	Locally Occasional
Curled dock	<i>Rumex crispus</i>	Occasional
Dog rose	<i>Rosa canina</i>	Occasional
English oak	<i>Quercus robur</i>	Rare
European Gorse	<i>Ulex europaeus</i>	Occasional
False oat-grass	<i>Arrhenatherum elatius</i>	Locally Occasional
Field maple	<i>Acer campestre</i>	Rare
Garlic mustard	<i>Alliaria petiolata</i>	Locally Occasional
Goat's-beard	<i>Tragopogon pratensis</i>	Locally Rare
Greater plantain	<i>Plantago major</i>	Locally Occasional
Greater woodrush	<i>Luzula sylvatica</i>	Occasional
Hart's-tongue fern	<i>Asplenium scolopendrium</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent – Locally Abundant
Hedge woundwort	<i>Stachys sylvatica</i>	Locally Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Occasional
Honey suckle	<i>Lonicera spp.</i>	Rare
Horsetail spp.	<i>Equisetum spp.</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent – Locally abundant
Laurel	<i>Laurus spp.</i>	Rare – Locally Occasional
Male fern	<i>Dryopteris filix-mas</i>	Rare
Oxeye daisy	<i>Leucanthemum vulgare</i>	Locally Occasional
Perennial ryegrass	<i>Lolium perenne</i>	Locally Occasional
Ribwort plantain	<i>Plantago lanceolata</i>	Locally Occasional
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	Occasional
Rough meadowgrass	<i>Poa trivialis</i>	Frequent
Sessile oak	<i>Quercus petraea</i>	Occasional
Sow thistle	<i>Sonchus arvensis</i>	Locally Occasional
Spear thistle	<i>Cirsium vulgare</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent

Wood avens	<i>Geum urbanum</i>	Occasional
Wood avens	<i>Geum urbanum</i>	Occasional
Wych elm	<i>Ulmus glabra</i>	Occasional

BAP Habitat Type: Ponds		
Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare - Occasional
Bindweed	<i>Calystegia sepium</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent
Cleavers	<i>Galium aparine</i>	Frequent
Common bulrush	<i>Typha latifolia</i>	Rare - Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Occasional - Locally Frequent
Common nettle	<i>Urtica dioica</i>	Frequent
Common reed	<i>Phragmites australis</i>	Abundant – Locally Dominant
Crack willow	<i>Salix fragilis</i>	Rare - Occasional
Creeping thistle	<i>Cirsium arvense</i>	Occasional
Dog rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare - Occasional
Goat willow	<i>Salix caprea</i>	Rare - Occasional
Greater willowherb	<i>Epilobium hirsutum</i>	Abundant
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Horsetail spp.	<i>Equisetum spp.</i>	Occasional - Locally Frequent
Red campion	<i>Silene dioica</i>	Occasional
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	Occasional - Locally Frequent

BAP Habitat Type: Unfavourable ASNW (Western Woodland Offshoot)		
Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional - Frequent
Bluebell species	<i>Hyacinthoides spp.</i>	Rare - Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent
Cleavers	<i>Galium aparine</i>	Occasional
Common nettle	<i>Hedera helix</i>	Occasional - Frequent
Dog-rose	<i>Rosa canina</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Ivy	<i>Hedera helix</i>	Frequent
Male-fern	<i>Dryopteris filix-mas</i>	Rare
Sessile oak	<i>Quercus petraea</i>	Occasional
Wych elm	<i>Ulmus glabra</i>	Occasional

BAP Habitat Type: Unfavourable ASNW (Eastern Woodland Offshoot)		
Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional - Frequent
Bluebell species	<i>Hyacinthoides spp.</i>	Rare - Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent
Dog rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional - Frequent
Ivy	<i>Hedera helix</i>	Frequent

Oak species	<i>Quercus spp.</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Wood spurge	<i>Euphorbia amygdaloides</i>	Rare
Wych elm	<i>Ulmus glabra</i>	Occasional

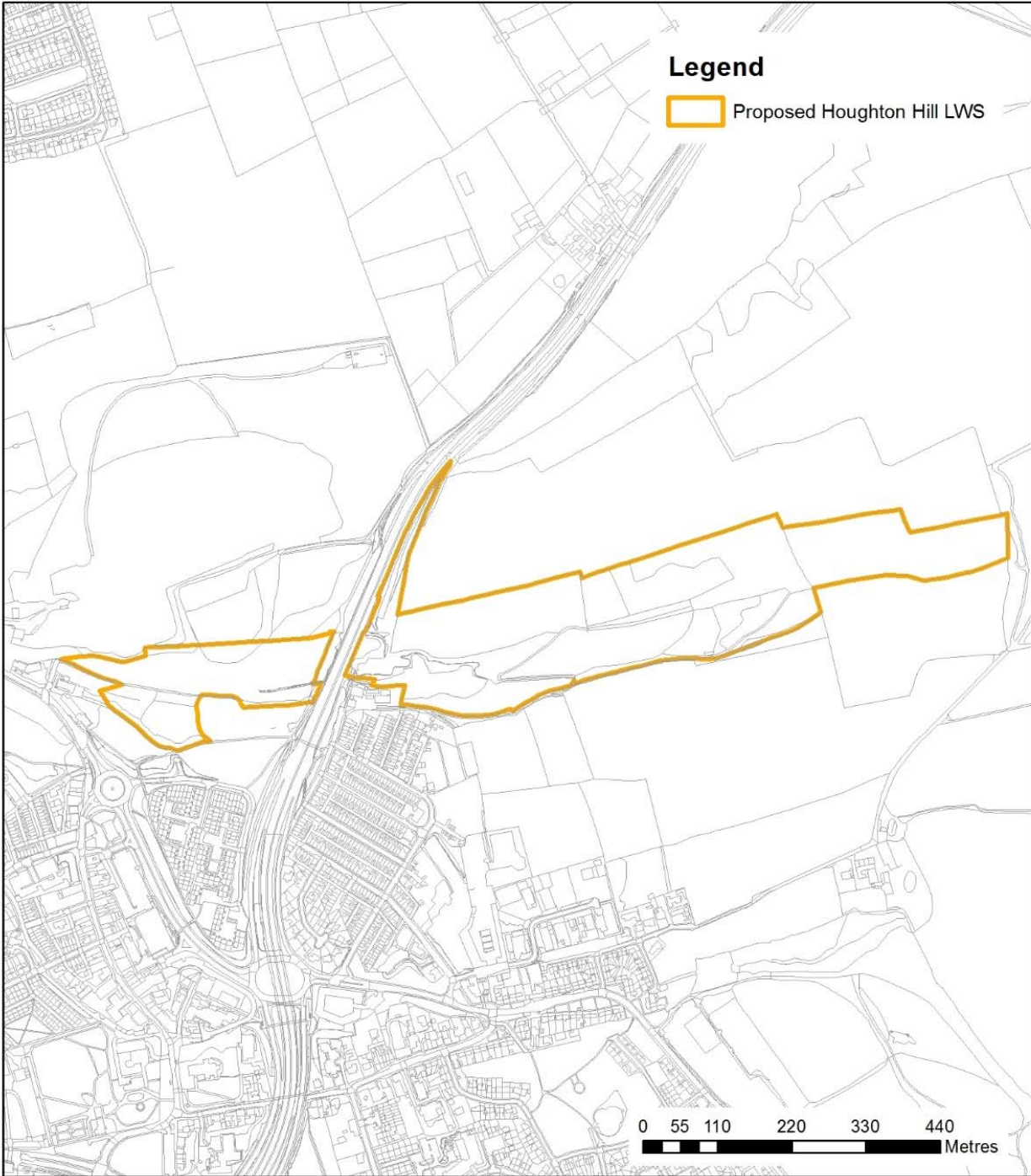
BAP Habitat Type: Other Broadleaf Woodland (Road shelterbelt)		
Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Occasional – Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequent
Broad-leaved dock	<i>Rumex obtusifolius</i>	Occasional
Cherry	<i>Prunus avium</i>	Occasional
Cleavers	<i>Galium aparine</i>	Frequent
Cock's-foot	<i>Dactylus glomerata</i>	Occasional
Common dandelion	<i>Taraxacum officinale</i>	Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Rare - Occasional
Common nettle	<i>Urtica dioica</i>	Frequent
Cow parsley	<i>Anthriscus sylvestris</i>	Occasional
Curled dock	<i>Rumex crispus</i>	Rare - Occasional
Dog rose	<i>Rosa canina</i>	Rare
Dogwood	<i>Cornus sanguinea</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
English oak	<i>Quercus robur</i>	Occasional
False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent - Abundant
Herb Robert	<i>Geranium robertianum</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Occasional
Ivy	<i>Hedera helix</i>	Frequent
Oxeye daisy	<i>Leucanthemum vulgare</i>	Occasional
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	Occasional
Rough chervil	<i>Chaerophyllum temulum</i>	Rare
Rough meadow-grass	<i>Poa trivialis</i>	Occasional
Scots pine	<i>Pinus sylvestris</i>	Rare
Wood avens	<i>Geum urbanum</i>	Rare - Occasional

BAP Habitat Type: Lowland Meadow and Pasture		
Common Name	Scientific Name	Abundance (DAFOR)
Betony	<i>Betonica officinalis</i>	Frequent
Broad-leaved dock	<i>Rumex obtusifolius</i>	Occasional
Bush vetch	<i>Vicia sepium</i>	Occasional – Locally Frequent
Chickweed	<i>Stellaria media</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional
Cock's foot	<i>Dactylis glomerata</i>	Abundant
Comfrey	<i>Symphytum officinale</i>	Rare
Common bent	<i>Agrostis capillaris</i>	Frequent
Common bird's-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Occasional – Locally

		Dominant
Common knapweed	<i>Centaurea nigra</i>	Frequent
Common nettle	<i>Urtica dioica</i>	Occasional – Locally Dominant
Common ragwort	<i>Jacobaea vulgaris</i>	Occasional
Common sorrel	<i>Rumex acetosa</i>	Occasional
Common yarrow	<i>Achillea millefolium</i>	Frequent
Cow parsley	<i>Anthriscus sylvestris</i>	Occasional
Cowslip	<i>Primula veris</i>	Frequent – Locally Abundant
Creeping bent	<i>Agrostis stolonifera</i>	Occasional
Creeping buttercup	<i>Ranunculus repens</i>	Frequent
Creeping cinquefoil	<i>Potentilla reptans</i>	Frequent
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Occasional
Curled dock	<i>Rumex crispus</i>	Occasional
Cut-leaved cranesbill	<i>Geranium dissectum</i>	Occasional
False oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field woodrush	<i>Luzula campestris</i>	Occasional
Germander speedwell	<i>Veronica chamaedrys</i>	Occasional
Glaucous sedge	<i>Carex flacca</i>	Occasional
Greater bird's-foot trefoil	<i>Lotus pedunculatus</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Horsetail species	<i>Equisetum spp.</i>	Rare
Lady's bedstraw	<i>Galium verum</i>	Occasional
Meadow buttercup	<i>Ranunculus acris</i>	Occasional
Meadow foxtail	<i>Alopecurus pratensis</i>	Frequent
Meadow vetchling	<i>Lathyrus pratensis</i>	Frequent – Locally Abundant
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Northern marsh orchid	<i>Dactylorhiza purpurella</i>	Rare
Oxeye daisy	<i>Leucanthemum vulgare</i>	Occasional
Quaking-grass	<i>Briza media</i>	Occasional
Ragged robin	<i>Lychnis flos-cuculi</i>	Occasional – Locally Frequent
Red clover	<i>Trifolium pratense</i>	Occasional
Red fescue	<i>Festuca rubra</i>	Frequent
Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
Rough meadow-grass	<i>Poa trivialis</i>	Frequent
Small blue-green sedges species	<i>Carex spp.</i>	Occasional
Tufted hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Wood avens	<i>Geum urbanum</i>	Occasional
Yellow oat-grass	<i>Trisetum flavescens</i>	Occasional
Yellow rattle	<i>Rhinanthus minor</i>	Occasional - Frequent
Yorkshire fog	<i>Holcus lanatus</i>	Frequent
Non-BAP Habitat Type: Scrub (encroaching on LM&P)		
Common Name	Scientific Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Rare - Occasional
Ash	<i>Fraxinus excelsior</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Frequent – Locally Dominant

Bramble	<i>Rubus fruticosus</i>	Occasional - Frequent
Cherry	<i>Prunus avium</i>	Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Frequent
Common nettle	<i>Urtica dioica</i>	Frequent
Crack willow	<i>Salix fragilis</i>	Occasional
Dog rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare - Occasional
Goat willow	<i>Salix caprea</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland (Narrow woodland edge)		
Common Name	Scientific Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Frequent – Locally Abundant
Broad-leaved dock	<i>Rumex obtusifolius</i>	Occasional
Cherry	<i>Prunus avium</i>	Occasional
Cleavers	<i>Galium aparine</i>	Frequent
Cock's-foot	<i>Dactylus glomerata</i>	Occasional - Frequent
Common dandelion	<i>Taraxacum officinale</i>	Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Occasional
Common nettle	<i>Urtica dioica</i>	Occasional
Cow parsley	<i>Anthriscus sylvestris</i>	Occasional
Crab Apple	<i>Malus sylvestris</i>	Rare
Curled dock	<i>Rumex crispus</i>	Rare – Occasional
Dog rose	<i>Rosa canina</i>	Rare – Occasional
Dogwood	<i>Cornus sanguinea</i>	Rare – Occasional
Elder	<i>Sambucus nigra</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Abundant
Herb Robert	<i>Geranium robertianum</i>	Frequent
Ivy	<i>Hedera helix</i>	Abundant
Meadow foxtail	<i>Alopecurus pratensis</i>	Occasional
Rosebay willowherb	<i>Chamaenerion angustifolium</i>	Rare – Occasional
Sessile oak	<i>Quercus petraea</i>	Occasional
Wood avens	<i>Geum urbanum</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07564274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 342 504 / NZ 345 507</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 08.06.2020 Scale 1: 8,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	
	<p>Subject Proposed Houghton Hill LWS</p>	
	<p>Drawing No. UF 5.36.01.06.027.01</p>	<p>Revisions 1</p>

SITE NAME	Houghton Hill
SITE No.	UF 5_36_01_06_027
LOCATION	Houghton-le-spring NZ343504
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993, revised in 2020
AREA	17.07 ha
DATE OF SITE VISIT	September 2016
OWNERSHIP	Sunderland City Council & Private.

SITE DESCRIPTION

Species-rich grassland and scrub habitats developed on the south-facing slopes of Houghton escarpment. The site also includes Magnesian limestone exposures at Houghton Cut and a disused quarry to the east of the A690.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares in 2016
Magnesian limestone grassland (inc. CG8)	7.86
Other broadleaf woodland	0.76

National and local BAP species:

English Name	Scientific Name	Notes
Badger	<i>Meles meles</i>	
Barn owl	<i>Tyto alba</i>	
Grey partridge	<i>Perdix perdix</i>	
Hedgehog	<i>Erinaceus europaeus</i>	Present
House sparrow	<i>Passer domesticus</i>	
Linnet	<i>Carduelis cannabina</i>	Breeds
Peregrine falcon	<i>Falco peregrinus</i>	
Red kite	<i>Milvus milvus</i>	
Song Thrush	<i>Turdus philomelos</i>	Breeds
Starling	<i>Sturnus vulgaris</i>	
Wall	<i>Lasiommata megera</i>	

Other protected species:

English Name	Scientific Name	Notes
Fieldfare	<i>Turdus pilaris</i>	
Redwing	<i>Turdus iliacus</i>	
Small heath	<i>Coenonympha pamphilus</i>	

DETAIL

Houghton Hill is located on the northern edge of the town of Houghton-le-Spring, to the southwest of the City of Sunderland. The site is divided in two by the A690 dual carriageway road. Housing lies to the south of the site, except at the eastern end, where arable and pasture land lie to the south and north. A quarry lies to the east, and another quarry lies to the north of the site west of the A690 road. Beyond the quarries lies further farmland. There are small pockets of woodland in close proximity, including to the west of the site and 200 metres to the north (The Clouds LWS).

The site has grassland and pasture on the south-facing slopes of Houghton escarpment. To the west of the A690 road is Magnesian limestone grassland and scrub mosaic on the slopes below an active limestone quarry. This side is open to the public and has several paths across it. To the east of the A690 road is permanent pasture grazed by horses and is privately-owned. This is a mosaic of Magnesian limestone grassland and scrub, with an area of dense scrub and Broadleaved woodland in the south. Pockets of the CG8 NVC community are present either side of the A690 road and around the end of Houghton Cemetery which lies north of the woodland. The Magnesian limestone grassland across the site includes a large number of key indicator species including small scabious, lady's bedstraw, thyme-leaved sandwort, carline thistle, harebell, fairy flax, quaking grass, downy oat-grass, wild thyme, salad burnet, burnet saxifrage, rest harrow, hairy violet, rough hawkbit, lesser hawkbit and blue moor-grass. Scrub encroachment is an issue on both sides of the A690, with bramble and hawthorn the issue and gorse in the east.

There is a large area of mature hawthorn scrub towards the south of the eastern side of the site. Below it is an area of developing broadleaved woodland which is predominantly ash and sycamore, with an elder and hawthorn understorey. The ground layer includes wood avens, herb robert and wood sage and less desirable species such as bramble and ivy abundant in places. Non-BAP habitat across the site includes rank semi-improved grassland, gorse/hawthorn/bramble scrub and amenity grassland (around the old cemetery and some areas west of the A690 road). There are several stands of Japanese Knotweed on site, one towards the western end of the site and three located in the northern part of the cemetery to the east of the A690 road.

CONDITION

The Magnesian Limestone grassland habitat meets the Local Wildlife Site criteria:

CG8 (blue moor-grass/small scabious) grassland is an NVC community of lowland calcareous grassland which occurs uniquely within Europe in the Durham Magnesian Limestone Natural Area, making it an extremely rare habitat. A large portion of the grassland across the site meets the criteria for the Durham BAP definition of Magnesian limestone grassland. Small pockets towards the A690 road fall within the CG8 NVC type, particularly where blue moor-grass is more prevalent. Overall, the Magnesian limestone grassland (inc. CG8 grassland) across the site is in unfavourable condition due to the amount of scrub present and the cover of undesirable species such as ragwort. In parcel 2 the frequency of indicator species also renders this pasture in unfavourable condition. Japanese knotweed is present in four locations on site.

The Broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland at Houghton Hill is situated in the south and west of the eastern part of the site. The larger parcel of woodland lies to the south of the old cemetery and gravestones are present within the woodland itself. Overall, the woodland is in an unfavourable condition. It fails on a number of the Durham BAP condition assessment criteria. It has a less than 80% native trees, a lack of dead wood habitat and a lack of indicator species and veteran trees.

CONNECTIVITY

Houghton Hill LWS is situated in an urban environment but at the very northern outskirts. Farmland surrounds most of the eastern side. However, the western side is sandwiched between housing and an active quarry. To the west lies another small area of greenspace and woodland before housing takes over in all directions. To the east the open farmland joins onto a series of coastal woodland denes linking right through to the coast. The farmland also continues to the north, with The Cloud LWS woodland just 200 metres to the north and several other small woodlands present amongst the farmland until it reaches the River Wear 5km to the north. The farmland also continues to the south, again with numerous pockets of woodland amongst the farmland. Overall, Houghton Hill LWS is an important habitat given its urban environment. It forms part of a wider wildlife corridor from the River Wear through to the coast, around the western and south edges of Sunderland. However, the site itself is not very well connected, with no linear connecting feature present such as a river, or disused railway and the woodland present is fragmented. Housing and an active quarry surround the western part of the site and open farmland surrounds the eastern part. There is some scrub and hedgerows along the A690 linking the site to woodland LWS in the north, however beyond this connectivity is poor.

RECORDED HISTORY

Surveyed in 2005/2006/2009 by A. Mclay as part of the MAGical Meadows project and again by Durham Wildlife Services in 2016.

SITE MANAGEMENT

Magnesian limestone grassland:

- Remove Japanese knotweed
- Selective scrub removal
- Graze
- Annual cut and rake of areas of grassland not subject to grazing
- Ragwort control

Other broadleaf woodland:

- Remove non-native species
- Improve woodland structure

Houghton Hill species list

Common Name	Botanical Name	Abundance (DAFOR)
<u>Magnesian Limestone Calcareous Grassland</u>		
Yarrow	<i>Achillea millefolium</i>	Abundant
Common Bent	<i>Agrostis capillaris</i>	Abundant
Creeping Bent	<i>Agrostis stolonifera</i>	Locally Abundant
Lady's Mantle	<i>Alchemilla filicaulis</i> ssp. <i>vestita</i>	Rare
Scarlet Pimpernel	<i>Anagallis arvensis</i>	Rare
Thyme-leaved Sandwort	<i>Arenaria serpyllifolia</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Rare
Meadow Oat-grass	<i>Avenula pratensis</i>	Rare
Downy Oat-grass	<i>Avenula pubescens</i>	Occasional
Lesser Bird's-claw Beard-moss	<i>Barbula convoluta</i>	Occasional
Daisy	<i>Bellis perennis</i>	Abundant
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
False Brome	<i>Brachypodium sylvaticum</i>	Occasional
Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Frequent
Quaking Grass	<i>Briza media</i>	Occasional
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Occasional
Harebell	<i>Campanula rotundifolia</i>	Occasional
Goldenleaf Moss	<i>Campyllum chrysophyllum</i>	Occasional
Musk Thistle	<i>Carduus nutans</i>	Occasional
Spring Sedge	<i>Carex caryophyllea</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Frequent
Carlina Thistle	<i>Carlina vulgaris</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Greater Knapweed	<i>Centaurea scabiosa</i>	Locally Frequent
Common Mouseear	<i>Cerastium fontanum</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional

Magnesian Limestone Calcareous Grassland Cont.

Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Wild Basil	<i>Clinopodium vulgare</i>	Occasional
Cotoneaster	<i>Cotoneaster horizontalis</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Smooth Hawksbeard	<i>Crepis capillaris</i>	Frequent
Chalk Club-moss	<i>Ctenidium molluscum</i>	Rare
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Abundant
Cock's Foot	<i>Dactylis glomerata</i>	Frequent
Northern Marrsh Orchid	<i>Dactylorhiza purpurella</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Rare
False Beard-moss	<i>Didymoden fallax</i>	Rare
Blue Fleabane	<i>Erigeron acer</i>	Rare
Eyebright	<i>Euphrasia nemorosa</i>	Frequent
Sheep's Fescue	<i>Festuca ovina</i>	Rare
Chewings Fescue	<i>Festuca rubra ssp. Commulata</i>	Occasional
Creeping Red Fescue	<i>Festuca rubra ssp. Rubra</i>	Abundant
Rock Pocket-moss	<i>Fissidens dubius</i>	Occasional
Wild Strawberry	<i>Fragaria vesca</i>	Locally Frequent
Ash	<i>Fraxinus excelsior</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Locally Frequent
Herb-robert	<i>Geranium robertianum</i>	Rare
Ground-ivy	<i>Glechoma hederacea</i>	Rare
Ivy	<i>Hedera helix</i>	Rare
Common Rock-rose	<i>Helianthemum nummularium</i>	Locally Frequent
Hawkweed	<i>Hieracium sect. sabauda</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent
Yellow Feather-moss	<i>Homalothecium lutescens</i>	Rare
Silky Wall Feather-moss	<i>Homalothecium sericeum</i>	Rare
Slender St John's-wort	<i>Hypericum pulchrum</i>	Occasional
Hybrid St John's-wort	<i>Hypericum x desetangsii</i>	Occasional
Cypress- leaved Plaitmoss	<i>Hypnum cupressiforme</i>	Occasional
Catsear	<i>Hypochaeris radicata</i>	Occasional
Dark-green Flapwort	<i>Jungermannia atrovirens</i>	Rare
Crested Hair-grass	<i>Koeleria micrantha</i>	Rare
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Lesser Hawkbit	<i>Leontodon saxatilis</i>	Occasional

Magnesian Limestone Calcareous Grassland Cont.

Fairy-flax	<i>Linum catharticum</i>	Frequent
Perennial Rye-grass	<i>Lolium perenne</i>	Abundant
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus var</i>	Locally Frequent
Black Medic	<i>Medicago lupulina</i>	Frequent
Changing Forget-me-not	<i>Myosotis discolor</i>	Rare
Red Bartsia	<i>Odontites verna</i>	Occasional
Common Sainfoin	<i>Onobrychis viciifolia</i>	Locally Frequent
Common Restharrow	<i>Ononis repens</i>	Locally Abundant
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Occasional
Burnet Saxifrage	<i>Pimpinella saxifraga</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Greater Plantain	<i>Plantago major</i>	Frequent
Sea Plantain	<i>Plantago maritima</i>	Rare
Hoary Plantain	<i>Plantago media</i>	Rare
Annual Meadow-grass	<i>Poa annua</i>	Frequent
Smooth Meadow-grass	<i>Poa pratensis</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Abundant
Barren Strawberry	<i>Potentilla sterilis</i>	Rare
Salad Burnet	<i>Poterium sanguisorba</i>	Occasional
Cowslip	<i>Primula veris</i>	Frequent
Selfheal	<i>Prunella vulgaris</i>	Frequent
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Locally Abundant
Wild Mignonette	<i>Reseda lutea</i>	Rare
Weld	<i>Reseda luteola</i>	Rare
Glaucous Dogrose	<i>Rosa caesia</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Occasional
Small Scabious	<i>Scabiosa columbaria</i>	Occasional
Meadow Fescue	<i>Schedonorus pratensis</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Abundant
Blue Moor-grass	<i>Sesleria albicans</i>	Locally Dominant
Field Madder	<i>Sherardia arvensis</i>	Occasional
Bladder Campion	<i>Silene vulgaris</i>	Rare
Field Sow-thistle	<i>Sonchus arvensis</i>	Rare

Magnesian Limestone Calcareous Grassland

Common Sowthistle	<i>Sonchus oleraceus</i>	Rare
Common Chickweed	<i>Stellaria media</i>	Occasional
Dandelion	<i>Taraxacum officinale</i> agg.	Abundant
Wild Thyme	<i>Thymus polytrichus</i>	Occasional
Upright Hedge-parsley	<i>Torilis japonica</i>	Rare
Frizzles Crisp-moss	<i>Tortella tortuosa</i>	Locally Frequent
Red Clover	<i>Trifolium pratense</i>	Frequent
White Clover	<i>Trifolium repens</i>	Abundant
Yellow Oatgrass	<i>Trisetum flavescens</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Locally Dominant
Nettle	<i>Urtica dioica</i>	Occasional
Common Mullein	<i>Verbascum thapsus</i>	Rare
Wall Speedwell	<i>Veronica arvensis</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Frequent
Hairy Violet	<i>Viola hirta</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Occasional
Moss	<i>Weissia</i> sp.	

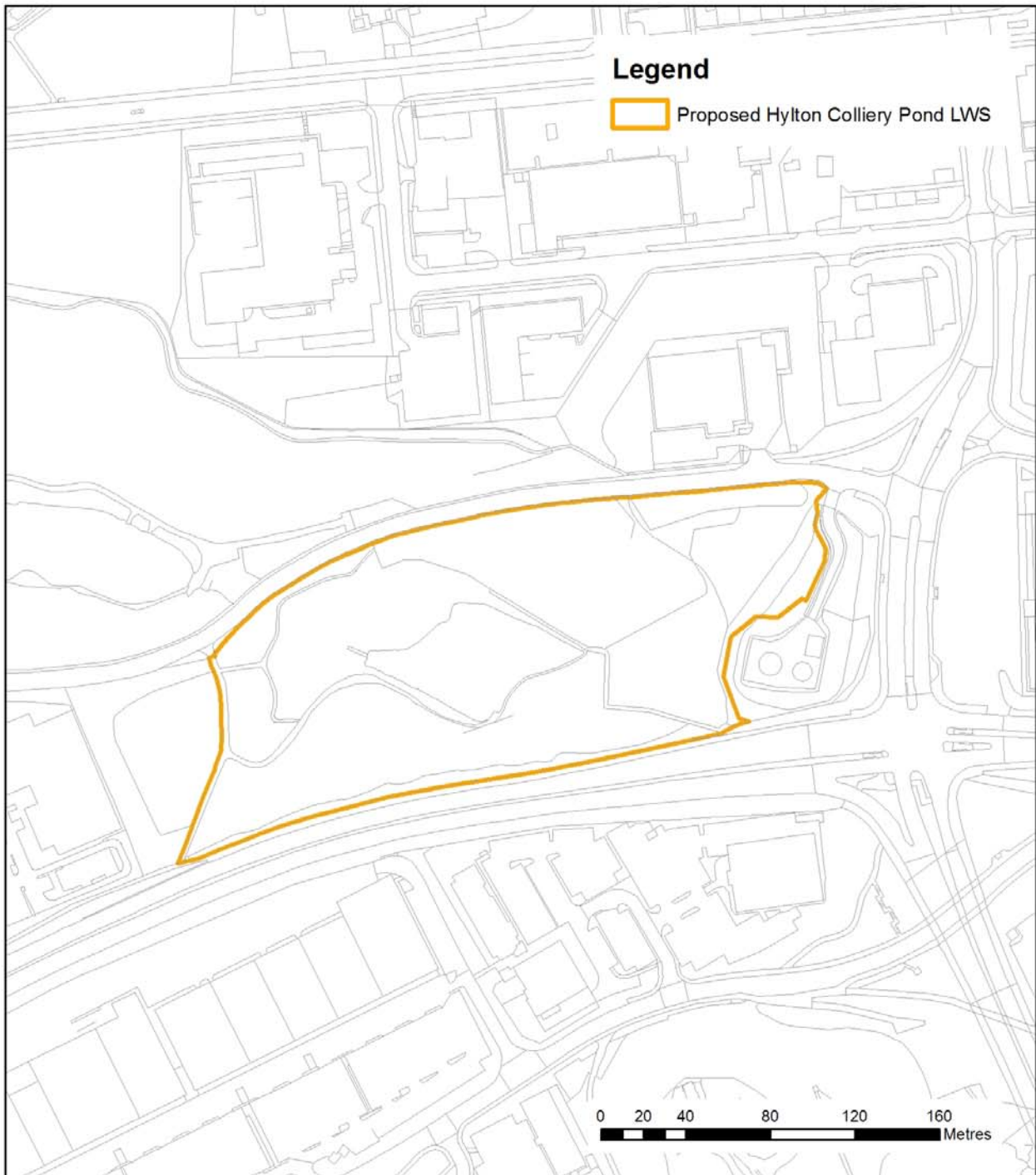
Parcel 2: Magnesian Limestone Calcareous Grassland (Non-Exhaustive)

Thyme-leaved Sandwort	<i>Arenaria serpyllifolia</i>	Rare
Daisy	<i>Bellis perennis</i>	Frequent
Harebell	<i>Campanula rotundifolia</i>	Rare
Musk Thistle	<i>Carduus nutans</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Locally Abundant
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Eyebright	<i>Euphrasia nemorosa</i>	Occasional
Doves-foot Cranesbill	<i>Geranium molle</i>	Occasional
Field Scabious	<i>Knautia arvensis</i>	Rare
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Black Medic	<i>Medicago lupulina</i>	Occasional
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Occasional
Cowslip	<i>Primula veris</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Weld	<i>Reseda luteola</i>	Rare
Small Scabious	<i>Scabiosa columbaria</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Abundant
Common Chickweed	<i>Stellaria media</i>	Rare
Nettle	<i>Urtica dioica</i>	Locally Dominant

Parcel 3: Magnesian Limestone Calcareous Grassland (Non-Exhaustive)

Thyme-leaved Sandwort	<i>Arenaria serpyllifolia</i>	Rare
Downy Oat-grass	<i>Avenula pubescens</i>	Occasional
Daisy	<i>Bellis perennis</i>	Frequent
Harebell	<i>Campanula rotundifolia</i>	Rare
Musk Thistle	<i>Carduus nutans</i>	Occasional
Spring Sedge	<i>Carex caryophylla</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Eyebright	<i>Euphrasia nemorosa</i>	Frequent
Lady's Bedstraw	<i>Galium verum</i>	Rare
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Fairy-flax	<i>Linum catharticum</i>	Occasional
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Black Medic	<i>Medicago lupulina</i>	Occasional
Salad Burnet	<i>Poterium sanguisorba</i>	Rare
Cowslip	<i>Primula veris</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Small Scabious	<i>Scabiosa columbaria</i>	Occasional
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Frequent
Wild Thyme	<i>Thymus polytrichus</i>	Rare
Yellow Oatgrass	<i>Trisetum flavescens</i>	Frequent
Nettle	<i>Urtica dioica</i>	Locally Abundant

Common Name	Botanical Name	Abundance (DAFOR)
<u>Other Broadleaved Woodland</u>		
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Rare
Daisy	<i>Bellis perennis</i>	Rare
Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Frequent
Bindweed	<i>Calestygia sepium</i>	Occasional
Musk Thistle	<i>Carduus nutans</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Cotoneaster	<i>Cotoneaster spp</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Cock's Foot	<i>Dactylis glomerata</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Abundant
Cleavers	<i>Galium aparine</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Abundant
Wood Avens	<i>Geum urbanum</i>	Abundant
Ivy	<i>Hedera helix</i>	Frequent
Hogweed	<i>Heracleum sphondylium</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Rare
Selfheal	<i>Prunella vulgaris</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Abundant
Elder	<i>Sambucus nigra</i>	Rare
Figwort	<i>Scrophularia nodosa</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Chickweed	<i>Stellaria media</i>	Rare
Yew	<i>Taxus baccata</i>	Rare
Wood Sage	<i>Teucrium scorodonia</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent
Germander Speedwell	<i>Veronica chamaedrys</i>	Rare
Lesser Periwinkle	<i>Vinca minor</i>	Abundant



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 367 584	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 08.06.2020 Scale 1: 2,500	
	Project Local Wildlife Site Boundary Review 2020	Sheet size A4	
	Subject Proposed Hylton Colliery Pond LWS	Revisions 1	
	Drawing No. UF 5.36.01.06.027.01		

SITE NAME	Hylton Colliery Pond
SITE No.	UF 5_36_01_06_028
LOCATION	Hylton NZ363585
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised in 2020
AREA	3.19 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

The site includes a large pond and areas of fen, grassland, broadleaf woodland and scrub.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen	0.30 ha
Lowland meadows and pasture	0.38 ha
Other broadleaf woodland	1.94 ha
Pond	0.28 ha

National and local BAP species:

English Name	Scientific Name	Notes
Hedgehog	<i>Erinaceus europaeus</i>	Present
Reed Bunting	<i>Emberiza schoeniclus</i>	Nests
Song Thrush	<i>Turdus philomelos</i>	Nests
Toad	<i>Bufo bufo</i>	
Wall	<i>Lasiommata megera</i>	
Water Shrew	<i>Neomys fodiens</i>	
Willow Warbler	<i>Phylloscopus trochilus</i>	

Other protected species:

English Name	Scientific Name	Notes
Chiffchaff	<i>Phylloscopus collybita</i>	
Common frog	<i>Rana temporaria</i>	
Lesser whitethroat	<i>Sylvia curruca</i>	
Moorhen	<i>Gallinula chloropus,</i>	
Whitethroat	<i>Sylvia communis</i>	

DETAIL

The site is a former coal-washing pond, which has become heavily overgrown and silted. The 2010 citation for the site records the presence of breeding mallard (*Anas platyrhynchos*), moorhen, frogs and toads. Most of the habitat would now be best described as reedbed. This is dominated by large stands of common reed, with great willowherb, meadowsweet and hard rush locally frequent. Branched bur-reed, water plantain, yellow flag iris and hornwort are present around the small remaining area of open water. A flush recorded in 2010 is no longer present in 2018.

Broadleaf woodland has developed on the land surrounding the pond, with scrub species such as hawthorn and elder dominant. Also present are a variety of species of willow, ash, sycamore, aspen and grey alder. Humidity levels seem to be high by virtue of a closed canopy, bowl-shaped topography and the presence of the pond and there seems to be a relatively high biomass and diversity of bryophytes. However, overall ground flora is poor with bramble and nettle dominant, also present are common woodland plants such as herb bennet, broad buckler fern, male fern and herb robert.

The 2010 citation lists a variety of species of bird from within the woodland, including blackcap, mistle thrush, song thrush, whitethroat, willow warbler and chiffchaff.

CONDITION ASSESSMENT

The Pond habitat meets the Local Wildlife Site criteria:

Very little open water remains in the pond on site, with branched bur-reed, water plantain, yellow flag iris and hornwort present around what open water remains. The pond is in an unfavourable condition due to the reduction of open water habitat on site and the shading of banksides.

The Fen habitat meets the Local Wildlife Site criteria:

The fen on site can now be more accurately classed as a *Phragmites australis* reedbed, with *Phragmites* very much the dominant species. Great willowherb, meadowsweet and hard rush are locally frequent. The fen habitat is currently in a favourable condition though scrub encroachment is currently close to acceptable limits.

The Broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland is secondary woodland, with ash, sycamore, alder and willow species forming mostly a young canopy layer. Older trees include ash, aspen, osier willow, crack willow, white willow and field maple. Hawthorn, bramble, elder, alder, holly, blackthorn and hazel dominate the shrub layer, which is the main characteristic of this woodland community. Ground flora is limited to nettle, bramble, wood avens and herb robert. Woodland birds are present but the proximity to housing and the degree of disturbance limit the variety of species. The woodland fails on its condition assessment due to woodland indicator species, amount of standing and lying deadwood and lack of veteran trees.

The Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

Indicator species present include great burnet, meadowsweet, meadow vetchling, common birds-foot-trefoil, common knapweed, tufted vetch yellow rattle and eyebright. Overall the grassland is in poor condition due to the cover of undesirable species present, with large stands of rosebay willowherb, nettle and frequent hogweed.

CONNECTIVITY

Hylton Colliery Pond LWS has strong connectivity to a complex of Local Wildlife Sites. These include: Hylton Dene, an area of broadleaf woodland, grassland and wetland habitat; Tilesheds, an area of broadleaf woodland and species rich calcareous grassland; and Bunny Hill, an area of magnesian limestone grassland. Together, along with Hylton Castle Cutting Site of Special Scientific Interest (SSSI), these sites are designated a Local Nature Reserve. The River Wear lies just 260 metres to the south and in between lies Timber Beach LWS. This site is part of the River Wear corridor, a complex containing several semi-natural habitats, including additional LWS and SSSI's. Overall, the site is well connected to the wildlife corridor that follows the River Wear.

LANDSCAPE

The pond and woodland are prominent features of the edge of a built-up area.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

The woodland was surveyed by Gordon Graham in 1993.

The fen was surveyed by Clare O'Riley in 2009.

The site was surveyed by A McLay 2010 and by Durham Wildlife Services in 2018 & 2019.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The site has a footpath along its length and open access throughout.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Other broadleaf woodland:

- Maintain the woodland free from invasive non-native plants.

Pond:

- Increase available area of open water habitat.
- Reduce shading around bankside.

Lowland fen:

- Cut a portion of reedbed annually to slow/prevent succession.
- Create open water pools to allow for phased succession.
- Control scrub annually to slow/prevent succession.

Hylton Colliery Pond species list

BAP Habitat: Pond		
Common Name	Botanical Name	Abundance (DAFOR)
Branched Bur-reed	<i>Sparganium erectum</i>	Locally Frequent
Common Rush	<i>Juncus effusus</i>	Rare
Common Water Plantain	<i>Alisma plantago-aquatica</i>	Occasional
Hornwort	<i>Ceratophyllum demersum</i>	Abundant
Water Knotweed	<i>Persicaria amphibia</i>	Occasional - Rare
Yellow Flag Iris	<i>Iris pseudacorus</i>	Occasional

BAP Habitat: Lowland fen		
Common Name	Botanical Name	Abundance (DAFOR)
Cleavers	<i>Galium aparine</i>	Locally Frequent
Common Fleabane	<i>Pulicaria dysenterica</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Locally Frequent
Common Reed	<i>Phragmites australis</i>	Dominant
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
False Fox-sedge	<i>Carex otrubae</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Locally Frequent
Hard Rush	<i>Juncus inflexus</i>	Very Locally Frequent
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Very Locally Frequent
Tufted Vetch	<i>Vicia cracca</i>	Rare
Water Dropwort	<i>Oenanthe crocata</i>	Occasional

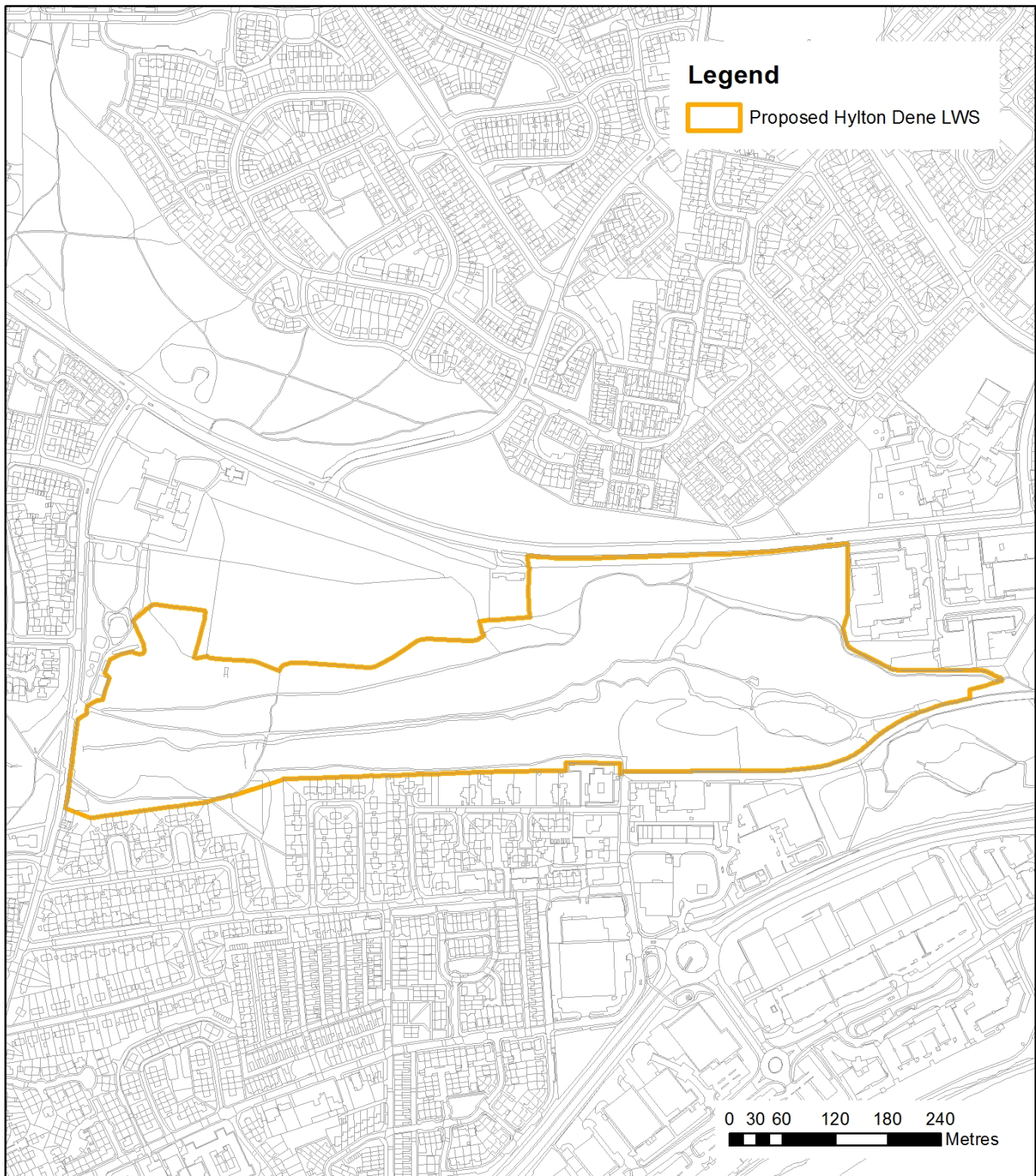
BAP Habitat: Other broadleaf woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Damson Plum	<i>Prunus domestica ssp insitia</i>	Occasional
Bird Cherry	<i>Prunus padus</i>	Rare
Bittersweet	<i>Solanum dulcamara</i>	Rare
Bloody Dock	<i>Rumex sanguineus</i>	Occasional - Rare
Blueish Veilwort	<i>Metzgeria violacea</i>	Occasional

Bramble	<i>Rubus fruticosus</i>	Locally Dominant
Brifid Crestwort	<i>Lophocolea bidentata</i>	Very Locally Frequent
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Occasional
Broadleaved Plantain	<i>Plantago major</i>	Locally Frequent
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Clustered Feather-moss	<i>Rhynchostegium confertum</i>	Occasional
Common Aspen	<i>Populus tremula</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Rare
Common Elder	<i>Sambucus nigra</i>	Frequent
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Feather-moss	<i>Kindbergia praelonga</i>	Abundant
Common Hawthorn	<i>Crataegus monogyna</i>	Abundant
Common Hazel	<i>Corylus avellana</i>	Occasional - Rare
Common Lime	<i>Tilia x vulgaris</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Abundant
Common Osier	<i>Salix viminalis</i>	Occasional
Common Pocket-moss	<i>Fissidens taxifolius</i>	
Common Polypody	<i>Polypodium vulgare sl</i>	Rare
Cornelian Cherry (?)	<i>Cornus mas (?)</i>	Rare
Cotoneaster	<i>Cotoneaster sp.</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Locally Abundant
Creeping Feather-moss	<i>Amblystegium serpens</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Dog Rose	<i>Rosa canina sl</i>	Rare
English Ivy	<i>Hedera helix</i>	Locally Frequent
European Ash	<i>Fraxinus excelsior</i>	Occasional
Field Forget-me-not	<i>Myosotis arvensis</i>	Locally Frequent
Field Maple	<i>Acer campestre</i>	Rare
Flat-leaved Scalewort	<i>Radula complanata</i>	Rare
Forked Veilwort	<i>Metzgeria furcata</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Occasional



Hart's-tongue Fern	<i>Phyllitis scolopendrium</i>	Rare
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional - Frequent
Herb Bennet	<i>Geum urbanum</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Hypnum Moss	<i>Hypnum curpressiforme sl</i>	Occasional
Japanese Rose	<i>Rosa rugosa</i>	Rare
Lords and Ladies	<i>Arum maculatum</i>	Occasional - Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Many-flowered Rose	<i>Rosa multiflora</i>	Rare
Meadow Crane's-bill	<i>Geranium pratense</i>	Rare
Meadowsweet	<i>Filipendula ulmaria</i>	Locally Frequent
Oiser Willow	<i>Salix viminalis</i>	Occasional
Raspberry	<i>Rubus idaeus</i>	Very Locally Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Frequent
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional - Frequent
Rough-stalked Feather- moss	<i>Brachythecium rutabulum</i>	Occasional
Silky-leaved Osier	<i>Salix x holosericea</i>	Occasional
Silverweed	<i>Potentilla anserina</i>	Locally Frequent
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Whitebeam	<i>Sorbus aria</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Rare
White Willow	<i>Salix alba</i>	Rare
Wild Strawberry	<i>Fragaria vesca</i>	Locally Frequent
Wood Bristle-moss	<i>Orthotrichum affine</i>	Locally Frequent

BAP Habitat Type: Lowland Meadow and Pasture		
Common Name	Botanical Name	Abundance (DAFOR)
Angelica	<i>Angelica sylvestris</i>	Occasional
Black Medic	<i>Medicago lupulina</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Coltsfoot	<i>Tussilago farfara</i>	Rare

Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	Frequent/Locally Abundant
Common Catsear	<i>Hypochaeris radicata</i>	Rare
Common Fleabane	<i>Pulicaria dysenterica</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Jacobaea vulgaris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent
Eyebright	<i>Euphrasia nemorosa</i>	Rare/Locally Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Rare
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Hedge Parsley	<i>Torilis japonica</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional/Locally Frequent
Perennial Ryegrass	<i>Lolium perenne</i>	Occasional
Perforate St John's-Wort	<i>Hypericum perforatum</i>	Rare
Red Bartsia	<i>Odontites vernus</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Abundant
Small Timothy	<i>Phleum bertolonii</i>	Rare
Smooth Hawksbeard	<i>Crepis capillaris</i>	Rare
Teasel	<i>Dipsacus fullonum</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Wild Parsnip	<i>Pastinaca sativa</i>	Abundant
Yarrow	<i>Achillea millefolium</i>	Frequent
Yellow Melilot	<i>Melilotus officinalis</i>	Rare
Yellow Rattle	<i>Rhinanthus minor</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 361 585</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 08/06/2020 Scale 1: 6,000</p>
	<p>Project Local Wildlife Ste Boundary Review 2020</p>	
	<p>Subject Proposed Hylton Dene LWS</p>	
	<p>Drawing No. UF 5.36.01.06.029.01</p>	<p>Sheet size A4 Revisions 1</p>

SITE NAME	Hylton Dene
SITE No.	UF 5_36_01_06_029
LOCATION	Hylton NZ367585
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised in 2020
AREA	17.93 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Hylton Dene is an important area of mixed habitats within the built-up area of Sunderland. The site includes a large pond and areas of fen, Magnesian limestone grassland, scrub and secondary woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Lowland fen	1.92
Magnesian Limestone grassland	0.27
Other broadleaf woodland	12.71
Pond	0.36
River and stream	0.26

National and local BAP species:

English Name	Scientific Name	Notes
Mistle thrush	<i>Turdus viscivorus</i>	
Reed Bunting	<i>Emberiza schoeniclus</i>	Nests
Song Thrush	<i>Turdus philomelos</i>	Nests
Starling	<i>Sturnus vulgaris</i>	
Willow warbler	<i>Phylloscopus trochilus</i>	

Other protected species:

English Name	Scientific Name	Notes
Blackcap	<i>Sylvia atricapilla</i>	
Bullfinch	<i>Pyrrhula pyrrhula</i>	
Great spotted woodpecker	<i>Dendrocopos major</i>	
Kingfisher	<i>Alcedo atthis</i>	
Sparrowhawk	<i>Accipiter nisus</i>	

DETAIL

A large diverse site, it contains areas of broadleaf woodland, wet woodland, scrub, ponds and fen and Magnesian limestone grassland habitat. The woodland is largely secondary woodland, with ash, sycamore, beech and other planted species forming the canopy layer. Hawthorn, hazel and elder dominate the shrub layer. Ground flora consists of herb robert, bramble, nettle and wood avens. Some areas on the southern side of the site appear in the 1st edition OS maps, indicating that they are possibly ancient woodland. Ground flora in these areas are dominated by swathes of wild garlic and other ancient woodland indicator species such as bluebell. The relatively high biomass and variety of bryophytes indicates that there has been a continuous cover of trees on these areas of the site for a long period of time. Woodland birds are present but the proximity to housing and the degree of disturbance limit the variety of species. Blackcap, mistle thrush, song thrush and chiffchaff were recorded as being regularly present in the 2010 citation. Consultation data lists sparrowhawk, great spotted woodpecker, willow warbler, bullfinch and kingfisher, which is a schedule 1 species.

The larger pond on site supports a number of waterfowl such as mallard and moorhen, a smaller pond is situated to the north of this. The non-native invasive aquatic plant *Crassula helmsii* is present in the larger of the two ponds. Amphibians such as toads breed in the pond and several common dragonfly species are present. Upstream from and fringing the ponds are areas of fen. The areas of fen are fed from the stream, from flushes coming from the slopes to the north and by small springs. To the west the fen is narrow and species poor. As it heads east it broadens into a tall herb fen of moderate species richness. Of note is an area of fen adjacent to the small pond that is NVC habitat M22. This area is more diverse and an uncommon habitat. Frequent species across the fen include lesser pond sedge, great willowherb, meadowsweet, yellow flag iris, amphibious bistort, reed canary grass, with brooklime, common valerian, ragged robin and devil's bit scabious less frequent in the sward. An area of relict Magnesian limestone grassland is present on part of the site. Some recent scrub clearance management works will help bring this grassland into a more favourable condition. It is currently grazed by rabbits. Indicator species include quaking grass, greater knapweed, eyebright, rough hawkbit, cowslip, hoary plantain, common birds-foot-trefoil, fairy flax and lady's bedstraw.

CONDITION ASSESSMENT

The Pond habitat meets the Local Wildlife Site criteria:

Two ponds are present on site; both located towards the eastern end with one much smaller than the other.

The pond is in an unfavourable condition due to the reduction of open water habitat on site and the shading of banksides and due to the presence of the non-native invasive aquatic plant *Crassula helmsii*. This plant is present at the western end around the fishing pegs of the larger pond.

The Lowland fen habitat meets the Local Wildlife Site criteria:

The fen habitat is currently in an unfavourable condition as a result of scrub encroachment.

The Broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland habitat is currently in a favourable condition. A large proportion of the woodland cover are non-native tree species, but these do not currently result in the woodland being in an unfavourable condition.

The Magnesian Limestone grassland habitat meets the Local Wildlife Site criteria:

An area of relict Magnesian limestone grassland is present on part of the site. Recent scrub clearance will help this area of grassland to recover. The only other management it currently receives is from rabbit grazing. Indicator species present include quaking grass, greater knapweed, eyebright, rough hawkbit, cowslip, hoary plantain, common birds-foot-trefoil, fairy flax and lady's bedstraw. The Permian basal sand present on site, other than dolomite, might explain the lack of blue moor grass. The grassland is still very much in unfavourable condition due to the amount of scrub still present. The magnesian limestone grassland is in unfavourable condition, due to the high proportion of scrub, coarse grasses and limited abundance of positive indicator species.

The Rivers and streams habitat meets the Local Wildlife Site criteria:

The Hylton Dene Burn flows through the site from west to east. Litter is an issue throughout. The burn flows through a mixture of woodland, where it is heavily shaded and areas of fen, particularly tall fen.

CONNECTIVITY

Hylton Dene LWS has strong connectivity to a complex of Local Wildlife Sites. These include: Hylton Colliery Pond; Tilesheds, an area of broadleaf woodland and species rich calcareous grassland; and Bunny Hill, as area of magnesian limestone grassland. Together, along with Hylton Castle Cutting Site of Special Scientific Interest (SSSI), these sites are designated a Local Nature Reserve. The River Wear lies just 400 metres to the south and in between lies Timber Beach LWS. This site is part of the River Wear corridor, a complex containing several semi-natural habitats, including additional LWS and SSSI's. Overall, the site is well connected to the wildlife corridor that follows the River Wear.

LANDSCAPE

The pond and woodland are prominent features of the edge of the built-up area.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

The woodland was surveyed by Gordon Graham in 1993.

The fen was surveyed by Clare O'Riley in 2009. The full site was surveyed by Durham Wildlife Trust in 2018 for an updated management plan.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The site has a footpath along its length and open access throughout.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Other broadleaf woodland:

- Remove litter.
- Control non-native species.
- Maintain woodland structure.

Pond:

- Remove invasive non-native aquatic plant *Crassula helmsii*.

Fen:

- Cut a portion of the fen annually to slow/prevent succession.
- Control scrub annually to slow/prevent succession.

Magnesian Limestone grassland:

- Selective scrub control.
- Annual cut and rake.
- Control rabbit population.

Hylton Dene species list

BAP Habitat: Fen		
Common Name	Botanical Name	Abundance (DAFOR)
Amphibious Bistort	<i>Persicaria amphibia</i>	Occasional - Frequent
Bittersweet	<i>Solanum dulcamara</i>	Locally Frequent
Branched Bur-Reed	<i>Sparganium erectum</i>	Occasional
Brooklime	<i>Veronica beccabunga</i>	Occasional
Brown Sedge	<i>Carex disticha</i>	Locally Abundant
Bugle	<i>Ajuga reptans</i>	Occasional - Rare
Bulrush	<i>Typha latifolia</i>	Rare
Carnation Sedge	<i>Carex panicea</i>	Locally Abundant
Cleavers	<i>Galium aparine</i>	Very Locally Frequent
Clustered Dock	<i>Rumex conglomeratus</i>	Occasional
Coltsfoot	<i>Tussilago farfara</i>	Rare
Common Fleabane	<i>Pulicaria dysenterica</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Locally Frequent
Common Knapweed	<i>Centaurea nigra</i>	Very Locally Frequent
Common Nettle	<i>Urtica dioica</i>	Very Locally Frequent
Common Sedge	<i>Carex nigra</i>	Rare
Common Valerian	<i>Valeriana officinalis</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Very Locally Frequent
Crack Willow	<i>Salix x fragilis</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Curled Hook-Moss	<i>Palustriella commutata</i>	Very Locally Frequent
Devil's Bit Scabious	<i>Succisa pratensis</i>	Very Locally Frequent
False Oat Grass	<i>Arrhenatherium elatius</i>	Locally Frequent
Fern-Leaved Hook-Moss	<i>Cratoneuron filicinum</i>	Locally Abundant
Field Horsetail	<i>Equisetum arvense</i>	Locally Frequent
Field Sow-Thistle	<i>Sonchus arvensus</i>	Rare
Fools Watercress	<i>Apium nodiflotum</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Locally Frequent
Great Horsetail	<i>Equisteum telmateia</i>	Locally Frequent

Great Willowherb	<i>Epilobium hirsutum</i>	Abundant
Grey Willow	<i>Salix cinerea</i>	Rare
Hairy Sedge	<i>Carex hirta</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hemlock Water Dropwort	<i>Oenanthe crocata</i>	Frequent
Hybrid Marsh Orchid	<i>Dactylorhiza x venusta</i>	Rare
Jointed Rush	<i>Juncus articulatus</i>	Rare
Kneiff's Feather-Moss	<i>Leptodictyum riparium</i>	Occasional
Lesser Pond Sedge	<i>Carex acutiformis</i>	Locally Frequent
Long-Stalked Yellow Sedge	<i>Carex lepidocarpa</i>	Very Locally Frequent
Marsh Arrow-Grass	<i>Triglochin palustris</i>	Rare
Marsh Horsetail	<i>Equisetum palustre</i>	Locally Frequent
Marsh Marigold	<i>Caltha palustris</i>	Occasional
Marsh Pennywort	<i>Hydrocotyle vulgaris</i>	Locally Frequent
Marsh Thistle	<i>Cirsium palustre</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Abundant
Northern Marsh Orchid	<i>Dactylorhiza purpurella</i>	Occasional - Rare
Osier Willow	<i>Salix viminalis</i>	Occasional
Pointed Spear-Moss	<i>Calliergonella cuspidata</i>	Occasional
Ragged Robin	<i>Silene flos-cuculi</i>	Rare
Reed Canary Grass	<i>Phalaris arundinacea</i>	Frequent
River Feather-Moss	<i>Brachythecium rivulare</i>	Occasional
Rough-Stalked Feather-Moss	<i>Brachythecium rutabulum</i>	Frequent
Rough-Stalked Meadow-Grass	<i>Poa trivialis</i>	Abundant
Scaly Male Fern	<i>Dryopteris borrieri</i>	Rare
Silky-Leaved Osier	<i>Salix x smithiana</i>	Occasional
Soft Rush	<i>Juncus effusus</i>	Rare
Spearmint	<i>Mentha spicata</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Water Horsetail	<i>Equisetum fluviatile</i>	Occasional
Water Mint	<i>Mentha aquatica</i>	Occasional - Frequent
Watercress	<i>Nasturtium officinale</i>	Rare
Wavy Bittercress	<i>Cardamine flexuosa</i>	Frequent
White Dead Nettle	<i>Lamium album</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Frequent

Yellow Flag Iris	<i>Iris pseudacorus</i>	Rare
------------------	-------------------------	------

BAP Habitat: Magnesian Limestone Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Agrimony	<i>Agrimonia eupatoria</i>	Locally Frequent
Barren Strawberry	<i>Potentilla sterilis</i>	Frequent
Beardless-Moss	<i>Weissia sp.</i>	Rare
Black Medick	<i>Medicago lupulina</i>	Occasional - Rare
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Cock's-Foot	<i>Dactylis glomerata</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Abundant
Common Birds-foot Trefoil	<i>Lotus corniculatus</i>	Frequent
Common Dog Violet	<i>Viola riviniana</i>	Occasional
Common Eyebright	<i>Euphrasia nemorosa</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Cowslip	<i>Primula veris</i>	Frequent
Creeping Thistle	<i>Cirsium vulgare</i>	Rare
Dandelion	<i>Taraxacum officinale</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Downy Oat-Grass	<i>Avenula pubescens</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Occasional - Frequent
False Brome	<i>Brachypodium sylvaticum</i>	Abundant
Field Wood-Rush	<i>Luzula campestris</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Abundant
Glaucous Sedge	<i>Carex flacca</i>	Abundant
Greater Knapweed	<i>Centaurea scabiosa</i>	Rare
Hairy Sedge	<i>Carex hirta</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Locally Frequent
Hoary Plantain	<i>Plantago media</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Occasional
Meadow Cranesbill	<i>Geranium pratense</i>	Locally Frequent
Mouse-Ear Hawkweed	<i>Pilosella officinarum</i>	Rare
Musk Thistle	<i>Carduus nutans</i>	Rare

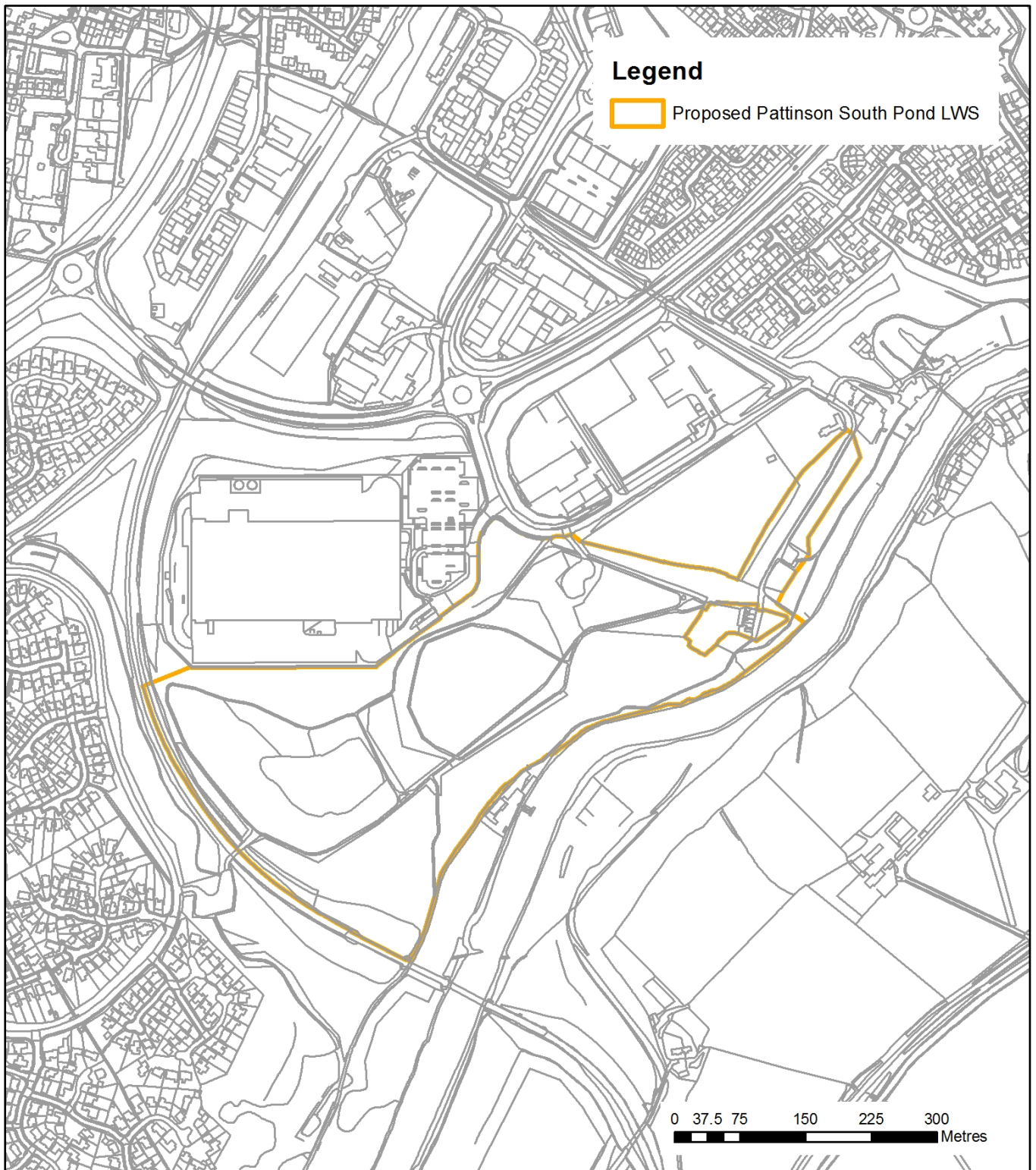
Quaking Grass	<i>Briza media</i>	Frequent
Ragwort	<i>Senecio jacobaea</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Abundant
Red Fescue	<i>Festuca rubra</i>	Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rough Hawkbit	<i>Leontodon hispidus</i>	Abundant
Rough-Stalked Meadow-Grass	<i>Poa trivialis</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional
Smooth Bedstraw	<i>Galium cruciata</i>	Locally Frequent
Smooth Hawksbeard	<i>Crepis capillaris</i>	Rare
Smooth-Stalked Meadow-Grass	<i>Poa pratensis</i>	Occasional
White Clover	<i>Trifolium repens</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Occasional
Wild Mignonette	<i>Reseda lutea</i>	Rare
Wild Parsnip	<i>Pastinaca sativa</i>	Occasional
Wild Strawberry	<i>Fragaria vesca</i>	Locally Frequent
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow Oat-Grass	<i>Trisetum flavescens</i>	Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant

BAP Habitat: Pond		
Common Name	Botanical Name	Abundance (DAFOR)
Amphibious Bistort	<i>Persicaria amphibia</i>	Occasional
Broad-leaved Pondweed	<i>Potamogeton natans</i>	Locally Dominant
Common Duckweed	<i>Lemna minor</i>	Rare
Water Horsetail	<i>Equisetum fluviatile</i>	Locally Dominant
Water Lily	<i>Nymphaea taxon</i>	Rare
Water Plantain	<i>Alisma plantago-aquatica</i>	Rare
Yellow Flag Iris	<i>Iris pseudacorus</i>	Locally Dominant


BAP Habitat: Ancient Semi-Natural (and other) Woodland: Canopy		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Frequent
Beech	<i>Fagus sylvatica</i>	Locally Dominant
Bifid Crestwort	<i>Lophocolea bidentata</i>	Occasional
Bindweed	<i>Calystegia sp.</i>	Locally Frequent
Bluebell	<i>Hyacinthoides non-scripta</i>	Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequently/ Locally Abundant
Broad Buckler Fern	<i>Dryopteris dilatata</i>	Occasional
Broad-Leaved Dock	<i>Rumex obtusifolius</i>	Rare
Broad-Leaved Willowherb	<i>Epilobium montanum</i>	Frequent
Bush Vetch	<i>Vicia sepium</i>	Rare
Cherry Plum	<i>Prunus cerasifera</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Clustered Feather-Moss	<i>Rhynchostegium confertum</i>	Occasional
Common Dog-Violet	<i>Viola riviniana</i>	Occasional - Rare
Common Feather-Moss	<i>Kindbergia praelonga</i>	Abundant
Common Hogweed	<i>Heracleum sphondylium</i>	Locally Abundant
Common Nettle	<i>Urtica dioica</i>	Locally Dominant
Common Pocket-Moss	<i>Fissidens taxifolius</i>	Occasional
Common Smoothcap	<i>Atrichum undulatum</i>	Occasional - Rare
Common Tamarisk-Moss	<i>Thuidium tamariscinum</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Locally Abundant
Creeping Feather-Moss	<i>Amblystegium serpens</i>	Occasional
Cypress-Leaved Plaitmoss	<i>Hypnum cupressiforme</i>	Rare
Downy Birch	<i>Betula pubescens</i>	Rare
Dutch Elm	<i>Ulmus x hollandica</i>	Rare
Elder	<i>Sambucus nigra</i>	Frequent
English Elm	<i>Ulmus procera</i>	Occasional
English Oak	<i>Quercus robur</i>	Rare
Fern-Leaved Hook-Moss	<i>Cratoneuron filicinum</i>	Rare
Field Elm	<i>Ulmus minor</i>	Rare

Field Maple	<i>Acer campestre</i>	Rare
Fox-Tail Feather-Moss	<i>Thamnobryum alopecurum</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Gooseberry	<i>Ribes ura-crispa</i>	Rare
Great Scented Liverwort	<i>Conocephalum conicum</i>	Very Locally Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Locally Frequent
Grey Poplar	<i>Populus x canescens</i>	Occasional
Grey Willow	<i>Salix cinerea</i>	Rare
Ground Elder	<i>Aegopodium podagraria</i>	Rare
Hair-Pointed Feather-Moss	<i>Cirriphyllum piliferum</i>	Occasional
Hart's Tongue Fern	<i>Phyllitis scolopendrium</i>	Rare
Hart's-Tongue Thyme-Moss	<i>Plagiomnium undulatum</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Dominant
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Locally Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Occasional
Horn Calcareous Moss	<i>Mnium hornum</i>	Occasional
Hybrid Bluebell	<i>Hyacinthoides x massartiana</i>	Occasional
Ivy	<i>Hedera helix</i>	Locally Dominant
Lesser Celandine	<i>Ficaria verna ssp verna</i>	Occasional
Lesser Featherwort	<i>Plagiochila porelloides</i>	Occasional - Rare
Lesser Pocket-Moss	<i>Fissidens bryoides</i>	Frequent - Abundant
Liverwort	<i>Pellia sp.</i>	Very Locally Frequent
London Pride	<i>Saxifrage x urbium</i>	Rare
Lords-and-Ladies	<i>Arum maculatum</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	
Many-Fruited Thyme-Moss	<i>Plagiomnium affine</i>	Locally Frequent
Meadow Buttercup	<i>Ranunculus repens</i>	Locally Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Locally Frequent
Orange Whitebeam	<i>Sorbus croceocarpa</i>	Rare
Pendulous Sedge	<i>Carex pendula</i>	Rare
Pignut	<i>Conopodium majus</i>	Occasional

Pointed Spear-Moss	<i>Calliergonella cuspidata</i>	Rare
Primrose	<i>Primula vulgaris</i>	Occasional
Ramsons	<i>Allium ursinum</i>	Locally Dominant
Red Campion	<i>Silene dioica</i>	Occasional - Rare
Red Currant	<i>Ribes rubrum</i>	Rare
Red Veined Sorrel	<i>Rumex sanguineus</i>	Occasional
Rosebay Willowherb	<i>Chamaerion angustifolium</i>	Very Locally Frequent
Rough-Stalked Feather-Moss	<i>Brachythecium rutabulum</i>	Frequent
Rough-Stalked Meadow-Grass	<i>Poa trivialis</i>	Frequent - Abundant
Rowan	<i>Sorbus aucuparia</i>	Rare
Scaly Male Fern	<i>Dropteris borrieri</i>	
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Abundant - Dominant
Tufted Hair-Grass	<i>Deschampsia cespitosa</i>	Occasional
Turkey Oak	<i>Quercus cerris</i>	Rare
Variable-Leaved Crestwort	<i>Lophocolea heterophylla</i>	Rare
Wavy Bittercress	<i>Cardamine flexuosa</i>	Frequent
White Dead Nettle	<i>Lamium album</i>	Locally Frequent
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Frequent - Abundant
Wood Bristle-Moss	<i>Orthotrichum affine</i>	Occasional
Wood Burdock	<i>Artium nemorosum</i>	Rare
Wood Sedge	<i>Carex sylvatica</i>	Occasional - Rare
Wood Sorrel	<i>Oxalis acetosella</i>	Occasional - Rare
Wych Elm	<i>Ulmus glabra</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 302 557 / NZ 307 540	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 29.04.2020
	Subject Proposed Pattison South Pond LWS	Scale 1: 6,000
	Drawing No. UF 5.36.01.06.039.01	Sheet size A4

SITE NAME	Pattinson South Pond.
SITE No.	UF 5_36_01_06_034
LOCATION	NZ 319548
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised 2020
AREA	16.55 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

A pond surrounded by mature plantation other broadleaf woodland and species rich grassland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen	0.26
Lowland meadows and pasture	2.47
Other broadleaf woodland	11.78
Pond	0.29

National and local BAP species:

English Name	Scientific Name
Bat	<i>Pipistrellus pipistrellus</i>
Common toad	<i>Bufo bufo</i>
Otter	<i>Lutra lutra</i>

Other protected species:

English Name	Scientific Name
Common Frog	<i>Rana temporaria</i>

DETAIL

Pattinson South Pond has developed on the site of an old claypit and comprises an area of open water surrounded by a variable width of fen vegetation, listed separately in the section below. The open water holds stands of broad-leaved, fennel and Canadian pondweeds; curled pondweed and *Crassula helmsii* was also reported and there is no reason to suspect their loss. White waterlily has been introduced.

Surrounding the site is mature woodland and there is a large stand of Lowland meadows and pasture to the north and east of the pond, but this has not recently been surveyed.

CONDITION ASSESSMENT

The Pond habitat meets the Local Wildlife Site criteria:

The pond meets the criteria by virtue of its size and continued presence. Furthermore, considered with the swamp, it can be considered a 'pond of high wildlife value', because it harbours at least 15 wetland plant species.

There is a transition from open water to swamp along most of the pond's circumference; in accordance with DBAP guidelines this is listed separately here as lowland fen. Open water grades to an outer zone of reedmace swamp, which in turn is replaced by shallower, richer inundation-zone vegetation of common spike-rush, water horsetail and jointed rush. Associated with this richer zone are water-plantain, clustered dock, hoary willowherb, water forget-me-not and New Zealand pigmyweed *Crassula helmsii*. A few trees of common alder diversify the swamp structurally. In the north-eastern margin, there is a band of pale, calcareous clay. The pond's surrounding slopes in these areas have fairy-flax and glaucous sedge, with the inundation-zone holding a sparse vegetation of toad rush and reflexed saltmarsh-grass. The pond is currently in unfavourable condition (i) because of pollution, (ii) on account of an abundance of New Zealand pigmyweed and (iii) because of the presence of fish, although given the site's nature, use and history their continued presence is a moot point.

The Lowland fen meets the Local Wildlife Site criteria:

A well-defined zone of neutral grassland occupies most of the eastern half of the site. Whilst not ancient, it is diverse and colourful, meeting the DBAP's definition of lowland meadows and pasture by virtue of frequent bird's-foot trefoil, tufted vetch, meadow vetchling and, locally, yellow-rattle. False oat-grass is often dominant, though less so in a central zone over shallower soil, where herbs are correspondingly more abundant. Other species present include rough and lesser hawkbits, knapweed, hoary ragwort, red and white clover and a diversity of scattered scrub. Although not defined as such in fen condition guidelines, New Zealand pigmyweed is considered an undesirable species. On these grounds the fen is in unfavourable condition.

The Lowland meadow habitat meets the Local Wildlife Site criteria:

The grassland is currently in favourable condition.

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

The area of mature plantation Other Broadleaf Woodland consists of field maple, hazel, ash, oak, sycamore and alder, with dense blackthorn thickets. Hawthorn is abundant, particularly along the footpath to the west, which has planted hawthorn scrub along its edge. Ground flora is poor with wood dock, lords and ladies, broadleaved willowherb, garlic mustard, hogweed, bramble, nettle, herb Robert, male fern and wood avens. Japanese rose and Japanese knotweed are present on site which are both WCA Schedule 9 species. The latter was located at NZ 32271 54998. The woodland qualifies at the DBAP habitat Other Broadleaf Woodland but is in poor condition due to the lack of deadwood habitat, lack of veteran trees, the number of non-natives present and the lack of woodland indicator species.

CONNECTIVITY

The proximity of James Steel Park to the Wear corridor ensures good connectivity with a wide range of other LWS, some of them large, such as Princess Anne Park and Washington Wildfowl Park. The presence of reflexed saltmarsh-grass may be evidence of wildfowl occasionally arriving at this LWS from the coast.

LANDSCAPE

Although the site is anthropogenic and sited in a hollow, its fringing belt of trees screens it from the surrounding residential areas and creates the sense of a woodland clearing, which probably contributes to its popularity as a place for recreation.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Other broadleaf woodland was surveyed in 2019 by Durham Wildlife Services for the boundary review.

SITE MANAGEMENT

Pond:

- Invasive species control – *Crasula helmsii*

Other broadleaf woodland:

- Increase deadwood habitat
- Reduce non-native species
- Invasive species control – Japanese rose and Japanese knotweed.

Pattinson South Pond species list

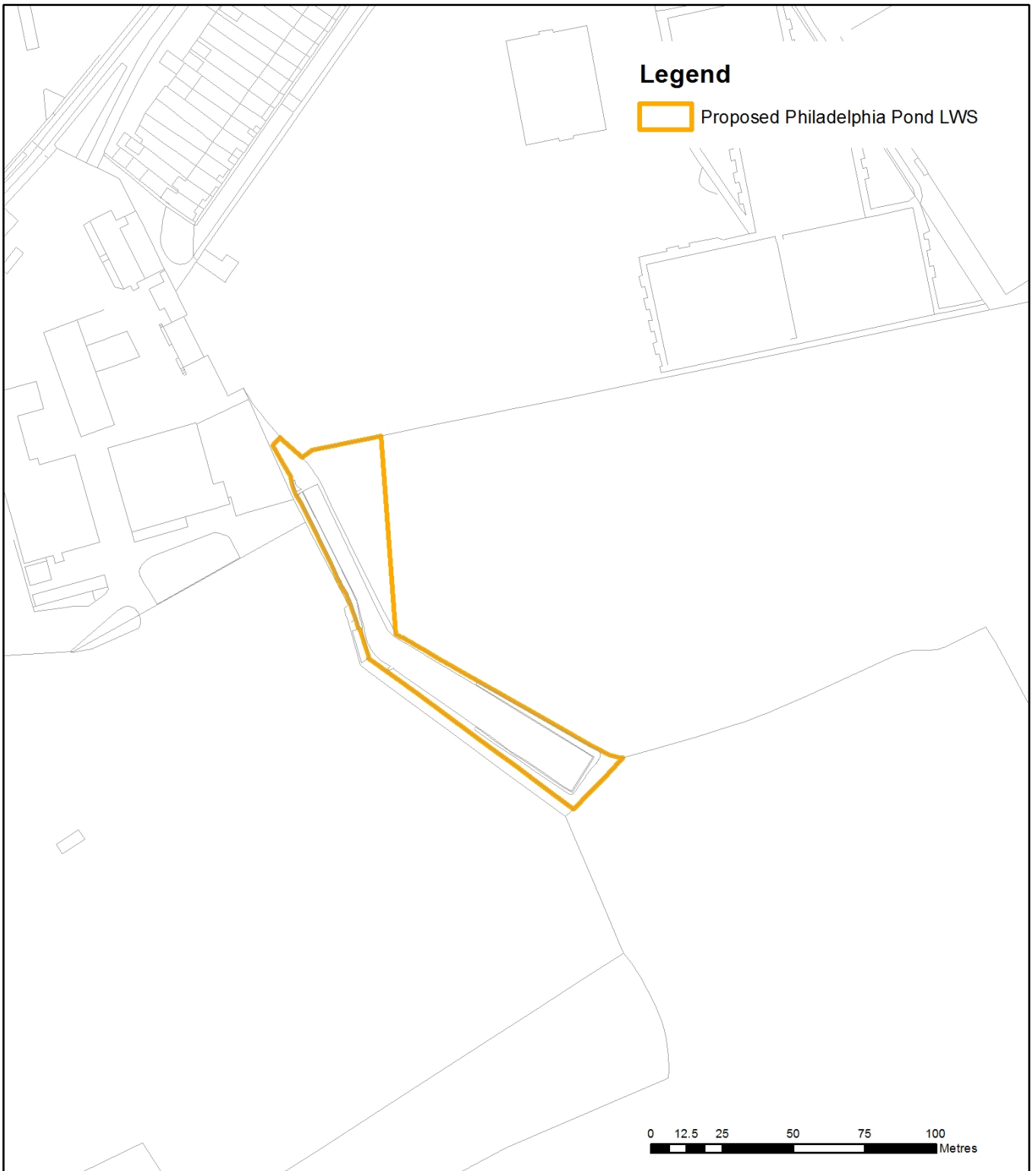
BAP Habitats: Pond, Lowland fen, Lowland meadows and pasture		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Rare
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	Occasional
Black Medick	<i>Medicago lupulina</i>	Occasional
Bramble	<i>Rubus fruticosus</i> agg.	Frequent
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Broad-leaved Pondweed	<i>Potamogeton natans</i>	Frequent
Brooklime	<i>Veronica beccabunga</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare
Canadian Pondweed	<i>Elodea Canadensis</i>	Occasional
Clustered Dock	<i>Rumex conglomerates</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Coltsfoot	<i>Tussilago farfara</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Ryegrass	<i>Lolium perenne</i>	Rare
Common Sallow	<i>Salix cinerea</i>	Rare
Common Spike-rush	<i>Eleocharis palustris</i>	Abundant
Cow-parsley	<i>Anthiscus sylvestris</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
Curled Dock	<i>Rumex crispus</i>	Occasional
Curled Dock	<i>Rumex crispus</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Dandelion	<i>Taraxacum officinale</i> agg.	Frequent
Dog Rose	<i>Rosa canina</i>	Occasional
Fairy Flax	<i>Linum catharticum</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Fennel Pondweed	<i>Potamogeton pectinatus</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Frequent
Field Maple	<i>Acer campestre</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Rare
Goat's-beard	<i>Tragopogon pratensis</i>	Rare
Gorse	<i>Ulex europaeus</i>	Rare
Greater Bird's-foot Trefoil	<i>Lotus uliginosus</i>	Rare

Greater Reedmace	<i>Typha latifolia</i>	Abundant
Greater Willowherb	<i>Epilobium hirsutum</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hemlock Water-dropwort	<i>Oenanthe crocata</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Frequent
Hoary Willowherb	<i>Epilobium parviflorum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Knapweed	<i>Centaurea nigra</i>	Occasional
Lesser Duckweed	<i>Lemna minor</i>	Occasional
Lesser Hawkbit	<i>Leontodon saxatilis</i>	Rare
Marsh Horsetail	<i>Equisetum palustre</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Abundant
Mouse-ear Chickweed	<i>Cerastium fontanum</i>	Occasional
New-Zealand Pigmyweed	<i>Crassula helmsii</i>	Frequent
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Olive Willow	<i>Salix elaeagnos</i>	Rare
Perennial Sowthistle	<i>Sonchus arvensis</i>	Rare
Prickly Sowthistle	<i>Sonchus asper</i>	Rare
Red Bartsia	<i>Odontites verna</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Abundant
Reflexed Saltmarsh-grass	<i>Puccinellia distans</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Rough Meadow-grass	<i>Poa trivialis</i>	Abundant
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Occasional
Silverweed	<i>Potentilla anserina</i>	Rare
Soft Downy-rose	<i>Rosa mollis</i>	Rare
Soft Rush	<i>Juncus effuses</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Spiked Water-milfoil	<i>Myriophyllum spicatum</i>	Rare
Sweet-briar	<i>Rosa rubiginosa</i>	Rare
Tall Melilot	<i>Melilotus altissima</i>	Rare
Timothy	<i>Phleum pratense</i>	Occasional
Toad Rush	<i>Juncus bufonius</i>	Rare
Tufted Forget-me-not	<i>Myosotis laxa ssp. Cespitosa</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Frequent
Upright Hedge-parsley	<i>Torilis japonica</i>	Rare



Water Horsetail	<i>Equisetum fluviatile</i>	Abundant
Water Plantain	<i>Alisma plantago-aquatica</i>	Frequent
Watercress	<i>Rorippa nasturtium-aquaticum</i>	Rare
White Clover	<i>Trifolium repens</i>	Frequent
White Waterlily	<i>Nymphaea alba</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow Rattle	<i>Rhinanthus minor</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant

BAP Habitat Type: Other Broadleaf Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Frequent/Locally Dominant
Bramble	<i>Rubus fruticosus</i>	Frequent /Locally Abundant
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broadleaved Plantain	<i>Plantago major</i>	Rare
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Chickweed	<i>Stellaria media</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common Alder	<i>Alnus glutinosa</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Corsican Pine	<i>Pinus nigra</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Soft Grass	<i>Holcus mollis</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional/ Locally Frequent
Dogwood	<i>Cornus sanguinea</i>	Rare
Elder	<i>Sambucus nigra</i>	Frequent
English Oak	<i>Quercus robur</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Maple	<i>Acer campestre</i>	Frequent
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Occasional
Grey Poplar	<i>Populus x canescens</i>	Occasional

Hawthorn	<i>Crataegus monogyna</i>	Abundant
Hazel	<i>Corylus avellana</i>	Occasional/Locally Abundant
Hedge Parsley	<i>Torilis japonica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Occasional
Hybrid Black Poplar	<i>Populus x canadensis</i>	Occasional
Ivy	<i>Hedera helix</i>	Occasional/Locally Abundant
Japanese Knotweed	<i>Reynoutria japonica</i>	Rare
Japanese Rose	<i>Rosa rugosa</i>	Rare
Lords and Ladies	<i>Arum maculatum</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Nettle	<i>Urtica dioica</i>	Frequent /Locally Abundant
Nipplewort	<i>Lapsana communis</i>	Rare
Olive Willow	<i>Salix eleagnos</i>	Occasional
Plum	<i>Prunus domestica</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Occasional
Sitka Spruce	<i>Picea sitchensis</i>	Rare
Smooth Sowthistle	<i>Sonchus oleraceus</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Tufted Vetch	<i>Vicia cracca</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 338 525	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.11.2020 Scale 1: 2,000
	Project Local Wildlife Site Boundary Review 2020	
	Subject Proposed Philadelphia Pond LWS	
	Drawing No. UF 5.36.01.07.006.01	Revisions

SITE NAME	Philadelphia Pond
SITE No.	UF 5_36_01_07_006
LOCATION	New Herrington NZ338525
STATUS	Proposed Local Wildlife Site
AREA	0.32 ha
DATE OF SITE VISIT	June 2009
OWNERSHIP	Private

SITE DESCRIPTION

A large pond on the edge of an urban area.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen/marsh	0.1
Pond	0.14

DETAIL

The local site consists of a 0.14 hectare pond and 0.1 hectares of adjacent marshy grassland with small pools.

The pond, an old, disused reservoir, has clean water and supports a range of aquatic species, including reed mace, branched bur-reed, water plantain. Floating aquatics are mainly common pond weed and common duckweed.

Frogs, toads and smooth newts have been recorded from the pond, which also has three-spined sticklebacks.

The pond is behind a two-metre security fence, with difficult access from the north end, and is consequently fairly undisturbed.

CONDITION ASSESMENT:

The pond and marsh meets the Local Wildlife Site criteria

The marsh on the north east side of the pond has a variety of rushes, including soft rush, hard rush and jointed rush. Other wetland species include common spotted and northern marsh orchids.

Frogs, toads and smooth newts have been recorded from the marsh.

At the time of the 2009 survey, the marsh was apparently much drier than usual, as there had been little rain.

The marsh is bordered by a well-used informal footpath.

CONNECTIVITY

Philadelphia Pond is fairly isolated from other ponds, which are scarce in this part of Sunderland. There is some interchange of waterfowl with the nearby recently created Herrington Country Park, which has a number of lakes.

Philadelphia Pond is an important component of the wildlife corridor between Penshaw Hill and Hetton-le-Hole.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in July 2009 by J L Durkin and A McLay.

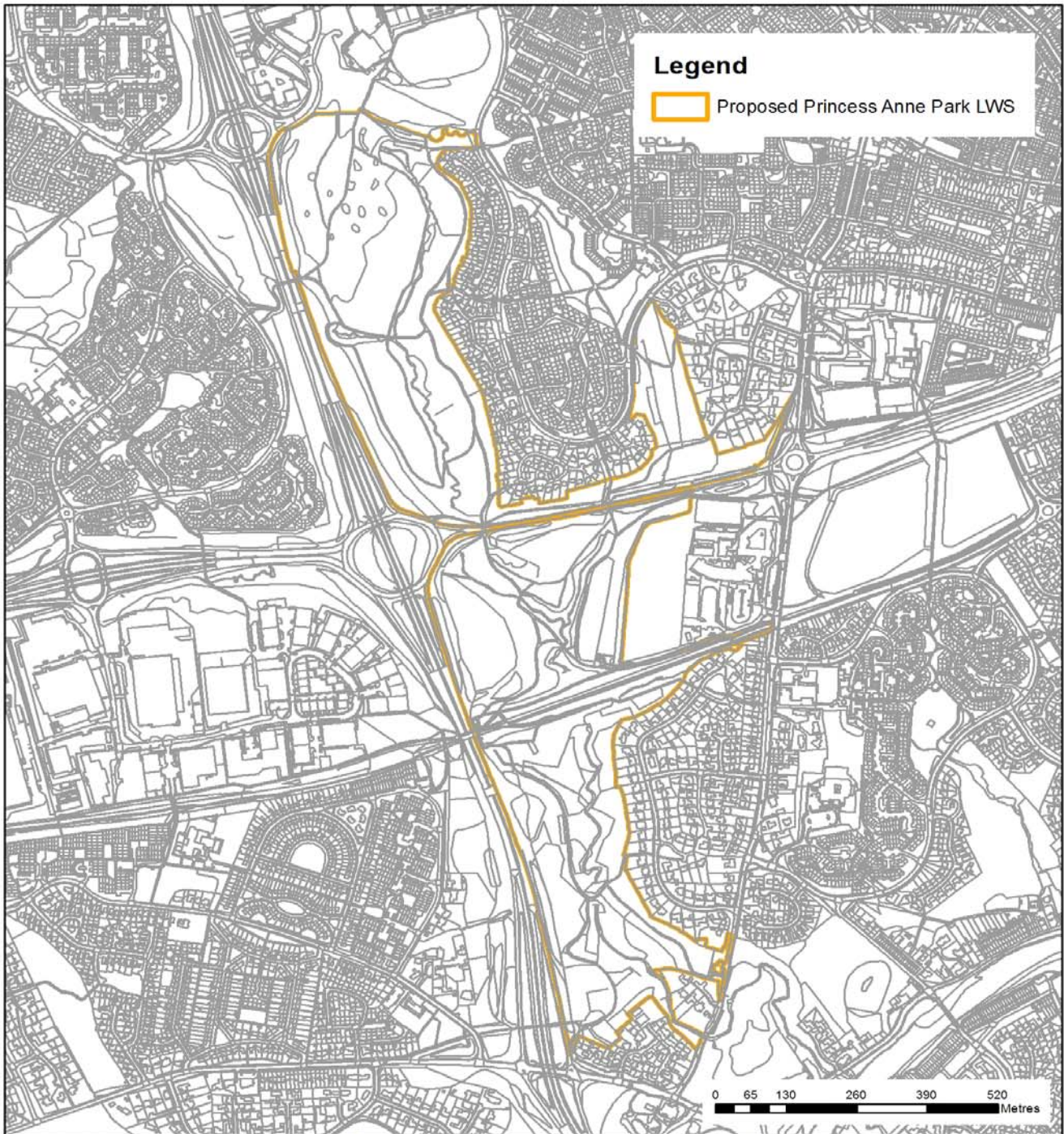
SITE MANAGEMENT

The pond has had no management in recent years, though little management is required. Future survey and management would benefit from the establishment of an access gate.



For details of pond and marsh management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".

Philadelphia Pond species list

English Name	Scientific Name	DAFOR
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Bramble	<i>Rubus fruticosus</i> agg.	Occasional
Branched Bur-reed	<i>Sparganium erectum</i>	Frequent
Broad-leaved Pondweed	<i>Potamogeton natans</i>	Locally Frequent
Bulrush	<i>Typha latifolia</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional
Common Duckweed	<i>Lemna minor</i>	Abundant
Common Figwort	<i>Scrophularia nodosa</i>	Frequent
Common Frog	<i>Rana temporaria</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Common Toad	<i>Bufo bufo</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
D. fuchsii x purpurella	<i>Dactylorhiza x venusta</i>	Occasional
Dog-rose	<i>Rosa canina</i> agg.	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Floating Sweet-grass	<i>Glyceria fluitans</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Frequent
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Foxtail	<i>Alopecurus pratensis</i>	Occasional
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Occasional
Rabbit	<i>Oryctolagus cuniculus</i>	Occasional
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Smooth Newt	<i>Triturus vulgaris</i>	Present
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Tall Fescue	<i>Festuca arundinacea</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Abundant
Yorkshire-fog	<i>Holcus lanatus</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 301 552	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 29.04.2020 Scale 1: 10,000
	Project Local Wildlife Site Boundary Review 2020	
	Subject Proposed Princess Anne Park LWS	
	Drawing No. UF 5.36.01.06.039.01	Revisions 1

SITE NAME	Princess Anne Park
SITE No.	UF 5_36_01_06_039
LOCATION	NZ 302557 - 307540
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised in 2020
AREA	56.05 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council and Private

SITE DESCRIPTION

A valley harbouring an extensive mosaic of woodland, scrub, fen and neutral grassland, centred upon the Oxclose Burn. Although many of the habitats are of recent origin, there are fragments of ancient woodland and pasture.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Ancient semi-natural woodland	1.23
Lowland fen	2.97
Lowland meadow and pasture	2.28
Other broadleaf woodland	40.92
Stream	0.71

National and local BAP species:

English Name	Scientific Name	Notes
Hedgehog	<i>Erinaceus europaeus</i>	
Song Thrush	<i>Turdus philomelos</i>	
Water Vole	<i>Arvicola terrestris</i>	

DETAIL

The most important woodland in nature conservation terms lies around the Oxclose Burn in the central and southern parts of the site, where in a few places very old standards and a characteristic ground flora mark out remnants of ancient woodland. Here, oak (mostly sessile) and ash are the main canopy trees, with scattered alders along the burn. A moderately well-developed shrub layer includes hazel, hawthorn, wild cherry, elder and rowan. Relatively large stands of bluebell occur in the ground-flora, with smaller amounts of dog's mercury, wood anemone, wood sorrel, wood sedge, wood melick, wood speedwell, bearded couch, ramsons, wild arum and common dog-violet. The humidity of this area, closest to the burn, is marked out by male, scaly male, lady, broad buckler and hart's-tongue ferns and, locally, carpets of bryophytes. The small size, the fragmented nature of the woodland and the disturbance to its ground flora by heavy public use makes the precise determination of the woodland type difficult. Stream-

sections show variable drift over shales, suggesting the area may once have mainly held W10e Oakwood. Several of the standard trees are of great age and show some of the features associated with veterans, though they seldom meet the girth requirements.

CONDITION ASSESSMENT

The Ancient semi-natural woodland meets the Local Wildlife Site criteria:

The majority of the woodland is of recent planted origin, with closely spaced, even-aged stands principally of Norway maple, sycamore, ash and grey alder. Wild cherry and oak are more local and there is a small percentage of conifer, mostly Scot's pine and hybrid larch. In this type of woodland there is generally only a local shrub layer of elder and the ground flora comprises ubiquitous species such as bramble, nettle and wood avens. In one or two places in the southern part of the site there is a low canopy of hawthorn with little or no ground-flora, reflecting recent natural succession from grassland. This secondary woodland is of value in buffering the ancient stands from the desiccation and disturbance of the woodland edge.

The woodland is currently in unfavourable condition due to damage occasioned by informal recreation - soil compaction and loss of ground flora and shrub layers, plus the lighting of fires in the boles of ancient trees.

The newly added furthest east on the northern stretch of the site is well established and appears to have been in situ a long time. It is open with numerous veteran horse chestnut, beech and silver birch trees present. Ground flora is also of higher quality within this woodland, with broadbuckler fern, male fern, sanicle, wood avens, herb Robert, wood millet, common dog violet, bluebell and enchanter's nightshade. The survey for this woodland was late in the season for woodland ground flora so the DAFOR in Species List 2 might be under-represented. Rhododendron was also locally abundant and Japanese Knotweed is present within a few locations (NZ 30690 55337 and NZ30670 55339) and should be treated urgently.

This woodland fails its condition assessment due to the percentage of non-native species present and lack of deadwood habitat (some lying deadwood is present).

The Other broadleaved woodland meets the Local Wildlife Site criteria:

On the west-facing slopes of the Oxclose Burn in the northern section of the site, tall-herb fen of meadowsweet is extensively developed. Existing in mosaics with tall grassland and on soil of varying depth and moisture level, it is colourful and quite rich, with notable associates being wild angelica, marsh and water horsetails, hogweed, marsh thistle, meadow vetchling, meadow foxtail, tufted vetch, sorrel, hairy sedge, Yorkshire fog, creeping soft-grass and common valerian.

The non-ancient broadleaved woodland is in unfavourable condition on account of (i) less than 90% native species in the canopy; (ii) a sparse shrub layer in most places falling well short of 20% cover and (iii) unacceptably low biomass of both fallen and standing dead wood.

Newly added woodland across the northern part of the site, north of the A195 road, is all of similar species composition (Species list number 1). The most northern area of woodland is abundant in sycamore, beech, silver birch and includes a stand of scots pine. The western area is similar but elm and willow species more frequent. Ground flora is poor, with bramble, nettle, hedge woundwort, herb Robert, wood avens, male fern and broadbuckler fern. Some path edges are dotted with non-native shrubs such as cotoneaster and steeple-bush. Veteran hybrid poplar trees are present but overall this woodland lack in veteran trees. It also fails its condition assessment due to the lack of deadwood habitat, the percentage of non-native species and poor ground flora.

Newly added woodland south of the A195 road is again, of similar composition (Species List 3). Oak, ash and alder are most frequent here, with sycamore only occasional. The exception to this is the woodland that runs parallel to Fatfield Park Road, where sycamore is abundant. Ash dieback is present on site. In the woodland parcels adjacent to the A195/A182 roundabout, scots pine is more frequent, with silver birch and wych elm. Ground flora is largely poor, with scaly male fern, broad buckler fern, lords and ladies, foxglove, wood speedwell, hairy brome, wood sedge and pignut all present but rare. More frequent are wood avens, herb Robert, nettle and bramble. This woodland fails its condition assessment due to a lack of veteran trees, lack of deadwood habitat, poor ground flora and although native species are more abundant, they do not make up over 80% of the canopy.

The Lowland fen community meets the Local Wildlife Site criteria:

Neutral BAP grasslands on this site are of two sorts. Some false oat-grass grasslands just harbour enough diversity to pass the DBAP criteria on species-richness. They are dubiously ancient and exist as gradations to non-qualifying species-poor stands of the same vegetation and for some at least a search of historic land-use records may prove them to be secondary in origin. This is the predominant type by area, including the large field on the central unit of the site. A second, rarer type has a composition and context which suggests it is genuinely old pasture, a relict of the pastoral landscape from before the construction of the new town, surviving on a valley-side in the northern part of the site at approx NZ 303551. This second type is of considerably greater conservation interest than the first. sweet vernal-grass, common bent and red fescue confer a shorter, finer appearance to the turf and are accompanied by a suite of species which collectively indicate old grassland: pignut, cowslip, rough hawkbit, golden oat-grass, zig-zag clover, greater burnet, oval sedge, square-stemmed and hairy Saint-John's-worts, sneezewort, fairy flax, meadow fescue and pepper saxifrage.

The lowland fen community is currently in favourable condition.

The Lowland meadows and pasture community meets the Local Wildlife Site criteria:

The Oxclose Burn is shaded for most of its length, either by woodland or dense vegetation overhanging what is often a steep section lacking characteristic wetland plants. The few encountered were concentrated at a man-made pool at the northern end of the site: yellow flag iris, reed, greater reedmace and common spike-rush. At the extreme southern end of the burn are localised stands of Himalayan balsam. Water vole has been recorded from at least four localities along the whole length of the burn and brown trout was seen in the Oxclose Burn during the 2010 survey.

This Lowland pasture community is currently in favourable condition, although there has probably been some loss in area to taller grasslands in previous decades.

A second Lowland meadows and pasture lies at either side of the disused railway line, which is now a coast to coast cycleway ran by Sustrans. At the western end, the one metre strip either side of the cycle path is species rich neutral grassland and qualifies as the Durham BAP habitat Lowland meadows and pasture. The northern side is more diverse than the south. Indicator species include abundant common knapweed, with oxeye daisy, common birds foot trefoil, meadow vetchling and field scabious also present. Additional species through this grassland is common toadflax, tall melilot, perforate St John's wort, white campion and tansy.

This grassland fails its condition assessment due to the frequency of indicator species, cover of undesirable species and presence of numerous trees and shrubs.

The stream meets the Local Wildlife Site criteria.

Other habitats:

Scrub is widespread and diverse, occurring as scattered stands and those on woodland margins and is sometimes of exotic shrubs. Marginal stands often grade into tall grassland which does not meet the BAP definition of 'lowland pasture' because of reduced species-richness. Occasionally species of note may occur in such grasslands, as near the embankment at NZ 304546, where small sweet-grass (*Glyceria declinate*) and narrow-leaved everlasting pea (*Lathyrus Sylvestris*) can be found.

CONNECTIVITY

This large LWS forms a major element in the LWS series, connecting to the River Wear corridor in the South and bringing wildlife into the heart of residential areas of Washington. Broad highway verges adjacent to and extending from the site may offer additional scope for the movement of biodiversity.

LANDSCAPE

Some parts of this extensive area offer unbroken views across wooded/pastoral countryside and are no doubt of great local landscape value. The woodlands and burn offer a valuable opportunity for children to explore and experience the natural world.

OTHER SCIENTIFIC IMPORTANCE

The extent and diversity of Princess Anne Park supports a fauna of local note. A wide range of birds and more common butterflies have been recorded.

RECORDED HISTORY

SITE MANAGEMENT

At present, there is mowing of strips alongside all formal paths as well as one or two patches of amenity grassland.

The following are suggested by way of developing management for nature conservation on the site:

- Focus on the preservation of the relicts of ancient pasture by roughly delineating this area and including it in the amenity cutting regime once annually in late August, with the cuttings removed.
- Encourage the spread of the less-robust herbs characterising this grassland type by reversing the encroachment of coarse species from within the meadowsweet fen. This could be accomplished by delineating, say, 5m zones and cutting these repeatedly in the course of the amenity cut to weaken the coarse perennial herbs. Removal of the cut material would be desirable but repeated cuts of any sort would be better than none. Informally monitor fescues, bents and other adaptable species such as cowslip for spread.
- Developing the wetland interest on the site by promoting some open wetland margins without sacrificing the cover needed by water vole.
- Develop a strategy for the protection of the ancient trees on the site, notably the oaks. This might entail education, publicity and awareness-raising, signage and replanting as well as path diversion. Sensitivity is needed as these trees currently provide a much-used recreational space.

Princess Anne Park species list

BAP Habitat Type: Unknown		
Common Name	Botanical Name	DAFOR
A hawkweed	<i>Hieracium sp</i>	Rare
Alder	<i>Alnus glutinosa</i>	Occasional
Ash	<i>Fraxinus excelsior</i>	Frequent
Bearded Couch	<i>Elymus caninus</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bluebell	<i>Hyacinthoides non-scripta</i>	Frequent
Bracken	<i>Pteridium aquilinum</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Abundant
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Occasional
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Frequent
Bugle	<i>Ajuga reptans</i>	Occasional
Common Pocket-moss	<i>Fissidens taxifolius</i>	Occasional
Common Sallow	<i>Salix cinerea</i>	Rare
Creeping Soft-grass	<i>Holcus mollis</i>	Rare
Cuckoo-pint	<i>Arum maculatum</i>	Occasional
Dog's-mercury	<i>Mercurialis perennis</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
Garlic Mustard	<i>Alliaria petiolata</i>	Occasional
Great Scented Liverwort	<i>Conocephalum conicum</i>	Rare
Ground-elder	<i>Aegopodium podagraria</i>	Rare
Ground-ivy	<i>Glechoma hederacea</i>	Occasional
Hairy-brome	<i>Bromopsis ramosa</i>	Occasional
Hart's-tongue Fern	<i>Phyllitis scolopendrium</i>	Rare
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Frequent
Herb Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent
Lady Fern	<i>Athyrium filix-femina</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Frequent
Nipplewort	<i>Lapsana communis</i>	Rare
Opposite-leaved Golden-saxifrage	<i>Chrysosplenium oppositifolium</i>	Occasional
Overleaf Pellia	<i>Pellia epiphylla</i>	Occasional
Pignut	<i>Conopodium majus</i>	Occasional
Ramsons	<i>Allium ursinum</i>	Occasional

Sanicle	<i>Sanicula europaea</i>	Rare
Scaly Male-fern	<i>Dryopteris affinis</i>	Frequent
Sessile Oak	<i>Quercus petraea</i>	Occasional
Spanish Bluebell	<i>Hyacinthoides hispanica</i>	Rare
Swan's-neck Thyme-moss	<i>Mnium hornum</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Wavy Bitter-cress	<i>Cardamine flexuosa</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Anemone	<i>Anemone nemorosa</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood Meadow-grass	<i>Poa nemoralis</i>	Rare
Wood Melick	<i>Melica uniflora</i>	Rare
Wood Sedge	<i>Carex sylvatica</i>	Rare
Wood Sorrel	<i>Oxalis acetosella</i>	Occasional

BAP Habitat Type: Unknown		
Common Name	Botanical Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	Abundant
Bearded Couch	<i>Elymus caninus</i>	Occasional
Black Bryony	<i>Tamus communis</i>	Rare
Bracken	<i>Pteridium aquilinum</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Abundant
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Frequent
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Frequent
Bugle	<i>Ajuga reptans</i>	Occasional
Californian Honeysuckle	<i>Lonicera involucrata</i>	Rare
Cleavers	<i>Galium aparine</i>	Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Dog-violet	<i>Viola riviniana</i>	Occasional
Cow-parsley	<i>Anthiscus sylvestris</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Soft-grass	<i>Holcus mollis</i>	Occasional
Cuckoo-pint	<i>Arum maculatum</i>	Occasional
Dotted Loosestrife	<i>Lysimachia punctata</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
Field Maple	<i>Acer campestre</i>	Rare
Goat Willow	<i>Salix caprea</i>	Rare
Greater Stitchwort	<i>Stellaria holostea</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Frequent
Ground-ivy	<i>Glechoma hederacea</i>	Occasional
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Frequent
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Hybrid Larch	<i>Larix x marschlinsii</i>	Occasional
Ivy	<i>Hedera helix</i>	Frequent
Nettle	<i>Urtica dioica</i>	Occasional
Nipplewort	<i>Lapsana communis</i>	Occasional
Norway Maple	<i>Acer platanoides</i>	Frequent
Raspberry	<i>Rubus idaeus</i>	Rare

Red Champion	<i>Silene dioica</i>	Occasional
Red Champion	<i>Silene dioica</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Rowan	<i>Sorbus aucuparia</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Self-heal	<i>Prunella vulgaris</i>	Frequent
Silver Birch	<i>Betula pendula</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Abundant
White Willow	<i>Salix alba</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wild Plum	<i>Prunus domestica ssp insitia</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Abundant
Wood Speedwell	<i>Veronica montana</i>	Occasional
Wood Woundwort	<i>Stachys sylvatica</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Rare

BAP Habitat Type: Unknown		
Common Name	Botanical Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	Rare
Bramble	<i>Rubus fruticosus</i> agg.	Occasional
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Rare
Cleavers	<i>Galium aparine</i>	Rare
Clustered Dock	<i>Rumex conglomeratus</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Sorrel	<i>Rumex acetosa</i>	Frequent
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	Rare
Compact Rush	<i>Juncus conglomeratus</i>	Rare
Couch-grass	<i>Elytrigia repens</i>	Rare
Cow-parsley	<i>Anthiscus sylvestris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Soft-grass	<i>Holcus mollis</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Rare
Curled Dock	<i>Rumex crispus</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Greater Bird's-foot Trefoil	<i>Lotus pedunculatus</i>	Rare
Greater Willowherb	<i>Epilobium hirsutum</i>	Occasional
Hairy Sedge	<i>Carex hirta</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hazel	<i>Corylus avellana</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Japanese Rose	<i>Rosa rugosa</i>	Rare
Knapweed	<i>Centaurea nigra</i>	Rare
Marsh Horsetail	<i>Equisetum palustre</i>	Abundant
Marsh Thistle	<i>Cirsium palustre</i>	Frequent
Marsh Willowherb	<i>Epilobium palustre</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Fescue	<i>Festuca pratensis</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Abundant
Nettle	<i>Urtica dioica</i>	Abundant
Ornamental Rhubarb	<i>Rheum palmatum</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Occasional

Reed Canary-grass	<i>Phalaris arundinacea</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rose-bay Willowherb	<i>Chamaerion angustifolium</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Rare
Silverweed	<i>Potentilla anserina</i>	Rare
Sneezewort	<i>Achillea ptarmica</i>	Rare
Soft Rush	<i>Juncus effusus</i>	Occasional
Timothy	<i>Phleum pratense</i>	Rare
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Water Horsetail	<i>Equisetum fluviatile</i>	Occasional
Whitebeam	<i>Sorbus aria</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Occasional
Wood Woundwort	<i>Stachys sylvatica</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant

BAP Habitat Type: Unknown		
Common Name	Botanical Name	DAFOR
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	Occasional
Black Knapweed	<i>Centaurea nigra</i>	Frequent
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Coltsfoot	<i>Tussilago farfara</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Abundant
Common Osier	<i>Salix viminalis</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Common Sallow	<i>Salix cinerea</i>	Rare
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	Rare
Common Valerian	<i>Valeriana officinalis</i>	Rare
Common Valerian	<i>Valeriana officinalis</i>	Rare
Cowslip	<i>Primula veris</i>	Occasional
Crack Willow	<i>Salix fragilis</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
Crosswort	<i>Galium cruciata</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Occasional
Field Woodrush	<i>Luzula campestris</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Frequent
Golden Oat-grass	<i>Tristum flavescens</i>	Occasional
Greater Burnet	<i>Sanguisorba officinalis</i>	Rare
Hairy Sedge	<i>Carex hirta</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Frequent
Hoary Ragwort	<i>Senecio erucifolius</i>	Rare
Lesser Stitchwort	<i>Stellaria graminea</i>	Occasional
Marsh Horsetail	<i>Equisetum palustre</i>	Frequent
Meadow Buttercup	<i>Ranunculus acris</i>	Frequent
Meadow Fescue	<i>Festuca pratensis</i>	Rare
Mouse-ear Chickweed	<i>Cerastium fontanum</i>	Rare
Nettle	<i>Urtica dioica</i>	Rare
Northern Dock	<i>Rumex longifolius</i>	Rare
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Oval Sedge	<i>Carex ovalis</i>	Rare
Pepper Saxifrage	<i>Silaum silaus</i>	Rare
Perennial Sowthistle	<i>Sonchus arvensis</i>	Rare
Pignut	<i>Conopodium majus</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Abundant
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare

Self-heal	<i>Prunella vulgaris</i>	Occasional
Sneezewort	<i>Achillea ptarmica</i>	Frequent
Square-stemmed St.John's-wort	<i>Hypericum tetrapterum</i>	Rare
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Frequent
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Frequent
Water Mint	<i>Mentha aquatica</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Frequent
Wood Woundwort	<i>Stachys sylvatica</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow Rattle	<i>Rhinanthus minor</i>	Occasional
Zigzag Clover	<i>Trifolium medium</i>	Frequent

BAP Habitat Type: Fen		
Common Name	Botanical Name	Abundance (DAFOR)
Bramble	<i>Rubus fruticosus</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Frequent
Greater Pond Sedge	<i>Carex riparia</i>	Dominant
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Willow sp.	<i>Salix sp.</i>	Occasional

BAP Habitat Type: Lowland Meadow and Pasture (New addition - Disused Railway)		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Occasional / Locally Abundant
Bush Vetch	<i>Vicia sepium</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Abundant
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Abundant
Common Nettle	<i>Urtica dioica</i>	Frequent/ Locally Abundant
Common Toadflax	<i>Linaria vulgaris</i>	Abundant
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare
Dandelion	<i>Taraxacum officinale</i>	Rare
Dog Rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare
English Oak	<i>Quercus robur</i>	Rare
Field Maple	<i>Acer campestre</i>	Rare
Field Scabious	<i>Knautia arvensis</i>	Rare
Greater Plantain	<i>Plantago major</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Rare / Locally Abundant
Mugwort	<i>Artemisia vulgaris</i>	Frequent
Nipplewort	<i>Lapsana communis</i>	Rare
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Rare

Perennial Sweet Pea	<i>Lathyrus latifolius</i>	Occasional / Locally Abundant
Perforate St John's Wort	<i>Hypericum perforatum</i>	Rare
Red Campion	<i>Silene dioica</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Rare
Silver Birch	<i>Betula pendula</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Tall Melilot	<i>Melilotus altissimus</i>	Frequent
Tansy	<i>Tanacetum vulgare</i>	Abundant
Tufted Vetch	<i>Vicia cracca</i>	Rare
White Campion	<i>Silene latifolia</i>	Rare
White Clover	<i>Trifolium repens</i>	Frequent
White Dead-nettle	<i>Lamium album</i>	Occasional
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland 1 (New addition - North and west)

Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Occasional / Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequent
Broadbuckler Fern	<i>Dryopteris dilatata</i>	Rare
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broadleaved Willowherb	<i>Epilobium montanum</i>	Occasional
Burdock	<i>Arctium sp.</i>	Rare
Cleavers	<i>Galium aparine</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Lime	<i>Tilia x vulgaris</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent/ Locally Dominant
Common Sallow	<i>Salix cinerea</i>	Occasional/ Locally Abundant
Cotoneaster sp.	<i>Cotoneaster sp.</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Occasional

Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Dandelion	<i>Taraxacum officinale</i>	Rare
Dogwood	<i>Cornus sanguinea</i>	Occasional/ Locally Abundant
Douglas Fir	<i>Pseudotsuga menziesii</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
English Elm	<i>Ulmus procera</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Franchets Cotoneaster	Field Maple	<i>Acer campestre</i>
Gorse	<i>Ulex europaeus</i>	Rare
Greater Plantain	<i>Plantago major</i>	Rare
Ground Elder	<i>Aegopodium podagraria</i>	Rare / Locally Abundant
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Frequent
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare – more towards stream in existing designation
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Hybrid Black Poplar	<i>Populus x canadensis</i>	Occasional
Ivy	<i>Hedera helix</i>	Occasional / Locally Abundant
Lady Fern	<i>Athyrium filix-femina</i>	Rare
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Nipplewort	<i>Lapsana communis</i>	Occasional
Norway Maple	<i>Acer platanoides</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Frequent / Locally Abundant
Shrubby Cinquefoil	<i>Dasiphora fruticosa</i>	Rare
Silver Birch	<i>Betula pendula</i>	Frequent
Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Steeple Bush	<i>Spiraea tomentosa</i>	Rare/ Locally Frequent
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent / Locally Abundant
Tufted Vetch	<i>Vicia cracca</i>	Rare
Wavy Bittercress	<i>Cardamine flexuosa</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional/ Locally Frequent
Wood Avens	<i>Geum urbanum</i>	Occasional

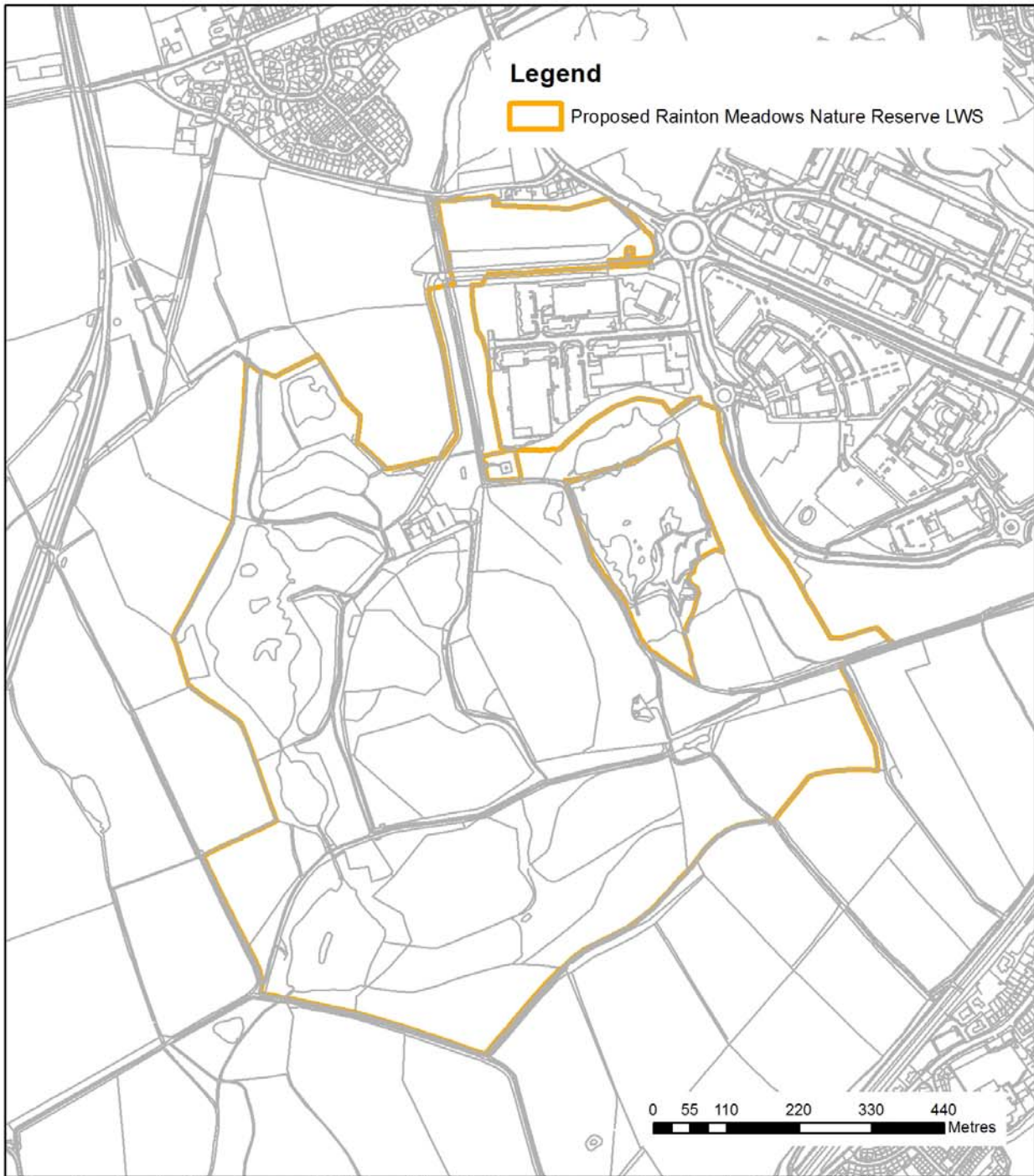
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland (New addition - North-east)		
Common Name	Botanical Name	Abundance (DAFOR)
Beech	<i>Fagus sylvatica</i>	Frequent
Bluebell	<i>Hyacinthoides non-scripta</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Occasional / Locally Abundant
Broadbuckler Fern	<i>Dryopteris dilatata</i>	Frequent
Broadleaved Willowherb	<i>Epilobium montanum</i>	Occasional
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Dog Violet	<i>Alnus glutinosa</i>	Rare
Douglas Fir	<i>Pseudotsuga menziesii</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
Enchanter's Nightshade	<i>Circaea lutetiana</i>	Rare
English Oak	<i>Quercus robur</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Frequent
Holly	<i>Ilex aquifolium</i>	Frequent / Locally Abundant
Horse Chestnut	<i>Aesculus hippocastanum</i>	Frequent
Ivy	<i>Hedera helix</i>	Occasional / Locally Dominant
Japanese Knotweed	<i>Reynoutria japonica</i>	Occasional / Locally Frequent
Male Fern	<i>Dryopteris filix-mas</i>	Frequent
Red Campion	<i>Silene dioica</i>	Rare
Rhododendron	<i>Rhododendron sp.</i>	Rare / Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Occasional
Sanicle	<i>Sanicula europaea</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Wood Millet	<i>Milium effusum</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Frequent
Yew	<i>Taxus baccata</i>	Rare

BAP Habitat Type: Other Broadleaf Woodland 3 (New addition - Middle section)		
Common Name	Botanical Name	Abundance (DAFOR)
Annual Meadow-grass	<i>Poa annua</i>	Rare
Apple	<i>Malus pumila</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Frequent

Beech	<i>Fagus sylvatica</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Frequent / Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequent
Broadbuckler Fern	<i>Dryopteris dilatata</i>	Rare
Broadleaved Plantain	<i>Plantago major</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Occasional
Common Catsear	<i>Hypochoeris radicata</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Abundant
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Rare
Daisy	<i>Bellis perennis</i>	Rare
Dog Rose	<i>Rosa canina</i>	Occasional
Dogwood	<i>Cornus sanguinea</i>	Rare
Doves-foot Cranesbill	<i>Geranium molle</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
English Oak	<i>Quercus robur</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Maple	<i>Acer campestre</i>	Rare
Foxglove	<i>Digitalis purpurea</i>	Rare
Franchets Cotoneaster	<i>Cotoneaster franchetii</i>	Rare
Grey Alder	<i>Alnus incana</i>	Rare
Ground Ivy	<i>Glechoma hederacea</i>	Rare / Locally Abundant
Hairy Brome	<i>Bromopsis ramosa</i>	Rare
Hawkweed sp.	<i>Hieracium sp.</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Occasional / Locally Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare – abundant inside current designation
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Hybrid Black Poplar	<i>Populus x canadensis</i>	Rare
Ivy	<i>Hedera helix</i>	Rare / Locally Abundant
Larch	<i>Larix decidua</i>	Rare
Leylandii	<i>Cupressus x leylandii</i>	Rare
Lords and Ladies	<i>Arum maculatum</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Frequent
Nipplewort	<i>Lapsana communis</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Frequent

Pignut	<i>Conopodium majus</i>	Rare
Prickly Sowthistle	<i>Sonchus asper</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scaly Male Fern	<i>Dryopteris borrieri</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Rare
Sessile Oak	<i>Quercus petraea</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Occasional
Sitka Spruce	<i>Picea sitchensis</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood Dock	<i>Rumex sanguineus</i>	Rare
Wood Sedge	<i>Carex sylvatica</i>	Rare / Locally Frequent
Wood Speedwell	<i>Veronica montana</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Occasional / Locally Frequent
Yarrow	<i>Achillea millefolium</i>	Rare
Yew	<i>Taxus baccata</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 326 484	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 29.09.2020 Scale 1: 8,000
	Project Local Wildlife Site Boundary Review 2020	Sheet size A4 
	Subject Proposed Rainton Meadows Nature Reserve LWS	
	Drawing No. UF 5.36.01.07.017.01	Revisions

SITE NAME	Rainton Meadows Nature Reserve
SITE No.	UF 5_36_01_07_017
LOCATION	Chilton Moor, Houghton-Le- Spring NZ323485
STATUS	Proposed Local Wildlife Site
AREA	71.17 Ha
DATE OF SITE VISIT	July 2020
OWNERSHIP	Sunderland City Council

SITE DESCRIPTION

A former opencast coal and colliery site restored between 1994 and 1996 to semi-natural habitats. The site now includes; reedbed, fen and marsh, ponds and open water, wet grassland, species rich neutral grassland, broadleaf woodland and scrub habitats. The site is important for breeding and passage bird species. A large number of waterfowl and wading bird species are present year-round, and the site supports a regionally significant population of the nationally threatened Willow Tit.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Broadleaf Woodland	50
Lowland Fen Habitat	2
Lowland Meadows & Pasture	2
Ponds	4
Reedbed	2
Rivers & Streams	200m

National and local BAP species:

English Name	Scientific Name	Notes
Bittern	<i>Botaurus stellaris</i>	Winter visitor
Black-tailed Godwit	<i>Limosa limosa subsp. limosa</i>	Passage migrant
Brown Hare	<i>Lepus europaeus</i>	Breeds
Brown Long-eared bat	<i>Plecotus auritus</i>	Breeds
Bullfinch	<i>Pyrrhula pyrrhula subsp. pileata</i>	Breeds
Common Cuckoo	<i>Cuculus canorus</i>	Passage migrant
Common Toad	<i>Bufo bufo</i>	Breeds
Curlew	<i>Numenius arquata</i>	Passage migrant
Dunnock	<i>Prunella modularis subsp. occidentalis</i>	Breeds
Grasshopper Warbler	<i>Locustella naevia</i>	Breeds
Grey Partridge	<i>Perdix perdix</i>	Breeds
Hedgehog	<i>Erinaceus europaeus</i>	Breeds
Hen Harrier	<i>Circus cyaneus</i>	Visitor
Herring Gull	<i>Larus argentatus subsp. argenteus</i>	Visitor
House Sparrow	<i>Passer domesticus</i>	Breeds
Kestrel	<i>Falco tinnunculus</i>	Breeds
Lapwing	<i>Vanellus vanellus</i>	Breeds
Lesser Redpoll	<i>Carduelis cabaret</i>	Visitor
Linnet	<i>Carduelis cannabina subsp. autochthona/cannabina</i>	Breeds
Marsh Tit	<i>Poecile palustris subsp. palustris/dresseri</i>	Breeds
Noctule	<i>Nyctalus noctula</i>	Breeds
Otter	<i>Lutra lutra</i>	Breeds

Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds
Sky Lark	<i>Alauda arvensis subsp. arvensis</i>	Breeds
Small Heath	<i>Coenonympha pamphilus</i>	Breeds
Snipe	<i>Gallinago gallinago</i>	Breeds
Song Thrush	<i>Turdus philomelos subsp. clarkei</i>	Breeds
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	Breeds
Starling	<i>Sturnus vulgaris subsp. vulgaris</i>	Winter visitor
Tree Sparrow	<i>Passer montanus</i>	Breeds
Willow Tit	<i>Poecile montanus subsp. kleinschmidti</i>	Breeds
Wood Warbler	<i>Phylloscopus sibilatrix</i>	Breeds
Yellowhammer	<i>Emberiza citrinella</i>	Breeds

Other protected species:

English Name	Scientific Name	Notes
Black-tailed Godwit	<i>Limosa limosa</i>	Passage migrant
Common Blue	<i>Polyommatus icarus</i>	Breeds
Goldfinch	<i>Carduelis carduelis</i>	Breeds
Meadow Brown	<i>Maniola jurtina</i>	Breeds
Peregrine	<i>Falco peregrinus</i>	Visitor
Redwing	<i>Turdus iliacus</i>	Winter visitor
Small Skipper	<i>Thymelicus sylvestris</i>	Breeds

DETAIL

The site consists of large areas of wetland habitat. This is diverse in nature and includes a series of large and smaller permanent and seasonal ponds, wet grassland and marginal muds, fen, marsh and reedbed.

Ponds range in size from c. 1ha down to a few square meters. The larger ponds of which there are five are variously vegetated and support fringing short and tall fen habitats consisting of reedmace, common reed, jointed and sharp-flowered rush, water-mint, common spotted and northern marsh orchids (*Dactylorhiza fuchsia* and *Dactylorhiza purpurella*), and cuckoo-flower.

The northern most pond is the largest seasonal pond on site and dries out most years, this provides a vegetation community and fauna assemblage not seen elsewhere on site. Here, lesser-pond sedge, grey club-rush, marestail, water mint and reedmace account for constants in a diverse vegetation. Both young and mature willow scrub fringe this pond supporting a regionally significant population of willow tit. The smaller ponds have a good cover of submerged, emergent and marginal plants including water starwort, water plantain, yellow flag iris and broadleaf pondweed.

Grasslands across the site have developed substantially since their creation in the mid 1990's and areas are now species rich including betony, orchids, yellow rattle, great burnet, meadowsweet, common bird's-foot trefoil, eyebright, cowslip, rough hawkbit, quaking grass, and sedges.

Large areas of the site were planted as woodland. The site now contains areas of mature semi-natural broadleaf woodland and semi-mature plantation woodland. Areas of wood include willow-carr, and areas of dry broadleaf woodland containing, oak, hazel, ash, alder, rowan, birch, hawthorn, and crab apple.

CONDITION ASSESSMENT

Broadleaf Woodland habitat meets the Local Wildlife Site criteria:

Rainton Meadows broadleaf Woodland includes the following tree species: silver birch, oak, ash, alder, hazel, goat willow. The under canopy and scrub layer includes gorse, hawthorn, and smalls areas dominated by blackthorn. The woodlands main canopy layer has trees up to 5 meters high and very few trees over 5 m high. The understory layer is still developing. The woodland areas meet the current selection criteria.

Lowland Fen Habitat habitat meets the Local Wildlife Site criteria:

For the purposes of the habitats identified under the former Durham BAP, a broad view of fen is taken. The dividing line between some of these habitats and fen is not always clear.

Rainton Meadows has the '*Pioneer vegetation on exposed mud*' habitat type around small seasonal ponds. Species include grasses such as Timothy, Yorkshire Fog, Crested Dog's tail, Common Bent, Tufted Hair grass and Perennial rye Grass. Other species includes: Yellow Rattle, Ragwort, Ribwort Plantain, Meadow buttercup, Betony, Meadow vetchling, Bush vetch, Wild carrot, Common Knapweed, Red clover, Bird's-foot-trefoil, Jointed Rush, False Fox Sedge, Common Spike Rush, Red Bartsia, Purple loosestrife, Soft rush, Hard rush, Bulrush sedge, Water mint, Water plantain, Yellow flag Iris, and floating on the standing water there is Chara sp.

This area is species rich and provides valuable habitat to invertebrates and amphibians. It is in very good condition with no negative indicators found in high percentages.

Rainton Meadows has swamp communities growing around ponds 1, 2, 3, 4 and along some of the streams that connect these ponds. Overall the vegetation is very similar in all these habitats. Close to the water level there is emergent vegetation dominated by Bulrush, Common Reed, Great Willowherb and Yellow flag iris. Amongst this emergent vegetation we have Water Mint, False Fox Sedge, Bulrush sedge, Tufted Hair Grass, Meadowsweet, Hard Rush, Articulated Rush, Water forget me not, Grey Bulrush. Walking away from the swamp habitat the scrub becomes more abundant which includes Goat Willow, and Alder mainly.

The habitat around pond 2 is exceptional for its plant diversity and the gradients where the vegetation changes from woodland, to scrub to meadow to wetland.

Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

Meadow areas to the left and right of the "Ribcage" monument in Pond 1 are the most species rich and they qualify to be included in the above definition. Species include: Oxeye daisy, northern marsh and common spotted orchid, wild carrot, Bird's foot trefoil, rough hawkbit, Common Knapweed, fairy flax, ribwort plantain, Meadow buttercup, betony, yellow rattle, cowslip, bush vetch, meadow vetchling, white clover, lesser trefoil, goat's beard, red Clover. Grasses include: crested Dog's tail grass, sweet vernal grass, Cock's foot grass and guaking grass, yellow oat grass, Timothy, common bent, false oat grass, Yorkshire fog, and red fescue.

The meadow areas are currently meet a favourable condition.

Ponds habitat meets the Local Wildlife Site criteria:

Ponds are present as both large open water bodies and small seasonal ponds across the site. They meet the current selection criteria.

The pond areas are currently meet a favourable condition

Reedbed habitat meets the Local Wildlife Site criteria:

Five areas of reedbed are present on site. The balancing pond to the north of Joes Pond, filtration reed bed to the west of Joes Pond, fringing reedbed around Pond 1, Reedbed to the outflow of Pond 2, and reedbed with in Pond 3.

The reedbed areas are currently meet a favourable condition

Rivers & Streams habitat meets the Local Wildlife Site criteria:

The Red Burn qualifies under this definition.

CONNECTIVITY

Rainton Meadows Nature Reserve LWS is bounded by the Red burn to the north and Joes Pond SSSI to the east (designated for the sites wetland communities). To sites immediate North West is Rainton Meadows LWS an area of species rich neutral grassland. Chilton Marsh LWS is 200m to the north lying along the Red burn, this is an area of wet neutral grassland. The Red burn provides a connectivity feature linking a number of important sites and species assemblages through the local landscape. This burn is a tributary of the Rainton burn. The wider former Rye Hill open cast site of which the Rainton Meadows Nature Reserve forms a part was restored to farmland and woodland. These areas of woodland are similar in nature to those on the nature reserve whilst a number of small ponds and a good network of hedgerows are present across the wider local landscape as a result of restoration works.

LANDSCAPE

The woodland and large wetland features form important landscape features, whilst a large hill at the centre of the site is prominent.

OTHER SCIENTIFIC IMPORTANCE

The site is of great ornithological importance, being on route for altitudinal migrants from the Durham coast SPA and Ramsar sites designated for their importance for birds. Little ring plover, snipe and lapwing all breed onsite, whilst a host of wading birds visit on passage including curlew, sandpipers, stint, avocet bittern and little egret. The site supports a regionally significant population of willow tit. A number of other passerines are recorded breeding including skylark, nine warbler species

grasshopper warbler and wood warbler, reed bunting, yellowhammer and tree sparrow. Reedbeds attract large numbers starling, roosting in the winter.

The site is of importance to invertebrates, a number of Lepidoptera and Odonata species are recorded across the site.

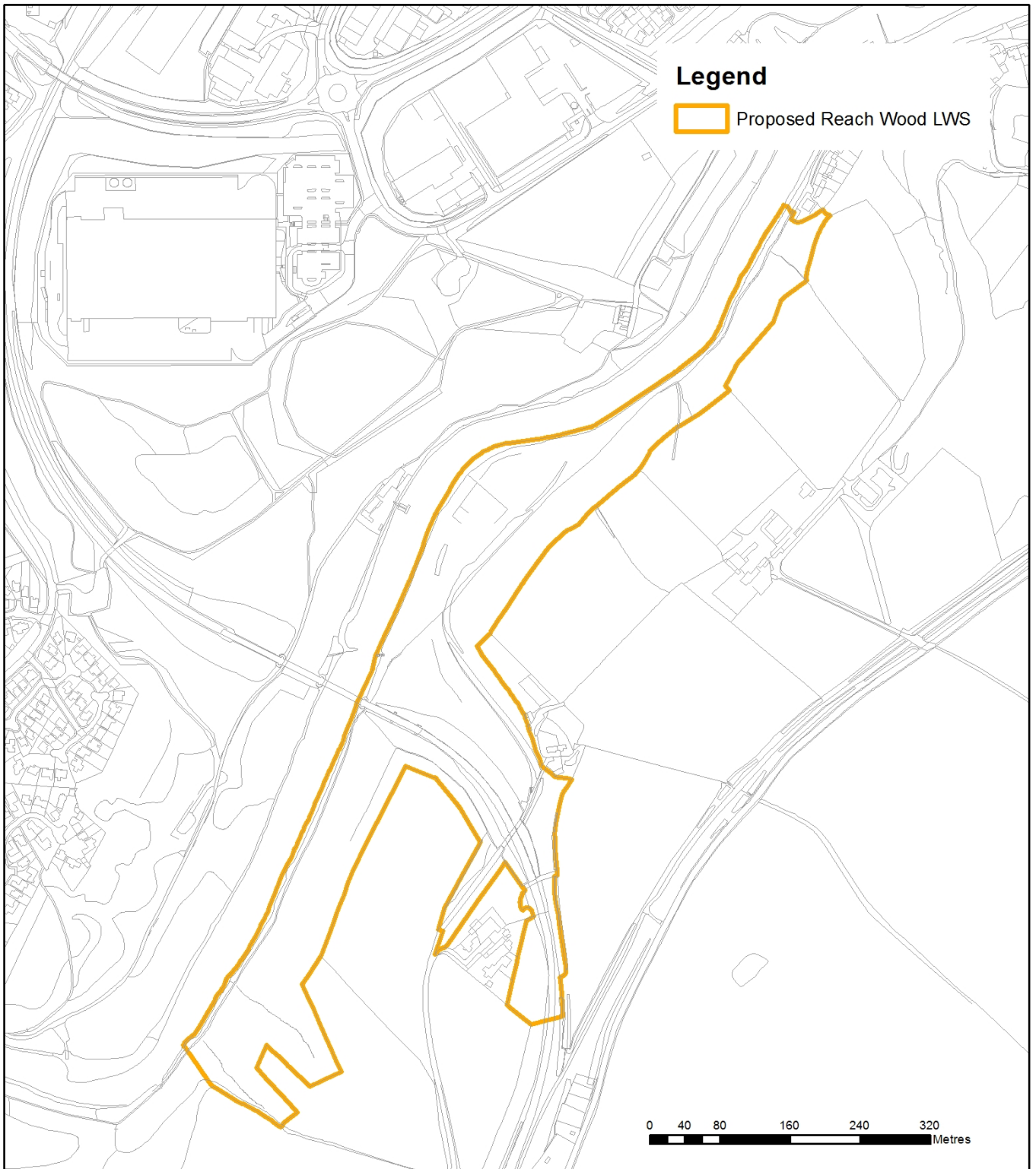
RECORDED HISTORY

Bird records dating back to 1990's are available for the site whilst site management has been recorded since Durham Wildlife Trust began management of the site. The site is a British Trust for Ornithology constant effort bird ringing site. Butterfly transects and various species surveys are undertaken annually.



SITE MANAGEMENT

The site is managed by Durham Wildlife Trust. Grasslands are managed through grazing and annual cutting. Woodlands are currently on a rotational thinning management. Fen, marsh and reedbed habitats are cut or grazed annually. Wetland water levels are managed under a series of penstock sluices.

Since restoration in the 1990's a number of nature conservational improvements have been made to habitats on site, this has included re-profiling larger water bodies to improve marginal habitat conditions, creating new ponds and scrapes, importing species rich seed and green hay for grassland species improvement. Invasive plant species and injurious weeds are controlled where appropriate.



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 320 545</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.11.2020 Scale 1: 6,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	
	<p>Subject Proposed Reach Wood LWS</p>	
	<p>Drawing No. UF 5_36_01_06_041.01</p>	<p>Revisions</p>

SITE NAME	Reach Wood (formerly part of Wear River Bank Woods)
SITE No.	UF 5_36_01_06_041
LOCATION	Fatfield NZ320545
STATUS	Local Wildlife Site.
FIRST NOTIFIED	First designated in 1986, revised in 2020.
AREA	14.08 ha
DATE OF SITE VISIT	July 2020
OWNERSHIP	Woodland Trust, Sunderland Council, Private

SITE DESCRIPTION

Ancient semi-natural woodland and planted woodland along the tidal River Wear.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Ancient semi-natural woodland	10.48
Other broadleaf woodland	3.11
Rivers and Streams	0.56

National and local BAP species:

English Name	Scientific Name	Notes
Badger	<i>Meles meles</i>	Occasionally present.
Bats		Regularly present
Otter	<i>Lutra lutra</i>	Regularly present

DETAIL

This site consists of Reach Wood and Viaduct Wood, together with some smaller planted areas of woodland.

Ancient semi-natural woodland on the steep banks of the River Wear, on upstream and downstream of the Victoria Viaduct. The composition of the woodlands varies with the geology, which is mostly neutral but acidic in places, with the small, seasonal streams flowing into the river, and with the tidal river frontage. The planted woodland areas were established in 1988. There are some fruit trees in places, which may mark former orchard areas. These factors have produced a variety of woodland types.

Ash and oak predominate in most places, with some wych elm. Sycamore and other non-native species are frequent in some places. There are areas of planted conifers in Reach Wood. Small areas of alder woodland occur on streamsides and on the river frontage. The 1988 plantings include some non-native species.

The shrub layer typically consists of hazel, hawthorn, elder and blackthorn. This is particularly dense in places where the woodland edge has been cultivated in the past, and then allowed to return to woodland. Most of these areas have, though, been taken back into cultivation, and were removed from the area designated as a LWS in 2011.

Typical ground floras include a number of ancient woodland indicator species such as bluebell, sanicle, sweet woodruff, ramsons, wood violet and wood millet. wood avens, wood cranesbill, and red campion are frequent. In the areas of more acidic soils, great woodrush and hard fern can be found.

In the alder flushes, several willow species form the understorey, with a ground flora of marsh marigold, opposite leaved golden saxifrage, lady's smock, common spotted orchid and giant Horsetail. These areas are also rich in ferns and bryophytes.

The tidal riverbanks support a woodland flora with occasional saltmarsh plants such as sea aster, salt marsh grass and sea club rush. In places the sea club rush forms stands of several square metres. This plant is uncommon in the Durham BAP area.

Woodland birds such as woodcock, sparrowhawk, nuthatch, tawny owl and great spotted woodpecker breed regularly.

The southern woodland block was assessed as 'Other Broadleaf Woodland' and extends along an old railway embankment and forms part an offshoot from the designated ancient semi-natural woodland present along the riverside. The woodland is lacking in standing deadwood and veteran trees; however, some fallen dead wood is noted in the lower sections of the woodland and large mature trees are frequent along the lower banks. Trees present on the upper slopes of the embankment, along the old rail line, are relatively young and provided a good mixture of native species (including ash, wych elm, hawthorn, oak, hazel, silver birch, elder, and salix species).

While sycamore is frequent within the canopy, the woodland is largely exhibiting native broadleaf species with frequent – abundant occurrences of wych elm and ash. The ground flora is generally limited with abundant and locally dominant patches of ivy and bramble. Stands of giant hogweed were also noted, particularly towards the railway viaduct (approx. grid reference NZ 32085 54488).

There is limited diversity in the ground flora with bramble and ivy often dominating. The canopy is often dense and shades the woodland which likely is a limiting factor on the floral diversity. The ground flora is more diverse along the narrow margins of the old railway line with species, such as, wild strawberry, wood avens, greater stitchwort, and bird's-foot trefoil noted.

The woodland block to the north is particularly uniform in size and age; although, the narrower section which links to current LWS is different in character, both in landscape form and tree age, and to some extent species composition. It may have some influence from the adjoining ancient semi-natural woodland as a slight increase in ferns, dog's mercury, and oak and holly trees was noted. The canopy in this area is shadier than the main woodland block and overall, the ground flower is limited. Thinning of the canopy would likely benefit the understory and floral diversity.

Mature beech and sycamore trees are abundant, and while the main block of woodland is not as shaded as the block to the south, bramble still dominates the ground flora. Dense stands of Himalayan balsam were also noted to the north-east of the woodland block (approx. grid reference NZ 32815 54962).

While large mature trees were regularly noted, the presence of established veteran/ancient tree within the canopy was limited. An increase in fallen deadwood was noted here, but it is unlikely that it meets a 'favourable condition' for this category from the quantity observed. A limited number of standing deadwood trees was also noted but this again would not meet a 'favourable condition' assessment for this category. The understory was noted to be limited in the main woodland block and the regeneration present is unlikely sufficient to replace the tree cover; however, the narrower woodland section had a more varied age structure with more understorey regeneration present.

CONDITION ASSESSMENT

The woodland meets the Local Wildlife Sites criteria:

The wood is in unfavourable condition because of the high proportion of non-native broadleaf trees and conifers. There is also a lack of standing and fallen dead wood.

CONNECTIVITY

The wood is an important component of the River Wear wildlife corridor.

LANDSCAPE

The wood is very prominent from the north side of the river.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

The wood was surveyed in 1992 by Gordon Graham, in 2008 by the DBAP woodland survey, and in 2020 by Durham Wildlife Services.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The wood has a level public footpath running along its length and is quite accessible to the public. This is the most well visited of the Wear River Bank Woodlands.

SITE MANAGEMENT ADVICE AND OBJECTIVES

- Maintain the area of the woodland.
- Restore the conifer areas to native broadleaf woodland at the next felling cycle.
- Decrease the proportion of non-native species and increasing the amount of standing and fallen dead timber.

The Woodland Trust have a management plan for their land, which is the majority of this site. The plan, "Riverside Woodland, South" aims to restore the ancient semi-natural woodland to favourable condition.

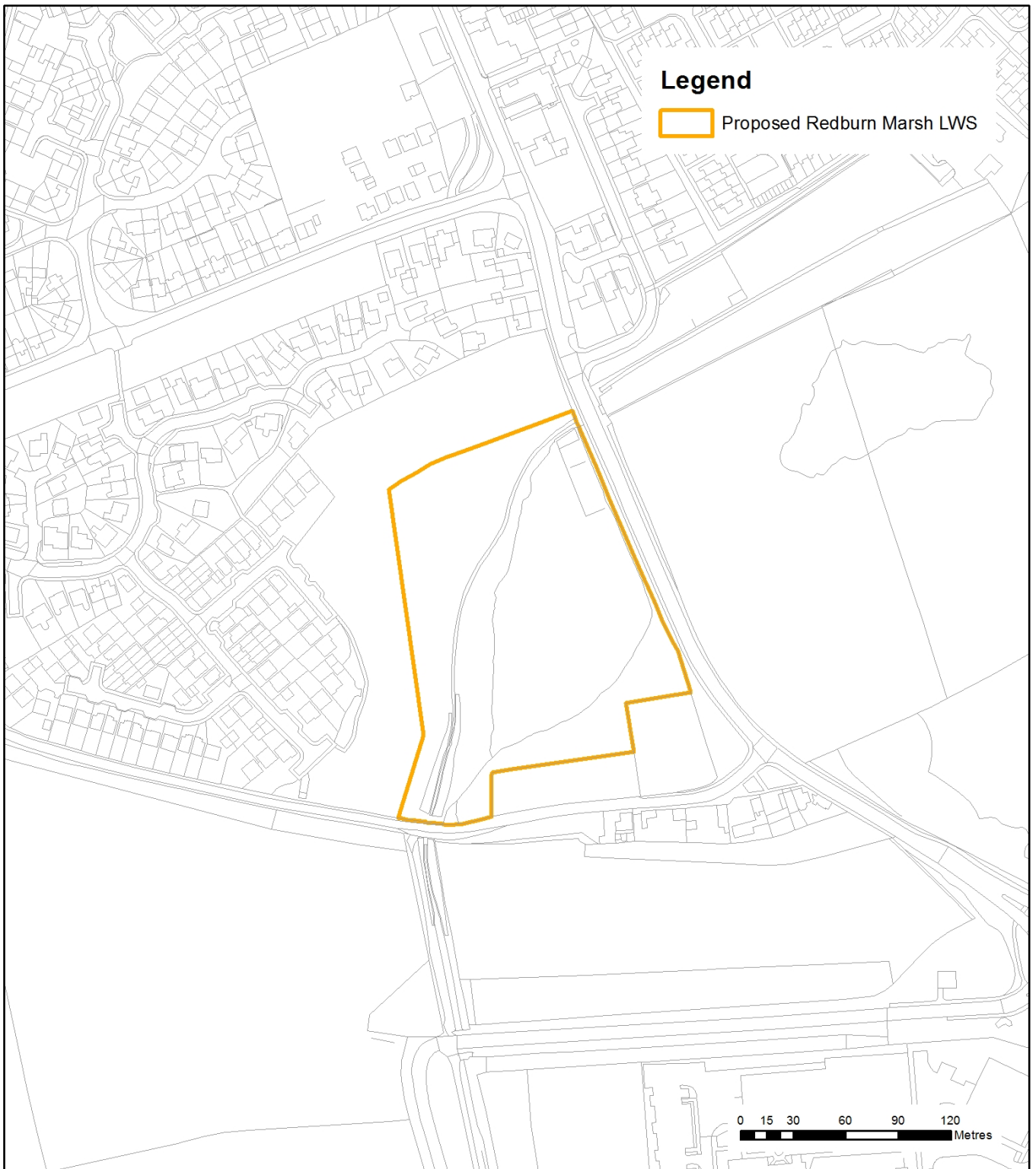
Reach Wood species lists

English Name	Scientific Name	DAFOR
Alder	<i>Alnus glutinosa</i>	Occasional
Amphibious Bistort	<i>Persicaria amphibia</i>	Occasional
Annual meadowgrass	<i>Poa annua</i>	Occasional
Annual Meadow-grass	<i>Poa annua</i>	Occasional
Apple	<i>Malus domestica</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Frequent
Barren brome	<i>Bromus sterilis</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Abundant
Birds-foot trefoil	<i>Lotus corniculatus</i>	Rare
Black Bryony	<i>Tamus communis</i>	Rare
Bluebell	<i>Hyacinthoides non-scripta</i>	Frequent
Bramble	<i>Rubus spp.</i>	Abundant – Locally Dominant
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Frequent
Broad-leaved dock	<i>Rumex obtusifolius</i>	Frequent
Burdock	<i>Arctium spp.</i>	Rare
Bush vetch	<i>Vicia sepium</i>	Occasional
Butterbur	<i>Petasites hybridus</i>	Occasional
Cleavers	<i>Galium aparine</i>	Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Occasional
Common bluebell	<i>Hyacinthoides non-scripta</i>	Occasional - Frequent
Common couch	<i>Elytrigia repens</i>	Occasional
Common dandelion	<i>Taraxacum officinale</i>	Occasional
Common dog-violet	<i>Viola riviniana</i>	Occasional
Common hogweed	<i>Heracleum sphondylium</i>	Occasional - Frequent
Common Ivy	<i>Hedera helix</i>	Frequent
Common nettle	<i>Urtica dioica</i>	Frequent – Locally Abundant
Cow Parsley	<i>Anthriscus sylvestris</i>	Frequent
Cow parsley	<i>Anthriscus sylvestris</i>	Occasional - Frequent
Crack-willow	<i>Salix fragilis</i>	Frequent
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Creeping buttercup	<i>Ranunculus repens</i>	Occasional – Locally Frequent
Creeping cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Soft-grass	<i>Holcus mollis</i>	Frequent
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Occasional
Curled dock	<i>Rumex crispus</i>	Occasional - Frequent
Daffodil / Wild Daffodil	<i>Narcissus pseudonarcissus</i>	Occasional



Dandelion	<i>Taraxacum agg.</i>	Frequent
Dog's mercury	<i>Mercurialis perennis</i>	Occasional - Frequent
Dog-rose	<i>Rosa canina</i>	Occasional
Dog's Mercury	<i>Mercurialis perennis</i>	Frequent
Dogwood	<i>Cornus sanguinea</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
English oak	<i>Quercus robur</i>	Occasional
Equal-leaved Knotgrass	<i>Polygonum arenastrum</i>	Occasional
False brome	<i>Brachypodium sylvaticum</i>	Occasional
False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
False-brome	<i>Brachypodium sylvaticum</i>	Frequent
Fennel Pondweed	<i>Potamogeton pectinatus</i>	Occasional
Floating Sweet-grass	<i>Glyceria fluitans</i>	Occasional
Foxglove	<i>Digitalis purpurea</i>	Rare
Garlic mustard	<i>Alliaria petiolata</i>	Occasional
Giant Bellflower	<i>Campanula latifolia</i>	Occasional
Giant Fescue	<i>Festuca gigantea</i>	Occasional
GIANT HOGWEED	<i>Heracleum mantegazzianum</i>	Occasional – Locally Dominant
Giant woodrush	<i>Luzula sylvatica</i>	Occasional
Goat willow	<i>Salix caprea</i>	Occasional
Greater stitchwort	<i>Stellaria holostea</i>	Occasional
Greater woodrush	<i>Luzula sylvatica</i>	Occasional
Ground-elder	<i>Aegopodium podagraria</i>	Frequent
Hairy Sedge	<i>Carex hirta</i>	Rare
Hairy-brome	<i>Bromus ramosus</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hard-fern	<i>Blechnum spicant</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Frequent
Hedge woundwort	<i>Stachys sylvatica</i>	Occasional
Hemlock Water-dropwort	<i>Oenanthe crocata</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Himalayan balsam	<i>Impatiens glandulifera</i>	Occasional – Locally Dominant
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Holly	<i>Ilex aquifolium</i>	Occasional – Locally Abundant
Honeysuckle	<i>Lonicera periclymenum</i>	Frequent
Hop	<i>Humulus lupulus</i>	Rare
Horse chestnut	<i>Aesculus hippocastanum</i>	Occasional
Horsetail spp	<i>Equisetum spp.</i>	Rare
Hybrid/Spanish bluebells	<i>Hyacinthoides hispanica x</i>	Frequent

Indian Balsam	<i>Impatiens glandulifera</i>	Frequent
Ivy	<i>Hedera helix</i>	Frequent – Locally Abundant
Lady-fern	<i>Athyrium filix-femina</i>	Frequent
Lesser celandine	<i>Ficaria verna</i>	Occasional
Lords and ladies	<i>Arum maculatum</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Frequent
Marsh Foxtail	<i>Alopecurus geniculatus</i>	Occasional
Meadow foxtail	<i>Alopecurus pratensis</i>	Occasional
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Occasional
Norway maple	<i>Acer platanoides</i>	Occasional
Norway Spruce	<i>Picea abies</i>	Occasional
Pear	<i>Pyrus communis</i>	Rare
Pendulous sedge	<i>Carex pendula</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Pignut	<i>Conopodium majus</i>	Rare
Ramsons	<i>Allium ursinum</i>	Frequent
Red campion	<i>Silene dioica</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Occasional
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional
Rosebay willowherb	<i>Chamerion angustifolium</i>	Occasional – Frequent
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Scaly Male-fern	<i>Dryopteris borreri</i>	Occasional
Scots pine	<i>Pinus sylvestris</i>	Locally Occasional (<10%)
Sessile oak	<i>Quercus petraea</i>	Occasional - Frequent
Sitka Spruce	<i>Picea sitchensis</i>	Occasional
Snowberry	<i>Symphoricarpos albus</i>	Occasional
Soapwort	<i>Saponaria officinalis</i>	Occasional
Soft-rush	<i>Juncus effusus</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Abundant
Tall Fescue	<i>Festuca arundinacea</i>	Occasional
Timothy	<i>Phleum pratense</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Celery	<i>Apium graveolens</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Occasional
Wild garlic	<i>Allium ursinum</i>	Frequent – Locally Abundant
Wild strawberry	<i>Fragaria vesca</i>	Occasional - Locally Frequent

Willowherb spp	<i>Epilobium spp.</i>	Occasional
Wood anemone	<i>Anemone nemorosa</i>	Occasional
Wood avens	<i>Geum urbanum</i>	Occasional
Wood Crane's-bill	<i>Geranium sylvaticum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Frequent
Wood Meadow-grass	<i>Poa nemoralis</i>	Occasional
Wood melick	<i>Melica uniflora</i>	Occasional
Wood millet	<i>Milium effusum</i>	Occasional
Wood Sage	<i>Teucrium scorodonia</i>	Occasional
Wood speedwell	<i>Veronica montana</i>	Occasional
Wood speedwell	<i>Veronica montana</i>	Occasional
Wood-sedge	<i>Carex sylvatica</i>	Occasional
Wych elm	<i>Ulmus glabra</i>	Occasional
Yellow Oat-grass	<i>Trisetum flavescens</i>	Occasional
Yorkshire-fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 326 493</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13/08/2020 Scale 1: 3,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Redburn Marsh LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5.36.01.06.042.01</p>		

SITE NAME	Redburn Marsh
SITE No.	UF 5_36_01_06_042
LOCATION	Chilton Moor NZ326493
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993, revised 2020
AREA	2.58 ha
DATE OF SITE VISIT	September 2019
OWNERSHIP	Private

SITE DESCRIPTION

Seasonally-inundated lowland fen within a horse-grazed pasture.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen	2.7

National and local BAP species:

English Name	Scientific Name	Notes
Lapwing	<i>Vanellus vanellus</i>	Breeds
Otter	<i>Lutra lutra</i>	Previously recorded
Reed bunting	<i>Emberiza schoeniclus</i>	Breeds

DETAIL

Redburn Marsh LWS follows the Red Burn and includes a depression of fen habitat that lies mostly to the west of the burn.

Tall fen communities of meadowsweet, great willowherb, false fox-sedge and sharp flowered-rush dominate areas, mixed with undesirables such as nettle, creeping thistle and hogweed. Water mint is also frequent throughout this area. Present in lower frequencies is purple loosestrife, wild angelica, soft rush, glaucous sedge, tufted hairgrass, jointed rush, common spike-rush, brooklime, fools' watercress, cuckooflower and common spotted orchid. Most of these species are found in areas where the vegetation becomes less rank and large areas of shorter fen vegetation, dominated by sedges, are present.

The latter area largely lies to the east of the burn. The area to the west of the stream is of similar species composition but desirable fen herbs are rarer in the sward, with more rank grasses present. The land to the west is higher ground than the land east of the burn.

CONDITION ASSESSMENT

Lowland fen:

Lifting of grazing pressure has benefitted the site in the short-term, it is essential that a more appropriate grazing regime is devised in the near future. There is no condition assessment in the DBAP for fen, however the areas outside of the current designation are deemed to be poor condition due to the number of undesirable species present and rank grasses.

CONNECTIVITY

Redburn Marsh is situated close to the Moors Burns Green Corridor and links via the Red Burn itself with nearby Rainton Meadows and Joe's Pond nature reserves.

LANDSCAPE

Redburn Marsh contributes towards the open pastoral landscape character of this part of Sunderland.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed for the MAGical Meadows Project by A.Mclay in 2006 and 2010 and again by Durham Wildlife Trust in 2019.

SITE MANAGEMENT

Lowland fen:

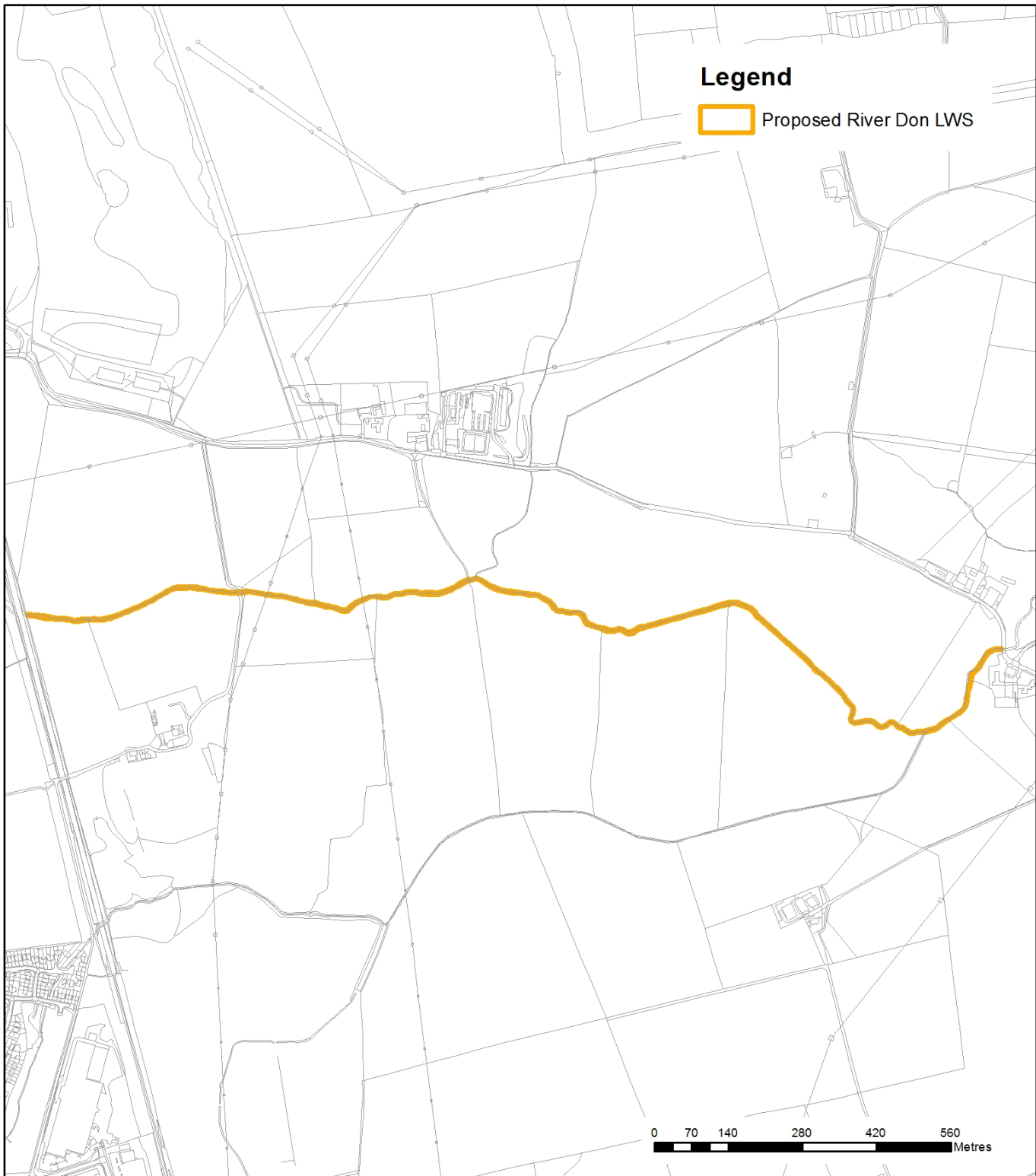
Whilst grazing management is intrinsic to the conservation value of the fen, the current grazing levels are evidently having a detrimental effect on the wetland plant communities present. It is recommended that livestock numbers are reduced to no more than three horses grazing during the summer months (April to September) and that no more than 6 horses graze the site at other times.

For further details of wetland management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".


Redburn Marsh species list

BAP Habitat Type: Fen		
Common Name	Botanical Name	Abundance (DAFOR)
Black Horehound	<i>Ballota nigra</i>	Occasional
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Brooklime	<i>Veronica beccabunga</i>	Rare
Bulrush	<i>Typha latifolia</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Catsear	<i>Hypochoeris radicata</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Mouse-ear	<i>Cerastium fontanum</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Frequent
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Common Spike-rush	<i>Eleocharis palustris</i>	Rare
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent / Locally Abundant
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Rare
Cuckooflower	<i>Cardamine pratensis</i>	Rare
False Fox-sedge	<i>Carex otrubae</i>	Frequent / Locally Dominant
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Rare
Fools Water-cress	<i>Apium nodiflorum</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Hoary Willowherb	<i>Epilobium parviflorum</i>	Rare
Jointed Rush	<i>Juncus articulatus</i>	Rare
Large Bindweed	<i>Calystegia silvatica</i>	Occasional / Locally Abundant
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent / Locally Abundant
Meadowsweet	<i>Filipendula ulmaria</i>	Frequent / Locally Dominant
Purple Loosestrife	<i>Lythrum salicaria</i>	Rare
Red Bartsia	<i>Odontites vernus</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Rare

Red Fescue	<i>Festuca rubra</i>	Occasional
Reed Canary- grass	<i>Phalaris arundinacea</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Sharp Flowered Rush	<i>Juncus acutiflorus</i>	Frequent / Locally Abundant
Silverweed	<i>Argentina anserina</i>	Frequent
Soft Rush	<i>Juncus effusus</i>	Rare
Timothy	<i>Phleum pratense</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Rare
Water Mint	<i>Mentha aquatica</i>	Frequent
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional / Locally Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 319 596	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 24.11.2020
	Subject Proposed River Don LWS	Scale 1: 15,000
	Drawing No. UF 5.36.01.07.007.01	Sheet size A4 Revisions

SITE NAME	River Don
SITE No.	UF 5_36_01_07_007
LOCATION	West Boldon NZ3259
STATUS	Proposed Local Wildlife Site
AREA	0.59 ha, 2 kilometres length of river.
DATE OF SITE VISIT	June, August and October 2009
OWNERSHIP	No registered ownership

SITE DESCRIPTION

The upper part of the course of the River Don.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
River and stream	0.59

National and local BAP species:

English Name	Scientific Name	Notes
Barn Owl	<i>Tyto alba</i>	Regularly present
Lapwing	<i>Vanellus vanellus</i>	Regularly present
Linnet	<i>Carduelis cannabina</i>	Nests in the gorse areas.
Otter	<i>Lutra lutra</i>	Occasional along the river.
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds.
Water shrew	<i>Neomys fodiens</i>	present
Water Vole	<i>Arvicola terrestris</i>	Frequent along the river

DETAIL

The site consists of the two kilometre stretch of the River Don between Hylton Bridge and the disused Wardley to Washington rail line. This LWS covers the southern half of the course of the river, the northern bank being in South Tyneside.

In this part of the course of the River Don, the river is quite small and is flanked by arable land. In places the river has been deeply cut and embanked, in order to drain the farmland. The river increases noticeably in size downstream of the inflow from the Usworth Burn.

The aquatic vegetation has few species; stands of branched bur-reed are the main emergents, with some soft rush, reed canary grass and yellow flag. Water cress, water mint and water starwort are present along the length of the river.

The steep banks of the cut channel are well vegetated, with regular patches of scrub including gorse, blackthorn and a variety of willow species.

The banks of the river provide suitable habitat for water voles, the River Don being one of the most important remaining watercourses for this declining species. They

are present along the whole length of this local wildlife site, but particularly around and downstream from the junction with the Usworth Burn.

Water shrews are present on the river, possibly with a large population. Otters are occasionally present, with individuals travelling up the river from the Tyne.

Though the river is quite small here, the water is fairly clean and supports many invertebrates, including banded demoiselle. The invertebrates, and a large population of three-spined sticklebacks, provide food for birds such as mallard, moorhen, kingfisher, heron, pied wagtail and grey wagtail. The steep banks provide several suitable nest sites for kingfishers. Barn owls are regularly present. Lapwings are present in the winter months. Linnets, reed buntings and a number of other small bird species nest in the scrub along the riverbanks.

CONDITION ASSESSMENT

The river meets the Local Wildlife Site criteria.

CONNECTIVITY

This section of the River Don is an important component of the River Don wildlife corridor.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in June, August and October 2009 by J L Durkin.

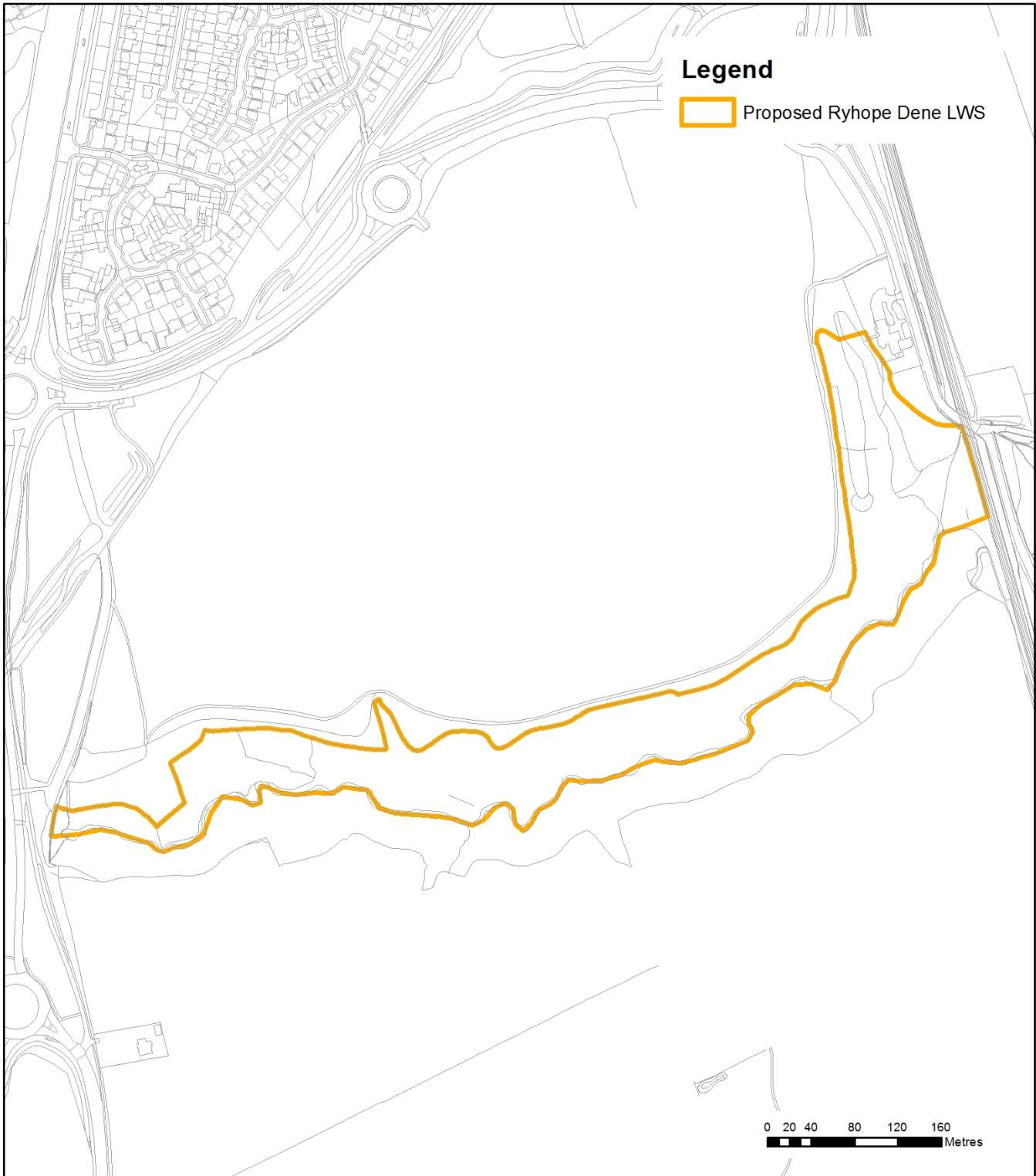
SITE MANAGEMENT

The river here is managed mainly to provide drainage for the adjacent arable fields.


For details of wetland management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes"

River Don species list



English Name	Scientific Name	DAFOR
Alder	<i>Alnus glutinosa</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bramble	<i>Rubus fruticosus agg.</i>	Occasional
Branched Bur-reed	<i>Sparganium erectum</i>	Occasional
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Rare
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Celery-leaved Buttercup	<i>Ranunculus sceleratus</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Chickweed	<i>Stellaria media</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Dog-rose	<i>Rosa canina agg.</i>	Occasional
Eared Willow	<i>Salix aurita</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Frequent
Goat Willow	<i>Salix caprea</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Hemlock	<i>Conium maculatum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Indian Balsam	<i>Impatiens glandulifera</i>	Occasional
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Rare
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Northern Mole	<i>Talpa europaea</i>	Occasional
Northern Water Vole	<i>Arvicola terrestris</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Pineappleweed	<i>Matricaria discoidea</i>	Occasional
Purple Willow	<i>Salix purpurea</i>	Rare
Radish	<i>Raphanus raphanistrum</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Dead-nettle	<i>Lamium purpureum</i>	Occasional
Red Fox	<i>Vulpes vulpes</i>	
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rusty Willow	<i>Salix cinerea oleifolia</i>	Occasional
Soft-rush	<i>Juncus effusus</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Water Shrew	<i>Neomys fodiens</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Occasional
Wood Burdock	<i>Arctium nemorosum</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare
Zigzag Clover	<i>Trifolium medium</i>	Occasional



Legend

 Proposed Ryhope Dene LWS

This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 412 517</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13/08/2020 Scale 1: 5,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	
	<p>Subject Proposed Ryhope Dene LWS</p>	
	<p>Drawing No. UF 5_36_01_06_047.01</p>	<p>Sheet size A4 Revisions 1</p>

SITE NAME	Ryhope Dene
SITE No.	UF 5_36_01_06_047
LOCATION	Ryhope NZ412517
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised 2020
AREA	6.53 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Mixed deciduous woodland with rich ground flora on base flushed soils.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Ancient semi-natural woodland	6.01
Other broadleaf woodland	0.25
Rivers and streams	0.27

National and local BAP species:

English Name	Scientific Name	Notes
Linnet	<i>Linaria cannabina</i>	
Noctule Bats	<i>Nyctalus noctula</i>	Regularly present
Song thrush	<i>Turdus philomelus</i>	
Water vole	<i>Arvicola terrestris</i>	Old record

Other protected species:

English Name	Scientific Name	Notes
Blackcap	<i>Sylvia atricapilla</i>	
Bullfinch	<i>Pyrrhula pyrrhula</i>	
Chiffchaff	<i>Phylloscopus collybita</i>	
Coal tit	<i>Periparus ater</i>	
Great spotted woodpecker	<i>Dendroscopus major</i>	
Long-tailed tit	<i>Aegithalos caudatus</i>	
Millipede	<i>Cylindroiulus londiniensis</i>	
Treecreeper	<i>Certhia familiaris</i>	

DETAIL

Lying on the Sunderland and Durham border and neighbouring the coast this broadleaf woodland is one of the smaller Durham coastal denes. It stretches from the A1018 south of the village of Ryhope eastward to the Seaham to Ryhope B1287 road and the Sunderland to Hartlepool rail line. Immediately to the west of Ryhope Dene lies the broadleaf woodland of Cherry Knowle Dene. The surrounding land use is mainly intensive arable agricultural systems with the urban areas of Ryhope and Sunderland to the north and Seaham to the south. The fields immediately adjacent to the woodland to the north are subject to a planning application for housing, which would bring housing to border the sites northern edge.

Ryhope Dene is an area of Ancient Semi-Natural Woodland (ASNW). It forms an area of coastal dene woodland which is characteristic of the Sunderland & Durham coast. The composition of the woodland varies with the geology of the site, which is strongly calcareous in places. The limestone rock is exposed in the stream bed and on the dene banks. Influenced by the underlying limestone geology, the woodland would once have consisted of an ash and elm woodland community, today few elm remain and instead ash and sycamore are frequent. In places the woodland is poorly drained and there are flush communities. These factors have produced a variety of woodland types. Beech and horse-chestnut are also present. The Cherry Knowle Burn runs through the site dividing the north and south dene and respective Local Wildlife Sites.

There are several access routes through the woodland, though none are statutory or permissive. Illegal trespass is a large issue in this woodland and motorbikes and quadbikes have historically caused large disturbance. The understory is sparse in places, more so in the south dene and consists of elder, hawthorn, blackthorn and hazel. The tree stock appears to be relatively healthy, though regeneration of tree species is limited in some areas. The ground flora is relatively rich and includes several ancient woodland indicator species such as bluebell, dog's mercury, sanicle, sweet woodruff, ramsons, common dog violet and wood millet. Wood avens, wood crane's-bill and red campion are frequent.

The small northern tributary dene is very calcareous, with areas of exposed rock and supports large numbers of harts tongue fern, with some hard shield and soft shield fern. A flush in this dene supports yellow flag, water horsetail and hybrid water horsetail. A garden escape London pride forms a small carpet on the southern dene bank. Himalayan balsam follows the burn and lower banks. Off road vehicles have widened out some woodland structure, though a continuous canopy is present almost throughout.

The woodland has been subject to active recording of bird species for a number of years. Several woodland birds are present, these include blackcap, bullfinch, chiffchaff, coal tit, great spotted woodpecker, long-tailed tit, song thrush, tree creeper. the site contains a sizeable population of a rare millipede.

A small area at the eastern end of the site includes other broadleaf woodland and some rank grassland. It should be noted that Japanese knotweed is present within the latter, as is Himalayan balsam, which does spill into the woodland area as well. The woodland itself is dominated with non-native sycamore. Other species include ash, elder, grey willow and horse chestnut. Ground flora is poor, dominated by ivy, nettle and Himalayan balsam. The woodland fails its condition assessment due to lack of deadwood habitat, lack of indicator species and percentage of non-native species present.

CONDITION ASSESSMENT

The Ancient semi-natural woodland habitat meets the Local Wildlife Site criteria:

Ryhope Dene (north & south) features on the Natural England's Ancient Woodland inventory, except for the woods north eastern arm. Though this has secondary and planted in parts, the steep gill running through its bottom is rich with woodland and flush flora. Being an ancient semi-natural woodland makes Ryhope Dene an important site, especially given its location at the edge of an urban environment. Non-native species including sycamore and beech are frequent across the site. Cover of native species across the site is as low as 45%, the DBAP woodland condition assessment states that native cover must be greater than 90%. Ryhope Dene therefore fails on this condition meaning that the site is currently in unfavourable condition. The site also suffers from antisocial behaviour resulting in off road vehicles causing heavy disturbance to ground flora and understorey, shrub and regenerating tree species.

The Rivers and streams habitat meets the Local Wildlife Site criteria:

Flowing through a woodland site, the burn here is heavily shaded. Off-road vehicles cross it in several places and fly-tipping occurs at the burns western end. The non-native Himalayan Balsam is present along the burn's length, densely so in places.

CONNECTIVITY

Ryhope Dene is part of a larger woodland complex which includes the ASNW of Cherry Knowle Dene immediately to the west (across the B1287) and Burden Dene adjoining this to the west. To the east of the dene (300m) is the Sunderland and Durham coast. This consists of foreshore, designated as the Durham Coast Site of Special Scientific Interest and the Northumbria Coast RAMSAR. Areas of cliff and cliff top grassland are present, including the Local Wildlife Sites of Ryhope Village Dene to the north east, Ryhope Denemouth (north and south) and Ryhope Dene Railway Cutting immediately to the west. Byron's Dene LWS lies 900m to the south. Ryhope Dene remains relatively isolated from these other sites as a result of the hard boundaries of local roads and the east coast rail line. To the south of the dene there is a reasonable network of hedges and the farmland of Seaham Grange Farm is currently in a Higher-Level Stewardship Scheme for its farmland bird interest.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

There is no formal access to this wood.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Ancient semi-natural woodland:

- Remove non-native species.
- Improve woodland composition.
- Fence woodland and patrol.

Rivers and streams:

- Himalayan balsam control.

Ryhope Dene species list

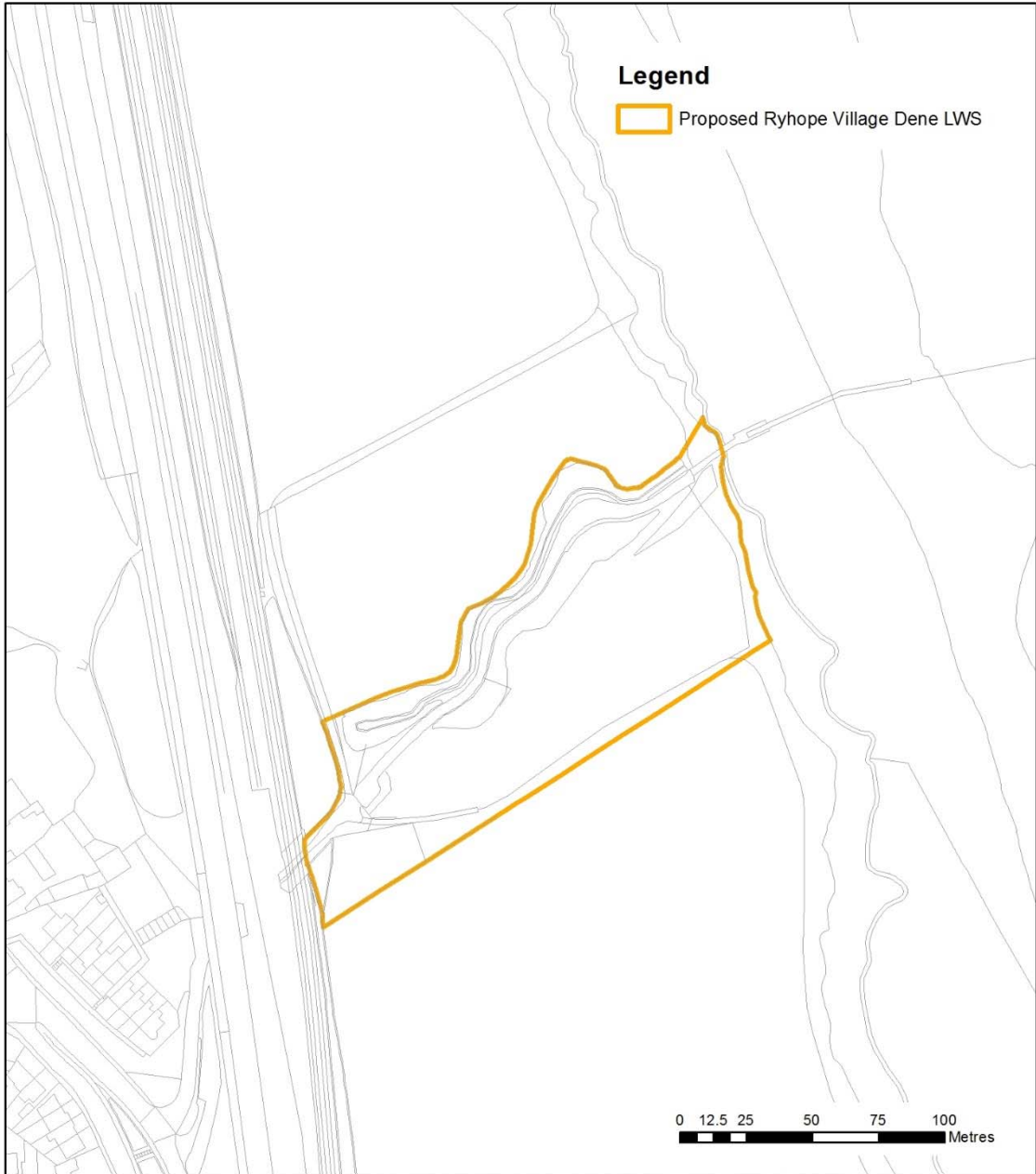
BAP Habitat Type: Ancient Semi-Natural Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Red Beard-Moss	<i>Bryoerythrophyllum recurvirostrum</i>	Occasional Occasional/Locally Frequent
Rough- Stalked Meadow Grass	<i>Poa trivialis</i>	Occasional/Locally Frequent
Wych Elm	<i>Ulmus glabra</i>	
Apetalous Sandwort	<i>Moehringia trinervia</i>	Rare
Bay Willow	<i>Salix pentandra</i>	Rare
Bifid Crestwort	<i>Lophocolea bidentata</i>	Occasional
Black Bryony	<i>Tamus communis</i>	Rare
Borrer's Scaly Male Fern	<i>Dryopteris borrieri</i>	Rare
Broad Buckler-Fern	<i>Dryopteris dilatata</i>	Occasionally Frequent
Broadleaf Plantain	<i>Plantago major</i>	Occasional
Broad-Leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Butterfly Bush	<i>Buddleja davidii</i>	Very Locally Frequent
Chickweed	<i>Stellaria media</i>	Rare
Cock's Foot	<i>Dactylis glomerata</i>	Occasional
Common Bluebell	<i>Hyacinthoides non-scripta</i>	Locally Abundant
Common Bracken	<i>Pteridium aquilinum</i>	Rare
Common Bugle	<i>Ajuga reptans</i>	Occasional
Common Dandelion	<i>Taraxacum officinale</i>	Occasional
Common Elder	<i>Sambucus nigra</i>	Occasional/Frequent
Common Feather-Moss	<i>Kindbergia praelonga</i>	Abundant
Common Hawthorn	<i>Crataegus monogyna</i>	Occasional
Common Hazel	<i>Corylus avellana</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Rare
Common Pocket-Moss	<i>Fissidens taxifolius</i>	Occasional
Common Sorrel	<i>Rumex sanguineus</i>	Occasional
Common Striated Feather-Moss	<i>Eurhynchium striatum</i>	Locally Frequent
Common Tamarisk-Moss	<i>Thuidium tamariscinum</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional

Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Crescent-Cup Liverwort	<i>Lunularia cruciata</i>	Occasionally Rare
Cypress-Leaved Plait-Moss	<i>Hypnum cupressiforme</i>	Occasional
Dark-Green Flapwort	<i>Jungermannia atrovirens</i>	Rare
Dog's Mercury	<i>Mercurialis perennis</i>	Locally Dominant
Dwarf Feather-Moss	<i>Eurhynchium pumilum</i>	Rare
Endive Pellia	<i>Pellia endiviifolia</i>	Very Locally Frequent
European Ash	<i>Fraxinus excelsior</i>	Frequent
European Blackberry	<i>Rubus fruticosus</i>	Frequent/Locally Dominant
European Ivy	<i>Hedera helix</i>	Locally Dominant
European Raspberry	<i>Rubus idaeus</i>	Rare
False-Brome	<i>Brachypodium sylvaticum</i>	Occasional
Flat Neckera	<i>Neckera complanata</i>	Rare
Fox-Tail Feather-Moss	<i>Thamnobryum alopecurum</i>	Occasional
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Golden Shield Fern	<i>Dryopteris affinis</i>	Occasionally Rare
Goosegrass	<i>Galium aparine</i>	Frequent
Great Scented Liverwort	<i>Conocephalum conicum</i>	Very Locally Abundant
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Ground Elder	<i>Aegopodium podagraria</i>	Locally Abundant
Ground Ivy	<i>Glechoma hederacea</i>	Occasional
Hair-Pointed Feather-Moss	<i>Cirriphyllum piliferum</i>	Occasional
Hairy-Brome	<i>Bromopsis ramosa</i>	Occasionally Rare
Hard-Shield Fern	<i>Polystichum aculeatum</i>	Rare
Hart's-Tongue Fern	<i>Phyllitis scolopendrium</i>	Locally Frequent
Hart's-Tongue Thyme-Moss	<i>Plagiomnium undulatum</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Locally Abundant
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Hybrid Bluebell	<i>Hyacinthoides x massartiana</i>	Rare
Ivy-Leaved Speedwell	<i>Veronica hederifolia</i>	Rare

Juicy Silk-Moss	<i>Plagiothecium succulentum</i>	Occasional
Lady's Mantle	<i>Alchemilla xanthochlora</i>	Rare
Lesser Celandine	<i>Ficaria verna</i>	Locally Abundant
Lesser Pocket-Moss	<i>Fissidens bryoides</i>	Frequent
London Pride	<i>Saxifraga x urbium</i>	Locally Abundant
Long-Beaked Thyme-Moss	<i>Plagiomnium rostratum</i>	Occasional
Long-Beaked Water Feather-Moss	<i>Platyhypnidium riparioides</i>	Very Locally Abundant
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Many-Zoned Fungus	<i>Coriolus versicolor</i>	Rare
Matted Feather-Moss	<i>Brachythecium populeum</i>	Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Pendulous Sedge	<i>Carex pendula</i>	Occasionally Rare
Pink-Fruited Thread-Moss	<i>Pohlia melanodon</i>	Occasional
Red Campion	<i>Silene dioica</i>	Rare
Redcurrant	<i>Ribes rubrum</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Very Locally Abundant
Rough Chervil	<i>Chaerophyllum temulum</i>	Rare
Rough-Stalked Feather-Moss	<i>Brachythecium rutabulum</i>	Abundant
Sanicle	<i>Sanicula europaea</i>	Rare
Spruce	<i>Picea</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Abundant/Dominant
Top Notchwort	<i>Leiocolea turbinata</i>	Rare
Tussock Grass	<i>Deschampsia cespitosa</i>	Occasional
Variable-Leaved Crestwort	<i>Lophocolea heterophylla</i>	Rare
Waved Silk-Moss	<i>Plagiothecium undulatum</i>	Rare
Wavy Bittercress	<i>Cardamine flexuosa</i>	Locally Frequent
White Nettle	<i>Lamium album</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Arum	<i>Arum maculatum</i>	Occasionally Rare
Wild Garlic	<i>Allium ursinum</i>	Abundant/Dominant
Wood Anemone	<i>Anemone nemorosa</i>	Locally Abundant
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood Sorrel	<i>Oxalis acetosella</i>	Occasional

Yellow Flag	<i>Iris pseudacorus</i>	Rare
-------------	-------------------------	------

BAP Habitat Type: Other Broadleaf Woodland – Southern Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Grey Willow	<i>Salix cinerea</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Abundant/Locally Dominant
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent/Locally Dominant
Nettle	<i>Urtica dioica</i>	Frequent/ Locally Dominant
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Abundant



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	National Grid Reference NZ 416 530	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 08.10.2020 Scale 1: 2,000
	Subject Proposed Ryhope Village Dene LWS	Sheet size A4
	Drawing No. UF 5.36.01.06.019.01	Revisions 1

SITE NAME	Ryhope Village Dene (formerly Halliwell Banks)
SITE No.	UF 5_36_01_06_019
LOCATION	Grangetown NZ415537
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised in 2020
AREA	1.40 ha
DATE OF SITE VISIT	June 2017
OWNERSHIP	Private

SITE DESCRIPTION

A small coastal gill supporting an important area of coastal calcareous grassland (Maritime magnesian limestone grassland).

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Maritime grassland	0.70
Rivers and streams	220m

National and local BAP species:

English Name	Scientific Name	Notes
Curlew	<i>Numenius arquata</i>	Migrant
Linnet	<i>Carduelis cannabina</i>	Present
Purple Sandpiper	<i>Calidris maritima</i>	Winter visitor
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds in the arable fields
Skylark	<i>Alauda arvensis</i>	Breeds in the arable fields
Turnstone	<i>Arenaria Interpres</i>	Winter visitor

Other protected species:

English Name	Scientific Name	Notes
Badger	<i>Meles Meles</i>	Previously recorded passing through along the cliffs.
Lattice Heath moth	<i>Chiasmia clathrate</i>	

DETAIL

The Maritime magnesian limestone grassland on the slopes of the gill is species-rich in places and contains a high number of calcicolous species including greater knapweed, common restharrow, small scabious, kidney vetch, salad burnet, burnet saxifrage, harebell, hoary plantain, downy oat-grass, meadow oat-grass and quaking grass. The grassland is unmanaged and has become much encroached upon by bramble, scrub and coarse grasses.

The remainder of the gill consists of tall rank vegetation and scrub characterised by stands of Himalayan balsam, this covers the banks of a stream running through the bottom of the site, and areas of the banks above. Scrub has developed in places, the denser sections on the north facing slope. The scrub consists mainly of hawthorn, grey willow, elder and sycamore and supports twining large bindweed and bramble thickets. Although species-poor, this coastal scrub is a habitat of considerable value to migratory birds seeking food and shelter.

The Himalayan balsam is currently undergoing control. The south facing bank is currently being maintained to encourage rock rose and other Magnesian limestone species.

CONDITION ASSESSMENT

The Maritime grassland habitat meets the Local Wildlife Site criteria:

Areas of maritime magnesian limestone grassland are present on the southern slopes. Other areas have become invaded by rank grasses, bramble or scrub. A large area had been scraped (c. 2012) of vegetation and now some herbs and grasses of interest colonise, which is managed with annual cuts.

This grassland is in an unfavourable condition. Scrub and rank grasses encroach in places and areas of bare ground are present. Given the recent scraping/disturbance, there are a limited number of positive indicator species present in these areas. Japanese Knotweed is present.

Rivers and streams habitat meets the Local Wildlife Site criteria:

Littering is occasional and the non-native Himalayan Balsam is present along the burn's length, densely so in places.

CONNECTIVITY

Ryhope Village Dene lies within the coastal strip neighbouring the Durham Coast SSSI and Northumbria Coast SPA and RAMSAR. A series of nationally important cliffs and foreshore, the Durham Coast SAC and SSSI supports important para-maritime magnesian limestone grassland and numerous bird species. Though interrupted in part, the SSSI extends from South Shields in the north to Crimdon in the south. Inland of this coastal strip, arable farmland lies immediately to the north and south of the dene. The east coast train line bounds this to the west. To the south is Ryhope Denemouth LWS, a further area of maritime magnesian limestone grassland and Ancient semi-natural woodland. This dene continues to the west and includes the LWS's of Ryhope Dene and Cherry Knowle Dene. Ryhope Dene Railway Cutting LWS lies 100m to the west, and 200m to the north is Hendon Promenade LWS and Hendon Railway LWS.

LANDSCAPE

Ryhope Village Dene is a part of a major landscape feature along the northern part of the Durham coast.

RECORDED HISTORY

Surveyed in 1995 and by A. Mclay in 2010, and again by Durham Wildlife Services in 2017 and 2019.

SITE MANAGEMENT

Maritime magnesian limestone grassland:

- Selective scrub removal
- Annual cut and rake
- Bare earth creation for grassland recolonization
- Control of non-native species – Japanese knotweed

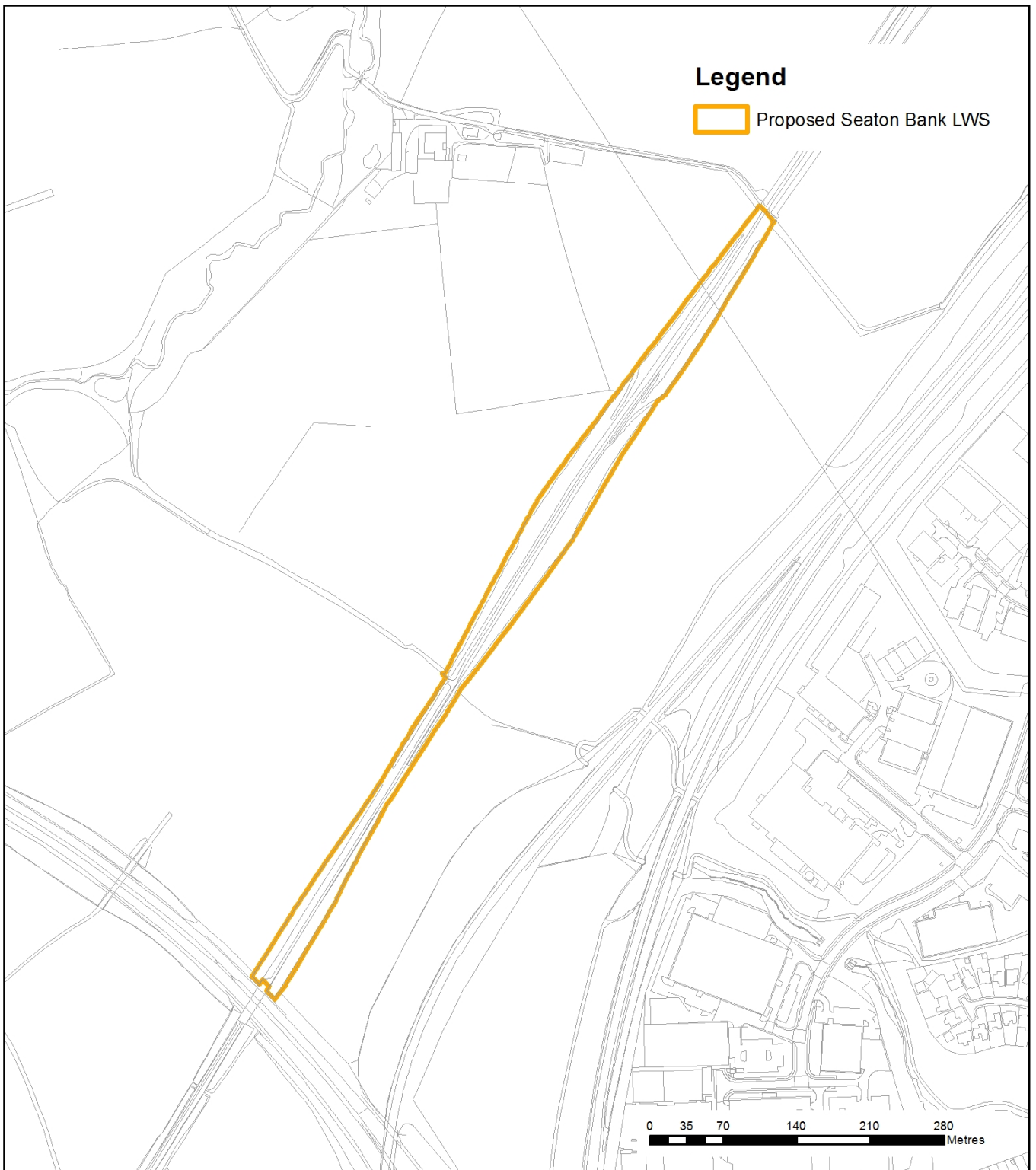
Rivers and streams:

- Himalayan balsam control
- Remove litter



Ryhope Village Dene species list

BAP Habitat: Magnesian Limestone Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare
Cock's Foot	<i>Dactylis glomerata</i>	Frequent
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Rare
Burnet Saxifrage	<i>Pimpinella saxifraga</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mouseear	<i>Cerastium fontanum</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Abundant
Creeping Red Fescue	<i>Festuca rubra ssp. rubra</i>	Abundant
Crested Hair-grass	<i>Koeleria macrantha</i>	Occasional
Crow Garlic	<i>Allium vineale</i>	Rare
Downy Oat-grass	<i>Avenula pubescens</i>	Locally Abundant
False Brome	<i>Brachypodium sylvaticum</i>	Locally Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Field Horsetail	<i>Equisetum arvense</i>	Locally Abundant
Field Scabious	<i>Knautia arvensis</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Rare
Harebell	<i>Campanula rotundifolia</i>	Rare
Hawkweed	<i>Hieracium sp.</i>	Rare
Himalayan Balsam	<i>Impatiens glandulifera</i>	Locally Frequent
Kidney-vetch	<i>Anthyllis vulneraria</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Frequent
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Quaking Grass	<i>Briza media</i>	Occasional

Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Hoary Plantain	<i>Plantago media</i>	Rare
Smooth Meadow-grass	<i>Poa pratensis</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent
Salad Burnet	<i>Poterium sanguisorba</i>	Rare
Cowslip	<i>Primula veris</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Red Japanese Rose	<i>Rosa rigosa</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Small Scabious	<i>Scabiosa columbaria</i>	Rare
Tall Fescue	<i>Schedonorus arundinaceus</i>	Occasional
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Bladder Campion	<i>Silene vulgaris</i>	Rare
Devil's Bit Scabious	<i>Succisa pratensis</i>	Rare
Goat's-beard	<i>Tragopogon pratensis</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
White Clover	<i>Trifolium repens</i>	Abundant
Colt's-foot	<i>Tussilago farfara</i>	Locally Frequent
Rough Hawkbit	<i>Leontodon hispidus</i>	Frequent
Rough-stalked Feathermoss	<i>Brachythecium rutabulum</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Abundant
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 401 509	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.11.2020 Scale 1: 5,000
	Project Local Wildlife Site Boundary Review 2020	
	Subject Proposed Seaton Bank LWS	
	Drawing No. UF 5.36.01.07.008.01	Revisions

SITE NAME	Seaton Bank
SITE No.	UF 5_36_01_07_008
LOCATION	Seaham NZ401509
STATUS	Proposed Local Wildlife Site
AREA	2.71 ha
DATE OF SITE VISIT	August 2016
OWNERSHIP	Private

SITE DESCRIPTION

Magnesian limestone cutting along disused railway.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Magnesian Limestone grassland	0.52
Lowland Fen	0.10

National and local BAP species:

English Name	Scientific Name	Notes
Dingy Skipper	<i>Elynnis tages</i>	Present
Frog Orchid	<i>Coeloglossum viride</i>	
Grasshopper warbler		
Lapwing		
Linnet	<i>Carduelis cannabina</i>	Nests in scrub
Starling		
Yellowhammer		

Other protected species:

English Name	Scientific Name	Notes
Bullfinch		
Redwing		
Wall		

DETAIL

The site is the embankments and cuttings of a former railway line which now forms a cycle/walkway. The banks support a habitat mosaic of species-rich calcareous grassland (Magnesian limestone grassland), a small area of fen habitat and areas of scattered to dense scrub. The areas of calcareous grassland include species such as betony, carline thistle harebell, fairy flax, autumn gentian, pepper saxifrage, common milkwort, kidney vetch, quaking grass and downy oatgrass. Common twayblade, fragrant orchids and a small population of frog orchid are present on site. The bee orchids recorded in 2009 were not recorded in 2016. Frog orchids are currently in severe decline nationally and are listed as a priority species under the NERC act.

Also present is pale St. John's wort, which is a local rarity with a markedly southern distribution in the UK.

There is a small area of lowland fen towards the northern end of the site. This is likely to be groundwater fed by a calcareous water supply. Meadowsweet dominant, but also present are glaucous sedge, jointed rush, toad rush and hard rush.

The rest of the site is made up of rank semi-improved grassland dominated by false oat-grass; tall ruderal vegetation dominated by rosebay willowherb and nettle; and areas of scrub, dominated by bramble, hawthorn and gorse.

CONDITION ASSESSMENT

The Magnesian limestone grassland habitat meets the Local Wildlife Site criteria:

Some of the drier areas of the railway embankment meet the criteria for the Durham BAP definition of Magnesian limestone grassland. The area of Magnesian limestone grassland towards the centre of the site is in favourable condition. Scrub is a problem in places and areas of bare ground are present, due to rabbits. However, the rabbits, at present, are helping to manage the grassland. The calcareous grassland relicts to the south of the site are unfavourable due to frequency of indicator species.

Lowland fen:

The fen habitat on site are from wet ground water depressions. They support a mixture of tall herb fen and short fen vegetation.

There is no condition assessment for lowland fen within the Durham BAP habitat definition. However, this area of fen seemed to be of reasonable quality given the limited water supply.

CONNECTIVITY

Seaton Bank is situated in a rural environment, surrounded by farmland. Urban areas are relatively close, with an industrial estate 250 metres to the east, Ryhope village 1km to the north and Seaton village 200 metres to the south. The site itself is a disused railway so is a long linear feature that will act as a wildlife corridor. The cycleway also extends up to the coast in the north and for several kilometres to the south through several villages. It is frequently lined with trees or scrub and does link a few small woodland sites, however, largely the habitat on either side of the former railway line is poor, with the majority of it being arable land. It doesn't, therefore, connect high quality wildlife habitats and the only other designated sites within proximity are a series of wooded denes (Cherry Knowle Dene LWS and Ryhope Dene LWS) that cross the cycleway 500 metres to the north.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed by V.Howard in 2005, in by A.Mclay in July 2009 and in 2016 by Durham Wildlife Trust.

SITE MANAGEMENT

Magnesian limestone grassland:

- Selective scrub removal.
- Annual cut and rake.

Lowland fen:

- Selective scrub removal.
- Annual cut and rake.

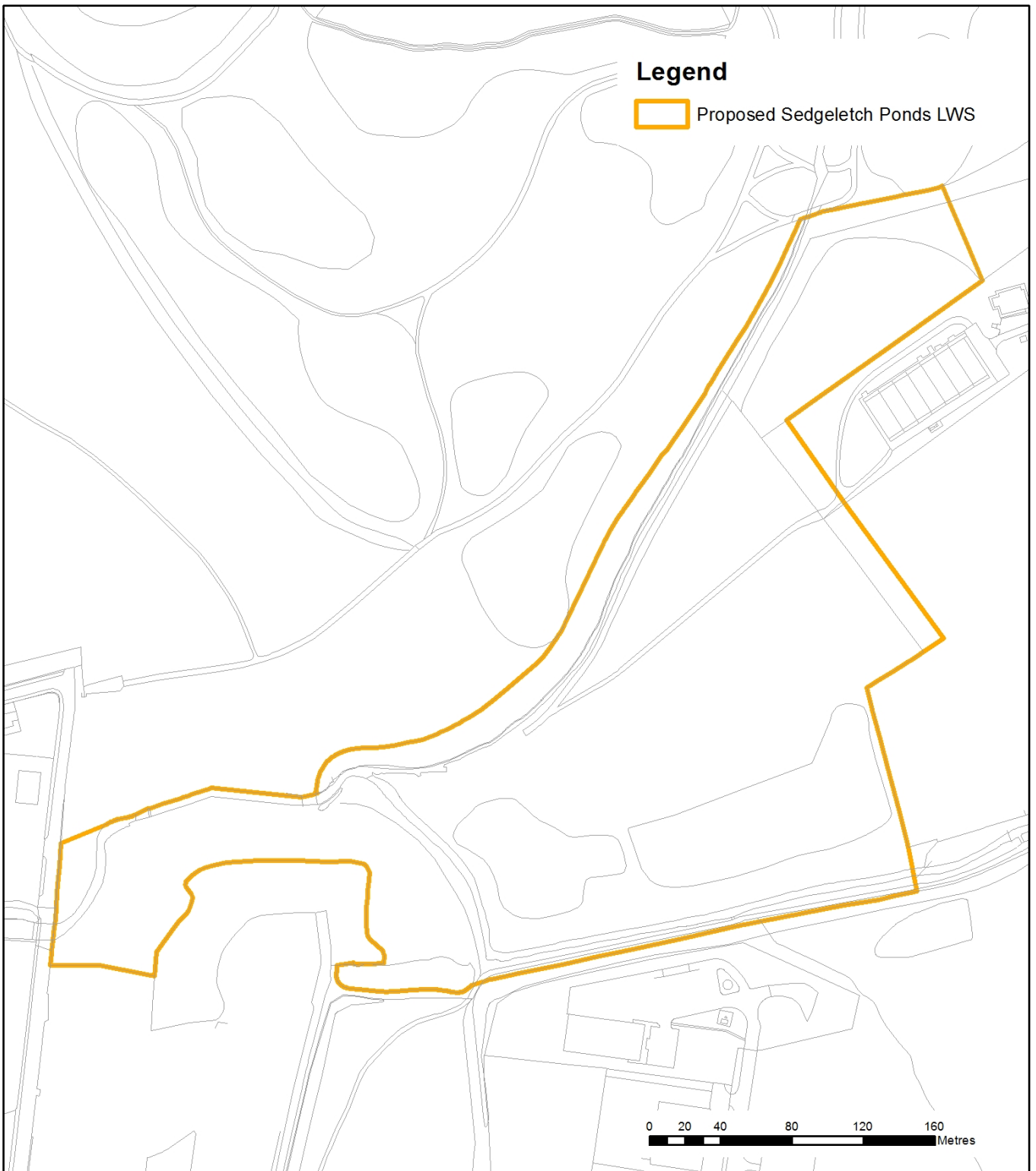
Seaton Bank species list

Common Name	Botanical Name	Abundance (DAFOR)
<u>Magnesian Limestone Calcareous Grassland</u>		
Cowslip	<i>Primula veris</i>	Frequent
Selfheal	<i>Prunella vulgaris</i>	Occasional
Pear	<i>Pyrus communis</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Rare
Wild Mignonette	<i>Reseda lutea</i>	Rare
Yellow Rattle	<i>Rhinanthus minor</i>	Rare
Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	Rare
Dog Rose	<i>Rosa canina</i>	Rare
Northern Downy Rose	<i>Rosa sherardii</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent
Common Sorrel	<i>Rumex acetosa</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Pepper Saxifrage	<i>Silaum silaus</i>	Locally Frequent
Bladder Campion	<i>Silene vulgaris</i>	Rare
Upright Hedge-parsley	<i>Torilis japonica</i>	Rare
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Zig-zag Clover	<i>Trifolium medium</i>	Locally Abundant
Red Clover	<i>Trifolium pratense</i>	Rare
Colt's-foot	<i>Tussilago farfara</i>	Locally Frequent
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Occasional
Moss	<i>Weissia sp.</i>	Occasional


Spiral Extinguisher-moss	<i>Encalypta streptocarpa</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Eyebright	<i>Euphrasia nemorosa</i>	Frequent
Red Fescue	<i>Festuca rubra</i>	Abundant
Rock Pocket-moss	<i>Fissidens dubius</i>	Occasional
Wild Strawberry	<i>Fragaria vesca</i>	Locally Frequent
Ash	<i>Fraxinus excelsior</i>	Rare
Bifid Hemp-nettle	<i>Galeopsis bifida</i>	Rare
Autumn Gentian	<i>Gentianella amerella</i>	Occasional
Herb-robert	<i>Geranium robertianum</i>	Rare
Fragrant Orchid	<i>Gymnadenia conopsea</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Hawkweed	<i>Hieracium sect. hieracium</i>	Frequent
Hawkweed	<i>Hieracium sect. sabauda</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional
Yellow Feather-moss	<i>Homalothecium lutescens</i>	Occasional
Pale St John's-wort	<i>Hypericum montanum</i>	Rare
Slender St John's-wort	<i>Hypericum pulchrum</i>	Occasional
Hybrid St John's-wort	<i>Hypericum x desetangsii</i>	Occasional
Gorse	<i>Ilex europaeus</i>	Occasional
Field Scabious	<i>Knautia arvensis</i>	Frequent
Top Notchwort	<i>Leiocolea turbinata</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Abundant
Toadflax	<i>Linaria vulgaris</i>	Rare
Fairy-flax	<i>Linum catharticum</i>	Frequent
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Black Medic	<i>Medicago lupulina</i>	Rare
Field Forget-me-not	<i>Myosotis arvensis</i>	Rare
Common Twayblade	<i>Neottia ovata</i>	Locally Frequent
Mouse-eared Hawkweed	<i>Pilosella officinarum</i>	Abundant
Lesser Feather-moss	<i>Plagiochila porelloides</i>	Rare
Long-beaked Thyme-moss	<i>Plagiomnium rostratum</i>	Rare
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Smooth Meadow-grass	<i>Poa pratensis</i>	Rare
Common Milkwort	<i>Polygala vulgaris</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare

Sycamore	<i>Acer pseudoplatanus</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Locally Frequent
Creeping Bent	<i>Agrostis stolonifera</i>	Abundant
Sweet Vernal	<i>Anthoxanthum odoratum</i>	Locally Frequent
Kidney-vetch	<i>Anthyllis vulneraria</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Downy Oat-grass	<i>Avenula pubescens</i>	Locally Frequent
Betony	<i>Betonica officinalis</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
False Brome	<i>Brachypodium sylvaticum</i>	Dominant
Quaking Grass	<i>Briza media</i>	Frequent
Capillary Thread-moss	<i>Bryum capillare</i>	Rare
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Occasional
Harebell	<i>Campanula rotundifolia</i>	Frequent
Goldenleaf Moss	<i>Campylium chrysophyllum</i>	Frequent
Glaucous Sedge	<i>Carex flacca</i>	Abundant
Carlina Thistle	<i>Carlina vulgaris</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mouseear	<i>Cerastium fontanum</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Frog Orchid	<i>Coeloglossum viride</i>	Rare
Common Dogwood	<i>Cornus sanguinea</i>	Rare
Cotoneaster	<i>Cotoneaster horizontalis</i>	Rare
Himalayan Cotoneaster	<i>Cotoneaster simonsii</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Rare
Cock's Foot	<i>Dactylis glomerata</i>	Occasional
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Heath Grass	<i>Danthonia decumbens</i>	Occasional
Wild Carrot	<i>Daucus carota</i>	Frequent
Male Fern	<i>Dryopteris filix-mas</i>	Rare

Common Name	Botanical Name	Abundance (DAFOR)
<u>Lowland Fen</u>		
Common Agrimony	<i>Agrimonia eupatoria</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Locally Dominant
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
False Brome	<i>Brachypodium sylvaticum</i>	Locally Frequent
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Locally Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Abundant
Creeping Thistle	<i>Cirsium arvense</i>	Locally Abundant
Fern-leaved Hook-moss	<i>Cratoneuron filicinum</i>	Rare
Crosswort	<i>Cruciata laevipes</i>	Occasional
Cock's Foot	<i>Dactylis glomerata</i>	Occasional
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Rare
Couch Grass	<i>Elytrigia repens</i>	Occasional
Hoary Willowherb	<i>Epilobium parviflorum</i>	Rare
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Creeping Red Fescue	<i>Festuca rubra ssp. Rubra</i>	Locally Abundant
Meadowsweet	<i>Filipendula ulmaria</i>	Dominant
Herb-robert	<i>Geranium robertianum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent
Hairy St John's-wort	<i>Hypericum hirsutum</i>	Occasional
Jointed Rush	<i>Juncus articulatus</i>	Locally Frequent
Toad Rush	<i>Juncus bufonius</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Locally Frequent
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent
Red Bartsia	<i>Odontites verna</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Occasional
Pepper Saxifrage	<i>Silaum silaus</i>	Rare
Upright Hedge-parsley	<i>Torilis japonica</i>	Occasional
Zig-zag Clover	<i>Trifolium medium</i>	Occasional
Nettle	<i>Urtica dioica</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 322 508	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 24.11.2020
	Subject Proposed Sedgeleth Ponds LWS	Scale 1: 3,000
	Drawing No. UF 5_36_01_07_009.01	Sheet size A4 Revisions

SITE NAME	Sedgeleth Ponds
SITE No.	UF 5_36_01_07_009
LOCATION	Sedgeleth NZ322508
STATUS	Proposed Local Wildlife Site
AREA	8.60 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

De-commissioned section of Sedgeleth sewage works flanked by two burns. Wetland habitats on former settling beds with associated semi-improved grassland and scrub.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen	1.58
Lowland meadow and pasture	4.92
Other broadleaf woodland	1.35
Pond	0.03
Rivers and streams	0.25

National and local BAP species:

English Name	Scientific Name	Notes
Daubenton's Bat	<i>Myotis daubentonii</i>	
Lapwing	<i>Vanellus vanellus</i>	
Pipistrelle Bat	<i>Pipistrellus pipistrellus</i>	
Reed Bunting	<i>Emberiza schoeniclus</i>	
Water Vole	<i>Arvicola terrestris</i>	

DETAIL

A tall swamp community dominated by great reedmace is well-developed within the former settling pools. Marestalk, branched bur-reed and grey club-rush are also present with floating aquatics such as broad-leaved pondweed, ivy-leaved duckweed and common duckweed. Water voles are present. Daubenton's and pipistrelle bats feed over the ponds and reedbeds.

The surrounding grazed marshy grassland is species-rich and supports a large population of thread-leaved water crowfoot with flote grass, cuckoo flower, false fox sedge, hairy sedge, fool's watercress, marsh horsetail, jointed rush and tufted water forget-me-not. Marsh yellow-cress, a declining annual species of grazed wetlands is also present.

This wetland site is best known for its ornithological interest and has been well recorded for a number of years now. Jack snipe and kingfisher are local specialities

and bittern has over-wintered on occasion. The present survey recorded breeding lapwing, reed bunting and moorhen.

A small area of densely packed and leggy mature broadleaf plantation can be found to the south west of the site. Species include Italian alder, oak, silver birch, field maple sycamore, ash and hawthorn are the main components of the woodland. Ground flora is poor, dominated with nettle and bramble.

CONDITION ASSESSMENT

The Lowland fen habitat meets the Local Wildlife Site criteria:

The drier parts of the pasture are close-cropped by horses but support small populations of characteristic grassland plants. These include common knapweed, birdsfoot trefoil, meadow cranesbill, hoary ragwort, meadow vetchling, yellow oat grass, squirrel-tail fescue, tufted vetch, autumn hawkbit and common catsear.

Two experimental scrapes have recently been excavated here by NWL but only one held water at the time of survey.

Both Moors and Herrington Burn support tall ungrazed vegetation along their banks dominated by vigorous nitrophilous species such as cow parsley, cleavers, stinging nettle and Himalayan balsam. The dense vegetation prevented close examination of the banks in order to establish the presence of water voles here. Fennel pondweed is locally abundant in both streams.

The former spoil heap at the western end of the site has been partially landscaped by tree planting but the unplanted slopes support a scrub and grassland mosaic typical of colliery shales in the area. Birdsfoot trefoil is abundant with hawkweeds, bladder campion, common spotted orchid, oxeye daisy, yellow rattle, common knapweed and red bartsia. Self-sown hawthorn scrub is invading the open grassland.

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

This woodland fails its condition assessment due to lack of deadwood habitat, percentage of non-native species and lack of veteran trees.

CONNECTIVITY

Sedgeleth Sewage Works forms an important link between the green corridors of Moors Burn, Sunnyside, Success and Herrington.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed by A McLay in 2009 and in 2020 by Durham Wildlife Services. Butterflies and dragonflies have been surveyed by Harry Eales for Northumbrian Water Ltd.

SITE MANAGEMENT

The permanent pasture and associated marsh are currently grazed year-round by horses. This regime has resulted in a close-cropped and somewhat species-poor sward within the drier grassland but a lighter grazed and botanically diverse marshy grassland sward. Grazed marshes of this type are increasingly rare in the Durham lowlands due to drainage and/or the cessation of grazing.

For details of marsh management, refer to the Local Wildlife Site “Management Guidance and Monitoring Notes”.

The brownfield grassland communities associated with the former pit heap will require active management to prevent further scrub encroachment.

For details of grassland management, refer to the Local Wildlife Site “Management Guidance and Monitoring Notes”.

Sedgelech Pond species list

BAP Habitat Type (unknown – from historic surveys)		
Common Name	Botanical Name	Abundance (DAFOR)
a willow	<i>Salix sp.</i>	Frequent
Annual Meadow-grass	<i>Poa annua</i>	Rare
Autumn Hawkbit	<i>Leontodon autumnalis</i>	Rare
Bittersweet	<i>Solanum dulcamara</i>	Rare
Black Medick	<i>Medicago lupulina</i>	Rare
Bladder Campion	<i>Silene vulgaris</i>	Occasional
Bramble	<i>Rubus fruticosus agg.</i>	Rare
Branched Bur-reed	<i>Sparganium erectum</i>	Rare
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Broad-leaved Pondweed	<i>Potamogeton natans</i>	Rare
Brooklime	<i>Veronica beccabunga</i>	Occasional
Bulrush	<i>Typha latifolia</i>	Dominant
Bush Vetch	<i>Vicia sepium</i>	Rare
Butterbur	<i>Petasites hybridus</i>	Abundant
Cat's-ear	<i>Hypochaeris radicata</i>	Occasional
Celery-leaved Buttercup	<i>Ranunculus sceleratus</i>	Occasional
Cleavers	<i>Galium aparine</i>	Rare
Clustered Dock	<i>Rumex conglomeratus</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Common Comfrey	<i>Symphytum officinale</i>	Rare
Common Duckweed	<i>Lemna minor</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mouse-ear	<i>Cerastium fontanum</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Sorrel	<i>Rumex acetosa</i>	Rare
Common Spike-rush	<i>Eleocharis palustris</i>	Abundant
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	Rare
Common Valerian	<i>Valeriana officinalis</i>	Rare
Common Vetch	<i>Vicia sativa</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Frequent
Creeping Bent	<i>Agrostis stolonifera</i>	Locally Abundant
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional

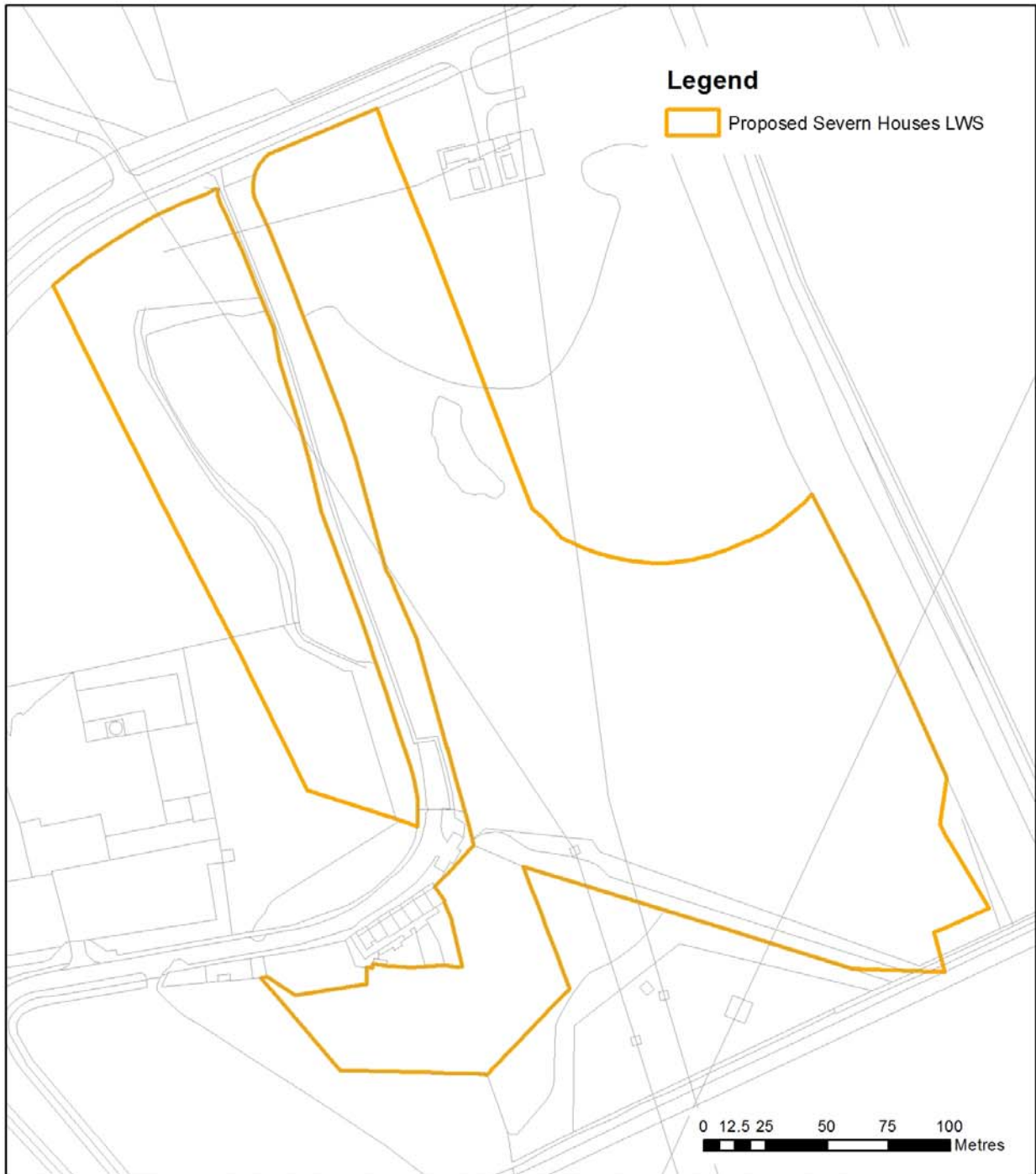
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Frequent
Crosswort	<i>Cruciata laevipes</i>	Rare
Cuckooflower	<i>Cardamine pratensis</i>	Rare
Curled Dock	<i>Rumex crispus</i>	Rare
Cut-leaved Crane's-bill	<i>Geranium dissectum</i>	Rare
Daisy	<i>Bellis perennis</i>	Rare
Dandelion	<i>Taraxacum agg.</i>	Rare
Dog-rose	<i>Rosa canina</i>	Rare
Eared Willow	<i>Salix aurita</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
False Fox-sedge	<i>Carex otrubae</i>	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Rare
Fat-hen	<i>Chenopodium album</i>	Rare
Fennel Pondweed	<i>Potamogeton pectinatus</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Rare
Field Wood-rush	<i>Luzula campestris</i>	Rare
Floating Sweet-grass	<i>Glyceria fluitans</i>	Frequent
Fool's-water-cress	<i>Apium nodiflorum</i>	Frequent
Garlic Mustard	<i>Alliaria petiolata</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Rare
Gorse	<i>Ulex europaeus</i>	Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Greater Plantain	<i>Plantago major</i>	Frequent
Grey Club-rush	<i>Schoenoplectus tabernaemontani</i>	Rare
Ground-elder	<i>Aegopodium podagraria</i>	Rare
Ground-ivy	<i>Glechoma hederacea</i>	Rare
Hairy Sedge	<i>Carex hirta</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hawkweed	<i>Hieracium agg.</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Hemlock	<i>Conium maculatum</i>	Occasional
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Indian Balsam	<i>Impatiens glandulifera</i>	Abundant
Ivy-leaved Duckweed	<i>Lemna trisulca</i>	Frequent
Japanese Knotweed	<i>Fallopia japonica</i>	Rare
Jointed Rush	<i>Juncus articulatus</i>	Frequent

Knotgrass	<i>Polygonum aviculare</i>	Rare
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Lesser Spearwort	<i>Ranunculus flammula</i>	Rare
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Mare's-tail	<i>Hippuris vulgaris</i>	Frequent
Marsh Cudweed	<i>Gnaphalium uliginosum</i>	Rare
Marsh Foxtail	<i>Alopecurus geniculatus</i>	Abundant
Marsh Horsetail	<i>Equisetum palustre</i>	Rare
Marsh Yellow-cress	<i>Rorippa palustris</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Abundant
Meadow Crane's-bill	<i>Geranium pratense</i>	Rare
Meadow Foxtail	<i>Alopecurus pratensis</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Mouse-ear-hawkweed	<i>Pilosella officinarum</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Rare
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Rare
Pineappleweed	<i>Matricaria discoidea</i>	Rare
Red Bartsia	<i>Odontites vernus</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Rare
Redshank	<i>Persicaria maculosa</i>	Rare
Reed Canary-grass	<i>Phalaris arundinacea</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Scentless Mayweed	<i>Tripleurospermum inodorum</i>	Rare
Sheep's-fescue	<i>Festuca ovina agg.</i>	Rare
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	Rare
Silverweed	<i>Potentilla anserine</i>	Rare
Soft-brome	<i>Bromus hordeaceus</i>	Rare
Soft-rush	<i>Juncus effusus</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Squirreltail Fescue	<i>Vulpia bromoides</i>	Rare
Sticky Mouse-ear	<i>Cerastium glomeratum</i>	Rare
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Rare

Tansy	<i>Tanacetum vulgare</i>	Rare
Thread-leaved Water-crowfoot	<i>Ranunculus trichophyllus</i>	Frequent
Toad Rush	<i>Juncus bufonius</i>	Rare
Tufted Forget-me-not	<i>Myosotis laxa</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Rare
Upright Hedge-parsley	<i>Torilis japonica</i>	Rare
Wall Cotoneaster	<i>Cotoneaster horizontalis</i>	Rare
Water Forget-me-not	<i>Myosotis scorpioides</i>	Occasional
Water-cress	<i>Rorippa nasturtium-aquaticum agg.</i>	Occasional
Water-plantain	<i>Alisma plantago-aquatica</i>	Frequent
Water-starwort	<i>Callitriche agg.</i>	Rare
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Rare
Wetted Thistle	<i>Carduus crispus</i>	Rare
White Clover	<i>Trifolium repens</i>	Rare
White Poplar	<i>Populus alba</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Wild Teasel	<i>Dipsacus fullonum</i>	Rare
Wood Burdock	<i>Arctium nemorosum</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Rare
Yellow Oat-grass	<i>Trisetum flavescens</i>	Frequent
Yellow-rattle	<i>Rhinanthus minor</i>	Rare
Yorkshire-fog	<i>Holcus lanatus</i>	Frequent

BAP Habitat Type: Other Broadleaf Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Apple	<i>Malus domestica</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Bird Cherry	<i>Prunus padus</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent/ Locally Abundant
Burdock sp.	<i>Arctium sp.</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Butterbur	<i>Petasites hybridus</i>	Rare/Locally Frequent
Changing Forget-me-not	<i>Myosotis discolor</i>	Rare
Cleavers	<i>Galium aparine</i>	Frequent/ Locally Abundant
Cock's Foot	<i>Dactylis glomerata</i>	Frequent
Common Alder	<i>Alnus glutinosa</i>	Occasional
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional

Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Lime	<i>Tilia x vulgaris</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent/ Locally Abundant
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare/Locally Frequent
Dog Rose	<i>Rosa canina</i>	Occasional
Dog's Mercury	<i>Mercurialis perennis</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
Field Maple	<i>Acer campestre</i>	Occasional
Garlic Mustard	<i>Alliaria petiolata</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hawkweed sp.	<i>Hieracium sp.</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Herb Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Rare
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Italian Alder	<i>Alnus cordata</i>	Frequent
Ivy	<i>Hedera helix</i>	Occasional/Locally Abundant
Larch	<i>Larix decidua</i>	Rare
Large Bindweed	<i>Calystegia silvatica</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Rare
Pineapple Weed	<i>Matricaria discoidea</i>	Rare
Red Campion	<i>Silene dioica</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Rough Meadow-grass	<i>Poa trivialis</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Rare
Silver Birch	<i>Betula pendula</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tansy	<i>Tanacetum vulgare</i>	Rare
White Deadnettle	<i>Lamium album</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Rare
Wood Speedwell	<i>Veronica montana</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 324 579</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13/08/2020 Scale 1: 5,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Severn Houses LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5_36_01_06_050.01</p>		

SITE NAME	Severn Houses
SITE No.	UF 5_36_01_06_050
LOCATION	Washington NZ323580
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised 2020
AREA	6.06 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Private

SITE DESCRIPTION

The local wildlife site consists of areas of wetland on either side of the A1290 Washington Road. There is also a large area of species-rich grassland, east of the road.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen/marsh	1.75
Lowland meadows and pasture	1.80
Other Broadleaf Woodland	0.54
Pond	0.06
Scrub <u>BAP</u>	1.13

National and local BAP species:

English Name	Scientific Name	Notes
Grass Snake		
Grasshopper Warbler		
Great Crested Newt	<i>Triturus cristatus</i>	Present
Grey Partridge		
Hen Harrier		
Linnet		
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds
Skylark		
Snipe	<i>Gallinago gallinago</i>	Breeds
Toad	<i>Bufo bufo</i>	Many tadpoles in 2009
Water Vole	<i>Arvicola terrestris</i>	Present
Yellowhammer		

Other protected species:

English Name	Scientific Name	Notes
Bullfinch		
Common Toad		
Fieldfare		

DETAIL

Severn Houses LWS is composed of an extensive wetland area, formerly comprising open water but now dominated by fen with reedmace and branched burr-reed. A good variety of wetland plants exist towards the margins of the fen, where lesser spearwort, marsh ragwort, common sedge, marsh thistle and a variety of rushes can be found, although the non- native invasive New Zealand pygmyweed dominates in places.

The fen is surrounded by lowland meadows and dense gorse scrub, which both provide important habitat for plants and birds respectively within the site. The meadow contains a range of species, including common knapweed, wild angelica, common bird's-foot trefoil, yellow rattle and pepper saxifrage.

An area of woodland can also be found to the south west of the site.

Several species of conservation concern occur within the site; water vole, toad and great crested newt are known to be present within the fen, and snipe, sedge warbler, linnet and reed bunting are known to nest at the site.

Although the main interest of the site is the wetland, the site hosts a variety of habitats in close proximity to one another, and this produces a mosaic of wildlife communities which is of great value.

CONDITION ASSESSMENT

The pond habitat meets the Local Wildlife Site criteria:

To the east of the A1290 is a large wetland area. Approximately 0.8 ha of open water was once present in this area, providing vital habitat for birds, amphibians, including great crested newt, and mammals such as water vole. Aerial photography shows this area of open water to have gradually reduced in size, before finally being overcome by the surrounding tall fen vegetation between 2006 and 2008. It is important to maintain a mosaic of habitats within the site and, although fen is an important habitat in itself, it has excluded the open water, thereby decreasing the value of the site as a whole. There is no formal condition assessment for ponds under the Durham Biodiversity Action Plan Priority Habitats Definitions, however no open water can be seen on site so this habitat must be described as being in poor condition and should be reinstated as it is an important feature of the site.

The Lowland fen/marsh habitat meet the Local Wildlife Site criteria:

Fen and marsh occupy much of the site, to both the east and west of the A1290, and is known to support a range of amphibians and birds. Tall fen composed primarily of reedmace surrounds and covers an area of former open water to the east of the road. Here the water table sits above ground level, although the water is becoming gradually shallower as vegetation develops and siltation occurs. Where the water table sits just beneath the ground, more varied, marshy vegetation has developed containing species such as marsh thistle, branched bur-reed, lesser spearwort and assorted rushes: hard, soft, compact and jointed. The non-native and highly invasive New Zealand pygmyweed (also known by its Latin name of *Crassula helmsii*) has become established in the marshy areas around the southern margins of the former pond. Previous management has concentrated on the use of plastic sheeting to shade out this plant and reduce its spread, however this method appears to have

now ceased and Crassula now forms dense mats across wide areas, shading out the native plants beneath. This has resulted in a loss of floral diversity in these areas, with the exception of common spike rush, which appears to be the only plant able to grow through the mass of Crassula. Crassula is also thought to cause oxygen depletion of the underlying water, leading to a decline in invertebrates and amphibians.

On the western side of the A1290 is a further 0.5 hectares of marsh habitat. This area is dominated by tall vegetation, with the wetter sections occupied by stands of reedmace and the drier sections by tufted hair grass. Variety of plants is greatest towards the northern end of the marsh, where small patches of meadowsweet, marsh thistle, common spike rush and false fox sedge occur. Two drainage ditches carry water through the site; one running the length of the western boundary, and the other crossing from west to east, before following the eastern boundary. Open water can be found in the western ditch, which contains sweet grass and broad-leaved pondweed. Willow scrub has developed over the eastern ditch.

There is no formal condition assessment for fen under the Durham Biodiversity Action Plan Priority Habitats Definitions. Although the fen on site contains a range of plants and birds, as well as priority and protected species, overall this habitat must be deemed in poor condition due to the presence of the invasive, non-native plant Crassula.

The Lowland meadows and pasture meets the Local Wildlife Site criteria:

A sizeable area of lowland meadow is located within the south-eastern portion of Severn Houses LWS. Several sedges and several orchid species have previously been recorded, whilst pepper saxifrage, sneezewort, angelica, birds-foot trefoil, meadowsweet and hoary ragwort are known to be present. Fen habitat appears to be expanding into this lowland meadow from the west, whilst scrub and woodland encroach from the east, resulting in a gradual reduction in the extent of this habitat. The grassland itself is also becoming overgrown, as the site currently receives little management. The condition of the meadow is therefore poor and appears to have declined since it was last surveyed.

The Other broadleaf woodland meets the Local Wildlife Site criteria:

Woodland is present to the south west of the site and meets Other broadleaf woodland BAP description but is in unfavourable condition. Although there is good canopy cover, at least 20% shrub cover, and species are native, there is little - no deadwood (standing or fallen) and no veteran trees are present. Trees within the woodland appear to be similarly aged meaning that the woodland structure is not favourable.

CONNECTIVITY

Severn Houses LWS forms part of a cluster of ponds in the Barmston area and sits within the Usworth and Hetton wildlife corridor. This region provides a vital link, along with the neighbouring Nissan complex, between the River Don Catchment and River Wear wildlife corridors, both of which are regional corridors spanning the borough. The River Don corridor runs along Sunderland's northern boundary with South Tyneside as well as linking with the Borough of Gateshead and therefore is a regionally important wildlife link to the neighbouring authorities. The River Wear

corridor runs through the heart of Sunderland and links the coast via the port to Fatfield in Washington.

In a local context, Severn Houses LWS provides an important green space on the eastern edge of an extensively built-up area. To the south is Barmston Pond LWS, containing further areas of wetland and fen, whilst to the east are Peepy Plantation and Hylton Plantation, both of which are Local Wildlife Sites in their own right and reside within the Nissan complex. The site is surrounded by agricultural fields and land of industrial value and is at risk of becoming isolated by potential development. It is important that areas of suitable green space are retained to provide connectivity for wildlife to move between the neighbouring LWSs as well as further afield, through the interlinking wildlife corridors.

To the immediate east and north of the LWS boundary are areas of lowland meadow and plantation woodland respectively.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in 2009 by J L Durkin and A McLay, and again in 2015 and 2020 by Durham Wildlife Services.

SITE MANAGEMENT

Pond:

- Remove reedmace.

Lowland fen/marsh:

- Graze.
- Control invasive plants.
- Map invasive plants.
- Ensure precautionary methods of working are adhered to.

Lowland meadows and pasture:

- Selectively control scrub – keeping in mind value to birds.
- Graze.

Scrub:

- Monitor the extent.

Amphibians and reptiles:

- Conduct a reptile survey

Severn Houses species list

BAP Habitat: Lowland Fen/Marsh		
Common Name	Botanical Name	Abundance (DAFOR)
Bittersweet	<i>Solanum dulcamara</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Rare
Branched bur-reed	<i>Sparganium erectum</i>	Locally frequent
Broad-leaved dock	<i>Rumex obtusifolius</i>	Rare
Broad-leaved plantain	<i>Plantago major</i>	Rare
Broad-leaved pondweed	<i>Potamogeton natans</i>	Rare
Clustered dock	<i>Rumex conglomeratus</i>	Rare
Common sedge	<i>Carex nigra</i>	Rare
Common spike-rush	<i>Eleocharis palustris</i>	Rare
Compact rush	<i>Juncus conglomerata</i>	Rare
Couch grass	<i>Elymus repens</i>	Rare
Creeping bent	<i>Agrostis stolonifera</i>	Rare
Creeping buttercup	<i>Ranunculus repens</i>	Rare
Creeping cinquefoil	<i>Potentilla reptans</i>	Rare
Creeping thistle	<i>Cirsium arvense</i>	Occasional
Daisy	<i>Bellis perennis</i>	Rare
False fox-sedge	<i>Carex otrubae</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Rare
Field horsetail	<i>Equisetum arvense</i>	Occasional
Gorse	<i>Ulex europeaus</i>	Rare
Great willowherb	<i>Epilobium hirsutum</i>	Occasional
Groundsel	<i>Senecio vulgaris</i>	Rare
Hard rush	<i>Juncus inflexus</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hedge woundwort	<i>Stachys sylvatica</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Rare
Jointed rush	<i>Juncus articulatus</i>	Rare
Lesser spearwort	<i>Ranunculus flammula</i>	Occasional
Marsh ragwort	<i>Senecio aquaticus</i>	Rare

Marsh thistle	<i>Cirsium palustre</i>	Occasional
Meadow buttercup	<i>Ranunculus acris</i>	Rare
Meadow vetchling	<i>Lathyrus pratensis</i>	Rare
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
New Zealand pygmyweed	<i>Crassula helmsii</i>	Locally dominant
Orchids	<i>Dactylorhiza spp.</i>	Rare
Oxeye daisy	<i>Leucanthemum vulgare</i>	Rare
Perennial sow-thistle	<i>Sonchus arvensis</i>	Rare
Ragwort	<i>Senecio sp.</i>	Rare
Red bartsia	<i>Odontites vernus</i>	Rare
Reedmace	<i>Typha latifolia</i>	Locally abundant
Rosebay willowherb	<i>Chamerion angustifolium</i>	Rare
Scentless mayweed	<i>Tripleurospermum inodorum</i>	Rare
Sedge	<i>Carex sp.</i>	Occasional
Soft rush	<i>Juncus effusus</i>	Occasional
Spear thistle	<i>Cirsium vulgare</i>	Rare
Stinging nettle	<i>Urtica dioica</i>	Rare
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	Rare
Tufted hair-grass	<i>Deschampsia cespitosa</i>	Locally dominant
Tufted vetch	<i>Vicia cracca</i>	Rare
Variiegated reed-grass	<i>Phalaris arundinacea</i>	Locally abundant
Vetch	<i>Vicia sp.</i>	Rare
Willow	<i>Salix sp.</i>	Locally dominant
Yorkshire fog	<i>Holcus lanatus</i>	Rare

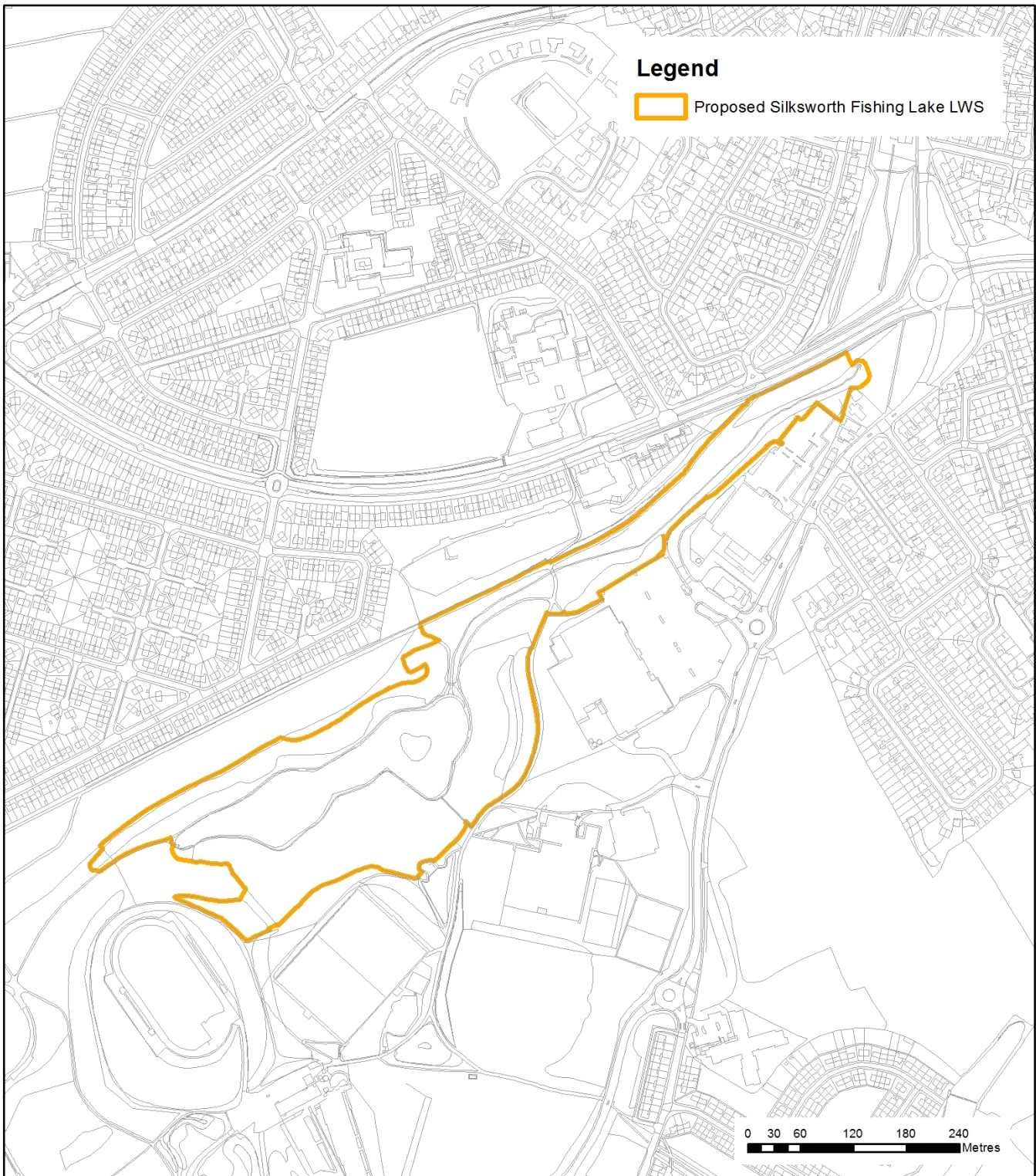
BAP Habitat: Lowland Meadow		
Common Name	Botanical Name	Abundance (DAFOR)
Autumn hawkbit	<i>Leontodon autumnalis</i>	Rare
Bifid hemp-nettle	<i>Galeopsis bifida</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Rare
Black medick	<i>Medicago lupulina</i>	Occasional
Broad-leaved dock	<i>Rumex obtusifolius</i>	Rare
Clustered dock	<i>Rumex conglomeratus</i>	Rare

Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Coltsfoot	<i>Tussilago farfara</i>	Rare
Common bird's-foot trefoil	<i>Lotus corniculatus</i>	Rare
Common knapweed	<i>Centaurea nigra</i>	Locally frequent
Common sedge	<i>Carex nigra</i>	Rare
Common vetch	<i>Vicia sativa</i>	Rare
Compact rush	<i>Juncus conglomeratus</i>	Rare
Creeping bent	<i>Agrostis stolonifera</i>	Occasional
Creeping cinquefoil	<i>Potentilla reptans</i>	Rare
Creeping thistle	<i>Cirsium arvense</i>	Locally abundant
Crested dog's tail	<i>Cynosurus cristatus</i>	Rare
Dog rose	<i>Rosa canina</i>	Rare
Downy oat-grass	<i>Avenula pubescens</i>	Locally frequent
Eyebright	<i>Euphrasia officinalis</i>	Rare
False oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Field horsetail	<i>Equisetum arvense</i>	Rare
Glaucous sedge	<i>Carex flacca</i>	Rare
Gorse	<i>Ulex europeus</i>	Locally dominant
Great burnet	<i>Sanguisorba officinalis</i>	Rare
Hard rush	<i>Juncus inflexus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Heath bedstraw	<i>Galium saxatile</i>	Rare
Heath grass	<i>Danthonia decumbens</i>	Rare
Hemp agrimony	<i>Eupatorium cannabinum</i>	Rare
Hoary ragwort	<i>Senecio erucifolius</i>	Rare
Lady fern	<i>Athyrium filix-femina</i>	Rare
Marsh thistle	<i>Cirsium palustre</i>	Abundant
Marsh yellow-cress	<i>Rorippa palustris</i>	Rare
Meadow vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Pedunculate oak	<i>Quercus robur</i>	Rare
Pepper saxifrage	<i>Silaum silaus</i>	Rare
Red bartsia	<i>Odontites vernus</i>	Rare
Red clover	<i>Trifolium pratense</i>	Rare
Red fescue	<i>Festuca rubra</i>	Occasional
Ribwort plantain	<i>Plantago lanceolata</i>	Rare
Rosebay willowherb	<i>Chamerion angustifolium</i>	Locally abundant


Sharp-flowered rush	<i>Juncus acutiflorus</i>	Rare
Silverweed	<i>Potentilla anserina</i>	Rare
Smooth sow-thistle	<i>Sonchus oleraceus</i>	Rare
Sneezewort	<i>Achillea ptarmica</i>	Occasional
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	Rare
Timothy	<i>Phleum pratense</i>	Occasional
Tormentil	<i>Potentilla erecta</i>	Rare
Tufted hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted vetch	<i>Vicia cracca</i>	Occasional
Water mint	<i>Mentha aquatica</i>	Rare
White clover	<i>Trifolium repens</i>	Rare
Wild angelica	<i>Angelica sylvestris</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Rare
Yellow rattle	<i>Rhinanthus minor</i>	Rare
Yellow wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire fog	<i>Holcus lanatus</i>	Rare

BAP Habitat: Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Dominant
Cherry	<i>Prunus avium</i>	Abundant
Dog Rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Locally Abundant
Gorse	<i>Ulex europeus</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent
Leylandii	<i>Cupressus x leylandii</i>	Rare
Prickly Ox-tongue	<i>Helminthotheca echioides</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Rare
Silver Birch	<i>Betula pendula</i>	Abundant
Swedish Whitebeam	<i>Sorbus x intermedia</i>	Rare
Willow	<i>Salix sp.</i>	Occasional

BAP Habitat: Woodland/ Scrub		
Common Name	Botanical Name	Abundance (DAFOR)
Bindweed	<i>Convolvulus sepium</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional - Rare
Bramble	<i>Rubus fruticosus</i>	Frequent
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Burdock	<i>Arctium minus</i>	Rare
Cherry	<i>Prunus avium</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Frequent
Common Toadflax	<i>Linaria vulgaris</i>	Rare
Creeping Cinquefoil	<i>Potentilla reptans</i>	Locally Frequent - Occasional
Creeping Thistle	<i>Cirsium vulgare</i>	Frequent
Dog Rose	<i>Rosa canina</i>	Abundant
Dogwood	<i>Cornus sanguinea</i>	Rare
Elder	<i>Sambucus nigra</i>	Frequent
False oat grass	<i>Arrhenatherum elatius</i>	Abundant
Gorse	<i>Ulex europaeus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Frequent - Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Abundant - Frequent
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Abundant
Spear Thistle	<i>Cirsium arvense</i>	Occasional
Vetch	<i>Vicia sp.</i>	Frequent
Wild Strawberry	<i>Fragaria vesca</i>	Rare
Willow	<i>Salix sp.</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 378 544	Contact C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Approved by C. Dewson
	Subject Proposed Silksworth Fishing Lake LWS	Drawn by E. Smith
	Drawing no. UF 5_36_01_07_010.01	Date 18.05.2020
		Scale 1: 6,000
		Sheet size A4

SITE NAME	Silksworth Fishing Lake
SITE No.	UF 5_36_01_07_010
LOCATION	Silksworth NZ3754
STATUS	Proposed Local Wildlife Site
AREA	10.76 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Large pond, outlet stream, Lowland meadows and pasture grassland and other broadleaf plantation areas around the lake.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland meadow and pasture	0.78
Other broadleaf woodland	4.77
Pond	1.80
Rivers and streams	0.09

National and local BAP species:

English Name	Scientific Name	Notes
Barn Owl	<i>Tyto alba</i>	
Bats	<i>Various</i>	
Black-necked Grebe	<i>Podiceps nigricollis</i>	
Cormorant	<i>Phalacrocorax carbo</i>	
European Hedgehog	<i>Erinaceus europaeus</i>	
Pochar	<i>Aythya ferina</i>	
Water Vole	<i>Arvicola terrestris</i>	By lake and outlet stream.
Willow Warbler	<i>Phylloscopus trochilus</i>	

Other protected species

English Name	Scientific Name	Notes
Brambling	<i>Fringilla montifringilla</i>	

DETAIL

The site consists of a fishing lake, grassland and tree planted areas around the lake and the outlet stream from the lake. The outlet stream runs for 600 metres to a culvert under the B1405 road. The whole site has been reclaimed from the former Silksworth Colliery.

The lake shore is a popular area for public recreation, with the lake itself mainly used as angling water. It has many fishing stands around the shore, the eastern end of the lake being particularly favoured. A range of coarse fish species are present, including some large carp. The fishing lake has species-poor sub-aquatic and marginal

vegetation, with several reedbeds of *Phragmites australis* and smaller areas of mixed fen.

Two well vegetated islands provide nesting sites for a limited range of waterfowl, including coot and mallard.

Two areas of woodland to the north and south are dominated by poplar spp., willow spp., alder spp. and Swedish whitebeam. Ground flora is poor, with nettles and brambles dominant. Several introduced shrubs line the edge of the woodland by the fishing lake, including fuchsia and hollyberry cotoneaster. The latter of which is listed under Schedule 9 of the Wildlife and Countryside Act 1981.

In the centre of the southern woodland is an area of rank grassland which qualifies as Lowland meadows and pasture. Common birds-foot-trefoil is abundant here, with eyebright frequent, fairyflax occasional, common knapweed and yellow rattle rare. Also present is lady's bedstraw. A small area of grassland lies to the western end of the northern woodland. This falls short of qualifying as a Durham BAP; with common birds-foot-trefoil abundant, common knapweed rare and lady's bedstraw frequent. These are a mixture of Lowland meadows and pasture indicator species and Magnesian limestone grassland species.

CONDITION ASSESSMENT

The pond and the outlet stream meet the Local Wildlife Site criteria:

The lake drains over a concrete dam into an outlet stream, which provides a variety of habitats along its 600-metre course, in places well vegetated with a variety of aquatic species, in others overgrown with scrub. Larger numbers of water voles are present along the stream, probably because of low levels of disturbance and predation and the varied sources of food plants.

The grassland slope along the northern shore of the lake has a varied vegetation with a large range of species recorded. Bee orchids, present with a range of other indicator species in an area of thin soils, are notable. There is some scrub invasion of this grassland from the adjacent tree planted area.

The Lowland meadows and pasture grassland meets Local Wildlife Site criteria:

This grassland is in poor condition due to the percentage of undesirables present and low percentage of herbs. This area of grassland is in need of management.

The Other broadleaf woodland meets Local Wildlife Site criteria:

Whilst there are some mature poplar, overall the woodland lacks in veteran trees and therefore fails its condition assessment on this basis, coupled with a lack of deadwood and percentage of non-native trees.

CONNECTIVITY

Silksworth Fishing Lake LWS is an important component of a wildlife corridor connecting the large open space around the Silksworth Sports Complex with the city centre via Barnes Park and other open spaces. Another wildlife corridor links the Silksworth area with Tunstall Hills and the coast.

LANDSCAPE

The Fishing Lake is an important feature of the landscape of the reclaimed Silksworth colliery area.

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Water voles were first recorded in 1999 by Karen Butterworth.

Surveyed in June 2009 by A McLay and J L Durkin and again by Durham Wildlife Services in 2019 and 2020.

SITE MANAGEMENT

The Fishing Lake and its surroundings are managed by the Sunderland City Council and Silksworth Fishing Club.

This is a popular area for public recreation, so there is a regular need for the removal of litter and maintenance of footpaths.

The Lake itself has little management except for its main use, as an angling facility.

In order to bring the lake into favourable condition, a greater variety of submerged and emergent aquatic vegetation would be required.

The outlet stream has little management, with its banks being regularly mown in places. This appears to be in favourable condition for the water vole population.

The grassland is regularly mown. In order to bring the grassland into favourable condition, mowing needs to be changed to an annual cut and rake off in late summer. The encroaching scrub would also need to be removed.

For details of grassland management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".

Silksworth Fishing Lake species list

BAP Habitat Type: Unknown		
Common Name	Botanical Name	DAFOR
A willow cultivar	<i>Salix sp.</i>	Occasional
Alder	<i>Alnus glutinosa</i>	Rare
Apple	<i>Malus sylvestris sens. lat.</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Bee Orchid	<i>Ophrys apifera</i>	Rare
Black Medick	<i>Medicago lupulina</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Cat's-ear	<i>Hypochaeris radicata</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Common Centaury	<i>Centaureum erythraea</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Mouse-ear	<i>Cerastium fontanum</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Common Reed	<i>Phragmites australis</i>	Frequent
Compact Rush	<i>Juncus conglomeratus</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Rare
Crack-willow	<i>Salix fragilis</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Frequent
Curled Dock	<i>Rumex crispus</i>	Occasional
Daisy	<i>Bellis perennis</i>	Occasional
Dandelion	<i>Taraxacum agg.</i>	Rare
Dewberry	<i>Rubus caesius</i>	Rare
Dog-rose	<i>Rosa canina</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
Eyebright	<i>Euphrasia officinalis agg.</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Rare
False Oat-Grass	<i>Arrhenatherum elatius</i>	Rare
Field Horsetail	<i>Equisetum arvense</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Frequent

Goat's-beard	<i>Tragopogon pratensis</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Frequent
Greater Plantain	<i>Plantago major</i>	Rare
Grey Alder	<i>Alnus incana</i>	Occasional
Hairy Tare	<i>Vicia hirsute</i>	Rare
Hard Rush	<i>Juncus inflexus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hemlock	<i>Conium maculatum</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Hollyberry Cotoneaster	<i>Cotoneaster bullatus</i>	Rare
Italian Alder	<i>Alnus cordata</i>	Occasional
Jointed Rush	<i>Juncus articulatus</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Occasional
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Male fern	<i>Dryopteris filix-mas</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Nipplewort	<i>Lapsana communis</i>	Rare
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Osier	<i>Salix viminalis</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Frequent
Pendulous Sedge	<i>Carex pendula</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Rare
Ragged Robin	<i>Lychnis flos-cuculi</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Rough Meadowgrass	<i>Poa trivialis</i>	Occasional
Silverweed	<i>Potentilla anserine</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Rare
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Timothy	<i>Phleum pratense</i>	Rare
Toad Rush	<i>Juncus bufonius</i>	Rare
Wallspray	<i>Cotoneaster horizontalis</i>	Rare
Water Avens	<i>Geum rivale</i>	Rare
White Clover	<i>Trifolium repens</i>	Frequent
White Poplar	<i>Populus alba</i>	Occasional
Wild Teasel	<i>Dipsacus fullonum</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Rare
Wood Crane's-bill	<i>Geranium sylvaticum</i>	Rare

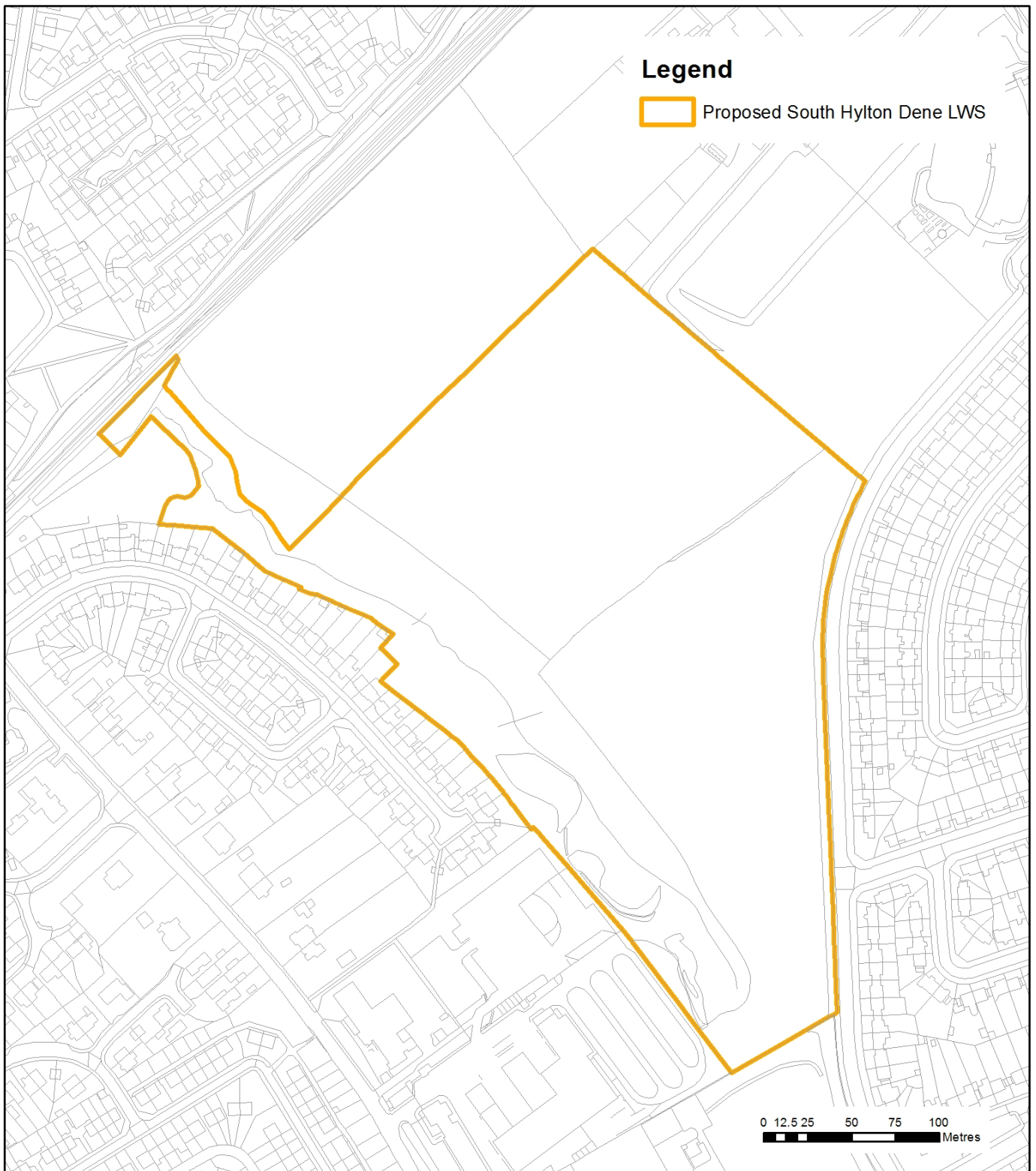
Yarrow	<i>Achillea millefolium</i>	Rare
Yellow Iris	<i>Iris pseudacorus</i>	Rare
Yellow-rattle	<i>Rhinanthus minor</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire-fog	<i>Holcus lanatus</i>	Occasional

Species list from 2020 survey:



BAP Habitat Type: Other Broadleaf Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Abundant
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Burnet Rose	<i>Rosa pimpinellifolia</i>	Occasional
Cleavers	<i>Galium aparine</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Dogwood	<i>Cornus sanguinea</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Reed	<i>Phragmites australis</i>	Rare/ Locally Frequent
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Rare
French Cranesbill	<i>Geranium endressii</i>	Rare
Fuchsia	<i>Fuchsia sp.</i>	Rare / Locally Frequent
Goat Willow	<i>Salix caprea</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Grey Poplar	<i>Populus x canescens</i>	Occasional / Locally Frequent
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Hollyberry Cotoneaster	<i>Cotoneaster bullatus</i>	Occasional
Hybrid Black Poplar	<i>Populus x canadensis</i>	Occasional
Italian Alder	<i>Alnus cordata</i>	Occasional / Locally Frequent
Male Fern	<i>Dryopteris filix-mas</i>	Rare
Nettle	<i>Urtica dioica</i>	Abundant
Osier Willow	<i>Salix viminalis</i>	Occasional

Pendulous Sedge	<i>Carex pendula</i>	Rare
Red Bartsia	<i>Odontites vernus</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare/ Locally Frequent
Rowan	<i>Sorbus aucuparia</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Frequent
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Timothy	<i>Phleum pratense</i>	Rare
White Poplar	<i>Populus alba</i>	Occasional
White Willow	<i>Salix alba</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Rare

BAP Habitat Type: Lowland Meadow and Pasture		
Common Name	Botanical Name	Abundance (DAFOR)
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Occasional
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Common Catsear	<i>Hypochoeris radicata</i>	Rare
Common Eyebright	<i>Euphrasia nemorosa</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Fairyflax	<i>Linum catharticum</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Lady's Bedstraw	<i>Galium verum</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow Rattle	<i>Rhinanthus minor</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 357 567</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13/08/2020 Scale 1: 3,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed South Hylton Dene LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5_36_01_06_051.01</p>		

SITE NAME	South Hylton Dene
SITE No.	UF 5_36_01_06_051
LOCATION	South Hylton NZ357567
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986 and revised in 2020
AREA	8.74 ha
DATE OF SITE VISIT	May 2018
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

A small woodland dene and lowland meadow pastures in an urban setting.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland meadows and pasture	6.61
Other broadleaf woodland	1.44
Wet woodland	0.44

National and local BAP species:

English Name	Scientific Name	Notes
Song Thrush	<i>Turdus philomelos</i>	Nests
Wall	<i>Lasiommata megera</i>	

Other protected species:

English Name	Scientific Name	Notes
Blackcap	<i>Sylvia atricapilla</i>	
Chiffchaff	<i>Phylloscopus collybita</i>	

DETAIL

South Hylton dene is located within South Hylton, towards the western outskirts of the city of Sunderland. In the main it is surrounded by housing on three sides, with pasture and hay meadow to the northeast. South Hylton Pasture SSSI is adjacent to the site and forms part of the same agricultural landholding. The Metro rail line runs east-west along the northern boundary of the site and at the southwest boundary is a Council depot. The River Wear lies just 500 metres to the north, with pockets of woodland along its banks, particularly heading west. There are also pockets of woodland along the A19 dual carriageway road, 700 metres to the west.

The site is a small woodland dene; the canopy layer mainly made up of sycamore and ash. Large parts of the woodland are degraded and have lost their canopy cover. The shrub layer typically consists of holly, hawthorn, elder and blackthorn. Ground flora includes two ancient woodland indicators, bluebell and dog's mercury. However, large areas of the site are dominated by species like bramble, ivy and ground elder.

Wet areas along the stream sides includes species like wild angelica, brooklime and meadowsweet. There is an area of marsh that includes some of these species, as well as an alder buckthorn tree. Located at NZ 35633 56749 this is a rare species in the Durham BAP area. The site does have a small area of more interesting wet woodland, within which several species of liverwort/moss are present. There is a large stand of Japanese knotweed present. This has obviously expanded since 2010 when it was recorded as only being in small quantities. Giant hogweed was also recorded on site during this survey.

Woodland birds previously recorded include blackcap, song thrush and chiffchaff but the proximity to housing and the degree of disturbance limit the variety of species. The two areas of pasture to the northeast are diverse neutral grasslands, with grass species such as sweet vernal, crested dog's tail and yellow oat-grass and herbs such as common knapweed, pignut, common spotted orchid, common birds-foot-trefoil, yellow rattle, goat's beard, fairy flax, autumn hawkbit and rough hawkbit.

There are also species present that sometimes indicate a more calcareous grassland such as salad burnet, burnet saxifrage and quaking-grass. The other small parcels of land surrounding the LWS are not of note; either rank species poor grassland or bramble and bracken scrub.

CONDITION ASSESSMENT

The woodland habitat meets the Local Wildlife Site criteria:

Overall South Hylton Dene is in an unfavourable condition. It fails on several of the Durham BAP condition assessment criteria. It has a less than 50% canopy, a lack of any dead wood habitat (standing or lying) and a lack of veteran trees. Although there are some interesting ground flora species such as bluebell and dog's mercury, the woodland is mostly dominated with undesirables such as bramble, ivy and ground elder. There is concern that species recorded in 2010 were not recorded during the 2018 survey. It appears that more open areas of grassland within the woodland have been lost and the areas of marshy grassland by the stream have declined in quality species such as tormentil, betony, devil's bit scabious, greater burnet, harebell, and the sedge species brown sedge and carnation sedge are missing from the site in 2016 having been recorded there just 6 years ago.

The Lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

There are two meadows adjacent to the woodland, with indicator species being present within the sward at high enough frequencies to meet the Lowland meadows and pasture criteria. Overall the meadows are in favourable condition, due to the lack of scrub, bare ground and presence of undesirable species. Field 1 is currently recovering from being over grazed and more ragwort is present across this meadow as a consequence of this. These meadows are situated adjacent to South Hylton Pasture Site of Special Scientific Interest (SSSI). This is an area of unimproved neutral grassland with many of the same herb species recorded in the two meadows. There is also a small area of lowland meadow and pasture within the woodland. This is currently in unfavourable condition because of the encroachment of bramble scrub.

CONNECTIVITY

South Hylton Dene Is situated in a very urban environment towards the outskirts of the City of Sunderland. However, the site borders the metro railway line to the north and this is tree lined, particularly to the southwest. This railway line links the site with the wooded river bank and wooded A19 roadsides. Despite this, the nearest woodland is still over 600 metres away. The two closest adjacent LWS's are Baron's Quay Wood LWS which lies 600 metres to the north and Wear River Bank Woods LWS which lies 700 metres west. The former is poorly connected to South Hylton Dene, with a housing estate between. However, the latter, which is an ancient semi-natural woodland, is connected via the tree lined metro line. South Hylton Dene lies in close proximity to three Sites of Special Scientific Interest (SSSI). South Hylton Pasture SSSI lies immediately adjacent to the site, with just fields between it and Claxheugh Rock and Ford Limestone Quarry SSSI which lies 550 metres to the northeast and is connected to South Hylton Dene via the railway line. Wear River Bank SSSI lies on the opposite bank of the River Wear to Claxheugh Rock and Ford Limestone Quarry SSSI, 750 metres north of South Hylton Dene. South Hylton Dene is therefore well connected to all these SSSI's and forms part of a wider network of important wildlife habitats, particularly given its highly urban environment.

LANDSCAPE

The wood and pasture are prominent features on the edge of the built-up area.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

The wood was surveyed by Gordon Graham in 1992 and the full site was surveyed by Durham Wildlife Services in 2018.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The wood has a public footpath past the lower end and open access throughout.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Other broadleaf woodland:

- Remove non-native invasive species
- Remove non-native species
- Improve woodland structure
- Reduce bramble and other undesirables
- Remove Litter
- Keep access improvements away from areas of important habitat.

Lowland meadow and pasture:

- Annual hay-cut and aftermath grazing of fields 1 and 2
- Ragwort control in field 1
- Graze and maintain lowland pasture grassland clearings in parcel D.

South Hylton Dene species list

Other Broadleaved Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Barren Strawberry	<i>Potentilla sterilis</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Locally Dominant
Plum	<i>Prunus domestica</i>	Rare
Cherry Laurel	<i>Prunus laurocerasus</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Frequent
Eagle Fern	<i>Pteridium aquilinum</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Dotted Thyme-moss	<i>Rhizomnium punctatum</i>	Occasional
Clustered Feather-moss	<i>Rhyndostegium confertum</i>	Rare
Blackcurrent	<i>Ribes nigrum</i>	Rare
Dog Rose	<i>Rosa canina</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Abundant (Locally Dominant)
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Grey Willow	<i>Salix cinerea</i>	
Crack Willow	<i>Salix fragilis</i>	Rare
Elder	<i>Sambucus nigra</i>	Frequent
Tall Fescue	<i>Schedonorus arundinaceus</i>	Rare
Giant Fescue	<i>Schedonorus giganteus</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Goldenrod	<i>Solidago canadensis</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Frequent
Greater Stitchwort	<i>Stellaria holostea</i>	Occasional
Dandelion	<i>Taraxacum officinale</i>	
Fox-tail Feather-moss	<i>Thamnobryum alopecurum</i>	
White Clover	<i>Trifolium repens</i>	Locally Frequent
Nettle	<i>Urtica dioica</i>	Frequent
Brooklime	<i>Veronica beccabunga</i>	Locally Frequent
Germander Speedwell	<i>Veronica chamaedrys</i>	Rare
Guelder Rose	<i>Viburnum apulus</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Occasional
Common Dog Violet	<i>Viola riviniana</i>	Rare

Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Rare
Japanese Knotweed	<i>Fallopia japonica</i>	Locally Dominant
Red Fescue	<i>Festuca rubra ssp. rubra</i>	
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Lesser Pocket-moss	<i>Fissidens bryoides</i>	Occasional
Alder Buckthorn	<i>Frangula alnus</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Frequent
Cleavers	<i>Galium aparine</i>	Occasional
Meadow Cranesbill	<i>Geranium pratense</i>	Occasional
Herb Bennet	<i>Geum urbanum</i>	Frequent
Ivy	<i>Hendra helix</i>	Locally Abundant
Giant Hogweed	<i>Heracleum mantegazzianum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent
Creeping Soft-grass	<i>Holcus mollis</i>	Occasional
Common Bluebell	<i>Hyacinthoides non-scriptus</i>	Locally Frequent
Des Etangs's St John's Wort	<i>Hypericum x desetangsii</i>	Rare
Cypress-leaved Plait-moss	<i>Hypnum cupressiforme</i>	Rare
Holly	<i>Ilex aquifolium</i>	Rare
Hoary Ragwort	<i>Jacobaea erucifolius</i>	Rare
Common Feather-moss	<i>Kindbergia praelonga</i>	Frequent
Nipplewort	<i>Lapsana communis</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Bifid crestwort	<i>Lophocolea bidentata</i>	Occasional
Dog's Mercury	<i>Mercurialis perennis</i>	Locally Abundant
Bluish Veilwort	<i>Metzgeria fruticulosa</i>	Locally Frequent
Wood Brittle-moss	<i>Orthotrichum affine</i>	Occasional
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Butterbur	<i>Petasites hybridus</i>	Local Dominant
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Locally Frequent
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Silverweed	<i>Potentilla anserina</i>	Rare

Norway Maple	<i>Acer platanoides</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Ground Elder	<i>Aegopodium podagraria</i>	Locally Frequent
Horse Chestnut	<i>Aesculus hippocastanum</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	
Creeping Feather-moss	<i>Amblystegium serpens</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Wood Burdock	<i>Arctium nemorosum</i>	
False Oat-grass	<i>Arrhenatherum elatius</i>	Locally Dominant
Mugwort	<i>Artemisia vulgaris</i>	Rare
Cuckoo Pint	<i>Arum maculatum</i>	Occasional
False Brome	<i>Brachypodium sylvaticum</i>	Rare
Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Frequent
Large Bindweed	<i>Calystegia silvatica</i>	Locally Frequent
Wavy Bittercress	<i>Cardamine flexuosa</i>	Occasional
Hairy Sedge	<i>Carex hirta</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Great Scented Liverwort	<i>Conocephalum conicum</i>	Occasional
Cotoneaster sp.	<i>Cotoneaster sp.</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Cock's Foot	<i>Dactylis glomerata</i>	Frequent
Borrer's Scaly Male Fern	<i>Dryopteris borreri</i>	Rare
Broad Buckler Fern	<i>Dryopteris dilatata</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Common Couch	<i>Elytrigia repens</i>	Occasional

Common Name	Botanical Name	Abundance (DAFOR)
<u>Lowland Meadow and Pasture Field 1</u>		
Yarrow	<i>Achillea millefolium</i>	Locally Frequent
Common Bent	<i>Agrostis capillaris</i>	Abundant
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Meadow Fox-tail	<i>Alopecurus pratensis</i>	Frequent
Sweet Vernal	<i>Anthoxanthum odoratum</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Bird's-claw Beard-moss	<i>Barbula unguiculata</i>	Occasional
Daisy	<i>Bellis perennis</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
Quaking Grass	<i>Briza media</i>	Rare
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Locally Abundant
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Mouseear	<i>Cerastium fontanum</i>	Frequent
Pignut	<i>Conopodium majus</i>	Rare
Montbretia	<i>Crocsmia x crocosmiiflora</i>	Rare
Crested Dog's-Tail	<i>Cynosurus cristatus</i>	Abundant
Cock's Foot	<i>Dactylis glomerata</i>	Frequent
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Abundant
Downy Oat-grass	<i>Helictotrichon pubescens</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant
Cypress-leaved Plait-moss	<i>Hypnum cupressiforme</i>	
Common Ragwort	<i>Jacobaea vulgaris</i>	Frequent
Common Feather-moss	<i>Kindbergia praelonga</i>	
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Locally Abundant
Fairy-flax	<i>Linum catharticum</i>	Locally Frequent
Perennial Rye-grass	<i>Lolium perenne</i>	Abundant
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Field Woodrush	<i>Luzula campestris</i>	Occasional
Black-medic	<i>Medicago lupulina</i>	Rare
Timothy	<i>Phleum pratense</i>	Abundant
Burnet-saxifrage	<i>Pimpinella saxifraga</i>	Rare

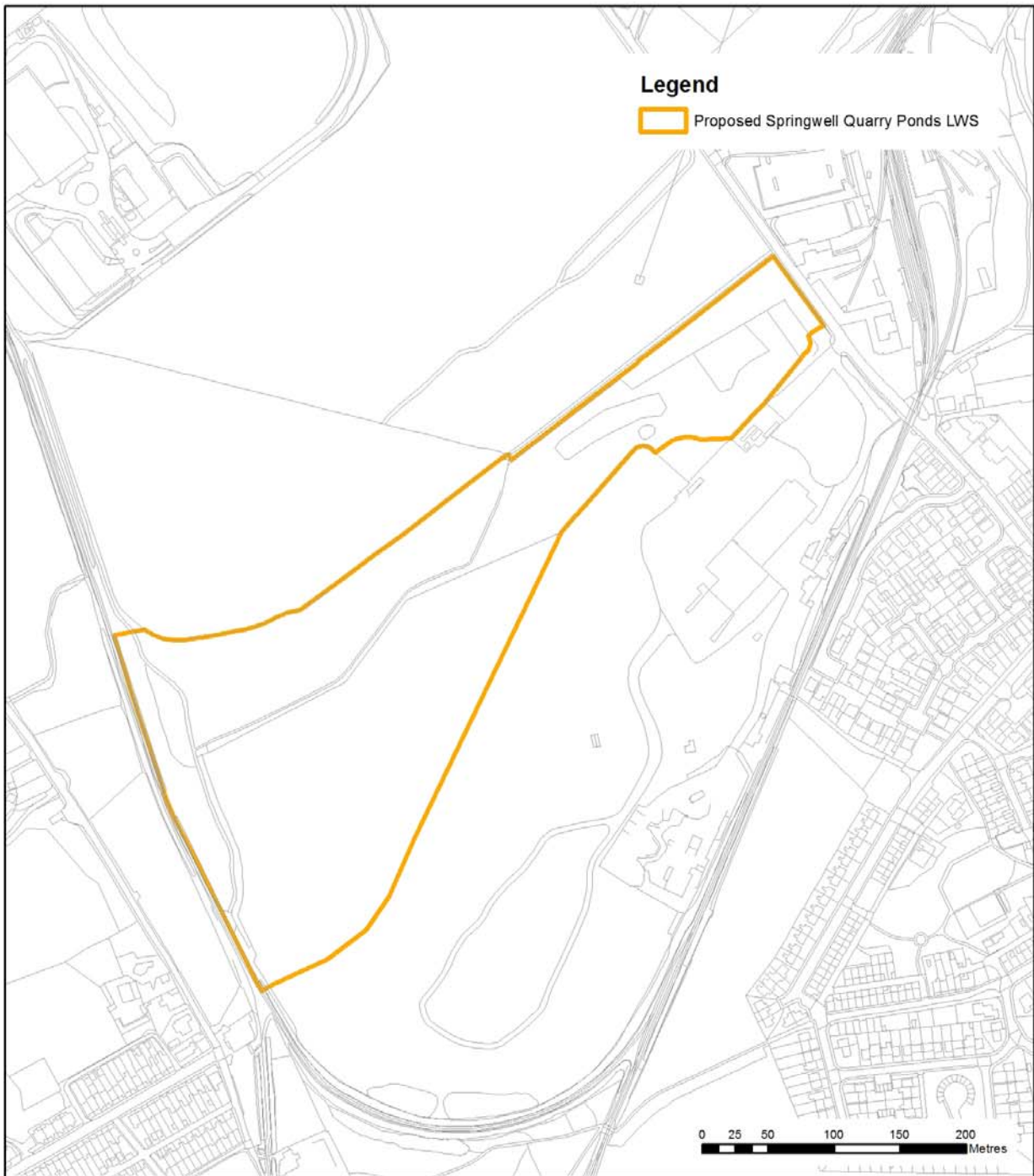
Lowland Meadow and Pasture Field 1 Cont.

Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Greater Plantain	<i>Plantago major</i>	Occasional
Smooth Meadow-grass	<i>Poa pratensis</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Abundant
Silverweed	<i>Potentilla anserina</i>	Occasional
Creeping Cinqfoil	<i>Potentilla reptans</i>	Occasional
Moss	<i>Pottia davalliana</i>	
Selfheal	<i>Prunella vulgaris</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Abundant
Creeping Buttercup	<i>Ranunculus repens</i>	Abundant
Yellow rattle	<i>Rhinanthus minor</i>	Rare
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Salad Burnet	<i>Sanguisorba minor</i>	Locally Frequent
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Abundant
Hoary Ragwort	<i>Senecio erucifolius</i>	Rare
Pepper-saxifrage	<i>Silaum silaus</i>	Rare
Dandelion	<i>Taraxacum officinale</i>	Frequent
Goat's-beard	<i>Tragopogon pratensis</i>	Rare
Lesser Trefoil	<i>Trifolium dubium</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Abundant
White Clover	<i>Trifolium repens</i>	Abundant
Yellow Oat-grass	<i>Trisetum flavescens</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare

Common Name	Botanical Name	Abundance (DAFOR)
<u>Lowland Meadow and Pasture Field 2</u>		
Yarrow	<i>Achillea millefolium</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Occasionally Frequent
Creeping Bent	<i>Agrostis stolonifera</i>	Locally Abundant
Meadow Foxtail	<i>Alopecurus pratensis</i>	Occasional
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Abundant
Cow Parsely	<i>Anthriscus sylvestris</i>	Rare
Daisy	<i>Bellis perennis</i>	Rare
Soft Brome	<i>Bromus hordeaceus</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Locally Abundant
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Chickweed	<i>Cerastium fontanum</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Very Locally Frequent
Pignut	<i>Conopodium majus</i>	Locally Frequent
Hawksbeard sp.	<i>Crepis sp.</i>	Occasionally Rare
Crested Dog's-Tail	<i>Cynosurus cristatus</i>	Abundant
Cock's-Foot	<i>Dactylis glomerata</i>	Frequent
Northern Marsh Orchid	<i>Dactylorhiza purpurella</i>	Locally Frequent
Hybrid Marsh Orchid	<i>Dactylorhiza x venusta</i>	Rare
Common Horsetail	<i>Equisetum arvense</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant
Common Cat's-ear	<i>Hypochaeris radicata</i>	Rare
Field Scabious	<i>Knautia arvensis</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Frequent
Perennial Rye-Grass	<i>Lolium perenne</i>	Locally Frequent
Common Bird's-Foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Timothy	<i>Phleum pratense</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Smooth Meadow-Grass	<i>Poa pratensis</i>	Occasional
Rough Meadow-Grass	<i>Poa trivialis</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent
Cowslip	<i>Primula veris</i>	Frequent
Meadow Buttercup	<i>Ranunculus acris</i>	Abundant
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Locally Frequent

Lowland Meadow and Pasture Field 2

Yellow Rattle	<i>Rhinanthus minor</i>	Frequent
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Dandelion	<i>Taraxacum officinale</i>	Occasionally Frequent
Goat's-Beard	<i>Tragopogon pratensis</i>	Locally Frequent
Red Clover	<i>Trifolium pratense</i>	Abundant
White Clover	<i>Trifolium repens</i>	Rare
Yellow Oat-Grass	<i>Trisetum flavescens</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Locally Frequent
Bush Vetch	<i>Vicia sepium</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationary Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 283 587</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 30.04.2020 Scale 1: 4,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4 </p>
	<p>Subject Proposed Springwell Quarry Ponds LWS</p>	
	<p>Drawing No. UF 5.36.01.07.011.01</p>	

SITE NAME	Springwell Quarry Ponds
SITE No.	UF 5_36_01_07_011
LOCATION	Springwell NZ283587
STATUS	Proposed Local Wildlife Site
AREA	8.25 ha
DATE OF SITE VISIT	July 2020
OWNERSHIP	Private

SITE DESCRIPTION

The site is made up of ponds, fen and marsh and secondary woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland fen/Marsh	0.15
Other broadleaf woodland	6.53
Pond	0.05

National and local BAP species:

English Name	Scientific Name	Notes
Great crested newt	<i>Triturus cristatus</i>	
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds
Song Thrush	<i>Turdus philomenos</i>	Breeds
Water Vole	<i>Arvicola terrestris</i>	Present

Other protected species:

English Name	Scientific Name	Notes
Frog	<i>Rana temporaria</i>	
Smooth newt	<i>Lissotriton vulgaris</i>	
Three-spined sticklebacks	<i>Gasterosteus aculeatus</i>	
Toad	<i>Bufo bufo</i>	

DETAIL

The site is located adjacent to the north of Springwell sandstone quarry, west of the village of Springwell, within Gateshead. The areas of Wrekenton, Eighton Banks and Whitehills lie around the west and north of the site with pasture fields present to the south. To the north of the site is a Public Right of Way.

The site is composed of a pond, surrounded by grassland and woodland. The pond itself is part of the drainage system of the quarry. Historically, water voles, frogs, toads, and smooth newts have been recorded in the pond. The pond is also known to contain three spined sticklebacks. The grassland on site has previously been classified as lowland meadows and pasture BAP habitat, however due to its now rank nature, with few indicator species, it currently doesn't qualify as this BAP habitat

type. Tall grasses now dominate, particularly creeping bent and false oat-grass. Some indicator species remain, with common knapweed still occasional through the sward, with localised patches of common birds-foot-trefoil. Little else remains, with autumn hawkbit, eyebright, glaucous sedge and zigzag clover all very rare.

The species across the site have changed since the previous visit in 2009, with no heather waterweeds found on site. The dominant aquatic species on site is now green algae, however bulrush dominates around 75% of the pond, with very little open water remaining. The bund on the southern side of the pond has been reprofiled and this may have resulted in the loss in key species on site.

Surrounding the pond to the south and east is an area of broadleaved woodland. The canopy is 50% non-natives, with hybrid poplar, white poplar and sycamore occasional to frequent. Native species present within the canopy includes ash, alder, goat willow, white and grey willow, hazel and hawthorn. Ground flora is poor with bramble abundant.

CONDITION ASSESSMENT

The Pond meets the Local Wildlife Site criteria:

The pond on site is part of the drainage system for Springwell quarry. The pond is three-quarters covered by bulrush (fen habitat), with a relatively small section of open water. The dominant aquatic flora within the open water pond habitat is green algae. Other species present includes branched bur-reed, floating sweet-grass and broadleaved pondweed.

The pond appears to be in a generally good condition with good water quality. Although invasive waterweed species have previously been recorded on site, they were not found within the pond during the latest site visit, suggesting an improvement in quality. However, very little open water remained with bulrush now dominating around 75% of the pond and is therefore in danger of covering the entirety of the pond.

The Lowland fen/marsh meets the Local Wildlife Site criteria:

The fen habitat surrounds the pond on site. Bulrush was noted to dominant within the habitat. Other species present include a range of rushes *Juncus* spp., great willowherb, and water mint. Bramble is locally frequent and encroaching this habitat.

The Other broadleaf woodland meets the Local Wildlife Site criteria:

The woodland at Springwell Quarry Ponds is an area of secondary planted deciduous woodland. A range of native species are also present including willow species noted to be most common. Ground flora is poor with bramble abundant. Around 50% of the canopy is made up of non-native species and although this still qualifies as BAP habitat, it puts the woodland into unfavourable condition.

CONNECTIVITY

The pond is connected to other ponds, with Springwell Ponds LWS to the south, (approximately 490m away), with woodland, scrub and grassland present between. There is also a pond approximately 320 metres to the northeast, with River Don tributaries (a Proposed LWS) just beyond this. The woodland on site links closely to other areas of woodland, scattered trees and hedgerows surrounding site, providing some connectivity to other habitats, including priority habitat, deciduous woodland, and the River Don. A further pond LWS is present in the form of Dunkirk Pond, which lies approximately 1.2km south-west of site. Overall, Springwell Quarry Ponds LWS is an important component of both Springwell and Follingsby wildlife corridors.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in 2005 by Veronica Howard, in 2007 by Durham Wildlife Services, in July 2009 by J L Durkin and again in 2018 and 2020 by Durham Wildlife Services.

SITE MANAGEMENT

Pond:

- Selective excavation of bulrush.

Lowland fen:

- Selective scrub removal.

Other broadleaf woodland:

- Remove non-native species.
- Improve woodland structure.

Springwell Quarry Ponds species list

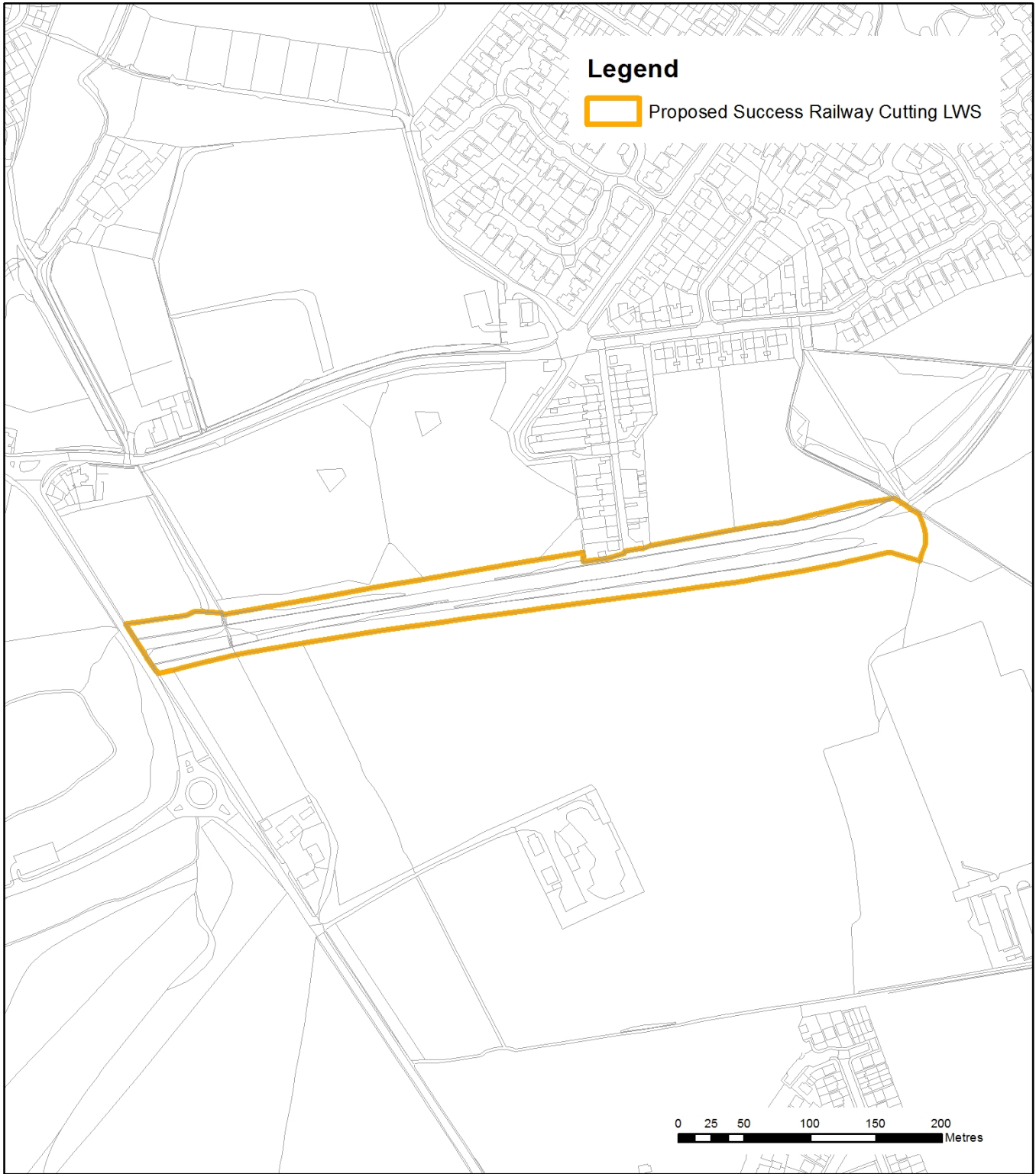
BAP Habitat: Pond		
Common Name	Botanical Name	Abundance (DAFOR)
Amphibious Bistort	<i>Persicaria amphibia</i>	Occasional
Birchtoled's Pondwed	<i>Potamogeton berchtoldii</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Clustered Dock	<i>Rumex conglomeratus</i>	Occasional
Common Spike-rush	<i>Eleocharis palustris</i>	Locally Abundant
Compact Rush	<i>Juncus conglomeratus</i>	Rare
Creeping Bent	<i>Agrostis stolonifera</i>	Locally Abundant
Curly Dock	<i>Rumex crispus</i>	
Floating Pondweed	<i>Potamogeton natans</i>	Rare
Floating Sweet-grass	<i>Glyceria fluitans</i>	
Glaucous Sedge	<i>Carex flacca</i>	Very Locally Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Locally Frequent Locally Frequent
Field Horsetail	<i>Equisetum arvense</i>	
Green Algae	<i>Chara spp.</i>	Locally Dominant
Grey Willow	<i>Salix cinerea</i>	Rare
Hard Rush	<i>Juncus inflexus</i>	Occasional
Jointed Rush	<i>Juncus articulatus</i>	Rare
Purple Osier	<i>Salix purpurea</i>	Rare
Osier Willow	<i>Salix viminalis</i>	
Common Club-rush	<i>Schoenoplectus lacustris</i>	Rare Rare Frequent
Branched Bur-reed	<i>Sparganium erectum</i>	Dominant
Bulrush	<i>Typha latifolia</i>	Rare
Bird Vetch	<i>Vicia cracca</i>	
Rough-stalked Meadow-grass	<i>Poa trivialis</i>	Occasional
Sharp-flowered Rush	<i>Juncus acutiflorus</i>	Occasional
Soft Rush	<i>Juncus effusus</i>	Locally Frequent
Water Lily	<i>Nymphaea sp.</i>	Rare
Water Mint	<i>Mentha aquatica</i>	Very Locally Frequent
Yorkshire fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat: Other Broadleaved Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Occasional
Apple	<i>Malus domestica</i>	Occasional
Ash	<i>Fraxinus excelsior</i>	Occasional
Aspen	<i>Populus tremula</i>	Frequent/ Locally Dominant
Blackthorn	<i>Prunus spinosa</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Abundant
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Abundant - Dominant
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Feather-moss	<i>Kindbergia praelonga</i>	Abundant
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Rare
Compact Rush	<i>Juncus conglomeratus</i>	Rare
Crab Apple	<i>Malus sylvestris</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Soft-grass	<i>Holcus mollis</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Damson	<i>Prunus domestica ssp.</i>	Locally Frequent Occasional
English Oak	<i>insitia Quercus robur</i>	
Dog Rose	<i>Rosa canina</i>	Occasionally Rare
Dog Rose	<i>Rosa canina</i>	Rare
Downy Birch	<i>Betula pubescens</i>	Locally Frequent
English Oak	<i>Quercus robur</i>	Locally Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Horse-tail	<i>Equisetum arvense</i>	Occasional / Locally Abundant
Field Maple	<i>Acer campestre</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Goat's-beard	<i>Tragopogon pratensis</i>	Rare



Golden Rod	<i>Solidago virgaurea</i>	Rare / Locally Abundant
Gorse	<i>Ulex europaeus</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Grey Willow	<i>Salix cinerea</i>	Occasional
Hard Rush	<i>Juncus inflexus</i>	Rare
Hart's-tongue Thyme Moss	<i>Plagiomnium undulatum</i>	Locally Abundant
Hawthorn	<i>Crataegus monogyna</i>	Locally Frequent
Hazel	<i>Corylus avellana</i>	Occasional
Hedge Cranesbill	<i>Geranium pyrenaecium</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Hoary Willowherb	<i>Epilobium parviflorum</i>	Rare
Hybrid Poplar	<i>Populus x canadensis</i>	Frequent
Leylandii	<i>Cupressus x leylandii</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Rare / Locally Frequent
Marsh Thistle	<i>Cirsium palustre</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Oiser Willow	<i>Salix viminalis</i>	Occasional
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Locally Abundant
Red Bartsia	<i>Odontites vernus</i>	Rare
Redcurrant	<i>Ribes rubrum</i>	Rare
Ribbed Melilot	<i>Melilotus officinalis</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Abundant
Rowan	<i>Sorbus aucuparia</i>	Rare
Self-heal	<i>Prunella vulgaris</i>	Rare
Silver Birch	<i>Betula pendula</i>	Frequent
Snowberry	<i>Symphoricarpos rivularis</i>	Rare
Soft Rush	<i>Juncus effusus</i>	Rare / Locally Frequent
Spreading Hedge-parsley	<i>Torilis arvensis</i>	Rare
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Rare
White Clover	<i>Trifolium repens</i>	Rare
White Poplar	<i>Populus alba</i>	Occasional
White Willow	<i>Salix alba</i>	Occasional

Wild Parsnip	<i>Pastinaca sativa</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare
Yorkshire fog	<i>Holcus lanatus</i>	Occasional
Zig-zag Clover	<i>Trifolium medium</i>	Rare

Non-BAP Habitat - semi-improved grassland *species found only in dry seasonal pond		
Common Name	Botanical Name	Abundance (DAFOR)
Bramble	<i>Rubus fruticosus</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Common Hogweed	<i>Heracleum sphondylium</i>	Locally Frequent
Common Knapweed	<i>Centaurea nigra</i>	Locally Frequent
Common Nettle	<i>Urtica dioica</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Compact Rush	<i>Juncus conglomeratus</i>	Rare
Couch-grass	<i>Elymus repens</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Crassula	<i>Crassula helmsii</i>	Locally Abundant
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional / Locally Abundant
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent / Locally Dominant
Creeping Thistle	<i>Cirsium arvense</i>	Frequent/ Locally Abundant
Curled Dock	<i>Rumex crispus</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Field Horse-tail	<i>Equisetum arvense</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Rare
Prickly Sow-thistle	<i>Sonchus asper</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Rare
Ribbed Melilot	<i>Melilotus officinalis</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Dominant
Sharp Flowered Rush	<i>Juncus acutiflorus</i>	Rare
Soft Rush	<i>Juncus effusus</i>	Locally Frequent
Teasel	<i>Dipsacus fullonum</i>	Rare
Timothy	<i>Phleum pratense</i>	Rare / Locally Frequent
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Frequent
Wild Parsnip	<i>Pastinaca sativa</i>	Frequent - Abundant
Yarrow	<i>Achillea millefolium</i>	Rare
Yellow Loosestrife	<i>Lysimachia vulgaris</i>	Rare / Locally Abundant
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 325 516</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.11.2020 Scale 1: 4,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p> 
	<p>Subject Proposed Success Railway Cutting LWS</p>	
	<p>Drawing No. UF 5.36.01.07.012.01</p>	

SITE NAME	Success Railway Cutting
SITE No.	UF 5_36_01_07_012
LOCATION	Success NZ3251
STATUS	Proposed Local Wildlife Site
AREA	2.18 ha
DATE OF SITE VISIT	June 2009
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Neutral grassland, scrub and a small pond in a disused railway cutting.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Lowland meadow and pasture	2.16
Pond 30 square metres	0.002

National and local BAP species

English Name	Scientific Name	Notes

DETAIL

The site consists of a disused railway line which is now a popular walk for local people. The level track bed area has species-rich, varied grassland habitats, with a small pond. The sides of the railway have cutting slopes at the east end, which have a variety of scrub and tall grassland habitats.

The grassland varies in composition because of the different substrates derived from the railway construction. There are also wetter and drier areas. The flora includes glaucous sedge, northern marsh orchid, meadow vetchling, birds-foot trefoil and mouse-ear hawkweed, as well as a great variety of other species, including clovers and vetches. This provides a suitable habitat for many species of butterflies, including meadow brown and ringlet.

CONDITION ASSESSMENT

The Lowland meadows and pasture meets the Local Wildlife Site criteria:

The scrub on the railway embankments is mainly of hawthorn, with some planted trees. This habitat is suitable for breeding birds, including lesser whitethroat, dunnock, robin and song thrush.

The small pond has been recently created and planted. Though small in area, (30 square metres) and variable in size it supports toads and smooth newts as well as a range of invertebrate species. It also provides fresh water for wildlife in an area with few other aquatic habitats. The aquatic plants include marsh marigold, greater spearwort and fool's watercress. A bed of emergent plants includes branched bur-reed and both greater and lesser pond sedges.

CONNECTIVITY

Success Railway Cutting is an important component of the Success wildlife corridor.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in June 2009 by A McLay and J L Durkin.

SITE MANAGEMENT

The cutting and its surroundings are managed by the Sunderland City Council.

This is a popular area for public recreation, so there is a regular need for the removal of litter and maintenance of footpaths.

In order to maintain favourable condition of the grassland, it will be necessary to cut and rake off the sward in late summer in occasional years, and to prevent scrub encroachment.

For details of grassland management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".

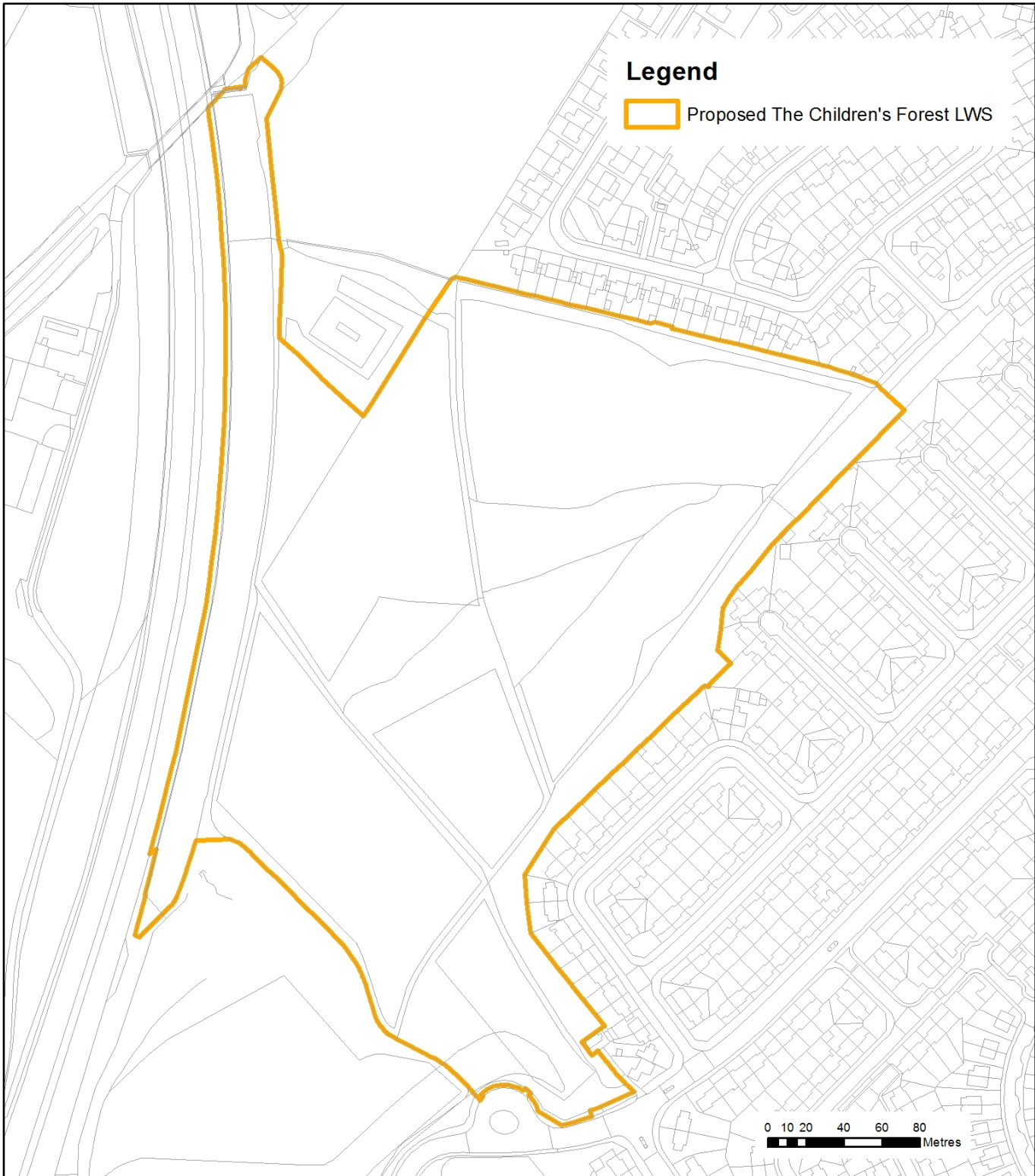
Success Railway Cutting species list

English Name	Scientific Name	DAFOR
Alder	<i>Alnus glutinosa</i>	Frequent
Ash	<i>Fraxinus excelsior</i>	Frequent
Black Medick	<i>Medicago lupulina</i>	Frequent
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Frequent
Broom	<i>Cytisus scoparius</i>	Frequent
Cat's-ear	<i>Hypochaeris radicata</i>	Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Abundant
Common Ivy	<i>Hedera helix</i>	Present
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Mouse-ear	<i>Cerastium fontanum</i>	Frequent
Cow Parsley	<i>Anthriscus sylvestris</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Frequent
Daisy	<i>Bellis perennis</i>	Frequent
Dogwood	<i>Cornus sanguinea</i>	Rare
False Oat-Grass	<i>Arrhenatherum elatius</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Foxglove	<i>Digitalis purpurea</i>	Rare
Garden Privet	<i>Ligustrum ovalifolium</i>	Frequent
Glaucous Sedge	<i>Carex flacca</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Frequent
Greater Plantain	<i>Plantago major</i>	Frequent
Hard Rush	<i>Juncus inflexus</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Abundant
Hazel	<i>Corylus avellana</i>	Present
Hedge Bindweed	<i>Calystegia sepium</i>	Frequent
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Horse-chestnut	<i>Aesculus hippocastaneum</i>	Present
Male-fern	<i>Dryopteris filix-mas</i>	Frequent
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent
Mouse-ear-hawkweed	<i>Pilosella officinarum</i>	Frequent
Mugwort	<i>Artemisia vulgaris</i>	Frequent
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Frequent
Norway Maple	<i>Acer platanoides</i>	Present
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Present
Perforate St John's-wort	<i>Hypericum perforatum</i>	Frequent



Red Bartsia	<i>Odontites vernus</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Frequent
Silver Birch	<i>Betula pendula</i>	Present
Soft-brome	<i>Bromus hordeaceus</i>	Rare
Sweet Cicely	<i>Myrrhis odorata</i>	Frequent
Timothy	<i>Phleum pratense</i>	Frequent
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
White Dead-nettle	<i>Lamium album</i>	Frequent
White Poplar	<i>Populus alba</i>	Frequent
Wild Teasel	<i>Dipsacus fullonum</i>	Frequent

English Name	Scientific Name	DAFOR
an oak	<i>Quercus sp.</i>	Frequent
Bittersweet	<i>Solanum dulcamara</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Present
Bladder Campion	<i>Silene vulgaris</i>	Occasional
Branched Bur-reed	<i>Sparganium erectum</i>	Frequent
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Charlock	<i>Sinapis arvensis</i>	Frequent
Colt's-foot	<i>Tussilago farfara</i>	Frequent
Common Nettle	<i>Urtica dioica</i>	Frequent
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Common Toad	<i>Bufo bufo</i>	Present
Common Vetch	<i>Vicia sativa</i>	Rare
Crack-willow	<i>Salix fragilis</i>	Present
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Dewberry	<i>Rubus caesius</i>	Frequent
Dog-rose	<i>Rosa canina agg.</i>	Frequent
Elder	<i>Sambucus nigra</i>	Frequent
Floating Sweet-grass	<i>Glyceria fluitans</i>	Rare
Fool's-water-cress	<i>Apium nodiflorum</i>	Rare
Goat Willow	<i>Salix caprea</i>	Frequent
Gorse	<i>Ulex europaeus</i>	Frequent
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Greater Pond-sedge	<i>Carex riparia</i>	Frequent
Greater Spearwort	<i>Ranunculus lingua</i>	Frequent
Hard Rush	<i>Juncus inflexus</i>	Frequent
Hoary Ragwort	<i>Senecio erucifolius</i>	Frequent
Japanese Rose	<i>Rosa rugosa</i>	Present
Lesser Pond-sedge	<i>Carex acutiformis</i>	Frequent
Lesser Trefoil	<i>Trifolium dubium</i>	Frequent
Marsh-marigold	<i>Caltha palustris</i>	Rare
Pear	<i>Pyrus communis</i>	Present
Red Clover	<i>Trifolium pratense</i>	Frequent
Rowan	<i>Sorbus aucuparia</i>	Present
Smooth Newt	<i>Triturus vulgaris</i>	Present
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Upright Hedge-parsley	<i>Torilis japonica</i>	Present
White Clover	<i>Trifolium repens</i>	Frequent

Wild Cherry	<i>Prunus avium</i>	Frequent
Zigzag Clover	<i>Trifolium medium</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 351 560	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 13/08/2020 Scale 1: 3,000	
	Project Local Wildlife Site Boundary Review 2020	Sheet size A4	
	Subject Proposed The Children's Forest LWS	Revisions 1	
	Drawing No. UF 5_36_01_06_051.01		

SITE NAME	The Children's Forest
SITE No.	UF 5_36_01_07_018
LOCATION	NZ 352 560
STATUS	Local Wildlife Site
FIRST NOTIFIED	2020
AREA	9.72 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Pennywell Children's forest is an area of plantation woodland with a couple of unimproved neutral grassland meadows.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland meadow and pasture	1.04
Other broadleaf woodland	8.68

National and local BAP species:

English Name	Scientific Name	Notes

DETAIL

The woodland itself is semi-mature broadleaved woodland. It is dense in places, particularly towards the south. The site suffers from antisocial behaviour and evidence of fires, litter and drinking were all present within the woodland.

Species include field maple, hawthorn, elder, goat willow, alder, ash, hazel, sycamore and cherry. The woodland qualifies and the Local Biodiversity Action Plan habitat, other broadleaf woodland.

The unimproved neutral grassland in the centre of the site is rank, particularly the western half, where rosebay willowherb, hogweed, common ragwort and creeping thistle are locally dominant. However, common knapweed is also frequent within this area; with eyebright, meadow cranesbill, meadow vetchling, and common birds-foot-trefoil occasional; and fairy flax, field scabious and great burnet rare. The eastern half is much less rank, with common knapweed abundant across this area, cowslip and common birds-foot-trefoil frequent and lady's bedstraw, yellow wort and goatsbeard were also present, but rare in the sward.

CONDITION ASSESSMENT

The Lowland meadows habitat meets the Local Wildlife Site criteria:

Overall, the meadows qualify as the Local BAP habitat Lowland meadows and pasture but is in poor condition just the large areas of undesirable species and the low frequencies of some of the indicator species.

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland is in poor condition, with the trees being uniform in age and limited ground flora being present.

CONNECTIVITY

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

The site was surveyed in 2020 by Durham Wildlife Services.

SITE MANAGEMENT

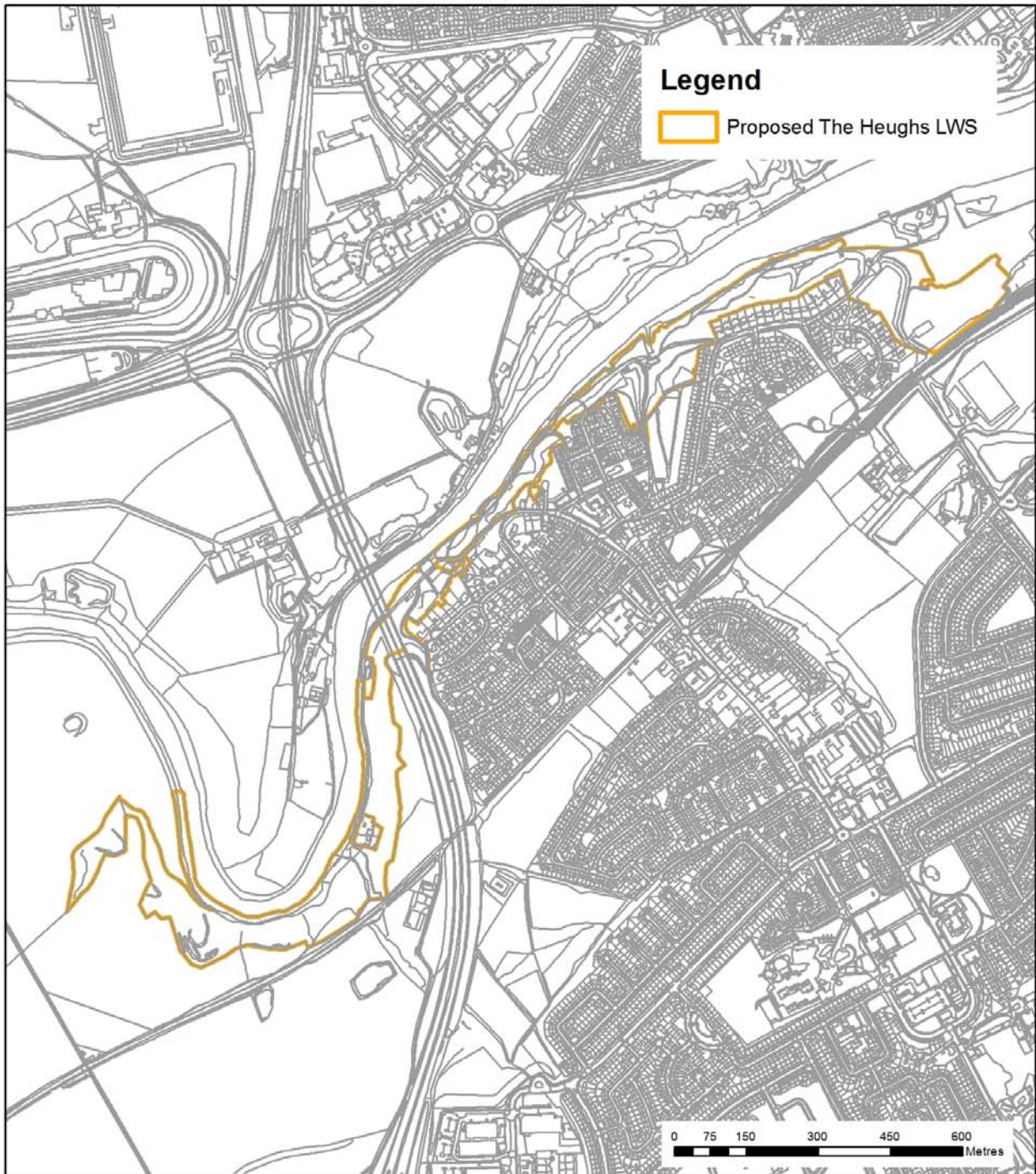
The Children's Forest Species List

BAP Habitat: Other Broadleaf Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Aspen	<i>Populus tremula</i>	Rare / Locally Abundant
Black Medic	<i>Medicago lupulina</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Frequent
Bluebell sp.	<i>Hyacinthoides sp.</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Cleavers	<i>Galium aparine</i>	Frequent
Cock'sfoot	<i>Dactylis glomerata</i>	Frequent
Colt's-foot	<i>Tussilago farfara</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Occasional
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Couch Grass	<i>Elymus repens</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field Maple	<i>Acer campestre</i>	Occasional
Franchet's Cotoneaster	<i>Cotoneaster franchetii</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Rare
Grey Poplar	<i>Populus x canescens</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Frequent
Hawkweed	<i>Hieracium Sect. Hieracium</i>	Rare



Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Occasional
Hedge Parsley	<i>Torilis japonica</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Occasional
Honesty	<i>Lonicera periclymenum</i>	Rare
Ivy	<i>Hedera helix</i>	Rare / Locally Abundant
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Meadow Cranesbill	<i>Geranium pratense</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Red Bartsia	<i>Odontites vernus</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional/ Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Rare
Silver Birch	<i>Betula pendula</i>	Occasional
Smooth Meadow-grass	<i>Poa pratensis</i>	Occasional
Snowberry	<i>Symphoricarpos rivularis</i>	Rare / Locally Abundant
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Teasel	<i>Dipsacus fullonum</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
Whitebeam	<i>Sorbus aria</i>	Frequent
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Rare
Wood Speedwell	<i>Veronica montana</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat: Lowland Meadow and Pasture		
Common Name	Botanical Name	Abundance (DAFOR)
Bramble	<i>Rubus fruticosus</i>	Occasional / Locally Abundant
Cock'sfoot	<i>Dactylis glomerata</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Common Cat'sear	<i>Hypochoeris radicata</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Mouseear	<i>Cerastium fontanum</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Cowslip	<i>Primula veris</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Occasional / Locally Frequent
Crested Dogs-tail	<i>Cynosurus cristatus</i>	Rare
Curled Dock	<i>Rumex crispus</i>	Rare
Daisy	<i>Bellis perennis</i>	Rare
Eyebright	<i>Euphrasia nemerosa</i>	Occasional
Fairyflax	<i>Linum catharticum</i>	Rare
Field Scabious	<i>Knautia arvensis</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Goat'sbeard	<i>Tragopogon pratensis</i>	Rare
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Lady's Bedstraw	<i>Galium verum</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Cranesbill	<i>Geranium pratense</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Silverweed	<i>Argentina anserina</i>	Rare
Tansy	<i>Tanacetum vulgare</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Rare

White Clover	<i>Trifolium repens</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Carrot	<i>Daucus carota</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 348 563</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 28.04.2020 Scale 1: 11,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4 </p>
	<p>Subject The Heughs LWS</p>	
	<p>Drawing No. UF 5.36.01.06.055.01</p>	

SITE NAME	The Heughs (Formerly part of Wear River Bank Woodland)
SITE No.	UF 5_36_01_06_055
LOCATION	South Hylton NZ345561
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised 2010
AREA	23.61 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

This site consists of White Heugh Wood, Stony Heugh Wood and Offerton Dene. Ancient semi-natural and other broadleaf woodland on the steep banks of the River Wear, upstream of the A19 bridge. The composition of the woodland varies with the geology, which is mostly neutral but calcareous in places, with small streams flowing into the river and with the tidal river frontage. These factors have produced a variety of woodland types.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Ancient semi-natural woodland	9.39
Other broadleaf woodland	11.46
Rivers and streams	1.02

National and local BAP species:

English Name	Scientific Name	Notes
Bats		Regularly present
Otter	<i>Lutra lutra</i>	Regularly present

DETAIL

Through the Ancient semi-natural woodland, ash and oak predominate in most places, with some wych elm. Sycamore and other non-native species are frequent in some places, particularly in the eastern part of the wood, where there are planted trees of a number of species. Small areas of alder woodland occur on stream-sides and on the river frontage.

The shrub layer typically consists of hazel, hawthorn, elder and blackthorn. This is particularly dense in places where the woodland edge has been cultivated in the past, and then allowed to return to woodland.

Typical ground floras include a number of ancient woodland indicator species such as bluebell, sanicle, sweet woodruff, ramsons, wood violet and wood millet. Wood avens, wood cranesbill, great woodrush and red campion are frequent.

In the alder flushes, several willow species form the understorey, with a ground flora of marsh marigold, opposite leaved golden saxifrage, lady's smock, common spotted orchid and giant horsetail. These areas are also rich in ferns and bryophytes.

There are few clearings in the wood. There is an old stone quarry in Offerton Dene.

The tidal riverbanks support a woodland flora with occasional saltmarsh plants such as sea aster, salt marsh grass and sea club rush. The latter is a scarce plant in the Durham BAP area.

Woodland birds such as woodcock, sparrowhawk, nuthatch, tawny owl and great spotted woodpecker breed regularly.

To the east, the mature plantation woodland qualifies as the BAP Habitat "other broadleaf woodland". It lies on the banks of the River Wear and is dominated by sycamore and ash with an abundant hawthorn shrub layer. There are some mature/veteran ash trees present. However, overall, this woodland fails its condition assessment due to lack of deadwood, percentage of non-native species, lack of indicator species and poor canopy cover. The woodland is quite open in places, with bramble dominating the understorey.

Ground flora includes male fern, scaly male fern, ivy, common nettle common hogweed, herb Robert and greater stitchwort. There are a number of woodland clearings which are dominated with tall ruderal species and/or rank grassland, including rosebay willowherb, bramble, common hogweed, creeping thistle, meadowsweet, false oat-grass and common nettle. A stand of Japanese Knotweed is situated at NZ 3516157031. Larger areas of open spaces by the river near the bridge and to the south by housing is species poor amenity grassland.

Little pockets of mud flats are present along the banks of the river and along the riverbanks, although mostly bare, some sea plantain and Babington's orache is present.

CONDITION ASSESSMENT

The Ancient semi-natural and broadleaf woodland meet the Local Wildlife Site criteria:

The wood is in unfavourable condition because of the high proportion of non-native trees, lack of deadwood, lack of indicator species and poor canopy cover.

CONNECTIVITY

The wood is an important component of the River Wear wildlife corridor.

LANDSCAPE

The wood is very prominent from the north side of the river and from the A19.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS**VALUE FOR THE APPRECIATION OF NATURE AND LEARNING**

The wood has a public footpath running along its length and is quite accessible to the public.

SITE MANAGEMENT ADVICE AND OBJECTIVES

Maintain the area of the woodland.

Aim to meet the “favourable condition” criteria; in this case by decreasing the proportion of non-native species and increasing the amount of standing and fallen dead timber.

General principles of woodland management are given in the “Woodland management guidance and monitoring notes”.

The Heughs species list

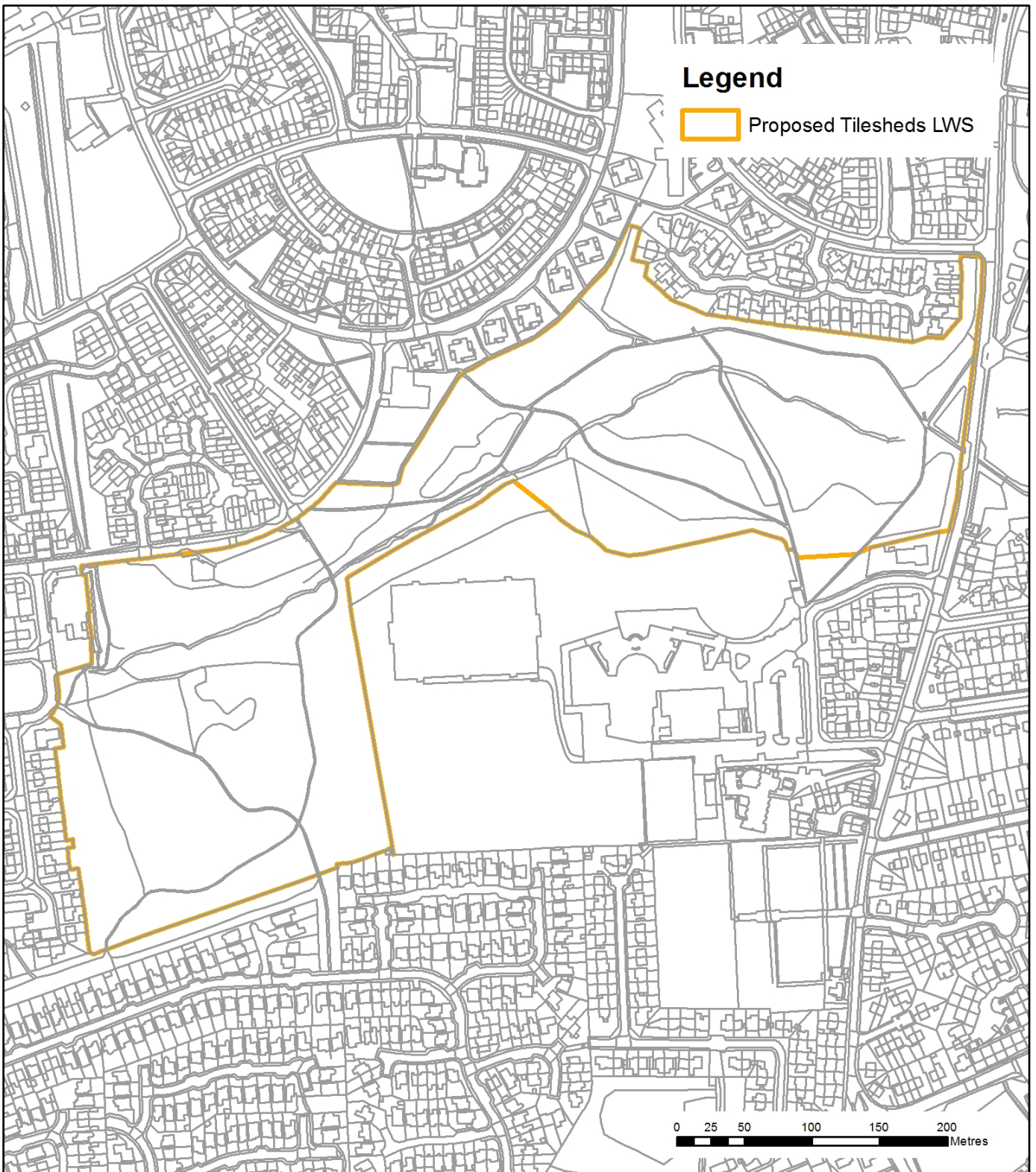
BAP Habitat: Ancient semi-natural woodland		
English name	Scientific Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	Frequent
Beech	<i>Fagus sylvatica</i>	Rare
Black Horehound	<i>Ballota nigra</i>	Rare
Bluebell	<i>Hyacinthoides non-scripta</i>	Occasional
Bramble	<i>Rubus fruticosus</i> agg.	Frequent
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Frequent
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Butterbur	<i>Petasites hybridus</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Frequent
Common Ivy	<i>Hedera helix</i>	Abundant
Common Nettle	<i>Urtica dioica</i>	Frequent
Common Valerian	<i>Valeriana officinalis</i>	Occasional
Common Whitebeam	<i>Sorbus aria</i>	Rare
Creeping Soft-grass	<i>Holcus mollis</i>	Occasional
Dog-rose	<i>Rosa canina</i> agg.	Frequent
Elder	<i>Sambucus nigra</i>	Frequent
Enchanter's-nightshade	<i>Circaea lutetiana</i>	Frequent
False-brome	<i>Brachypodium sylvaticum</i>	Frequent
Field Maple	<i>Acer campestre</i>	Occasional
Giant Bellflower	<i>Campanula latifolia</i>	Rare
Giant Fescue	<i>Festuca gigantea</i>	Frequent
Great Wood-rush	<i>Luzula sylvatica</i>	Occasional
Ground-ivy	<i>Glechoma hederacea</i>	Occasional
Guelder-rose	<i>Viburnum opulus</i>	Occasional
Hard Shield-fern	<i>Polystichum aculeatum</i>	Rare
Hawkweed	<i>Hieracium</i> agg.	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Frequent
Herb-Robert	<i>Geranium robertianum</i>	Frequent
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Holly	<i>Ilex aquifolium</i>	Occasional
Honeysuckle	<i>Lonicera periclymenum</i>	Frequent
Lady-fern	<i>Athyrium filix-femina</i>	Occasional
Lesser Periwinkle	<i>Vinca minor</i>	Occasional

Lesser Sea-spurrey	<i>Spergularia marina</i>	Rare
Male-fern	<i>Dryopteris filix-mas</i>	Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Opposite-leaved Golden-saxifrage	<i>Chrysosplenium oppositifolium</i>	Frequent
Pedunculate Oak	<i>Quercus robur</i>	Occasional
Primrose	<i>Primula vulgaris</i>	Occasional
Red Campion	<i>Silene dioica</i>	Frequent
Red Currant	<i>Ribes rubrum</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Occasional
Sanicle	<i>Sanicula europaea</i>	Frequent
Scaly Male-fern	<i>Dryopteris affinis subsp. borrieri</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Frequent
Soft Shield-fern	<i>Polystichum setiferum</i>	Rare
Sweet Chestnut	<i>Castanea sativa</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Frequent
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood Burdock	<i>Arctium nemorosum</i>	Occasional
Wood Crane's-bill	<i>Geranium sylvaticum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Frequent
Wood Melick	<i>Melica uniflora</i>	Occasional
Wood Speedwell	<i>Veronica montana</i>	Occasional
Wood-sorrel	<i>Oxalis acetosella</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Frequent


BAP Habitat: Other Broadleaf Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Annual Meadow-grass	<i>Poa Annua</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Abundant
Aspen	<i>Populus tremula</i>	Rare
Babington's Orache	<i>Atriplex glabriuscula</i>	Rare
Bird Cherry	<i>Prunus padus</i>	Occasional
Black Medic	<i>Medicago lupulina</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Occasional / Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Abundant / Locally Dominant
Broadleaved Dock	<i>Rumex obtusifolius</i>	Rare

Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Chinese Bramble	<i>Rubus tricolor</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Cock'sfoot	<i>Dactylis glomerata</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Occasional / Locally Abundant
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Abundant
Common Nettle	<i>Urtica dioica</i>	Frequent / Locally Abundant
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Crack Willow	<i>Salix x fragilis</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Rare / Locally Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Elder	<i>Sambucus nigra</i>	Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Rare
Field Maple	<i>Acer campestre</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Goatsbeard	<i>Tragopogon pratensis</i>	Rare
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Greater Stitchwort	<i>Stellaria holostea</i>	Rare
Grey Willow	<i>Salix cinerea</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Frequent
Hawthorn	<i>Crataegus monogyna</i>	Abundant
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Rare / Locally Abundant
Ivy	<i>Hedera helix</i>	Occasional / Locally Dominant
Japanese Knotweed	<i>Reynoutria japonica</i>	Rare / Locally Abundant
Large Bindweed	<i>Calystegia silvatica</i>	Frequent
Male Fern	<i>Dryopteris filix-mas</i>	Rare
Many Flowered Rose	<i>Geranium pratense</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Locally Frequent

Red Champion	<i>Silene dioica</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rose sp.	<i>Rosa sp.</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Frequent / Locally Dominant
Rough Hawkbit	<i>Leontodon hispidus</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Frequent
Scaly Male Fern	<i>Dryopteris borreri</i>	Rare / Locally Frequent
Sea Plantain	<i>Plantago maritima</i>	Rare
Silver Birch	<i>Betula pendula</i>	Rare
Smooth Meadow-grass	<i>Poa pratensis</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Tufted Vetch	<i>Vicia cracca</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
White Deadnettle	<i>Lamium album</i>	Rare
Whitebeam	<i>Sorbus aria</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Frequent



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 355 585	Contact C. Dewson Approved by C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Drawn by E. Smith Date 28.04.2020
	Subject Proposed Tilesheds LWS	Scale 1: 11,000
	Drawing No. UF 5.36.01.06.056.01	Sheet size A4

SITE NAME	Tilesheds
SITE No.	UF 5_36_01_06_056
LOCATION	Hylton Castle NZ355585
STATUS	Local Wildlife Site
FIRST NOTIFIED	1993 and revised in 2020
AREA	12.51 ha
DATE OF SITE VISIT	June 2018
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

The site comprises of both unimproved and semi-improved grassland areas, scrub, a wooded streamside and associated plantation woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Lowland meadows and pasture	1.86
Other broadleaf woodland	6.50
Pond	0.0096
Rivers and streams	0.16

National and local BAP species:

English Name	Scientific Name	Notes
Wall	<i>Lasiommata megera</i>	

DETAIL

Tilesheds is located to the south west of Hylton Castle, Sunderland. The site is served by several permissive paths and desire lines. It is boarded to the north, west and south by housing. A school and some amenity grassland is present to the south. To the east lies Hylton Dene Local Wildlife Site, separated by a road.

This site supports one of the region's best examples of unimproved Lowland meadows. The damper grassland areas contain abundant meadowsweet and great burnet with wild angelica, marsh thistle, northern marsh orchid, common spotted orchid, hoary ragwort, glaucous sedge, carnation sedge, hard rush and compact rush. Pepper saxifrage and sneezewort were both known to occur here but were not recorded during this site walkover, nor the 2010 site walkover.

The drier parts of the grassland support many species typical of unimproved neutral grassland including common knapweed, zigzag clover, cowslip, common eyebright, lady's bedstraw, common birdsfoot trefoil, field scabious, meadow cranesbill, meadow vetchling, rough hawkbit, tufted vetch, fairy flax and autumn hawkbit. Crested dogstail, red fescue, sweet vernal grass and yorkshire fog were prominent among the 13 species of grasses recorded in the main meadow area.

A large portion of the site is covered by mature broadleaf woodland habitats. These contain a large component of non-native species such as Canadian poplar, sycamore and Swedish whitebeam. The wooded stream banks have a more semi-natural feel but still support a good deal of non-native species, particularly Huntingdon's elm. However, this is mixed with native species with hawthorn, hazel, ash, elder, crack willow, goat willow and small quantities of guelder rose. The relict woodland flora includes lords and ladies, male fern, golden male fern, common dog violet, wood avens and herb bennet. Wetland species present on the more open stream banks include wild angelica, hemlock water-dropwort, fool's watercress and valerian. A small seasonal pond is also present.

The southern area of woodland has an area of rank grassland in its centre. Although part of this is composed of tall ruderal non-BAP habitat, the rest qualifies as the Durham BAP habitat, Lowland Meadow and Pasture. This grassland is in poor condition due to the percentage of herbs present, the percentage of undesirable species present and the low abundance of indicator species. Indicator species present include meadow cranesbill, common knapweed, great burnet, tufted vetch, meadow vetchling and meadowsweet.

The site suffers from high levels of disturbance; litter is a major issue, along with fires and evidence of off-road motorbikes being used.

CONDITION ASSESSMENT

The lowland meadows and pasture habitat meets the Local Wildlife Site criteria:

The areas of lowland meadows and pasture on site are impacted by scrub encroachment and succession. Rank grasses and ruderal species currently encroach due to a lack of appropriate management. A small core area is in favourable condition; however, most of this feature is in an unfavourable condition.

The Other broadleaf woodland habitat meets the Local Wildlife Site criteria:

The woodland habitat is currently in a favourable condition. A small amount of non-native *Rhododendron* is present and small areas are affected by anti-social behaviour.

CONNECTIVITY

Tilsheds has strong connectivity to a complex of Local Wildlife Sites. These include: Hylton Dene, which lies immediately to the east and is a complex of species, rich grassland, ponds, fen and woodland; Hylton Colliery Pond lies beyond this; and Bunny Hill, an area of Magnesian limestone grassland to the north. Together, along with Hylton Castle Cutting Site of Special Scientific Interest (SSSI), these sites are designated a Local Nature Reserve. The River Wear lies just 800 metres to the south and in between lies Baron's Quay LWS, with Timber Beach LWS to the east. This site is part of the River Wear corridor, a complex containing several semi-natural habitats, including additional LWS and SSSI's. Overall, the site is well connected to the wildlife corridor that follows the River Wear.

LANDSCAPE

Tilsheds LWS forms an important wooded green space within a highly populated urban area of the city.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Surveyed for the MAGical Meadows Project by A. Mclay in 2006 and 2010 and again by Durham Wildlife Services in 2019 and 2020.

SITE MANAGEMENT

Lowland meadow and pastures:

- Selective scrub control
- Annual cut and rake
- Facilitation of grazing

Other broadleaf woodland:

- Remove non-native species – Rhododendron
- Remove non-native species – Japanese knotweed
- Litter Removal

Ponds:

- Reduce shading around bankside

Tilesheds species list

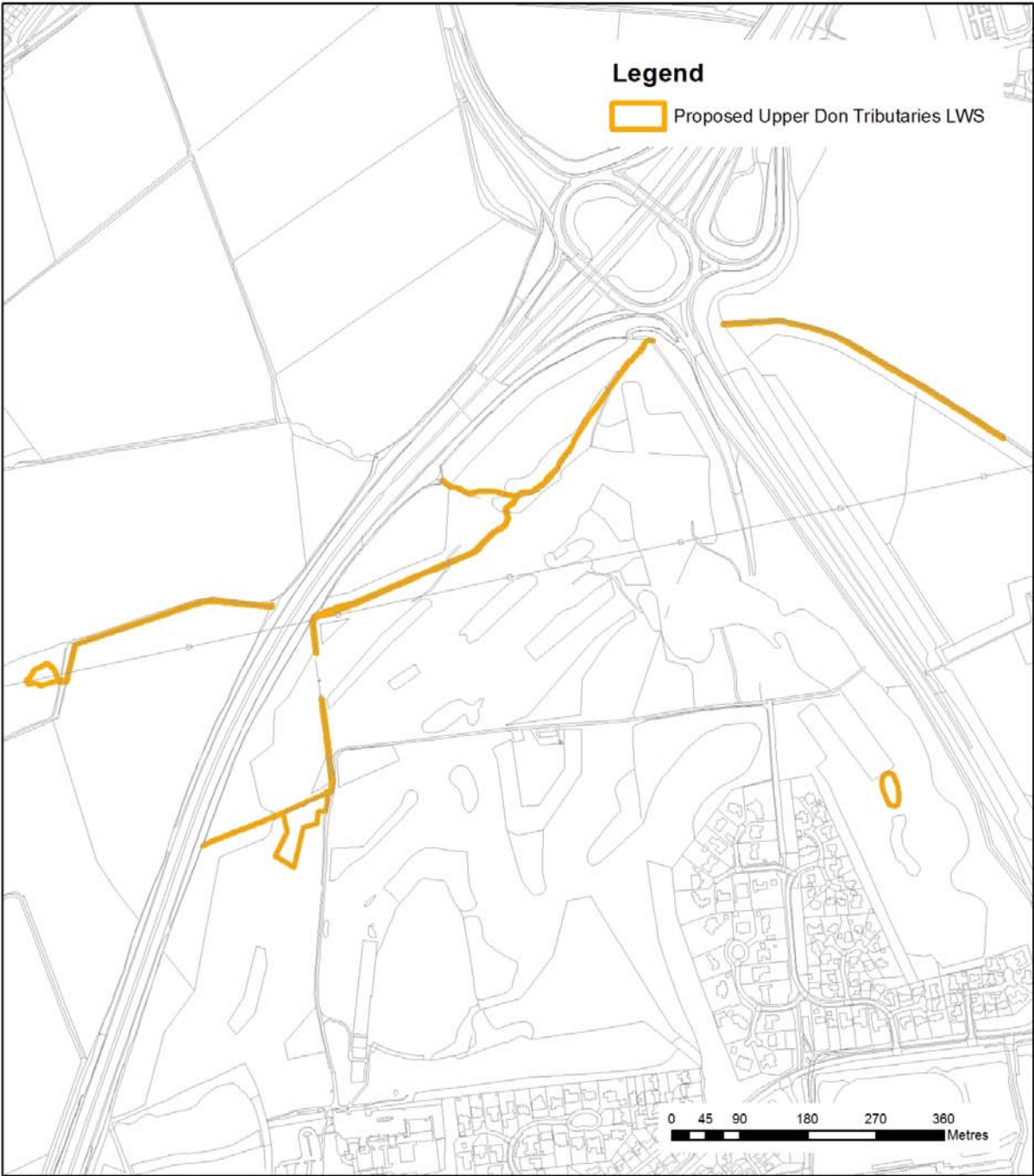
BAP Habitat: Lowland Meadow		
Common Name	Botanical Name	Abundance (DAFOR)
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Rare
Bramble	<i>Rubus fruticosus agg</i>	
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Carnation Sedge	<i>Carex panicea</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Frequent/Locally Abundant
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Common Cowslip	<i>Primula veris</i>	Rare
Common Eyebright	<i>Euphrasia nemorosa</i>	Rare
Common Hawthorn	<i>Crataegus monogyna</i>	Rare
Common Horsetail	<i>Equisetum arvense</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Abundant
Common Spotted Orchid	<i>Dactylorhiza fuchsii</i>	Occasional
Compact Rush	<i>Juncus conglomeratus</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Locally Frequent
Crested Dogstail	<i>Cynosurus cristatus</i>	Abundant
Downy Birch	<i>Betula pubescens</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Occasional
False-brome	<i>Brachypodium sylvaticum</i>	Very Locally Frequent
Field Scabious	<i>Knautia arvensis</i>	Rare
Field Wood-rush	<i>Luzula campestris</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Abundant
Great Burnet	<i>Sanguisorba officinalis</i>	Frequent
Hard Rush	<i>Juncus inflexus</i>	Occasional
Hawkweed sp.	<i>Hieracium sect. Sabauda</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional - Frequent
Hybrid Marsh Orchid	<i>Dactylorhiza x venusta</i>	Occasional
Lady's Bedstraw	<i>Galium verum</i>	Rare
Marsh Thistle	<i>Cirsium palustre</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional

Meadow Crane's-bill	<i>Geranium pratense</i>	Rare
Meadow Fescue	<i>Schedonorus pratensis</i>	Occasional
Meadow Foxtail	<i>Alopecurus pratensis</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Abundant-Dominant
Mouse-ear Chickweed	<i>Cerastium fontanum</i>	Occasional
Northern Marsh Orchid	<i>Dactylorhiza purpurella</i>	Occasional
Perennial Ryegrass	<i>Lolium perenne</i>	Very Locally Abundant
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Locally Frequent
Red Clover	<i>Trifolium pratense</i>	Frequent
Red Fescue	<i>Festuca rubra</i>	Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rough Hawkbit	<i>Leontodon saxatalis</i>	Rare
Selfheal	<i>Prunella vulgaris</i>	Frequent
Square-stalked St John's Wort	<i>Hypericum tetrapterum</i>	Rare
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Locally Frequent
Tall Fescue	<i>Schedonorus arundinaceus</i>	Occasional
Timothy-grass	<i>Phleum pratense</i>	Occasional - Frequent
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Very Locally Frequent
Tufted Vetch	<i>Vicia cracca</i>	Frequent
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow-wort	<i>Blackstonia perfoliata</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant
Zigzag Clover	<i>Trifolium medium</i>	Locally Frequent

BAP Habitat: Other Broadleaved Woodland		
Common Name	Botanical Name	Abundance (DAFOR)
Common Alder	<i>Alnus glutinosa</i>	Occasional/ Locally Frequent
Ash	<i>Fraxinus excelsior</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bloody Dock	<i>Rumex sanguineus</i>	Occasional
Box Honeysuckle	<i>Lonicera nitida</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent/ Locally Abundant
Broadleaved Dock	<i>Rumex obtusifolius</i>	Rare
Broadleaved Plantain	<i>Plantago major</i>	Locally Frequent
Bush Vetch	<i>Vicia sepium</i>	Occasional
Canadian Poplar	<i>Populus x canadensis</i>	Locally Frequent
Cherry Plum	<i>Prunus cerasifera</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Common Aspen	<i>Populus tremula</i>	Rare
Common Dog-violet	<i>Viola riviniana</i>	Rare
Common Dogwood	<i>Cornus sanguinea</i>	Rare
Common Feather-moss	<i>Kindbergia praelonga</i>	Occasional
Common Hawthorn	<i>Crataegus monogyna</i>	Frequent/Locally Dominant
Common Hazel	<i>Corylus avellana</i>	
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Ivy	<i>Hedera helix</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Locally Frequent
Common Pocket-moss	<i>Fissidens taxifolius</i>	
Common Snowberry	<i>Symphoricarpos rivularis</i>	Rare
Couch Grass	<i>Elytrigia repens</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Locally Frequent
Crack Willow	<i>Salix x fragilis</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Locally Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Damson	<i>Prunus domestica ssp insitia</i>	Locally Frequent
Dog Rose	<i>Rosa canina sl</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
Elm	<i>Ulmus sp.</i>	Rare

Field Maple	<i>Acer campestre</i>	Abundant
Fool's-water-cress	<i>Apium nodiflorum</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Golden Male Fern	<i>Dryopteris affinis sl</i>	Rare
Greater Burdock	<i>Arctium nemorosum sl</i>	Rare
Grey Poplar	<i>Populus x canescens</i>	Occasional
Grey Willow	<i>Salix cinerea</i>	Locally Frequent
Ground Ivy	<i>Glechoma hederacea</i>	Occasional
Guelder Rose	<i>Viburnum opulus</i>	Occasional
Hairy Brome	<i>Bromopsis ramosa</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Occasional / Locally Abundant
Hedge Parsley	<i>Torilis japonica</i>	Rare
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Bennet	<i>Geum urbanum</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Huntingdon Elm	<i>Ulmus x vegeta</i>	Locally Frequent
Hybrid Poplar	<i>Populus x canadensis</i>	Occasional
Italian Alder	<i>Alnus cordata</i>	Rare
Korean Privet	<i>Ligustrum ovalifolium</i>	Rare
Large Bindweed	<i>Calystegia sylvatica</i>	Locally Frequent
Lords and Ladies	<i>Arum maculatum</i>	Occasional - Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Many-fruited Thyme-moss	<i>Plagiomnium undulatum</i>	Locally Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Locally Frequent
Nettle	<i>Urtica dioica</i>	Frequent / Locally Abundant
Oiser Willow	<i>Salix viminalis</i>	Occasional
Privet	<i>Ligustrum ovalifolium</i>	Rare
Purple Oiser Willow	<i>Salix purpurea</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Rare
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Locally Frequent
Valerian	<i>Valeriana officinalis</i>	Rare
Water Dropwort	<i>Oenanthe crocata</i>	Rare

White Willow	<i>Salix alba</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Rare
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Rare
Wych Elm	<i>Ulmus glabra</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017
 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	National Grid Reference NZ 301 597	Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.11.2020 Scale 1: 10,000	
	Project Local Wildlife Site Boundary Review 2020	Sheet size A4	
	Subject Proposed Upper Don Tributaries LWS	Revisions	
	Drawing No. UF 5.36.01.07.013.01		

SITE NAME	Upper Don Tributaries
SITE No.	UF 5_36_01_07_013
LOCATION	Washington NZ2959, NZ3059
STATUS	Proposed Local Wildlife Site
AREA	0.68 ha, 2 kilometres length of watercourse.
DATE OF SITE VISIT	June, August and October 2009
OWNERSHIP	Private

SITE DESCRIPTION

The upper tributaries of the River Don and two associated ponds.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Other broadleaf woodland	0.26
Pond	0.15
River and stream	0.27

National and local BAP species:

English Name	Scientific Name	Notes
Otter	<i>Lutra lutra</i>	Occasional along the river.
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds.
Song Thrush	<i>Turdus philomenos</i>	Breeds
Water Vole	<i>Arvicola terrestris</i>	Frequent along the burns.

DETAIL

The site consists of three sections of watercourses which form part of the upper catchment of the River Don. The watercourses are divided by the A194(M) and A195 roads, but there are wide culverts under the roads which assist in maintaining continuity of habitat and species movements.

The eastern section is a kilometre stretch of the River Don immediately east of the A195 road. This LWS covers the southern half of the course of the river, the northern bank being in Gateshead.

In the middle section, the Leam and Whittle Burns join to form the river within the George Washington Golf Course. There is also an old pond here, now overgrown to "tall fen".

The western section of the LWS is the course of the Whittle Burn, and also includes a large pond. In this part of the course of the River Don, the river is quite small and is

flanked by arable land and a golf course. In places, the river has been deeply cut and embanked, in order to drain the farmland. The watercourse increases noticeably in size downstream from the confluence of the Leam and Whittle burns.

The aquatic vegetation has few species; stands of branched bur-reed are the main emergents, with some soft rush, reed canary grass and yellow flag. Water cress, water mint, fennel pondweed and water starwort are present along the length of the burns.

The steep banks of the cut channel are well vegetated, with regular patches of scrub including gorse, blackthorn and a variety of willow species. Woodland species such as dog violet and hedge woundwort are present in the longer established scrub. A small area of wet alder woodland is present on the Golf Course.

The banks of the burns provide suitable habitat for water voles in places that have the combination of steep banks for burrowing and a variety of aquatic plants for food. The River Don catchment is one of the most important remaining watercourses for this declining species. They are present along the whole length of this local wildlife site, but particularly east of the A195 road, on part of the Golf Course and on the Whittle Burn.

Water shrews are present on the river east of the A195 road. Otters are occasionally present in the same area, with individuals travelling up the river from the Tyne.

Though the watercourses are quite small here, the water is fairly clean and supports many invertebrates, including banded demoiselle. The invertebrates and a population of three-spined sticklebacks, provide food for birds such as mallard, moorhen, kingfisher, heron, pied wagtail and grey wagtail. The steep banks provide several suitable nest sites for kingfishers. Reed buntings and a number of other small bird species nest in the scrub along the stream banks.

The Golf Course pond has long been overgrown and is now best described as "tall fen". It is dense with reedmace, yellow flag iris, lesser pond sedge and water horsetail. This is a scarce habitat in Sunderland. Water voles are present here, but difficult to survey.

The Whittle Burn Pond is an unusual one for a lowland area, in that it consists of a floating bog covered mostly in floating sweet grass and branched bur reed, with lesser duckweed. It is difficult to survey thoroughly.

CONDITION ASSESSMENT

The wetlands meet the Local Wildlife Site criteria.

CONNECTIVITY

This section of the River Don catchment is an important component of the River Don wildlife corridor.

LANDSCAPE**OTHER SCIENTIFIC IMPORTANCE****RECORDING HISTORY**

Surveyed in June, August and October 2009 by J L Durkin.

SITE MANAGEMENT

The burns here are managed mainly to provide drainage for the adjacent land.

The site would benefit from a review of current management of the watercourse with a view to improving the habitat for water voles, for example by ensuring connectivity through the road culverts. The two ponds are overgrown but are still valuable habitats in their current successional state as fen.

For details of wetland management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".

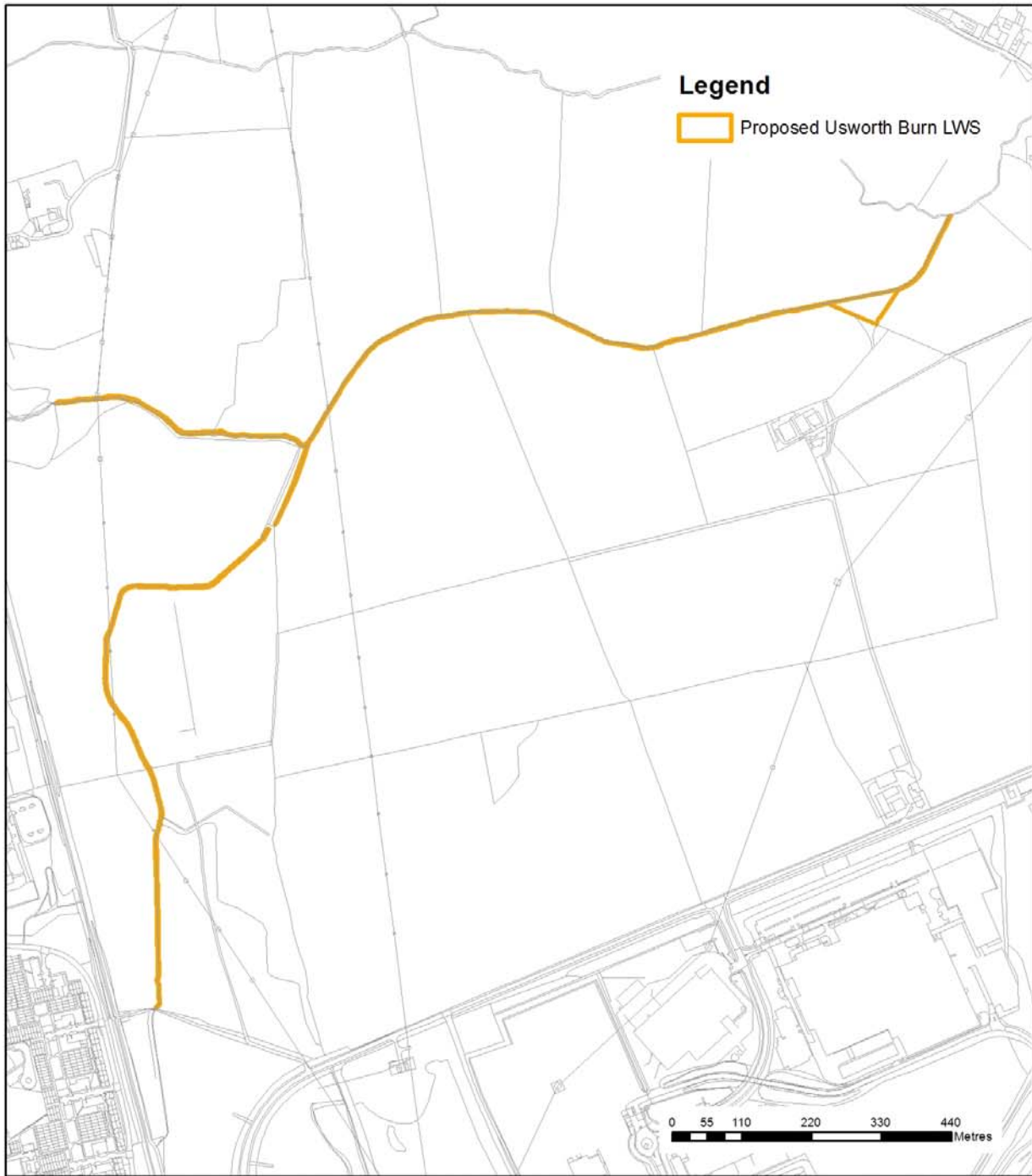
Upper Don Tributaries species list

English Name	Scientific Name	DAFOR
Alder	<i>Alnus glutinosa</i>	Occasional
Apple	<i>Malus sylvestris lat.</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Autumn Hawkbit	<i>Leontodon autumnalis</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bracken	<i>Pteridium aquilinum</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Frequent
Branched Bur-reed	<i>Sparganium erectum</i>	Frequent
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Brooklime	<i>Veronica beccabunga</i>	Occasional
Bulrush	<i>Typha latifolia</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Occasional
Cat's-ear	<i>Hypochaeris radicata</i>	Occasional
Charlock	<i>Sinapis arvensis</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Occasional
Common Duckweed	<i>Lemna minor</i>	Dominant
Common Figwort	<i>Scrophularia nodosa</i>	Occasional
Common Frog	<i>Rana temporaria</i>	Occasional
Common Ivy	<i>Hedera helix</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Abundant
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Toadflax	<i>Linaria vulgaris</i>	Occasional
Common Whitebeam	<i>Sorbus aria</i>	Occasional
Corsican Pine	<i>Pinus nigra</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Crack-willow	<i>Salix fragilis</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crosswort	<i>Cruciata laevipes</i>	Rare
Dandelion	<i>Taraxacum agg.</i>	Occasional


Dog-rose	<i>Rosa canina</i> agg.	Occasional
Dove's-foot Crane's-bill	<i>Geranium molle</i>	Rare
Eared Willow	<i>Salix aurita</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
European Larch	<i>Larix decidua</i>	Occasional
False Oat-Grass	<i>Arrhenatherum elatius</i>	Abundant
Fennel Pondweed	<i>Potamogeton pectinatus</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Floating Sweet-grass	<i>Glyceria fluitans</i>	Occasional
Garden Privet	<i>Ligustrum ovalifolium</i>	Rare
Garlic Mustard	<i>Alliaria petiolata</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Occasional
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Greater Plantain	<i>Plantago major</i>	Occasional
Greater Stitchwort	<i>Stellaria holostea</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Occasional
Grey Squirrel	<i>Sciurus carolinensis</i>	Occasional
Groundsel	<i>Senecio vulgaris</i>	Occasional
Guelder-rose	<i>Viburnum opulus</i>	Occasional
Hairy Bitter-cress	<i>Cardamine hirsute</i>	Occasional
Hairy-brome	<i>Bromopsis ramosa</i>	Occasional
Hart's-tongue	<i>Phyllitis scolopendrium</i>	Rare
Hawkweed	<i>Hieracium</i> agg.	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Occasional
Hedge Bindweed	<i>Calystegia sepium</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Hemlock	<i>Conium maculatum</i>	Occasional
Herb-Robert	<i>Geranium robertianum</i>	Occasional
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Occasional
I. aquifolium x perado	<i>Ilex x altaclerensis</i>	Occasional
Indian Balsam	<i>Impatiens glandulifera</i>	Rare
Lady-fern	<i>Athyrium filix-femina</i>	Occasional
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Lesser Pond-sedge	<i>Carex acutiformis</i>	Abundant
Lesser Stitchwort	<i>Stellaria graminea</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Occasional
Marsh Woundwort	<i>Stachys palustris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional

Meadowsweet	<i>Filipendula ulmaria</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Norway Maple	<i>Acer platanoides</i>	Rare
Osier	<i>Salix viminalis</i>	Rare
Perennial Sow-thistle	<i>Sonchus arvensis</i>	Occasional
Pink Purslane	<i>Claytonia sibirica</i>	Occasional
Prickly Sow-thistle	<i>Sonchus asper</i>	Occasional
Rabbit	<i>Oryctolagus cuniculus</i>	Occasional
Radish	<i>Raphanus raphanistrum</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Occasional
Red Fox	<i>Vulpes vulpes</i>	Occasional
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scaly Male-fern	<i>Dryopteris affinis borrieri</i>	Occasional
Scentless Mayweed	<i>Tripleurospermum inodorum</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Sessile Oak	<i>Quercus petraea</i>	Occasional
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	Occasional
Soft Shield-fern	<i>Polystichum setiferum</i>	2
Soft-rush	<i>Juncus effusus</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Sun Spurge	<i>Euphorbia helioscopia</i>	Occasional
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Timothy	<i>Phleum pratense</i>	Occasional
Toad Rush	<i>Juncus bufonius</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Upright Hedge-parsley	<i>Torilis japonica</i>	Occasional
Water Horsetail	<i>Equisetum fluviatile</i>	Abundant
Water Vole	<i>Arvicola terrestris</i>	Occasional
Water-cress	<i>Rorippa nasturtium-aquaticum</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Occasional
White Willow	<i>Salix alba</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Burdock	<i>Arctium nemorosum</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Occasional

Yarrow	<i>Achillea millefolium</i>	Occasional
Yellow Iris	<i>Iris pseudacorus</i>	Abundant
Yorkshire-fog	<i>Holcus lanatus</i>	Occasional
Zigzag Clover	<i>Trifolium medium</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 328 592</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.11.2020 Scale 1: 8,000</p>
	<p>Project Local Wildsite Site Boundary Review 2020</p>	<p>Sheet size A4</p> <p>Revisions</p>
	<p>Subject Proposed Usworth Burn LWS</p>	
	<p>Drawing No. UF 5.36.01.07.014.01</p>	

SITE NAME	Usworth Burn (River Don South)
SITE No.	UF 5_36_01_07_014
LOCATION	West Boldon NZ3259
STATUS	Proposed Local Wildlife Site
AREA	0.78 ha
DATE OF SITE VISIT	October 2009
OWNERSHIP	Private

SITE DESCRIPTION

A tributary stream of the River Don.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares
Other broadleaf woodland	0.26
River and stream	0.52

National and local BAP species:

English Name	Scientific Name	Notes
Barn Owl	<i>Tyto alba</i>	Regularly present
Lapwing	<i>Vanellus vanellus</i>	Regularly present
Linnet	<i>Carduelis cannabina</i>	Nests in the hedgerows.
Otter	<i>Lutra lutra</i>	Occasional along the burn.
Reed Bunting	<i>Emberiza schoeniclus</i>	Breeds.
Song Thrush	<i>Turdus philomelos</i>	Nests in the hedgerows.
Water Vole	<i>Arvicola terrestris</i>	Locally frequent along the burn

DETAIL

The site consists of the 2.5km long course of the Usworth Burn between its confluence with the River Don and the disused Wardley to Washington rail line. The LWS covers the burn itself, a tributary going south towards Seven Houses and an adjacent copse.

The burn is quite small and is flanked by arable land and by land that is currently not being farmed. In places the burn has been deeply cut and embanked, in order to drain the farmland. The burn increases noticeably in size downstream at the inflow from the Usworth Pond.

The aquatic vegetation has few species; stands of branched burr-reed are the main emergents, with some soft rush, reed canary grass and yellow flag. Water cress, water mint, water plantain, and water starwort are present along the length of the burn. Broad-leaved and small pondweeds are present where there is sufficient depth of water.

The steep banks of the cut channel are well vegetated, with regular patches of scrub including gorse, blackthorn and a variety of willow species. There is a small copse of

crack willow and elm at North Moor Farm. Between the copse and Usworth Pond, the burn is flanked by large, long-established hedgerows.

The banks of the burn provide suitable habitat for water voles, the River Don and its tributaries being one of the most important remaining watercourses for this declining species. They are present along the whole length of this local wildlife site, but particularly just upstream from the junction with the River Don and close to Usworth Pond.

Water shrews are present on the burn. Otters are occasionally present, with individuals travelling up the River Don from the Tyne.

Though the burn is quite small here, the water is fairly clean and supports many invertebrates, including banded demoiselle. The invertebrates and a large population of three-spined sticklebacks, provide food for birds such as mallard, moorhen, kingfisher, heron, pied wagtail and grey wagtail. Barn owls are regularly present. Lapwings are present in the winter months. Linnets, reed buntings and a number of other small bird species nest in the scrub along the banks of the burn and the adjacent hedgerows.

CONDITION ASSESSMENT

The burn meets the Local Wildlife Site criteria.

CONNECTIVITY

This tributary of the River Don is an important component of the River Don wildlife corridor.

LANDSCAPE

OTHER SCIENTIFIC IMPORTANCE

RECORDING HISTORY

Surveyed in June, August and October 2009 by J L Durkin.

SITE MANAGEMENT

The burn here is managed mainly to provide drainage for the adjacent arable fields.

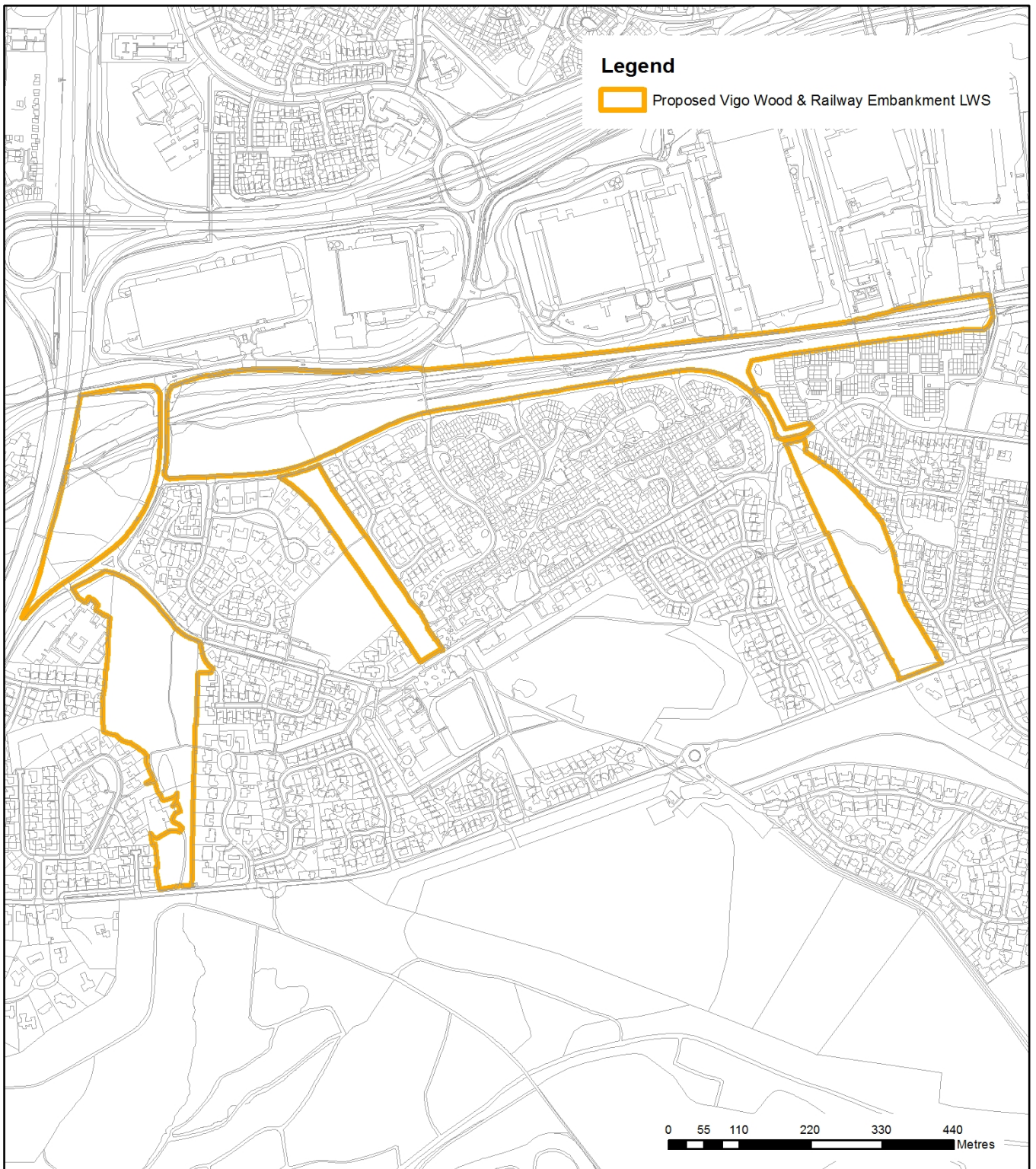
For details of wetland management, refer to the Local Wildlife Site "Management Guidance and Monitoring Notes".

Usworth Burn species list (River Don South)


English Name	Scientific Name	DAFOR
Alder	<i>Alnus glutinosa</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Bittersweet	<i>Solanum dulcamara</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bracken	<i>Pteridium aquilinum</i>	Occasional
Bramble	<i>Rubus fruticosus agg.</i>	Frequent
Branched Bur-reed	<i>Sparganium erectum</i>	Occasional
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broad-leaved Pondweed	<i>Potamogeton natans</i>	Occasional
Brooklime	<i>Veronica beccabunga</i>	Occasional
Bulrush	<i>Typha latifolia</i>	Occasional
Celery-leaved Buttercup	<i>Ranunculus sceleratus</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional
Clustered Dock	<i>Rumex conglomeratus</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Bistort	<i>Persicaria bistorta</i>	Occasional
Common Chickweed	<i>Stellaria media</i>	Occasional
Common Duckweed	<i>Lemna minor</i>	Occasional
Common Figwort	<i>Scrophularia nodosa</i>	Occasional
Common Hemp-nettle	<i>Galeopsis tetrahit</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Toadflax	<i>Linaria vulgaris</i>	Occasional
Common Vetch	<i>Vicia sativa</i>	Occasional
Common Water-crowfoot	<i>Ranunculus aquatilis</i>	Occasional
Common Water-starwort	<i>Callitriche stagnalis</i>	Occasional
Compact Rush	<i>Juncus conglomeratus</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Crack-willow	<i>Salix fragilis</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Dog-rose	<i>Rosa canina agg.</i>	Occasional
Eared Willow	<i>Salix aurita</i>	Occasional
Elder	<i>Sambucus nigra</i>	Frequent

False Oat-Grass	<i>Arrhenatherum elatius</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Occasional
Floating Sweet-grass	<i>Glyceria fluitans</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Occasional
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Greater Plantain	<i>Plantago major</i>	Occasional
Groundsel	<i>Senecio vulgaris</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Hemlock	<i>Conium maculatum</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Occasional
Honeysuckle	<i>Lonicera periclymenum</i>	Occasional
Indian Balsam	<i>Impatiens glandulifera</i>	Rare
Knotgrass	<i>Polygonum aviculare</i>	Occasional
Knotted Clover	<i>Trifolium striatum</i>	Occasional
Lady-fern	<i>Athyrium filix-femina</i>	Rare
Large Bindweed	<i>Calystegia silvatica</i>	Occasional
Lesser Stitchwort	<i>Stellaria graminea</i>	Occasional
Male-fern	<i>Dryopteris filix-mas</i>	Occasional
Marsh Ragwort	<i>Senecio aquaticus</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Northern Mole	<i>Talpa europaea</i>	Occasional
Oat	<i>Avena sativa</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perennial Sow-thistle	<i>Sonchus arvensis</i>	Occasional
Pineappleweed	<i>Matricaria discoidea</i>	Occasional
Plicate Sweet-grass	<i>Glyceria notata</i>	Occasional
Prickly Sow-thistle	<i>Sonchus asper</i>	Occasional
Rabbit	<i>Oryctolagus cuniculus</i>	Occasional
Radish	<i>Raphanus raphanistrum</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Dead-nettle	<i>Lamium purpureum</i>	Occasional
Red Fox	<i>Vulpes vulpes</i>	Rare
Reed Canary-grass	<i>Phalaris arundinacea</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rusty Willow	<i>Salix cinerea oleifolia</i>	Occasional

Scentless Mayweed	<i>Tripleurospermum inodorum</i>	Occasional
Small Pondweed	<i>Potamogeton berchtoldii</i>	Occasional
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	Occasional
Soft-rush	<i>Juncus effusus</i>	Occasional
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Toad Rush	<i>Juncus bufonius</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Frequent
Water Shrew	<i>Neomys fodiens</i>	Occasional
Water Vole	<i>Arvicola terrestris</i>	Occasional
Water-cress	<i>Rorippa nasturtium-aquaticum</i>	Occasional
Water-plantain	<i>Alisma plantago-aquatica</i>	Occasional
White Clover	<i>Trifolium repens</i>	Occasional
White Dead-nettle	<i>Lamium album</i>	Occasional
White Willow	<i>Salix alba</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Burdock	<i>Arctium nemorosum</i>	Occasional
Zigzag Clover	<i>Trifolium medium</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 Sunderland City Council City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk	National Grid Reference NZ 288 543	Contact C. Dewson
	Project Local Wildlife Site Boundary Review 2020	Approved by C. Dewson
	Subject Proposed Vigo Wood & Railway Embankment LWS	Drawn by E. Smith
	Drawing No. UF 5.36.01.06.058.01	Date 16.06.2020
		Scale 1: 10,000
		Sheet size A4



SITE NAME	Vigo Wood and Railway Embankment
SITE No.	UF 5_36_01_06_058
LOCATION	Vigo NZ288543
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised 2020
AREA	21.77 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

This site consists of a long, thin strip of secondary woodland and a parallel disused railway line now used as a cycleway.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Other broadleaf woodland	21.23
Pond	0.13

National and local BAP species:

English Name	Scientific Name	Notes
Hedgehog	<i>Erinaceus europaeus</i>	Present
Song Thrush	<i>Turdus philomelos</i>	Nests

DETAIL

The Vigo Woods consist of urban other broadleaf woodlands located on clayey soils overlying coal measures and sandstones. The woodlands occupy flat sites surrounded by roads and residential housing and consequently are heavily used by local people for informal recreation. Originally part of the Lambton Estate, they consist of mixed high forest woodland containing oak, ash, sycamore and Scots pine, most of which is estimated to have been planted around 1960. The woodland lies within a Strategic Wildlife Corridor as identified under the Tyne & Wear Nature Conservation Strategy. The Sustrans' C2C national cycle route runs along the eastern section of the site.

Ash, sycamore and planted species such as Scots pine and spruce form the canopy layer. Hawthorn, bramble and elder dominate the shrub layer, with a ground flora consisting of herb Robert, hedge woundwort, red campion, ramsons, wood avens, bluebell and stitchwort. Two orchid species, twayblade and broad-leaved helleborine, are notable here.

Woodland birds are present but the proximity to housing and the degree of disturbance limit the variety of species. Blackcap, song thrush and chiffchaff are regularly present.

A large pond lies to the southwest. This is evidently well used by dog walkers and waterfowl a large percentage of its banksides are bare earth. The pond has a wooden dipping platform and species more suited to a wetter environment were found around the outside including alder, crack willow, pendulous sedge and soft rush.

CONDITION ASSESSMENT

The woodland habitat meets the Local Wildlife Site criteria:

A small area of woodland to the northwest includes species such as sycamore, sessile oak, ash and hawthorn. Ground flora includes common dog violet, male fern, broadleaved willowherb, wood avens, herb Robert, bramble and nettle. The woodland fails its condition assessment due to the lack of deadwood habitat, lack of veteran trees and percentage of non-native species present.

The woodland east towards the overpass includes species such as crack willow, silver birch, ash, goat willow, hawthorn and alder. Ground flora includes male fern, wood speedwell, wood dock, bramble and hedge woundwort. The more open sides of the cycleway include meadow vetchling, red clover, yellow melilot, tansy and common knapweed; with wetter areas including reed canary-grass, angelica and tufted hair-grass. This woodland also fails its condition assessment due to lack of woodland indicator species, lack of deadwood habitat and lack of veteran trees.

The woodland west of Picktree Lane, either side of the coast to coast cycle route, is dominated by beech, with sycamore frequent and hybrid poplar, ash, scots pine and hawthorn occasional. Ground flora includes bramble, herb Robert, wood avens, male fern, bracken, hedge woundwort, wood dock, hairy brome, common dog violet, wood millet and abundant nettle. This woodland fails its condition assessment due to the lack of deadwood habitat, lack of indicator species, lack of veteran trees and has a high percentage of non-native trees.

The woodland to the south of Rickleton Way is largely beech and oak but also includes occasional ash, hawthorn, sycamore and wild cherry. Ground flora includes ivy, bramble, male fern, tufted hair-grass, wood millet, wood dock and common twayblade the more interesting find. This woodland also fails its condition assessment for the same reasons as the previous woodland.

Shiphouse Wood to the east is dominated by sycamore, oak and beech, with a small number of veteran sycamore present on site. This woodland is in poor condition due to a lack in veteran trees and deadwood habitat, and a high percentage of non-native trees. Ground flora is poor, with nettle, ground elder, bramble, wood avens herb Robert, male fern, red campion but also present is dog's mercury. The site is obviously well used by locals, particularly because of Covid 19 in 2020, and the site appears to be being abused by bikes.

CONNECTIVITY

The wood is in close proximity to other secondary woodlands. The railway track walk provides good connectivity to other habitats.

LANDSCAPE

The wood is a prominent feature of the edge of the built-up area.

RECORDED HISTORY AND CULTURAL ASSOCIATIONS

Surveyed by Rob Strachan in 1984, by Gordon Graham in 1993 and by Durham Wildlife Services in 2019 and 2020.

VALUE FOR THE APPRECIATION OF NATURE AND LEARNING

The value of these woods is, principally, as local aesthetic and recreational resources for people living around them and as havens for urban wildlife. They also serve an important function as attenuation barriers, helping to reduce the effects of noise, dust and pollution, generated by vehicles using the adjacent A1(M).

SITE MANAGEMENT ADVICE AND OBJECTIVES

The site is currently managed by the Woodland Trust and has a 2015-2020 management plan in place.

Vigo Wood and Railway Embankment species list

BAP Habitat Type: Other Broadleaf Woodland – small extension to northwest		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Barren Strawberry	<i>Potentilla sterilis</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent/Locally Dominant
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Changing Forget-me-not	<i>Myosotis discolor</i>	Rare
Chickweed	<i>Stellaria media</i>	Rare
Common Dog Rose	<i>Rosa canina</i>	Rare
Common Forget-me-not	<i>Myosotis arvensis</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent/Locally Dominant
Cowslip	<i>Primula veris</i>	Rare
Dog Violet	<i>Viola riviniana</i>	Occasional
Elder	<i>Sambucus nigra</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Herb Robert	<i>Geranium robertianum</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Rare
Selfheal	<i>Prunella vulgaris</i>	Rare
Sessile Oak	<i>Quercus petraea</i>	Occasional
Spruce sp.	<i>Picea sp.</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Wood Avens	<i>Geum urbanum</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland (including cycleway verges) – east of current designation		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Occasional
Annual Meadow-grass	<i>Poa annua</i>	Frequent
Ash	<i>Fraxinus excelsior</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent
Broadleaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broom	<i>Cytisus scoparius</i>	Rare
Burdock sp.	<i>Arctium sp.</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Frequent
Coltsfoot	<i>Tussilago farfara</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional

Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Mouseear	<i>Cerastium fontanum</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Common Toadflax	<i>Linaria vulgaris</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinquefoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Dandelion	<i>Taraxacum officinale</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Dogwood	<i>Cornus sanguinea</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
English Elm	<i>Ulmus procera</i>	Rare
English Oak	<i>Quercus robur</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field Horsetail	<i>Equisetum arvense</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Grey Alder	<i>Alnus incana</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Rare
Ivy	<i>Hedera helix</i>	Rare / Locally Abundant
Large Bindweed	<i>Calystegia silvatica</i>	Occasional/ Locally Abundant
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Narrow-leaved Everlasting Pea	<i>Lathyrus sylvestris</i>	Occasional / Locally Abundant
Nettle	<i>Urtica dioica</i>	Abundant
Nipplewort	<i>Lapsana communis</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Frequent
Red Clover	<i>Trifolium pratense</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Occasional
Reed Canary-grass	<i>Phalaris arundinacea</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Frequent / Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Rare
Silver Birch	<i>Betula pendula</i>	Frequent
Smooth Sowthistle	<i>Sonchus oleraceus</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Rare

Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Tansy	<i>Tanacetum vulgare</i>	Rare
Timothy	<i>Phleum pratense</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare / Locally Frequent
White Clover	<i>Trifolium repens</i>	Occasional
White Deadnettle	<i>Lamium album</i>	Occasional
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Occasional
Wood Dock	<i>Rumex sanguineus</i>	Rare
Wood Speedwell	<i>Veronica montana</i>	Occasional
Yellow Archangel	<i>Lamium galeobdolon</i>	Rare / Locally Abundant
Yellow Flag-iris	<i>Iris pseudacorus</i>	Rare
Yellow Melilot	<i>Melilotus officinalis</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional/Locally Abundant

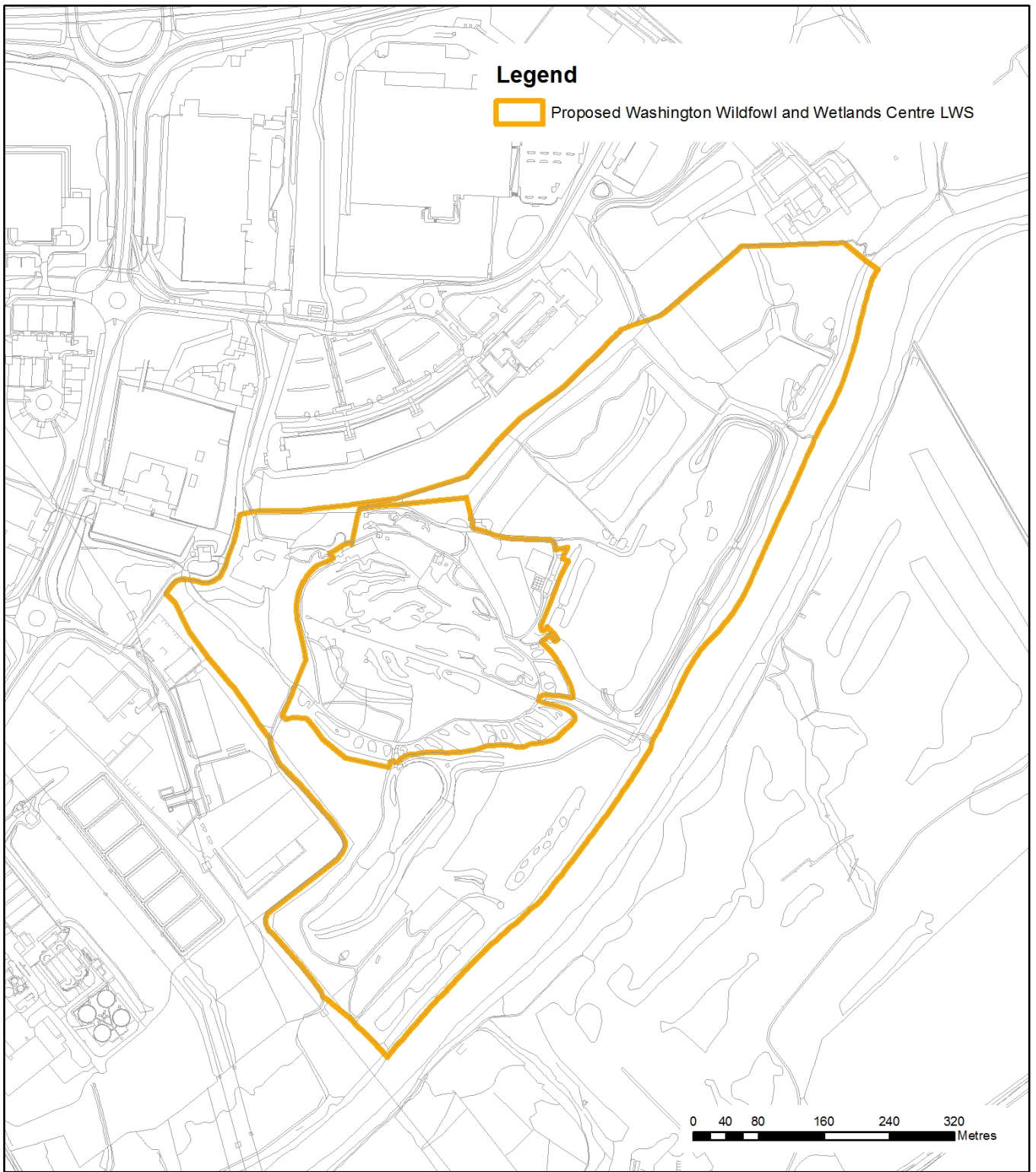
BAP Habitat Type: Other Broadleaf Woodland – west of current designation (west of Picktree Lane)

Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Abundant
Bracken	<i>Pteridium aquilinum</i>	Rare / Locally Abundant
Bramble	<i>Rubus fruticosus</i>	Frequent/ Locally Dominant
Burdock	<i>Arctium sp.</i>	Rare
Common Dog Violet	<i>Viola riviniana</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Garlic Mustard	<i>Alliaria petiolata</i>	Rare
Hairy Brome	<i>Bromopsis ramosa</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hedge Parsley	<i>Torilis japonica</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Rare
Honeysuckle	<i>Lonicera periclymenum</i>	Occasional / Locally Abundant
Hybrid Poplar	<i>Populus x canadensis</i>	Occasional
Ivy	<i>Hedera helix</i>	Locally abundant
Male Fern	<i>Dryopteris filix-mas</i>	Rare
Nettle	<i>Urtica dioica</i>	Abundant
Oak sp.	<i>Quercus sp.</i>	Occasional
Red Campion	<i>Silene dioica</i>	Rare
Rowan	<i>Sorbus aucuparia</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Frequent



Selfheal	<i>Prunella vulgaris</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Wood Millet	<i>Milium effusum</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Rare

BAP Habitat Type: Other Broadleaf Woodland – South of current designation (south of Rickleton Lane)

Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Frequent / Locally Abundant
Cleavers	<i>Galium aparine</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Twayblade	<i>Neottia ovata</i>	Rare
Cotoneaster	<i>Cotoneaster sp</i>	Rare
Dog Rose	<i>Rosa canina</i>	Rare
Downy Birch	<i>Betula pubescens</i>	Rare
English Oak	<i>Quercus robur</i>	Frequent
Hairy Brome	<i>Bromopsis ramosa</i>	Occasional
Hawkweed	<i>Hieracium sp.</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Holly	<i>Ilex aquifolium</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent / Locally Abundant
Leylandii	<i>Cupressus x leylandii</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Frequent
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Wood Millet	<i>Milium effusum</i>	Occasional
Wych Elm	<i>Ulmus glabra</i>	Rare
Yew	<i>Taxus baccata</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 333 560</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 05.06.2020 Scale 1: 6,500</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Washington Wildfowl & Wetland Centre LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5.36.01.06.060.01</p>		

SITE NAME	Washington Wildfowl and Wetlands Centre
SITE No.	UF 5_36_01_06_060
LOCATION	NZ 333560
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985, revised 2020
AREA	29.62 ha
DATE OF SITE VISIT	June 2020
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

A complex of wetlands, woodland and grassland situated beside the River Wear and managed as a nature reserve by a conservation body. Most of the habitats are of recent origin, although there are traces of ancient grassland and woodland.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Other broadleaf woodland	14.20
Lowland fen	0.79
Lowland meadows and pasture	4.2
Ponds	2.26
Reedbed	1.37
Rivers and streams	1.09
Saltmarsh	0.3

National and local BAP species:

English Name	Scientific Name	Notes
Barn Owl	<i>Tyto alba</i>	irregular visitor
Brown Hare	<i>Lepus capensis</i>	resident
Curlew	<i>Numenius arquata</i>	large numbers winter
Daubenton's Bat	<i>Myotis daubentoni</i>	regular visitor
Hedgehog	<i>Erinaceus europaeus</i>	resident
Lapwing	<i>Vanellus vanellus</i>	breeds
Noctule	<i>Nyctalus noctula</i>	common visitor
Otter	<i>Lutra lutra</i>	regular visitor
Pipistrelle	<i>Pipistrellus pipistrellus</i>	resident
Redshank	<i>Tringa totanus</i>	breeding attempted
Reed Bunting	<i>Emberiza schoeniclus</i>	breeds
Skylark	<i>Alauda arvensis</i>	irregular visitor
Snipe	<i>Gallinago gallinago</i>	common non-breeder
Song Thrush	<i>Turdus philomelos</i>	breeds
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	resident
Spotted Flycatcher	<i>Muscicapa striata</i>	irregular visitor
Water Shrew	<i>Neomys fodiens</i>	resident

Other protected species:

English Name	Scientific Name	Notes
Avocet	<i>Recurvirostra avosetta</i>	S1 WCA. Breeds.
Bittern	<i>Botaurus stellaris</i>	rare visitor
Little Ringed-plover	<i>Charadrius dubius</i>	S1 WCA. Breeds.

DETAIL

Several blocks of grassland occur on the site, all varying in quality. Whilst some tracts only questionably meet the BAP qualification guidelines for species-diversity, the presence of old grassland indicators scattered across the site suggests that although these swards may have undergone long periods of neglect in the past, they are at least in part derived from old, unimproved pasture. As the current beneficial management regime is likely to be increasing quality across all units, almost all these managed grasslands have been mapped as qualifying BAP habitat.

Swards are generally dominated by common bent, red fescue, crested dog's-tail, Yorkshire fog and sweet vernal-grass, with yellow rattle, meadow buttercup, knapweed, glaucous sedge, ribwort plantain, bird's-foot trefoil, meadow vetchling, meadow cranesbill and tufted vetch occurring commonly. Each grassland compartment has a particular character. White Meadow has an abundance of dog daisy as well as small amounts of common centaury in damp areas; greater burnet and betony are conspicuous in The Old Oak Meadow, together with some pepper saxifrage; Little Meadow harbours a few plants of common cotton-grass, and Top Meadow contains bee-orchids and a large stand of adder's-tongue. A 2008 record for hairy lady's mantle adds weight to the idea that the grasslands on the site are in part ancient.

The southern slopes of The Old Oak Meadow, in common with the adjacent East Downs, display a shift to acid grassland over freer-draining soils, where both herbs and fescues increase in prominence. However, as these areas are limited in extent and differ only subtly from the surrounding grasslands they have not been listed as a separate BAP feature.

Surrounding the carpark of Washington Wildfowl and Wetlands Centre, and heading northeast, is an area of mature plantation. The woodland is leggy, dense, and uniform in age. It lacks in veteran trees, with the exception of a group of veteran oak and ash trees at the very northern edge, near where a stream crosses the site. The coast to coast cycleway runs through the woodland and is frequently lined with a number of non-native species, including rock-spray cotoneaster (*Cotoneaster horizontalis*) which is listed under Schedule 9 of the Wildlife and Countryside Act 1981, as well as a number of other species of cotoneaster and park leaves (*Hypericum androsaemum*).

The woodland changes as it heads north east, following the cycleway from the carpark. Around the carpark it starts off dominated by ash, sycamore, scots pine and grey alder. Beyond this the woodland becomes a more oak dominated, before changing to a more open silver birch and bramble dominated woodland and finishing again with a more oak dominated woodland. The woodland overall is in poor condition due to percentage of non-native species, lack of veteran trees, and lack of deadwood, although a small amount of standing deadwood is present. Ground flora is poor, often dominated by bramble, nettle, ivy or non-natives. Bat boxes were present on some of the trees.

CONDITION ASSESSMENT

The Lowland meadows and pastures meet the Local Wildlife Site criteria:

A variety of man-made ponds occur. The Wader Lake was designed to attract wildfowl and waders, of which the most notable are listed above and below ('other scientific importance'). Most of the other ponds are less biodiverse, on account of shading, being primarily designed as water-treatment processes associated with the adjacent wildfowl park, or in the case of the reservoir, of holding high numbers of waterfowl. Exceptions occur in the North of the site. Here, the small Dragonfly Ponds hold broad-leaved pondweed, greater pond-sedge, great reedmace, water-plantain and stoneworts. The adjacent amphibian pond has water of high-quality supporting frog, toad and common newt, with a dense stand of the locally uncommon lesser pondweed.

Top Meadow and Wader Meadow are in a favourable condition. Old Oak Meadow and White Meadow are in unfavourable condition on account of substantial proportions lacking sufficient forb cover. Little Meadow is unfavourable on account of waterlogging and eutrophication, with consequent high creeping buttercup cover, over perhaps half its area.

The Ponds and Lowland fen meet the Local Wildlife Site criteria:

With the exception of the amphibian pond, which harbours small amounts of New Zealand pigmyweed, the ponds are in favourable condition. It is suggested that the Reservoir, with high numbers of waterfowl, be excluded from condition assessment on the grounds that it is essentially part of the wildfowl collection infrastructure.

Lowland fen is represented by a varied but rather limited array of wetland types that can all be classed as open-water transitions. Locally bordering the Wader Lake are inundation communities on mud characterised by amphibious bistort, silverweed, toad rush, brooklime, lesser sea-spurrey and common water-starwort. Where the edges of the waterbody are steeper, a narrow band of swamp may develop. Most commonly this is of common spike-rush, although hard and soft rushes and greater reedmace may occur, and both floating and small sweet-grasses occur at the Dragonfly Ponds. Swamp of common reed is also of this type but is listed separately below. More extensive areas of fen are limited on account of the topography of the site. However, there are moderately rich fens of meadowsweet associated with the Wader Lake, and of reed canary-grass at the amphibian pond. Richest is a small area at the Dragonfly Ponds where water mint, jointed rush and false fox-sedge form a colourful sward.

Reedbeds are present at the head of the Wader Lake, at the southern end of the site, and in less natural contexts in a series of water-treatment lagoons at the Round Table Filters, the water vole ponds, and most extensively at the main filter bed. Whilst they are typically floristically species-poor, they support breeding reed and sedge warblers, and reed bunting.

Although there are traces of ancient woodland on this site, they are too small to meet selection guidelines. Larger areas of maturing, recently planted woodland does, however, occur. These vary widely in their species composition across the site, but the commoner canopy species are ash, sycamore, common and grey Alders, with willows of local importance and some conifer. Most common in the ground flora are

generalists such as bramble, nettle and wood avens, though wood and pendulous sedges are locally frequent.

Although the Wear is tidal at this reach, the shore slopes steeply so that only a thin, fragmentary strip of saltmarsh occurs, up to 2m in width, above estuarine sediment. A lower zone has dominant sea aster with sea arrow-grass and gives way to an upper zone of common and/or sea couch-grasses, occasionally replaced by sea club-rush. Wild celery is found here, uncommon in the north-east on account of its specialised ecological niche.

At Spring Gill Wood there is ancient woodland of sessile oak, but this is too small a feature to meet selection guidelines at 0.33ha. It is of NVC type W10e and includes some old oak standards in addition to a ground-flora with abundant bluebell. Although the size of this stand means it does not qualify, species found only here have been included in the non-ancient woodland species list below, indicated by an asterisk.

Coarse, often weedy and species poor grassland frequently occupies a zone along paths and between habitats such as woodland and grassland; there is a long belt of this vegetation along the bank of the Wear. Also of note is scrub, again species poor and composed largely of hawthorn and bramble.

The Other broadleaf woodland meets the Local Wildlife Site criteria:

Taken as a whole, the non-ancient broadleaved woodland on this site is in unfavourable condition on account of having less than 90% native species in the canopy, unacceptably low biomass of standing dead wood, and probably also because of its sparse shrub layer. However, the feature is more variable than other such woodland blocks surrounding the new town and locally shrub and dead-wood level are acceptable. Scrub is not uncommon on the site, though tends to occur as pure early successional stands rather than as part of a woodland understory.

CONNECTIVITY

A core site within the River Wear corridor, this LWS is integral with a wider system of woodlands, grasslands and wetlands that cuts across the central part of the borough and draws wildlife into the built-up areas of Washington.

LANDSCAPE

The adjacent golf course and valley-side rising up to Penshaw Monument create a strong sense of place with a very rural character for such a suburban site.

OTHER SCIENTIFIC IMPORTANCE

Active management of the site for wildlife has resulted in a long list of breeding species in addition to those cited above; of especial note are sparrowhawk, common tern, oystercatcher, tawny owl, long-tailed tit, six species of warbler, goldcrest and grey heron, the latter present in the largest heronry in the region. Large numbers of wintering and passage birds use the Wader Lake at various times of year, most notably large numbers of curlew. The site plays a very valuable educational role.

RECORDED HISTORY

A survey was carried out in 2020 by Durham Wildlife Services for a boundary review.

SITE MANAGEMENT

There is a highly active programme of management on this site, driven by staff, supported by various capital and revenue schemes. Future plans include developing Wader Meadow further for breeding waders of wet grassland, and the creation of a saline lagoon to further diversify habitat representation.

The following suggestions are made to assist in reviewing/developing what is already a very beneficial regime.

Spread seed-hay between meadows occasionally in order to restore fuller species-richness. Although the existing floristic differences between them are of interest, this is almost certainly due simply to varying levels of neglect in the past, rather than reflecting edaphic differences per se. Enriching them from donor sites immediately to hand is thus probably more beneficial than preserving 'character'. Top Meadow and the richer parts of Old Oak Meadow are the best donor sites. Pepper saxifrage, an important indicator, seems rare, and could be grown on from seed for planting out.

Limit the eutrophication of Little Meadow, caused by seepage from the enriched waters of the reservoir, by establishing further reed or meadowsweet fens. These could be designed as an extension to the Marsh Garden. Safeguard the cotton-grass, again through ex-situ measures if necessary.

Remove the few small patches of New Zealand pigmyweed from the west side of the amphibian ponds before they become problematic.

The water in the amphibian pond appears to be of good quality; likewise, charophytes occur in the Dragonfly Ponds. Consider creating more ponds adjacent to and of the same character as the amphibian pond, as ponds of this type with clean base-rich water are especially rare in the area.

Plant gorse for whitethroat on the upper slopes of the east downs, on grassland which are botanically dull; leave the drier lower slopes. Develop the small amount of acid grassland by seeding-in betony, harebell and heather here.

Increase the quantity of willow and goat willow on the site, e.g. in the vicinity of the Dragonfly Ponds.

When undertaking woodland management in the Spring Gill area, manage according to an NVC W10e mix, using seed from the site.

Wildfowl and Wetland Trust species list

English Name	Scientific Name	DAFOR
a hawkweed	<i>Hieracium sect. Sabauda</i>	Rare ²
Black Knapweed	<i>Centaurea nigra</i>	Frequent (I)
Cat's-ear	<i>Hypochoeris radicata</i>	Occasional
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Bent	<i>Agrostis capillaris</i>	Abundant
Common Centaury	<i>Centaureum erythraea</i>	Rare ²
Common Cotton-grass	<i>Eriophorum angustifolium</i>	Rare ⁴
Common Eyebright	<i>Euphrasia nemorosa</i>	Occasional ¹
Common St.John's-wort	<i>Hypericum perforatum</i>	Rare
Cow-parsley	<i>Anthriscus sylvestris</i>	Frequent (I)
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent (I)
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Abundant
Crosswort	<i>Galium cruciata</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Abundant (I)
Field Horsetail	<i>Equisetum arvense</i>	Rare
Field Scabious	<i>Knautia arvensis</i>	Rare ⁵
Field Thistle	<i>Cirsium arvense</i>	Occasional
Glaucous Sedge	<i>Carex flacca</i>	Frequent (I)
Hard Rush	<i>Juncus inflexus</i>	Rare
Hawthorn	<i>Crataegus monogyna (sdg)</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Meadow Cranesbill	<i>Geranium pratense</i>	Frequent (I)
Meadow Foxtail	<i>Alopecurus pratensis</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Mouse-ear Chickweed	<i>Cerastium fontanum</i>	Occasional
Northern Marsh-orchid	<i>Dactylorhiza purpurella</i>	Rare
Pignut	<i>Conopodium majus</i>	Occasional ³
Red Fescue	<i>Festuca rubra</i>	Abundant
Rough Hawkbit	<i>Leontodon hispidus</i>	Occasional
Smooth Hawk's-beard	<i>Crepis capillaris</i>	Rare ²
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Abundant
Teasel	<i>Dipsacus fullonum</i>	Rare ⁵
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wood Sedge	<i>Carex sylvatica</i>	Rare ⁴

Yarrow	<i>Achillea millefolium</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Abundant

English Name	Scientific Name	DAFOR
Adder's-tongue	<i>Ophioglossum vulgatum</i>	Frequent ₁
Bee Orchid	<i>Ophrys apifera</i>	Rare ₁
Betony	<i>Stachys officinalis</i>	Frequent ₃
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	Frequent
Black Medick	<i>Medicago lupulina</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Rare
Common Sorrel	<i>Rumex acetosa</i>	Frequent
Cowslip	<i>Primula veris</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Abundant (I)
Creeping Cinquefoil	<i>Potentilla reptans</i>	Frequent (I)
Fairy Flax	<i>Linum catharticum</i>	Rare
Field Woodrush	<i>Luzula campestris</i>	Rare
Germander Speedwell	<i>Veronica chamaedrys</i>	Rare
Goat's-beard	<i>Tragopogon pratensis</i>	Occasional
Golden Oat-grass	<i>Tristum flavescens</i>	Occasional
Greater Burnet	<i>Sanguisorba officinalis</i>	Occasional
Hairy Tare	<i>Vicia hirsuta</i>	Rare
Hoary Ragwort	<i>Senecio erucifolius</i>	Occasional
Lesser Stitchwort	<i>Stellaria graminea</i>	Occasional ₃
Meadow Buttercup	<i>Ranunculus acris</i>	Abundant
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Frequent (I)
Pepper Saxifrage	<i>Silaum silaus</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Abundant
Rose	<i>Rosa (sdg)</i>	Rare
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent (I)
Self-heal	<i>Prunella vulgaris</i>	Occasional
Smooth Meadow-grass	<i>Poa pratensis</i>	Frequent
Timothy	<i>Phleum pratense</i>	Rare
Tufted Vetch	<i>Vicia cracca</i>	Frequent
White Clover	<i>Trifolium repens</i>	Occasional
Wild Parsnip	<i>Pastinaca sativa</i>	Rare ₂
Yellow Bartsia	<i>Parentucellia viscosa</i>	Rare ₂

Yellow Rattle	<i>Rhinanthus minor</i>	Abundant (I)
---------------	-------------------------	--------------

Note: a local rating (I) indicates greatly varying abundance between meadows. Supplementary codes are given for species more or less restricted to individual meadows, as follows: ₁ - Top Meadow ₂ - White Meadow ₃ - Old Oak Meadow ₄ - Little Meadow ₅ - Wader Meadow

English Name	Scientific Name	DAFOR
a stonewort	<i>Chara sp.</i>	Rare
Amphibious bistort	<i>Persicaria amphibia</i>	Occasional
Broad-leaved Pondweed	<i>Potamogeton natans</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Spike-rush	<i>Eleocharis palustris</i>	Occasional
Common Spike-rush	<i>Eleocharis palustris</i>	Occasional(a ₂)
Common Water-starwort	<i>Callitriche stagnalis</i>	Rare
Couch-grass	<i>Elytrigia repens</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent
False Fox-sedge	<i>Carex otrubae</i>	Rare (f ₁)
Floating Foxtail	<i>Alopecurus geniculatus</i>	Rare
Floating Sweet-grass	<i>Glyceria fluitans</i>	Occasional
Fool's Water-cress	<i>Apium nodiflorum</i>	Rare (f ₂)
Giant Fescue	<i>Festuca gigantea</i>	Rare
Greater Pond-sedge	<i>Carex riparia</i>	Rare
Greater Reedmace	<i>Typha latifolia</i>	Rare
Greater Willowherb	<i>Epilobium hirsutum</i>	Rare (o ₄)
Hoary Willowherb	<i>Epilobium parviflorum</i>	Rare
Lady's Smock	<i>Cardamine pratensis</i>	Occasional
Marsh Bedstraw	<i>Galium palustre</i>	Rare
Marsh Cudweed	<i>Gnaphalium uliginosum</i>	Rare
Marsh Horsetail	<i>Equisetum palustre</i>	Occasional
Marsh Thistle	<i>Cirsium palustre</i>	Rare
Meadow Crane's-bill	<i>Geranium pratense</i>	Rare
Meadowsweet	<i>Filipendula ulmaria</i>	Occasional (a ₄)
New-Zealand Pigmyweed	<i>Crassula helmsii</i>	Rare ₂
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Frequent
Small Pondweed	<i>Potamogeton berchtoldii</i>	Abundant ₂
Small Sweet-grass	<i>Glyceria declinata</i>	Rare (o ₁)
Square-stemmed St.John's-wort	<i>Hypericum tetrapterum</i>	Rare

Water Plantain	<i>Alisma plantago-aquatica</i>	Occasional
Water Plantain	<i>Alisma plantago-aquatica</i>	Occasional
White Waterlily	<i>Nymphaea alba (planted)</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Occasional
Yellow Flag-iris	<i>Iris pseudacorus</i>	Rare

English Name	Scientific Name	DAFOR
Amphibious Bistort	<i>Persicaria amphibia</i>	Rare (a ₃)
Bramble	<i>Rubus fruticosus agg.</i>	Rare
Brooklime	<i>Veronica beccabunga</i>	Occasional
Celery-leaved Buttercup	<i>Ranunculus sceleratus</i>	Rare (o ₃)
Clustered Dock	<i>Rumex conglomeratus</i>	Rare
Common Club-rush	<i>Schoenoplectus lacustris</i>	Rare ⁵
Common Sallow	<i>Salix cinerea</i>	Occasional
Common Valerian	<i>Valeriana officinalis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Great Plantain	<i>Plantago major</i>	Rare
Greater Reedmace	<i>Typha latifolia</i>	Rare
Hard Rush	<i>Juncus inflexus</i>	Occasional(a ₄)
Hemlock Water-dropwort	<i>Oenanthe crocata</i>	Occasional
Hoary Ragwort	<i>Senecio erucifolius</i>	Rare
Jointed Rush	<i>Juncus articulatus</i>	Occasional (f ₁)
Lesser Sea-spurrey	<i>Spergularia marina</i>	Rare (o ₃)
Lesser Spearwort	<i>Ranunculus flammula</i>	Rare
Osier	<i>Salix viminalis</i>	Rare
Perennial Sowthistle	<i>Sochus arvensis</i>	Rare
Red Bartsia	<i>Odontites verna</i>	Rare
Reed	<i>Phragmites australis</i>	dominant (l)
Reed Canary-grass	<i>Phalaris arundinacea</i>	Rare (a ₂)
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Self-heal	<i>Prunella vulgaris</i>	Rare
Silverweed	<i>Potentilla anserina</i>	Rare (a _{3,4})
Soft Rush	<i>Juncus effusus</i>	Occasional(a ₄)
Toad Rush	<i>Juncus bufonius</i>	Rare (a ₃)
Tufted Forget-me-not	<i>Myosotis laxa ssp. cespitosa</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Rare
Water Mint	<i>Mentha aquatica</i>	Rare (a ₁)
Wood Dock	<i>Rumex sanguineus</i>	Rare

Note: a local rating (l) indicates greatly varying abundance between fens. Supplementary abundance ratings are for individual ponds and fens as follows: ₁ - Dragonfly Ponds ₂ - Amphibian Pond ₃ - Wader Lake inundation community ₄ - Wader Lake tall-herb fen ₅ - Round Table Filters.

English Name	Scientific Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	Abundant
Bearded Couch	<i>Elymus caninus</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Rare
Bluebell	<i>Hyacinthoides non-scripta</i> *	Frequent
Broad Buckler-fern	<i>Dryopteris dilatata</i>	Occasional
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Frequent
Bugle	<i>Ajuga reptans</i>	Rare
Butterbur	<i>Petasites japonicus</i>	Rare
Cleavers	<i>Galium aparine</i>	Frequent
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Common Alder	<i>Alnus glutinosa</i>	Frequent
Cow-parsley	<i>Anthiscus sylvestris</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Soft-grass	<i>Holcus mollis</i> *	Occasional
cultivated apple	<i>Malus domestica</i>	Rare
Dogwood	<i>Cornus sanguinea</i>	Rare
English Oak	<i>Quercus robur</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Frequent
Ground-elder	<i>Aegopodium podagraria</i>	Rare
Hairy Brome	<i>Bromus ramosus</i>	Occasional
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i> *	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Frequent
Himalayan Cotoneaster	<i>Cotoneaster simonsii</i>	Rare
Hogweed	<i>Heracleum sphondylium</i>	Frequent
Holly	<i>Ilex aquifolium</i> *	Rare
Honeysuckle	<i>Lonicera periclymenum</i> *	Occasional
Horse Chestnut	<i>Aesculus hippocastaneum</i> *	Rare
Hybrid Larch	<i>Larix x marschlinsii</i>	Occasional
Ivy	<i>Hedera helix</i>	Frequent
Lady Fern	<i>Athyrium filix-femina</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i> *	Occasional

Norway Spruce	<i>Picea abies</i>	Rare
Pendulous Sedge	<i>Carex pendula</i>	Occasional
Pignut	<i>Conopodium majus*</i>	Occasional
Primrose	<i>Primula vulgaris*</i>	Occasional
Red Oak	<i>Quercus rubra</i>	Rare
Rose-bay Willowherb	<i>Chamaerion angustifolium</i>	Rare
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Self-heal	<i>Prunella vulgaris</i>	Rare
Sessile Oak	<i>Quercus petraea*</i>	dominant
Silver Birch	<i>Betula pendula</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Abundant
Wavy Hair-grass	<i>Deschampsia flexuosa*</i>	Frequent
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wild Plum	<i>Prunus domestica ssp insitia</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Frequent
Wood False-brome	<i>Brachypodium sylvaticum</i>	Rare
Wood Sedge	<i>Carex sylvatica</i>	Rare

English Name	Scientific Name	DAFOR
a rose cultivar	<i>Rosa sp</i>	Rare
Bramble	<i>Rubus fruticosus agg.</i>	Abundant
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broad-leaved Whitebeam	<i>Sorbus latifolia*</i>	Rare
Burnet Rose	<i>Rosa pimpinellifolia</i>	Rare
Common Comfrey	<i>Symphytum officinale</i>	Rare
Common Dog-violet	<i>Viola riviniana</i>	Rare
Common Sallow	<i>Salix cinerea</i>	Occasional
Crack Willow	<i>Salix fragilis</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Frequent
Elder	<i>Sambucus nigra</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Greater Stitchwort	<i>Stellaria holostea*</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hybrid Woundwort	<i>Stachys x ambigua</i>	Rare
Osier	<i>Salix viminalis</i>	Occasional

Red Campion	<i>Silene dioica</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Stinging Nettle	<i>Urtica dioica</i>	Abundant
Wood Dock	<i>Rumex sanguineus</i>	Rare
Wood Woundwort	<i>Stachys sylvatica</i>	Occasional

* Records (with DAFOR ratings) pertaining only to the area of ancient woodland.

2020 Species list

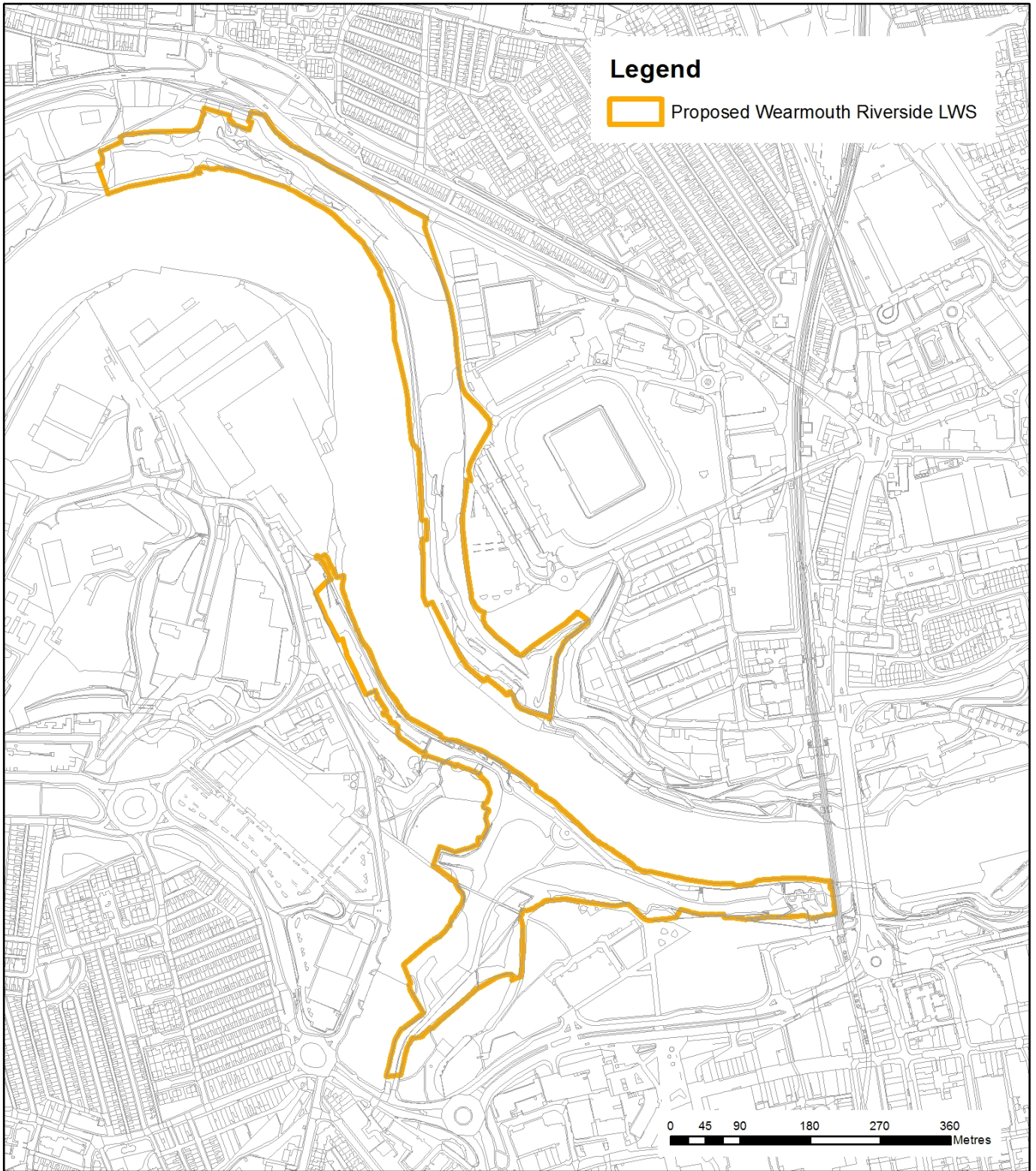
BAP Habitat: Other Broadleaved Woodland - Along C2C Cycleway heading NE from Carpark		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Occasional
Apple	<i>Malus domestica</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Frequent - Abundant
Beech	<i>Fagus sylvatica</i>	Rare
Black Medic	<i>Medicago lupulina</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Abundant / Locally Dominant
Broadleaved Willowherb	<i>Epilobium montanum</i>	Occasional
Cleavers	<i>Galium aparine</i>	Frequent / Locally Abundant
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-Foot	<i>Tussilago farfara</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Rare / Locally Abundant
Common Dogwood	<i>Cornus sanguinea</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Nettle	<i>Urtica dioica</i>	Frequent / Locally Abundant
Common Privet	<i>Ligustrum vulgare</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Cotoneaster sp.	<i>Cotoneaster sp.</i>	Rare
Couch Grass	<i>Elymus repens</i>	Rare
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Dog Rose	<i>Rosa canina</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
False Brome	<i>Brachypodium sylvaticum</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Franchets Cotoneaster	<i>Cotoneaster franchetii</i>	Rare
Glaucous Sedge	<i>Carex flacca</i>	Rare
Grey Alder	<i>Alnus incana</i>	Occasional

Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hazel	<i>Corylus avellana</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Italian Alder	<i>Alnus cordata</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent / Locally Dominant
Laurustinus	<i>Viburnum tinus</i>	Rare
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Meadow Cranesbill	<i>Geranium pratense</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Rare
Nipplewort	<i>Lapsana communis</i>	Rare
Park Leaves	<i>Hypericum androsaemum</i>	Occasional/ locally Abundant
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Rock-spray Cotoneaster	<i>Cotoneaster horizontalis</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare
Rough Meadowgrass	<i>Poa trivialis</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Rare
Sessile Oak	<i>Quercus petraea</i>	Frequent
Silver Birch	<i>Betula pendula</i>	Occasional / Locally Abundant
Spreading Hedge Parsley	<i>Torilis arvensis</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent - Abundant
Teasel	<i>Dipsacus fullonum</i>	Rare
Timothy	<i>Phleum pratense</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Frequent
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Wood Dock	<i>Rumex sanguineus</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional



BAP Habitat: Other Broadleaved Woodland - Around Carparks		
Common Name	Botanical Name	Abundance (DAFOR)
Alder	<i>Alnus glutinosa</i>	Occasional

Ash	<i>Fraxinus excelsior</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent / Locally Dominant
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Chinese Barberry	<i>Berberis julianae</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional / Locally Abundant
Cock's-foot	<i>Dactylis glomerata</i>	Occasional - Frequent
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Common Dogwood	<i>Cornus sanguinea</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Nettle	<i>Urtica dioica</i>	Frequent / Locally Dominant
Common Privet	<i>Ligustrum vulgare</i>	Rare
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crested Dog's Tail	<i>Cynosurus cristatus</i>	Rare
Dog Rose	<i>Rosa canina</i>	Rare
Dog's Mercury	<i>Mercurialis perennis</i>	Rare / Locally Frequent
False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Goat Willow	<i>Salix caprea</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Occasional
Grey Alder	<i>Alnus incana</i>	Frequent
Hard Rush	<i>Juncus inflexus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hazel	<i>Corylus avellana</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Occasional
Ivy	<i>Hedera helix</i>	Occasional / Locally Abundant
Large Bindweed	<i>Calystegia silvatica</i>	Rare / Locally Frequent
Mugwort	<i>Artemisia vulgaris</i>	Rare
Pendulous Sedge	<i>Carex pendula</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Red Clover	<i>Trifolium pratense</i>	Rare
Rough Meadowgrass	<i>Poa trivialis</i>	Occasional
Scots Pine	<i>Pinus sylvestris</i>	Frequent
Selfheal	<i>Prunella vulgaris</i>	Rare
Sessile Oak	<i>Quercus petraea</i>	Rare
Silver Birch	<i>Betula pendula</i>	Rare

Silverweed	<i>Argentina anserina</i>	Rare / Locally Frequent
Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Frequent - Abundant
Teasel	<i>Dipsacus fullonum</i>	Rare
Timothy	<i>Phleum pratense</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wild Parsnip	<i>Pastinaca sativa</i>	Rare
Wood Dock	<i>Rumex sanguineus</i>	Rare
Wood Horsetail	<i>Equisetum sylvaticum</i>	Rare/ Locally Abundant
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 392 575 / NZ 390 582</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.06.2020 Scale 1: 10,000</p>	
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>	
	<p>Subject Proposed Wearmouth Riverside LWS</p>	<p>Revisions 1</p>	
	<p>Drawing No. UF 5.36.01.06.061.01</p>		

SITE NAME	Wearmouth Riverside
SITE NO.	UF 5_36_01_06_061
LOCATION	NZ 392575-390582
STATUS	Local Wildlife Site
FIRST NOTIFIED	1985 and revised in 2020
AREA	13.59 ha
DATE OF SITE VISIT	August 2019
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

A riverside park in the centre of the city mostly landscaped and managed for amenity but with some broadleaf woodland and unmanaged magnesian limestone and lowland meadow grassland. In addition, there is very fragmentary coastal plant interest along the Wear estuary.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitats	Hectares
Lowland meadows and pasture	0.07
Magnesian limestone grassland	1.32
Other broadleaf woodland	6.09

National and local BAP species:

English Name	Scientific Name	Notes
Bats	<i>Unknown</i>	
Black poplar	<i>Populus nigra</i>	
Hedgehog	<i>Erinaceus europaeus</i>	
Otter	<i>Lutra lutra</i>	
Peregrine	<i>Falco peregrinus</i>	
Redshank	<i>Tringa totanus</i>	

Other protected species:

English Name	Scientific Name	Notes
Kingfisher	<i>Alcedo atthis</i>	
Shaded broad-bar moth	<i>Scotopteryx chenopodiata</i>	

DETAIL

The site on the southern bank of the River Wear includes a formal riverside park with large areas of amenity grassland, intersected with footpaths and small areas of plantation broadleaf woodland.

The southern bank woodland includes large numbers of non-native species, with sycamore, hybrid poplar, grey poplar, red alder, Swedish whitebeam and Italian alder. Native species include field maple, silver birch, common alder, crack willow, hawthorn and wild cherry. Numerous non-native shrubs are present on site, including snowberry, buddleia, mile-a-minute and those listed on Schedule 9 of the Wildlife and Countryside Act: Japanese rose and wall cotoneaster.

A small number of saltmarsh plants occur along the edge of the river, including lyme grass, sea plantain, common seablite and sea aster. Less saltmarsh plants were recorded on site compared with the 2010 survey. Some calcareous influence is also present here with greater knapweed present, along with hawkweed, common birds-foot-trefoil and common spotted orchid. Most of these species are rare and overall this area does not qualify as a BAP habitat but is still of botanical interest and should remain part of the designation.

A very small area of species rich grassland has been created within the formal park. The soil has been scraped and a wildflower seed mix sown, including corncockle, poppy, camomile, cornflower and common knapweed.

The northern bank is of greater botanical interest. This side of the river is a steep slope with a mixture of grassland, scrub and plantation broadleaf woodland. Several limestone cliffs are also present within this area, although most are too steep to be vegetated and where they plateau, it has become dominated with scrub.

The grassland is a mixture of rank non-BAP and Magnesian limestone grassland. It was previously recorded in 2010 as the Local BAP habitat lowland meadows and pasture, with just small fragments of Magnesian limestone. However, the 2019 survey found the Magnesian limestone species to be more frequent through the sward and overall, the grassland fell into this category of Local BAP habitat, other than lowland meadows. Species include frequent/abundant lady's bedstraw, frequent birds-foot-trefoil, occasional greater knapweed, small scabious, kidney vetch and salad burnet, with marjoram, quaking grass and carline thistle rarer in the sward. The overall area of species rich grassland seems to have reduced from 2010, with large amounts of scrub encroachment, particularly to the west near the cliffs.

The plantation broadleaf woodland contains large amounts of sea buckthorn, with dogwood abundant along the river path; silver birch, ash, buddleia and hawthorn are frequent; along with occasional crack willow, white poplar, osier willow, hybrid poplar, scots pine and Swedish whitebeam. Ground flora is poor, mostly consisting of bramble, ivy and non-native species such as mile a minute, snow in summer, wall cotoneaster (listed on Schedule 9 of the Wildlife and Countryside Act) and franchet cotoneaster.

A small triangle of Magnesian limestone grassland sits between the existing site and the Keir Hardie Way road. Species include greater knapweed, common birds-foot-trefoil, marjoram, lady's bedstraw, salad burnet and yellow-wort.

CONDITION ASSESSMENT

The Magnesian limestone grassland meets Local Wildlife Site criteria:

This grassland fails its condition assessment due to the frequency of indicator species and cover of wildflowers in the sward, with too many rank grasses present.

The Other broadleaf woodland community meets the Local Wildlife Site criteria:

This DBAP habitat is currently in unfavourable condition because of its uniform structure, lack of deadwood, lack of veteran trees, presence of non-native species and lack of woodland indicator species.

CONNECTIVITY

Wearmouth Riverside LWS sits on the banks of the River Wear, with the river itself providing a significant wildlife corridor. However, habitat along the edge of the river, either side of this designation, is of mixed value for wildlife, with areas of concrete and businesses extending up to or close to the water's edge. This area is heavily urbanised, within the centre of Sunderland and close to the port. This demonstrates the importance of this site within the landscape, with the site providing important habitats along a section of river corridor that is so urbanised. There are no other designated sites within 2km of this one. With the closest designated sites further up-river, over 2.5km away. Here the riverside habitat begins to improve, with more grassland and woodland habitat and buildings set further back from the river. Despite the urban environment, the river still provides an important corridor, particularly for more mobile species such as birds, otter and to a lesser extent, bats.

LANDSCAPE

The gorge landform forms a dramatic landscape feature in the heart of the city seen by many crossing the Wear.

OTHER SCIENTIFIC IMPORTANCE

RECORDED HISTORY

Durham Wildlife Services carried out surveys in July and August 2019.

SITE MANAGEMENT

Magnesian limestone grassland:

- Improve condition of grassland.
- Removal of scrub.

Other broadleaf woodland

- Remove non-native species.
- Improve woodland structure.
- Remove litter.

Wearmouth Riverside species list

BAP Habitat Type: Magnesian Limestone Grassland - North Bank Main Meadow		
Common Name	Botanical Name	Abundance (DAFOR)
Black Horehound	<i>Ballota nigra</i>	Occasional
Black Medick	<i>Medicago lupulina</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Frequent/Locally Abundant
Bristly Ox-tongue	<i>Helminthotheca echioides</i>	Rare
Bush Vetch	<i>Vicia sepium</i>	Rare
Carline Thistle	<i>Carlina vulgaris</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Frequent
Common Catsear	<i>Hypochoeris radicata</i>	Rare
Common Hogweed	<i>Heracleum sphondylium</i>	Frequent
Common Knapweed	<i>Centaurea nigra</i>	Frequent
Common Knotgrass	<i>Polygonum aviculare</i>	Rare
Common Mousear	<i>Cerastium fontanum</i>	Occasional
Common Ragwort	<i>Senecio jacobaea</i>	Frequent
Common Salt-marsh Grass	<i>Puccinellia maritima</i>	Rare
Cotoneaster sp.	<i>Cotoneaster sp.</i>	Rare / Locally Abundant
Couch Grass	<i>Elymus repens</i>	Rare
Cowslip	<i>Primula veris</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Creeping Cinqfoil	<i>Potentilla reptans</i>	Occasional
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crested Dog's-tail	<i>Cynosurus cristatus</i>	Rare
Crosswort	<i>Cruciata laevipes</i>	Rare
Cut leaved Cranesbill	<i>Geranium dissectum</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
Fairy Flax	<i>Linum catharticum</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Field Bindweed	<i>Convolvulus arvensis</i>	Rare
Field Horse-tail	<i>Equisetum arvense</i>	Rare
Goats-beard	<i>Tragopogon pratensis</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Occasional
Groundsel	<i>Senecio vulgaris</i>	Rare

Hairy Tare	<i>Vicia hirsuta</i>	Occasional/ Locally Abundant
Hedge Parsley	<i>Torilis japonica</i>	Occasional
Japanese Rose	<i>Rosa rugosa</i>	Rare
Kidney Vetch	<i>Anthyllis vulneraria</i>	Occasional/ Locally Frequent
Lady's Bedstraw	<i>Galium verum</i>	Frequent/ Locally Abundant
Lesser Stitchwort	<i>Stellaria graminea</i>	Rare
Lyme Grass	<i>Leymus arenarius</i>	Rare
Marjoram	<i>Origanum vulgare</i>	Rare
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Frequent
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Musk Mallow	<i>Malva moschata</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Occasional
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perforate St John's-wort	<i>Hypericum perforatum</i>	Occasional
Pignut	<i>Conopodium majus</i>	Rare
Quaking Grass	<i>Briza media</i>	Rare/ Locally Abundant
Red Clover	<i>Trifolium pratense</i>	Frequent
Red Fescue	<i>Festuca rubra</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional/Locally Abundant
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Salad Burnet	<i>Poterium sanguisorba</i>	Occasional
Sea Couch	<i>Agropyron pungens</i>	Rare
Selfheal	<i>Prunella vulgaris</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Occasional
Small Scabious	<i>Scabiosa columbaria</i>	Occasional/Locally Abundant
Smaller Catstail	<i>Phleum bertolonii</i>	Occasional
Smooth Sowthistle	<i>Sonchus oleraceus</i>	Rare
Stonecrop sp.	<i>Sedum sp.</i>	Rare
Sweet Vernal	<i>Anthoxanthum odoratum</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Tall Melilot	<i>Melilotus altissimus</i>	Occasional
Teasel	<i>Dipsacus fullonum</i>	Rare
Timothy	<i>Phleum pratense</i>	Frequent
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Upright Brome	<i>Bromopsis erecta</i>	Rare
Weld	<i>Reseda luteola</i>	Rare
White Clover	<i>Trifolium repens</i>	Occasional
Wild Basil	<i>Clinopodium vulgare</i>	Occasional
Wild Carrot	<i>Daucus carota</i>	Frequent

Wild Mignonette	<i>Reseda lutea</i>	Rare
Wild Parsnip	<i>Pastinaca sativa</i>	Frequent
Yarrow	<i>Achillea millefolium</i>	Abundant
Yellow Rattle	<i>Rhinanthus minor</i>	Rare
Yellow Toadflax	<i>Linaria vulgaris</i>	Rare
Yellowwort	<i>Blackstonia perfoliata</i>	Occasional
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland – North Bank - to the east within current designation		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare
Butterfly Bush	<i>Buddleja davidii</i>	Occasional
Cherry Plum	<i>Prunus cerasifera</i>	Rare
Cock's-foot	<i>Dactylis glomerata</i>	Occasional
Colt's-foot	<i>Tussilago farfara</i>	Occasional
Crack Willow	<i>Salix fragilis</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Dogwood	<i>Cornus sanguinea</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
False-oat-grass	<i>Arrhenatherum elatius</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Hybrid Poplar	<i>Populus sp.</i>	Occasional
Mugwort	<i>Artemisia vulgaris</i>	Rare
Osier Willow	<i>Salix viminalis</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional/Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Rare
Sea Buckthorn	<i>Hippophae rhamnoides</i>	Frequent/Locally Abundant
Silver Birch	<i>Betula pendula</i>	Occasional
Willow sp.	<i>Salix sp.</i>	Rare

BAP Habitat Type: Other Broadleaf Woodland – North Bank - to the western end by cliffs		
Common Name	Botanical Name	Abundance (DAFOR)
Barren Brome	<i>Bromus sterilis</i>	Rare
Black Horehound	<i>Ballota nigra</i>	Occasional
Blackthorn	<i>Prunus spinosa</i>	Rare

Bramble	<i>Rubus fruticosus</i>	Frequent
Butterfly Bush	<i>Buddleja davidii</i>	Frequent
Cherry Laurel	<i>Prunus laurocerasus</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Abundant
Crack Willow	<i>Salix fragilis</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Frequent
Dog Rose	<i>Rosa rugosa</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
Field Maple	<i>Acer campestre</i>	Frequent
Goat Willow	<i>Salix caprea</i>	Rare
Guelder Rose	<i>Viburnum opulus</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Honey Suckle	<i>Lonicera periclymenum</i>	Rare
Leylandii	<i>Cupressus x leylandii</i>	Rare
Oak sp.	<i>Quercus sp.</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Spindle	<i>Euonymus europaeus</i>	Rare
Swedish Whitebeam	<i>Sorbus x intermedia</i>	Rare
White Poplar	<i>Populus alba</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wild Plum	<i>Prunus domestica</i>	Rare

BAP Habitat Type: Other Broadleaf Woodland – North Bank Extension		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Frequent
Aspen	<i>Populus tremula</i>	Rare / Locally Frequent
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent/ Locally Abundant
Broom	<i>Cytisus scoparius</i>	Rare
Butterfly Bush	<i>Buddleia davidii</i>	Frequent
Cherry Plum	<i>Prunus cerasifera</i>	Rare
Cocksfoot	<i>Dactylis glomerata</i>	Frequent
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Frequent
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Crack Willow	<i>Salix x fragilis</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Dogwood	<i>Cornus sanguinea</i>	Frequent/ Locally Abundant
English Oak	<i>Quercus robur</i>	Rare

False Oat-grass	<i>Arrhenatherum elatius</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Frequent
Franchets Cotoneaster	<i>Cotoneaster franchetii</i>	Occasional
Gorse	<i>Ulex europaeus</i>	Rare
Greater Knapweed	<i>Centaurea scabiosa</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Frequent
Hedge Parsley	<i>Torilis japonica</i>	Rare
Herb Robert	<i>Geranium robertianum</i>	Rare
Holly	<i>Ilex aquifolium</i>	Rare
Hybrid Black Poplar	<i>Populus x canadensis</i>	Occasional
Italian Alder	<i>Alnus cordata</i>	Rare
Ivy	<i>Hedera helix</i>	Occasional / Locally Abundant
Lady's Bedstraw	<i>Galium verum</i>	Occasional
Large Bindweed	<i>Calystegia silvatica</i>	Occasional / Locally abundant
Meadow Buttercup	<i>Ranunculus acris</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Rare
Mile a Minute	<i>Fallopia baldschuanica</i>	Occasional / Locally Dominant
Mugwort	<i>Artemisia vulgaris</i>	Rare
Oiser Willow	<i>Salix viminalis</i>	Occasional
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Perforate St John's Wort	<i>Hypericum perforatum</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional
Salad Burnet	<i>Poterium sanguisorba</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Occasional
Sea Buckthorn	<i>Hippophae rhamnoides</i>	Frequent / Locally Abundant
Selfheal	<i>Prunella vulgaris</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Frequent / Locally Abundant
Snow-in-summer	<i>Cerastium tomentosum</i>	Locally Dominant
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Rare
Wall Cotoneaster	<i>Cotoneaster horizontalis</i>	Occasional / Locally Dominant
White Poplar	<i>Populus alba</i>	Occasional
Wild Carrot	<i>Daucus carota</i>	Occasional
Wild Marjoram	<i>Origanum vulgare</i>	Rare
Wild Parsnip	<i>Pastinaca sativa</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Abundant
Yellowwort	<i>Blackstonia perfoliata</i>	Rare

BAP Habitat Type: Other Broadleaf Woodland – South Bank		
* Plants found along the river path and cliff.		
Common Name	Botanical Name	Abundance (DAFOR)
Field Maple	<i>Acer campestre</i>	Occasional
Norway Maple	<i>Acer platanoides</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Frequent / Locally Abundant
Yarrow	<i>Achillea millefolium</i>	Occasional
Creeping Bent *	<i>Agrostis stolonifera</i>	Rare
Italian Alder	<i>Alnus cordata</i>	Occasional
Common Alder	<i>Alnus glutinosa</i>	Occasional
Red Alder	<i>Alnus rubra</i>	Rare
Barren Brome *	<i>Anisantha sterilis</i>	Occasional
Burdock sp.	<i>Arctium sp.</i>	Rare
Silverweed	<i>Argentina anserina</i>	Rare
Mugwort	<i>Artemisia vulgaris</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Occasional
Butterfly Bush	<i>Buddleia davidii</i>	Occasional / Locally Frequent
Large Bindweed	<i>Calystegia silvatica</i>	Occasional / Locally Abundant
Shepherds Purse *	<i>Capsella bursa-pastoris</i>	Rare
Greater Knapweed *	<i>Centaurea scabiosa</i>	Rare
Common Mouseear	<i>Cerastium fontanum</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional / Locally Dominant
Creeping Thistle	<i>Cirsium arvense</i>	Occasional / Locally Abundant
Marsh Thistle *	<i>Cirsium palustre</i>	Rare
Spear Thistle	<i>Cirsium vulgare</i>	Occasional
Dogwood	<i>Cornus sanguinea</i>	Rare
Hazel	<i>Corylus avellana</i>	Occasional
Wall Cotoneaster *	<i>Cotoneaster horizontalis</i>	Occasional / Locally Dominant
Cotoneaster sp.	<i>Cotoneaster salicifolius?</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Occasional
Smooth Hawksbeard	<i>Crepis capillaris</i>	Rare
Common Spotted Orchid *	<i>Dactylorhiza fuchsii</i>	Rare
Wild Carrot *	<i>Daucus carota</i>	Rare
Teasel *	<i>Dipsacus fullonum</i>	Rare
Common Couch *	<i>Elymus repens</i>	Rare
Great Willowherb	<i>Epilobium hirsutum</i>	Rare
Broadleaved Willowherb	<i>Epilobium montanum</i>	Occasional
Field Horsetail	<i>Equisetum arvense</i>	Rare
Treacle Mustard *	<i>Erysimum cheiranthoides</i>	Rare
Beech	<i>Fagus sylvatica</i>	Rare
Ash	<i>Fraxinus excelsior</i>	Occasional
Cleavers	<i>Galium aparine</i>	Occasional

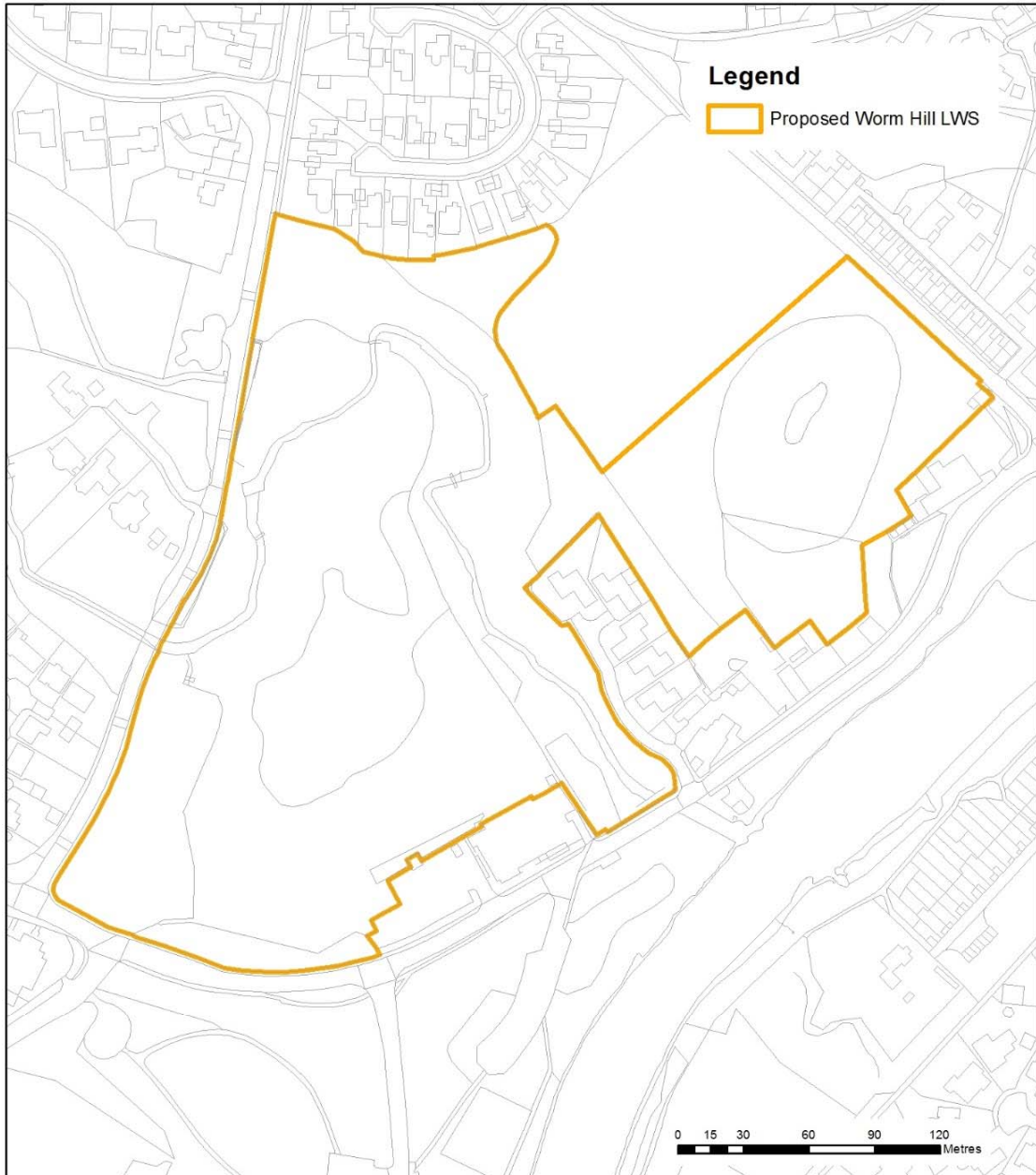
Herb Robert	<i>Geranium robertianum</i>	Rare
Herb Bennet	<i>Geum urbanum</i>	Rare
Ivy	<i>Hedera helix</i>	Frequent
Hawkweed sp *	<i>Hieracium sp.</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional
	<i>Hypericum perforatum</i>	
Perforate St John's-wort *		Rare
Common Catsear *	<i>Hypochoeris radicata</i>	Rare
Nipplewort *	<i>Lapsana communis</i>	Rare
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Hoary Cress *	<i>Lepidium draba</i>	Rare
Lyme Grass *	<i>Leymus arenarius</i>	Rare
Yellow Toadflax *	<i>Linaria vulgaris</i>	Rare
Perennial Rye-grass	<i>Lolium perenne</i>	Occasional
Honeysuckle *	<i>Lonicera periclymenum</i>	Rare / Locally Dominant
Common Birds-foot-trefoil	<i>Lotus corniculatus</i>	Rare
Black Medick *	<i>Medicago lupulina</i>	Frequent
Changing Forget-me-not *	<i>Myosotis discolor</i>	Rare
Wild Parsnip *	<i>Pastinaca sativa</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Rare
Sea Plantain *	<i>Plantago maritima</i>	Rare
Annual Meadow-grass	<i>Poa annua</i>	Occasional
Common Knotgrass	<i>Polygonum aviculare</i>	Rare
Mile a Minute *	<i>Polygonum baldschuanicum</i>	Occasional / Locally Dominant
Grey Poplar	<i>Populus x canescens</i>	Occasional
White Poplar	<i>Populus alba</i>	Rare
Aspen	<i>Populus tremula</i>	Rare
Hybrid Poplar	<i>Populus x canadensis</i>	Rare
Creeping Cinqfoil	<i>Potentilla reptans</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Rare
Wild Cherry	<i>Prunus avium</i>	Occasional
Wild Plum	<i>Prunus domestica</i>	Rare
Bird Cherry	<i>Prunus padus</i>	Rare
Blackthorn	<i>Prunus spinosa</i>	Rare
Bracken	<i>Pteridium aquilinum</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Weld *	<i>Reseda lutea</i>	Rare
Wild Mignonette *	<i>Reseda lutea</i>	Rare
Dog Rose	<i>Rosa canina</i>	Occasional
Burnet Rose	<i>Rosa pimpinellifolia</i>	Rare
Japanese Rose	<i>Rosa rugosa</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Abundant/ Locally Dominant

Creeping Bramble	<i>Rubus tricolor</i>	Occasional / Locally Dominant
Curled Dock	<i>Rumex crispus</i>	Rare
Broadleaved Dock	<i>Rumex obtusifolius</i>	Rare
Glasswort sp. *	<i>Salicornia sp.</i>	Rare
Goat Willow	<i>Salix caprea</i>	Occasional
Common Oiser	<i>Salix viminalis</i>	Occasional
Crack Willow	<i>Salix x fragilis</i>	Occasional
Elder	<i>Sambucus nigra</i>	Occasional
English Stonecrop	<i>Sedum anglicum</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Occasional
Hedge Mustard	<i>Sisymbrium officinale</i>	Occasional
Smooth Sowthistle	<i>Sonchus oleraceus</i>	Rare
	<i>Sorbus aucuparia</i>	
Rowan		Rare
Swedish Whitebeam	<i>Sorbus intermedia</i>	Occasional
Common Seablite *	<i>Suaeda maritima</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Frequent / Locally Abundant
Dandelion	<i>Taraxacum officinale</i>	Occasional
Zigzag Clover *	<i>Trifolium medium</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Scentless Mayweed *	<i>Tripleurospermum inodorum</i>	Rare
Sea Aster *	<i>Tripolium pannonicum</i>	Rare
Gorse	<i>Ulex europaeus</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Abundant
Guelder Rose *	<i>Viburnum opulus</i>	Rare
Common Vetch	<i>Vicia sativa</i>	Rare


Area scraped and sown with wildflowers on southern bank		
Common Name	Botanical Name	Abundance (DAFOR)
Black Medick	<i>Medicago lupulina</i>	Abundant
Bladder Campion	<i>Silene vulgaris</i>	Rare
Camomile	<i>Matricaria chamomilla</i>	Rare
Common Knapweed	<i>Centaurea nigra</i>	Rare
Common Mouseear	<i>Cerastium fontanum</i>	Occasional
Corncockle	<i>Agrostemma githago</i>	Rare
Cornflower	<i>Centaurea cyanus</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Rare
Crosswort	<i>Cruciata laevipes</i>	Rare
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Occasional
Pignut	<i>Conopodium majus</i>	Rare

Poppy	<i>Papaver rhoeas</i>	Rare
Red Clover	<i>Trifolium pratense</i>	Rare
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Selfheal	<i>Prunella vulgaris</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland – South Bank Extension		
Common Name	Botanical Name	Abundance (DAFOR)
Ash	<i>Fraxinus excelsior</i>	Rare
Berberis	<i>Berberis vulgaris</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Frequent / Locally Dominant
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Cherry Laurel	<i>Prunus laurocerasus</i>	Rare
Cleavers	<i>Galium aparine</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Abundant / Locally Dominant
Crack Willow	<i>Salix x fragilis</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Occasional
Crimson King Maple	<i>Acer platanoides</i>	Rare
Elder	<i>Sambucus nigra</i>	Occasional
Field Maple	<i>Acer campestre</i>	Rare
Grey Poplar	<i>Populus x canescens</i>	Occasional
Hawthorn	<i>Crataegus monogyna</i>	Rare
Hazel	<i>Corylus avellana</i>	Frequent / Locally Abundant
Ivy	<i>Hedera helix</i>	Occasional / Locally Dominant
Large Bindweed	<i>Calystegia silvatica</i>	Occasional / Locally Abundant
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Occasional / Locally Dominant
Rowan	<i>Sorbus aucuparia</i>	Rare
Scaly Male Fern	<i>Dryopteris borreii</i>	Rare
Sea Buckthorn	<i>Hippophae rhamnoides</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Wild Cherry	<i>Prunus avium</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Rare



This map is based upon the Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence No. 100018385. Date 2017 © Bluesky International Ltd and Getmapping plc [2020]

 <p>Sunderland City Council</p> <p>City Development P.O. Box 102, Civic Centre Sunderland, SR2 7DN</p> <p>Telephone: 07584274028 Email: emma.smith2@sunderland.gov.uk Web: www.sunderland.gov.uk</p>	<p>National Grid Reference NZ 309 541</p>	<p>Contact C. Dewson Approved by C. Dewson Drawn by E. Smith Date 24.06.2020 Scale 1: 10,000</p>
	<p>Project Local Wildlife Site Boundary Review 2020</p>	<p>Sheet size A4</p>
	<p>Subject Proposed Worm Hill LWS</p>	
	<p>Drawing No. UF 5.36.01.06.063.01</p>	<p>Revisions 1</p>

SITE NAME	Worm Hill
SITE No.	UF 5_36_01_06_063
LOCATION	Fatfield NZ317540
STATUS	Local Wildlife Site
FIRST NOTIFIED	1986, revised 2020
AREA	7.26 ha
DATE OF SITE VISIT	August 2018
OWNERSHIP	Sunderland City Council & Private

SITE DESCRIPTION

Woodland, scrub and grassland communities developed alongside the Biddick Burn. Worm Hill itself supports acidic grassland habitat.

REASONS FOR DESIGNATION

National and local BAP habitats:

Habitat	Hectares in 2018
Ancient semi-natural woodland	1.43
Lowland acid grassland	0.33
Other broadleaf woodland	3.26
Rivers and streams	0.17

National and local BAP species:

English Name	Scientific Name	Notes
None recorded		

DETAIL

Worm Hill was formed as the result of a glacial moraine, during the last Ice Age. As a result, it consists of sand and fine sediment with a thin layer of topsoil areas of which now erode. The grassland sward is kept short by rabbit grazing and the extremely low nutrient status of the soils. The adjoining woodland areas include areas of plantation. Aged from growth size planting is placed at around 50 years.

The Worm Hill spoil mound supports locally rare acid grassland and scrub communities. Areas of short rabbit-grazed grassland are dominated by common bent and sweet vernal with lesser amounts of wavy hairgrass and heath grass. Mat grass has been previously recorded on site and is likely to be still present but could not be located on the 2018 survey. This grass is of rare occurrence in Sunderland. Sheep's fescue also appeared to be absent in 2018, with red fescue a dominant grass across the site. Typical acid grassland indicator species present include heath bedstraw, hawkweeds, harebell, betony, tormentil, mouse-ear hawkweed, common catsear, sheep's sorrel and autumn hawkbit. Encroaching scrub is dominated by gorse with broom and bramble. Coarse grassland and tall stands of

rosebay willowherb are dominant on the more neutral soils developed on the lower slopes. Great burnet grows here in the remaining open areas of grassland. A second area of acid grassland is found on a steep slope west of Worm Hill with a similar species composition. Bracken, rosebay willowherb and coarse grassland are invading the remaining acid grassland community along with adjoining scrub.

Remnant ancient woodland occurs on both banks of the Biddick Burn. This is largely ash dominated but oak, birch and sycamore are also present locally. There is limited hazel, with hawthorn, rowan, elder and yew understory. The ground flora is typical of old woodland sites in places, there are several indicator species present but they are not dominate. Those found include ramsons, dog's mercury, bearded couch, hard fern, harts-tongue fern, opposite-leaved golden-saxifrage and lords and ladies. Himalayan balsam is now present in patches throughout the site and Japanese knotweed is also present; both species are listed under Schedule 9 part ii of the Wildlife and Countryside Act 1981 (as amended).

The areas of woodland to the south are dominated by sycamore, with beech frequent and cherry, hawthorn, ash, silver birch and scots pine occasional. A large stand of coniferous trees are present in the southwest corner, mostly comprising scots pine and larch. Ground flora throughout the woodland is poor, with Himalayan balsam a particular issue on site in the south. Other species present include frequent wood avens, nettle and occasional herb Robert. These areas of woodland are in poor condition due to the lack of woodland indicator species, lack of veteran trees, lack of deadwood habitat. The trees are relatively uniform in age, so overall woodland structure is poor. The house to the top northwest corner has extended their garden into the woodland including carrying out landscaping with paths and ornamental planting.

There are limited older trees, with the older of the trees (oak and ash) at around 150 years. There are no veteran trees present. Areas of mature Broadleaved plantation woodland are also present and consist largely of sycamore and alder, with some ash and oak. Also present is Scot's pine. The understorey consists mainly of elder with some limited hawthorn, whilst the field layer is poorly developed and support a "weedy" ground flora of nettles, Himalayan balsam and secondary woodland indicators such as hedge woundwort and nipplewort are present. The remainder of the site consists of a mosaic of scrub and coarse grassland habitat which are of value to breeding birds.

Comma, ringlet and meadow brown butterflies are noted on the sites 2010 citation.

CONDITION ASSESSMENT

The Lowland acid grassland habitat meets the Local Wildlife Site criteria:

Suffering the effects of succession, the lowland acid grassland is currently in an unfavourable condition.

The Ancient semi-natural woodland habitat meets the Local Wildlife Site criteria:

There are no veteran trees on site, there is limited amount of standing deadwood and the ground flora species are not suitable for an NVC assessment. The woodland is therefore in an unfavourable condition.

The Broadleaf woodland habitat meets the Local Wildlife Site criteria:

Due to poor woodland composition and non-native tree species, this woodland is currently in an unfavourable condition.

CONNECTIVITY

Surrounding land use is mainly dominated by large urban areas to the north, east and west. However, Worm Hill LWS lies just 70 metres from the River Wear, along the banksides of which lie numerous LWS and SSSI's. Princess Anne Park LWS lies immediately to the west, consisting of grassland and woodland following the Biddick Burn from the north. This site, therefore, is situated on an important wildlife corridor connected to the wider landscape via two water courses and associated woodland habitat.

LANDSCAPE

Worm Hill itself is a well-known local landmark of the Washington area and contributes greatly to the landscape character of this part of Sunderland.

RECORDED HISTORY

Surveyed in 1995 and by Andy Mclay in 2010 and again in 2018 and 2019 by Durham Wildlife Services.

SITE MANAGEMENT

Lowland acid grassland:

- Control scrub encroachment.
- Cut annual growth.

Ancient semi-natural woodland:

- Remove non-native species – sycamore, Himalayan balsam, Japanese knotweed.
- Improve woodland structure and composition.
- Promote woodland ground flora by limiting disturbance and translocating specimens.
- Increase deadwood habitat.

Other broadleaf woodland:

- Improve woodland composition.
- Remove non-native tree species.
- Increase deadwood habitat.

Rivers and streams:

- Remove non-native plant species.
- Renew willow spiling.
- Remove and prevent littering.

Worm Hill species list

BAP Habitat: Acid Grassland		
Common Name	Botanical Name	Abundance (DAFOR)
Annual Meadow Grass	<i>Poa annua</i>	Rare
Autumn Hawkbit	<i>Scorzoneroides autumnalis</i>	Rare
Betony	<i>Betonica officinalis</i>	Rare
Bramble	<i>Rubus fruticosus</i>	Locally Frequent
Bristly Haircap	<i>Polytrichum piliferum</i>	Rare
Broad Buckler Fern	<i>Dryopteris dilatata</i>	Rare
Broom Forkmoss	<i>Dicranum scoparium</i>	Rare
Common Bent	<i>Agrostis capillaris</i>	Dominant
Common Broom	<i>Cytisus scoparius</i>	Occasional/ Locally Dominant
Common Cat's Ear	<i>Hypochaeris radicata</i>	Occasional - Frequent
Common Elder	<i>Sambucus nigra</i>	Rare
Common Gorse	<i>Ulex europaeus</i>	Locally Dominant
Common Hawthorn	<i>Crataegus monogyna</i>	Rare
Common Hemp-nettle	<i>Galeopsis tetrahit ss</i>	Rare
Common Honeysuckle	<i>Lonicera periclymenum</i>	Rare
Common Ragwort	<i>Senecio jacobaea</i>	Locally Frequent
Common Sorrel	<i>Rumex acetosa</i>	Occasional
Common Tormentil	<i>Potentilla erecta</i>	Rare
Common Yarrow	<i>Achillea millefolium</i>	Very Locally Frequent
Creeping Soft-grass	<i>Holcus mollis</i>	Very Locally Frequent
Creeping Thistle	<i>Cirsium arvense</i>	Rare
False Oat-grass	<i>Arrhenatherum elatius</i>	Locally Frequent
Field Wood-rush	<i>Luzula campestris</i>	Frequent
Great Burnet	<i>Sanguisorba officinalis</i>	Rare
Harebell	<i>Campanula rotundifolia</i>	Occasional
Hawkweed	<i>Hieracium sect. Hieracium</i>	Occasional - Frequent
Heath Bedstraw	<i>Galium saxatile</i>	Occasional - Frequent
Heath Grass	<i>Danthonia decumbens</i>	Occasional
Hypnum Moss	<i>Hypnum cupressiforme ss</i>	Abundant
Juniper Haircap	<i>Polytrichum juniperinum</i>	Locally Frequent

Mouse-ear Hawkweed	<i>Pilosella officinarum</i>	Locally Frequent
Oak	<i>Quercus (seedling)</i>	Rare
Pignut	<i>Conopodium majus</i>	Rare
Red Fescue	<i>Festuca rubra</i>	Dominant
Ribwort Plantain	<i>Plantago lanceolata</i>	Very Locally Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Frequent
Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Rare
Sheep's Sorrel	<i>Rumex acetosella</i>	Locally Frequent
Smooth Meadow-grass	<i>Poa pratensis</i>	Frequent
Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	Frequent
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Abundant
Wavy Hair-grass	<i>Deschampsia flexuosa</i>	Occasional - Rare
White Clover	<i>Trifolium repens</i>	Occasional - Rare
Whitish Feather-moss	<i>Brachythecium albicans</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional

BAP Habitat: Ancient Semi-Natural Woodland		
Common Name	Botanical Name	DAFOR
Variegated Yellow Archangel	<i>Lamium galeobdolon ssp. argentatum</i>	Rare
Barberry	<i>Berberis gagnepagnii</i>	Rare
Bearded Couch	<i>Elymus caninus</i>	Rare
Bloody Dock	<i>Rumex sanguineus</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Frequent/ Locally Dominant
Broad Buckler Fern	<i>Dryopteris dilatata</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Rare
Broadleaved Plantain	<i>Plantago major</i>	Occasional - Rare
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare
Cape Thread-moss	<i>Orthodontium lineare</i>	Rare
Carpet Moss	<i>Mnium hornum</i>	Occasional
Cleaver	<i>Galium aparine</i>	Occasional
Cocksfoot	<i>Dactylis glomerata</i>	Occasional

Common Alder	<i>Alnus glutinosa</i>	Rare
Common Ash	<i>Fraxinus excelsior</i>	Locally Dominant
Common Beech	<i>Fagus sylvatica</i>	Occasional
Common Dog-violet	<i>Viola riviniana</i>	Occasional- Rare
Common Elder	<i>Sambucus nigra</i>	Occasional
Common Feather-moss	<i>Kindbergia praelonga</i>	Occasional
Common Gorse	<i>Ulex europaeus</i>	Rare
Common Hawthorn	<i>Crataegus monogyna</i>	Locally Frequent
Common Hazel	<i>Corylus avellana</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Knapweed	<i>Centaurea nigra</i>	Occasional
Common Lime	<i>Tilia x vulgaris</i>	Rare
Common Mugwort	<i>Artemisia vulgaris</i>	Rare
Common Nettle	<i>Urtica dioica</i>	Locally Frequent
Common Rhododendron	<i>Rhododendron ponticum</i>	Rare
Common Smoothcap	<i>Atrichum undulatum</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Crack Willow	<i>Salix x fragilis</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Locally Frequent
Creeping Feather-moss	<i>Amblystegium serpens</i>	Occasional
Creeping Soft-grass	<i>Holcus mollis</i>	Locally Abundant
Crosswort	<i>Cruciata laevipes</i>	Rare
Dog Rose	<i>Rosa canina sl</i>	Rare
Dog's Mercury	<i>Mercurialis perennis</i>	Very Locally Dominant
Downy Birch	<i>Betula pubescens</i>	Occasional - Rare
English Ivy	<i>Hedera helix</i>	Locally Abundant
English Oak	<i>Quercus robur</i>	Rare
English Yew	<i>Taxus baccata</i>	Occasional - Rare
False Brome	<i>Brachypodium sylvaticum</i>	Rare
Figwort	<i>Scrophularia nodosa</i>	Rare
Forked Veilwort	<i>Metzgeria furcata</i>	Rare
Fox-tailed Feathermoss	<i>Thamnobryum alopecurum</i>	Locally Frequent
Garlic Mustard	<i>Alliaria petiolata</i>	Occasional

Giant Rye Grass	<i>Schedonorus giganteus</i>	Occasional
Golden Male Fern	<i>Dryopteris affinis sl</i>	Rare
Gooseberry	<i>Ribes uva-crispa</i>	Rare
Great Scented Liverwort	<i>Conocephalum conicum</i>	Locally Abundant
Greater Stitchwort	<i>Stellaria holostea</i>	Occasional - Rare
Ground Elder	<i>Aegopodium podagraria</i>	Locally Frequent
Ground Ivy	<i>Glechoma hederacea</i>	Locally Frequent
Hairy Bittercress	<i>Cardamine hirsuta</i>	Occasional
Hard Fern	<i>Blechnum spicant</i>	
Hart's-tongue	<i>Phyllitis scolopendrium</i>	Occasional
Hart's-tongue Thyme-moss	<i>Plagiomnium undulatum</i>	Locally Abundant
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Herb Bennet	<i>Geum urbanum</i>	Locally Frequent
Herb Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Locally Rare
Hypnum Moss	<i>Hypnum cupressiforme sl</i>	Occasional - Frequent
Japanese Knotweed	<i>Reynoutria japonica</i>	Rare
Lady Fern	<i>Athyrium filix-femina</i>	Rare
Lesser Pocket-moss	<i>Fissidens bryoides</i>	Occasional
Long-beaked Water Feather-moss	<i>Platyhyridium riparioides</i>	Occasional
Lords and Ladies	<i>Arum maculatum</i>	Occasional
Male Fern	<i>Dryopteris filix-mas</i>	Occasional
Many-fruited Thyme-moss	<i>Plagiomnium affine</i>	Rare
Nipplewort	<i>Lapsana communis</i>	Occasional
Norway Maple	<i>Acer platanoides</i>	Rare
Oiser Willow	<i>Salix viminalis</i>	Rare
Opposite-leaved Golden-Saxifrage	<i>Chrysosplenium oppositifolium</i>	Occasional
Pendulous Sedge	<i>Carex pendula</i>	Rare
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Occasional
Ramsons	<i>Allium ursinum</i>	Rare
Raspberry	<i>Rubus idaeus</i>	

Red Campion	<i>Silene dioica</i>	Locally Frequent
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare
Rough Chervil	<i>Chaerophyllum temulentum</i>	Occasional
Rough Meadow-grass	<i>Poa trivialis</i>	Occasional
Rowan	<i>Sorbus aucuparia</i>	Occasional - Rare
Scotch Elm	<i>Ulmus glabra</i>	Occasional - Rare
Sessile Oak	<i>Quercus petraea</i>	Rare
Snowberry	<i>Symphoricarpos rivularis</i>	Rare
Swedish Whitebeam	<i>Sorbus intermedia</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Occasional
Tube Lichen	<i>Hypogymnia physodes</i>	Occasional
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Rare
White Dead-nettle	<i>Lamium album</i>	Rare
Wild Angelica	<i>Angelica sylvestris</i>	Rare
Wood Bristle-moss	<i>Orthotrichum affine</i>	Occasional
Wood Burdock	<i>Arctium nemorosum</i>	Rare
Wood Sanicle	<i>Sanicula europaea</i>	Occasional - Rare
Wood Speedwell	<i>Veronica montana</i>	Occasional
Yew-Leaved Pocket-moss	<i>Fissidens taxifolius</i>	Occasional

BAP Habitat Type: Other Broadleaf Woodland		
Common Name	Botanical Name	DAFOR
Ash	<i>Fraxinus excelsior</i>	Occasional
Beech	<i>Fagus sylvatica</i>	Frequent
Blackthorn	<i>Prunus spinosa</i>	Occasional
Bramble	<i>Rubus fruticosus</i>	Occasional
Broadleaved Willowherb	<i>Epilobium montanum</i>	Rare
Broom	<i>Cytisus scoparius</i>	Rare
Common Alder	<i>Alnus glutinosa</i>	Rare
Common Hawthorn	<i>Crataegus monogyna</i>	Occasional
Common Hogweed	<i>Heracleum sphondylium</i>	Occasional
Common Nettle	<i>Urtica dioica</i>	Frequent
Creeping Buttercup	<i>Ranunculus repens</i>	Rare
Creeping Thistle	<i>Cirsium arvense</i>	Occasional / Locally Abundant
Elder	<i>Sambucus nigra</i>	Occasional
English Oak	<i>Quercus robur</i>	Occasional
Herb Robert	<i>Geranium robertianum</i>	Occasional
Himalayan Balsam	<i>Impatiens glandulifera</i>	Occasional / Locally Abundant
Ivy	<i>Hedera helix</i>	Occasional / Locally Dominant
Larch	<i>Larix decidua</i>	Rare / Locally Frequent
Red Alder	<i>Alnus rubra</i>	Rare
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Locally Abundant
Rowan	<i>Sorbus aucuparia</i>	Rare
Scots Pine	<i>Pinus sylvestris</i>	Occasional / Locally Frequent
Sessile Oak	<i>Quercus petraea</i>	Occasional
Silver Birch	<i>Betula pendula</i>	Occasional
Sycamore	<i>Acer pseudoplatanus</i>	Abundant
Wild Cherry	<i>Prunus avium</i>	Occasional
Willow sp.	<i>Salix sp.</i>	Occasional
Wood Avens	<i>Geum urbanum</i>	Frequent

