Leigh Ecology Ltd

Protected Species and Habitat Surveys

Land at The Boat Inn, Erbistock, Wrexham, LL13 0DL.

On behalf of Mr. Graham Price.

Preliminary Ecological Appraisal

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Important Information to Readers

This report has been prepared for Mr. Graham Price, 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 completely 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.

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1. EXECUTIVE SUMMARY

Leigh Ecology Ltd was commissioned to undertake a preliminary ecological assessment of a parcel of land at the Boat Inn, Erbistock, Wrexham.

The site comprises a bank of mixed composition, with the majority featuring other neutral grassland with other dense sections of mixed scrub and ruderal species across the bank. A large section of existing mowed modified grassland and hard standing parking area are also present. The site features ideal habitat for invertebrate species, and many were noted during the site survey.

The proposal plans include the addition of 6 self-contained visitor lodges, embedded within the sloped bank on site. Specifically, the plans are to erect the lodges within the bank with associated infrastructure and to feature a green roof atop to maintain as much habitat quality on site as possible. The site of the proposed lodges is around 60m from the adjacent River Dee (SSSI and Special Area of Conservation), with the area currently in use for extended parking for The Boat inn, and designated parking area for the proposed lodges being around 17m at the nearest point.

The results of the survey indicate the site offers ideal varied habitat for invertebrate species, and some will subsequently be lost to facilitate the development plans. Given the proposals of the green roof atop the lodges, the site will still offer ideal foraging habitat and linkage, given any infrastructure/ lighting proposals are not intrusive.

No signs of badger usage were noted on site, with the full site being examined for signs of badger activity. The wider site could not be examined, particularly to the north of proposal site as it is private land. Many six-spot burnet moths, Meadow Brown, Large white and Brimstone butterflies were noted across the site during the survey.

The site sits close to the River Dee (SSSI) which is prime habitat for small mammals (Water Vole and Otter). Therefore, it is crucial that physical pollutive and lighting improvements have negligible effect on the River Dee. It is advised that if lighting infrastructure is improved, that it

follows the guidance by the BCT in ‘Bats and Artificial Lighting at Night (August 2023)’ which will protect the integrity of bat foraging and other species usage of the River Dee.

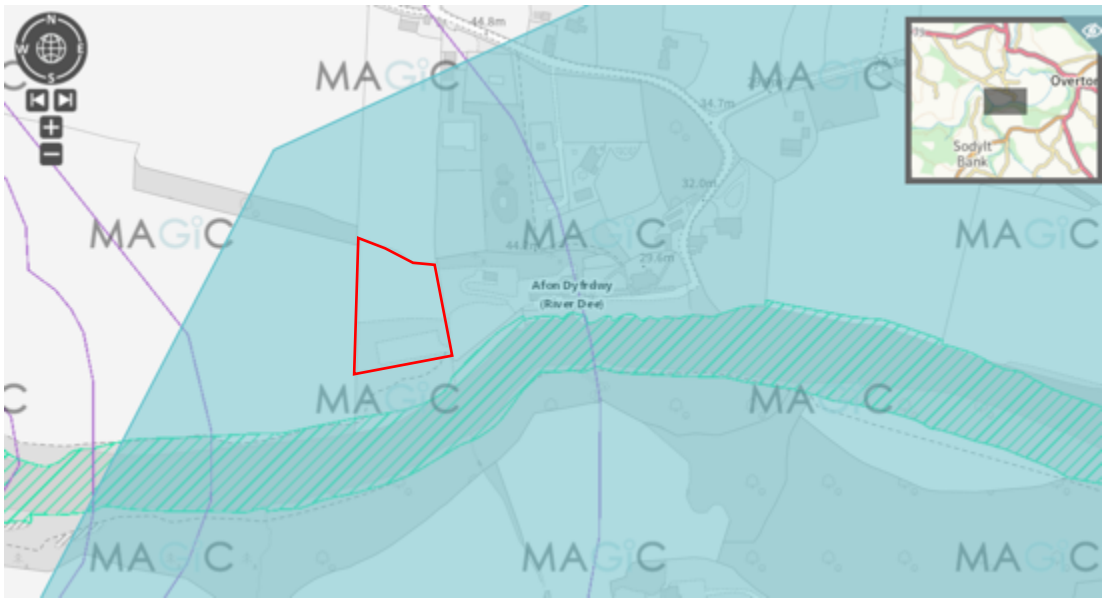


Figure 1: Shows site location in proximity to River Dee (SSSI)

2. INTRODUCTION

Background

Leigh Ecology Ltd was commissioned by Mr. Graham Price to undertake an Ecological Appraisal of a parcel of land identified for embedded guest lodges. (approx. National Grid Reference (NGR) SJ 354413); refer to redline boundary shown on *Figure 2.1* below.



Figure 1.1; Site Location (Google Earth, Airbus 2024).



Fig 1.2; Proposed development plans. (Blueprint Architectural Services, 2024).

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

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to throughout this report. Their context and application are explained in the relevant sections of this report. The relevant articles of legislation are:

- Planning Policy Wales (8th Ed. January 2016)
- Technical Advice Note 5 (TAN5) Nature Conservation and Planning 2009
- Local planning policies (Wrexham City Council).
- The Conservation of Habitats and Species Regulations 2017.
- The Wildlife and Countryside Act 1981 (as amended).
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC.
- National Parks and Access to the Countryside Act 1949.
- The Protection of Badgers Act 1992.
- The Countryside and Rights of Way Act 2000.
- The Hedgerow Regulations 1997.
- The Natural Environment and Rural Communities Act 2006; and
- Local Biodiversity Action Plan for Wrexham.

Sites of biodiversity conservation value, habitats and species in UK and Local Biodiversity Action Plans (BAPS) and protected species are material considerations in the planning process Habitat Regulations 2017 and the Environment (Wales) Act 2016.

Under the National Planning Policy Framework 2018, the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.

3. METHODOLOGY

A daytime preliminary ecological appraisal was conducted on the 16th of July 2024 at around 11am in bright conditions.

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.

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. (2024):

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.

At the local level, the site falls within the area covered by the Wrexham Biodiversity Action Plan (WBAP), in which GCN are identified as a Priority Species. GCN are also listed in Section 41 of the NERC Act 2006as Species of Principal Importance; national objectives and targets include the maintenance of the geographical range and viability of existing great crested newt populations to ensure that it remains in favorable conservation status.

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.

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 *Fig 1.1* and *Fig 1.2.* The proposed development will see the addition of guest lodges and associated infrastructure, embedded within the slope on site.

Ecologically, the site comprises a slope of mainly other neutral grassland, with dense creeping thistle and scrub habitat across the slope. The rest other section of site is an existing hard standing car parking area, surrounded by a buffer of modified grassland.

Habitats

The other neutral grassland has not been mown or maintained in some years, creating a varied sward and species bank that resembles other neutral grassland. The lower levels feature dominant clusters of creeping thistle and bramble, with grass species being dominant further up the slope of the bank. This section is ideal habitat for invertebrate species, and many were identified during the survey. Due to the invertebrate presence, the bank is likely used as bat foraging habitat and bird usage, as the site is mostly undisturbed by artificial light.

Site Boundaries

The site is bounded by wooden fencing across all sides.

Surrounding habitats

The site sits within the small village of Erbistock in Wrexham County Borough, set within typical rural habitat, characterised by large arable fields, surrounding hedgerows and woodland clusters. The surrounding area is ideal for all species.



Photograph 1; A view of the bank on site. The hard standing car park is seen in the above photograph also.



Photograph 2; A view across the site. The space is regularly visited by dog walkers and locals.



Photograph 3; A view of the other neutral grassland bank, at the bottom of the slope dominated by creeping thistle, ragwort and hogweed.



Photograph 4; The base of the bank offers ideal invertebrate habitat, and many were noted across site.



Photograph 5; As the bank progresses, grass species dominate, with Coxfoot and Yorkshire fog both identified across the bank.



Photograph 6; A view of a Six-spot Burnet moth within the grassland on the bank. Many Six-spot Burnet and various butterfly species were identified across the bank.



Photograph 7; A view of the middle section of site, where a natural levelling occurs. Grass species dominate to the top of the bank, with dotted creeping thistle and ragwort.



Photograph 8; Several self-seeded oaks were identified across the bank. Common bird species (blackbird, magpie) were identified across site. No signs of mammal usage were identified.



Photograph 9; The northern boundary features a distinctive tree line. This tree line should be unaffected by development plans.



Photograph 10; A view of the bank from the northern top end. The bank is consistent throughout, with a bottom dominant of denser flowering species.



Photograph 11; A view of the modified grassland within the southern section of site

Protected and notable species

Invertebrates

The site featured an abundance of flowering vegetation, particularly at the base of the bank, which offers ideal habitat for invertebrate species. It is possible that these dominant sections will be retained as proposed lodges are further up the bank.

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.

A water body was identified around 100m northeast of proposal site, this water body could not be asssesed as it sits within private land. A pond features around 530m direclty east of proposal site between arable fields.

Bats

Surrounding habitat and Tree Inspection

The site, given its location and surrounding habitat structure, offers excellent connectivity to the wider habitat and primary foraging habitat for bats (particularly hedgerows, tree lines and tree covers).

Trees along the northern boundary should be unaffected by development work.

Breeding Birds

Beyond the site boundaries, mature trees and hedgerows feature to the south and the east; these hedgerows/mature trees offer ideal bird nesting potential. It is critical that any infrastructure improvements (i.e., flood lighting upgrades) are undertaken to a suitable standard and minimise light exposure to these hedgerows and nearby trees, as they are important features for nesting birds.

Badger

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

Other mammals

The site could be frequented by hedgehog and fox, as the minor urban features and rural landscape are ideal.

Lighting

As previously mentioned, the lighting scheme should be designed to deter any spillage on the adjacent River Dee, and linear features such as tree lines and hedges. The lighting scheme should follow the guidance laid out by the BCT in 'Bats and Artificial Lighting at Night' 2023 to safeguard bat foraging and other species use.

4. CONSTRAINTS AND RECOMMENDATIONS

The proposed development (within the red line site boundary *as shown in Figure 1.1 and 1.2*) will consist of the creation of several guest lodges embedded within the slope on site.

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 with regard to any development of the site are discussed below.

Plants

Invasive Plants

An abundance of Himalayan Balsam was noted nearby to site along the River Dee channel.

Native Plants

The grassland bank features many different species of plants, with a large portion being flowering plants ideal for invertebrate usage. The plans for the lodges include the addition of a green roof atop, meaning native flowering species can be replanted and cultivated atop the building.

Protected species

Bats

Due to the lack of potential roosting habitat across the site, it has been deemed to offer *negligible suitability for bats*.

Birds

No removal of suitable habitat for nesting birds is included within development plans. However, nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments), and it would be an offence to damage or destroy a nest or otherwise disturb a nesting bird.

Because of the possible presence of nesting birds within features beyond the site boundary, lighting impacts, as stated above, should be designed to prevent this.

Badgers

No signs of badgers were noted during the survey.

Biodiversity

The biodiversity impacts of the development plans will mainly be the removal of invertebrate habitat on site but should be suitably mitigated atop via the green roof. The nearby River Dee should be unimpacted by development plans, as all works should be contained within the development footprint, with the large flat area of the car park and modified grassland acting as a buffer to the grassland bank.

5. REFERENCES

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Appendices

Appendix 1 – Phase 1 Habitat Map

