



Leigh Ecology Ltd

Protected Species and Habitat Surveys

Land at Waterfold Lane, Bury.

On behalf of Equilibrium.

Preliminary Ecological Appraisal

Report Number	LAWL/24-001
Author	C. Leigh
Date	10 th October 2024
First Check	C. Evans
Final Technical Check	R. Leigh

Office 01606892032 Mobile 07815711678

Directors R S Leigh & J J Leigh. 8 Hall Drive, Marston, Northwich, Cheshire CW9 6DT

Important Information to Readers

This report has been prepared for Equilibrium, in accordance with the terms and conditions of appointment for a Preliminary Ecological Appraisal. Leigh Ecology Ltd cannot accept any responsibility for the use of or reliance on the content of this report by any third party.

The advice contained in this report is based on the information available and/or collected during the period of study. We cannot eliminate the possibility of important ecological features being found through further investigation and/or by survey at different times of the year or in different years.

Surveys and assessments are undertaken on the understanding that nothing in our reports will be omitted, amended or misrepresented by the client or any other interested party.

Please be aware the information contained within this report is valid for a period not exceeding two years. After this time, data contained within will require updating.

This report and its contents remain the property of Leigh Ecology Ltd, until payment has been made in full.

Contents

1. Executive summary	4
2. Introduction	5
2.1 Legislation & Policy	7
3. Methodology	9
4. Results	10
5. Constraints and Recommendations	21
6. References	23
7. Appendices	
Appendix 1 – Phase 1 Habitat map and legend	
Appendix 2 – Target Note Table	

1. EXECUTIVE SUMMARY

Leigh Ecology Ltd was commissioned to undertake a preliminary ecological assessment at a parcel of land at Waterfold Lane, Bury.

The site is a parcel of derelict land, currently comprising of patches of rubble/ hard standing with accompanying grassland and early succession plant species. The bordering sections, especially along the adjacent river rich channel features large clusters of Himalayan Balsam, an invasive plant species. The southern boundary bund features tall ruderal species, mainly fireweed, hogweed, creeping thistle and some stands of Himalayan balsam.

The site is situated on the periphery of Bury, a large suburban town of Manchester. Typical rural habitat, comprising open grassland, surrounding hedgerows and tree lines/clusters feature south of the proposal site, with Bury town Centre and urban infrastructure featuring directly north of proposal site. The site also sits adjacent to the M66 motorway.

The proposal plans include the addition of a care home complex with accompanying infrastructure. The objective of the survey was therefore to assess the composition of the site and produce a UKHABS map.

The results of the survey indicate that the site comprises typical derelict land, with consistent underfoot of rubble and hard standing material, with grassland growth and succession species growth. The site has clearly previously featured some hard standing structure/ plans for structure as large concrete foundations and rubble feature consistently. Small clusters of scattered scrub feature at a low stand height across site, offering limited habitat for invertebrate species on the main section of site. As previously mentioned, a bund features along the southern boundary of site, running alongside Waterfold Lane. This bund features several ruderal species and tall weeds, particularly fireweed, hogweed and stands of Himalayan Balsam.

The site features within 10m of the River Roch channel, which features dense cover of Himalayan balsam across the riparian zone. The river channel was unable to be comprehensively assessed

for suitable mammal species as it could not be accessed at any safe point. A consistently canopy tree line features along the northern boundary, acting as a buffer to the adjacent M66 motorway. This tree line is ideal bat foraging habitat, sheltered by the artificial lighting of the motorway channel.

Lighting proposals must be considered to minimise impact on adjacent tree lines and hedgerows.

2. INTRODUCTION

Background

Leigh Ecology Ltd was commissioned by Equilibrium to undertake an Ecological Appraisal of a parcel of land identified for the addition of a housing development. (approx. National Grid Reference (NGR) SD822103; refer to redline boundary shown on Figure 2.1 below.



Figure 2.1; Site Location and Extent. (Google Satellite, 2024).

(Contains public sector information licensed under the Open Government Licence v3.0.)

This report will therefore provide baseline information as derived from the diurnal appraisal

process outlined and recommend any necessary additional surveys, or work, where applicable, to provide a conclusive ecological impact assessment.

The Applicant should be aware that if during the appraisal:

- The application site/area was found to be suitable for any European Protected Species (EPS), otherwise protected, or priority habitats/species, or,
- Signs of use by particular protected species were found, or suspected, or,
- Seasonal constraints significantly limit the gathering of ecological information to arrive at an accurate conclusion on which the planning application can proceed.

Then more detailed surveys may be recommended where necessary, to allow the ecologist to arrive at a conclusive impact assessment.

If any protected species was subsequently found during detailed further surveys and / or may be affected by the development proposals, then a European Protected Species Mitigation Licence (EPSML) may be required to proceed with the development.

Protected/priority species omitted from this report have been discounted due to factors including obvious absence/isolation of suitable habitats, and/or distributional aspects negating the necessity to survey for them, and/or the proposed works were not considered to negatively impact the species or encroach on areas where the species may be present.

2.1 Legislation & Policy

The legislature considered for the purposes of this report includes the following:

- Conservation of Habitats and Species Regulations (amendment) (2019) (EU Exit)
- Wildlife and Countryside Act (1981) (as amended)
- Countryside Rights of Way (CRoW) Act (2000)
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act (1992)
- The Hedgerow Regulations (1997)
- Town and Country Planning Act (1990)
- Wild Mammals Protection Act (1996)

These acts entail relevance to both protected and invasive species. The degree of protection offered to taxa provided within existing UK and EU legislature often varies depending on species/group, for example, some species may purely be protected during one of its life stages (e.g., common species of breeding bird whilst nesting/with eggs/young); some species may receive full protection within the EU (e.g., otter), whereas others may be protected solely on a national basis (e.g., grass snake).

Policy

Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other

developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and,

d) 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.

This is supported within the local plan.

The study is documented in this report and includes the following:

- Preliminary ecological baseline for the site;
- Protected mammals' assessment of the site;
- A desk study including Magic map data search;
- Potential ecological constraints to the development of the site; and
- Further ecological work necessary for a planning submission.

All Work was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Practice.

3. METHODOLOGY

A daytime preliminary ecological appraisal was conducted on the 30th of July 2024 in dry conditions by Natural England licensed surveyor and Qualifying CIEEM member, Christian Leigh.

Floristic assessment

The survey followed the UK Habitat Classification Version 1.1 (Butcher et.al., 2020) being introduced as part of the roll out of Biodiversity Net-gain with reference to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology standards (JNCC, 2010) and reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series “Guidelines for Preliminary Ecological Appraisal, 2nd Edition” (CIEEM, 2017).

During the survey walkover, botanical assemblages were assessed, and the land was inspected for the presence of red-listed (Stroh et al, 2014; Hodgetts, 2011), s.41 and LBAP species alongside specially protected species as listed under Schedule 8 of the Wildlife and Countryside Act (WCA) (1981) (as amended) and / or Schedule 5 The Conservation of Habitats and Species (amendment) (EU exit) Regulations (2019). Species nomenclature follows Stace, C. (2019) – definitive English names for vascular plants, Smith, A. (2004) for mosses, and Dobson, F. (2018) for lichens.

In combination with assessing the area in relation to flora and habitats of conservation importance, the land was also assessed in relation to the presence of invasive non-native species (INNS) as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981) (as amended).

Faunal assessment

The identification and/or evidence of fauna encountered was documented whilst in tandem the area was assessed for the potential to support the priority species covered in the previous paragraphs. The ‘walkover’ also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

The application site was assessed for bats; buildings (where present) were inspected for potential places that may be of value to bats and to determine evidence of use.

This typically involves a search for potential roost features (PRF) both internally (investigation of loft spaces/upper floors/internal elevations) as well as externally, comprising an investigation of features (roof material, building components) using a high- powered torch. Field signs of bats typically comprise bat droppings, incidental animal presence, dead specimens and/or prey items. The surrounding habitat was also considered in terms of general suitability.

Trees (where present) were inspected for places that may be of value to bats and to determine if evidence of use was present; this typically involves a search for potential roost features along with an investigation of those features using a high-powered torch or close focus binoculars. Potential roost features can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy with stem diameters in excess of 50mm or bat/bird boxes. All mature trees were assessed for their potential to host roosting bats.

Criteria for preliminary bat roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023):

Landscape Assessment

Bats use regular commuting and foraging routes; these are usually linear features such as hedgerows and watercourse corridors. The loss and severance of such a feature may have an indirect impact on the bats. Therefore, it is important that if the development impacts on these features, they are assessed.

Breeding Birds

Buildings, trees, hedges, and scrub (where present) were checked for evidence of nesting birds and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting.

Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for the site's capacity to support species especially protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended), for example Barn Owl (*Tyto alba*) and other priority species.

Other terrestrial mammals

The walkover included a search for field signs of Badger (*Meles meles*) which includes signs of activity such as digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground. Any signs indicative of use of the site by European Hedgehogs (*Erinaceus europaeus*), or habitats of value to them, were also recorded.

Amphibians and Reptiles

During desktop assessment, a 250m search was undertaken from a site-central grid reference in relation to the presence of ponds, ditches or other water bodies that may support Great Crested Newts (GCN). The information gathered was then used to aid in establishing if more detailed surveys are required.

The site and its surroundings were assessed for suitability for use by reptiles, with particular attention paid to features that could be used as basking areas (e.g., south-facing slopes), hibernation sites (e.g., banks, walls, piles of hardcore) and opportunities for foraging (e.g., rough grassland and scrub).

The results, conclusions and recommendations of this report are based on a number of factors i.e., Skills and experience of the surveyor, knowledge of flora and fauna relevant to the site location and geographical range.

4. RESULTS

Site survey

Habitats within the survey area

The results of the Phase 1 Habitat survey and details are shown in *Appendix 1*, with accompanying photographs shown within the text (below). Habitat descriptions are provided, and plant species are referred to using their English names.

The survey site covers the full extent of the land shown in *Figs 2. 1.*. The proposed development will see the addition of small housing development with associated infrastructure.

Ecologically, the site currently comprises a patch of predominately derelict land, with instances of consistent grass growth sections. Sections of the site feature rubble/building material across the ground, with grasses growth and early successor species growth between. The site also features a bank within the riparian zone of dominant Himalayan balsam cover, along with self-seeded trees. The site also features a bund acting as the southern border, this features typical tall ruderal species with stands of Himalayan balsam also present within.

Habitats

The site currently features limited habitats on site. The site had previously featured more tree cover on site, using Google earth to view the site in previous years, the site in 2000 featured denser woodland cover in the northern corner and along the southern boundary. At present, the site features some ideal habitat for invertebrates, with speckled wood and Painted lady being identified across the bund along southern boundary of site. The tree line beyond the western boundary is ideal bat foraging habitat and is vital to be maintained during development work.

Site Boundaries

The site is bounded by wooden fencing to the west, with the vegetated bund being the eastern boundary and the northern boundary is the adjacent River Roch.

Surrounding habitats

The surrounding habitat is of mixed composition, with typical urban infrastructure directly north of the proposal site, and large open grassland fields and bordering hedgerows to the south of proposal site. The site sits adjacent to the M66 motorway and supporting slip road.

A map showing the specific habitat areas is presented in **Appendix 1**.



Photograph 1; A view of the middle of site, towards the western boundary.



Photograph 2; The site comprises derelict land, with grassland growth between hard standing/ rubble sections.



Photograph 3; The site features small clusters of dandelion and common nettle. The areas not featuring rubble/ hard standing, the ground was comminated by grass, common butterweed and common nettle.



Photograph 4; A view of the rear of the eastern bund.



Photograph 5; A view of the eastern bund, dominated by vegetation. Fireweed and creeping thistle are the dominant species, with some minor stands of Himalayan Balsam toward the northerly sections of the bund.



Photograph 6; A view of the Himalayan balsam in the northeastern corner of site. The Himalayan balsam extends all along the riparian zone/ bank of the River Roch.



Photograph 7; A view of the northern section, dominated by Himalayan balsam and self-seeded dotted trees. Himalayan Balsam should be removed and prevented from re growth on site.



Photograph 8; The northern and northwestern corner featured various tree stumps and former woodland floor.



Photograph 9; Trees in the northern corner featured some damage and breakage across the limbs. The trees were predominantly common lime trees in the northern corner and western tree line buffer.



Photograph 11; Some trees along the western buffer, beyond the wooden fence offered some PRF's.



Photograph 12; Some sections of concrete foundations feature across the site.



Photograph 13; The adjacent river channel could not be assessed comprehensively. The riparian zone of the river was constantly populated by vegetation and tree cover. The river offered few instances of viewable banks suitable for water vole.

Protected and notable species

Invertebrates

Several invertebrate species were recorded across site, including Speckled wood and painted lady butterflies identified along the eastern bund. The habitat on site is ideal for invertebrate species but does feature instances of invasive species within. This bund will be lost to facilitate the development.

Amphibians

Great crested newts are protected by Schedule 2 of the Convention of Habitats and Species Regulations (2010) and Schedule 5 of the Wildlife and Countryside Act (1981, as amended), which provide protection to both the individuals and the areas they use for rest, shelter or breeding. Great crested newts are also a UK BAP and LBAP priority species.

The site is segregated to the north and west with the M66 motorway, and the River Roch channel. Therefore, the only realistic direction of concern is south which features no instances of ponds or considerable water bodies within 500m

Bats

Surrounding habitat and Tree Inspection

The site features limited opportunity for bat roosting, some trees feature along the northern boundary and corner feature, but no PRF's were identified. The immediate surrounding area is ideal for bat foraging, especially directly west of site along the treeline adjacent to proposal site. This treeline may be an important treeline link along the M66 motorway channel, creating a sheltered buffer from artificial light along the motorway.

Breeding Birds

The site features limited sections suitable for bird nesting. It is critical that any infrastructure improvements (i.e., flood lighting upgrades) are undertaken to a suitable standard and minimize light exposure to adjacent treelines and river channel.

Badger

No signs of badger usage were noted across the site, or within the surrounding area.

Other mammals

The proposal site features limited value for other mammal species, the site may support some hedgehog foraging habitat given the site location. The adjacent river channel could not comprehensively be assessed, but viewable sections did not identify any suitable area for water voles within the riverbank. Otters are known to inhabit the River Roch, but the river channel could not be assessed during the survey.

5. CONSTRAINTS AND RECOMMENDATIONS

The proposed development (within the red line site boundary as shown in *Figures 2.1*) will consist of small housing development with associated infrastructure.

Positioning, construction, and post construction impacts are therefore likely upon both the habitats and species within and immediately adjacent to the site. Ecological constraints and recommendations regarding any development of the site are discussed below.

Non-native invasive species

Invasive Plants

An extensive buffer of Himalayan Balsam feature along the riparian zone of the adjacent river Roch. Some stands of Himalayan Balsam also feature in the northern end of the eastern bund buffer. This Himalayan Balsam should be entirely removed and prevented from regrowth.

Plants

The site features a good variation of plant species that are commonly identified within the ruderal vegetation bund, featuring creeping thistle, fireweed, bramble, common ragwort.

Protected species

Bats

The site features negligible suitable habitat for bat roosting and important foraging space. Adjacent treelines and river channel are more important for bat foraging, and lighting proposals for the development should be considered to minimize the lighting spillage to the treeline and river channel. Lighting schemes should be designed following the guidance set out by the BCT in 'Bats and Artificial Lighting at Night' 2023.

Where lighting is necessary, this will be low wattage, directional, low level and/or shaded to minimise light spill (<1Lux) onto potential flight lines and foraging habitat to ensure that the overall impact caused by lighting the site is negligible. These recommendations are particularly in reference to flood lighting being used on the development site.

Birds

No signs of active/ancient bird nesting were identified on site. Trees in the northern and eastern corner offer some potential for roosting.

Beyond this, any removal/trimming/part-removal of overhanging trees and trees on site should be undertaken outside of the bird nesting season (March-August).

Badgers

No signs of badgers or other mammal species were noted across the site. Despite this, it is likely that mammal species will frequent the site and RAMS (Reasonable Avoidance Measures) should be followed across all development stages to safeguard any effects on terrestrial mammals.

Other Mammals

The adjacent River Roch could not be comprehensively assessed but may support habitat for water voles and otters. RAMS should be followed across all development phases, including lighting spillage, buffer zones etc. to ensure any potential usage of the river channel is protected.

Biodiversity Net Gain

Biodiversity net gain calculations will be undertaken alongside this PEA report.

6. REFERENCES

ARG UK 2010. ARG UK Advice Note 5: Great crested newt Habitat Suitability Index.

Amphibian and Reptile Groups of the United Kingdom.

Botanical Society of the British Isles (BSBI) (2013). Online Atlas of the British and Irish Flora. Available at: http://www.brc.ac.uk/plantatlas/index.php?q=title_page

Chartered Institute of Ecological and Environmental Management (2017). Guidelines for Ecological Report Writing.

Cheffings, C.M. & Farrell, L. (Eds), Dines, T.D., Jones, R.A., Leach, S.J., McKean, D.R., Pearman, D.A., Preston, C.D., Rumsey, F.J., Taylor, I. 2005. The Vascular Plant Red Data List for Great Britain. Species Status 7: 1-116. Joint Nature Conservation Committee, Peterborough.

Department for Communities and Local Government 2012. National Planning Policy Framework.

Eaton MA, Brown AF, Noble DG, Musgrove AJ, Hearn R, Aebischer NJ, Gibbons DW, Evans A and Gregory RD (2012) Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 102, pp296-34

HMSO 1981. Wildlife and Countryside Act 1981 (and amendments). (c.69), London: HMSO.

HMSO 2010. Conservation of Habitats and Species Regulations, London, HMSO.

Hundt, L. (2016). Bat Surveys: Good Practice Guidelines, 2nd edition. Bat Conservation Trust.

Gilbert, O.J. & Anderson, P. 2000. Habitat Creation and Repair. Oxford University Press, New York.

Joint Nature Conservation Committee 2010. Handbook for Phase 1 Habitat Survey – a technique for environmental audit. JNCC.

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.

Roth, T., & Weber, D. (2008). Top predators as indicators for species richness? Prey species are just as useful. *Journal of Applied Ecology*, 45(3), 987-991.

Stace, C. A (1997). New Flora of the British Isles Second Edition. Cambridge University Press.

UK BAP 2008. Priority Habitat Descriptions [Online]. Available at: <http://www.ukbap.org.uk/library/UKBAPPriorityHabitatDescriptionsfinalAllhabitats20081022.pdf>

Appendices
Appendix 1 – Phase 1 Habitat Map

