

# Ecological Impact Assessment at

Henblas

Rhydycroseau

Oswestry

Shropshire

SY10 9BB

(SJ24822.29242)

By Churton Ecology

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*Commissioned by Berrys*

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## **SUMMARY**

### *Background*

Churton Ecology was instructed to carry out an Ecological Impact Assessment of a small barn at Henblas Farm, Rhydycroseau, Oswestry, Shropshire SY10 9BB.

The site comprises a small, two-storey agricultural outbuilding. The proposal is for the change of use of the building to holiday let.

### *Method of study*

A desktop search, daytime building inspection and general protected species walkover of the site and surrounds aimed to establish the presence or absence of roosting bats, breeding birds and other protected species with potential to be negatively affected by the development proposal. All survey activities potentially disturbing to bats were carried out under licence by Mr. Rob Thorne on 05/07/23.

### *Ecological features*

The site supports habitats of low biodiversity value. Bats (commuting and foraging) are considered to be an important ecological feature of the site's potential area of influence.

### *Mitigation and enhancement measures*

With mitigation measures in place for bats (appropriate lighting) there will be no significant residual adverse effect on protected species or habitats.

With enhancements in place (installing bat and bird boxes) there would be an increase in the biodiversity value of the site.

# 1 INTRODUCTION

## 1.1 Background and site description

Churton Ecology was instructed by Berrys to carry out an Ecological Impact Assessment of a small barn at Henblas Farm, Rhydycroesau, Oswestry, Shropshire SY10 9BB (SJ24822.29242).



Fig 1: Site location and layout  
OS map licence no. 100048619

A desktop search, daytime building inspection and general protected species walkover of the site and surrounds aimed to establish the presence or absence of roosting bats, breeding birds and other protected species with potential to be negatively affected by the development proposal.

The site comprises a small, two-storey agricultural outbuilding.

## 1.2 Proposed works

The proposal is for the change of use of the building to holiday let. It is unlikely that the building would need to be re-roofed although the skylights may need to be replaced.

## **2 METHODOLOGY**

### **2.1 Desk study**

Sites of international and national conservation significance were sought within 1km of the site. Sites of local conservation significance were sought within 500m of the site. Searches were conducted using the following sources:

- MAGIC maps
- Shropshire Environmental Network (SEN)

OS maps and aerial photographs (Google Earth) were used to identify landscape features of potential ecological interest including hedgerows, tree-lines, ponds, streams, ditches and areas of likely (semi-)natural value.

### **2.2 Habitat survey**

A survey of the site and surrounds was conducted on 05/07/2023 by Mr Rob Thorne (Churton Ecology).

### **2.3 Protected species survey**

#### **2.3.1 Bats**

##### *Field survey*

A suitably high ladder was used to access all elevated areas with potential to support roosting bats. A roof ladder was available to access and inspect the undersides of all the ridge-tiles.

Searches were conducted using a fibrescope, extraction pooter, mirrors and torches to identify and collect signs indicating past or current bat use, such as the presence or not of live or dead bats, their droppings or urine splats, cobweb-free areas in cracks and crevices, grease stains or smoothed edges within or below potential roosts and/or their access points.

##### *Habitat suitability assessment*

A general habitat suitability assessment of the site and surrounds was carried out to determine the likely value of foraging and commuting habitats.

#### **2.3.2 Great Crested Newt**

##### *Desktop search*

Ponds and other potential breeding habitats were sought within 250m of the site using OS maps and aerial photographs.

### **2.3.3 Breeding birds**

#### *Field survey*

Birds seen or heard during the survey were recorded and old nests were attributed to species where possible.

#### *Habitat suitability assessment*

Habitats, with potential to support common, priority or Schedule 1 species of nesting bird were identified within the site and the immediate surrounds.

### **2.3.4 Other protected and priority species**

#### *Habitat suitability assessment*

Habitats thought suitable to support other protected or priority species potentially relevant to the site location were also sought. Where no suitable habitats exist and/or where no impacts can be reasonably predicted, species can be discounted from further survey, impact assessment and mitigation - in this instance Dormouse, Otter, White-clawed Crayfish, Badger, Water Vole and reptiles.

## **3 RESULTS AND EVALUATION**

### **3.1 Designated sites**

#### *Statutory and non-statutory sites*

There are no sites of international or national conservation significance within 1km of the site. There is one site of local conservation significance within 500m of the site. Morda Valley LWS (an area of ancient replanted woodland) is located 290m to the west.

#### *The Shropshire Environmental Network*

The site does not represent a core area or corridor in the Shropshire Environmental Network.

#### *Evaluation and discussion*

The site does not support the type of habitats for which Morda Valley LWS has been designated so there is no intrinsic habitat that links the two sites. As a consequence the proposal will have no significant adverse effect on any habitats associated with this wildlife site.

## 3.2 Field survey

### 3.2.1 Building description

The site comprises a small, rectangular two-storey agricultural outbuilding. The walls are random laid stone construction and the joints are mortared and intact. The ground-floor is open-fronted and the first-floor is used as a recreation room.



**P1:** S (gable) + E (side) elevations: looking NW



**P2:** E (side) + N (gable) elevations: looking SW



**P3:** First-floor interior, looking N



**P4:** Ground-floor interior, looking W



**P5:** Detail of the mortared rafter crevices



**P6:** Detail of the obstructed eaves

The roof is lined with breathable membrane and covered with slate and overlapping angled clay ridge-tiles. The slates are flush, tight-fitting and intact with no potential entry points for

bats. The ridge-tiles are securely bonded and there is no mortar loss between the joints or along the ridge-bed. The typical crevices associated with exposed gable-end-rafters have been filled with mortar and the roof-verges are intact. Similarly the eaves have been obstructed with ply-board soffits.

### **3.3 Protected species survey**

#### **3.3.1 Bats**

##### *Field survey*

The building supports no suitable bat roosting habitat and no bats or their field signs were recorded.

##### *Habitat suitability assessment*

The site has excellent links to riparian woodland, overgrown hedgerows and meadows and is suitable for a wide range of both generalist and specialist bat species – as a consequence the site is ideally suited to providing ecological enhancements, particularly in relation to bats.

##### *Evaluation and discussion*

The inspection survey was carried out thoroughly and all areas could be accessed and inspected closely and no evidence of a bat roost could be identified in any part of the building. It is therefore the opinion of Churton Ecology that no further bat survey effort, impact assessment or mitigation is required in relation to roosting bats.

#### **3.3.2 Great Crested Newt**

##### *Desktop search*

The site is located in the known geographic range for this species and the species is widespread in this part of the county. Given the scale of the development, only ponds within 250m of the site were considered to be potentially relevant to the proposal. No mapped ponds were identified within this area and there is nothing to indicate the potential presence of any unmapped ponds (based on aerial photography).

##### *Evaluation and discussion*

Great Crested Newt is not considered to be an important ecological feature of the site; therefore, no further survey effort, impact assessment or mitigation is required in relation to it.



### **3.3.3 Birds**

#### *Field survey*

No evidence of nesting birds was noted in the building.

#### *Habitat suitability assessment*

With the exception of House Martin (which was not recorded using the building) the building supports no potential bird nesting habitat.

#### *Evaluation and discussion*

Nesting birds are not considered to be an important ecological feature of the site since no habitat loss is proposed; therefore, no further survey, impact assessment or mitigation is required in relation to this class of animal.

### **3.3.4 Other protected and priority species**

There is negligible potential for other protected or priority species to be negatively affected by the proposed development.

## **4 POTENTIAL IMPACTS**

### **4.1 General**

This section considers the potential impacts (and subsequent effects) which might arise from the development in the absence of avoidance measures and/or mitigation. Wherever possible, the negative ecological impact of a development must be avoided. Any residual effects and their level of significance are further discussed with mitigation and/or enhancements in place.

It is important to note that the purpose of an ecological impact assessment is to consider impacts and effects in relation to species and habitats that have some level of international, national or local conservation significance – broadly speaking rare, uncommon or declining species and habitats. These are variously protected by domestic law and priority species have some limited protection under the provisions of the NERC Act – species and habitats listed on the UK/Local biodiversity/habitat action plan and consequently S41 of the NERC Act.

## **4.2 Protected species**

### **4.2.1 Bats**

#### *Significance of effects prior to mitigation*

The development will not result in the deterioration, damage, destruction or obstruction of a bat roost and no bats will be disturbed, captured, injured, killed or transported as a result of the proposal.

There will be no loss of potential bat foraging habitat; however, the illumination of any peripheral habitats could result in the disturbance or deterioration of commuting habitats. It would be difficult to quantify the significance of the impact of lighting and its effect on bats, since the species and status of any roosts potentially present nearby is unknown. Therefore, it must be assumed (on balance) that a significant effect at the site level is possible.

#### *Significance of residual effects after mitigation*

With lighting mitigation measures in place there should be no significant residual adverse effect on commuting and foraging bat species.

#### *Significance of effects after enhancements*

The provision of a bat box on a nearby building or tree could only have a beneficial effect on local bat populations.

### **4.2.2 Breeding birds**

#### *Significance of effects prior to mitigation*

N/A

#### *Significance of residual effects after mitigation*

N/A

#### *Significance of residual effects after enhancement*

The development could result in the provision of new bird nesting opportunities suitable for House Sparrow. The impact of this could only have a significant beneficial effect on local bird populations.

### **4.3 Survey constraints**

There were no survey constraints.

### **4.4 Protected species legislation**

#### Bats

All UK bat species are protected under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and The Wildlife and Countryside Act 1981 (as amended). Essentially this makes it unlawful to; deliberately capture, injure or kill a bat; intentionally or recklessly disturb a bat whilst it occupies a roost or deliberately cause disturbance to (a bat) or significant group of bats; damage or destroy the roosting site of a bat; intentionally or recklessly obstruct access to a bat roost.

Notably, legal protection gives absolute protection to bat roosts and their continued functionality, regardless of deliberate, intentional or reckless action. Legal protection also extends to seasonal roosts which are not always occupied by bats throughout the year.

Disturbance caused through excessive noise or lighting and/or alterations to the landscape could potentially impact on bat roosting, foraging and/or commuting habitats and may have legal implications with regards disturbance and roost deterioration laws. It is therefore the duty of the relevant competent authority to take habitat severance, disturbance and land use change issues and their potential for impact on bat populations into consideration when assessing applications for the relevant consent.

### **4.5 Personnel**

Rob Thorne BA (Hons) MRSB has eighteen years' experience surveying sites for development and conservation purposes, covering Ecological Impact Assessment, botanical and vegetation surveys, and is competent to survey for a wide range of protected and priority species. He holds NE and NRW bat (17yrs) and Great Crested Newt (15yrs) survey and numerous mitigation licences and is a long-time member of The Shropshire Bat Group. He holds, or is accredited to work under, survey licences for Barn Owl, White-clawed Crayfish and Dormouse. He is also an experienced reptile and Otter surveyor having undertaken large scale reptile surveys for Natural England (to inform SSSI designations) and the Wildlife Trusts and targeted Otter surveys of watercourses for The Shropshire Mammal Group (as well as for numerous development proposals). He is also experienced in reptile mitigation, habitat management and trans/re-locations and has carried out long-term studies of several Slow-worm populations.

## 5 PROPOSED AVOIDANCE MEASURES, MITIGATION AND ENHANCEMENTS

### 5.1 Avoidance measures and mitigation

#### 5.1.1 Protected species

##### *Bats*

No further mitigation is required other than the careful vigilance of contractors during the works period; however, in the event that bats, or evidence of bats, are encountered during any part of the development, then there is a legal requirement for works to cease immediately. A suitably qualified and licensed ecologist should be consulted at the earliest opportunity and further surveys may need to be conducted to meet any subsequent licensing requirements.

If bats are discovered these should be covered by the last object removed (where there is no risk of crushing) and any associated coverings nearby must also be replaced. An estimate of the numbers should be **quickly** ascertained by the contractor before the bats are concealed. If grounded bats are discovered these should be covered by a cardboard box until the bat worker arrives.

If any external lighting is proposed, then a lighting plan may be requested as a condition of planning consent. Alternatively, a lighting plan can be submitted with the application to reduce the number of conditions attached to the decision notice. The plan submitted must take into account the following guidance and summary recommendations:

- Bat Conservation Trust (2018) *Bats and artificial lighting in the UK – Bats and the Built Environment Series* Bat Conservation Trust, London
- Bat Conservation Trust (2014) *Interim Guidance: Artificial lighting and wildlife – Recommendations to help minimise the impact of artificial lighting* Bat Conservation, London
- Institute of Lighting Professionals (2011) *Guidance notes for the reduction of obtrusive light* Institute of Lighting Professionals, London

As a matter of best practice, external lighting must be minimised or avoided altogether. Where used, lighting must be fixed on the lowest column practical with light spread kept well below the horizontal using cowls, hoods, screens or simply by downward directionality. LED bulbs with a warm white colour spectrum (2700 Kelvins) must be used to reduce the blue light component most disturbing to bats. PIR systems must be set on a short timer (1 minute maximum) and responsive only to larger moving objects.

## **5.2 Enhancement recommendations**

### **5.2.1 Species**

A woodcrete bat box could be mounted on a nearby tree or building.

One Schwegler 1SP House Sparrow nesting terrace could be installed in a suitable location on the newly converted building. The box could be mounted on the north gable, just below the ridge.

The locations of these would typically be provided at the Reserved Matters (or a prior to first occupation condition).

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