

BAT PRESENCE/ABSENCE SURVEYS (PAS)

ROCKY HILL COTTAGE, ST MARY'S, ISLES OF SCILLY



Client: Duchy of Cornwall

Our reference: 24-8-7

Planning reference: Report produced in advance of submission

Report date: 17th September 2024

Revision: -

Author: James Faulconbridge BSc (Hons), MRes, MCIEEM

Contact: ios.ecology@gmail.com

Executive Summary

Overview
<p>One Presence/Absence Survey (PAS) was undertaken on Rocky Hill Cottage to assess the use of the structure by roosting bats in advance of proposed re-roofing and renovation works.</p> <p>This was undertaken to provide an evidence base which meets Best Practice Guidance following the initial findings of the Preliminary Roost Assessment (PRA) report.</p>
Results
<p>The survey did not identify any bats emerging from the property.</p> <p>The survey generally recorded moderate activity levels of common pipistrelle bats in the garden of the property. No other bat species were recorded.</p>
Conclusion
<p>The survey evidence accords with the Best Practice Guidance requirements to conclude 'Probable Absence' of bats.</p> <p>No further surveys are required and there is no requirement for a European Protected Species Mitigation Licence (EPSML).</p>
Mitigation Strategy
<p>As no roosts were identified, there is no requirement for mitigation measures to be built into the development.</p> <p>A precautionary method of working would represent good practice during re-roofing and renovation works – outline recommendations are provided in this report.</p>
Planning Recommendations
<p>The PRA and PAS reports together provide an appropriate ecological baseline for the purposes of assessing the Planning Application. No further surveys would be required.</p>

Table of Contents

Executive Summary	2
Table of Contents	3
1. Introduction.....	4
1.1. Background to Survey.....	4
1.2. Survey Objectives	4
2. Survey Methodology.....	5
2.1. Surveyor Details.....	5
2.2. Survey Methodology.....	5
2.3. Survey Validity and Update.....	5
3. Results.....	6
3.1. Surveyor Positions	6
3.2. PAS Survey	6
3.3. Limitations and Constraints	7
4. Mitigation Strategy	9
4.1. EPSML Requirement	9
4.2. Precautionary Method of Works.....	9
4.3. Timing of Works.....	9
4.4. Habitat Enhancement / Mitigation.....	9
Appendix 1 - Precautionary Method Statement with regards to Bats.....	10
Appendix 2 – NVA Screenshots	12

1. Introduction

1.1. Background to Survey

Rocky Hill Cottage is a detached granite-built dormer bungalow situated within a small settlement of dwellings and agricultural buildings in Rocky Hill which lies to the north-east of Hugh Town in St Mary's, Isles of Scilly.

The proposed schedule of works involve the replacement of the existing roof covering.

A Preliminary Roosting Assessment (PRA) was carried out in August 2024 - this assessment identified Low Potential for use by roosting bats.

The PRA report stated that a further PAS survey would be required to provide an evidence base sufficient to identify the status of the building with regards to bats, and inform any mitigation measures required to ensure legislative compliance. This PAS report provides the results of the recommended survey. It should be read alongside the PRA report to provide a comprehensive assessment of the building with regards to roosting bats.

1.2. Survey Objectives

In accordance with the Best Practice Guidance¹ for a Low Potential building, the structure was subject to a single PAS survey with two surveyors and three Night Vision Assistance (NVA) cameras positioned to observe all relevant aspects of the building.

The overall objective is to provide a comprehensive ecological baseline upon which to assess the potential impact of the proposed works to roosting bats.

¹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).
The Bat Conservation Trust, London

2. Survey Methodology

2.1. Surveyor Details

The survey was led by Darren Hart. Darren has undertaken Professional Bat Licence training and is a Level 2 Licenced Bat Worker with experience in undertaking emergence, re-entry and activity surveys. Other surveyors are experienced in undertaking emergence surveys and worked under the supervision and direction of the Licenced Bat Worker.

The NVA review, assessment and reporting were completed by James Faulconbridge, trading as IOS Ecology. James is a Level 2 Licenced Bat Worker with over 15 years' experience in undertaking ecological assessments to support Planning and Development.

2.2. Survey Methodology

The dusk emergence survey was conducted following Best Practice methodology for bat surveys.

The PAS survey was carried out on the evening of 12th September 2024.

The dusk emergence survey commenced from approximately 15 minutes before sunset and continued until 90 minutes after sunset. The survey was undertaken with regard for the appropriate weather conditions ($\geq 10^{\circ}\text{C}$ at sunset, no/light rain or wind).

Frequency division bat detectors were used to detect and record all bat passes. The surveyor recorded metadata including the time the pass occurred, the behaviour observed (foraging/commuting) and where possible, the species of bat observed. Results from the bat detector recordings were analysed using BatSound/Analook sonogram analysis computer software.

Three NVAs were used to provide comprehensive coverage of the potential access or roosting features identified on the property – these were three Nightfox Whisker infra-red cameras with additional infra-red torches. Footage from these NVAs was watched back to verify or update the survey results confirmed in the field.

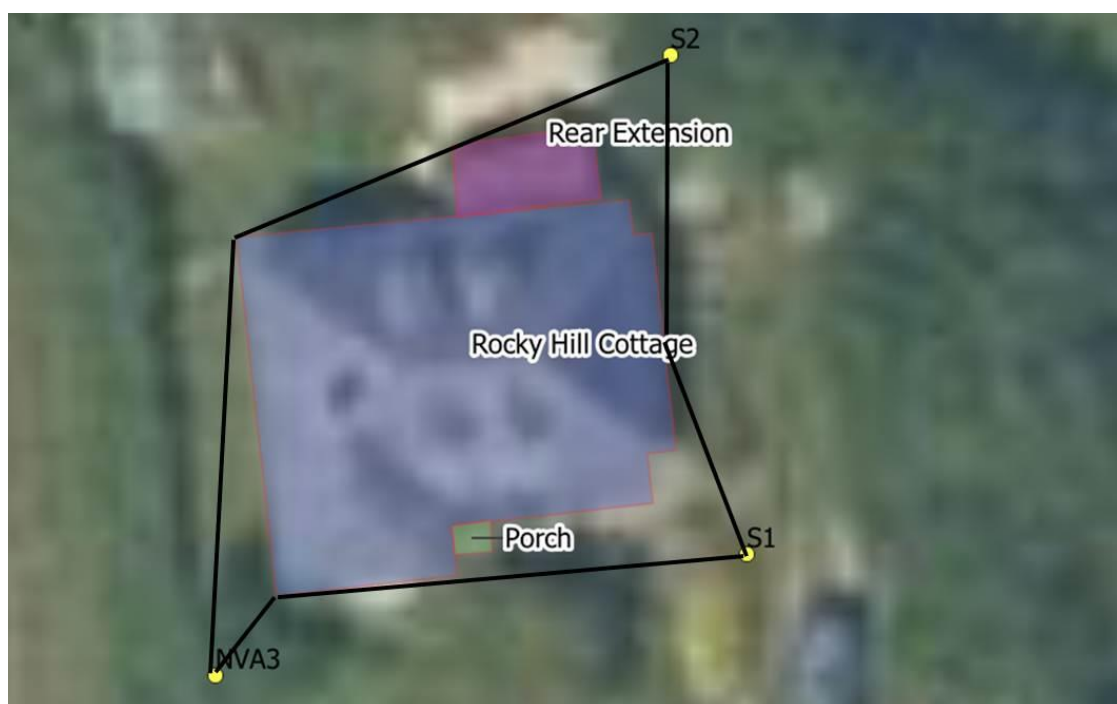
2.3. Survey Validity and Update

Bats are transient in their use of habitats such as these, and apparently minor changes in condition or use of the building can affect suitability. However in the absence of significant changes in condition or building use, the nature and character of the site suggest that the results of the PAS surveys can be considered proportionately valid to support a Planning Application until the next active season in May 2025.

3. Results

3.1. Surveyor Positions

In order to ensure that the building received a survey effort of a single bat survey for a Low Potential building (in line with the Best Practice Guidance), two surveyor position and three NVAs were deployed. These are identified in Map 01 below.



Map 01 – showing two surveyor positions (S1 and S2) and the additional NVA position (NVA3). NVA1 and NVA2 were associated with the corresponding surveyor positions. These building components are described fully in the PRA report for this property.

3.2. PAS Survey

3.2.1. Survey Conditions

The dusk survey was undertaken on 12th September 2024. The survey commenced at 7:29pm, approximately 15 minutes before sunset at 7:44pm. It was completed at 9:14pm.

The temperature throughout the survey was 13°C - the evening was dry and partly cloudy with a moderate breeze but locally sheltered.

3.2.2. Survey Results - Emergence

No emergence activity was recorded during the survey.

A potential emergence identified by the surveyor in position S2 was ruled out by review of the NVA footage which clearly recorded the bat flying in from offsite to the west.

3.2.3. Survey Results - Activity

The first bat was recorded at 8:09pm flying into the site over the eastern gable. Further foraging activity was then recorded from 8:23pm until the end of the survey with intense foraging activity recorded by both surveyors from around 8:30pm until 9:15pm.

This activity and timing of records indicates the likelihood of a roost in a nearby offsite property, and illustrates the high suitability of the mature garden as a foraging resource.

No species other than common pipistrelle bats were positively identified during the survey.

3.3. Limitations and Constraints

3.3.1. Seasonal Timing

The survey was undertaken towards the main active season in 2024 – this conforms with the recommended survey timings within the Good Practice Guidelines.

The potential roosting features identified in the PRA are restricted to minor niches suitable for use by individual bats and no suitable opportunities for a maternity roost were identified. The timing of the survey at the end of the main maternity season on the approach of the transitional period is therefore considered optimal to identify this type of roost use.

3.3.2. Survey Conditions

The weather conditions were optimal with no precipitation or other adverse conditions which might be expected to affect bat behaviour.

3.3.3. Visibility and Coverage

The two survey positions allowed full visibility of the potential roosting features identified on the property during the PRA.

The NVA3 camera was positioned on the south-western corner of the property to observe the western aspect as a precaution; however no potential roosting features were identified on the western aspect of the property. The camera footage from this aspect was watched back carefully to rule out any potential emergence from this aspect.

3.3.4. NVA Footage

The NVA positions allowed full visibility of the potential roosting features identified on the property during the PRA. There were minor gaps in the

comprehensive coverage of the property itself due to restrictions of Field of Vision (FOV) and vantage points; however these were strategically targeted to ensure the footage did not omit any areas with potential roosting features.

The NVA1 and NVA3 cameras were operated by a single surveyor S1 - the footage from these two cameras was watched back carefully to ensure that there was no emergence activity overlooked by the S1 surveyor when briefly adjusting IR levels on the NVA3 camera during the survey.

4. Mitigation Strategy

4.1. EPSML Requirement

The project does not require a European Protected Species Mitigation Licence (EPSML) to proceed.

4.2. Precautionary Method of Works

As individual bats can be exploratory or make transient use of roosting opportunities, it is important that contractors undertaking the proposed works are aware of the low risk for bats to be encountered - works should therefore proceed with appropriate caution and vigilance.

A Precautionary Method of Works (PMW) is outlined in Appendix 1 of this document and should be followed by contractors undertaking works.

4.3. Timing of Works

4.3.1. Bats

The results of the PRA/PAS surveys do not indicate that there is a requirement for seasonal constraints on the timing of works with regards to bats.

4.3.2. Nesting Birds

Assessment of potential for nesting birds, and appropriate mitigation measures, are provided in the PRA report. These recommendations are not repeated here, for brevity, but remain valid and should be addressed in any appropriate Planning Conditions and work practices.

4.4. Habitat Enhancement / Mitigation

The proposals would not directly affect any confirmed roosts, commuting routes or foraging habitat – therefore no habitat creation or enhancement is required.

If the applicant wished to provide enhancement measures, the installation of a bat box within the grounds of the property would have a high likelihood of occupation given the location in optimal habitat. The box should be positioned on a wall or tree facing the perimeter of the garden at a height of at least 3m. An open-based box design would ensure that it would not require cleaning. The location and aspect would be optimal for bats such as common pipistrelle which is the dominant species present on the island and the most likely species to use the environs for foraging and roosting.

A suitable box could be purchased or constructed following freely available plans. Kent Bat Box style boxes are slim and easy to construct from appropriate timber using the plans provided at: <http://www.kentbatgroup.org.uk/kent-bat-box.pdf>

Appendix 1 - Precautionary Method Statement with regards to Bats

The purpose of this Method Statement is to ensure that proposed works can proceed where presence of bats has been determined to be unlikely, but a precautionary approach is still advisable. It has been determined that direct harm to roosting bats during the proposed works would be highly unlikely.

Contractors should, however, be aware of **their own legal responsibility with respect to bats**:

Relevant Legislation regarding Bats

The Conservation of Habitats and Species Regulations 2017, or the 'Habitat Regulations 2017', transposes European Directives into English and Welsh legislation. Under these regulations, bats are classed as a European Protected Species and it is, therefore, an offence to:

- *Deliberately kill, injure or capture bats;*
- *Deliberately damage or destroy bat roosts.*

A bat roost is commonly defined as being any structure or place that is used as a breeding site or resting place, and since it may be in use only occasionally or at specific times of year, a roost retains such a designation even if bats are not present.

Bats are also protected from disturbance under Regulation 43. Disturbance of bats includes in particular any disturbance which is likely:

- (a) *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*
- (b) *To affect significantly the local distribution or abundance of the species to which they belong.*

Bats also have limited protection under the Wildlife and Countryside Act 1981 (as amended) and the Countryside Rights of Way Act 2000 (as amended). It is, therefore, an offence to:

- *Intentionally or recklessly destroy, damage or obstruct any structure or place which a bat uses for shelter or protection.*
- *Intentionally or recklessly disturb bats whilst occupying any structure or place used for shelter or protection.*

Contractors should be aware of **where bats are most likely to be found in respect to the existing building**. The generic recommendations relating to each type of feature are outlined below – locations where these features occur are listed in the PRA report:

Fascias and Soffits

There are intermittent gaps where the soffit/fascia meet the wall as identified in the PRA report. Where these are to be removed or impacted as part of the proposed works, the features should be carefully removed and the gaps behind exposed in such a way that, in the unlikely event that bats are present, they are not injured or killed by the action.

Once these areas are fully exposed, they can be visually inspected by contractors. Any cavities exposed by this action should also be carefully inspected and features dismantled by hand where necessary until absence of bats can be confidently confirmed.

Damaged/Lifted Tiles

If any tiles are lifted or damaged at the time of works; they should be removed carefully and the undersides inspected in such a way that, in the unlikely event that bats are present, they are not injured or killed by the action.

Extra care should be taken when removing the first run(s) of tiles around the gables and eaves closest to the fascia boards and soffits; as well as those on the dormer windows where lifted/damaged tiles were identified in the PRA report.

Contractors should be aware of **the process to follow in the unlikely event of finding bats** or evidence indicating that bats are likely to be present:

If bats are identified or suspected, works should cease and the named ecologist contacted immediately for advice.

If the bat is in a safe situation, or a situation which can be made safe, they should remain undisturbed.

Only if the bat is in immediate risk of harm can the bat be moved with care and using a gloved hand. This is a last resort and should only be undertaken for humane reasons if the bat is at immediate risk of harm **and** if the ecologist cannot be contacted for advice.

Appendix 2 – NVA Screenshots



NVA1 – showing a screenshot from the Nightfox Whisker at position S1. This is covering the northern and eastern aspects of the property ensuring coverage of the potential access features associated with the soffit beside the porch; the drop tile on the gable and the missing tile on the dormer.



NVA2 – showing footage from the Nightfox Whisker on position S2 This is covering the northern aspect of the property ensuring that the soffits/fascias with minor gaps are included in the FOV along with the lifted tile on the upper dormer window.



NVA3 – showing footage from the Nightfox Whisker on position NVA3. This is covering the western aspect of the property – as well as the hipped section of the roof on the southern aspect which is outside the FOV of the camera in position S1 du to the intervening vegetation.