



- BAT ACTIVITY SURVEY RESULTS REPORT -

**EVESON'S FARM
SIMONSTONE LANE
SIMONSTONE**

AUGUST 2023

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- Bat Activity Survey Results Report -

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A report for:

Ben Simmonds

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1. INTRODUCTION

1.1 BACKGROUND AND REASON FOR SURVEY

PENNINE ecological were commissioned by Mr. Ben Simmonds to undertake two bat presence/absence surveys of Eveson's Farm, Simonstone Lane, Simonstone. The building is to be renovated/converted to a residential property. This follows the recommendations for further survey which was outlined in the Preliminary Roost Assessment (PRA) report written by PENNINE Ecological in May 2023 (PENNINE ecological, 2023).

The PRA identified the building to be of **moderate suitability** to support a bat roost(s). Therefore, in accordance with the current Bat Conservation Trust's *Bat Surveys for Professional Ecologists Good Practice Guidelines* 3rd Edition (Collins, 2016), two presence/absence surveys (see Figure 1 below) have been undertaken on the 1st and 15th August 2023.

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

Figure 1: Extract from Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016)

The surveys were undertaken to determine whether the proposals would result in adverse impacts to bats which may potentially be roosting within the building.

The results, conclusions and recommendations following the surveys, including any indicative mitigation to inform an application to Natural England for a European protected species mitigation licence (EPSML), where necessary, will be supplied within this report.

In accordance with Biodiversity Net Gain: Good practice principles for development (CIEEM et al, 2019), measures have been recommended proportionate to anticipated impacts to ensure that the proposed development results in a biodiversity net gain

Information pertaining to bat legislation and planning policy is included in Appendix A.

1.2 SITE LOCATION AND CONTEXT

The building is located to the east of Simonstone Lane, approximately 675m southeast of Simonstone village (Figure 2). The building is within a largely rural location with improved grassland fields to the east, south and west. A small area of woodland is present to the north and hedgerows border the fields.

The national grid reference for the building is SD 77476 34146.



Figure 2: Aerial view of the building.

2. METHODOLOGY

2.1 SURVEY METHODS

The Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) edition states:-

“The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g., either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. The guidance should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.”

The survey methods have been determined using the experience of the surveyors and knowledge of the specific nature of the site.

Two dusk emergence surveys were undertaken on 1st and 15th August 2023. This is considered to be within the main active season for bats (April to September inclusive) and within the optimal survey period in which Natural England accept bat surveys and grant European Protected Species Mitigation Licences (May to August inclusive).

Dusk surveys were considered appropriate for this site as the features could be observed with no visual constraints.

The number of surveys and surveyors was adequate relative to the roost potential that was identified for the site. The surveyors observed the roost features for at least 15 minutes prior to and 1 hour 30 minutes after sunset. The surveyors used bat detection equipment e.g., Anabat Chorus, Echo Meter touch Pro, Batbox Duet and Nightfox Whisker infrared cameras that would enable them to hear, potentially locate (dependent on light levels) and record high frequency echolocation calls emitted by bats whilst commuting or foraging. The echolocation and infrared camera recordings were analysed following survey completion where required.

The survey was led by Stuart Macpherson BSc (Hons) MSc, ACIEEM who holds a Class 2 Natural England bat survey licence (licence ref no. 2021-10079-CL18-BAT) AND who is also an experienced bat consultant and carer.

2.2 SURVEY LIMITATIONS

There were no survey limitations.

3. RESULTS

The results of the bat activity surveys are outlined below.

3.1 BAT ACTIVITY SURVEY RESULTS

Survey details including dates, times and weather conditions are provided in Table 3.1 and the results of the dusk surveys provided in Table 3.2.

Table 3.1: Bat Activity Survey Details

Time of Survey	Sunset Time	Date	Weather Conditions
20:50 – 22:35	21:05	1 st August 2023	Dry, light breeze, 1/8 cloud cover cloud cover. Start temp: 14°C. End temp: 13°C.
20:22 – 22:07	20:37	15 th August 2023	Dry, light breeze, 8/8 cloud cover cloud cover. Start temp: 13°C. End temp: 12C.

Table 3.2: Dusk Emergence Survey Results

Survey Results	Time	Species	Activity
1 st August 2023	20:50 – 22:35	Summary: No emergence and moderate bat activity of a small number of bats.	
	21:23	Common pipistrelle bat	First bat. Foraging, heard not seen initially. Bat then observed foraging along the lane to the immediate north of the building.
	21:25	Common pipistrelle bat	Bat observed foraging along the lane before entering the building on the eastern aspect through an open window (also to forage). Bat was observed leaving the building soon after on the southern aspect.
	21:35	Common pipistrelle bat	Two bats foraging along the lane and around to the south of the building.
	21:46	Common pipistrelle bat	Two bats recorded foraging as above. This activity continued to the end of the survey.
	22:04	Brown long-eared bat	Foraging.
	22:14	Soprano pipistrelle bat	Foraging, heard not seen.

Survey Results	Time	Species	Activity
	22:22	Brown long-eared bat.	Foraging, heard not seen.
End of Survey			
15 th August 2023	20:22 – 22:07	Summary: No emergence and low bat activity.	
	20:43	Common pipistrelle bat	First bat. Foraging along the lane to the immediate north of the building.
	20:50	Common pipistrelle bat	Two bats observed foraging along the lane and also to the south.
	21:00	Common pipistrelle bat	Bat foraging along the southern aspect of the building.
	21:12	Common pipistrelle bat	Two, potentially three bats foraging consistently through to the end of the survey.
	21:35	Soprano pipistrelle bat	Single bat heard but not seen.
	21:40	Brown long-eared bat	Single bat heard but not seen.
End of Survey			

4. CONCLUSION & RECOMMENDATIONS/MITIGATION

4.1 CONCLUSION

From the two dusk surveys, it can be reasonably concluded that bats were absent from the building. Bat activity was moderate with common pipistrelle, soprano pipistrelle and brown long-eared bats all being recorded.

4.2 RECOMMENDATIONS/MITIGATION

Due to the absence of a bat roost, works can proceed as planned. However, as bats are highly transient species' and can use buildings that offer potential roost features at any time of the year, it should be stated that if bats, or evidence of bats is found at any stage during the works, then as a legal requirement the work at the site must stop immediately and a bat ecologist contacted for further advice.

Although no roost has been identified, the proposal may consider enhancements for bats to demonstrate a biodiversity net gain for this site, in accordance with local and national planning policy. A number of potential enhancement measures are provided below.

4.2.1 Enhancing a development site for bats

External lighting

In all cases illumination of adjacent habitats should be avoided. Where lighting is required, this must be low level, low intensity and directed downwards. The following principles will apply;

- Where and if lighting is required, this will be directed internally within the site avoiding spillage.
- The use of low powered sodium lights or similar will be used and these will be fitted with cowls / covers that prevent lateral light spillage.
- Wherever possible and only if required low level (1-1.5m high) bollard lighting will be used.
- If required lights will be fitted with timer controls that minimise the duration of lighting.

Lighting requirements will follow guidance provided by the Bat Conservation Trust; links are provided below.

- Bat Conservation Trust's Acritical Lighting Guidance. Webpage link <https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting>
- Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/23: Bats and Artificial Lighting in the UK. Webpage link <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

Integrated bat box

The Habibat Bat Box (Figure 3) is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Figure 3 – Habibat bat box

Ridge access

Where appropriate, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles (Figures 4 and 5). Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping, and killing bats.

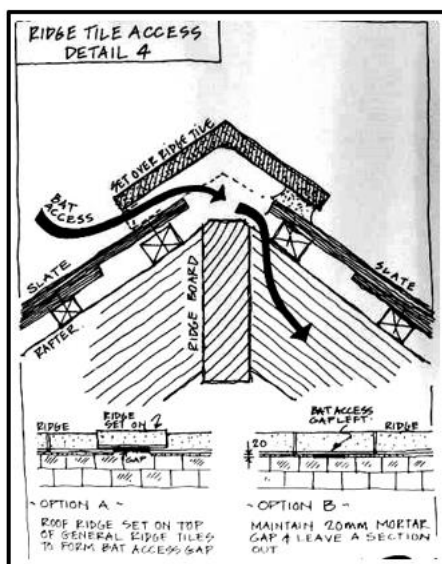


Figure 4 – Ridge access



Figure 5 – Breathable membrane

Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.

Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings. Suitable models for both buildings and trees may include the Eco Kent Bat Box (Figure 6) or a soffit bat box (Figure 7).



Figure 6 – Eco Kent Bat Box

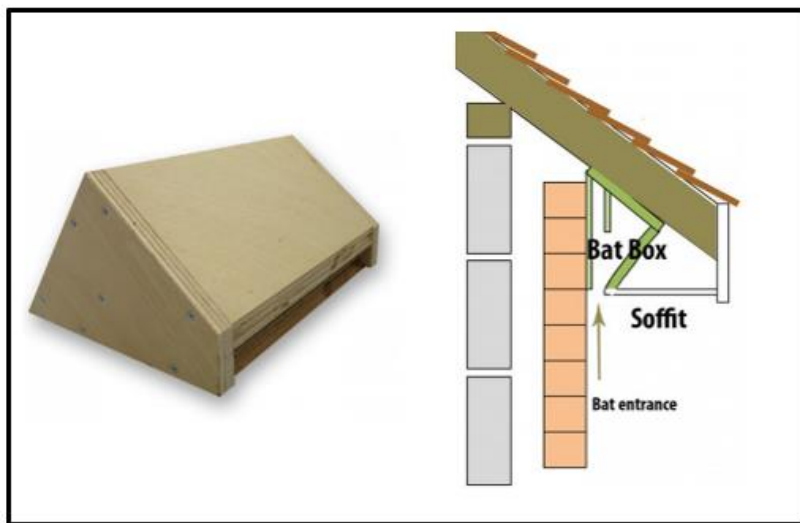


Figure 7 – Soffit bat box

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Appendix A: Bat Legislation and Policy

Legislation

All British bats and their roosts¹ are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

The relevant sections of the Wildlife and Countryside Act 1981 (as amended) make it an offence to:

- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

The relevant sections of the Conservation of Habitats and Species Regulations 2019 make it an offence to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species; and,
- Damage or destroy a breeding site or resting place of such an animal.

Where it is likely that the scheme would result in contravention of this legislation, a bat mitigation licence would be required to allow the works to proceed. As part of this process, the application must meet 'three tests' for licencing under the Conservation of Habitats and Species Regulations 2019. Planning guidance and case law also require the Local Planning Authority (LPA) to address these three tests when deciding whether to grant planning permission. The three tests are as follows:

- Regulation 55 (2) (e) states that a derogation license can only be issued for preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- Regulation 55 (9) (a): that there is no satisfactory alternative; and
- Regulation 55 (9) (b): that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

¹ The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation

Policy

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

180. 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.

Bats in Lancashire

Up to eleven bat species have been recorded in Lancashire, most of which are likely to use built structures e.g., buildings, bridges, culverts etc. as well as features in trees e.g., knot holes, woodpecker holes, peeling bark, torn limbs etc. The most frequently encountered species are the common and soprano pipistrelle bats; their abundant status in Lancashire is reflected throughout the UK.