Birmingham & Black Country Local Sites Assessment Report

EcoRecord Reference	Site Name	Grid Reference	Current Status [1]	Survey Date(s)	
WV011	Moseley Hall	SJ932037	Part SINC	17.05.2019	
Planning Authority	Site Ownership	Area/Length	Reason for Survey	Report Date	
Wolverhampton	Private	14ha	BC Call for Sites	19.11.2019	
Meets LS Criteria	SINC	Туре	Wildlife	i.e. Wildlife/Geological	
Amendment(s)	Extension i.e. None; New Site; Upgrade; Downgrade; Extension; Whole/Part Deletion				
Description	This assessment considers that the area currently designated as Moseley Hall SINC still achieves the criteria necessary to hold that designation. In addition, field compartment F1, not formerly designated, meets the criteria for SINC when considered in conjunction with Moseley Hall and the range of habitats it adds to the site. As such it should be included within the SINC designation.				

Citation (Summary of Value)

Moseley Hall encompasses 14ha of semi-improved grassland and broadleaved woodland with areas of scrub, tall herb, standing and running water. Good species diversity is present throughout the site due to the prominent structural variation, especially in the woodland where the variation includes wet Alder *Alnus glutinosa* and Willow *Salix sp.* carr to dry Ash *Fraxinus excelsior*, Beech *Fagus sylvatica* and Pedunculate Oak *Quercus robur* woodland. A desk based review undertaken in 2008, by the Wildlife Trust, identified sections of the semi-natural woodland within the site as probable ancient woodland.

The northern grassland habitat, through heavy grazing has reduced species diversity within the sward, provides further habitat variation to the woodland through the addition of mature Pedunculate Oak and permanent and ephemeral water bodies, further enhancing its value as a wildlife corridor and as one of the most ecologically valuable sites in Wolverhampton.

Local Site Selection Cr	iteria	
Ecological		
Habitat Diversity	н	Moseley Hall supports a wide range of woodland habitats which have been established onsite since at least 1845, with probable ancient woodland located on site. Due to the extent of habitat present much structural variation exists within the woodland and waterbodies, providing key ecological habitat for both fauna and flora.
Species Diversity	н	The overall species diversity of the survey area is high due to the wide range of habitats, including wetland, woodland and grassland, and the structural variation within them. Incidental and historical fauna recordings show that the site is of value to a wide range of fauna.
Habitat Rarity	н	The probable ancient woodland on site is a <i>Rare</i> habitat across the Birmingham and the Black Country, with the ponds and intact hedgerows being <i>Uncommon</i> but of created origin. All are listed as Habitats of Principal Importance.
Species Rarity	М-Н	Numerous flora species recorded on site have been identified as <i>Uncommon</i> to <i>Rare</i> within Birmingham and Black Country, with one <i>Very Rare</i> flora species recorded on site, Narrow-fruited Water-cress <i>Rorippa microphylla</i> .
Size or Extent	н	In the context of Birmingham and Black Country's local sites Moseley Hall is of medium extent in terms of the total site area. However, the extent of ancient woodland habitat onsite represents a significant amount within Birmingham and the Black County.
Naturalness	н	The survey area comprises a wide range of semi-natural features that have been established for at least 20 years, with some over 150 years.
Position & Connectivity	н	Moseley Hall forms an important area of semi-natural habitat which is linked to the surrounding landscape through hedgerow networks and numerous designated sites.
Geological – Not Asses	sed	
Social		
Historical & Cultural	н	Part of the site represents a probable remnant of the ancient woodland as depicted on 1845 historical mapping and comprises part of the parkland of the historic Moseley Old Hall Estate.
Access	М	The southern area is publicly accessible and regularly used by the public with numerous formal and informal paths throughout. While the northern field and woodland is under private ownership.
Aesthetic	н	In the context of the surrounding landscape which is predominantly built-up, Moseley Hall offers a highly attractive woodland and farmland landscape.
Recorded History	н	Historical information is well recorded with mapping records dating back to at least the late 18 th century. Local site assessment reports have been undertaken in 1989 and 2000.
Value for Learning	м	With areas open to public, this area has much value for both formal and informal education in conservation, historic landscape, woodland management and ecosystems.

Site Description

Moseley Hall site is approximately 14ha in size and is located to the north of Wolverhampton and to the west of Northycote Lane. The site is bordered by agricultural farmland, parkland and two long stretches of broadleaved woodland that acts as a wide wildlife corridor through the site and to the surrounding landscape.

The site encompasses a large extent of broadleaved woodland with sections of both semi-natural and plantation woodland, with the central area of woodland being identified as probable ancient woodland. Due to the brook and dry ditches on site, wet areas exist within the woodland which allows for the presence of water associated species which increase the floral diversity of the site.

In the northern section of the site lies an improved grassland field which is currently horse grazed. Due to the management practice the sward diversity is low and dominated by grass species, with only occasional forbs present. However, three ponds are present, two of which are ephemeral, with hedgerows bordering the field.

Historical mapping shows that sections of the woodland and onsite permanent field pond having remained intact since at least 1845, with these woodland areas likely to be ancient woodland. Further woodland planting was undertaken in the north around the 1940s and the south around the 1980s which extended the woodland habitat area. The field was previously of a larger size and separated into two fields. The area was later used to expand the woodland with the remainder made into pasture.

For the purpose of this survey, the site has been divided into four area compartments and three hedgerow compartments.

Habitats Phase 1 Name Broadleaved woodland – semi-natural / plantation Phase 1 Code A1.1

The site encompasses a large area of semi-natural and plantation broadleaved woodland, which predates 1816. In 2008, the Birmingham and Black County Wildlife Trust undertook an Ancient Woodland Inventory review (evidence based desk review) which covered this area and identified sections of the semi-natural woodland as probable ancient woodland.

To show species diversity across the site, the site has been designated into three compartments - these can be seen on **Map 2**. Formal and informal paths are denoted throughout the woodland. Public disturbance is noted throughout from footfall with evidence of fly tipping and fires present close to the stream, off the main public footpath.

Woodland accessible to the north and south of pond P1 and the central brook 'Waterhead Brook' is covered by compartment W1. This includes an area of plantation woodland that runs along the southern boundary and is divided from the semi-natural woodland by an historic bank and ditch, which is likely evidence of an old woodland boundary. Woodland W2 includes the area within the palisade fencing where access was restricted and finally woodland W3 is the rectangular section of woodland to the west of the main survey area.

The broadleaved plantation woodland (W1) located within the southern area comprising mature Sycamore *Acer pseudoplatanus*, Beech, Ash, Lime *Tilia platyphyllos x europaea* and Pedunculate Oak with an understorey of Pedunculate Oak, Wayfaring Tree *Viburnum lantana*, Sycamore, Elder *Sambucus nigra*, Holly *Ilex aquifolium* and Silver Birch *Betula pendula*. There is variation within the woodland where the canopy is sparser and in these areas the understorey becomes increasingly dense with Raspberry *Rubus idaeus* occasionally present. The field-layer flora comprising Male-fern *Dryopteris filix-mas*, Great Willowherb *Epilobium hirsutum*, Meadowsweet *Filipendula ulmaria*, Herb-Robert *Geranium robertianum*, Dog's Mercury *Mercurialis perennis*, Wood-sorrel *Oxalis acetosella*, Wood Avens *Geum urbanum* and native Bluebell *Hyacinthoides non-scripta*. In the western section of the plantation woodland Sweet Chestnut *Castanea sativa*, Norway Maple *Acer platanoides* and Wild Cherry *Prunus avium* becomes present within the species mix. Overall the plantation woodland is based on a north-facing free draining slope. Regeneration is present throughout the woodland.

Along the south-eastern boundary lies a strip of semi-natural woodland predominantly Pedunculate Oak and Beech with Sycamore and Lime. The understorey and field-layer flora is sparse except along the woodland edge where the canopy is not over shaded. This had led to areas of bare ground and numerous informal footpaths being present throughout. The field-layer flora present includes Common Hogweed *Heracleum sphondylium*, Hedge Mustard *Sisymbrium officinale*, Red Campion *Silene dioica* and native Bluebell.

Along the central area north of the bank and ditch and within close proximity of the dry ditch and Waterhead Brook the woodland becomes semi-natural and lies flat close to the water table. Due to the presence of the brook and dry ditch, this area was likely a former island, possibly shaped by its former land use as a mill. However, due to the long time since this use the island characteristics have become indistinct in the majority of areas as the southern water channel has mostly dried out, except where weather conditions and its nature in holding water has caused pools of standing water. There are areas of inundation in proximity of the southern dry ditch which has resulted in a change in field-layer flora allowing for Tufted Hair-grass Deschampsia cespitosa, Pendulous Sedge Carex pendula, Remote Sedge Carex remota to be present, due to their association with water. The woodland canopy also becomes sparse within this area allowing for the understorey to grow further and becoming more dominant. In this area Crack Willow Salix fragilis, Yew Taxus baccata and Dogwood Cornus sanguinea are now present within the understorey, creating a more wet woodland setting with locally abundant Rhododendron Rhododendron ponticum.

The northern section of semi-natural woodland W1 lies on a south-facing free-draining slope which feeds Waterhead Brook and two woodland ponds created from a number of hollows within the woodland. The woodland itself is a mature Beech woodland with Ash, Sycamore, Oak, Hornbeam *Carpinus betulus* with dense areas of Rhododendron, and Cherry Laurel *Prunus laurocerasus* understorey, which is locally abundant in areas in close proximity to F1. In one localised area in the northern section numerous Scots Pine *Pinus sylvestris* are present. Otherwise the field-layer comprises Garlic Mustard *Alliaria petiolata*, Wild Angelica *Angelica sylvestris*, Barren Brome *Anisantha sterilis*, Cow Parsley *Anthriscus sylvestris*, Lords-and-Ladies *Arum maculatum*, Small Nettle *Urtica urens*, Wood Sage *Teucrium scorodonia* and Wood Dock *Rumex sanguineus*. The Field-layer is dominated by Bracken *Pteridium aquilinum* (locally abundant), Bramble *Rubus fruticosus agg.*, Wood Sedge *Carex sylvatica* (abundant near the brook), Wood Sorrel and native Bluebell which is locally abundant in the western end. Regeneration is present throughout the woodland. A large open glade is present within the western portion of the woodland, this area has become choked by the scrub with the southern section containing dense Bracken, while the northern section comprising a species mixture dominated by Common Nettle *Urtica dioica* and Bramble.

Semi-natural woodland compartment W2 was inaccessible at the time of the survey, therefore the assessment has been undertaken from the palisade fence line. Woodland W2 is a semi-natural extension of W1 as much the same composition as the drier areas, however, it was noted the W2 is currently undergoing works to the north of pond P1 which has resulted in bare areas and log piles. A bare earth track was noted within the eastern end of the compartment which had been used regularly, resulting in no field-layer flora. The understorey in the compartment appears to be denser than seen in W1 with Holly, Yew and Ash abundant with Sycamore and Pedunculate Oak. Where the woodland borders the stream the bankside appears to have been modified with ornamental shrub species present along the edge such as bamboo *Bambusoideae*.

Woodland W3 follows the Waterhead Brook and is seen as an extension of undisturbed semi-natural woodland comprising dense Alder and Ash canopy with a number of mature Pedunculate Oak. The understorey comprises Field Maple Acer campestre, Sycamore, Hazel Corylus avellana and Hawthorn Crataegus monogyna. The Sycamore, although present within the understorey, is slowly joining the canopy however, due to its younger age it has yet completed this. Sycamore, Holly and Horse Chestnut Aesculus hippocastanum regeneration is present. Along the brook wet woodland is present comprising Goat Willow Salix caprea, Common Sallow Salix cinerea, Lords-and-Ladies, Lesser Pond-sedge Carex acutiformis, Large Bitter-cress Cardamine amara, Wavy Bittercress Cardamine flexuosa, Opposite-leaved Golden-saxifrage Chrysosplenium oppositifolium, Tufted Hair-Grass, Broad Buckler-fern Dryopteris dilatata and Marsh Horsetail Equisetum palustre. In drier area the ground flora consists Common Nettle, Ivy, Wood Anemone Anemone nemorosa, Pignut Conopodium majus, Nipplewort Lapsana communis, Common Dog-violet Viola riviniana and Lesser Celandine Ranunculus ficaria.

There is evidence of a remnant hedge along northern edge comprising Oak and Ash and a small area of bare ground was denoted within the area with evidence of a small fire having recently occurred.

Phase 1 Name Scrub – dense / scattered Phase 1 Code A2.1 / A2.2

Within field F1, there is a localised patch of dense Blackthorn *Prunus spinosa* scrub, adjacent to hedgerow H2, due to selective grazing from horses and encroachment from the adjacent hedgerow.

Along the northern boundary of Field F1 lies areas of scattered immature Hawthorn scrub between five Pedunculate Oaks which denote a field boundary between two pasture fields. This is likely remnants of an old Hawthorn hedgerow.

There are numerous other areas of bramble and scattered scrub that are incorporated within the broadleaved woodland which are described within the relevant Phase 1 habitat category.

Phase 1 Name Scattered tree – Broadleaved Phase 1 Code A3.1

The majority of the mature trees found on site are located within hedgerows and the broadleaved woodland and as such have been detailed within the relevant phase 1 habitat sections below. However, seven mature Pedunculate Oak were noted within field compartment F1.

Phase 1 Name Species poor semi-improved grassland Phase 1 Code B6

Field Compartment F1 is located in the northern section of the site and is currently used as horse pasture with seven standard mature broadleaved trees, one pond and three inundated areas present within the compartment. These additional habitats are described under the relevant phase 1 habitat descriptions.

The sward is kept short through grazing and at the time of survey was up to 15cm in height. The sward diversity within the compartment was relatively low, being dominated by grass species comprising Perennial Rye-grass *Lolium perenne*, Annual Meadow-grass *Poa annua* and False Oat-grass *Arrhenatherum elatius* with occasional Yorkshire Fog *Holcus lanatus* and Sweet Vernal-grass *Anthoxanthum odoratum*. Forb species were frequent within the sward but dominated by competitive species such as Common Nettle, Broadleaved Dock *Rumex obtusifolius*, Creeping Buttercup *Ranunculus repens*, Creeping Thistle *Cirsium arvense* and Dandelion *Taraxacum officinale agg*. with Common Speedwell *Veronica persica*, Ragwort *Senecio jacobaea*, Yarrow *Achillea millefolium*, Field Forget-me-not *Myosotis arvensis*, White Clover *Trifolium repens*, Greater Plantain *Plantago major* and Common Mouse-ear *Cerastium fontanum* only present occasionally.

Areas of ruderal habitats, denoted on the phase 1 map, comprising Broadleaved Dock and Common Nettle were noted across the sward indicating local enrichment from horse manure.

Phase 1 Name Other tall herb and fern - Ruderal Phase 1 Code C3.1

Areas of tall ruderal vegetation were noted within field compartment F1 dominated by Common Nettle and Broadleaved Dock with Red Campion, due to localised nutrient enrichment by horses grazing within the compartment.

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

There are six waterbodies located within the site boundary.

The first pond is a large permanent ornamental pond, former mill pond, located within the central area of the site. Due to the palisade fencing and access restrictions for Moseley Hall and associated parkland no access to the bankside was possible. However, from the fencing, it was noted that the pond was surrounding by broadleaved woodland with the shore line dominated by Rhododendron, mature Ash, Beech, Hawthorn and Sycamore. The shore line appears to be dominated by areas of bare earth likely due to the heavy shading and presence of wild fowl however, Male Fern was noted.

The second and third ponds lie within woodland compartment W3 adjacent to each other. While pond P2 held some water at the time of the survey (up to 20cm of water in approximately half of the base of the pond) pond P3 was completed dry, however, there was evidence that the pond does hold water at certain times of the year. Therefore, it is assumed that both ponds will be seasonally wet. Due to their location within the woodland, leaf litter dominates the pond substrate and these suffer from large amounts of fly tipping with large objects such as tyres present.

Pond P2 contained no visible aquatic / marginal vegetation with bankside vegetation dominated by woodland field-layer flora, consisting of Common Nettle and Bluebell and woodland shrubs including Bramble, Holly, Lime, Hazel and Ash. Pond P3 was similar to P2 but included Cut-leaved Crane's-bill *Geranium dissectum* within the bankside vegetation.

Both ponds, due to the steep sided banks and location, can be assumed to be historically manmade structure rather than natural.

Pond P4 is located within field compartment F1 and is a small shallow-sided field pond. At the time of the survey the pond was holding water and appeared to hold water permanently. The banksides showed some poaching along edges where horses regularly go to drink, however, this does not appear to have been detrimental to the bankside structure as semi-mature trees and shrub was present comprising of Pedunculate Oak, Sycamore and Horse Chestnut, with large areas of Bulrush Typ*ha latifolia* and Yellow Iris *Iris pseudacorus* encompassing much of the pond edge.

The pond itself appeared to be up to half meter in depth, however, due to the presence of a distinct drainage channel being present to the west of the pond, it is likely that the pond responds greatly with weather and will often break its banks. This ditch leads directly to the two further ephemeral ponds within the field compartment.

Pond P5 and P6 are two ephemeral ponds located within compartment F1. While P6 was dry at the time of the survey, P5 did contain a few cm of water. The banksides were extremely shallow and poaching was evident within the pond and along the bank

edges. No pond edge vegetation was denoted with only the grassland species present except a small patch of Yellow Iris noted on the banks of pond P5. However, the central area of the ponds was dominated by Water Crowfoot *Ranunculus aquatilis* especially in P5 where Broadleaved Dock and Cock's Foot *Dactylis glomerata* were present only occasionally. Within pond P6 other forbs were more frequent such as Great Willowherb *Epilobium hirsutum*, Bulbous Buttercup *Ranunculus bulbosus*, Floating Sweet-grass *Glyceria fluitans* and Field Horsetail *Equisetum arvense*, suggesting that the pond dries out more often than pond P5. All three ponds are connected and appear to drain into each other before draining into the hedgerow ditch.

Phase 1 Name Running water Phase 1 Code G2

One brook is present within the survey running east to west across the centre of the site feeding into and draining from pond P1. It is identified as Waterhead Brook.

The eastern section of the stream is approximately 2 metres in width and 1/2 metre in depth, with steep banks and a combination of silt and leaf litter substrate in the majority, however, peddles substrate was present in localised areas. While present within the survey area the stream remains heavily shaded by the adjacent woodland with banksides dominated with semi-mature to mature woodland trees and woodland ground flora comprising Yellow Archangel *Lamiastrum galeobdolon subsp. montanum*, Wood Sage, Nettle, Elder, Sycamore, Red Campion and Horse Chestnut. In localised areas aquatic vegetation is noted along its banks in the form of Pendulous and Remote Sedge. In addition, Himalayan Balsam is locally abundant along the stream just before it joins pond P1. The stream itself at the time of the survey had a moderate flow with variation in channel structure including small riffles and pools forming, otherwise the majority of the channel was straight which may indicate modification of its structure by man, likely due to the pond historical use as a mill pond.

The western section is approximately 3 metres in width and half a metre deep. A small portion of the brook has been culverted under the public footpath to the west of the pond P1, the rest being open until it meets the western boundary where it enters into a brick culvert. The stream shows a moderate flow, due to the deep brown colour of the water it can be ascertained that the stream is carrying silt downstream. However, the banks and stream floor were noted to be predominantly silt with occasional deposition of gravels.

Within woodland compartment W2 (not accessible) it could be seen that along the banks numerous ornamental planting was present including bamboo along with native woodland species such as Ash, Sycamore and Hawthorn.

Within woodland W4 the stream vegetation becomes was more diverse species comprising Lords-and-Ladies, Lesser Pond-sedge, Large Bitter-cress, Wavy Bittercress, Opposite-leaved Golden-saxifrage, Tufted Hair-Grass, Broad Buckler-fern and Marsh Horsetail. While the stream itself shows naturalised meanders and variation in its structure.

Phase 1 Name Intact Hedgerow with trees Phase 1 Code J2.3

Hedgerow H1 is a Hawthorn dominant intact hedgerow with mature Pedunculate Oak trees, located along the eastern boundary of Field compartment F1, which includes occasional Sycamore, Blackthorn, Hazel and Elder with a field-layer flora comprising Male Fern, Common Nettle, Meadow Buttercup, Grey Willow Salix cinerea, Bluebell, Broad leaved Dock, Cuckoo flower Cardamine pratensis, Creeping Thistle, White Dead-nettle Lamium album, Red Campion and Common Hogweed. The hedgerow itself is 5m tall by 3m wide and managed on the site side to stop encroachment of the hedgerow within the adjacent field. Stock-proof fencing is present within the hedgerow.

Hedgerow H2 is Hawthorn and Blackthorn dominated intact hedgerow with mature Pedunculate Oak, Ash and Sycamore trees located along the northern boundary of field compartment F1. The hedgerow is sectioned with the eastern end dominated by Hawthorn and the western side by Blackthorn. The field-layer flora species includes Soft rush *Juncus effusus*, Meadowsweet, Field Forget-me-not, Bramble, Common Speedwell, Meadow Buttercup, Dandelion, Cleavers *Galium aparine*, Foxglove *Digitalis purpurea*, Hedge Mustard, Field Horsetail and Common Nettle. The field-layer flora is less dense under the blackthorn where it is heavily shaded, limiting the field-layer flora to few species including Cleavers, Ivy and Lesser Stitchwort. The hedgerow itself is 5m tall by 3m wide although it narrows greatly to 1.5m where Blackthorn predominates, while a dry ditch with steep sides runs the length of the hedgerow. Due to the presence of Soft Rush within the field-layer flora and that the ponds drain into the ditch it can be ascertained the ditch will hold water periodically. The hedgerow is managed through irregularly flail cutting which has caused gaps to start forming but also allowed Blackthorn to encroach into the field creating an area of dense scrub. Stock-proof fencing is present throughout the hedgerow.

Hedgerow H3 is a Holly dominated hedgerow with scrub species including Elder and two mature Ash located on the western edge of field F1. The field-layer flora is dominated by Meadowsweet, Foxglove, Soft Rush, Water Forget-me-not, Hedge Mustard and Common Field Speedwell. The hedgerow itself is 10m tall x 5m wide and is subject to irregular management which has caused the hedgerow to become defunct. A stock-proof fence is present on the outer edge of the hedgerow.

Phase 1 Name Dry ditch Phase 1 Code J2.6

Two dry ditches are present within the site boundary.

The first lies along the southern boundary of pond P1 and extends east into the broadleaved woodland where it meets the brook which intersects the northern and southern portion of the broadleaved woodland. The ditch itself where it is located south of P1 contains steep sides and is likely a drainage channel for times of heavy rainfall. However, no aquatic or marginal vegetation was noted within the ditch itself suggesting the ditch has not held water for some time. The ditch was heavily shaded by Rhododendron and contained little to no vegetation. Where the ditch intersects from P1 and extends to the brook the banks becomes shallow sided and small areas are either damp underfoot or contain a few cm of standing water. These areas denote the path of the brook otherwise it can be indistinct from the woodland. The bankside vegetation is predominantly of woodland flora with large area of bare banks. No aquatic vegetation other than Pendulous Sedge is noted along its bank.

The second ditch lies within the eastern portion of woodland W3. The ditch itself runs from adjacent offsite fields to the onsite stream. The ditch comprises of steep banks and is approximately 0.5m in width. No aquatic / marginal vegetation was noted, with the ditch substrate being predominantly pebbles and leaf litter. At the time of the survey the ditch was damp in the majority however, a small trickle of water was present in one area suggesting water levels vary greatly in line weather conditions.

Notes

Phase 1 Name	Phase 1 Code	EHD	NERC	LBAP	Rarity	Year Recorded
Lowland Mixed Deciduous Woodland	A11		Υ			2019
Hedgerows (Intact, with trees)	J23		Υ			2019
Ponds (Standing Water)(Mesotrophic)	G12		Υ			2019
Notes						

Species of Note [2]							
Flora							
Species	Statutory	NERC	LBAP	RDL	Rarity	Axiophyte	Year Recorde d
Adoxa moschatellina - Moschatel					R	BBCF_Ax	2008
Anemone nemorosa - Wood Anemone					F	BBCF_Ax	1988
Angelica sylvestris - Wild Angelica					F	BBCF_Ax	2000
Athyrium filix-femina - Lady-fern					F	BBCF_Ax	2000
Brachypodium sylvaticum - False-brome					F	BBCF_Ax	2000
Bromopsis ramosa - Hairy-brome					F	BBCF_Ax	2000
Caltha palustris - Marsh-marigold					F	BBCF_Ax	2000
Cardamine amara - Large Bitter-cress					R	BBCF_Ax	2000
Carex acutiformis - Lesser Pond-sedge					F	BBCF_Ax	1989
Carex remota - Remote Sedge					F	BBCF_Ax	2000
Carex sylvatica - Wood-sedge					U	BBCF_Ax	2019
Chrysosplenium oppositifolium - Opposite- leaved Golden-saxifrage					U	BBCF_Ax	2000
Cirsium palustre - Marsh Thistle					F	BBCF_Ax	2000
Dioscorea communis - Black Bryony					F	BBCF_Ax	2000
Epipactis helleborine - Broad-leaved Helleborine			Y		R	BBCF_Ax	2000
Equisetum fluviatile – Water Horsetail					U	BBCF_Ax	1989
Equisetum palustre - Marsh Horsetail					U	BBCF_Ax	2019
Festuca gigantea - Giant Fescue					F	BBCF_Ax	2000
Filipendula ulmaria - Meadowsweet					F	BBCF_Ax	1989
Hyacinthoides non-scripta - Bluebell	WCA S8		Y		С		2000
Mercurialis perennis - Dog's Mercury					F	BBCF_Ax	2000
Moehringia trinervia - Three-nerved Sandwort					R	BBCF_Ax	1989
Oxalis acetosella - Wood-sorrel				RLGB .Lr(NT	U	BBCF_AX	2000
Persicaria hydropiper - Water-pepper				,	U	BBCF_Ax	1989
					U	BBCF_Ax	2019
Poa nemoralis - Wood Meadow-grass						DDCE Av	2000
Quercus petraea - Sessile Oak					U	BBCF_Ax	2000
Ribes rubrum - Red Currant Rorippa microphylla - Narrow-fruited Water-	-				U VR		1989
Cress	-					DDCE Av	
Stellaria alsine - Bog Stitchwort					U	BBCF_Ax	1989
Teucrium scorodonia - Wood Sage Valeriana officinalis - Common Valerian				RLGB .Lr(NT	U R	BBCF_Ax BBCF_Ax	1989
Veronica beccabunga - Brooklime				<u> </u>	F	BBCF_Ax	2000
Veronica montana - Wood Speedwell					U	BBCF_Ax	1989
·				RLGB .Lr(NT	R	BBCF_Ax	2000
Veronica officinalis - Heath Speedwell		-)			2040
Viburnum lantana - Wayfaring-tree					R		2019
Notes The flora list provided are known spec	cies recorded v	within the s	site bound	ary.			
Species	Statutory	NERC	LBAP	RDL	Concern	Rarity	Year Recorde

Bird							
Anas platyrhynchos - Mallard					BAmb	С	1989
Apus apus - Swift					BAmb	С	1989
Columba oenas – Stock Dove					BAmb	F	1989
Delichon urbicum – House Martin					BAmb	F	1989
Emberiza citronella - Yellowhammer		Y			BRed	С	1989
Motacilla cinerea – Grey Wagtail					BRed	F	2000
Muscicapa striata- Spotted Flycatcher		Y			BRed	F	1989
Passer domesticus – House Sparrow		Y			BRed	VC	1989
Poecile montana – Willow Tit		Y			BRed	F	1989
Pyrrhula pyrrhula - Bullfinch		Y			BAmb	С	1989
Strix aluco – Tawny Owl					BAmb	F	1989
Sturnus vulgaris – Starling		Y			BRed	VC	1989
Turdus philomelos – Song Thrush		Y	Y		BRed	С	2000
Turdus viscivorus – Mistle Thrush					BRed	С	2000
Invertebrates							
Coenonympha pamphilus – Small Heath		Y		RLGB. Lr(NT)		U	2000
Mammals							
Lepus europaeus – Brown Hare		Y	Y	ND		R	2004
Meles meles – Eurasian Badger	PBA					С	2000
Mustela ermine – Stoat						U	2000
Mustela nivalis - Weasel						U	1988
Neomys fodiens - Eurasian Water Shrew						R	1989
Sorex araneus - Eurasian Common Shrew					MS_Statu s_Dec	U	1989

Notes

During the Local site survey, a one hole outlier Badger *Meles* meles sett was identified within woodland compartment W1, at the time of survey it was assessed to be partially used.

Site/Habitat Suitability for Other Species of Note (not recorded during the survey)

Description/Notes

The mature trees on site have potential to provide roosting features for bats. While the hedgerow and broadleaved woodland provides foraging and commuting habitat for the local bat populace.

The ponds noted on-site offer potential aquatic habitat for Great Crested Newt *Triturus cristatus* and other amphibians. The inundation areas and ponds within field compartment F1 contain suitable egg-laying material, in forming of Floating Sweet-grass, and being adjacent to optimal terrestrial habitat in the form of hedgerow and woodland. In addition, the network of hedgerows on site provides sheltering and commuting habitat for Great Crested Newt and other amphibians.

The habitats on site provide suitable foraging habitat for the European Hedgehog Erinaceus europaeus.

Invasive Species [3]						
Species	Location	Abundance (DAFOR)	Year Recorded			
Impatiens glandulifera – Himalayan Balsam	SJ931037	Abundant (Locally)	2019			
Rhododendron ponticum - Rhododendron	SJ931037, SJ933037 and SJ930037	Abundant	2019			
Notes						

Geology				
Solid/Drift Formation	The site is encompassed by Chester formation – Sandstone and conglomerate. Superficial deposits of Till, Devensian – Diamicton are recorded in around half of the site.			
Description	Chester Formation - Sandstone and conglomerate, interbedded. Sedimentary bedrock formed between 250 and 247.1 million years ago during the Triassic period.			
Features of Value				
1 None recorded.				

Soils

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

Land Use	A combination of public open space, horse grazing pasture and privately owned parkland.				
Access Level Unrestricted except for the woodland compartment W2, the northern section of W1 and field F1 which restricted.					
Access Type(s)	The southern section of woodland compartment W1 and W3 is open to the public and contains a number of public rights of way. However, the northern section of W1, W2 and F1 is restricted.				

Comparison with Previous Survey(s) Results

Previous surveys have been undertaken in 1989 and 2000 when the Birmingham and Black Country Wildlife Trust undertook Local Site Assessments of Moseley Hall SINC. Both concluded that the site met the threshold for SINC status and as such the site has retained the designation since 1977. However, the northern field compartment was not included within the assessment. With the 2000 Local Site Assessment report providing management recommendations focused on maintaining and enhancing the current diverse woodland with thinning, coppicing and new planting, with a focus on Sycamore control. With the aim to maintain the natural composition of the woodland.

Summary of Assessment

When assessed against the Birmingham & Black Country Local Sites Selection Criteria Moseley Hall scores High against most of the ecological criteria. The site, therefore, meets the threshold for selection as a Site of Importance for Nature Conservation (SINC).

Recomm	nendations (including further survey & site management/enhancement)
1	The intact hedgerows should be placed under active management to maintain and enhance the hedgerow structure and density. This should involve annual trimming outside nesting bird season. It should also include the infilling of any sparse areas, with native species, to enhance species diversity.
2	Removal of invasive species such as Himalayan balsam to prevent further spread within the surrounding habitats.
3	Control Sycamore understorey to ensure species diversity within the woodland. Areas with few Sycamores could have all Sycamore removed, whilst dense Sycamore could be managed to gradually remove it.
4	Control of Rhododendron and Cherry Laurel should be considered to prevent areas becoming further dominated, such as an area in the north section of Wood W1 and around Pond P1, that lack tree regeneration and establishment of marginal wetland vegetation, respectively.
5	Woodland pond (P2 and P3) would respond positively to the clearance of the silt and rubbish accumulation within them. This would allow wetland species to establish in the area.
6	The onsite ditches should be retained and managed by traditional means with minimal disturbance.
7	Details of the ecological value of the site and advice on how best to manage the survey area to retain its value should be provided to the private landowner.
8	Further fauna surveys, in particular for Great Crested Newt and bats, should be undertaken to access the value of the site for protected species.

Data Sources		
	Source	Date
Species and Habitat Data Source(s)	Samantha Pritchard and Tanya Petrovic, The Wildlife Trust for Birmingham and the Black Country	
Data Source(s)	Ecorecord data search 2018	
Geological Data Source(s)	British Geological Society 1:50,000 bedrock & superficial deposits GIS web map services from BGS website	18/06/2019
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, November 2019	15/11/2019
Assessment Author and Organisation	Samantha Pritchard, The Wildlife Trust for Birmingham and the Black Country	15/11/2019

[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 = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads, or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads or 5Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species present in 1.0% - 4.3% of 1Km squares in B&BC | R = Very Rare - a species

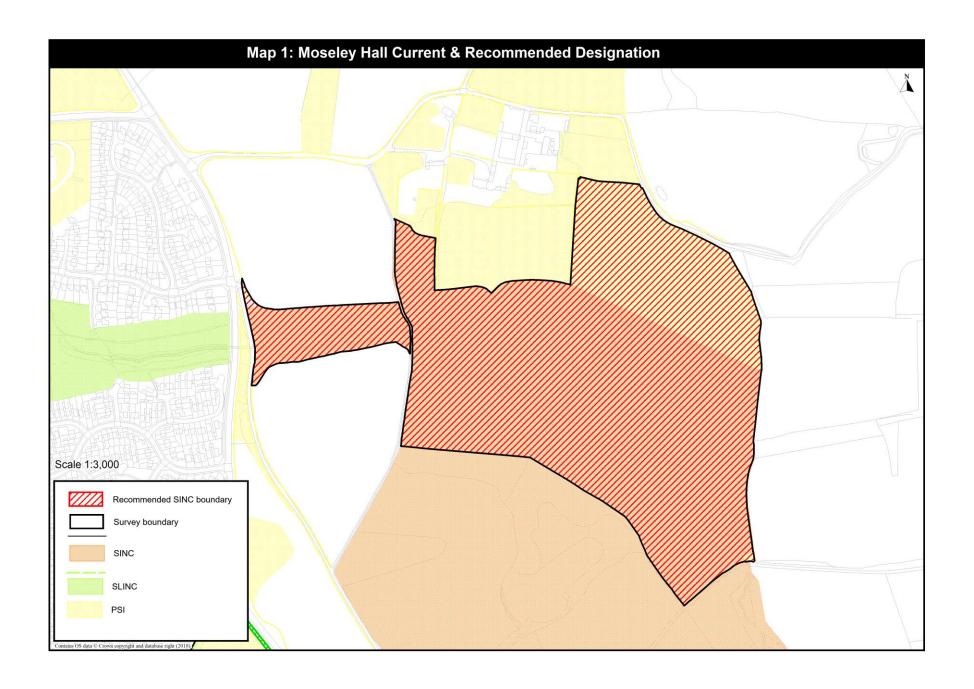
AXIOPHYTE - BBCF_Ax = included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord).

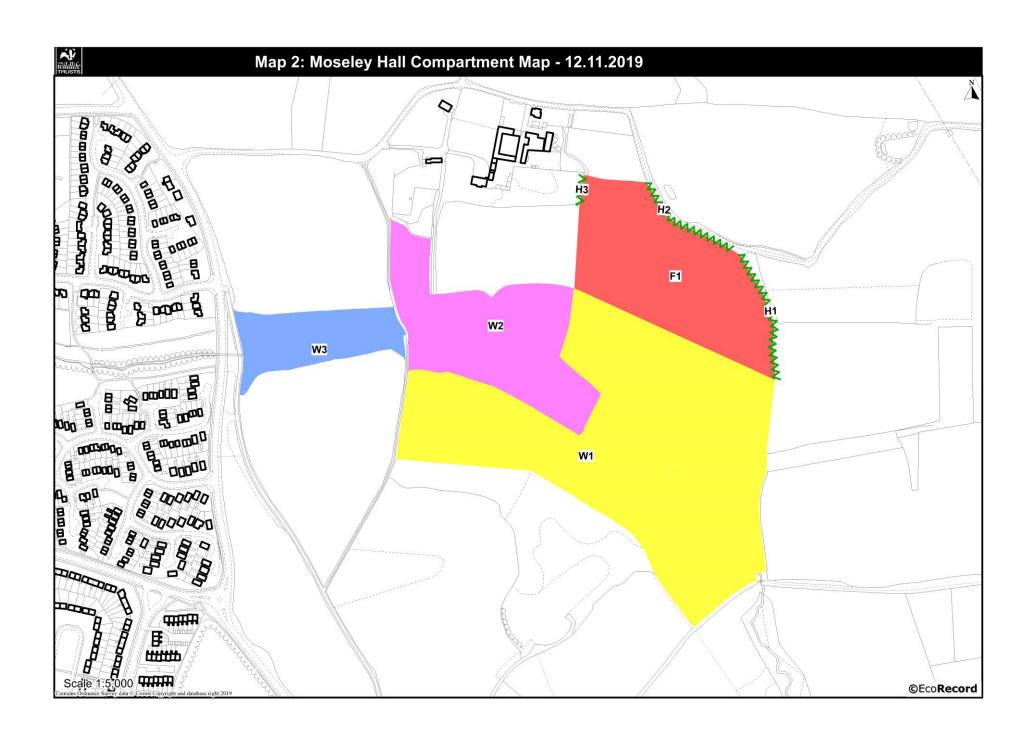
YEAR - The most recent year the species has been recorded.

CONCERN (FAUNA SPECIES OF CONSERVATION CONCERN) -

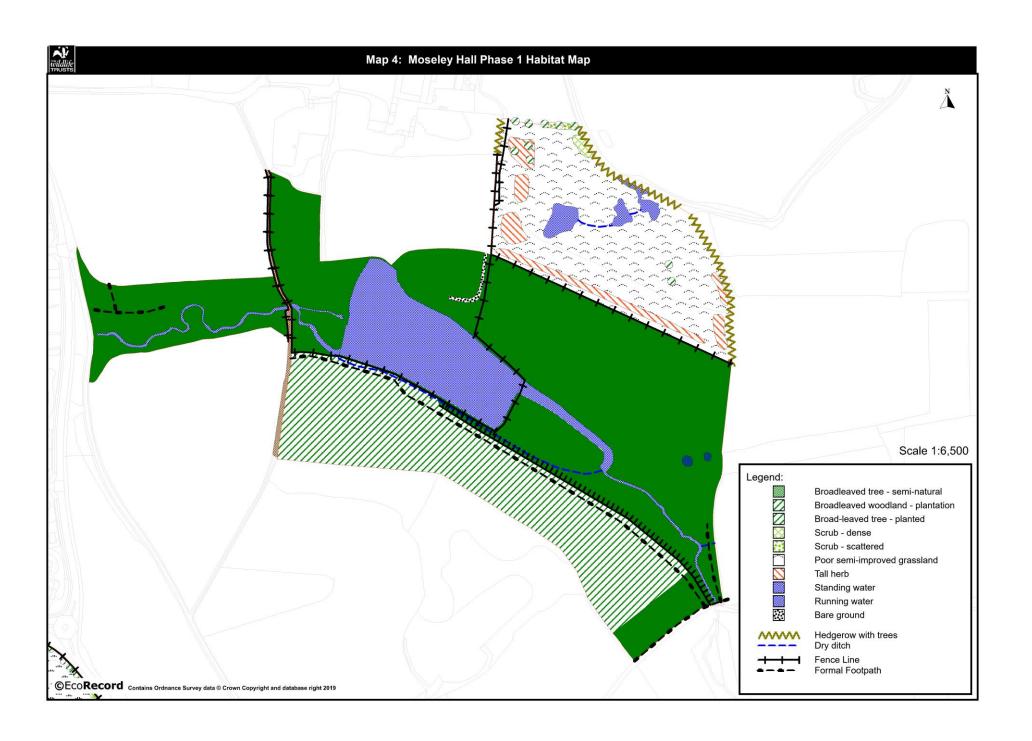
Birds: *BRed* = Birds of Conservation Concern Red List - bird species of high conservation priority needing urgent conservation action. This encompasses species that are Globally Threatened according to the International Union for Nature Conservation criteria; those whose population or range has declined 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.

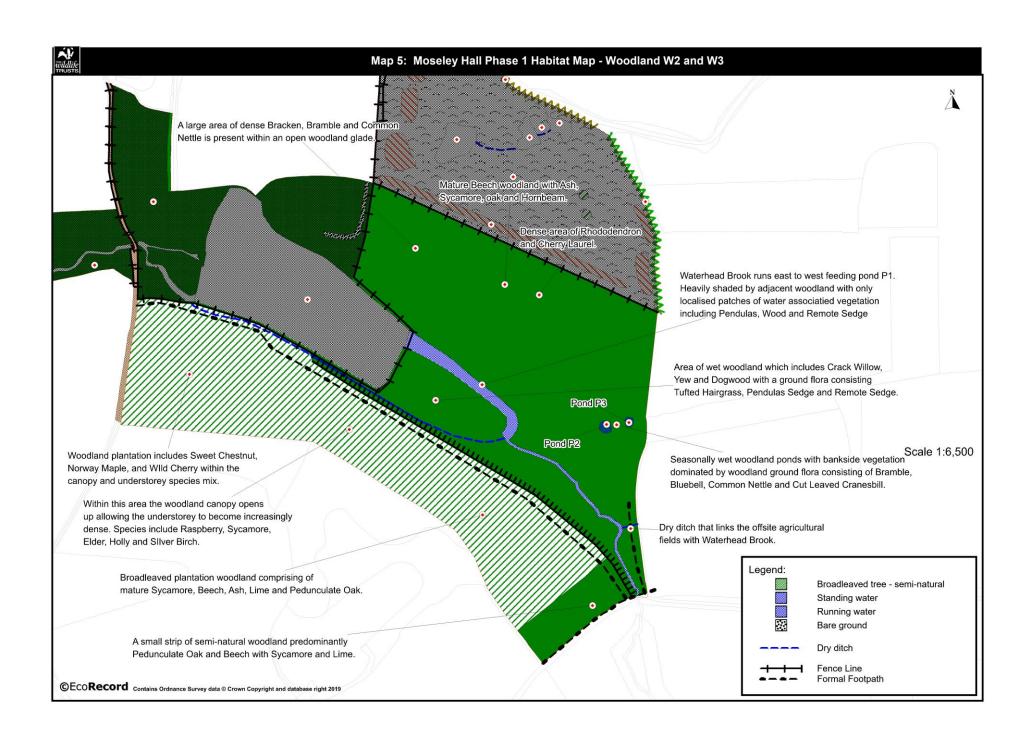
[3] Species listed on Schedule 9 part 1 (animals) and part 2 (plants) of the Wildlife and Countryside Act 1981 as amended - this lists animals which may not be released or allowed to escape into the wild and plants which may not be planted or otherwise caused to grow in the wild.

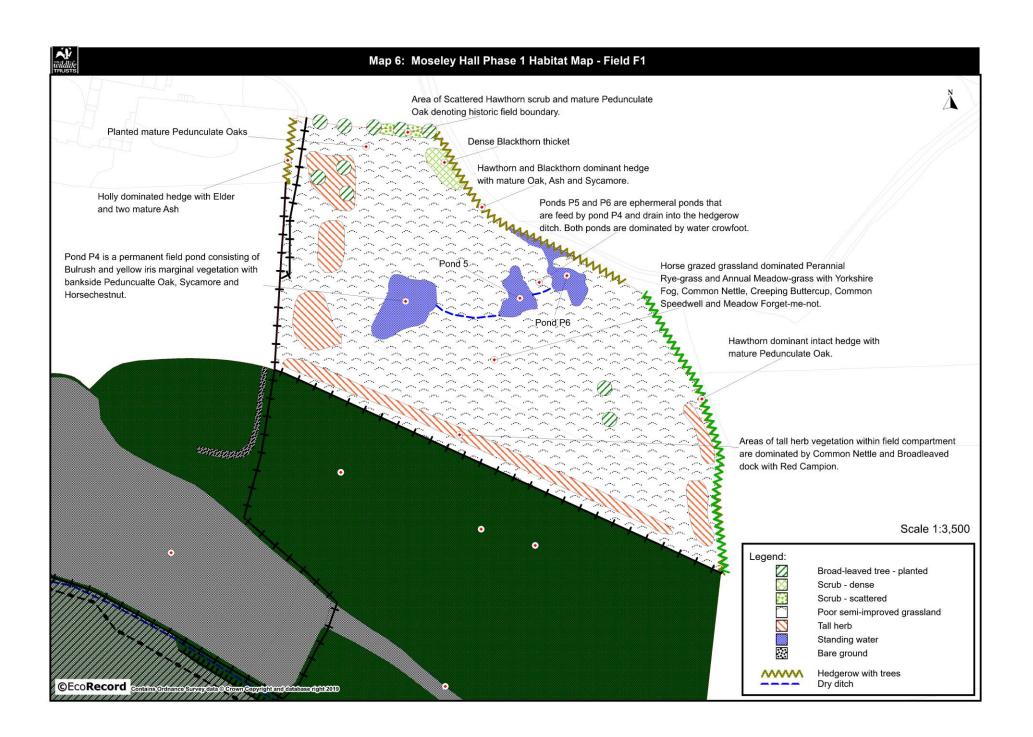


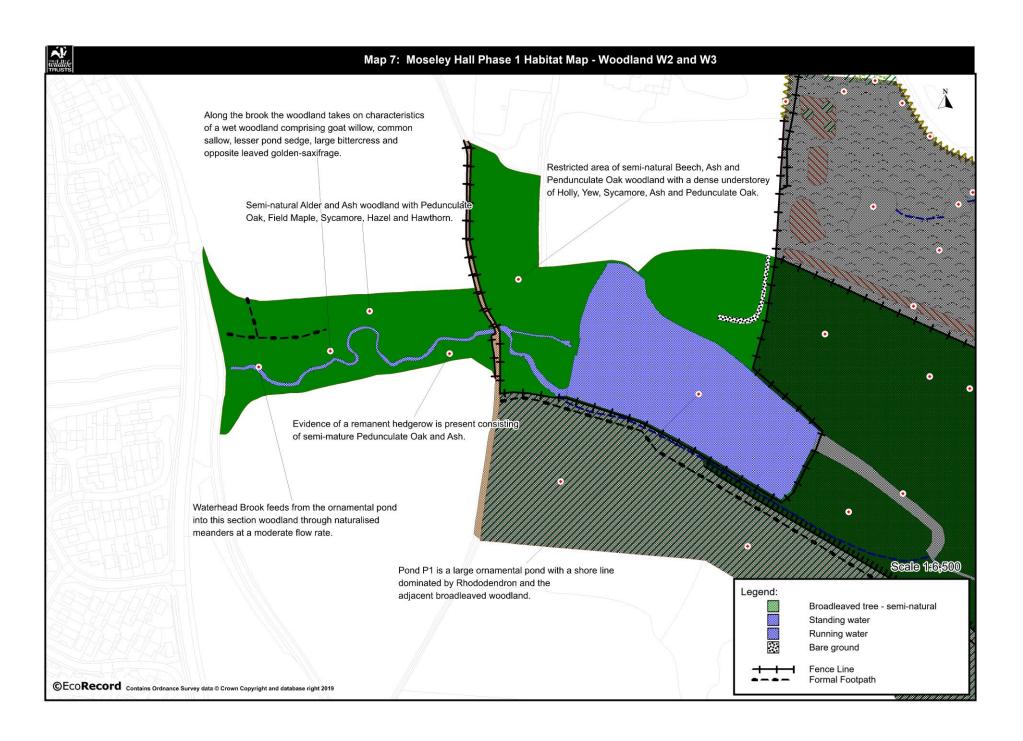












Site Photographs



Photograph 1: Area of semi-natural broadleaved woodland within compartment W3



Photograph 2: Waterhead Brook abounded by wet woodland habitat



Photograph 3: Horse grazed species poor semi-improved grassland field containing numerous mature Pedunculate Oak trees and three waterbodies.



Photograph 4: Eastern end of pond P4 showing the extent of marginal vegetation and bankside trees present. Fallen dead wood can also be seen within the photo.



Photograph 5: Pond P5 at the time of the survey holds a few centimetres of water in areas with Common Water-crowfoot dominanting the surface of the pond.



Photograph 6: Localised damp areas along the dry ditch within Woodland W1.



Photograph 7: Area of broadleaved woodland plantation with limited understorey.



Photograph 9: Small section of remnant hedgerow along the northern boundary of Field F1 containing areas of scattered Hawthorn scrub and mature Pedunculate Oak.

Compartment F1 - The Brockills (east)	
Scientific Name	Common Name
Acer pseudoplatanus	Sycamore
Achillea millefolium	Yarrow
Anthoxanthum odoratum	Sweet Vernal-grass
Arrhenatherum elatius	False Oat-grass
Caltha palustris	Marsh-marigold
Cerastium fontanum	Common mouse-ear
Cirsium arvense	Creeping Thistle
Epilobium hirsutum	Great Willowherb
Equisetum arvense	Field Horsetail
Galium aparine	Cleavers
Glyceria fluitans	Floating Sweet-grass
Holcus lanatus	Yorkshire-fog
Iris pseudacorus	Yellow Iris
Lolium perenne	Perennial Rye-grass
Myosotis arvensis	Meadow Forget-me-not
Plantago major	Greater Plantain
Poa annua	Annual Meadow-grass
Poa trivialis	Rough Meadow-grass
Prunus spinosa	Blackthorn
Quercus robur	Pedunculate Oak
Ranunculus bulbosus	Bulbous Buttercup
Ranunculus repens	Creeping Buttercup
Rumex obtusifolius	Broad-leaved Dock

Senecio jacobaea Common Ragwort Silene dioica **Red Campion**

Stellaria media Common Chickweed

Taraxacum officinale agg. Dandelion Trifolium repens White Clover Typha latifolia Bulrush

Urtica dioica Common Nettle Urtica urens Small Nettle

Veronica persica Common Field-speedwell

Compartment H1 - The Brockhills (east) Hedge - east

compartment 112 The Brookinns (case) freuge case						
Scientific Name	Common Name					
Acer pseudoplatanus	Sycamore					
Cardamine pratensis	Cuckooflower					
Cirsium arvense	Creeping Thistle					
Corylus avellana	Hazel					
Crataegus monogyna	Hawthorn					
Dryopteris filix-mas	Male-fern					
Heracleum sphondylium	Hogweed					
Hyacinthoides non-scripta	Bluebell					
Lamium album	White Dead-nettle					
Prunus spinosa	Blackthorn					
Quercus robur	Pedunculate Oak					
Ranunculus acris	Meadow Buttercup					

Rumex obtusifolius Broad-leaved Dock

Salix cinerea subsp. oleifolia Rusty Willow

Sambucus nigra Elder

Silene dioica Red Campion
Urtica dioica Common Nettle

Compartment H2 - Moseley Road Hedge - south

Compartment 112 - Woseley Road Hed	ge - south
Scientific Name	Common Name
Acer pseudoplatanus	Sycamore
Cardamine pratensis	Cuckooflower
Crataegus monogyna	Hawthorn
Digitalis purpurea	Foxglove
Equisetum arvense	Field Horsetail
Filipendula ulmaria	Meadowsweet
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Hedera helix subsp. helix	Common Ivy
llex aquifolium	Holly
Juncus effusus	Soft-rush
Myosotis scorpioides	Water Forget-me-not
Prunus spinosa	Blackthorn
Quercus robur	Pedunculate Oak
Ranunculus repens	Creeping Buttercup
Rubus fruticosus agg.	Bramble
Sisymbrium officinale	Hedge Mustard
Stellaria graminea	Lesser Stitchwort
Taraxacum officinale agg.	Dandelion
Urtica dioica	Common Nettle
Veronica persica	Common Field-speedwell

Compartment H3 - The Brockhills (east) Hedge - west

Scientific Name	Common Name
Fraxinus excelsior	Ash
Galium aparine	Cleavers
llex aquifolium	Holly
Ranunculus repens	Creeping Buttercup
Sambucus nigra	Elder
Taraxacum officinale agg.	Dandelion
Urtica dioica	Common Nettle

Compartment W1

Scientific Name	Common Name
Acer pseudoplatanus	Sycamore
Acer platanoides	Norway Maple
Aesculus hippocastanum	Horse-chestnut
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Anisantha sterilis	Barren Brome

Anthriscus sylvestris Cow Parsley
Arum maculatum Lords-and-Ladies

Betula pendula Silver Birch

Carex pendulaPendulous SedgeCarex remotaRemote SedgeCarex sylvaticaWood-sedgeCarpinus betulushornbeamCastanea sativaSweet Chestnut

Circaea lutetiana Enchanter's-nightshade

Cornus sanguineaDogwoodCorylus avellanaHazelCrataegus monogynaHawthorn

Deschampsia cespitosa Tufted Hair-Grass

Dryopteris filix-mas Male-fern

Epilobium hirsutum Great Willowherb

Fagus sylvatica Beech

Filipendula ulmaria Meadowsweet

Fraxinus excelsior Ash
Galium aparine Cleavers

Geranium dissectum Cut-leaved Crane's-bill

Geranium robertianumHerb-RobertGeum urbanumWood AvensHedera helix subsp. helixCommon IvyHeracleum sphondyliumHogweedHyacinthoides non-scriptaBluebellIlex aquifoliumHolly

Impatiens glanduliferaIndian BalsamLamiastrum galeobdolonYellow ArchangelLamium purpureumRed Dead-nettleLonicera periclymenumHoneysuckleMercurialis perennisDog's MercuryOxalis acetosellaWood-sorrelPinus sylvestrisScots Pine

Poa nemoralis Wood Meadow-grass

Prunus aviumWild CherryQuercus roburPedunculate OakRanunculus repensCreeping ButtercupRhododendron ponticumflowering plant

Ribes Currant
Rubus fruticosus agg. Bramble
Rubus idaeus Raspberry

Rumex obtusifolius Broad-leaved Dock

Rumex sanguineus Wood Dock

Salix euxina x alba = S. x fragilis Hybrid Crack-willow

Sambucus nigra Elder

Silene dioica Red Campion
Sisymbrium officinale Hedge Mustard

Sorbus aucuparia Rowan

Stachys sylvatica Hedge Woundwort

Taraxacum officinale agg. Dandelion
Taxus baccata Yew

Teucrium scorodonia Wood Sage

Tilia platyphyllos x cordata = T. x

europaea Lime

Urtica dioicaCommon NettleUrtica urensSmall Nettle

Veronica persica Common Field-speedwell

Viburnum lantana Wayfaring-tree
Viola riviniana Common Dog-violet

Compartment W3 - Waterhead Brook Wood

Scientific NameCommon NameAcer campestreField MapleAcer platanoidesNorway MapleAcer pseudoplatanusSycamoreAesculus hippocastanumHorse-chestnut

Alnus glutinosa Alder

Alliaria petiolata

Anemone nemorosa Wood Anemone Apium nodiflorum Fool's-water-cress Lords-and-Ladies Arum maculatum Brachypodium sylvaticum False-brome Caltha palustris Marsh-marigold Cardamine amara Large Bitter-cress Cardamine flexuosa Wavy Bitter-cress Carex acutiformis Lesser Pond-sedge Opposite-leaved Golden-

Garlic Mustard

Chrysosplenium oppositifolium saxifrage

Circaea lutetiana Enchanter's-nightshade

Conopodium majusPignutCorylus avellanaHazelCrataegus monogynaHawthorn

Deschampsia cespitosaTufted Hair-GrassDryopteris dilatataBroad Buckler-fern

Dryopteris filix-mas Male-fern
Equisetum arvense Field Horsetail
Equisetum palustre Marsh Horsetail

Fagus sylvatica Beech Fraxinus excelsior Ash Galium aparine Cleavers Geranium robertianum Herb-Robert Geum urbanum Wood Avens Hedera helix subsp. helix Common Ivy Heracleum sphondylium Hogweed Hyacinthoides non-scripta Bluebell Ilex aquifolium Holly

Lamiastrum galeobdolon subsp.

argentatum Yellow Archangel
Lapsana communis Nipplewort

Larix deciduaEuropean LarchMercurialis perennisDog's MercuryOxalis acetosellaWood-sorrel

Poa trivialis Rough Meadow-grass

Prunus aviumWild CherryPrunus cerasiferaCherry PlumPrunus laurocerasusCherry LaurelQuercus roburPedunculate OakRanunculus ficariaLesser CelandineRanunculus repensCreeping Buttercup

Ribes Currant
Rosa arvensis Field-rose
Rosa canina Dog-rose
Rubus fruticosus agg. Bramble

Rumex obtusifolius Broad-leaved Dock

Rumex sanguineusWood DockSalix capreaGoat WillowSalix cinereaCommon SallowSalix euxina x alba = S. x fragilisHybrid Crack-willow

Sambucus nigra Elder

Silene dioica Red Campion
Solanum dulcamara Bittersweet

Stachys sylvaticaHedge WoundwortUrtica dioicaCommon NettleValeriana officinalisCommon ValerianViola rivinianaCommon Dog-violet

FAUNA

Whole Site

Scientific Name	Common Name
Anas platyrhynchos	Mallard
Branta canadensis	Canada Goose
Parus major	Great Tit
Pica pica	Magpie
Turdus merula	Blackbird
Meles meles	Eurasian Badger