



Markhor, Eaves Hall Lane, West Bradford

Proposed Replacement of Residential Building

Produced For

Miss Huskisson & Mrs Wilkinson

BAT SURVEY REPORT

August 2025

1 INTRODUCTION

The applicant appointed Etive Ecology Ltd to undertake a suite of bat surveys in relation to the proposed replacement of the existing residential building on Eaves Hall Lane, West Bradford. The site is centred on National Grid Reference SD 73858 44866.

A PEA/PRA was undertaken on 19th May 2025. The site was found to comprise a residential property and associated hardstanding, garden lawn, shrubs and mature trees. Adjacent to the east of the property is a block of broadleaved woodland designated as a Biological Heritage Site; Drakehouse Wood BHS.

The property was subject to a PRA in 2024 (Angela Graham, 2024). The survey found evidence of brown long-eared bat droppings within the loft space but no apparent entry points for the species. It was concluded that the roost had been adversely impacted during approved works in 2013, undertaken by the previous owners of the property.

During Etive's PRA, a small number of scattered fresh bat droppings (in addition to the old accumulations previously noted) were found, of a similar size to a small bat such as a Pipistrelle sp. Possible access points were noted at the apex on either gable end, beneath a uPVC cap. Given the evidence of bat usage of the property, three bat emergence surveys were recommended. This report presents the survey findings and discusses the impact on bats and the required mitigation process.

2 METHODOLOGY

The survey effort followed the latest survey guidance (BCT, 2023) and consisted of three dusk surveys, with two surveyors and night vision aids (NVA) also deployed.

Dusk surveys commenced 15 minutes before sunset. They ceased no earlier than 90 minutes following sunset, when survey conditions were too dark for the surveyors to accurately and definitively identify bat emergence and flight.

The surveyors used Echo Meter Touch bat detectors. A Sony 4K Handycam was deployed during the surveys, utilising the Nightshot function and coupled with a Sony IR Lamp. A FLIR E54 thermal imaging camera was also used to monitor bat activity. Bat activity was recorded on each occasion and analysed using Kaleidoscope software.

Dusk surveys were undertaken on the following dates:

- 19th May 2025; 14°C, 5mph easterly, dry and 10% cloud cover.
- 10th June 2025; 13°C, 5mph westerly, dry and 0% cloud cover
- 7th of July 2025; 14°C, 13 mph north-westerly, dry and 20% cloud cover.

The survey effort was led by Russell Grey (2015-14472-CLS-CLS), a bat-licensed ecologist with over 20 years of experience as an ecological consultant. Survey assistance was provided by Laura Clement-Evans, who has 2 years of bat survey experience.

Surveyors were located at either end of the building (east and west) with good visibility of the gable ends and the most likely emergence locations. NVAs were placed next to the surveyors, trained on the gable walls.

3 SURVEY RESULTS

Survey 1 (Sunset at 21.15)

The first bat encountered at the front (west) of the property was a soprano pipistrelle at 21.30 which appeared from the bottom of the roof verge on the northern pitch. The bat was not seen to emerge and no obvious access point or PRF was noted in this location, but the bat was not recorded or seen by the surveyor to the rear. This bat is therefore considered to have emerged from the property.

The first bat encountered to the rear of the property was a common pipistrelle at 21:34, which flew east from the treeline to the north of the dwelling. Common pipistrelle activity was frequent from this point, with both foraging and commuting individuals at the front and rear of the property. A soprano pipistrelle was observed foraging over the back garden at 21:48, joined by another two at 21:53. Foraging and social calls were continuous from both species until 22:00. At 22:04, two soprano pips returned to the site and foraged until 22:16. At that point, they flew north, off-site. Other species recorded included a brown long-eared bat at 21:54 and 22:40 (neither seen to emerge from the building or seen at all).

In summary, one soprano pipistrelle was deemed to have emerged from the building and there was a high volume of foraging/commuting to the rear, and to a lesser degree at the front of the property (peak count of 141 bat passes).

Survey 2 (Sunset at 21.39)

The first bat encountered was a soprano pipistrelle which was observed to emerge from around the bottom of the northern pitch on the western gable of the property (same location as per Survey 1). Common and soprano pipistrelle bats were then observed flying onto site from Eaves Hall Lane to the west, from 21.47. These bats circled to forage in the front portion of the site and then appeared to commute to the rear of the property where they foraged more extensively.

A single brown long-eared bat was recorded at 23.10 at the western end of the property but was not seen by either surveyor.

In summary, a single soprano pipistrelle bat was observed to emerge from the property again. Pipistrelle activity was observed in a moderate volume to both the front and rear of the property (peak count of 51 bat passes).

Survey 3 (Sunset at 21:41)

Prior to the survey the loft space was re-checked for evidence of bats. No fresh droppings were found anywhere within the loft space.

The first bat encountered was a soprano pipistrelle at 21.47 recorded at the rear (east) of the property. The bat was not seen by the surveyor and NVA footage confirms that it did not emerge from the gable end of the building.

At 22:00, a common pipistrelle was observed flying east along the northern boundary and was observed by the surveyor to the rear flying away from the property and into the rear garden. A common pipistrelle appeared to reverse this path at 22:03, flying west towards the property and over the flat roof buildings to the north. A soprano pipistrelle was recorded foraging over the front garden and driveway at 22:13. For the remainder of the survey, there was a high quantity of commuting bats (c.pip and s.pip) recorded foraging to both the rear and front of the property.

In summary, no bats were observed to emerge from the property. Foraging and commuting activity were found to be in moderate volume (peak count of 58 bat passes).

Summary

Based on the findings of the internal inspection and the three dusk surveys, it is concluded that:

- The property has previously (+ 5 years) supported a brown long-eared bat roost – size and status known but potentially a maternity roost.
- The property currently supports a summer roost for a single soprano pipistrelle bat.
- There is a high level of foraging and commuting activity across the site.

4 DISCUSSION

Impacts

The proposed scheme involves demolishing the existing property and constructing a new residential building on a similar sized footprint but orientated north-south rather the east/west. The surrounding land will be re-landscaped, with vehicle access retained and slightly extended. The proposed layout, elevations, and floor plans are included in the planning application.

Demolition will result in the permanent loss of the bat roost associated with the existing building. The only current roost identified on site is a summer roost for an individual soprano pipistrelle, which is supported by the presence of occasional scattered pipistrelle droppings within the loft space and the emergence of one pipistrelle on two of the three surveys. It is also acknowledged that the building appears to have previously supported a brown long-eared roost, which no longer appears to be active. The conservation status of the active roost is low given that soprano pipistrelles are common and widespread, and that just a single bat appears to roost on site. Therefore, the magnitude of the impact is assessed to be Minor at the Local scale.

A small area of amenity grassland will also be lost but replaced by a garden of similar biodiversity value, supporting bat foraging and commuting. The site will remain residential, so artificial lighting and disturbance levels are expected to remain unchanged, making impacts on bats minor and not significant.

Recommendations

A Bat License must be obtained from Natural England prior to the commencement of works to permit the permanent loss of, and disturbance to, the bat roost. The license application will demonstrate the NEED for the development (to provide a modern residential property that meets current design, regulatory and energy efficiency standards), that there is NO SUITABLE ALTERNATIVE to demolition that avoids the loss of the roost, and explain why the FAVOURABLE CONSERVATION STATUS (FCS) of the bat species present will not be adversely affected due to the proposed mitigation.

The mitigation strategy is to ensure that, a) bats are not harmed during demolition, b) alternative roosting provision is provided during the construction phase and c) long-term roosting opportunities are provided within the new building.

The works will be scheduled to take place during periods when bats are active, typically between April and September, to avoid disturbing any potential hibernation roosts (although hibernation potential is considered to be low). Before any works commence on site, 2 x Schwegler 2FN bat boxes will be installed on existing trees in the rear garden, to offer temporary roosting habitat during the construction period. Before demolition, a pre-commencement bat survey and thorough inspection by a licensed bat worker will be carried out to confirm the absence of bats. The building will then undergo a soft strip under ecological supervision, with any bats encountered being safely relocated into the bat boxes.

The new building design incorporates a section of new loft space that will be allocated for bat use. This section of loft space is clearly shown on the submitted design drawings. Access points will be provided in the form of an access slot in the north-facing gable of the proposed bat loft and gaps beneath two of the ridge tiles. The loft space will comprise exposed timbers and a traditional bituminous roof felt, with access provided for bats to move through the felt and to access the space beneath the roof tiles and ridge tiles. The open loft space will also provide suitable roosting habitat for brown long-eared bats as well as pipistrelle bats, in response to the former use of the existing building by long-eared bats.

All lighting will be carefully sited so as to avoid casting any light onto areas of vegetated (trees and vegetated boundaries) of high value to foraging commuting bats, or onto any part of the bat loft structure or flight lines to/from this structure.

These measures will maintain the overall value of the site for roosting, foraging and commuting bats despite the loss of the existing roost building.

5 CONCLUSION

Etive Ecology Ltd have conducted three dusk emergence surveys at Markhor, Eaves Hall Lane, confirming the presence of a soprano pipistrelle summer roost within the existing dwelling. The building also appears to have previously supported a brown long-eared bat roost.

The proposed redevelopment will result in the loss of the existing roost, necessitating a Bat Mitigation Licence to be obtained before works proceed. Demolition will be scheduled during the active season (April to September inclusive) to avoid the risk of disturbance to any hibernating bats (although hibernation activity is not expected on site). A licensed ecologist will carry out a pre-demolition survey of the building and will supervise the soft strip of the roof until all PRFs have been removed. Any bats encountered will be safely relocated into bat boxes installed on existing mature trees prior to demolition.

The replacement dwelling will include a designated loft space to provide suitable roosting opportunities for pipistrelle and long-eared bats. With these measures and the appropriate licence, no significant adverse impacts on bats or their conservation status are expected.

Report Prepared by: Laura Clement-Evans

Reviewed by: Russell Grey

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