



## Bat Emergence Echolocation Surveys Report

**Project name and address:**

Forest Lodge, Cross Colwood Lane  
Bolney, West Sussex, RH17 5RX

**Report Number:**

**Commissioned by:**

**Prepared by:**

**Date:** 11<sup>th</sup> August 2025

## QUALITY STANDARDS CONTROL

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

This document must only be treated as a draft unless it has been signed by the originators and approved by a director.

Revision:

Date:

Prepared by: Rita Smoldareva MSc Senior Ecologist

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The advice provided in this report is in accordance with the CIEEM Code of Professional Conduct. The opinions expressed are true and professional.

## LIMITATIONS

This report is for the sole use of Mr Harvey (the client). The conclusions and recommendations contained in this report are based on information provided by others. The methodology and sources of information used in providing services are outlined in this report. The scope of this report and services are factually limited by the conditions encountered and the information available at the time of assessment.

The report sections below should be read in full and detailed guidance given in this report must be followed to avoid breaching legislation regarding protected and invasive species.

This report is valid for one year from the date of the survey visit. Should works be delayed to later than one year after the survey then a further update survey of the site would be required as habitats change over time, along with their potential to support protected species.

## Executive Summary

Enviro-reporter Ltd was commissioned to undertake nocturnal emergence and dawn re-entry bat surveys at Foresters, Cross Colewood Lane, Bolney, West Sussex. These surveys were commissioned to inform a planning application associated with the proposed redevelopment of the existing residential building.

A Preliminary Ecological Appraisal (PEA) incorporating a Preliminary Roost Assessment (PRA) was undertaken on 22 November 2024. The assessment identified several potential roosting features during internal and external inspection, including gaps beneath roof tiles, lifted flashing, and small crevices within the building fabric. Based on these findings, the building was assessed as having moderate potential to support roosting bats. In accordance with Bat Conservation Trust (BCT) *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (4th ed., 2023), two further surveys – a nocturnal emergence with night visual aids were recommended to determine the presence or likely absence of roosting bats.

This report details the results of the surveys undertaken between 10<sup>th</sup> June and 8<sup>th</sup> July 2025.

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## 1. Introduction

### *Project Description*

In November 2024, [Client Name] instructed Enviro-reporter Ltd to undertake a Preliminary Ecological Appraisal (PEA) incorporating a Preliminary Roost Assessment (PRA) at Foresters Cottage, Cross Colwood Lane, Bolney, West Sussex.

During the inspection of the main residential dwelling, several potential roosting features (PRFs) were noted externally and internally, including lifted and missing roof tiles, small gaps between wooden cladding, and crevices within the building fabric. Based on these findings, the building was assessed as having moderate potential to support roosting bats. In accordance with *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (BCT, 4th ed., 2023), two further surveys were recommended.

This report details the findings of the bat activity surveys undertaken between 8<sup>th</sup> June 2025 and 10<sup>th</sup> July 2025.

### *Development Site Description and Context*

The site is located within a semi-rural area of [insert village/town]. The majority of the site comprises a residential garden with modified grassland, ornamental shrubs, and hardstanding in the form of concrete paving and paths. The main building is a one-storey detached dwelling with associated outbuildings. A short ornamental hedge is present along one boundary, with mature trees and a vegetated treeline providing connectivity to the wider landscape.

### *Proposals*

The works comprise the demolition of the existing dwelling and associated outbuildings, with redevelopment of the site for a new residential property and associated landscaping.

## 2. Relevant Legislation

### Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017 (as amended), states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally* or *recklessly\** damage or destroy, or obstruct access to, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally* or *recklessly\** disturb any protected species while it is occupying a structure or place which it uses for shelter or protection.

\*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, Noctule Bat *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros*.

### 3. Bat Survey Methodology

#### General Information

Nocturnal emergence bat surveys were undertaken in line Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023). Night Visual Aids (NVA) consisting of two cameras with infrared recording, Sony AX53 capability and four supplementary infrared illuminators and torches were also

used. The camcorder footage was later analysed using Video slow and fast speed Ramp software to allow slowing down the video in line with the recorded bat call to ensure the location of bat movement was captured to conclude if the bat emerged from potential roosting features associated with the site. The location of the infrared camcorders remained the same during each survey to ensure a full coverage of the areas of the building to be affected by the proposals.

*Type of survey carried out*

Presence/absence survey (emergence/re-entry)

The survey involved two dusk nocturnal visits to watch, listen for and record bats exiting bat roosts. The aim of the survey is to determine the presence or likely absence of roosting bats at the time of surveys and the need for mitigation.

*Equipment used to detect bats*

Bat detector types used included Echo Meter Touch 2 Pro (for IOS).

*Constraints*

All areas required to be surveyed were visible and accessible. Therefore, there were no constraints to surveying.

## 4. Bat Survey Results

### Weather conditions during first survey

Date	Survey	Times	Weather conditions
10/06/2025	Nocturnal	Start: 20:50 End: 23:20 sunset at 21:17	Temp: 17 C Cloudy: 30% Wind: F0 Rain: None

### Description of emerging bats.

No bats were observed emerging from any features associated with the residential dwelling at Foresters Cottage during the survey.

### Description of other bat behaviour.

**Nathusius pipistrelle** (*Pipistrellus nathusii*) – 21:28 hrs: 1 pass; 22:17 hrs: 1 pass.

**Common pipistrelle** (*Pipistrellus pipistrellus*) – 21:30–21:40 hrs: 3 passes; 22:04 hrs: 4 passes; 22:22 hrs: 4 passes.

**Soprano pipistrelle** (*Pipistrellus pygmaeus*) – 22:13 hrs: 1 pass.

Date	Surveyor and survey position	Building (Elevation covered)	Activity
<b>Survey visit 1</b>			
<b>10/06/2025</b>	Rita Smoldareva (1) with NVA	Front/Side	<p>During the survey, Nathusius pipistrelle activity was recorded twice, with one pass detected at 21:28 hrs and another at 22:17 hrs.</p> <p>Common pipistrelle was recorded more frequently, with three passes between 21:30 and 21:40 hrs, four passes at 22:04 hrs, and a further four passes at 22:22 hrs.</p> <p>A single soprano pipistrelle was recorded at 22:13 hrs, with one pass detected.</p>
	Louise Payton (2) with NVA	Rear/Side	No further bats were recorded during this survey. All bats recorded during the survey did not emerge from any potential roosting features associated with the building.

## Weather conditions during second survey

Date	Survey	Times	Weather conditions
08/07/2025	Nocturnal	Start 20:50 End 23:20 sunset at 21:37	Temp: 17 C Cloudy: 30% Wind: F0 Rain: None

### Description of emerging bats.

No bats were observed emerging from any features associated with the residential dwelling at Foresters Cottage during the survey.

### Description of other bat behaviour.

**Serotine** (*Eptesicus serotinus*) – 21:35–21:40 hrs: 6 passes at 27 kHz; one visual observation of an individual flying from right to left in front of the surveyor at approximately 2–3 m above ground level.

**Common pipistrelle** – multiple passes recorded, with continuous activity ( $\geq 32$  passes) between 21:58 and 22:15 hrs; several individuals observed foraging above and around the surveyor's position.

**Soprano pipistrelle** – 21:55 hrs: 1 pass at 56 kHz; one individual observed flying from left to right over the roof towards the rear garden.

Date	Surveyor and survey position	Building (Elevation covered)	Activity
<b>Survey visit 1</b>			
<b>10/06/2025</b>	Rita Smoldareva (1) with NVA	Front/Side	<p>During the survey, serotine activity was recorded between 21:35 and 21:40 hrs, with a total of six passes detected at 27 kHz. One individual was visually observed flying from right to left in front of the surveyor at an approximate height of 2–3 metres above ground level.</p> <p>Common pipistrelle was the most frequently recorded species during the evening. Multiple passes were detected throughout the survey period, with continuous activity (<math>\geq 32</math> passes) noted between 21:58 and 22:15 hrs. Several individuals were visually confirmed foraging above and around the surveyor's position.</p> <p>A single soprano pipistrelle was recorded at 21:55 hrs with one pass detected at 56 kHz. The bat was observed flying from left to right over the roof of the building towards the rear garden.</p>

## Bat Survey Results Summary

Across both surveys, bat activity was dominated by common pipistrelle, which was recorded on each visit and showed sustained foraging and commuting

behaviour around the site. Soprano pipistrelle was recorded in low numbers during both surveys, with only isolated passes noted. Serotine was recorded during the first survey, with one visual observation and several passes detected. Natusius pipistrelle was recorded during the second survey on two occasions.

No confirmed bat roosts were identified, and all bat activity was associated with foraging and commuting behaviour along site boundaries. No bats were seen emerging from any features of the building during the first survey, and only a single unconfirmed emergence was noted during the second survey.

## Surveyors

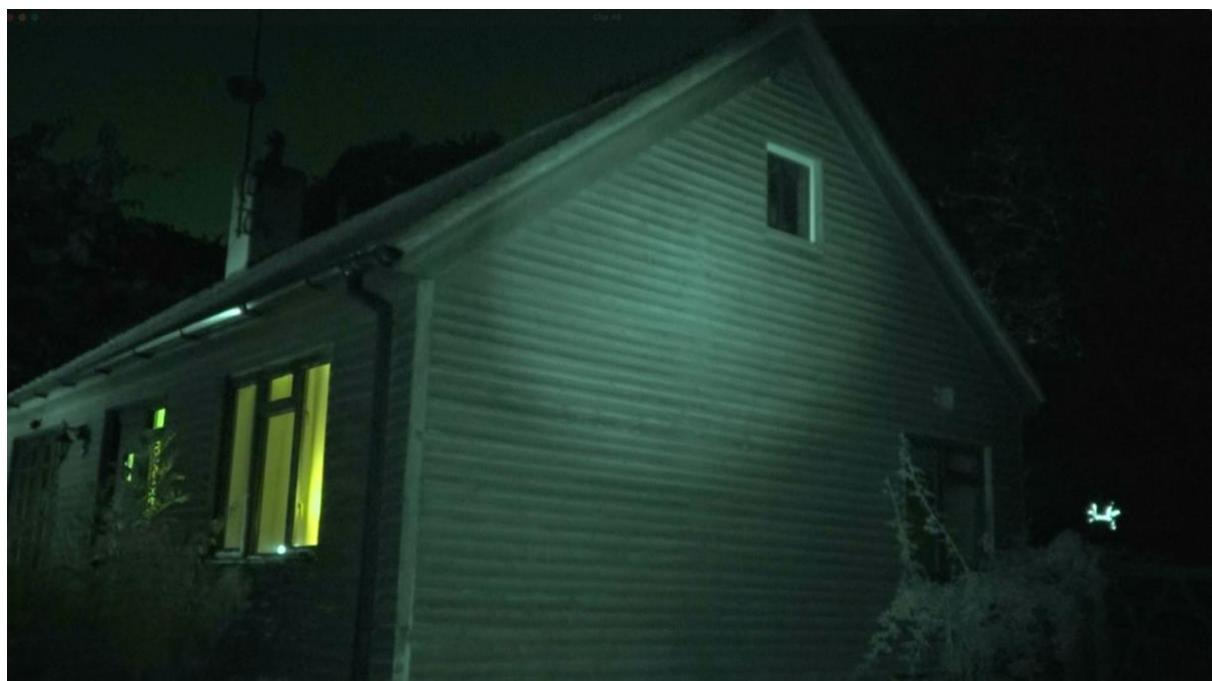
The lead surveyor for both bat activity surveys was Rita Smoldareva BSc (Hons), MSc, Senior Ecologist (on behalf of Enviro-reporter Ltd). Rita is an experienced ecologist with over 11 years' professional experience in terrestrial ecology, protected species assessment, habitat classification, and biodiversity planning. She holds a Class 1 Bat Survey Licence (since July 2022) and a Level 1 Great Crested Newt Licence (since 2019) and is a CAA-certified UAV (drone) pilot, supporting the integration of high-resolution aerial imagery into habitat mapping and condition assessment workflows. She is a Full Member of the Institution of Engineering and Technology (IET) and an Associate Member of both the Institute of Environmental Management and Assessment (IEMA) and the Landscape Institute (LI).

The supporting surveyor for both bat activity surveys was Louise Payton, an experienced ecological field surveyor with a background in protected species monitoring and habitat assessment. Louise has assisted on numerous bat surveys across residential, commercial, and rural sites, undertaking dusk emergence, dawn re-entry, and transect surveys in accordance with Bat Conservation Trust guidelines.

## 5. NVA Darkest Points



*Rear and side elevation*



*Front and side elevation*

## 6. Recommendations

### Further Surveys

No further surveys or specific precautions relating to roosting bats are currently required. If works are delayed and are due to commence more than one year after the last survey visit (10 June 2025), an updated bat survey will be required. This is because bats can change roost sites between years, and the status of the building in relation to bats may alter over time.

In the unlikely event that a bat is discovered during works (e.g., beneath roof tiles or within any other part of the structure), all works in that area must cease immediately and a suitably qualified ecologist should be consulted to determine the appropriate course of action.

### European Protected Species Mitigation Licence

Based on the results of the surveys, no Natural England European Protected Species Mitigation Licence will be required to carry out the proposed works.

### Lighting

It is recommended that no additional artificial lighting is installed in areas used by foraging and commuting bats, particularly the rear garden and adjacent vegetated boundaries. Any necessary lighting should be designed to avoid light spill onto trees, hedgerows, and shrubbery. Lighting should follow the most up-to-date guidance from the Institution of Lighting Professionals (ILP), available in Guidance Note 8: *Bats and Artificial Lighting in the UK* (<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>).

### Nesting Birds

Any works to building sections with nesting potential, or to trees, shrubs, and other vegetation, should be scheduled outside the main bird nesting season (March–August inclusive). If works must occur during this period, an ecologist should first inspect the area. If an active nest is found, a 5-metre buffer must be maintained and works delayed until the young have naturally fledged.

### Enhancement Recommendations

**Roosting Bats** – Install two built-in bat boxes suitable for crevice-dwelling species, incorporated into the new building design at a height of 3–5 metres, orientated south or west, with a clear, unobstructed flight path to the entrance. Boxes should be maintenance-free, and any future checks must be carried out by a licensed bat surveyor. No external lighting should be positioned close to the bat boxes, and if lighting is necessary nearby, it should be directed away from the entrances.

These recommendations will ensure compliance with wildlife legislation and deliver ecological enhancements, contributing to local biodiversity.

Bat Box	Notes	Bat Box Image
Habitat built-in bat box 001 or similar* 2 no.	<p>The Habitbat Bat Box is a large, solid box made of insulating concrete which provides an internal roost space, and can be seamlessly integrated into the fabric of a building as it is built or renovated. Suitable for most species commonly found in the UK, this single chambered unit features an integrated V system to increase the surface for bats to roost against, whilst allowing them to move around.</p> <p>The Habitbat Bat Box can be faced with a number of products to suit the design build. This includes, brick, block, stone, wood or a rendered finish, ensuring the box is unobtrusive and aesthetically pleasing.</p> <p><u>Unfaced</u>- There are a choice of 3 plinth colours are available: smooth blue, smooth red, or buff.</p> <p><u>Standard Facing</u>- This box is faced in standard smooth blue or red brick and is ideal for new builds.</p> <p><u>Bespoke Facing</u>- This box is made to order with a choice of finishes.</p> <p><b>Dimensions:</b> 215 x 440 x 102 mm plus facing bricks  <b>Material:</b> Concrete plus facing  <b>Weight:</b> approximately 7 kg</p>	

Notes: Images obtained from <https://www.wildcare.co.uk/habitat-built-in-bat-box-001.html>

\*or suitable alternative depending on availability.

## References

Collins, J. (ed), (2023), Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition, BCT, London

CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys  
<https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

Institute of Lighting Professionals (2012) Guidance for The Reduction of Obtrusive Light.

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