Ashby Farm, Northwood
Ecological Appraisal Report
Holland and Holland
12 March 2026

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1 Introduction

1.1 BACKGROUND

1.1.1 This report presents a Preliminary Ecological Appraisal (PEA) and the Biodiversity Net Gain (BNG) calculation using the statutory metric for Ashby Farm, Ducks Hill Road, Northwood HA6 2SS, henceforth known as 'the Site'. The Site is centred approximately on ordnance survey grid reference TQ07519004 and is displayed in Figure 1.

1.1.2 The site incorporates an existing main shooting facility operated by Holland and Holland, with a reception building, function space and other associated workshops and stores constructed in 2017, as well as two small residential properties known as Ashby Cottages. The southeast area of the site is a derelict farmhouse and approximately nine associated storage buildings and barns. The most western area of the site comprises a clay pigeon shoot area, bordered by mature treelines and hedgerows.

1.1.3 It is understood that the Survey Area operates in part as an equestrian business under tenancy, including a livery with some general storage uses taking place within the various buildings. Several adjacent fields within the wider survey area are understood to be regularly used for grazing purposes.

1.1.4 As shown on the Landscape Masterplan, Wider Landscape plan (Andysturgeon Design 2026) current proposals include demolition of all existing storage barns within the development Site, in order to facilitate development of a new two-storey, part-subterranean gun making facility, including the creation of a proposed agricultural track, attenuation pond and natural regeneration of grassland habitats and enhancements to existing hedgerows. The derelict farmhouse within the wider survey area is not planned for demolition within these proposals.

1.1.5 All ecology work required for the production of this PEA and the associated BNG calculations were undertaken by Davidson-Watts Ecology Ltd on behalf of Holland and Holland.

1.2 AIMS AND OBJECTIVES

1.2.1 From 2nd April 2024, Biodiversity Net Gain became mandatory for all small developments under The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024 (with some exclusions). In England, biodiversity net gain is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This is referred to as biodiversity net gain in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.

1.2.2 Biodiversity net gain has been defined as 'development that leaves biodiversity in a better state than before, and an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation' (Baker, 2016).

1.2.3 The site was initially assessed in 2024, however as proposals developed a new redline boundary was proposed to encompass an area to the west, proposed for construction of a new farm track and an area to house spoil during the development, in response to the updated redline boundary, as depicted on the landscape masterplan (Andysturgeon Design, 2026) the site was therefore reassessed in 2025 and 2026, this report presents the findings of the

updated ecological assessment and evaluates the findings against the updated proposals. Further details of the updated field survey and methodology are provided within section 3 of this report. Therefore, specifically the objectives of this report are to:

- To identify and describe all valuable ecological receptors associated with the proposed development,
- To determine the requirement, if any, for further survey effort that will inform any subsequent mitigation measures necessary to ensure compliance with nature conservation legislation and planning policy;
- To make recommendations for avoidance, mitigation, compensation and enhancement in line with best practice requirements, and
- To identify how Biodiversity Net Gain could be achieved on the land in line with national legislative requirements.

2 Planning Policy

2.1 NATIONAL PLANNING POLICY

2.1.1 The National Planning Policy Framework (NPPF) (2024) Chapter 15 outlines how the planning system should contribute to and enhance the natural and local environment by protecting sites of biodiversity, recognising the wide benefits from natural capital, minimising impacts on and providing net gains for biodiversity. If a proposed development would result in significant harm to the natural environment, Site of Special Scientific Interest or irreplaceable habitats which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort), then planning permission should be refused. Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

2.1.2 To minimise impacts on biodiversity and geodiversity, planning policies should identify and map components of the local ecological networks, including the hierarchy of sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat management, enhancement, restoration or creation, promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing a strategic approach to maintaining and enhancing networks of habitats.

2.1.3 The NPPF retains protection for Local Wildlife Sites which are clearly recognised in the framework as locally designated sites of importance for biodiversity (Paragraph 193). The policy provides the direction for local authorities to identify, map and protect these sites through local plans. The new policy also requires protection of Local Wildlife Sites to recognise the importance and the contribution that they make to wider ecological networks, as stated in the Government's own Natural Environment White Paper.

2.1.4 The government circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System still remains the key reference material to support obligations under the NPPF.

2.1.5 The Natural Environment and Rural Communities (NERC) Act came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. All habitats and species in England identified as requiring action in the UK Biodiversity Action Plan (UK BAP) remain conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

2.1.6 In England, biodiversity net gain (BNG) is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This is referred to as BNG in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.

2.1.7 Under the statutory framework for BNG, every grant of planning permission is deemed to have been granted subject to a general biodiversity gain condition to secure the biodiversity gain objective. This objective is to deliver at least 10% increase in relation to the pre-development biodiversity value of the development granted permission. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits. BNG will be measured using DEFRA's biodiversity metric and habitats will need to be secured for at least 30 years.

2.2 LOCAL PLANNING POLICIES

2.2.1 Hillingdon's Local Plan Part 2 adopted in January 2020 details policies relating to nature conservation in Policy DMEI 7: Biodiversity Protection and Enhancement as follows:

A. The design and layout of new development should retain and enhance any existing features of biodiversity or geological value within the site. Where loss of a significant existing feature of biodiversity is unavoidable, replacement features of equivalent biodiversity value should be provided on-site. Where development is constrained and cannot provide high quality biodiversity enhancements on-site, then appropriate contributions will be sought to deliver off-site improvements through a legal agreement.

B. If development is proposed on or near to a site considered to have features of ecological or geological value, applicants must submit appropriate surveys and assessments to demonstrate that the proposed development will not have unacceptable effects. The development must provide a positive contribution to the protection and enhancement of the site or feature of ecological value.

C. All development alongside, or that benefits from a frontage on to a main river or the Grand Union Canal will be expected to contribute to additional biodiversity improvements.

D. Proposals that result in significant harm to biodiversity which cannot be avoided, mitigated, or, as a last resort, compensated for, will normally be refused.

3 Methodology

3.1 DESK STUDY

3.1.1 The purpose of the desk study is to review information available in the public domain. The following sources were checked, and data was requested from the local biological record

centre for ecological information relating to a 2km radius from the centre point within the site boundary:

- Greenspace Information for Greater London (GIGL), requested on 28th March 2024: 2km radius for all protected and notable species,
- Aerial mapping (Google Earth Pro),
- MAGIC (Multi-Agency Geographical Information for the Countryside) http://www.natureonthemap.naturalengland.org.uk, and
- NBN (National Biodiversity Network) http://www.data.nbn.org.uk.

3.2 FIELD SURVEY

3.2.1 The initial field survey of the development Site, was undertaken on Wednesday 3rd April 2024 by Andrew Latham ACIEEM and Freja McCall-Stevenson BSc (Hons) MSc MRSB. The survey aimed to record both the habitat types present at the site as well as identify any evidence of protected and notable species (listed under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act, Birds of Conservation Concern or locally notable species). This can be done by direct observation and through searching for field signs for each species. The survey was undertaken following 'Guidelines for Preliminary Ecological Appraisal' (CIEEM, 2013).

3.2.2 The redline was updated in 2025 and 2026 to include a proportion of land in the west, proposed for housing spoil from the development, and providing a connecting track linking the existing Holland and Holland shooting grounds to the original proposed development, therefore updated site visits where conducted on 29th October 2025 by Roisin Jones ACIEEM and on 25th January 2026 by David Kent ACIEEM to incorporate this additional area into the RLB. The aim of the updated 2025 and 2026 surveys was to verify that the Site conditions remained unchanged from the 2024 survey, and to complete a walkover of the new area in the west of the site.

3.3 ZONE OF INFLUENCE

3.3.1 The Zone of Influence (ZoI) has been identified as the full extent of the Survey Area, i.e. all land within the red line and green line boundary in Figure 1. This has not been extended as any impacts of the proposed development are unlikely to extend beyond this and additionally, access was not available to neighbouring land parcels that were not under the ownership of Holland and Holland.

3.4 HABITAT SURVEY

3.4.1 The walkover study area, therefore, consists of all habitats within the development Site and wider survey area. Attention was also given to any survey corridors that linked the Site with other areas of ecological interest or value for protected and/or notable species. Non-native invasive species were recorded where present on the site. Plant species follow nomenclature from Stace, fourth edition (2019).

3.4.2 The field survey of the study area was conducted in April 2024, with additional updated surveys completed on the 29th October 2025 and 25th January 2026. April, October and January are considered sub-optimal months to survey vegetation as most plants and grasses are dormant at this time. However, given that the main areas proposed for development are located within

current hardstanding and artificial habitats, and that the grassland is frequently managed, the timing of the habitat surveys is not expected to be a significant limitation to the project.

3.4.3 The dominant plant species were recorded, and habitats classified according to their vegetation types and presented in the standard UK Habitat Classification (UKHAB) survey format. This survey method aims to characterise habitats and communities present and is not intended to provide a complete list of all plants occurring across the Survey Area. The abundance of species has been recorded with reference to the DAFOR scale:

- Dominant (D) >75%
- Abundant (A) 75 – 51%
- Frequent (F) 50 – 26%
- Occasional (O) 25 – 11%
- Rare (R) <10%

3.4.4 Habitats were classified to a minimum of level 4 in the UKHAB hierarchy, with the minimum mappable area of 25m2 and 5m length x 1m width for linear features. Where applicable, secondary habitat codes were also used.

3.4.5 Habitat type has been digitised using QGIS 3.34.5 (see Figure 3).

3.4.6 Target notes (TN) were made on species and habitats of conservation interest and are included in Figure 4.

3.4.7 The importance of ecological features present within the Site was determined based on the guidance given in CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and Guidelines for Ecological Impact Assessment (CIEEM, 2018).

3.4.8 Habitats that could be affected by the proposed works were assigned levels of ecological value. The hierarchy of importance used in this report ranges from international, national, regional, county, local, and, lastly, site level (CIEEM, 2018).

3.5 BADGER SURVEY

3.5.1 All suitable habitats within the site and 30m beyond the site boundary were systematically searched for any evidence of badgers utilising the site, and any setts that have the possibility of being impacted by the development. All hedgerows, grassland, and scrub were searched for any evidence of badger activity, such as dugpits, foraging signs, badger setts or badger daybeds.

3.6 STATUTORY BIODIVERSITY NET GAIN APPROACH

3.6.1 Under the statutory framework for biodiversity net gain, every grant of planning permission is deemed to have been granted subject to a general biodiversity gain condition to secure the biodiversity gain objective. This objective is to deliver at least 10% increase in relation to the pre-development biodiversity value of the development granted permission. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits.

3.6.2 The habitat condition assessment was undertaken using the Statutory Biodiversity Metric and Metric Condition Assessments, using technical advice from the Statutory Biodiversity Metric User guide.

3.6.3 The opportunity exists for the creation or enhancement of habitats of the same or higher distinctiveness to replacement of non-irreplaceable habitats that are to be lost or impacted as a result of the development which is known as 'trading up'. This can only occur where environmental conditions area appropriate and where it generates the greatest benefit for biodiversity.

3.6.4 Good practice principles for biodiversity net gain are set out within Table 1.1 of Biodiversity Net Gain: Good practice principles for development (Baker et al., 2019). The key principles include Apply the 'Mitigation Hierarchy' (in line with CIEEM Guidelines for Ecological Impact Assessment (EcIA)) (CIEEM, 2018) and be 'additional' by achieving outcomes that exceed existing obligations.

- Avoid losing biodiversity which cannot be off-set elsewhere (e.g. irreplaceable habitats).
- Address risk (e.g. difficulty of achieving habitat creation / enhancement for net gain).
- Make a 'measurable' net gain contribution (e.g. calculated using an appropriate metric) and ensure that calculations consistent and transparent (i.e. limitations and assumptions are clearly identified).
- Ensure that net gain design achieves the best outcome for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.

3.7 SURVEY CONSTRAINTS

3.7.1 All areas of the Site within the red line boundary were fully accessible during the field surveys.

3.7.2 The weather conditions were suitable for undertaking the survey work and were recorded.

4 Baseline Conditions

4.1 PROTECTED SITES

Statutory Designated Sites

4.1.1 On review of MAGIC data base no internationally designated sites are located within 2km of the Site. Two nationally designated areas are located within 2km of the Site, these are;.

4.1.2 Ruislip Woods National Nature Reserve (NNR) surrounds the site and is 15 m (metres) to the east at its closest point. Ruislip Woods NNR consists of five principal areas and represents 10% of London's Semi-Natural Ancient Woodland (SNAW). The majority of the site is wooded, with extensive areas of hornbeam coppice overstood with either common or sessile oak. The remaining woods are secondary, consisting of oak/birch, birch/aspen, beech and sweet chestnut. There are also areas of streams, wetlands and common within the NNR.

4.1.3 Ruislip Woods Site of Special Scientific Interest (SSSI) surrounds the site and is 15 m east at its closest point. Ruislip Woods SSSI is comprised of several pockets of Ancient and Semi-natural Woodland (ASNW), including some of the largest unbroken blocks that remain in

Greater London: four separate pockets are located within 2km of the site. These woodland areas are characterised by hornbeam coppice *Carpinus betulus*, with both pedunculate oak *Quercus robur* and sessile oak *Quercus petraea*. The SSSI also features areas of lowland acid grassland.

Non-Statutory Designated Sites

4.1.1 The desk study returned 13 Sites of Importance for Nature Conservation (SINCs) and one Regionally Important Geological/Geomorphological Site (RIGS) shown in Appendix B.

4.1.2 The nearest was Ruislip Woods and Poor's Field SINC of Metropolitan Importance. The SINC was located 15 m east of the Site at its closest point and was hydrologically connected. It was designated for being the largest block of ancient woodland in London, with adjacent areas of acid grassland, heathland and wetlands.

4.1.3 The remaining SINCs listed in Appendix B are not constraints to the works due to their distances from the Site and the small spatial and temporary nature of effects arising from the proposed works.

Ancient Woodland

4.1.4 The desk study confirmed the presence of 18 sites within 2km of The Site listed within the Ancient Woodland Inventory (AWI). These comprised of ancient semi natural woodland and restored ancient woodland sites. The closest site was a stretch of ancient and semi-natural woodland 15m east of the site.

Habitats of Principal Importance

4.1.5 The desk study returned four Habitats of Principal Importance (HPIs) within 2 km of the site. These comprised:

- Deciduous woodland HPI 15 m to the east of the Site,
- Lowland dry acid grassland HPI 943 m to the southeast of the site,
- Woodpasture and Parkland HPI – 1.4 km southeast of the site,
- Traditional orchards 1.6 km northwest of the site.

Aquatic Habitats

4.1.6 The desk study returned four waterbodies within 250m of the Site. Two ponds were identified within the Survey Area but outside of the RLB, as detailed within Appendix C. The third pond was located 153 m south of the Site and was hydrologically connected, with the fourth located approximately 200m to the west of the redline boundary.

4.2 UKHAB SURVEY

4.2.1 The UK habitat classification survey identified several habitats within the site; these are summarised below, and illustrated in Figure 3. More detailed descriptions, target notes and species recorded within the site are listed in Appendix A.

- G4 – Modified grassland, parcels 1 – 6 with secondary codes 101,103, 503, 510.

- H3d - Bramble scrub
- H3h – Mixed scrub
- u1f - Sparsely vegetated urban-land
- u1b5 – Buildings
- u1c – Artificial unvegetated, unsealed surface

- H2a - native hedgerows

4.2.2 There are also 15 individual trees within the RLB, comprising 10 small trees, four in poor condition and seven in moderate condition, three medium trees, one in poor condition, one in moderate condition and one in good condition, and two large trees, one in moderate condition and one in good condition, in accordance with DEFRA Biodiversity net gain metric criteria

4.3 NON-NATIVE INVASIVE SPECIES

4.3.1 Onenon-native invasive species listed within Schedule 9 of the Wildlife and Countryside Act (INNS) was recorded within the RLB and wider Survey Area during the survey, namely Japanese knotweed *Reynoutria japonica*.

4.3.2 Japanese knotweed was present within an area of mixed scrub located in the centre of the Survey Area near the modified grassland and stable yard and recorded within the hedgerow around the northern and western aspects of the derelict farmhouse, connecting two areas of mixed scrub.

4.3.3 Buddleia *Buddleia sp,* although not listed within Schedule 9, is on the London Invasive Species Initiative (LISI), category 3, Buddleia is fast growing and can take root with minimal base substrate to grow from, colonising areas of bare ground, or damaged / frequently disturbed substrates. Should it take root in building crevices or cracks, it can cause significant damage. Buddleia was present in various locations and was most abundant in the south of the Site among the artificial unvegetated, unsealed surface and mixed scrub.

PROTECTED AND NOTABLE SPECIES

Amphibians

4.3.4 GIGL provided one record of great crested newt (GCN) *Triturus cristatus*, one record of common toad *Bufo bufo*, and one record of common frog *Rana temporaria* within 2 km of the Site within the past 10 years. The GCN record was located 1.2 km southeast of the Site.

4.3.5 Magic returned one GCN EPSL licence within 2 km of the Site within the past 10 years (EPSM2012-4868). This was located 1.1 km southeast and involved the destruction of a resting place from 24/04/2013 to 30/06/2015.

4.3.6 Magic also returned three GCN class licence returns within 2 km of the Site within the past 10 years. These were located 1.09 km southeast of the Site.

4.3.7 No waterbodies were recorded within the RLB itself, however four waterbodies were identified within 250m of the Site, as shown on the pond location plan Figure 7. Two ponds were located within the wider survey area;

- Waterbody 1 located approximately 35m north,
- Waterbody 2 located approximately 5m north,
- Waterbody 3 located approximately 150m south,
- Waterbody 4 located approximately 200m west of the current site boundary.

4.3.8 Therefore, suitable breeding habitat for GCN and other amphibian populations was present within the wider area.

4.3.9 Although no suitable breeding habitats pertain to the Site itself, suitable terrestrial habitats exist in the form of hedgerow bases, ditches, scrub and grassland edges. In addition to stored and discarded materials scattered throughout the Site.

4.3.10 A GCN Habitat Suitability Index (HSI) assessment was undertaken of the two ponds within the Survey Area which were accessible during the 2024 survey. These are included in full in Appendix E. In summary, Pond 1had an average pond suitability, with a HSI score of 0.63. Pond 2 also had an average pond suitability, with a HSI score of 0.64.

Bats

4.3.11 GIGL provided 11 records of bats within 2km of the Site within the last 10 years. The records related to serotine Eptesicus serotinus, Daubenton's *Myotis daubentonii*, whiskered/Brandt's *Myotis mystacinus/Myotis Brandtii*, Leisler's *Nyctalus leislerii*, noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, brown long-eared *Plecotus auritus*, Nathusius' pipistrelle *Pipistrellus nathusii*, and an unknown bat species *Chiroperta spp.* The closest record related to Daubenton's bat 492 m away from the Site.

4.3.12 Magic returned six European protected species licences for bats within 2 km of the Site within the last 10 years, as detailed in Appendix D. The closest related to the destruction of a soprano pipistrelle *pipistrellus pygmaeus* maternity roost 434 m to the northeast of the site.

4.3.13 There were several buildings within the Site and wider area that had potential for roosting bats.

4.3.14 The two-storey derelict farmhouse had brick construction with concrete render and a slate tiled roof, likely with a substantial loft void that could be used as a maternity bat roost. It has fallen into disrepair, with many open windows and gaps allowing ample access for roosting bats.

4.3.15 The single storey stable buildings were also suitable for roosting bats, with many cracks and crevices behind boarding and access through open stable doors. Most stable blocks within the Survey Area had asbestos roofing and no loft voids.

4.3.16 There were also various other small outbuildings present within the RLB used for storage. Some of these were constantly open, providing access for roosting bats. These provide fewer roosting opportunities for bats than the farmhouse and stables due to their single storey nature and flat roof design. However, they could still be used by night roosting bats.

4.3.17 There were also trees that had potential for roosting bats, including a mature oak located within the hedgerow on the northern boundary of the western field.

4.3.18 The hedgerow, scrub and grassland habitats within the site and the woodland adjacent to the site provide suitable habitat for foraging and commuting bats.

4.3.19 The surrounding landscape is also well connected to the Site and nearby woodland by linear features, such as hedgerows and tree lines.

European Badger

4.3.20 There were no records of badger *Meles meles* within 2km of the Site within the past 10 years.

4.3.21 No evidence of badger was discovered within the Site or the 30m buffer. A single mammal path was recorded approximately 10m from the site boundary in the north, at the location shown in Figure 4 and described in Appendix A, Plate 17, TN6.

4.3.22 Suitable opportunities for badger sett building and foraging are present within the Site and its immediate surroundings, including hedgerow bases, mature tree lines, and grassland fields.

Hazel Dormouse

4.3.23 The desk study returned no records of hazel dormouse *Muscardinus avellanarius* within 2 km of the Site.

4.3.24 The hedgerows, mature treelines, mixed and bramble scrub within the Site and the wider area provide suitable habitat for hazel dormouse nesting and foraging. There was good connectivity to the surrounding habitat and food sources available.

European Hedgehog

4.3.25 One record of European hedgehog *Erinaceus europaeus* was returned within 2km of the Site within the past 10 years. The record was located 1440 m north of the Site.

4.3.26 Scrub and hedgerows present within the site could support commuting and sheltering hedgehog. The modified and other neutral grassland could also provide foraging opportunities.

Reptiles

4.3.27 The records search returned two records of reptiles within 2 km of the Site within the past 10 years, including grass snake *Natrix Helvetica*, and adder *Vipera berus*. The closest record for grass snake was 1.5 km southeast.

4.3.28 Hedgerows, grassland edges and scrub within the Site and Survey Area offer commuting and sheltering habitat for reptiles. Further potential suitable refuge for reptiles included stored and discarded materials strewn throughout much of the Survey Area, including board and carpet. The large muck heap within the Site also provides good refuge for reptiles and a suitable place for grass snakes to lay their eggs.

Nesting Birds

4.3.29 The records search returned 15 records for birds within 2 km of the Site within the past 10 years that could be reasonably expected to be present within the Site or Survey Area. These are laid out in Appendix F.

4.3.30 The stable structures of hedgerows, trees and scrub habitats present within the Site and wider area hold value for nesting birds.

4.3.31 During the Preliminary Roost Assessment, where possible, birds' nests were also searched for in buildings, though no active nests were recorded.

4.3.32 During the survey, one swallow was seen foraging around the stable yard and fields. A red kite *Milvus milvus* was also seen above the western field.

4.3.33 No habitats were present that could support significant numbers of wintering, farmland or waterfowl and the site is regularly disturbed as a working livery yard.

Eurasian Otter

4.3.34 The records search also returned one Eurasian otter *Lutra lutra* record. However, the record accuracy was 10 km and so it is unknown how close this record was to the Site. On review of the Otter road death map from Cardiff University, one sub-adult male was found in 2018, approximately 4.4km southwest of the site.

4.3.35 There are several watercourses, waterbodies and supportive terrestrial habitats within 1km of the site which are suitable habitat for Otter.

4.3.36 The Site provides some areas of suitable habitat in the form of treelines, hedgerows, ponds and ditches; these are connected to more suitable habitats in the wider area, including small tributaries, ditches, and large areas of woodland to the east, south and smaller pockets to the north, all of which are connected by thick treelines, hedgerows and ditches. In addition, Ruislip Lido and its connecting watercourses are located within Runslip Woods SSSI east and south of the site.

4.3.37 However, due to the current site and wider area use as shooting grounds, it's highly unlikely that an Otter would utilise the Site on a permanent basis. It is conceivable that this species passes through the area on a transitional basis.

European Water Vole

4.3.38 A European water vole *Arvicola amphibius* record was provided 1.4 km east from the Site.

4.3.39 A ditch was located on the southern edge of the Site, recorded as a dry ditch, with occasional damp areas, therefore this ditch is highly unlikely to support this species.

Other

4.3.40 There were numerous invertebrate records from the surrounding 2km area within the past 10 years, but there were only four records within 500 m of the Site. These can be seen in Table 1 below.

Table 1: Invertebrate records within 500 m of the Site in the past 10 years

Common name	Vernacular name	Protected status	Distance and direction from Site

White Admiral	*Limenitis camilla*	NERC Act Section 41 LPS Local Spp of Cons Conc RedList GB-VU	430 m southeast
Small Copper	*Lycaena phlaeas*	LPS	453 m east
Large Skipper	*Ochlodes sylvanus*	LPS	158 m south
Small Skipper	*Thymelicus sylvestris*	LPS	430m south

4.3.41 Although the hedgerows, scrub and other neutral grassland habitats within the Site and Survey Area provide some suitable habitat for the above species, they do not provide the botanical species diversity or structure required to support a diverse invertebrate population.

4.3.42 During the walkover in 2026, a number of ant hills were recorded at the edge of the hedgerow in the west of the site.

Individual Protected and Notable Plants

4.3.43 The records search returned several scarce species of flowering plant within 2 km of the Site in the past 10 years. However, all of the records were over 1 km away from the Site. Therefore, these species are highly unlikely to be present within the Site.

5 Evaluation and Recommendations

5.1 PROTECTED AND NOTABLE SITES

Ruislip Woods SSSI

5.1.1 Ruislip Woods SSSI is located 15 m east at its closest point and is hydrologically connected to the Site. Therefore, Ruislip Woods SSSI is a constraint to the proposed works.

5.1.2 Works have potential to directly impact the SSSI by; pollution pathways; release of polluting chemicals from works machinery; and habitat loss and/or degradation. SSSI assent must be sought prior to the proposed works to determine any potential negative impacts upon the conservation status of the SSSI.

5.1.3 Appropriate pollution prevention measures must be implemented throughout the works.

Ruislip Woods NNR

5.1.4 Ruislip Woods NNR is located 15 m east at its closest point and is hydrologically connected to the Site. Therefore, Ruislip Woods NNR is a constraint to the proposed works.

5.1.5 Works have potential to directly impact the NNR by; pollution pathways; release of polluting chemicals from works machinery; and habitat loss and/or degradation.

5.1.6 Appropriate pollution prevention measures must be implemented throughout the works.

Ruislip Woods and Poor's Field SINC (Metropolitan Importance)

5.1.7 Ruislip Woods and Poor's Field SINC of Metropolitan Importance is located 15 m east at its closest point and is hydrologically connected to the Site. Therefore, Ruislip Woods and Poor's Field SINC of Metropolitan Importance is a constraint to the proposed works.

5.1.8 Works have potential to directly impact the SINC by; pollution pathways; and release of polluting chemicals from works machinery.

5.1.9 Appropriate pollution prevention measures must be implemented throughout the works.

Ancient Woodland and Deciduous Woodland HPI

5.1.10 Ancient semi-natural woodland is located 15 m to the east of the Site and is hydrologically connected. Ancient woodland is a constraint to the proposed works.

5.1.11 Deciduous woodland HPI located 15 m to the east of the Site and is hydrologically connected. Deciduous woodland HPI is a constraint to the proposed works.

5.1.12 Works have potential to directly impact ancient woodland and deciduous woodland HPI by; pollution pathways; release of polluting chemicals from works machinery; and habitat loss and/or degradation.

5.1.13 Appropriate pollution prevention measures must be implemented throughout the works.

Aquatic Habitats

5.1.14 Four ponds were located within 250 m of the Site. Therefore, aquatic habitats are a constraint to the proposed works.

5.1.15 Works have potential to directly impact aquatic habitats by; pollution pathways; release of polluting chemicals from works machinery; and habitat loss and/or degradation.

5.1.16 Appropriate pollution prevention measures must be implemented throughout the works.

5.2 HABITATS

5.2.1 Developed land; sealed surface, artificial unvegetated and unsealed surface are not listed as HPIs within the NERC Act or as Priority Habitats within the Hillingdon LBAP and are of negligible ecological value. As such, these habitats are not a constraint to the proposed works.

5.2.2 Modified grassland, bramble scrub, mixed scrub and ditches are not listed as HPIs within the NERC Act or as Priority Habitats within the Hillingdon LBAP. These habitats are valuable in the site context only as none connect to wider valuable habitats and are managed/grazed to

reduce structure. Therefore, these habitats are of ecological value at the Site level only and are not a constraint to the proposed works.

5.2.3 Ponds are listed as a HPI within the NERC Act. However, the ponds present within the wider survey area do not meet the description. Although the ponds within the wider survey area hold ecological value for a range of species, this is at the Site level only. Works have potential to directly impact ponds by pollution pathways, release of polluting chemicals from works machinery, and habitat loss and/or degradation. Appropriate pollution prevention measures must be implemented throughout the works.

5.2.4 Buildings are not listed as a HPI within the NERC Act or as a Priority Habitat within the Hillingdon LBAP. However, the buildings present within the RLB and the wider survey area have potential for roosting bats and nesting birds and therefore have ecological value at the local level. It is understood that demolition is required to facilitate the proposed works. Therefore, buildings are a potential constraint to the proposed works. Species-specific recommendations are given below.

5.2.5 Native hedgerows are listed as a HPI within the NERC Act. They provide shelter and local food resources for local mammal, bird and invertebrate species and facilitate dispersal of species through the local area into the green corridor network. These features therefore have ecological value at the local level. It is understood that vegetation management is required to facilitate the proposed works. Therefore, native hedgerows are a constraint to the proposed works.

5.2.6 The isolated trees are also only valuable in the site context, but retention of native trees would be advised wherever possible, particularly the mature oak within the northern boundary of the western field. All native trees that are to be retained should be protected in line with BS5837:2012 Trees in relation to design, demolition and construction.

5.2.7 Where any hedgerows or native trees are lost as part of the proposed development, they should be replaced with an increased length of native species-rich continuous hedgerow or native broadleaved trees in order to achieve net gain as required by local planning policy.

5.3 NON-NATIVE INVASIVE SPECIES

5.3.1 Japanese knotweed is present within the Site. It is an INNS listed on schedule 9 of the Wildlife and Countryside Act and is also designated as London Invasive Species Initiative (LISI) category 3 and should be removed where possible.

5.3.2 Buddleia is also present within the Site. It is designated as LISI category 3 and should be prevented to spreading onto neighbouring land.

5.3.3 Therefore, INNS are a constraint to the proposed works.

5.4 PROTECTED AND NOTABLE SPECIES

Amphibians

5.4.1 Habitat has been identified within 250m of the Site that could support breeding populations of amphibians, including GCN. There is also sufficient connective terrestrial habitat within the RLB to support a sustainable population of these species, with ample sheltering opportunities. It is understood that the proposed works include vegetation management, which could have

an impact on amphibians. Therefore, amphibians are a potential constraint to the proposed works.

5.4.2 Further survey work has been recommended in relation to GCN and is subject to a separate report (Davidson-Watts, 2026a)

Bats

5.4.3 There are several buildings and trees within the RLB and wider survey area that have potential for roosting bats. Habitat has also been identified within the RLB and wider survey area which could support foraging and commuting bats, including the native hedgerow. It is understood that the proposed works include building demolition and vegetation management, which could have an impact on bats. Therefore, bats are a potential constraint to the proposed works.

5.4.4 Further survey work has been recommended in relation to bats, the results and recommendations are subject to a separate report (Davidson-Watts, 2026b)

European Badger

5.4.5 Suitable foraging and sett building habitat for badgers was identified during the survey. Badgers are a highly mobile species, and new setts can be constructed in relatively short periods of time. Due to the loss and works within proximity to these suitable habitats, it is recommended that the site and a 30m buffer be subject to an updated badger survey before works commence to identify any new badger setts that may have been constructed since the ecological walkovers conducted in 2024 – 2026.

5.4.6 In addition, measures to protect badgers during construction should be employed, such as covering any deep excavations overnight during works and shallow excavations should have a mammal ramp, constructed of scaffold board or equivalent, which provides suitable grip, placed at an 45 degree angle to allow any badgers (or other mammals) to escape, should they fall in. All construction materials and any chemicals should be stored securely to prevent badger from investigating these substrates.

Hazel Dormouse

5.4.7 Suitable foraging and nesting habitat for hazel dormouse was identified during the survey, particularly the native hedgerows on the Sites boundaries and areas of scrub. There was also good connectivity to the surrounding habitat and food sources; therefore, it's possible that dormice are present in suitable habitats in the site.

5.4.8 As illustrated on the Landscape Masterplan, no significant amount of vegetation is to be removed to facilitate the proposals; however, there are some small pockets of mixed scrub and vegetation associated with the southern boundary hedgerow planned for removal as shown on the Landscape and Hard finishes MasterPlan_for Planning (AndySturgeon Design, 2025). The areas proposed for removal are highly unlikely to disturb the long-term functionality and connectivity of the vegetated habitats within the site, therefore a targeted dormouse survey was not proposed.

5.4.9 However, due to the possibility of hazel dormouse being present within the site, any vegetation required for removal will need to be conducted in accordance with a Precautionary Method of Works (PMoW) and carried out with a suitable qualified ecologist present, to act as an

Ecological Clerk of Works (ECoW). All actions must be in accordance with best practice guidance (Wells, D, Chainin, P & Gubet, L, 2025).

5.4.10 This generally includes either a single-stage clearance in autumn or a single-stage clearance in spring (combined with nesting bird checks). Any 'grubbing out' of tree roots will be completed outside of the hibernation season. Before clearing suitable habitats, an ecologist will conduct a visual search for dormouse nests.

5.4.11 In the event that dormouse or evidence of dormice is discovered during the search, work will need to stop, and an EPS licence will need to be applied for before work can continue.

5.4.12 If the works cannot comply with the requirements of the PMoW and a greater level of vegetation clearance is required, then further survey will be required to assess the impacts to hazel dormice and the proposed works prior to this vegetation clearance taking place.

European Hedgehog

5.4.13 There is potential for hedgehogs to shelter under the hedgerow and scrub habitats within the Site. Hedgehog may also forage on the modified and other neutral grassland. It is understood that the proposed works include vegetation management and excavations, which could have an impact on hedgehog. Therefore, hedgehogs are a constraint to the proposed works.

5.4.14 Where suitable vegetation for hedgehogs is required for clearance, these areas should be checked by hand by appropriate persons before vegetation removal. Any active adult hedgehogs found should be moved to a safe zone. Any nests found with young, overwintering or hedgehogs in torpor should be left in situ. Where this is not practical, advice should be sought from an ecologist, or a wildlife rehabilitation centre should be contacted.

Reptiles

5.4.15 Suitable habitats are present within the site to support this species group for commuting and foraging. Opportunities for shelter are provided by under-stored and discarded materials throughout much of the Site, including boards and carpet. The large muck heap also provides valuable refuge and a suitable place for grass snakes to lay their eggs. It is understood that the proposed works include the removal of these suitable habitats, therefore, reptiles are a constraint to the proposed works.

5.4.16 Working methods will need to consider the presence of reptiles during site clearance. It is advised that an Ecological Clerk of Works (ECoW) supervises the vegetation clearance to search for reptiles.

5.4.17 To remove residual risks to reptiles, the site clearance works will be carried out in stages, in suitable weather conditions, when any reptiles present on the site have the ability to leave the Site of their own accord. Any removal of site debris that could be used for shelter must be checked by hand prior to removal. Any vegetation cut in stages and, if necessary, hand-searched.

5.4.18 A Toolbox Talk ('TBT') should be presented to the works team outlining how to common reptile species and what to do in the event they are discovered on Site during works. The TBT will be presented by the ECoW.

Nesting birds

5.4.19 Habitat suitable for nesting birds is present in the Site and wider survey area including dilapidated buildings, stables, scrub, hedgerows and trees. It is understood that the proposed works include vegetation management and demolition of buildings, which could have an impact on nesting birds. Therefore, nesting birds are a constraint to the proposed works.

5.4.20 Avoid works during the months of March to August, inclusive, when the majority of bird species breed allowing for seasonal variations. It should be noted that some species can nest all year round e.g. barn owl *Tyto alba*, woodpigeon *Columba palumbus*, and some species nest early (e.g. dunnock *Emberiza calandra*) or late (e.g. corn bunting *Emberiza calandra*).

5.4.21 Works involving vegetation clearance between March and August should be subject to a pre-works nesting bird check by a suitably qualified ecologist. Works at other times of year should be assessed for their potential to support nesting birds. Active nests must be left in situ with an appropriate buffer and left untouched until the young birds have fledged. Works can proceed when the nest is no longer in use.

5.5 ENHANCEMENTS

5.5.1 In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, every effort should be made to enhance the biodiversity value of the site.

5.5.2 Options to enhance the site include (but are not limited to):

- Removal of injurious and invasive species (Buddleia).
- Installation of nesting boxes and bat boxes.
- Planting of further native trees, shrubs or native hedgerow, particularly along the boundaries or between the houses, to increase connectivity around and through the site.
- Planting of species that benefit local invertebrates through a variety of nectar resources through the season.
- Improving the quality of grassland species diversity through removal of nutrients and a relaxed mowing or reduced grazing regime.

5.5.3 In line with National Planning Policy, all proposals should be supported by evidence to demonstrate a 10% BNG using a recognised biodiversity accounting metric.

5.6 BASELINE HABITATS

5.6.1 The Statutory Biodiversity Metric has been completed for the on-site baseline habitats as taken from the UKHab Habitat Survey map. Some habitat type areas have been reclassified to enable calculation within the DEFRA Metric. These habitats are shown in Figure 5. The habitat areas are as follows:

Habitat Areas

- modified grassland – 1.5679 ha
- mixed scrub - 0.0658 ha
- bramble scrub 0.0204 ha

- artificial unvegetated, unsealed surface and bare ground – 0.3258 ha
- developed land; sealed surface – 0.4881ha

Linear Areas

- Native hedgerow – 0.220km

Urban Trees

- Urban scattered trees – 0.1669 ha calculated through the use of the BNG tree helper tool. Tree area consists of 11 small trees, 3 medium trees and 2 large trees.

5.6.2 Habitat condition assessments have been undertaken during the field surveys; these assessments were undertaken outside of the main flowering season, in particular, associated with the grassland habitats, and their condition has been estimated as higher than is likely to overcome this.

5.7 ONSITE PROPOSED DEVELOPMENT

5.7.1 Habitat measurements have been adapted from the Ashby Farm_Artisans Workshop Landscape MasterPlan Wider Landscape drawing (Andy Sturgeon Design, 2026). The approximate proposed development areas are as follows and as illustrated in Figure 6.

Habitat Areas

- Modified grassland - 0.0336ha
- Other neutral grassland - 0.4999ha
- Mixed scrub – 0.1046ha
- Sustainable drainage system – 0.0418
- Green Roofs – 0.0026ha
- Vegetated garden / ornamental planting – 0.0414
- Artificial unvegetated, unsealed surface - 0.3363ha
- Developed land; sealed surface - 0.1288ha

Linear Areas

- Native hedgerow 0.119km

5.7.2 Existing trees are to be retained, and further trees are to be planted; however, they have not been added to the result at this stage, as tree species have not been confirmed.

5.7.3 Areas of enhancement

- 1.1339ha of Modified grassland to other neutral grassland
- 0.0174ha of mixed scrub enhanced with additional planting.

5.7.4 Minor areas of grassland, bramble scrub and hardstanding to be retained only.

5.7.5 Creation and enhancement measures, as depicted on the Wider Landscape plan, are to include

- Re-seeding of grassland areas and suitably managing to diversify the species within the sward, and opportunities to continue grazing at lower levels to aid in creating a diverse sward structure.
- The area lost to spoil storage during the development is to be enhanced to other neutral grassland.
- Planting of native scrub species within the grassland areas.
- Creation of an attenuation pond, with wildlife-friendly design features.
- Creation of hedgerow habitats to extend the native scrub habitat on the southern site boundary.
- New buildings, a new farm track, a car parking area, and associated ornamental planting.

5.8 HEADLINE BNG RESULTS

5.8.1 The above achieves a net gain of 42.61% with 4.69 of area habitat units, and with a 21.62% net gain with 0.47 hedgerow units, with trading rules not satisfied.

5.9 LIFESPAN OF SURVEYS

5.9.1 Where the survey data is 18 months or older, it is likely that update surveys and reporting will be required for planning for EPSL licensing purposes as bats are highly mobile species (CIEEM, 2019).

6 References

Andysturgoendesgin, (2026). Landscape MasterPlan, Wider Landscape, Ashby Farm_Artisans Workshop, dwg no, _P00_00_001, issue P05.

Bat Conservation Trust (2018). Bats and Artificial Lighting in the UK: Bats and the Built Environment Series Guidance Note 08/18.

British Standards Institution (2012). British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations. British Standards Institution, London.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at http://www.ukhab.org/

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys, Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, (2nd ed.) Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed.). The Bat Conservation Trust, London.

Cresswell, W and Whitworth, R. (2004). English Nature Research Reports Number 576: An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt *Triturus cristatus*

DEFRA (2012). 'MAGIC Interactive Map – Conservation Sites with Statutory Protection'. Available: http://magic.defra.gov.uk/

Hillingdon Council (2012). Hillingdon Local Plan: Part 1 – Strategic Policies

Hillingdon Council (2022). Hillingdon Local Plan: Part 2 – Development Management Policies

HMSO The Conservation of Habitats and Species Regulations 2017, as amended.

HMSO The Countryside and Rights of Way Act 2000.

HMSO Wildlife and Countryside Act 1981.

Ministry of Housing, Communities and Local Government (February 2019). National Planning Policy Framework.

Institute of Lighting Professionals (2023). Guidance Note GN08/23 Bats and Artificial Lighting at Night

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143-155.

QGIS.org (2024). QGIS Geographic Information System. QGIS Association. http://www.qgis.org

Stace, C. A. (2019) New Flora of the British Isles (4th ed). C&M Floristics

Figure 1 Site Location Plan

Figure 2 Proposed Development

Figure 3 UKHABS Map

Figure 4 Target Notes

Legend
Site boundary
Target Notes

Tilte:
Figure 4 - Target Notes

Client
Holland and Holland

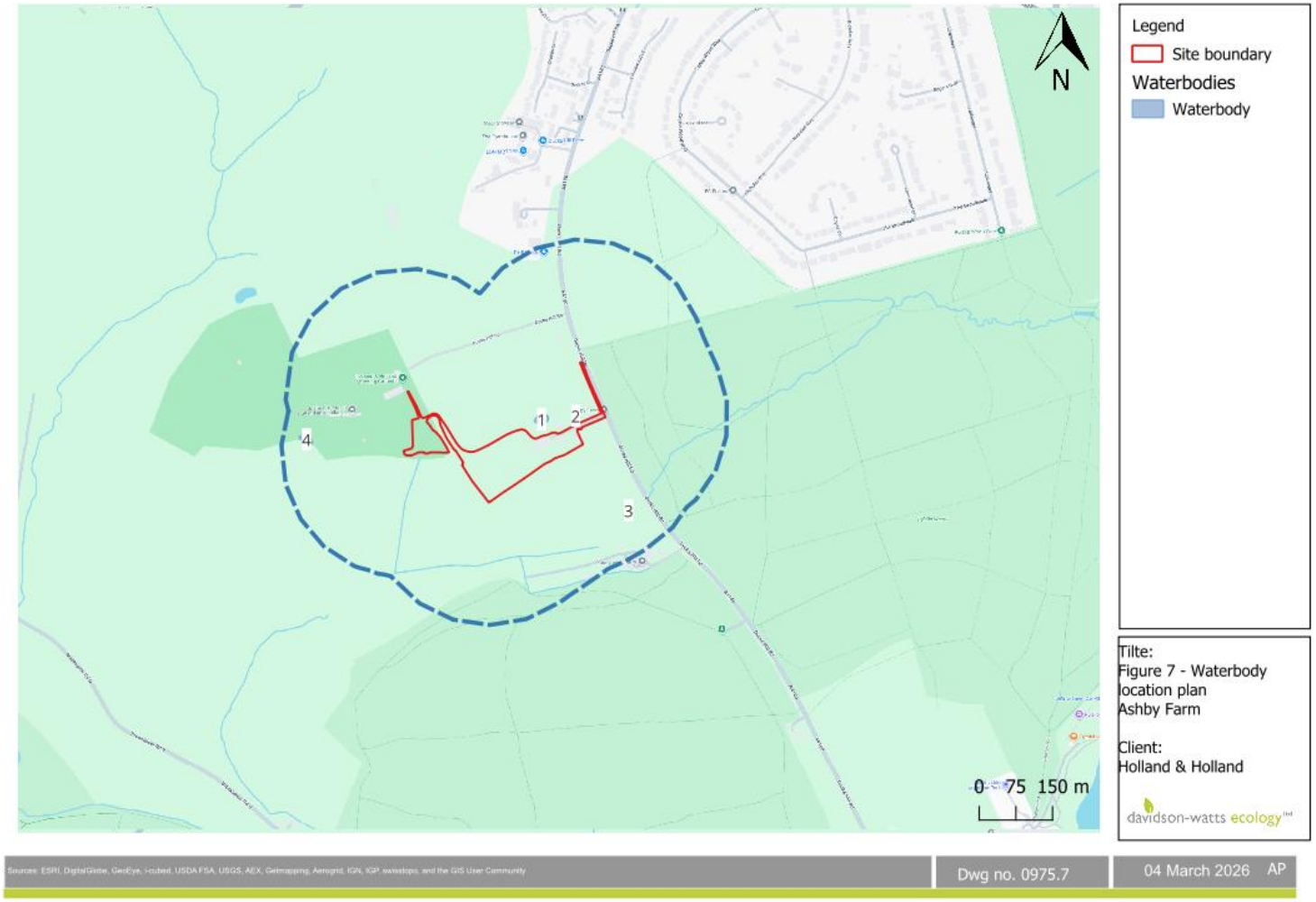
davidson-watts ecology ltd

Sources: ESRI, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community | Scale: 1:3,740.77 @A4 | 04 March 2026 | AP

Figure 5 BNG Baseline

Figure 6 – BNG – Proposed

Figure 7 – Pond Locations



Appendix A Plates and Habitat Descriptions

Plate 1: Mature oak tree with potential bat roost features (target note 1).

Plate 2: Muck heap (target note 2).

Plate 3: Japanese knotweed within mixed scrub (target note 3).

Plate 4: Scrub line and old drainage ditch (target note 4)

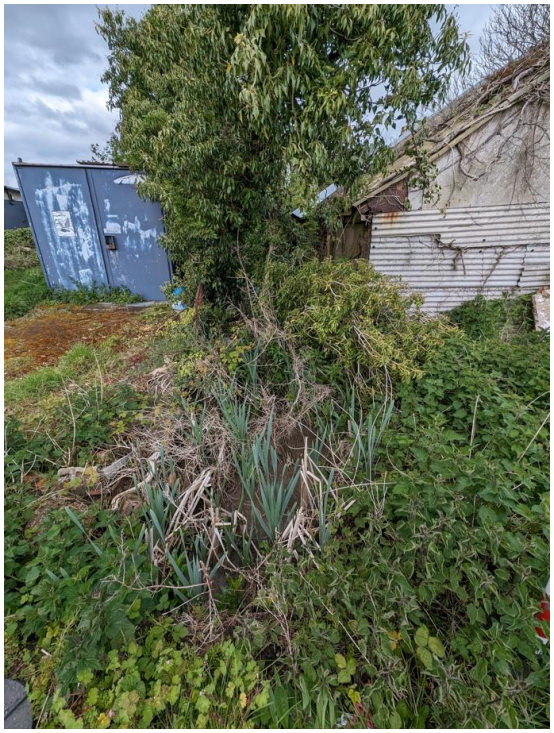


Plate 6: Parcel 1 - Poached modified grassland.

Plate 7: H1 - native hedgerow habitat.

Plate 8: H2 native hedgerow habitat.

Plate 9: Pond 1 - TQ 07640 90051

Plate 10: Pond 2 - TQ 07710 90057

Plate 11: Pathway along the edge of grassland habitat.

Plate 13: Outbuilding and storage containers.

Plate 14: Scrub habitat surrounding Pond 2.

Plate 15: Part of the stable yard.

Plate 16: The derelict farmhouse (off site).

Plate 17: Mammal path (target note 5) located at TQ 07424 90058

Habitat descriptions

G4 – Modified grassland, with secondary codes 101,103, 503, 510.

Parcel 1 - The western field was used predominantly for horse grazing and was extremely poached and damaged in the eastern half of the field. There were several patches of bare muddy ground, and where ground flora was present, sward height was very short. The field was dominated by perennial ryegrass *Lolium perenne,* with abundant white clover *Trifolium repens,* and occasional common nettle *Urtica diocia.*

Parcel 2 - The north field was also used predominantly for horse/cattle grazing. The fields were poached, with some areas of muddy bare ground. The field comprised of dominant perennial ryegrass, abundant white clover, frequent Yorkshire fog *Holcus lanatus* and cock's foot *Dactylis glomerata*, occasional broad-leaved dock *Rumex obtusifolius*, common nettle, and daisy *Bellis perennis.*

Parcel 3 - The northwest field is currently in use as part of the clay pigeon shooting business and, as such, is heavily disturbed and managed. An earth bund is present in the central area of the field, with a less disturbed grassland area to the west, species included soft rush *Juncus effusus,* with structural diversity of tussocky grasses and larger vascular plants such as broad-leaved dock *Rumex obtusifolius,* and indications of nutrient-enriched areas, due to patches of common nettles.

Parcel 4 – Strips of modified grassland border the main access path.

Parcel 5 – Similar species composition to parcels 1, 2 and 3, primarily used for horse grazing.

Parcel 6 – grassland has begun to encroach the areas of hardstanding, similar species composition to parcels 1,2 and 3.

The following grassland species of were recorded at the site; (A) yorkshire fog Holcus Lanatus, (A) cocksfoot Dactylis glomerata, (A) perennial rye grass Lolium perenne, (A) red fescue Festuca rubra, (O) sticky mouse-ear Cearstium glomeratum, (O) creeping buttercup Ranunculus repens, (R) dandelion Taraxacum ssp, (R) spear thistle Cirsium vulgare, (O) moss Bryophyta ssp, (O) wavy bittercress Cardamine flexuosa, (O) tufted vetch Vicia cracca, (R) cleavers Galium aparine, (O) prickly sow thistle Sonchus asper, (O) ribwort plantain Plantago lanceolota, (O) groundsel Senecio vulgaris, (R) stone parsley Sison amomum, (O) cinquefoil Potentilla reptans, (R) common nettle Urtica dioica, (O) knapweed Centaurea nigra, (O) sheep sorrel Rumex acetosella, (O) Soft rush Juncus effusus, (F) Common field speedwell Veronica persica and (O) Broad leaved dock Rumex obtusifolius.

H3d - Bramble scrub

Patches of bramble-dominated scrub are scattered around the site, and the southern edge is bordered by dense bramble scrub.

H3h - Mixed scrub

A patch of mixed scrub is present between two buildings, which appears to be part of an old drainage network. A slight depression was noted between the scrub, with an old wooden bridge at its southern end. The base of the depression was heavily silted, with no flowing water. Some marginal species present included greater willowherb, Typha sp. However, species such as bramble, common nettle, buddleja, elder and ash dominated the area.

Other small patches of mixed scrub are scattered throughout the site.

u1f - Sparsely vegetated urban-land

Scattered patches are present around the site, mostly where the gravel farm tracks and hardstanding meet scrub and grassland edges.

u1b5 – Buildings

There were several buildings within the site. Consisted of several occupied stables and various other outbuildings used for storage.

u1c – Artificial unvegetated, unsealed surface

Gravel track areas were present north of the buildings, expanding into a larger area of gravel in the west. This area was used as parking and storage. There was scattered grass among the gravel, and grass was abundant along the edges. Occasional buddleia and common nettle were also present, along with occasional broad-leaved dock.

H2a - native hedgerows

Native hedgerow was present along almost all field boundaries, apart from a large break in the hedgerow on the southern boundary of the western field and another break along the eastern boundary of the northeastern field.

The hedgerows consisted of abundant blackthorn, hawthorn and bramble, frequent English elm Ulmus procera, common ivy Hedera helix, and common nettle, occasional elder, and oak Quercus sp.

H1 – Thick outgrown hedgerow, historically thought to be two separate hedgerows. Dominated by blackthorn and hawthorn, with scattered elm, common ivy, elder and oak species, with occasional dry depressions at its base. Species present at the base of the hedge included garlic mustard and docks. The edges of the hedgerow are engulfed in bramble patches in some places.

H2 - outgrown hedgerow with similar species composition to H1.

Appendix B Non-statutory Designated Sites Within 2 km of The Site

Site name	Designation	Grade	Reason for designation
Ruislip Woods and Poor's Field	SINC	Metropolitan	One of London's two National Nature Reserves, this site includes a large area of ancient woodlands, as well as heathland and grassland.
Harefield Churchyard and Wood	SINC	Borough I	A picturesque 14th century parish church and cemetery with several old trees.
Shepherd's Hill Woods and Fields	SINC	Borough I	A large mosaic of fields and small woods with thick inter-connecting hedges, creating a distinctly rural feel.
Haste Hill Golf Course, Northwood Golf Course and Northwood Park	SINC	Borough I	Golf courses close to Ruislip Woods, with woodland and grassland areas. Small areas of acid grassland occur on both courses.
White Heath Farm and Harefield Grove	SINC	Borough II	Farmland landscape consisting mainly of pastures, arable fields, copses, and hedgerows, and has managed to retain the rural character of the landscape.
Old Pumping Station Field	SINC	Borough II	A large area of rich grassland with good native hedgerow boundaries.
Knightscote Farm Ponds	SINC	Borough II	Two ponds separated by an area of woodland, one used for fishing.

Site name	Designation	Grade	Reason for designation
Gravel Pit, Northwood	SINC	Borough II	Heavily wooded gravel diggings.
St Vincent's Hospital Meadows	SINC	Borough II	Two fields, one each side of St Vincent's Hospital, rich in butterflies and grasshoppers.
Shepherds Hill House	SINC	Borough II	A field study centre with grounds containing scattered native trees and shrubs.
Breakspear House Wood	SINC	Borough II	A small ancient woodland with a footpath running through it.
Fields and Hedgerows South of Mount Vernon Hospital	SINC	Borough II	Fields to the south of the hospital with broad hedgerows and scrub.
Bury Street Open Space & Wallington Close streamside	SINC	Local	A public park with a good range of wildlife habitats, including a stream.
The Gravel Pits, Northwood	Adopted RIGS	N/A	An area of woodland covering old gravel pits in the Lambeth Group, Palaeocene – Eocene. The gravel from these pits was used for several hundred years for road mending in the area.

Appendix C Habitat Descriptions

g4 – modified grassland

Secondary codes – 11: hedgerow with trees, 101: cattle grazed, 103: horse grazed, 503: wet, 510: bare ground.

There are four main areas of modified grassland within the RLB (Figure 3).

The western field was used predominantly for horse grazing and was extremely poached and damaged in the eastern half of the field. There were several patches of bare muddy ground, and where ground flora was present, sward height was very short. The field comprised of dominant perennial ryegrass Lolium perenne, abundant white clover Trifolium repens, and occasional common nettle Urtica diocia.

The north filed was also used predominantly for horse/cattle grazing. The fields were poached, with some areas of muddy bare ground. The field comprised of dominant perennial ryegrass, abundant white clover, frequent Yorkshire fog Holcus lanatus and cock's foot Dactylis glomerata, occasional broad-leaved dock Rumex obtusifolius, common nettle, and daisy Bellis perennis.

The north west field is currently in use as part of the clay pigeon shooting business and as such is heavily disturbed and managed.

Modified grassland also boarders the main access path.

The following species of were recorded at the site; (A) yorkshire fog *Holcus Lanatus*, (A) cocksfoot *Dactylis glomerata*, (A) perennial rye grass *Lolium perenne*, (A) red fescue *Festuca rubra*, (O) sticky mouse-ear *Cearstium glomeratum*, (O) creeping buttercup *Ranunculus repens*, (R) dandelion *Taraxacum ssp*, (R) spear thistle *Cirsium vulgare*, (O) moss *Bryophyta ssp*, (O) wavy bittercress *Cardamine flexuosa*, (O) tufted vetch *Vicia cracca*, (R) cleavers *Galium aparine*, (O) prickly sow thistle *Sonchus asper*, (O) ribwort plantain *Plantago lanceolota*, (O) groundsel *Senecio vulgaris*, (R) stone parsley *Sison amomum*, (O) cinquefoil *Potentilla reptans*, (R) common nettle *Urtica dioica*, (O) knapweed *Centaurea nigra*, (O) sheep sorrel *Rumex acetosella*, (O) Soft rush *Juncus effusus*, (F) Common field speedwell *Veronica persica* and (O) Broad leaved dock *Rumex obtusifolius*.

u1b – developed land; sealed surface

A paved access path is present that joins from the main road to the east of the Site, and continues into the farm yard (Figure 3).

u1b6 – other developed land

Secondary codes – 804: Car park, 821: Artificial sports pitch, 839: Track

Two sections of developed land; sealed surface was present across the Survey Area (Figure 3).

A small car park area is present in the centre of the Site south of the building. The area wraps towards the centre of the Site around all of the stables, providing a hard-standing yard area.

The second area of developed land; sealed surface was in the northwest of the Site and consisted of an arena for exercising and riding horses. The arena had an impermeable underlayer, topped with sand and rubber pieces. The arena was encompassed by a fence and common nettles, bramble and grass were present around the edge.

h3d – bramble scrub

There were two areas of bramble scrub within the RLB (Figure 3).

1.1.9 The largest area of bramble scrub was located within the south of the RLB. The bramble scrub boarders the RLB and forms a boundary between the Site and the adjacent field.

A second area of bramble scrub is also present in the southeast corner, encroaching into the RLB from the adjacent eastern field.

h3h – mixed scrub

There were six areas of mixed scrub within the RLB (Figure 3).

An area of dense mixed scrub is present in the north of the RLB and carries on into the wider survey area encompassing the two ponds within the Survey Area. They comprised of abundant bramble and willow Salix sp., and frequent common nettles. Another area of mixed scrub is also present immediately south of here, separated by the access track.

There was a patch of mixed scrub in the south of the RLB. This area comprised of abundant bramble and willowherb Epilobium sp., frequent common nettle, and occasional buddleia Buddleja davidii.

There are small areas of mixed scrub in the centre of the RLB consisting of abundant bramble, frequent buddleia and willowherb, and occasional elder Sambucas nigra. There was also a European ash tree Fraxinus excelsior located amongst the mixed scrub.

u1c – artificial unvegetated, unsealed surface

Secondary codes – 532: scattered grass, 804: car park, 849: track

Gravel track areas were present in north of the buildings, expanding into a larger area of gravel in the west. This area was used as parking and storage. There was scattered grass among the gravel and grass was abundant along the edges. Occasional buddleia and common nettle were also present, along with occasional broad-leaved dock.

The area to the north west of the RLB is an

u1b5 – buildings

There were several buildings within the RLB (Figure 3). They consisted of several occupied stables and various other outbuildings used for storage.

u1f - sparsely vegetated urban-land

There was a small area of sparsely vegetated urban land in the northwest of the Survey Area, east of the arena (Figure 3). This appeared to consist of an artificial membrane that had been covered with earth and colonised by relatively sparse grass. Common nettles were abundant, as well as frequent broad-leaved dock and willowherb species.

h2a – native hedgerow

There were several lines of native hedgerow within the Survey Area (Figure 3).

Native hedgerow was present along almost all field boundaries, apart from a large break in the hedgerow on the southern boundary of the western field and another break along the eastern boundary of the northeastern field.

The hedgerows consisted of abundant blackthorn, hawthorn and bramble, frequent English elm Ulmus procera, common ivy Hedera helix, and common nettle, occasional elder, and rare oak Quercus sp.

The hedgerow on the northern boundary of the western field contained a mature oak tree west of the arena.

The hedgerow running along the southern boundary of the Survey Area had a dry ditch. The ditch was vegetated and full of litter.

Native hedgerow was also present around the northern and western aspects of the derelict farmhouse, connecting two areas of mixed scrub. This hedgerow also contained Japanese knotweed.

Appendix D Bat Licences Within 2 km of The Site

Licence Number	Species	Distance and direction from the Site	Licence Impacts	Date
EPSM2013-5408	Soprano pipistrelle	434 m northeast	Destruction of a breeding site and resting place	01/02/2013 – 30/09/2014
2020-48250-EPS-MIT	Brown long-eared and Leisler's	644 m northeast	Destruction of a resting place	01/09/2020 – 31/12/2031
2016-23429-EPS-MIT	Brown long-eared, common pipistrelle and soprano pipistrelle	782 m west	Destruction of a resting place	16/06/2016 – 15/06/2021
2019-42658-EPS-MIT	Brown long-eared and common pipistrelle	872 m east	Destruction of a breeding site and resting place	25/10/2019 – 17/10/2029
2016-23261-EPS-MIT	Common pipistrelle	945 m northeast	Destruction of a resting place	01/09/2016 – 31/08/2021
2017-28939-EPS-MIT	Common pipistrelle	951 m northeast	Destruction of a resting place	27/04/2017 – 31/08/2018

Appendix E Great Crested Newt Habitat Suitability Index Results

	Pond Name	**Pond 1 (west)**	**Pond 2 (east**
SI Number	**SI Description**	**SI Value**	**SI Value**
1	Geographic location	1	1
2	Pond area	0.4	0.2
3	Pond permanence	0.9	0.9
4	Water quality	0.33	0.33
5	Shade	0.2	0.4
6	Waterfowl effect	1	1
7	Fish presence	1	1
8	Pond Density	1	1
9	Terrestrial habitat	1	1
10	Macrophyte cover	0.4	0.5
	HSI Score	0.63	0.64
	Pond suitability	Average	Average

Based on ARGUK advice note 5 - Great Crested Newt Habitat Suitability Index

Appendix F Notable Bird Species

Bird species that could be present on or adjacent to the site boundaries based on the habitats present within the Survey Area.

Common name	Vernacular name	Status/protection
Lesser redpoll	*Acanthis cabaret*	NERC Act Section 41 LPS Local Spp of Cons Conc
Skylark	*Alauda arvensis*	NERC Act Section 41 LPS Local Spp of Cons Conc Bird-Red
Swift	*Apus apus*	LPS Bird-Red
Short-eared owl	*Asio flammeus*	Birds Dir Anx 1
Greenfinch	*Chloris chloris*	Birds Dir Anx 1 W&CA Sch1 Part 1
Lesser Whitethroat	*Curruca curruca*	LPS
House martin	*Delichon urbicum*	LPS Bird-Red
Yellowhammer	*Emberiza citrinella*	NERC Act Section 41 LPS Local Spp of Cons Conc Bird-Red
Linnet	*Linaria cannabina*	LPS Local Spp of Cons Conc Bird-Red
Red kite	*Milvus milvus*	Birds Dir Anx 1 W&CA Sch1 Part 1
House sparrow	*Passer domesticus*	NERC Act Section 41 LPS

Common name	Vernacular name	Status/protection
		Local Spp of Cons Conc Bird-Red
Dunnock	*Prunella modularis*	LPS
Tawny owl	*Strix aluco*	LPS
Starling	*Sturnus vulgaris*	LPS Local Spp of Cons Conc Bird-Red
Song thrush	*Turdus philomelos*	LPS Local Spp of Cons Conc
Barn owl	*Tyto alba*	W&CA Sch1 Part 1

Appendix G Legislation

This Appendix is intended as a brief guide to some of the relevant offences associated with protected species which are common constraints associated with development projects.

For full details of legislation relating to all habitats and species discussed within this report visit http://www.legislation.gov.uk.

Amphibians including great crested newt

Great crested newt *Triturus cristatus* (GCN) is protected under the Wildlife & Countryside Act 1981 (as amended) ("the WCA 1981") and the Conservation of Habitats and Species Regulations 2017 (as amended) ("the Habitats Regulations") and is therefore a European Protected Species (EPS).

It is illegal to kill, injure, capture, handle or disturb GCN, and the places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed.

Natterjack toad *Epidalea calamita* is also an EPS and is afforded the same protection.

GCN, natterjack toad and common toad Bufo bufo are Priority Species under the Natural Environment and Rural Communities Act 2006 ("the NERC Act").

European Badger

Badgers *Meles meles* and their setts are protected under the Protection of Badgers Act 1992 ("the PBA 1992"). It is an offence to kill, injure or take a badger from the wild. It is also an offence to destroy, damage or obstruct an active badger sett, or to disturb badgers within the sett.

Bats

All species of bat occurring within the UK are included in Schedule 2 of the Habitats Regulations. Under Regulation 43, bats are protected from deliberate capture, injury or killing, from deliberate disturbance and from damage or destruction of a breeding site or resting place (roost).

All UK bats are also included on Schedule 5 of the WCA 1981. It is an offence to intentionally or recklessly disturb bats while they are occupying a structure or place used for shelter or protection, or to obstruct access to any such place.

Bats are also listed as Priority Species under Section 41 of the NERC Act and certain species are Priority Species under the NERC Act.

Birds

All wild birds are protected under the WCA 1981 against destruction of the active nest.

It is illegal to kill, injure or 'take' any wild bird, take or damage the nest of any wild bird whilst in use or being built. The eggs of all wild birds are also protected.

The birds listed in Schedule 1 of the WCA 1981 are protected against disturbance whilst actively nesting.

Competent authorities must have regard for all bird species listed under Section 41 of the NERC Act which have potential to be impacted by proposed works.

In 2021, a re-assessment of Birds of Conservation Concern (BoCC) was published by Stanbury et al. (2021), which defined rare and threatened bird species on two lists (Red and Amber) describing the level of threat to each species of concern.

'Red' is the highest conservation priority, with species needing urgent action due to either a historical decline in breeding population, severe (>50%) decline in breeding or non-breeding population, or severe decline in breeding range over 50 years or more.

'Amber' is the next most critical group, with species qualifying for this status as a result of either recovery from red list criterion, being classed as rare breeders in the UK, moderate (>25%) decline in breeding or non-breeding population or moderate decline in breeding range over 25 years or more.

These categories are followed by 'Green', indicating that the species is not experiencing population declines. A species can be green listed but can also be listed under Schedule 1 of the WCA 1981 due to risk of persecution.

Hazel dormouse

Hazel dormouse *Muscardinus avellanarius* is protected under Schedule 5 of the WCA 1981, and under Schedule 2 of the Habitats Regulations, giving this species the same protection as GCN and bats.

Hazel dormouse is also listed as a Priority Species under the Section 41 of the NERC Act.

Eurasian Otter

Otter *Lutra lutra* is protected under Schedule 5 of the WCA 1981, and under Schedule 2 of the Habitats Regulations, giving this species the same protection as GCN and bats.

Otter are listed as Priority Species under the Section 41 of the NERC Act.

Reptiles

All UK reptile species are protected under Schedule 5 of the WCA 1981 against intentional killing or injuring.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* are further protected under Schedule 2 of the Habitats Regulations.

Slow worm *Anguis fragilis*, sand lizard, common lizard *Zootoca vivipara*, grass snake *Natrix helvetica* and adder *Vipera berus* are also listed as Priority Species under the Section 41 of the NERC Act.

European Water vole

Water vole *Arvicola amphibius* is fully protected under Schedule 5 of the WCA 1981 making it an offence to intentionally kill, injure or take a water vole, intentionally or recklessly damage or destroy a place of shelter or protection, intentionally or recklessly disturb a water vole when it is occupying such a place, or intentionally or recklessly obstruct such a place.

Water vole are listed as Priority Species under the Section 41 of the NERC Act.

Invasive non-native species

Certain species of plants and animals that do not naturally occur in the UK have become established in the wild and represent a threat to the natural fauna and flora.

The WCA 1981 is the principal piece of legislation in the UK regarding invasive non-native species. It is an offence under Section 14 (2) to plant or otherwise cause to grow in the wild any species listed on Schedule 9, Part II of the Act. Schedule 9, Part II includes knotweed species *Fallopia spp.*, Himalayan balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, cotoneaster species *Cotoneaster spp.*, montbretia *Crocosmia* × *crocosmiiflora* and Rhododendron species *Rhododendron spp.* Section 14 also controls the spread of various animal species.

In accordance with Section 33 and 34 of the Environmental Protection Act 1990, if taken from their place of origin, any plant listed on Schedule 9, Part II of the WCA 1981 and their associated material (e.g. soil and ash) are classed as controlled waste.