

Bat Survey Report

Wern Farm, Usk



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Ecology | Green Space | Community | GIS

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Report Produced for FCE (Wales) Limited

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EXECUTIVE SUMMARY

Introduction	<ul style="list-style-type: none">• The site was located at Wern Farm, Tredunnoch, Usk (Grid Reference: ST 37942 95382);• The development proposals comprise the conversion of the existing structures (Barn 1 and Barn 2) as 2 purpose built units as dwellings for holiday lets.
Surveys undertaken	<ul style="list-style-type: none">• A preliminary roost assessment for bats (and nesting birds) – external and internal structures inspection in January 2021;
Ecological constraints	<ul style="list-style-type: none">• The site was situated in a rural location with hedgerows connecting the site to high quality habitat for bats in the wider area;• Whilst both structures have open frontage, no evidence of bats was found. There were no features suitable for crevice dwelling bats.• No evidence of breeding birds was found.
Recommendations	<ul style="list-style-type: none">• Pre-commencement checks for bats and breeding birds;• Enhancement measures for bats and breeding birds.

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1 INTRODUCTION

Ethos Environmental Planning (Ethos) have undertaken this Bat Survey Report of Wern Farm, Tredunnoch, Usk. This report includes a preliminary roost inspection for bats of the existing structure and a background data search using open source information.

1.1 Aims and objectives

The objectives of the survey were to:

- Identify if bats are roosting on site or have potential to roost on site;
- Identify the presence or potential presence of bats on site - protected species whose disturbance may require consent under the Wildlife and Countryside Act, 1981 (as amended) or The Conservation of Habitats and Species Regulations, 2017;
- Identify any bat species which may require special mitigation during the works;
- Identify the potential or presence for any other protected species;
- Identify any compensation or enhancement measures required;
- Assess the need for a European Protected Species (EPS) Licence for bats; and
- Identify any areas that may require special protection during the development.

1.2 Site Location

The site was located at Wern Farm, Tredunnoch, Usk (Grid Reference: ST 37942 95382) as shown in Figure 1. It was part of a farm compound containing other associated buildings and access roads. It was directly adjacent field hedgerows and surrounded by agricultural fields, which dominate the wider rural environment. The SSSI, SAC River Usk is approximately 380m east and the nearest A road (A449) is 960m east. Pockets of woodland are located approximately 1km to the south and west.

Figure 1 Site Location at 1:5,527



1.3 Development proposals

The development proposals will likely necessitate the conversion of the existing structures (Barn 1 and Barn 2) to enable the construction of 2 purpose built units as residential dwellings for holiday lets.

1.4 Structure of Report

The following sections are included within this report:

- Legislative and planning context;
- Methodology;
- Background Data Review
- Protected species assessment;
- Discussion; and
- Recommendations.

2 LEGISLATIVE AND POLICY CONTEXT

This section provides a summary of the legislative and planning context which has been used to inform the ecological assessment and subsequent recommendations made in this report. Appendix I sets out further details in relation to the most relevant legislation and policy.

2.1 Summary of Legislation

The Habitats Directive (together with the Birds Directive) forms the cornerstone of Europe's nature conservation policy. It is built around two pillars: the Natura 2000 network of protected sites and the strict system of species protection. All in all, the directive protects over 1,000 animals and plant species and over 200 "habitat types" (e.g. special types of forests, meadows, wetlands, etc.), which are of European importance. The habitats Directive and parts of the Birds Directive are transposed into legislation by the Conservation of Species and Habitat Regulations. Since the UK has left the EU, these regulations have been amended to retain the legal powers of the regulations to the UK and are now referenced as: **Conservation of Habitat and Species Regulations (Amendment) (EU Exit) Regulations 2019**.

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Badgers and their setts are protected under the **Protection of Badgers Act 1992** as amended by the Hunting Act 2004.

The **Natural Environment and Rural Communities Act 2006** (the NERC act) places a duty on all public authorities, including local planning authorities, to consider biodiversity in their work. Local planning authorities are to ensure that there is no net loss of biodiversity on a site, no net loss in habitat connectivity and aims to enhance biodiversity.

The **Environment (Wales) Act 2016** came into force in 2016 and puts into place the necessary legislation to enable the planning and management of the natural resources of Wales in a more sustainable, pro-active and joined-up way than was previously possible. **Part 1 Section 7** requires Welsh Ministers to publish and maintain lists of species and habitats in Wales that are regarded as of 'principal importance' for the purpose of maintaining and enhancing biodiversity. This part of the Act replaces the duty outlined in Section 42 of the NERC Act 2006.

The **Hedgerows Regulations 1997** protect 'important hedgerows' from being removed (uprooted or destroyed). Hedgerows are protected if they are at least 30 years old and meet at least one of the criteria listed in part II of schedule 1.

Specific legislation related to different species such as bats, birds and reptiles is outlined in Appendix I, A1.1.

2.2 Policy

Planning Policy Wales (Edition 10, December 2018) aims to minimise impacts on biodiversity and provide net benefits in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including the establishment of coherent ecological networks more resilient to current and future pressures.

The historic UK Biodiversity Action Plan (UK BAP) set out a programme for conserving the UK's biodiversity. It led to the production of 436 action plans between 1995 and 1999 to help many of the UK's most threatened species and habitats to recover. A review of the UK BAP Priority list in 2007 identified 1,150 species and 65 habitats that met the UK BAP criteria. Since, as a result of new drivers and requirements the **UK Post-2010 Biodiversity Frameworks (2012)** has replaced the UK BAP Action Plan. The BAP process has been devolved to local level with each county deciding its own way forward.

2.2.1 Planning Policy Wales (Edition 10, December 2018)

The primary objective of Planning Policy Wales is to ensure that the planning system contributes to the delivery of sustainable development and improves, among other objectives, the environmental well-being of Wales. In particular, a duty is placed on local planning authorities to maintain and enhance biodiversity through the Section 6 Duty.

Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

6.4.5 Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity. In doing so planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

- *diversity between and within ecosystems;*
- *the connections between and within ecosystems;*
- *the scale of ecosystems;*
- *the condition of ecosystems including their structure and functioning; and*
- *the adaptability of ecosystems.*

6.4.6 In fulfilling this duty, planning authorities must have regard to:

- *the list of habitats and species of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016;*
- *the SoNaRR, published by NRW; and*
- *any Area Statement that covers all or part of the area in which the authority exercises its functions.*

6.4.7 Planning Authorities should also refer to up to date ecological survey information (where appropriate).

6.4.8 A proactive approach towards facilitating the delivery of biodiversity and resilience outcomes should be taken by all those participating in the planning process. In particular, planning authorities must demonstrate that they have sought to fulfil the duties and requirements of Section 6 of the Environment Act by taking all reasonable steps to maintain and enhance biodiversity in the exercise of their functions.

The broad framework for implementing the Section 6 Duty and building resilience through the planning system includes addressing:

- *Diversity: to ensure mechanisms are in place to minimise further loss and where circumstances allow for species' populations to expand and recolonise their natural range (former range) or adapt to future change. More diverse ecosystems are more resilient to external influences (this includes biological, geological and physical diversity on a site). This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity;*
- *Extent: to ensure mechanisms allow for the identification of potential habitat, the maintenance of existing assets and networks and promote the restoration of damaged, modified or potential habitat and the creation of new habitat. This means that planning decisions should incorporate measures which seek the creation, restoration and appropriate management of green networks and linkages between habitats and maintaining and enhancing other green infrastructure features and networks;*
- *Condition: Ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services. Planning decisions should not compromise the condition of ecosystems. By taking an integrated approach to development, for example, which considers both direct and wider impacts and benefits it should be possible to make a positive contribution. Planning for the long term management of retained habitats is key to maintaining condition through for example, the use of planning obligations;*
- *Connectivity: to take opportunities to develop functional habitat and ecological networks within and between ecosystems and across landscapes, building on existing connectivity and quality and encouraging habitat creation, restoration and appropriate management. The opportunities could include enlarging habitat areas, developing buffers around designated sites or other biodiversity assets or corridors, including transport and river corridors, and the creation of 'stepping stones' which will strengthen the ability of habitats and ecological networks to adapt to change, including climate change; and*
- *Adaptability to change: primarily in the form of climate change, for both species (diversity) and ecosystems requires action to protect the extent, condition and connectivity of habitats, features and ecological networks. Development plans, planning proposals and applications which build on protecting designated sites and securing and enhancing green infrastructure will be key ways of addressing the attributes of ecosystems resilience identified in the Environment Act as well as facilitating social and economic resilience aspirations of the Well-being of Future Generations Act.*

2.2.2 Local Policy

The following extract was taken from *Monmouthshire County Council Adopted Local Development Plan 2011-2021*. Revisions for an updated policy are ongoing.

Policy NE1 – Nature Conservation and Development

Development proposals that would have a significant adverse effect on a locally designated site of biodiversity and / or geological importance, or a site that satisfies the relevant designation criteria, or on the continued viability of priority habitats and species, as identified in the UK or Local Biodiversity Action Plans or Section 42 list of species and habitats of importance for conservation of biological diversity in Wales, will only be permitted where:

- a) the need for the development clearly outweighs the nature conservation or geological importance of the site; and*
- b) it can be demonstrated that the development cannot reasonably be located elsewhere.*

Where development is permitted, it will be expected that any unavoidable harm is minimised by effective avoidance measures and mitigation. Where this is not feasible appropriate provision for compensatory habitats and features of equal or greater quality and quantity must be provided.

Where nature conservation interests are likely to be disturbed or harmed by development proposals, applications must be accompanied by an ecological survey and assessment of the likely impact of the proposal on the species /habitats, and, where necessary, shall make appropriate provision for their safeguarding.

Development proposals shall accord with nature conservation interests and will be expected to:

- i) Retain, and where appropriate enhance, existing semi-natural habitats, linear habitat features, other features of nature conservation interest and geological features and safeguard them during construction work;*
- ii) Incorporate appropriate native vegetation in any landscaping or planting scheme, except where special requirements in terms of purpose or location may dictate otherwise;*
- iii) Ensure the protection and enhancement of wildlife and landscape resources by appropriate building design, site layouts, landscaping techniques and choice of plant species;*
- iv) Where appropriate, make provision for on-going maintenance of retained or created nature conservation interests.*

3 METHODOLOGY

3.1 Background data search

A full background data search has not been conducted at this stage and will be conducted prior to the production of a final survey report. A search for statutory designated sites within 2km of the development site was undertaken using publicly available information (DEFRA Magic map).

3.2 Bats

The methodology for the bat survey has been informed by the Bat Conservation Trust *Bat Surveys Good Practice Guidelines 2016*. The habitats on site were assessed for their suitability for foraging and commuting bats and the potential for roosting bats. Additionally, the following surveys and assessments were undertaken:

3.2.1 Preliminary roost inspection

A physical external inspection of the structure was undertaken on 29th January 2021 by the surveyor using the equipment described below to assist the inspection. Internally a torch was used to search dark areas, i.e. roof beams and floor, for signs of bats. Approximately 2 hours of search effort was expended.

The physical search includes a search for live animals and a search for other signs that give an indication of past or present occupancy as outlined below. In the case of bats, typical indicators include droppings (which are characteristic and can often be species-specific or at least be indicative of species type), signs of staining, urine splashing, characteristic odours, and accumulations of discarded prey remains.

3.3 Other species

The survey also included an assessment for the potential for breeding birds to use the structure.

3.4 Personnel

The survey was led by Jim Phillips, MSc BSc (Hons), MCIEEM as Managing Director. Jim holds a Class 2 Bat Licence and is a registered consultant on Natural England's Bat Low Impact Class Licence (BLICL). Jim's experience in ecology covers a wide range of projects and manages a team of other qualified ecologists.

3.5 Limitations

Full access was provided during the survey of the two structures; no limitations were identified to conduct an overall assessment.

4 BACKGROUND DATA REVIEW

4.1 Notable sites

Table 2 below denotes the notable sites found within the search criteria.

Table 1

Site name	Site designation	Site description	Distance and direction from the site
River Usk	SSSI SAC (WALES)	The Usk is host to an array of wildlife and is both a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) for most of its length. It is a good example of a river running over sandstones and for its associated plant and animal communities. Its character spans a wide range of types from an upland base-poor stream to a large lowland river with extensive tidal reaches. Its overall diversity is a product of its geology, soil types, adjacent land-use and hydrology. It is also one of the largest rivers in Wales.	360m east of the site.

5 PROTECTED SPECIES ASSESSMENT

5.1 BATS

5.1.1 Habitats

The wider environment is dominated by agricultural fields with hedgerows and trees lining the field boundaries. The River Usk is approximately 380m east and there are no other urban areas or major roads within 400m of the site. The habitats are likely to provide high potential for commuting bats with good foraging potential along the hedgerows and river.

The site itself was a farm compound comprising 2 agricultural buildings used for storage. The adjacent hedgerows provide commuting potential around the site and connect it the surrounding habitat with high potential for bats.

5.1.2 Preliminary roost inspection

The 2 structures on site were agricultural stores, they are mapped in figure 2 and described further below.

Figure 2 Structures on Site



Building 1

Barn 1 was a single storey structure with an open front entrance, located off the southern boundary of the site. It comprised a flat roof of corrugated metal, which was supported by a timber frame laid directly upon concrete blockwork walls. The roof was assessed to be in good condition.

The walls were single skin blockwork without a cavity or rendered façade; part of the front of this structure had been rebuilt. There were small cracks between blockwork but none assessed to have potential for bats.

Internally, the structure was void from floor to roof with no loft space present. A low accumulation of approximately 5 droppings were observed on top of a box amongst debris (see location at figure 2 and photo 2). The droppings were old and indistinguishable, however, a number were collected and sent for eDNA analysis. The results of the analysis confirmed they were from a Wood Mouse (see results at appendix II).

Whilst the structure provides open access for bats, considering the nature of the building (i.e. a lack of crevice features), had void dwelling species such as brown long eared bats or lesser horseshoe bats used the structure for roosting, it would be expected to find some evidence. Considering the lack of evidence, it was assessed that bats are most likely not to be using the structure as a roost. Therefore, the structure was assessed to have negligible potential for roosting bats.



Photo 1: Barn 1 with open front



Photo 2: Clustered bat droppings amongst debris

Building 2

Barn 2 was a single storey structure with an open front entrance, located off the western boundary of the site. The building comprised the same design and materials as Building 1. The roof and walls were assessed to be in relatively good condition.

Again, as with building 1, whilst the structure provides open access for bats, considering the nature of the building (i.e. a lack of crevice features), had void dwelling species such as brown

long eared bats or lesser horseshoe bats used the structure for roosting, it would be expected to find some evidence. Considering the lack of evidence, it was assessed that bats are most likely not to be using the structure as a roost. Therefore, the structure was assessed to have negligible potential for roosting bats.



Photo 3: Barn 2 with open front



Photo 4: Interior void

5.2 Breeding Birds

No historic or current nests were found in the structure on site. However, both structures had potential to support breeding birds at any time during nesting season.

6 DISCUSSION

The development proposals will likely necessitate the demolition or complete renovation of the existing structures (Barn 1 and Barn 2) to enable the construction of 2 purpose built units as residential dwellings for holiday lets.

Whilst the structures provided open access for void roosting bats, no evidence of bats was found suggesting that bats have not been using the structures as a roost. The buildings did not have features suitable for crevice dwelling bats, so again these species are unlikely to be using the structures.

Whilst no further surveys for bats are required, as the buildings remain open, pre works checks for bats will be required. Also, as there is high value habitat for bats in the immediate vicinity, the development provides opportunities for new roosting opportunities within the new build.

7 RECOMMENDATIONS

1. A pre-works check of the buildings for bats and nesting birds will be undertaken by a licensed ecologist;
2. Contractors will be given a tool box talk on the potential presence of bats;
3. If any evidence of bats is found, works will stop and the licensed ecologist will consult Natural Resources Wales;
4. One integral bat boxes and one sparrow terrace box will be erected on the external fascia of each building – exact locations to be agreed when proposals are finalised.

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APPENDIX I LEGISLATION AND POLICY DETAILS

A1.1 Legislation - Species

This section outlines the key legislation related to the habitats and species considered within this survey report.

A1.1.1 Bats

All British bats are fully protected under Section 9 Schedule 5 of the Wildlife and Countryside Act 1981 and amendments. Agreement, and are fully protected under The Conservation of Habitats and Species Regulations 2017. In addition, they are protected under the Berne Convention; they are given migratory species protection within the Bonn Convention. Regulation 43 (1) of The Conservation of Habitats and Species Regulation 2017 makes it an offence to:

- deliberately capture, injure or kill any species of bat;
- deliberately disturb any species of bat;
- damage or destroy a breeding site or resting place of any species of bat.

It is an offence to disturb any bat roosting site, whether the bats are there or not. Under Regulations 43 (2) disturbance includes in particular any disturbance which is likely:

- To impair their ability
 - to survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of a hibernating or migratory species, to hibernate or migrate; or
- To affect significantly the local distribution or abundance of the species to which they belong.

Presence of bats does not necessarily mean that development cannot go ahead, but that with suitable, approved mitigation, exemptions can be granted from the protection afforded to bats under regulation 43 by means of a licence. Natural England (NE) is the appropriate authority for determining licence applications for works associated with developments affecting bats, including demolition of their roost sites. In cases where licences are required, certain conditions have to be met to satisfy Natural England. Before the Statutory Nature Conservation Organisation (SNCO), in this case NE, can issue a licence to permit otherwise prohibited acts three tests have to be satisfied under the requirement of Regulation 55. These are:

1. Imperative Reasons of Overriding Public Interest [Reg 55(2)(e)];
2. No Satisfactory Alternative [Reg 55(9)(a)];
3. Maintenance of Favourable Conservation Status [Reg 55(9)(b)].

In order to meet the tests, SNCO usually expects the planning position to be fully resolved as this is necessary to satisfy tests 1 and 2. Full planning permission, if applicable, will need to have been granted and any conditions relating to bats fully discharged. ahead of any licence application to the SNCO. The LPA have a legal duty under The Conservation of Habitats and Species Regulations 2017, to assess whether the application is likely to meet the Three Tests

and therefore the requirements for Natural England licensing, prior to determination of an application The Licence application process may take two months before a licence is issued. Planning Permission and granting of a bat licence are separate legal functions. Therefore receiving planning permission from the Local Authority is no guarantee that the SNCO will issue a derogation licence.

A1.1.2 Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) and cannot be killed or taken, their nests and eggs taken, damaged or destroyed while their nest is in use or being built. It also prohibits or controls certain methods of killing or taking except under licence. Other activities that are prohibited include possession and sale. Activities such as killing or taking birds (including relocating) which would otherwise be illegal can be carried out under licence where there is suitable justification and the issue cannot be resolved by alternative means.

Specially protected or Schedule 1 birds receive full protection under the Wildlife and Countryside Act 1981 (as amended). Part I birds are protected at all times, Part II during the close season only. In addition to the protection from killing or taking that all birds, their nests and eggs have under the Act, Schedule 1 birds and their young must not be disturbed at the nest.