

- Protected species survey & licensing
- Habitat survey
- Habitat creation & management
- Arboricultural survey & impact assessment
- Invasive species survey & control
- Management plans

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Evesons Farm
Simonstone Lane
Simonstone

For the attention of: Mr. Peter Hitchen

Dear Peter,

Re: Preliminary Roost Assessment (PRA) for Bats: Evesons Farm, Simonstone, Simonstone

PENNINE Ecological have been commissioned to undertake a daytime inspection for bats at the above address. The purpose of this study is to address any potential issues in relation to bats resulting from the proposed renovation of the existing barn into a residential dwelling.

Additionally notes on the immediate surrounding habitats that are potentially to be impacted on as a result of the proposals will be briefly referred to.

The grid reference for the building is SD 77476 34146. An aerial image of the building is shown in Figure 1 below with photographs provided at the end of this report.

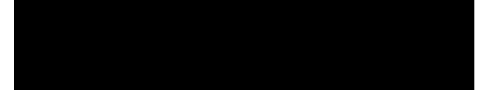
Bolton Offices:



Preston Office:



Glossop Office:



25th May 2023



Figure 1: Building subject to survey within the red line boundary.

1. Background Information on Bats

a) Legislation and Planning Policy

Bats are comprehensively protected by European 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.

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;*

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.

- 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.*

b) Use of Buildings, Structures and/or Trees by Bats

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage (all British bats are insectivorous).

Definitions of the bat roosts most likely to be encountered during the PRA of buildings, structures and/or trees are summarised below (for further details refer to Collins (2016)).

- a) Day roost; a place where individual bats or a small group of male bats rest during the day but are rarely found by night in the summer.
- b) Night roost; a place where bats rest during the night but are rarely found during the day.
- c) Transitional/occasional roost; used by a few individuals for short periods of time following or prior to hibernation.
- d) Maternity roost (May – August); where female bats give birth and raise their young to independence.
- e) Hibernation roost (November - February); where bats may be found individually or together during the winter period.

Up to eleven bat species have been recorded in Lancashire most of which use built structures e.g., residential properties, bridges and culverts as well as features in trees e.g., knot holes, woodpecker holes, peeling bark and torn limbs. The most frequently encountered species are the common and soprano pipistrelle bats; their abundant status in Lancashire is reflected throughout the UK. All British bats and their roosts are afforded protection under the Wildlife & Countryside Act 1981 (as amended) and are listed in Schedule 2 of the Conservation of Habitats & Species Regulations 2017 (as amended). When dealing with cases where an EPS may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the 2017 Regulations and therefore has a statutory duty to have due regard to the provisions of the Regulations in the exercise of its functions.

2. Desktop Study

A desk top consultation study with Lancashire Environmental Records Network (LERN) (the local records centre for Simonstone) was not undertaken for this study due to the relatively small-scale nature of the development.

However, searches for statutory sites and European Protected Species Mitigation Licences (EPSML) were undertaken as detailed below.

a) Statutory Sites

Details of statutory sites were sought from the Natural England web site search:

<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

There are no statutory protected wildlife sites within a 2km radii of the site (refer to Figure 2).

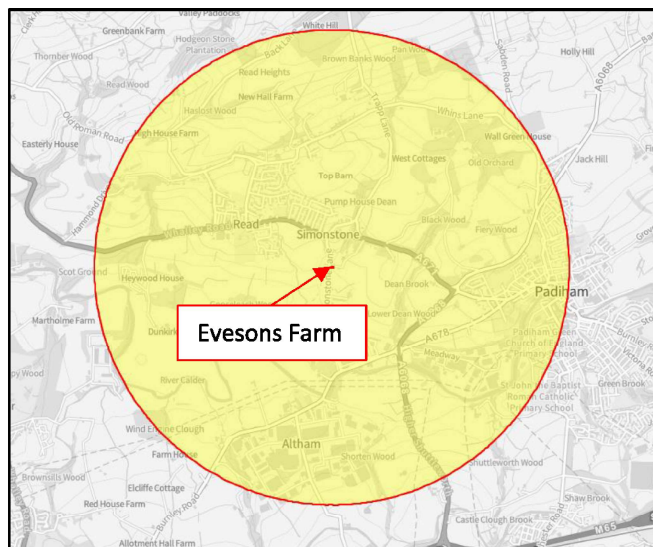


Figure 2 - Statutory Designated site and 2km buffer from Evesons Farm, Simonstone.

b) European Protected Species Mitigation Licences

Details of EPSML for bats was sought from the Natural England web site search (refer to Figure 3):

<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

There are no EPSML within 1km of Evesons Farm, Simonstone.



Figure 3 - EPSML and 1km buffer from Evesons Farm, Simonstone.

3. Survey Methodology

a) Methodology

A daytime survey was conducted on 12th May 2023. The building was inspected externally and internally for evidence of bats and potential places / points of internal access that may be of value to bats. Where appropriate all elevations were investigated from ground floor level, with the aid of close focusing binoculars, a high-powered torch, and an endoscope for places that are potentially used by bats as roosts or as access into roost chambers. All elevations were visually accessible.

The survey was conducted by Mr. Stuart Macpherson, who is an experienced ecologist and holds a Class 2 bat licence 2021-10079-CL18-BAT.

During the survey the surrounding habitat was evaluated in relation to bats as very often roost selection is closely correlated with the surrounding habitat.

b) Survey Constraints

Due to the height and access the north facing roof could not be fully surveyed. However, the conclusions and recommendations made within the report account for this.

4. Bat Survey Results

The building was found to be of **moderate suitability** to support roosting bats.

a) Summary of the Building

The building is located on the northern boundary of an improved grassland immediately east of Simonstone Lane and 670m south east of the centre of Simonstone village. The building is an old livestock barn measuring approximately 18m x 20m x 10m at its largest.

The barn comprised four rooms with two mezzanine floors, the latter of which were presumed to have been used for storage of hay when the barn was in use. In the north western corner of the building was what was presumed to be a milking parlour.

Two large archways on the northern and southern aspects allowed access in to the barn with a door on the eastern aspect. The northernmost archway comprised large wooden doors, whereas the southern arch was completely open as was the doorway.

Annexes on the building's south west and south eastern corners appeared to have been later additions to the building. The walls of the annexes had been rendered.

b) External/Internal Inspection

Refer to the photographs at the end of this report for exact features identified which could potentially be suitable as a bat roost.

Potential roost features for bats identified during the external inspection were limited to a large crack between the stonework on the building's eastern aspect, gaps between roof tiles on both the main barn and the two annexes and gaps in the wall plate where the wall meets the roof.

The building was constructed of stone with a double skin thus a cavity was recorded when undertaking the internal inspection (see below). The external stonework was mortared which was generally in good condition on all elevations, however a crack measuring approximately 1.5m in height was identified on the building's eastern aspect on the far north eastern corner of the building.

Multiple gaps were identified throughout the roof with missing and/or slipped tiles. The roof was constructed of what were presumed to be slate tiles. The roof did not comprise any insulation and could be fully inspected internally without constraint. The annexes comprised large stone tiles with multiple gaps identified on each. The southwestern annexes roof had partially collapsed leading to numerous tiles being lifted or overlapping one another.

On both the northern and southern aspects numerous gaps in the wall plate were identified that would potentially provide access for bats in to any wall cavity.

Internally, due to the height of the building and the unsafe mezzanine floors all walls couldn't be fully inspected, however, using a high powered torch and binoculars enough of the walls could be inspected to provide an accurate assessment of the potential suitability of the features. Missing stonework on the eastern, western, and southern walls of the building were subject to an endoscope inspection. No bats were recorded, however, these features were suitable to support a bat roost.

c) Habitat Assessment

Surrounding habitats included optimal bat foraging habitat in woodland, tree lines/hedgerows, disused railway line and adjacent residential properties (refer to Figure 4 below).

Overall, the habitat quality for foraging bats is considered to be moderate on a scale of low, moderate and high quality.



Figure 4. Optimal bat foraging/commuting habitat identified within the wider landscape surrounding Evesons Farm.

5. General Habitat Notes

An area of grassland immediately south of the building was also surveyed for its potential interest for other habitats and/or species of interest. The area surveyed outlined in blue is shown in Figure 5. The area surveyed comprised an area of hard standing and improved grassland habitat of poor ecological value. The area was dominated by commonly occurring grasses such as Yorkshire fog, perennial rye grass, meadow foxtail, and sweet vernal. Common nettle, spear thistle, dandelion, and broad leaved dock were also recorded.

A large sycamore tree was recorded in the site's far north west. No features were found identified within the tree that could support a bat roost.

It should also be noted that pellets that were recorded on the larger mezzanine in the eastern half of the building. It couldn't be conclusively determined from what species they were from as the size of the pellets varied. Potential species which includes barn owl, could be little owl, kestrel etc. The pellets were estimated to be at least 6-8 months old suggesting the building isn't used regularly. No further evidence of breeding was recorded within the building.

Feral pigeon were confirmed to be breeding within the building.

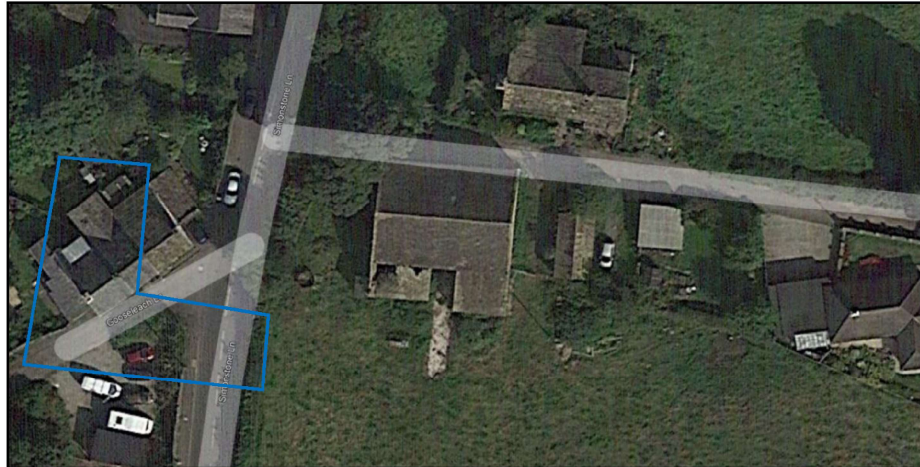


Figure 5. Area of grassland surveyed for its potential habitat and/or species interest.

6. Recommendations:

The building was deemed to be of **moderate** suitability to support roosting bats. Subsequently, two dusk/dawn surveys should be undertaken. The surveys are required to establish whether bats are using the buildings and if present how they are using it. The surveys will need to be conducted during the main active season of bats i.e., between May and August inclusive. The surveys must be spaced between those months and at least two weeks apart (refer to Figure 5 below). Following the completion of these surveys further recommendations will be made in respect of any issues in relation to bats.

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

^a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see Section 5.2.9). If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

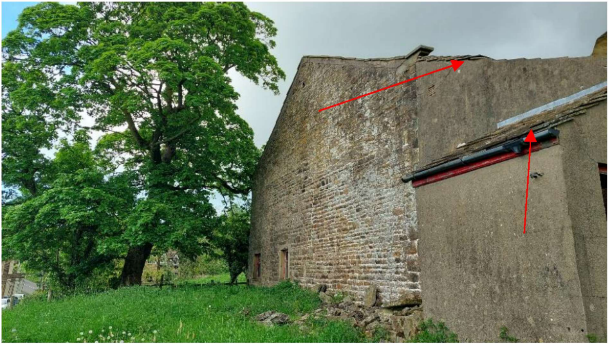
^b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

Figure 5: Extract from Bat Conservation Trust: Bat Survey Guidelines 2016 3rd Edition

Yours faithfully,
Stuart Macpherson
 BSc. (Hons.) MSc, ACIEEM.

Site Photographs: 12th May 2023

All red arrows in the photographs identify potential roost features.

 Photograph 1: Southern aspect of the buildings. Gaps throughout the roof and on gable end ridge lines.	 Photograph 2: Northern aspect of the building. Gaps identified in the wall plate.
 Photograph 3: Eastern aspect. Crack between stonework.	 Photograph 4: Western aspect of the building. Gaps between wall and roof tiles and between tiles on the annex (right of photograph).



Photograph 5: Southern aspect. Missing mortar on gable end ridge line and lifted tiles throughout.



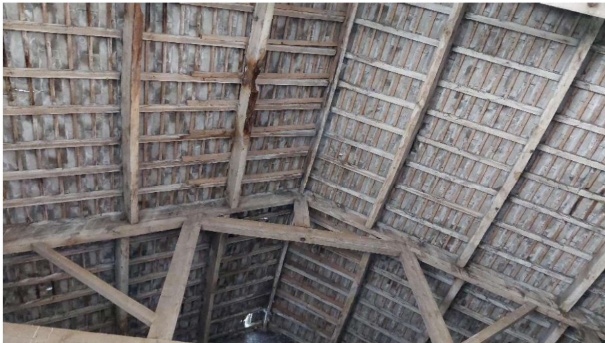
Photograph 6: Southern aspect. Gaps in wall plate.



Photograph 7: South western annex. Collapsed roof had created multiple features for roosting bats (likely day roost only in this location).



Photograph 8: Internal view of the roof frame and tiles.



Photograph 9: As for Photograph 8.



Photograph 10: Eastern room in the building. Presumed to have been used to house livestock.



Photograph 11: Milking parlour/holding pen for livestock.



Photograph 12: Mezzanine in the eastern half of the building. Gaps in the stonework potentially provide suitable bat roosting opportunities.



Photograph 13: Central section of the building.



Photograph 14: Gaps in the south western corner were subject to endoscope but no bats recorded.



Photograph 15: Improved grassland to the west of the building.



Photograph 16: Improved grassland to the south of the building.



Photograph 17: Example of pellet recorded on the building's eastern mezzanine.

NO PHOTOGRAPH