



Bat Activity Survey Report

**Petersburgh Farm
Beckermeth
Cumbria**

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NON-TECHNICAL SUMMARY

Executive Summary

Background	Natural Ecology were instructed to undertake bat emergence surveys of buildings at Petersburg Farm, Beckermeth, Cumbria (central grid reference NY 02181 05947) following a Preliminary Roost Assessment undertaken by Envirotech. The result of this PRA confirmed the requirement for further nocturnal bat activity surveys, which were undertaken during the survey season of 2024.
Site Description	The site comprises a series of adjoined buildings including four rendered barns and one stone barn. The buildings lie approximately 800m south of the village of Beckermeth.
Development Proposal	Development proposals comprise renovation of the buildings for residential purposes and therefore require change of use planning permission. The proposals will not alter the overall footprint.
Purpose	The purpose of the survey was to: <ul style="list-style-type: none"> Assess the potential value of those features for bats following the best practice guidelines; Assess the potential of the surrounding habitats for foraging and commuting bats; Undertake a single nocturnal bat activity survey to determine whether the building is in use as a bat roost; Recommend further surveys, if necessary; and Recommend mitigation, compensation, and enhancement measures. A nesting bird check was also completed where possible.
Results	Nocturnal Survey No bats were identified roosting within either building during the course of the surveys. Three bat species were observed during the survey: common pipistrelle <i>Pipistrellus pipistrellus</i> , soprano pipistrelle <i>Pipistrellus pygmaeus</i> and noctule <i>Nyctalus noctula</i> . None of these were seen using the building for roosting. All activity was a result of commuting and foraging along the lane and over the site.
Recommendations	Given the survey results, it is considered that bats are not using the buildings for roosting. No further action is required for works to be carried out on site. In the unlikely case that bats are found during works, all works should stop immediately, and a licensed bat ecologist contacted.

1. INTRODUCTION

Background

- 1.1 Natural Ecology were commissioned by Adams Planning + Development Ltd to undertake nocturnal bat surveys of Petersburg Farm, Beckermeth, Cumbria (NY 02181 05947) during May to July 2024 (hereafter referred to as the 'Building/Site').
- 1.2 The site was subject to a preliminary roost assessment in October 2023, undertaken by Envirotech. The purpose of the PRA was to establish, as far as possible, whether the site offered any potential to support roosting bats and assess the necessity for any further bat surveys to support a planning application.

Survey Objectives

- 1.3 The purpose of the nocturnal survey was to:
 - Assess the potential value of features highlighted during the PRAs for bats following the best practice guidelines;
 - Assess the potential of the surrounding habitats for foraging and commuting bats;
 - Recommend further surveys, if necessary; and
 - Recommend mitigation, compensation, and enhancement measures.
- 1.4 The following assessment is informed by the Bat Conservation Trust's publication Bat Surveys for Professional Ecologists – Good Practice Guidelines (Collins, J. (Ed) 2016).

2. METHODS

Desk Study

- 2.1 To create a baseline of the ecological conditions in the area, we reviewed and included relevant ecological information surrounding a 2km radius. This included:
- Landscape structure using Ordnance Survey base maps (www.bing.com) and aerial photographs from Google Earth (www.maps.google.co.uk).
 - Designated sites, habitat and granted European Protected Species Mitigation (EPSM) records held on <http://magic.defra.gov.uk/>.

Site Survey

- 2.2 Natural Ecology visited the site on 8th 21st and 29th May, 20th June and 11th July 2024 to conduct dusk emergence surveys, by experienced bat surveyors in suitable weather conditions, and following the guidelines set out by the Bat Conservation Trust's "Bat Surveys for Professional Ecologists". Observations were made by surveyors situated around the building at locations that were considered most likely for bats to emerge.
- 2.3 The emergence surveys were conducted from 15 minutes before sunset and concluded approximately 1.5 hours after sunset.
- 2.4 Detectors used for bat observation and identification were Echo Meter Touch 2's with Samsung A7 tablets. Bat passes were observed and flight paths mapped (commuting, foraging).
- 2.5 NVAs used included Nightfox Whiskers. All NVAs were mounted on secure tripods and covered all required features of the building/s surveyed.
- 2.6 Analysis was performed as necessary on calls made.

Limitations

- 2.7 There were no significant constraints to the nocturnal surveys; weather conditions were good for the surveys.

Legislation

- 2.8 Bats and their roosts are protected under the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010. In summary, this makes it an offence to damage, destroy or obstruct any place used by bats for breeding and shelter, disturb a bat, or kill, injure, or take a bat. Seven bat species including noctule *Nyctalus noctule* (but not common pipistrelle *Pipistrellus pipistrellus*) are listed at Species of Principal Importance under the provisions of the Natural Environment and Rural Communities (NERC) Act 2006.
- 2.9 The ODPM Circular 06/05 makes the presence of a protected species a material consideration within the planning process. It states that it is essential for the presence of protected species and the extent they may be affected by proposed development be established through appropriate surveys before the planning permission is granted and encourages the use of planning conditions to secure the long-term protection of the species.
- 2.10 The NERC Act, as amended, puts an obligation on public bodies to have regard, so far as is consistent with the proper exercise of their functions, to the purpose of conserving biodiversity. Under the terms of the Act, conserving biodiversity includes restoring or

enhancing populations and/or habitats. The local planning authority (LPA) or other determining authority must therefore consider the effects of planning applications upon biodiversity and how it can be mitigated for or enhances.

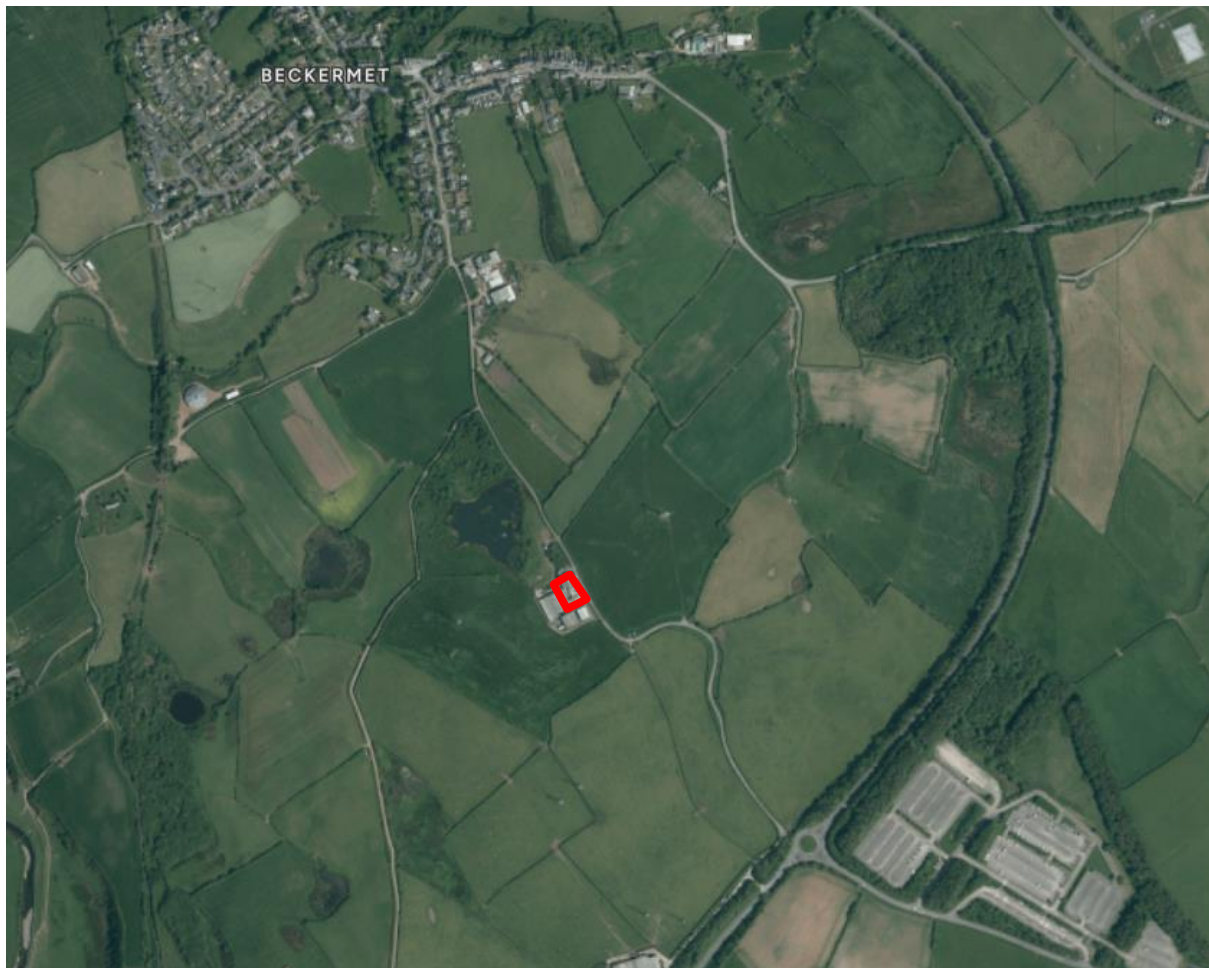
- 2.11 Furthermore, the National Planning Policy Framework (NPPF) required that 'Planning policies and decisions should contribute to and enhance the natural and local environment' and that 'opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity'.

3. RESULTS – NOCTURNAL SURVEY

Site Description

- 3.1 The site is situated 800m south of the village of Beckermets, Cumbria (Figure 1).
- 3.2 There is fragmented woodland in the local area but the site is in an exposed position.
- 3.3 The surveyed buildings comprise three rendered barns under slate roofs, one stone-built barn and one small stone-built building under slate roofs, and one rendered building under a flat corrugated roof.
- 3.4 It is proposed to apply for change of use, and convert the barns into residential dwellings.
- 3.5 Construction is unlikely to affect any other buildings or landscape in the area.

Figure 1: Petersburg Farm situated in the wider landscape and approximate site boundary, highlighted in red



Nocturnal Activity Survey

- 3.6 A breakdown of the bat activity can be found below. No bats were observed roosting within the building during the nocturnal survey.

Table 1: Surveyors and Equipment

Survey Date	Surveyor	Experience	Equipment
All Dates	Lucinda Spencer	10 years survey experience as a bat consultant Licence Number 2022-CL18-BAT	Echo Meter Touch 2, Samsung Tablet, Nightfox Whisker Infra-Red Camera
	David Watson	3 years survey experience	Echo Meter Touch 2, Samsung Tablet, Nightfox Whisker Infra-Red Camera

Table 2: Survey Conditions

Survey Date	Time		Temperature (C)		Precipitation		Cloud (%)		Cover		Wind Speed (mph)	
	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
08.05.2024	20:45	22:30	12	12	0	0	100	100	7	7		
21.05.2024	21:05	22:55	16	15	0	0	100	100	3	3		
29.05.2024	21:20	23:05	12	12	0	0	90	90	10	10		
20.06.2024	21:35	23:25	17	15	0	0	5	5	1	1		
11.07.2024	21:30	23:25	15	15	0	0	80	50	4	4		

8th May 2024 – B1

- 3.7 Three bat species was observed in total: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and noctule *Nyctalus noctula*. No more than a single bat was observed at one time. The bats were not associated with the building, and were seen to be flying along the lane, foraging and commuting. Bats were also observed flying along the eastern hedgerow of the property.

- 3.8 The first bat recorded was at 21:24, with low activity by a common pipistrelle.

- 3.9 No roosting bats or roosting behaviour was observed during the survey.

21st May 2024 – B4 & B5

- 3.10 Three bat species were observed: common and soprano pipistrelle and noctule. No more than two bats were observed at one time.

- 3.11 The first bat was recorded at 21:38, a soprano pipistrelle flying over the site. Bats were observed flying along the lane, over the buildings and within the courtyards.
- 3.12 No roosting bats or roosting behaviour was observed during the survey.
- 29th May 2024 – B3*
- 3.13 Three bat species were observed: common and soprano pipistrelle and noctule. No more than two bats were observed at one time. Bats were seen to be flying along the lane, over the buildings and within the courtyards.
- 3.14 The first bat recorded was at 21:55, with two noctules flying down the lane and across the site, foraging.
- 3.15 No roosting bats or roosting behaviour was observed during the survey.
- 20th June 2024 – B1*
- 3.16 Three bat species were observed: common and soprano pipistrelle and noctule. No more than two bats were observed at one time. Bats were seen to be flying along the lane, over the buildings and within the courtyards.
- 3.17 The first bat recorded was at 22:09, with constant foraging activity from noctules along the lane and over the site. Pipistrelles were first heard on site at 22:10.
- 3.18 No roosting bats or roosting behaviour was observed during the survey.
- 11th July 2024 – B1 & B6*
- 3.19 Three bat species were observed: common and soprano pipistrelle and noctule. No more than two bats were observed at one time. Bats were seen to be flying along the lane, over the buildings and within the courtyards.
- 3.20 The first bat was recorded at 21:56, with noctules foraging over the site.
- 3.21 No roosting bats or roosting behaviour was observed during the survey.

4. CONCLUSIONS

- 4.1 The PRA identified potential roost features (PRFs) and bat access points into the building.
- 4.2 Nocturnal bat surveys are carried out to establish if bats are roosting in a structure or tree, and if they do, they help determine species and roost type present, and the level of further survey effort, mitigation and compensation required for the development to lawfully proceed.
- 4.3 During the bat activity survey, activity from bats was relatively low, with the most recorded species being passes by common and soprano pipistrelles and noctules commuting and foraging along hedgerow and tree lines and through the site.
- 4.4 Although the internal inspection revealed bat droppings in various area, the activity survey confirmed that bats are not currently using the buildings as no bats were seen to emerge.
- 4.5 The proposed works will **not** result in the destruction or disturbance of any bat roosts, and as such a European Protected Species Licence (EPSL) from Natural England will be **not** be required.
- 4.6 Due to the legal protection of bats in the UK, if any bats are unexpectedly discovered during works, all activities in that area should immediately cease and the advice of a licensed bat ecologist sought.

5. RECOMMENDATIONS

5.1 Final recommendations are as follow:

- Due to the legal protection of bats in the UK, if any bats are unexpectedly discovered during works, all activities in that area should immediately cease and the advice of a licensed bat ecologist sought.
- External lighting should be kept to a minimum and, where necessary, should be low wattage and should include measures to reduce reflective rebound into the surrounding sky.
- Site lighting will be kept to a minimum during construction and operational phases. If lighting is necessary, there are a number of ways to minimise the effect of lighting on bats. Information can be taken from the Institution of Lighting Professionals and Bat Conservation Trust's Guidance Note 08/18 Bats and artificial lighting in the UK (2018). If further clarification is required, the ecologist should be consulted.
- As there have been bats previously on site (due to droppings noted during the preliminary roost assessment), breathable roofing membranes (BRM's) should **not** be used due to an entrapment risk to bats. Type 1F hessian reinforced bitumen felt should be used within the roof.
- As bats are opportunistic animals, if the start of works is delayed by more than one year (into the summer of 2025 or later) then update surveys of all buildings is likely to be required.
- On a further note, barn owls are breeding within building 5 in a barn owl nest box, the chicks have been heard calling on several occasions. No works can be done to this building until the chicks have fledged. The nest box can then be boarded to prevent further use and put up in a different suitable location on site.

6. REFERENCES AND SUPPORTING DOCUMENTS

COLLINS, J. (ED.) (2023) Bat Surveys for Professional Ecologists – Good Practice Guidelines, 4th Edition. Bat Conservation Trust, London <https://www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-3rd-edition>

Bat Ability (2019) Assessing Sites for Hibernation Potential. A Practical Approach, including Proposed Method and Supporting Notes

Bat Conservation Trust (2018) Guidance Note 08/18 Bats and artificial lighting in the UK

Mitchell-Jones, A.J. (2004), Bat Mitigation Guidelines, English Nature, Peterborough

Office of the Deputy Prime Minister (2005), Circular 06/2005: Biodiversity and Geological Conservation. Para. 99

Grid Reference Finder (2023): GRF, online <http://www.gridreferencefinder.com>, accessed at report date.

Magic (2023): Magic Maps, NEPS licences and designated sites, online <http://www.magic.gov.uk>, accessed at report date.

APPENDIX A - BAT SURVEY PLAN

