Birmingham & Black Country Local Sites Assessment Report

EcoRecord Reference	Site Name	Grid Reference	Current Status[1]	Survey Date(s)
N/A	Walsall Wood Sewage Treatment Plant	SK 04098 03790	Potential Site of Importance (PSI)	30/08/2019
Planning Authority	**Site Ownership**	**Area/Length**	**Reason for Survey**	**Report Date**
Walsall Metropolitan Borough Council	Severn Trent	3.3ha	Call for sites	18/12/2019

Meets LS Criteria	SLINC	Type	Wildlife	i.e. Wildlife/Geological

Amendment(s)	New Site	i.e. None; New Site; Upgrade; Downgrade; Extension; Whole/Part Deletion
Description	The site acts as an important linkage between adjacent designated sites, while providing a relatively diverse mosaic of successional habitats. Therefore, it is deemed to meet the criteria for Site of Local Importance to Nature Conservation (SLINC) status and should be designated as a new SLINC site 'Walsall Wood Field'.	

Citation (Summary of Value)

Walsall Wood Sewage Treatment Plant encompasses 3.3ha of unmanaged habitat that is dominated by successional habitat in the form of tall ruderal and scrub with pockets of remnant semi-improved grassland. The site is bordered by hedgerows and ditches with a broadleaved woodland plantation and pond holding a central location within the site. Although the site has been heavily modified throughout its recent history, the site does offer a range of valuable semi-natural habitats including a species rich boundary hedge.

Within the surrounding landscape, the site acts as an important ecological corridor between the adjacent ecological designated sites The Jockey Fields Site of Special Scientific Interest (SSSI), Site of Local Importance to Nature Conservation (SLINC) and Grange Farm Wood Site of Importance to Nature Conservation (SINC).

Local Site Selection Criteria		
Ecological		
Habitat Diversity	**M**	The site supports a wide range of created and semi-natural habitat types, resulting from natural succession, due to the lack of management onsite. This natural succession has formed a diverse and complex habitat mosaic with relatively good species diversity and structure.
Species Diversity	**M**	The overall species diversity of the site is moderate, due to the number of habitats present. Highest floristic diversity was found within the established hedgerows, where good structural variation was present.
Habitat Rarity	**M**	The majority of habitats present on site are common across Birmingham and the Black Country. The hedgerows are listed as a Habitat of Principal Importance.
Species Rarity	**M**	Most of the species present are *Uncommon* to *Common* across Birmingham and the Black Country. Red deer *Cervus elaphus* an *Uncommon* species is known to use the site.
Size or Extent	**L**	In the context of Birmingham's Local Sites Walsall Wood Sewage Treatment Plant is of small extent in terms of the total site area present within the site boundary.
Naturalness	**M**	The landscape is artificial in origin, having had numerous works and habitats introduced over progressive years. However, the habitats have become established over time and have been subject to natural succession which has result in naturalised features.
Position & Connectivity	**H**	The site lies in close proximity to a number of designated sites which include The Jockey Fields SSSI, The Jockey Fields SLINC and Grange Farm Wood SINC, as such acts as an important ecological corridor between these designated sites, as well as providing a valuable buffer zone for the wider landscape.
Geological		
Not assessed		
Social		
Historical & Cultural	**L-M**	The survey area has changed moderately over the course of the last century due to land use changes. Originally three separate arable fields have now merged into one large field, which has since seen little to no management. Remnants of past use remain in the hedgerows.
Access	**L**	The site is under private ownership and is not open to the public.
Aesthetic	**L/M**	The site sits between designated sites, as such it contributes to the overall landscape aesthetics.
Recorded History	**M**	Historical mapping is recorded with records dating back to at least 1840s, showing that the survey area was used as agricultural land until 1930s, since then the site has suffered from a lot of disturbance. Some remnant field boundary hedgerows with bank and ditch remain to the North and notably to the West, the latter established around 1884.
Value for Learning	**L-M**	Low, there is currently no public access and in its current state potentially dangerous.

Site Description

Walsall Wood Sewage Treatment Plant (WWSTP) is located northwest of Walsall Wood. To the south of the site and marking its southern boundary lies Green Lane. The site is surrounded on all sides excluding the northern edge by sites with local and national designations. These include Jockey Fields SLINC's and Jockey Fields SSSI.

The WWSTP encompasses a wide range of habitats, including four hedgerows (one of which is well established representing the old field boundary), semi-improved neutral grassland, a broad-leaved plantation woodland, several areas of scattered trees, a ditch holding running water, a reed bed and a large area of tall ruderal, which makes up the majority of the site.

The survey area is currently managed primarily for access and legal obligations, as such management is focussed along the access road, with much of the site remaining unmanaged. Japanese Knotweed is present sporadically within the northern and southern section of the site and is currently undergoing treatment for its removal, as such large areas have been treated and cleared to the south of the site.

Historical mapping shows the site remained part of agricultural farming up until the 1940s, after which a road was installed through the field to provide an alternative access route into the nearby sewage works. While the shape of the field system has remained the same from this point the site has under gone works, such as in the 1945 embankment which is present today in the north-western part of the site, while in the 1970s the onsite road was altered from its central locations to its current alignment.

Habitats

Phase 1 Name	Broad-leaved Woodland - Plantation	Phase 1 Code	A1.1.2

The broad-leaved woodland plantation (W1) is located centrally adjacent to the eastern survey boundary. This semi-mature woodland is predominantly Sycamore (*Acer pseudoplatanus*) but also consists of a mixture of species planted in localised patches, consisting of Alder (*Alnus glutinosa*) to the North, a varied age structure patch of Goat Willow (*Salix caprea*) makes up the Western most edge, incidental mature Elder (*Sambucus nigra*) and Cockspur Thorn/ ornamental Hawthorn (*Crataegus x lavallei*) are planted in the southern section. The shrub layer is limited and sparse but does contain self-set Elder, Hawthorn (*Crataegus monogyna*) and Holly (*Ilex aquifolium*). The woodland is unmanaged and in need of regeneration, as such there is little light penetrating to the woodland floor. The lack of light penetration has led to large areas of bare ground, with localised patches of Nettle (*Urtica dioica*), Cow Parsley (*Anthriscus sylvestris*), White Dead-nettle (*Lamium album*), Herb Robert (*Geranium robertianum*), Wood Avens (*Geum urbanum*), Garlic Mustard (*Alliaria petiolata*), Hemp Nettle (*Galeopsis tetrahit*), Wood Millet (*Milium effusum*) and occasional Ivy (*Hedera helix*) and Field Rose (*Rosa arvensis*).

The woodland is used by Red Deer (*Cervus elaphus*) with evidence of prolonged sheltering present in the Northwest portion of the woodland. In addition, fly tipping was present within the woodland.

Phase 1 Name	Scrub & Bramble - Dense / Continuous / Scattered	Phase 1 Code	A2.1/A2.1Rf/A2.2/A2.2Rf

A large area of dense scrub is present on site directly adjacent to Hedgerow H2 and comprises predominantly of semi-mature Pedunculate Oak (*Quercus robur*), with a scrub layer of self-set Elder, Holly, Hawthorn and Ash (*Fraxinus excelsior*). Due to over shading from the shrub layer, the field layer is in majority focused along the boundary edges and included occasional Common Nettle and Bramble. The invasive fungus Ash Dieback (*Hymenoscyphus fraxineus*) was present on a number of the young Ash saplings within these scattered trees.

The largest area of scattered scrub is present on site north of W1. This area comprises scattered Sycamore trees, likely planted at the same time as the plantation woodland (W1). The field layer is a mixture of Annual Meadow-grass (*Poa annua*), Red Fescue (*Festuca rubra*), Cock's-foot (*Dactylis glomerata*), Cow Parsley (*Anthriscus sylvestris*), Creeping Thistle (*Cirsium arvense*) and False Oat-grass (Arrhenatherum *elatius*), with occasional White Bryony (*Bryonia alba*). The tall ruderal is made up predominantly of Common Nettle and Common Hogweed (*Heracleum sphondylium*).

Semi-mature Hawthorn and Elder scattered scrub is located centrally adjacent to the access road and hedgerow H3. The field layer present with the scrub consisted predominantly of Common Nettle with Bramble and encroaching Bracken (*Pteridium aquilinum*) from the dense patch directly to the South.

A small patch of scattered Sycamore, Goat Willow and Blackthorn (*Prunus spinosa*) scrub with occasional field layer species including Common Nettle and Bramble can be found within the north-eastern section of the site. While a similar patch of scattered scrub consisting of semi-mature Pedunculate Oak and Hawthorn is found adjacent to Hedgerow H2.

In addition, three areas of dense Bramble scrub were present on site these were located along the bankside of the drainage ditch present on the eastern boundary fence line, located to the north of the broadleaved woodland habitat present on the eastern edge of the site and a small area in the north-western corner of the site.

These scattered areas of scrub represent part of the mosaic of habitats present on site, which include the combination of tall herb, scrub and woodland habitat, showing the prevalence of natural succession present onsite.

Phase 1 Name	Neutral Grassland - Semi Improved	Phase 1 Code	B2.2

There are three distinct patches of grassland found on site. Two are located centrally to the site situated on small hills surrounded by successional habitat. Due to the health and safety risks onsite caused by dense vegetation and potential open holes, these two areas were surveyed from a distance, but are presumed to be of a similar composition to the third and most substantial patch located in the north-eastern corner of the site.

This area of grassland is based on an Easterly facing slope; it is bordered by post and wire fencing and tall herb vegetation. The grassland appears to be irregularly management, which has restricted encroachment from adjacent habitat, however, evidence was present of the grassland going rank. The sward diversity was low with restricted forb composition and count while being comprised predominantly of Perennial Ryegrass (*Lolium perenne*) and False Oat-grass (*Arrhenatherum elatius*) with occasional Cock's-foot (*Dactylis glomerata*), Annual Meadow-grass (Poa annua) and Red Fescue (*Festuca rubra*).

Phase 1 Name	Improved Grassland	Phase 1 Code	B4

Improved grassland is present on either side of the access road located to the West of the surveyed area. Towards the Southern portion there is a larger section of grassland, however, north of this area it is solely a 1m mown strip either side of the road. It is managed by mowing regularly with the arisings left, at the time of the survey there was around 7cm of growth. The composition of the grassland is 90% grass species and 10% forbs. Grass species include: Cock's-foot, False Oat-grass, Red Fescue and Perennial

Ryegrass. The rest of the composition is made up of: Mugwort (*Artemisia vulgaris*), Nettle, White Clover (*Trifolium repens*), Broad-leaved Willowherb (*Epilobium montanum*), Meadow Buttercup (*Ranunculus acris*) and Springy Turf-moss (*Rhytidiadelphus squarrosus*).

Phase 1 Name	Running Water	Phase 1 Code	G2

Along the southern boundary and a portion of the eastern boundary lies a small drainage ditch, approximately 2m wide, holding a shallow depth of running water. This ditch acts as drainage for the fields and Green Lane to the South and appears to hold water much of the year. While the substrate is a mixture of silt and leaf litter.

The East-southerly section is shaded by H1, while the Western portion is more openly shaded by scattered trees of Pedunculate Oak and Goat Willow. Species present include Bulrush, Common Water-starwort (*Callitriche stagnalis*) and Duckweed (*Lemna spp.*). Banksides are ruderal on the Northern edge with Common Nettle, Great Willowherb and Common Hogweed dominant. There are also small localised patches of Japanese Knotweed (*Fallopia japonica*) on the banks. Litter spans the Southernmost road-side boundary.

Phase 1 Name	Tall Herb and Fern - Bracken - Continuous	Phase 1 Code	C1.1

There is a single patch of dense continuous Bracken present on site. This is located within the western section of the site shaded by Hedgerow H3 half way along the access road on the Western side. The Bracken is so dense that all other ground flora has been shaded out.

Phase 1 Name	Tall Herb and Fern - Tall Ruderal	Phase 1 Code	C3.1

There are two substantial stands of tall ruderal vegetation found across the site, the largest, making up a large portion of the site as a whole, is found throughout the middle portion of the site and is very undulating, the second can be found in the Southwest corner of the site spanning from the hedge in the West to the access road. Species commonly found in the tall ruderal are: Creeping Thistle (*Cirsium arvense*), Spear Thistle (*Cirsium vulgare*), Common Nettle, Common Vetch (*Vicia sativa*), Foxglove (*Digitalis purpurea*), White Dead-nettle, Hedge Bindweed, Broad-leaved Dock (*Rumex obtusifolius*), Common Hogweed, Great Willowherb (*Epilobium hirsutum*), Weld (*Reseda luteola*), Butterbur (*Petasites hybridus*), Bramble, Field Horsetail (*Equisetum arvense*). In addition, there is a small clump of Reed Canary Grass (*Phalaris arundinacea*) in the Northwest corner of the site, this is presumably spontaneous and as a result of a small area of inundation from drainage off of the access road. It should be noted that due to safety concerns not all of the central portion of Tall Ruderal was surveyed, and it is likely more species are present within this habitat.

Within the large expanse of tall herb habitat on site a small cluster of Japanese Knotweed is present in the north eastern portion.

Phase 1 Name	Marginal Vegetation	Phase 1 Code	F2.1

A small patch of Bulrush (*Typha latifolia*) can be found within the ditch containing standing water (SW1) found near the Southern boundary of the site.

Phase 1 Name	Standing Water – Mesotrophic	Phase 1 Code	G1.2

In the centre of the site lies a large area of standing water vegetated by Common Reed (*Phragmites australis*). This is likely as a result of impeded drainage, from historical disturbance, as historical mapping shows no evidence of a pond being present.

Due to the undulating terrain and dangers associated with hidden holes present on site this portion of the survey area was surveyed from a distance, therefore, a full assessment and species count could not be undertaken.

Phase 1 Name	Ephemeral / Short Perennial	Phase 1 Code	J1.3

The South-eastern portion of the site, to the east of the access road is dominated by a large area of disturbed ground with ephemeral/short perennial vegetation (30cm). It is evident that this is the result of ongoing management works for the control of invasive Japanese Knotweed. The area appears to have been sprayed off and flailed with some clearance works, with woodchip arisings left on site. Some sporadic re-growth of Japanese Knotweed is seen predominantly to the Southern portion of the area and along the bank-side of the wet ditch. The re-growth is dominated by Broad-leaved Willowherb and Great Willowherb. Localised areas are dominated by White Dead-nettle and Common Nettle. There are occasional instances of Bush Vetch (*Vicia sepium*) and infrequently Sedge (*Carex spp.*). A portion to the Northeast has been left slightly longer, perhaps missing the previous treatment, though the composition of species remains the same.

Phase 1 Name	Intact / Defunct Hedgerow / with trees	Phase 1 Code	J2.2/J2.3

Defunct Hedgerow H1 is situated on the South-easterly boundary of the site; it is situated adjacent to field drainage ditch. The hedge is species poor, comprising solely of Hawthorn. The hedge is defunct having been without appropriate management for a while this has led to it being 4m in high and outgrown; it is around 1m wide with large gaps between the stems at the bottom. At the time of survey, it had recently received management in the form of flailing on the roadside face; as such this side was devoid of foliage. Due to the sparse nature of the hedge the ground flora is virtually non-existent with a lot of bare soil, and when there is ground flora it is of a poor floristic diversity comprising of localised patches of dominant Common Nettle, with scattered Bramble, Broad-leaved Dock, Garlic Mustard, Common Hogweed and Male Fern (*Dryopteris filix-mas*). Within the hedge there are instances of the perennial creeping plants Hedge Bindweed and White Bryony.

Defunct Hedgerow H2 is a line of semi-mature Silver Maple trees located running alongside the access road on the Easterly side; these were most likely planted at the time the access road was built in the 1970s. The trees have been managed for access, with low hanging branches over the road having been pruned. Lack of further management has led to the field layer comprising of Nettle, Bramble, Cow Parsley, Broad-leaved Willowherb in localised patches, otherwise field grasses such as Yorkshire Fog (*Holcus lanatus*), Red Fescue or bare ground is present. In the areas running alongside the scrub habitat, the hedgerow has been infilled between the semi-mature trees by the scrub species creating a similar field layer.

Hedgerow 3 (H3) is a historic field-boundary hedgerow with a mixture of semi-mature/mature trees. Historic maps date portions of this hedgerow back to at least 1884. Located on the Westernmost boundary of the site it represents the most diverse hedgerow found on site. The hedgerow is well established with many semi-mature to mature trees within it. It is situated on top of a heavily shaded dry ditch with a stock-netting fence on the opposing western bank. Due to lack of management for a number of years the hedgerow has become a tree-line with dense shrub layer formed by Blackthorn, Holly, Elder, and Hawthorn. The hedgerow consists of mature Silver Birch (*Betula pendula*) and semi-mature Hawthorn, *Rare* Holly, Goat Willow, Elder, Ash and Pedunculate Oak which becomes increasingly dominant towards the North. Self-seeding is evident from the hedge-line with regeneration of Ash, Hawthorn and Elder. The field layer is limited with leaf litter and areas of bare earth, when present there are patches of Bramble,

Nettle and occasional Male Fern and Hedge Bindweed. Ivy is occasionally present as both epiphytic and prostrate plants. Fallen branches have been left under the hedge; as such there is an abundance of deadwood providing good habitat for detritivores.

Hedgerow 4 (H4) is an intact old field boundary hedgerow with some semi-mature trees located on the Northernmost boundary of the site. It is situated on top of a dry ditch, and has a stock-netting fence on the Northerly bank. It consists of predominantly Oak and semi-mature Hawthorn trees with Silver Birch, Elder, Hazel (*Corylus avellana*) and Blackthorn also making up the mix. The field layer where present is predominantly Garlic Mustard, self-set Holly seedlings can also be found.

Phase 1 Name	Bare Ground	Phase 1 Code	J4

An area of bare ground is found centrally in the Southern portion of the site; it is presumed this has arisen from flailing the area in the treatment of Japanese Knotweed, as stems of treated plants were evident within the area. This is connected to the area of ephemeral/short perennial, which is presumably an area previously flailed but missed on the second treatment. Some encroachment of the ephemeral short perennial is found in this area, with composition of similar species i.e. Broad-leaved willow herb, Nettle and White Dead Nettle.

Within the north eastern area of the site lies an additional area of the bare ground. This was the result of a recent small fire that had occurred within the grassland habitat.

Notes

Habitats of Note [2]

Phase 1 Name	Phase 1 Code	EHD	NERC	LBAP	Rarity	Year Recorded
Hedgerows (with trees)	J2.3		Y			2019
Standing Water (Reedbed)	G1.2		Y			2019

Notes

Species of Note [2]

Flora

Species	Statutory	NERC	LBAP	RDL	Rarity	Axiophyte	Year Recorded
Milium effusum - Wood Millet					***U***	***Y***	2019

Notes

Fauna

Species	Statutory	NERC	LBAP	RDL	Concern	Rarity	Year Recorded
Cervus elaphus - Red Deer						***U***	2019
Rana temporaria - Common Frog	***WCA5/9.5a***		***Y***			***C***	2019
The following Species of Note have been recorded within 500m of the assessment site boundary.							
Acanthis flammea - Common (Mealy) Redpoll					***BAmb***	***U***	1987
Alauda arvensis - Skylark		***Y***	***Y***		***BRed***	***C***	2004
Anas platyrhynchos - Mallard					***BAmb***	***C***	1987
Chroicocephalus ridibundus - Black-headed Gull					***BAmb***	***C***	1987
Coenonympha pamphilus - Small Heath	***RLGB.Lr(NT)***	***Y***				***U***	1997
Delichon urbicum - House Martin					***BAmb***	***F***	1987
Dendrocopos minor - Lesser Spotted Woodpecker		***Y***			***BRed***	***F***	2008
Emberiza citronella - Yellowhammer		***Y***			***BRed***	***C***	1987
Emberiza schoeniclus - Reed Bunting		***Y***			***BAmb***	***C***	1987
Erinaceus europaeus - West European Hedgehog		***Y***				***C***	2015
Gallinago gallinago - Snipe			***Y***		***BAmb***	***F***	1987
Lissotriton vulgaris - Smooth Newt	***WCA5/9.5a***		***Y***			***F***	2005
Muscicapa striata - Spotted Flycatcher		***Y***			***BRed***	***F***	1977
Passer domesticus - House Sparrow		***Y***			***BRed***	***VC***	1977
Perdix perdix - Grey Partridge		***Y***	***Y***		***BRed***	***U***	1987
Phylloscopus trochilus - Willow Warbler					***BAmb***	***C***	1977
Pipistrellus pipistrellus - Pipistrelle	***WCA5/9.5a HabRegs2***		***Y***			***C***	1994

Prunella modularis - Dunnock		***Y***			***BAmb***	***VC***	1990
Pyrrhula pyrrhula - Bullfinch		***Y***			***BAmb***	***C***	1977
Sturnus vulgaris - Starling		***Y***			***BRed***	***VC***	1990
Triturus cristatus - Great Crested Newt	***WCA5/9.5a HabRegs2***	***Y***	***Y***			***U***	2010
Turdus iliacus - Redwing	***WCA1i***				***BRed***	***C***	1987
Turdus philomelos - Song Thrush		***Y***	***Y***		***BRed***	***C***	1990
Turdus pilaris - Fieldfare	***WCA1i***				***BRed***	***F***	1987
Notes							

Site/Habitat Suitability for Other Species of Note (not recorded during the survey)	
Description/Notes	The wetland habitats present on site provide good habitat for amphibian species, so it is entirely plausible these are present on site. The hedgerows present provide commuting habitat, while the wetland area providing foraging opportunities for local bat populations. The site provides suitable undisturbed habitat for European Hedgehog.

Invasive Species [3]

Species	Location	Abundance (DAFOR)	Year Recorded
Fallopia japonica - Japanese Knotweed	Field, Ditch/Stream	Rare	2019
Notes	Ongoing treatment evident in Southern instances, North-easterly instance untreated.		

Geology	
Solid/Drift Formation	The site is encompassed by Alveley Member Formation - Sandstone, superficial deposits: Devenisian - Diamicton Till
Description	Alveley Member Formation - Sandstone, Sedimentary bedrock formed approximately 308 to 310 million years ago in Carboniferous period, Local area previously dominated by rivers. Devenisian - Diamicton Till, superficial deposits formed 2 million years ago in Quaternary period, Local area previously dominated by ice age conditions.
Features of Value	
1	None known.

Soils

The species present across the site suggest the soils are predominantly neutral.

Public Access & Site Usage	
Land Use	Private Land
Access Level	Restricted
Access Type(s)	Private Land

Comparison with Previous Survey(s) Results

A species list was carried out on the land which is now Walsall Wood Sewage Treatment Plant (Then Black Piece, Grange Farm) in 1987. Many of the species recorded then are still present on site; however, a few have failed to be re-recorded in this 2019 Local Site Assessment Survey, which could be in part due to the changing nature of site use. Species now absent such as Gorse (*Ulex europaeus*) and Broom (*Cytisus scoparius*) could suggest the nutrient contents of the soil have improved. Sunflower (*Helianthus annuus*) and Tomato (*Lycopersicon esculentum*) were probably remnant species retained in the seed bank since the area was used as arable. Common Orache (*Atriplex patula*) was also recorded in 1987, though the habitat remains suitable and it could be the case that it is still present on site but un-recorded due to safety concerns associated with accessing the areas it is present within. Many new species are now present on site since the 1987 survey, as the extent of the area surveyed is unknown it is not clear if these predated the previous survey.

Summary of Assessment

When assessed against the Birmingham & Black Country Local Site criteria Walsall Wood Sewage Treatment Plant scores Medium to High against most of the ecological criteria. The site therefore meets the threshold for selection as a Site of Local Importance for Nature Conservation (SLINC).

Recommendations (including further survey & site management/enhancement)	
1	Hedgerows on site should be managed to maintain structure and diversity, including an annual trim outside of bird nesting season, and thinning out areas to allow light penetration increasing diversity.
2	Eradication of Japanese Knotweed. The current ongoing measures being used to eradicate Japanese Knotweed should be continued.
3	Control the natural succession present across site to retain areas of semi-improved neutral grassland.

Data Sources		
	Source	**Date**
Species and Habitat Data Source(s)	The Wildlife Trust for Birmingham & the Black Country EcoRecord data search 2019	30/08/2019
Geological Data Source(s)	British Geological Society 1:50,000 bedrock & superficial deposits GIS web map services from BGS website: https://www.bgs.ac.uk/data/services/mash-ups/desktopgis.html	08/11/2019
Historic Data Sources(s)	Ordnance Survey Country Series Mapping 1884 - 1992 Quigley, P. 2010 Black Country Historic Landscape Characterisation, electronic dataset, Wolverhampton City Council. Google earth pro historical imagery. December 2018	02/11/2019
Assessment Author and Organisation	The Wildlife Trust for Birmingham & the Black Country	17/01/2019

[1] Definitions of Local Sites in B&BC (SINCs & SLINCs) and Potential Sites of Importance (PSIs)

In Birmingham and the Black Country Local Wildlife and Geological Sites encompass what are termed Sites of Importance for Nature Conservation (**SINCs**) and Sites of Local Importance for Nature Conservation (**SLINCs**). This two-tier system aims to ensure that all sites of substantive local nature conservation and geological value are selected by assessing sites in both a sub-regional (i.e. Birmingham and the Black Country) and metropolitan borough or city context (either Birmingham, Dudley, Sandwell, Walsall or Wolverhampton). The two designations are defined as:

- Site of Importance for Nature Conservation (**SINC**) - Sites of substantive nature conservation value in the context of Birmingham and the Black Country.
- Site of Local Importance for Nature Conservation (**SLINC**) - Sites of substantive nature conservation value in the context of a metropolitan borough.

Potential Sites of Importance (**PSIs**) have not yet been assessed against the Local Wildlife and Geological Sites selection criteria but may potentially support species of note, areas of important semi-natural habitat or valuable geological features. PSIs are identified primarily through the use of aerial photography, but also through reference to old maps, existing records and local knowledge. Commonly these sites will not have been subject to the survey work necessary to undertake a Local Wildlife and Geological Sites assessment.

[2] Habitats/Species of Note Tables – Attribute Definitions

STATUTORY (PROTECTED) - ***EHD*** = EU Habitats Directive (plus where relevant the Annexe II or IV) | ***WCA S1*** = Wildlife & Countryside Act Schedule 1 (birds protected at all times) | ***WCA S5*** = Wildlife & Countryside Act Schedule 5 (animals with various levels of protection) | ***WCA S8*** = Wildlife & Countryside Act Schedule 8 (higher and lower plants with various levels of protection) | ***PBA*** = Protection of Badgers Act 1992 | ***HabRegs2*** = The Conservation (Natural Habitats, &c.) Regulations 2010 (Schedule 2) | ***HabRegs4*** = The Conservation (Natural Habitats, &c.) Regulations 2010 (Schedule 4).

NERC – ***Y*** = Habitats/Species included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended).

LBAP – ***Y*** = Habitats/Species included on the latest B&BC LBAP list of Priority Habitats/Species.

RDL - Species included on Global IUCN & British Red Data Lists: ***RLGB.EN*** = IUCN (2001) – Endangered | ***RLGB.VU*** = IUCN (2001) – Vulnerable | ***RDBGB.R*** = IUCN (pre 1994) – Rare | ***RLGB.Lr(NT)*** = IUCN (2001) - Lower risk - near threatened | ***RDBGB.IK*** = RDB - Insufficient known | ***RLGB.DD*** = IUCN (2001) - Data Deficient

RARITY (HABITATS) - BIRMINGHAM & BLACK COUNTRY - ***Y*** = Habitats included on the B&BC list of locally rare habitats (administered by EcoRecord).

RARITY (FLORA SPECIES) - BIRMINGHAM & BLACK COUNTRY - (based on data held and managed by EcoRecord): ***VR*** = Very Rare - a species present in less than 1.0% of 1Km squares, tetrads, or 5Km squares in B&BC | ***R*** = Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads, or 5Km squares in B&BC | ***U*** = Uncommon - a species present in 4.3% - 12% of 1Km squares, tetrads or 5Km squares in B&BC | ***NRR =*** no recent B&BC records.

AXIOPHYTE - ***BBCF_Ax*** = included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord).

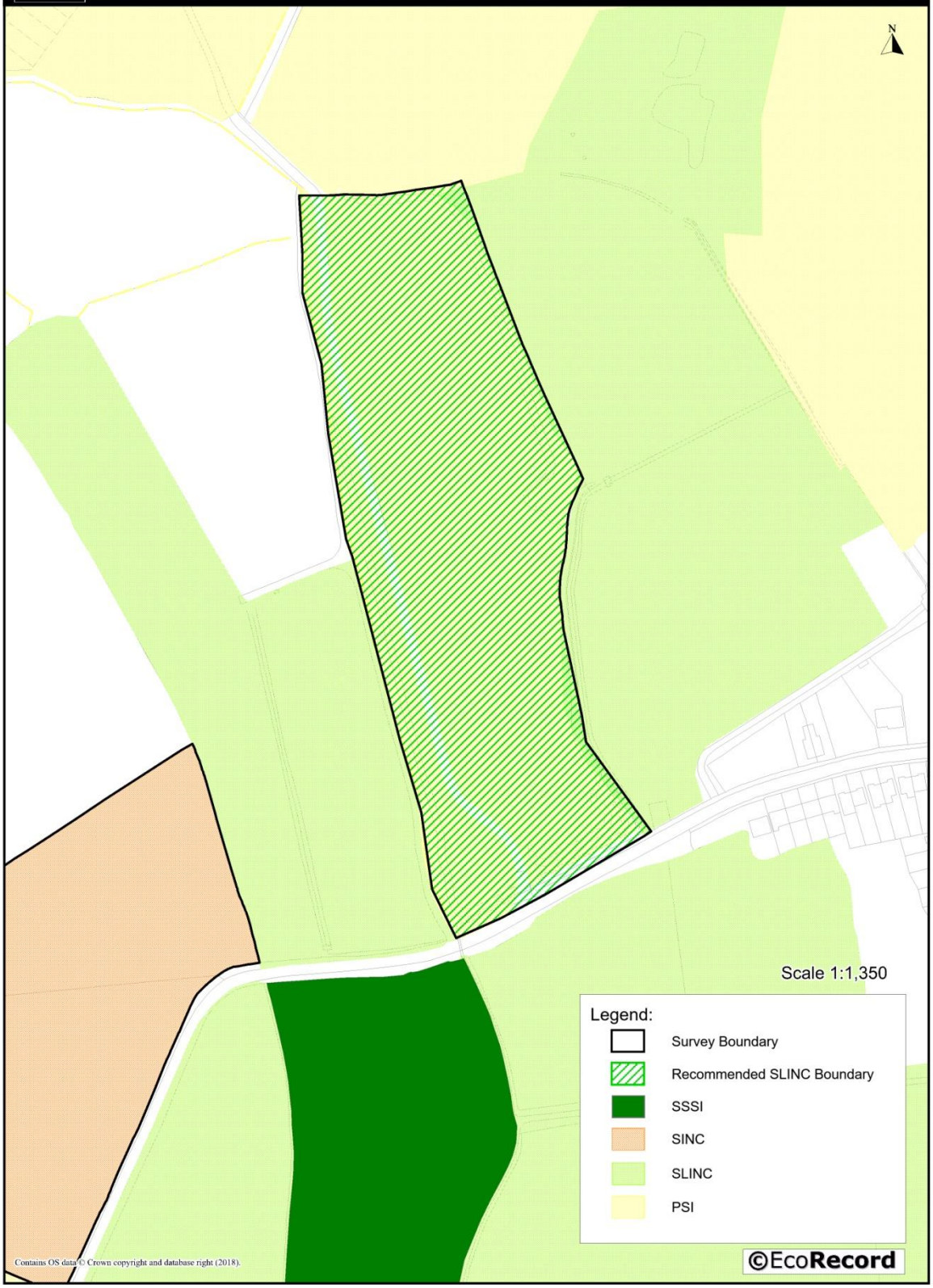
YEAR - The most recent year the species has been recorded.

CONCERN (FAUNA SPECIES OF CONSERVATION CONCERN) -

Birds: ***BRed*** = Birds of Conservation Concern Red List - bird species of high conservation priority needing urgent conservation action. This encompasses species that are Globally Threatened according to the International Union for Nature Conservation criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery. ***BAmb*** = Bird of Conservation Concern Amber List – bird species with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.

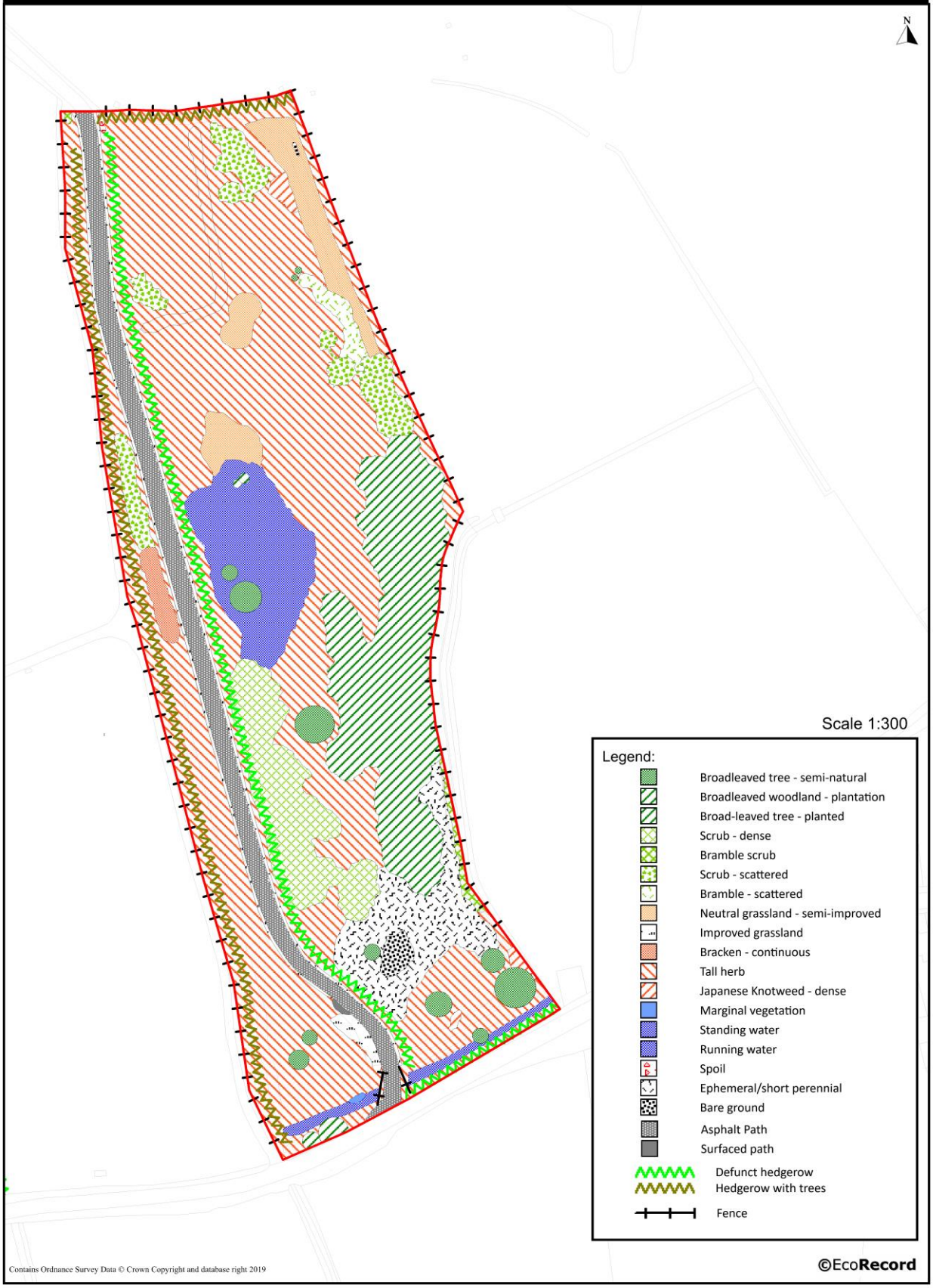
[3] Species listed on Schedule 9 part 1 (animals) and part 2 (plants) of the Wildlife and Countryside Act 1981 as amended - this lists animals which may not be released or allowed to escape into the wild and plants which may not be planted or otherwise caused to grow in the wild.

Map 1: Walsall Wood Wesage Treatment Plant
Current & Recommended Designation

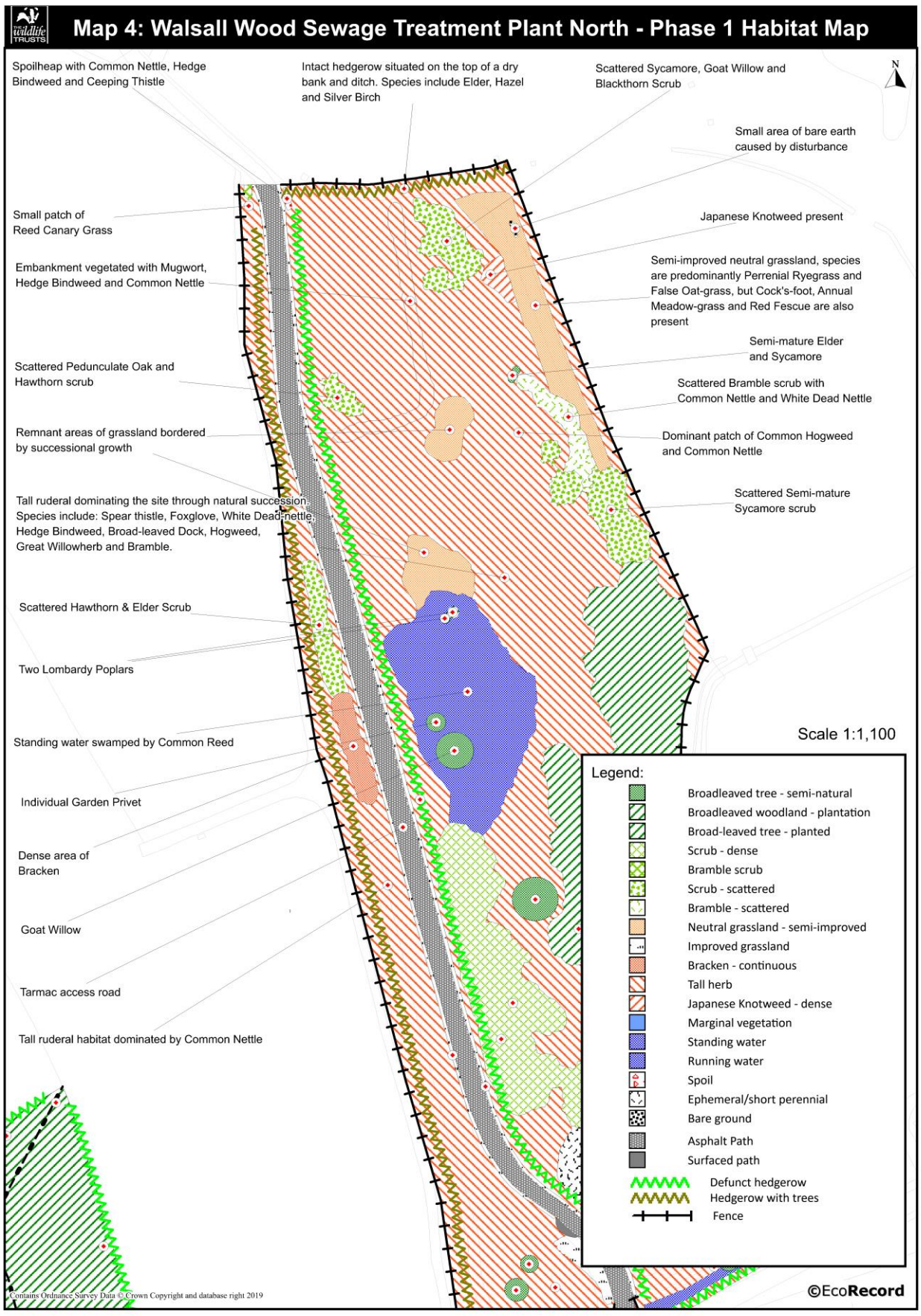


Map 2:Walsall Wood Sewage Treatment Plant Compartment Map - 28/11/2019

Map 3: Walsall Wood Sewage Treatment Plant - Phase 1 Habitat Map



Map 4: Walsall Wood Sewage Treatment Plant North - Phase 1 Habitat Map



Map 5: Walsall Wood Sewage Treatment Plant South - Phase 1 Habitat Map

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Site Photographs

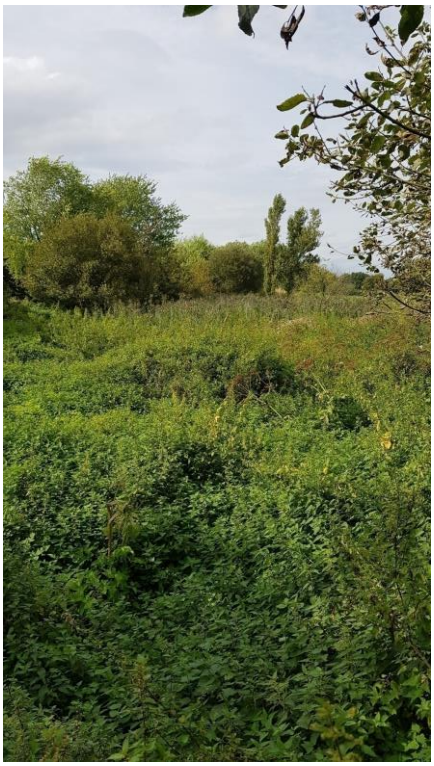
Photograph 1: Hawthorn dominated hedgerow (H1) located along the southern boundary.

Photograph 2: Field Drainage ditch locate along the southern boundary.

Photograph 3: Japanese knotweed present on the banksides of the drainage ditch.

Photograph 4: northern portion of broadleaved wood plantation, showing the sparse field layer and signs of Red deer use.

Photograph 5: Pedunculate Oak hedgerow (H3), bordered by extensive ruderal vegetation.



Photograph 6: Broad view of the central section of the site. In the distance is the area of standing water swamped by Common Reed.

Photograph 7: Section of semi-improved neutral grassland located in the north eastern section of the site.

Species Records

FLORA

Field (F1)

Scientific Name	Common Name
Anthriscus sylvestris	Cow Parsley
Arrhenatherum elatius	False Oat-grass
Artemisia vulgaris	Mugwort
Bryonia alba	White Bryony
Calystegia sepium	Hedge Bindweed
Carex sp.	Sedge
Chamerion angustifolium	Rosebay Willowherb
Cirsium arvense	Creeping Thistle
Cirsium vulgare	Spear Thistle
Dactylis glomerata	Cock's-foot
Digitalis purpurea	Foxglove
Epilobium hirsutum	Great Willowherb
Epilobium montanum	Broad-leaved Willowherb
Equisetum arvense	Field Horsetail
Fallopia japonica	Japanese Knotweed
Festuca rubra	Red Fescue
Fraxinus excelsior	Ash
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Hymenoscyphus fraxineus	Ash dieback
Iris pseudacorus	Yellow Iris
Lamium album	White Dead-nettle

Lingustrum vulgare	Wild Privet
Lolium perenne	Perennial Rye-grass
Petasites hybridus	Butterbur
Phalaris arundinacea	Reed Canary Grass
Phragmites australis	Common Reed
Prunus spinosa	Blackthorn
Poa annua	Annual Meadow-grass
Populus nigra 'Italica'	Lombardy Poplar
Pteridium aquilinum	Bracken
Quercus robur	Pedunculate Oak
Ranunculus acris	Meadow Buttercup
Reseda luteola	Weld
Rhus sp.	Sumac
Rhytidiadelphus squarrosus	Springy Turf-moss
Rubus fruticosus agg.	Bramble
Rumex acetosa	Common Sorrel
Rumex obtusifolius	Broad-leaved Dock
Sonchus oleraceus	Smooth Sow-thistle
Taraxacum officinale agg.	Dandelion
Trifolium repens	White Clover
Urtica dioica	Common Nettle
Vicia sativa	Common Vetch
Vicia sepium	Bush Vetch

Woodland (W1)

Scientific Name	Common Name
Acer pseudoplatanus	Sycamore
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Anthriscus sylvestris	Cow Parsley
Crataegus x lavallei	Hybrid Cockspurthorn
Crataegus monogyna	Hawthorn
Galeopsis tetrahit	Common Hemp-nettle
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Hedera helix	Ivy
Heracleum sphondylium	Hogweed
Ilex aquifolium	Holly
Lamium album	White Dead-nettle
Milium effusum	Wood Millet
Rosa arvensis	Field-rose
Rubus fruticosus agg.	Bramble
Salix caprea	Goat Willow
Sambucus nigra	Elder
Urtica dioica	Common Nettle

Ditch/Stream (SW1)

Scientific Name	Common Name
Callitriche stagnalis	Common Water-starwort
Calystegia sepium	Hedge Bindweed

Crataegus monogyna	Hawthorn
Dryopteris filix-mas	Male-fern
Epilobium hirsutum	Great Willowherb
Fallopia japonica	Japanese Knotweed
Heracleum sphondylium	Hogweed
Juncus effusus	Soft-rush
Lemna sp.	Duckweed
Rubus fruticosus agg.	Bramble
Sambucus nigra	Elder
Typha latifolia	Bulrush
Urtica dioica	Common Nettle

Hedgerow 1 (H1)

Scientific Name	Common Name
Alliaria petiolata	Garlic Mustard
Bryonia dioica	White Bryony
Calystegia sepium	Hedge Bindweed
Crataegus monogyna	Hawthorn
Dryopteris filix-mas	Male-fern
Epilobium hirsutum	Great Willowherb
Equisetum arvense	Field Horsetail
Heracleum sphondylium	Hogweed
Rubus fruticosus agg.	Bramble
Rumex obtusifolius	Broad-leaved Dock
Urtica dioica	Common Nettle

Hedgerow 2 (H2)

Scientific Name	Common Name
Acer saccharinum	Silver Maple
Anthriscus sylvestris	Cow Parsley
Dactylis glomerata	Cock's-foot
Epilobium montanum	Broad-leaved Willowherb
Festuca rubra	Red Fescue
Holcus lanatus	Yorkshire-fog
Rubus fruticosus agg.	Bramble
Urtica dioica	Common Nettle

Hedgerow 3 (H3)

Scientific Name	Common Name
Alnus glutinosa	Alder
Betula pendula	Silver Birch
Calystegia sepium	Hedge Bindweed
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Dryopteris filix-mas	Male-fern
Fraxinus excelsior	Ash
Hedera helix	Ivy
Ilex aquifolium	Holly
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Quercus robur	Pedunculate Oak

Rhus sp.	Sumac
Rubus fruticosus agg.	Bramble
Salix caprea	Goat Willow
Sambucus nigra	Elder
Urtica dioica	Common Nettle

Hedgerow 4 (H4)

Scientific Name	Common Name
Alliaria petiolata	Garlic Mustard
Betula pendula	Silver Birch
Calystegia silvatica	Large Bindweed
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Heracleum sphondylium	Hogweed
Ilex aquifolium	Holly
Prunus spinosa	Blackthorn
Quercus robur	Pedunculate Oak
Sambucus nigra	Elder
Urtica dioica	Common Nettle

FAUNA

Whole site

Scientific Name	Common Name
Buteo buteo	Buzzard
Cervus elaphus	Red Deer
Columba palumbus	Woodpigeon
Odonata Spp.	Dragonfly Species
Pararge aegeria tircis	Speckled Wood
Pica pica	Magpie
Pieris rapae	Small White
Rana temporaria	Common Frog
Vanessa atalanta	Red Admiral