ECOSA
Ecological Survey & Assessment
A Trinity Consultants Company

BEACHES YARD, HORTON ROAD, YIEWSLEY, WEST DRAYTON, LONDON

ECOLOGICAL IMPACT ASSESSMENT

Final Document

February 2022

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EcIA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

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ECOSA Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The Ecological Impact Assessment and report has been prepared in line with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018) and survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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BEACHES YARD, HORTON ROAD, YIEWSLEY, WEST DRAYTON, LONDON

ECOLOGICAL IMPACT ASSESSMENT

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by Harvest Land Management to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of Beaches Yard, Horton Road, Yiewsley. The site is located south-east of the town of Yiewsley, on the western outskirts of London and comprises several static homes, large areas of hardstanding, small areas of vegetation, scrub and boundary trees. The proposals entail the redevelopment of the site comprising a new warehouse.

The main findings of the Ecological Impact Assessment are:

- Habitat present on site include scattered scrub, tall ruderal, ephemeral/short perennial and scattered trees.

- The buildings/structures present on site all have negligible suitability for supporting roosting bats.

- The site has low suitability for foraging and commuting bats and suitability for breeding birds.

- Mitigation and compensation recommendations have been given for foraging and commuting bats and nesting birds through timing of works.

- Enhancement recommendations include the provision of landscaping after the construction phase and the provision of bat and bird boxes.

- If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Harvest Land Management to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of Beaches Yard, Horton Road, Yiewsley, West Drayton, UB7 8HX (hereafter referred to as the site).

1.2 The Site

The site is located in south-east Yiewsley, Middlesex, centred on National Grid Reference (NGR) TQ 0713 8039 (**Map 1**). The Phase 1 habitat map (**Map 2**) depicts the boundary of the site.

The site comprises several static homes, large areas of hardstanding, small areas of vegetation, scrub and boundary trees. The site is bounded by commercial developments to the south and west and woodland and a golf course to the north and the east.

The wider landscape comprises an urban setting with significant residential and commercial development to the south, west and east. Public open space is present to the north of the site in the form of playing fields and a country park. A canal and railway line are located approximately 360 metres south of the site, the M4 is 1.8 kilometres to the south and the M25 is three kilometres west. Heathrow airport is also 3.4 kilometres south.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out during December 2021 and January 2022. The report describes the habitats and species (hereafter referred to as ecological features) within the site's Zone of Influence (Paragraph 3.2) and provides a detailed assessment of potential ecological effects of the proposed development of the site. It identifies the need for any measures to avoid, mitigate or compensate for significant adverse effects[1] on ecological features and outlines enhancements to the site's ecology to be implemented as part of the development. The objectives of the assessment are:

- To provide baseline information on ecological features within the site's Zone of Influence;

[1] For the purposes of this assessment a 'significant' adverse effect is one which will have an adverse effect on the ecological feature at the site level or higher.

- To assess, characterise and quantify the effects on ecological features, including cumulative effects, and identify effects in the absence of any mitigation;
- To set out measures to avoid, mitigate and compensate for significant ecological effects in accordance with the 'mitigation hierarchy'[2]; and
- To outline opportunities for enhancement in order to achieve a net gain for biodiversity.

1.4 Site Proposals

The proposals for the site comprise the redevelopment of the site to comprise a new warehouse facility.

The Ecological Impact Assessment is based on the proposals plan produced by Nick Wilson Architects, dated February 2022 (Project No. 0203).

[2] In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

2.0 PLANNING POLICY CONTEXT

2.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the Hillingdon Council administrative area. This information is then used to assess the compliance of the scheme in relation to relevant planning policy and where necessary used to inform the necessary mitigation, compensation and enhancement measures (see Section 5.0).

2.2 Planning Policy

2.2.1 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with the most recent revised NPPF published in July 2021. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF "*Plans and decisions should apply a presumption in favour of sustainable development*". However, Paragraph 182 goes on to state that "*The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.*".

The NPPF sets out that development proposals should not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 174 states that the planning system should contribute to and enhance the natural environment by *"…minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...".*

A number of principles are set out in Paragraph 180, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats[1], including ancient woodland[2]. Where loss to irreplaceable

[1] The NPPF defines irreplaceable habitats as "*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."*
[2] Natural England defines ancient woodland as "An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)."

habitats occurs planning permission would normally be refused unless there are wholly exceptional reasons and an adequate compensation strategy is in place. Paragraph 180 also states "*development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*". Paragraph 181 also sets out that potential SPAs, SACs and listed or proposed Ramsar sites or sites acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states "*the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat*". Paragraph 99 states "*it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the Proposed Project Development, is established before planning permission is granted*".

2.2.2 Local Policy

The Hillingdon Local Plan – Strategic Policies sets out a vision for the future development of the London Borough of Hillingdon and covers a 15-year plan period up to 2026. The council adopted the Local Plan in November 2012. The plan conforms to the London Plan produced by the Mayor of London. A number of polices within the Core Strategy DPD and the London plan refer to biodiversity.

Within the London Borough of Hillingdon Local Plan, the following policy applies:

- **Policy EM7: Biodiversity and Geological Conservation**
  Hillingdon's biodiversity and geological conservation will be preserved and enhanced with particular attention given to:

  1. The conservation and enhancement of the natural state of:
     - Harefield Gravel Pits
     - Colne Valley Regional Park
     - Fray's Farm Meadows
     - Harefield Pit

  2. The protection and enhancement of all Sites of Importance for Nature Conservation. Sites with Metropolitan and Borough Grade 1 importance will be protected from any adverse impacts and loss. Borough Grade 2 and Sites of

Local Importance will be protected from loss with harmful impacts mitigated through appropriate compensation.

3. The protection and enhancement of populations of protected species as well as priority species and habitats identified within the UK, London and the Hillingdon Biodiversity Action Plans.

4. Appropriate contributions from developers to help enhance Sites of Importance for Nature Conservation in close proximity to development and to deliver/ assist in the delivery of actions within the Biodiversity Action Plan.

5. The provision of biodiversity improvements from all development, where feasible.

6. The provision of green roofs and living walls which contribute to biodiversity and help tackle climate change.

7. The use of sustainable drainage systems that promote ecological connectivity and natural habitats.

Within the London Plan, the following policy applies:

- **Policy G6: Biodiversity and Access to Nature**
  - Sites of Importance for Nature Conservation (SINCs) should be protected.
  - Boroughs, in developing Development Plans, should:
    1. Use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks;
    2. Identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them;
    3. Support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans;

4. Seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context 325 The London Plan 2021 – Chapter 8 Green Infrastructure;

5. Ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.

- Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:

    1. Avoid damaging the significant ecological features of the site

    2. Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site

    3. Deliver off-site compensation of better biodiversity value.

- Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.

- Proposals which reduce deficiencies in access to nature should be considered positively

3.0 METHODS

3.1 Introduction

This section details the methods used during the field survey and desktop study carried out as part of the Ecological Impact Assessment. Any significant limitations to the assessment are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this assessment (Zone of Influence[3]), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the assessment (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals.

3.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 4.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the assessment of ecological effects and mitigation measures section (Section 5.0) of this report.

3.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this assessment. This was not considered necessary given the limited scale of impacts and the nature of on-site and surrounding habitats.

3.4.1 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) (DEFRA, 2022) database was reviewed on 5th January 2022 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any

[3] The Zone of Influence (ZoI), as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species[4]. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

3.4.2 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

3.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including boundary features. Habitats described in Section 4.0, have been mapped (**Map 2**) and photographs provided, where relevant.

3.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010). This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each

[4] Search areas for bat records are based upon information contained within Collins, J. (Ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Third Edition). The Bat Conservation Trust, London. Relevant distances for consideration of impacts on SPAs, SACs, Ramsar sites have been based on current published guidance available through web-based sources.

vegetation type was compiled and any invasive species[5] encountered as an incidental result of the survey recorded.

3.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of buildings and trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as loose or missing roof tiles or lifted lead flashing for buildings and holes, cracks, splits, loose bark and ivy cladding for trees. A detailed external of accessible structures was undertaken to compile information on potential and actual bat entry/exit points; potential and actual bat roosting locations; any evidence of bats found.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 3**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

[5] Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on-site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable

for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 3.4.2), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species[6], specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

3.6 Field Survey Details

The field survey was carried out by Jennifer Simpson-Watts, Ecologist of ECOSA on 20th December 2021. The weather conditions were overcast with 100% cloud cover, an ambient temperature of 6°C and a gentle breeze.

3.7 Field Survey Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

[6] LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

Not all potential bat roosting features are accessible to the surveyor eg. gaps beneath roof materials or holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

It is not always possible to provide definitive assessments of a species' presence/likely absence at a site and so in the absence of direct evidence, assessments and recommendations are based on the presence of suitable habitat within/adjacent to a site and the results of species records within the desk study data.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Introduction

This section details the results of the field survey and desktop study undertaken as part of the Ecological Impact Assessment for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey carried out on 20th December 2021.

4.2 Statutory Designated Sites

There are no statutory designated sites of nature conservation interest situated within one kilometre of the site boundary.

4.3 Habitats

4.3.1 Desktop Study Results

Consultation with MAGIC produced no records of notable habitats within the site boundary, however, broadleaved deciduous woodland, a priority habitat, is present directly north and east of the sit boundary, associated with the golf course and country park.

4.3.2 Field Survey Results

Habitats within the site are shown on the Phase 1 Habitat Map (**Map 2**) and photographs have been provided as appropriate. Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Scattered Scrub

An isolated area of scattered scrub is present on site and is concentrated between the boundary fence and one of the buildings (**Figure 1**). The dominant species is bramble *Rubus fruiticosus* aggregate with common fleabane *Pulicaria dysenterica* and willow *Salix* species.

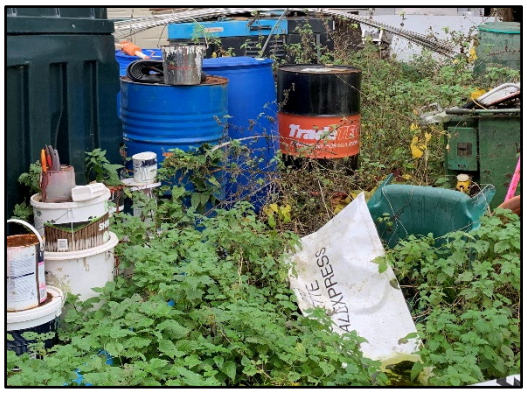

Figure 1: Scattered scrub and tall ruderal

Tall Ruderal

A small area of tall ruderal is present on site between buildings towards the centre of the site. The area is dominated by common nettle *Urtica dioica*.

Ephemeral/Short Perennial

Several isolated areas of ephemeral/short perennial are present on site (**Figure 2**). Species present include cleavers *Galium aparine*, nipplewort *Lapsana communis*, dandelion *Taraxacum officinale*, field bindweed *Convolvulus arvensis*, cock's foot *Dactylus glomerata*, horseweed *Erigeron canadensis*, least mallow *Malva parviflora*, oxeye daisy *Leucanthemum vulgare*, hemlock *Conium maculatum*, willow species, sow thistle *Sonchus oleraceus*, groundsel *Senecio vulgaris*, buddeja *Buddleja davidii* and cudweed *Gnaphalium* species.

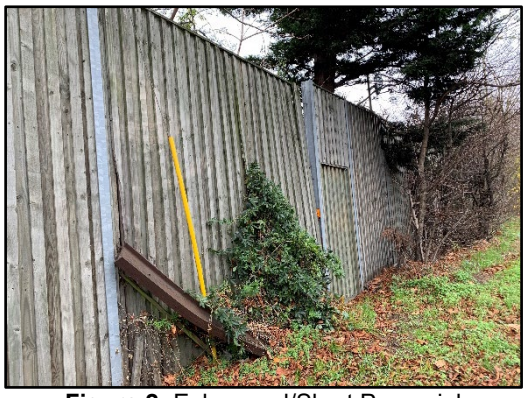

Figure 2: Ephemeral/Short Perennial

Scattered Trees

Scattered trees are present along the eastern boundary of the site (**Figure 3**). All species were pine *Pinus* species.

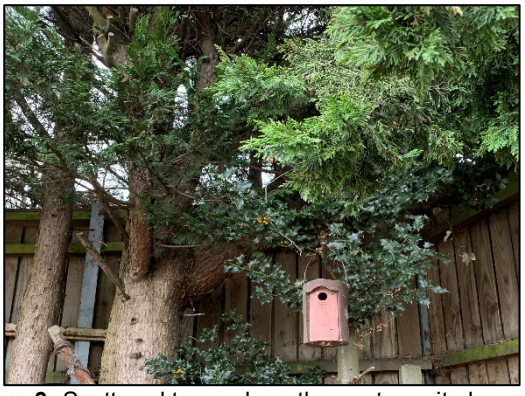

Figure 3: Scattered trees along the eastern site boundary

Other Habitats

Other habitats present include hardstanding, buildings (Paragraph 4.4.1) and a boundary fence.

Summary

The habitats onsite comprise scattered scrub, tall ruderal, ephemeral/short perennial and scattered trees. These habitats support a low diversity of plant species and are considered to be of low ecological value compared to those in the wider landscape.

4.4 Notable and Legally Protected Species

4.4.1 Bats

Desktop Study Results

Consultation with MAGIC produced no records of bats within the desktop study area, however, this does not confirm the absence of the species group in the local area.

Building Assessment

There are multiple structures on the site including 12 static residences and three sheds. The majority of these structures were mobile homes. Two of these were chalet-type bungalows with a shallow pitches roof, but no internal void (**Figure 4**). A prefabricated building with a flat roof and wooden fascias is also present (**Figure 5**). None of these structures supported suitable features for roosting bats.

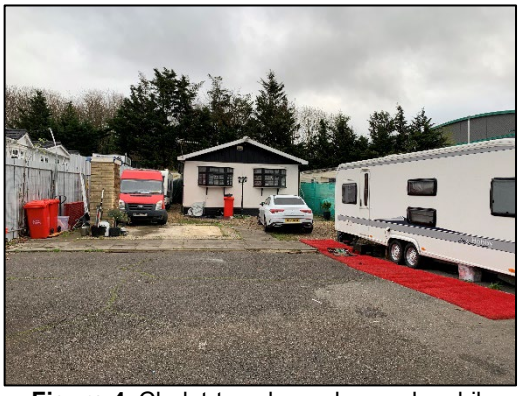

Figure 4: Chalet-type bungalow and mobile home

Figure 5: Prefabricated building with flat roof

Tree Assessment

The trees on site are all semi-mature and lack features which support roosting bats. Therefore, the trees on site are considered to have negligible suitability for supporting roosting bats.

Foraging and Commuting Habitat

The site itself supports limited vegetation comprising a small area of scrub and tall ruderal vegetation, patches of ephemeral/short perennial and boundary trees. The majority of the site comprises buildings and hardstanding. However, highly suitable foraging and commuting habitat is present in the wider area, though this does not have

good connectivity to the site. Therefore, the site is assessed as having low suitability for foraging/commuting bats.

4.4.2 Otter

Desktop Study Results

Consultation with MAGIC produced no records of otter *Lutra lutra* within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site does not support any aquatic habitats required by this species including rivers, streams, ditches, wetlands, lakes, ponds or reservoirs. A canal is present approximately 360 metres to the south of the site. However, the habitats on site are unsuitable for supporting otter, therefore it is considered unlikely that otter would commute overland to the site.

The habitats on site are considered unsuitable for otter and the species is not considered further in this report.

4.4.3 Badger

Field Survey Results

No field signs of badger *Meles meles* were identified during the survey and there is no suitable habitat on site for badger to construct setts as the majority of the site is hardstanding. The vegetation on site does not provide suitable foraging opportunities for badger as habitats are limited to small areas of scrub and tall ruderal, a line of scattered trees and ephemeral/short perennial, though it is likely badger may be present in habitats within the wider landscape. The site is enclosed by close-board timber fencing and concrete pads, which are in excellent condition without gaps or holes present. Therefore, it is unlikely that badger will commute through the site.

The habitat on site is unsuitable for badger and therefore the species is not considered further in this report.

4.4.4 Hazel Dormouse

Desktop Study Results

Consultation with the MAGIC database produced no records of granted EPSM licences with regards to hazel dormouse *Muscardinus avellanarius* within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site is predominantly hardstanding and lacks structured vegetation required by hazel dormouse including hedgerows and dense scrub. More suitable habitats are present beyond the site boundary in the form of woodland to the north and east of the site. However, there is no connectivity between this woodland and the habitats on site, therefore dormouse will not be supported on the site itself.

Overall, the habitats on site are unsuitable for hazel dormouse and therefore the species is not considered further in this report.

4.4.5 Water Vole

Field Survey Results

The site does not support river habitats and lacks the bank structure and bank side vegetation required by this species. Water vole *Arvicola amphibius* are unlikely to use the site due to the nature of the habitats present and therefore the species is not considered further in this report.

4.4.6 Birds

Field Survey Results

During the survey, no bird species were recorded on site or passing over in flight.

The habitats present on the site offer very limited suitability for nesting birds as the majority of the site comprises hardstanding. However, the scrub habitats and scattered trees do provide some habitat for nesting birds. Additionally, a single bird nesting box is already present on the south-east corner of the site but did not show any signs of occupancy (**Figure 3**).

Therefore, these habitats provide suitability for nesting birds.

4.4.7 Reptiles

Field Survey Results

The site comprises largely of hardstanding and therefore, there is no suitable habitat for supporting reptiles. The scrub/tall ruderal habitats appear unmanaged but are isolated from other suitable habitats and also frequently disturbed as this area is being used for storage of materials (**Figure 1**), therefore it is unlikely that reptiles would use this area. There is much more suitable habitat for common reptile species in the wider area such as woodland to the north and east.

Therefore, the habitats on site are considered unsuitable for reptiles and therefore this species group is not considered further in this report.

4.4.8 Great Crested Newt

Desktop Study Results

Consultation with the MAGIC database produced no records of granted EPSM licences with regards to great crested newt *Triturus cristatus* within the desktop study area, however, this does not confirm the absence of the species in the local area.

A review of aerial photography and OS mapping revealed no waterbodies within 500 metres of the site.

Field Survey Results

There are no waterbodies on site, therefore the site does not support a breeding population of great crested newt. There are no suitable breeding ponds within 500 metres of the site. The habitats onsite are predominately hardstanding and therefore offer no suitability for great crested newt.

The habitat on site is unsuitable for great crested newt and this species is not considered further in this report.

4.4.9 Invertebrates

Field Survey Results

The habitats on site are common and widespread and therefore likely to support common and widespread species and assemblages of invertebrates.

As the site is considered unlikely to support notable invertebrate species or assemblages, this group is not considered further in this report.

4.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- Habitats on site have low suitability for foraging/commuting bats
- The site has suitability for nesting birds.

5.0 ASSESSMENT OF ECOLOGICAL EFFECTS AND MITIGATION/COMPENSATION/ ENHANCEMENT MEASURES

5.1 Introduction

This section assesses the ecological effects of the proposed development scheme on the identified ecological features as identified in Section 4.0. Methods for addressing potential impacts and effects on ecological features have been approached in accordance with the mitigation hierarchy[7] with avoidance of impacts prioritised where possible. Where significant adverse effects cannot be avoided other forms of mitigation are prioritised over compensation. Enhancement measures have been detailed, where relevant, in order to not only minimise the impacts on biodiversity but also to provide enhancement in accordance with Paragraph 170 of the NPPF (Paragraph 2.2.1). It is anticipated that mitigation, compensation and enhancement measures will be secured through the planning process.

5.2 Scheme Design

The proposed development entails the redevelopment of the site to comprise of a warehouse facility.

No details of lighting or landscaping proposals have currently been provided. Landscaping proposals will be provided to support a full planning application.

The potential ecological impacts and effects of these proposals, in the absence of mitigation, are described for each ecological feature below. For each ecological feature, measures to mitigate and/or compensate for significant effects are described.

5.3 Habitats

5.3.1 Potential Impacts and Effects

The current proposals for the site will impact a small area of scrub/tall ruderal and ephemeral/short perennial. Proposals will also require the removal of two small trees along the boundary of the site with Horton Road. The buildings, residences and sheds are likely to be removed from site prior to the redevelopment. The habitats within the site are common and widespread and are of low ecological value and limited in extent, therefore this does not represent a significant constraint to the project.

5.3.2 Potential Mitigation and Compensation Measures

The current proposals include the retention of the scattered trees along the eastern site boundary. The retained trees should be buffered by a minimum of five metres with no access to this buffer during the construction phase. This will be achieved through the

[7] In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

erection of Heras fencing or similar. Any retained trees will be protected during the construction period with Root Protection Zones established in accordance with BS 5837:2012 (British Standards, 2012).

5.3.3 Enhancement

There are no proposals for current landscaping opportunities for the site. However, once the development has been completed, it is recommended that enhancement planting in the form of trees, shrubs and grassland areas should be included.

5.4 Bats

5.4.1 Potential Impacts and Effects

Two boundary trees are proposed to be removed. Due to the remaining trees left along the site boundary and the connectivity to additional suitability foraging/commuting habitats in the wider landscape, there will be no loss of suitable foraging/commuting habitat for bats.

If new external lighting were to be installed on site as part of the proposals, it may disturb foraging and commuting bats.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017. Refer to **Appendix 2** for details.

5.4.2 Potential Mitigation and Compensation Measures

Two boundary trees are proposed to be removed. This is not considered to be a significant loss to foraging/commuting habitat the majority of the boundary habitat remains *in situ* and is connected to further suitable habitat immediately outside the site boundary.

All works associated with the construction phase should be carried out within daylight hours to avoid disturbance to foraging and commuting bats.

Any new lighting should be task related, associated with specific entrance/exit points of the building and should be directed away from the retained boundary vegetation. The lux level should be as low as possible to allow the task to be carried out safely and effectively. Guidance on task related lighting levels and mitigation options as described within the Bats and Artificial Lighting in the UK report will be followed (Institution of Lighting Professionals, Bat Conservation Trust, 2018).

5.4.3 Enhancement

To provide suitable enhancement for bats, three Vivara Pro WoodStone bat box (or similar alternatives) could be erected on the building, orientated east. An additional two bat boxes could be erected on any retained mature trees (where possible) at a height of four metres.

5.5 Birds

5.5.1 Potential Impacts and Effects

Clearance of the vegetation may harm and/or disturb breeding birds if carried out during the nesting season of March to August inclusive and in the absence of compensation, will lead to a loss of nesting habitats.

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981 (as amended). Refer to **Appendix 2** for details.

5.5.2 Mitigation and Compensation Measures

Vegetation clearance should be undertaken outside the breeding bird season of March to August, inclusive, or if not possible, an ecologist should be present immediately prior to clearance to check vegetation. Active nests should be left with a suitable buffer until nesting ends.

5.5.3 Enhancement

As a form of enhancement, one Vivara Pro WoodStone House Sparrow Nest Box and two Vivara Pro Woodstone Seville Nest Boxes (or similar alternatives) could be installed on the new building after the completion of the development to provide further nesting opportunities for breeding birds.

5.6 Residual and Cumulative Effects

Given the mitigation and compensation measures outlined above, no significant residual effects are anticipated on any of the species considered. Therefore, there will be no cumulative effects on local populations as a result of the development.

6.0 CONCLUSIONS

6.1 Conclusion

The site is assessed as having low suitability for foraging and commuting bats and suitability for breeding birds. Any adverse impacts of the proposals have been identified and appropriate mitigation measures proposed including sensitive lighting schemes and timings of the works and the provision of bat and bird boxes.

6.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

7.0 REFERENCES

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Map 1 Site Location Plan

BEACHES YARD, HORTON ROAD, YIEWSLEY, WEST DRAYTON, LONDON

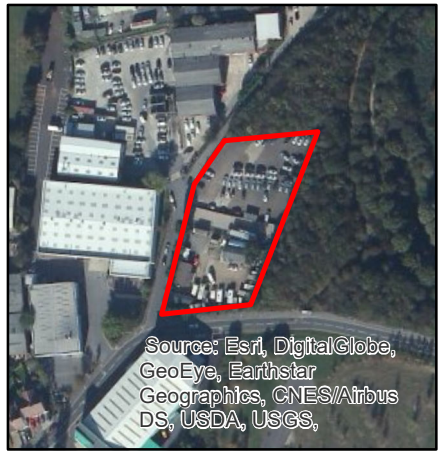
ECOLOGICAL IMPACT ASSESSMENT

Map 1 - Site Location Plan

Client:	Harvest Land Management
Date:	February 2022
Status:	Final

KEY

Site Boundary



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0 100 200 400 Metres

N

Prepared by: JW	Date: 170122
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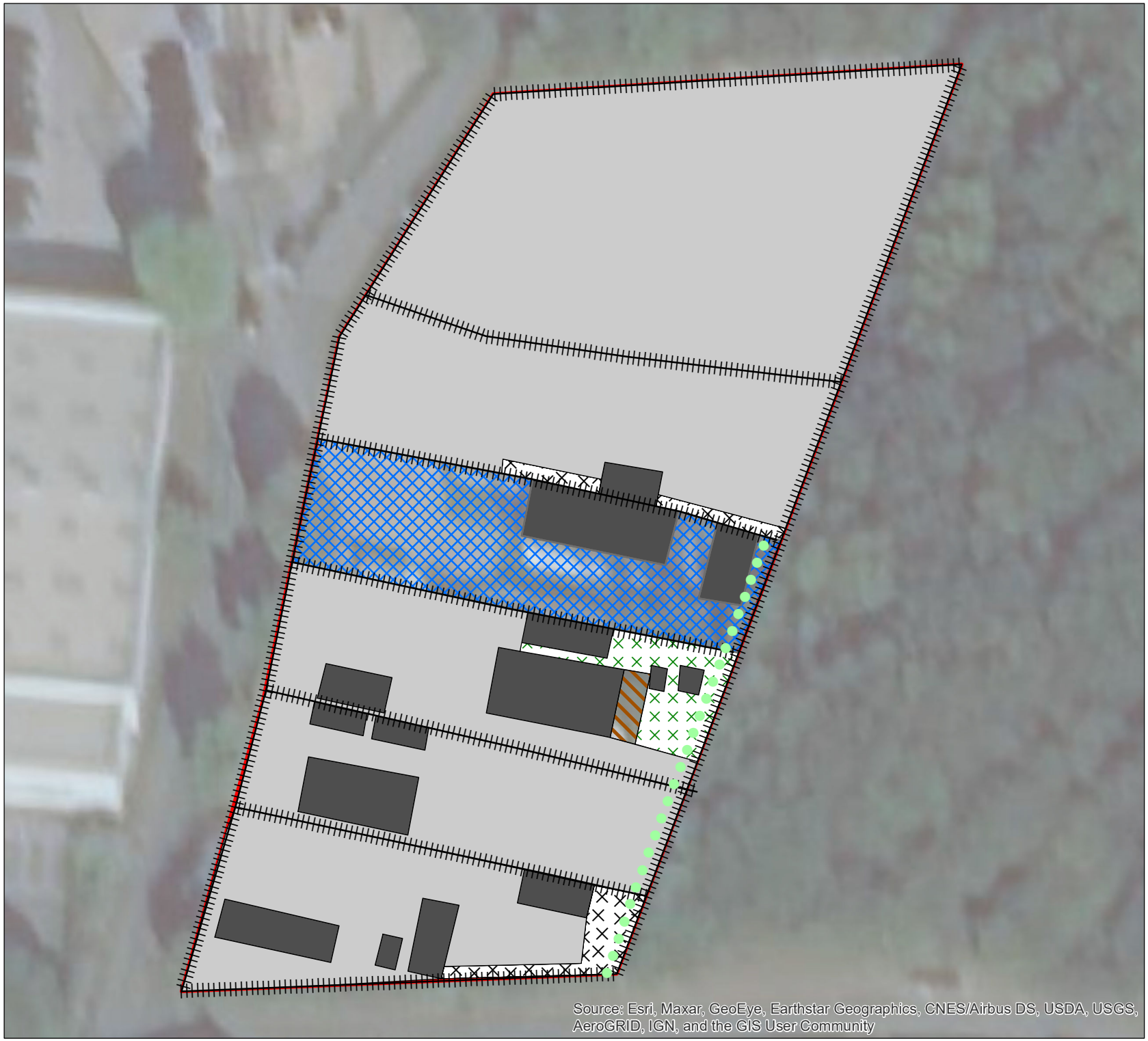
Map 2 Phase 1 Habitat Map



BEACHES YARD, HORTON ROAD, YIEWSLEY, WEST DRAYTON, LONDON

ECOLOGICAL IMPACT ASSESSMENT

Map 2 - Phase 1 Habitat Map

Client:	Harvest Land Management
Date:	January 2022
Status:	Final

KEY

- Site Boundary
- Area Not Surveyed
- Building
- Ephemeral/Short Perennial
- Hardstanding
- Scattered Scrub
- Tall Ruderal
- Coniferous Parkland Scattered Trees
- Fence

Scale at A4: 1:503

0 5 10 20 Metres

N

Prepared by: JSW	Date: 100122
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Appendix 1 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) form a network of protected sites across the European Union and United Kingdom. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to SPAs and SACs.

SACs are sites which support internationally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds . SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on SPAs, SACs or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an “Appropriate Assessment” to fully assess the plan or project against the site’s conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a SPA, SAC or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSI) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNR) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNR) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Appendix 2 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
- To impair its ability to survive, breed, or rear or nurture their young;
- To impair its ability to hibernate or migrate;
- To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Appendix 3 Appraisal Criteria for Bats

The criteria used to assess the suitability of foraging/commuting habitat for bats is based on industry guidelines and outlined in Error! Reference source not found.[8].

Table 1: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate	A structure of tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat). Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

[8] Table adapted from (Collins, 2016)