# BAT PRESENCE/ABSENCE SURVEYS (PAS)

# GUTHERS, ST MARY'S, ISLES OF SCILLY



Client: Mike & Karrie Skaife Our reference: 24-7-10 Planning reference: P/24/062/HH Report date: 3<sup>rd</sup> September 2024 Revision: -Author: James Faulconbridge BSc (Hons), MRes, MCIEEM Contact: ios.ecology@gmail.com

# Executive Summary

#### **Overview**

Two Presence/Absence Surveys (PAS) were undertaken on the residential property known as Guthers to assess the use of the structure by roosting bats in advance of proposed works.

This was to provide an evidence base which meets Best Practice Guidance following the initial findings of the Preliminary Roost Assessment (PRA) report.

#### Results

A maximum of two common pipistrelle bats were recorded emerging from a roosting location on the south-eastern gable of the building on one of the two PAS surveys. These results are considered to be consistent with a non-breeding summer roost of individual common pipistrelle bats.

No other emergence activity was recorded from elsewhere within the structure.

The surveys generally recorded relatively low activity levels of common pipistrelle bats foraging or commuting around the building.

#### **Mitigation Strategy**

A European Protected Species Mitigation Licence (EPSML) must be obtained before works affecting the roof of the property are undertaken. The works must then comply with the mitigation strategy outlined in the EPSML. This would include ecological oversight of relevant aspects of the roof removal; and the restoration of a roosting feature at the completion of works

It is recommended that the EPSML progresses via Site Registration under the Earned Recognition (ER) scheme as this pathway offers the benefits both of reduced cost from Natural England and a streamlined timeframe for approval. The standard EPSML application pathway would also be appropriate.

The evidence baseline presented in this report is considered appropriate to support both the current Planning Application and the proposed EPSML application in line with Best Practice Guidance. The number of surveys required to characterise a roost are based on the expert judgement of the Licenced Bat Worker and the baseline gathered to date is considered to be appropriate and proportionate to identify impacts; outline mitigation proposals; build in additional precautionary safeguards to control residual risk; and provide a long-term compensation roost with reference to Licencing Policy 4.

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# 1. Introduction

# **1.1. Background to Survey**

The property is the residential property known as Guthers which is located to the south-eastern end of Hugh Town.

The proposed schedule of works involves the replacement of the existing cedar shingle roof covering; structural works to replace the existing dormer and add new dormers to the roof pitch; installation of additional windows in the gables of the property; and further external and internal renovation works.

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

The PRA report stated that further PAS surveys 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 surveys. It should be read alongside the PRA report to provide a comprehensive assessment of the buildings with regards to roosting bats.

## **1.2.** Survey Objectives

In accordance with the Best Practice Guidance<sup>1</sup> for a Moderate Potential building, the structure was subject to two PAS surveys with two surveyors positioned to observe those locations where potential access or roosting features were identified.

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

<sup>&</sup>lt;sup>1</sup> 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 design, 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.

The PAS surveys were led by Rob Carrier. Rob has over three years' experience undertaking emergence, re-entry and activity surveys on the Isles of Scilly working alongside licenced bat workers. Additional surveyors are experienced in undertaking emergence and re-entry surveys.

# 2.2. Survey Methodology

The dusk emergence surveys were conducted following Best Practice methodology for bat surveys<sup>2</sup>.

The two PAS surveys were carried out on the evenings of 7<sup>th</sup> August 2024 and 28<sup>th</sup> August 2024 – scheduled three weeks apart in accordance with Best Practice guidance.

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

Frequency division bat detectors were used to detect and record all bat passes. The surveyors 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.

Night Vision Aids (NVAs) were used on both survey positions – these were two Nightfox Whisker infra-red cameras with additional infra-red torches. The 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

<sup>&</sup>lt;sup>2</sup> Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

considered proportionately valid to inform a Planning Application until the next active season in May 2025.

# 3. Results

# 3.1. Surveyor Positions

In order to ensure that the different elements of the building received a survey effort appropriate to a Moderate Potential building (in line with the Best Practice Guidance), two surveyor positions with associated NVAs were deployed. These are identified in Map 01 below.



Map 01 – showing surveyor positions (S1-S2).

# 3.2. PAS Survey 1

3.2.1. Survey Conditions

The first dusk survey was undertaken on 7<sup>th</sup> August 2024. The survey commenced at 8:41pm, approximately 15 minutes before sunset at 8:56pm. It was completed at 10:26pm.

The temperature throughout the survey was 17°c - the evening was dry with a south-westerly breeze but conditions were relatively still on site. The sky was overcast at the beginning of the survey, clearing slightly towards the end.

## 3.2.2. Survey Results - Emergence

The emergence survey did not identify any emergence of bats from roost sites on the property.

## 3.2.3. Survey Results - Activity

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

The surveyor on in position S2 on the western side of the property recorded occasional passes throughout the survey, believed to be associated with foraging on adjacent land to the west. The first bat was recorded at 9:28pm with the last recording at 10:12pm. Activity levels for S1 on the eastern side of the property were considerably lower with two brief passes recorded at 9:47pm and 9:56pm.

## 3.3. PAS Survey 2

3.3.1. Survey Conditions

The second dusk survey was undertaken on 28<sup>th</sup> August 2024. The survey commenced at 8:01pm, approximately 15 minutes before sunset at 8:16pm. It was completed at 9:46pm.

The temperature at the beginning of the survey was 16°c dropping to 15°c by the end. The evening was dry with a light south-westerly breeze and 30% scattered cloud cover.

3.3.2. Survey Results - Emergence

Two common pipistrelle bats were recorded emerging from a roost access feature on the overhang of the south-eastern gable of the property in the location indicated in Photos 01 and 02. The emergence was at 8:37pm and 8:38pm, 21 and 22 minutes after sunset respectively.

No other emergence behaviour was recorded throughout the rest of the building.



**Photos 01 - 02** – showing the confirmed emergence location (indicated with the arrow) – the emerging bats can be seen just below the emergence point.

3.3.3. Survey Results - Activity

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

Activity levels after the confirmed emergence were low - both surveyors recorded infrequent foraging between 9:05pm and 9:44pm but these were brief,

quiet recordings and the bats were not seen – it is likely that these records are associated with foraging offsite

## 3.4. Survey Conclusion

The surveys undertaken in early-August 2024 during the peak maternity season did not identify any emergence behaviour and very low levels of activity.

The presence of 2x bats in late August would be characteristic of a non-breeding summer roost used by individual bats.

The results would not indicate that the building is used as a maternity roost.

As individual bats were confirmed roosting in the feature in late-August, it would be an appropriate assumption that use as a transitional roost is also possible. The nature of roosts in the transitional period would make it highly unlikely that significantly higher numbers of bats would be recorded compared with the two individuals confirmed in the late-August survey. As a precautionary measure, transitional use by individual bats is therefore assumed.

# 3.5. Limitations and Constraints

## 3.5.1. Seasonal Timing

The surveys were undertaken within the main active season in 2024 and spaced more than three weeks apart – this conforms with the recommended survey timings within the Good Practice Guidelines.

The first survey is within the peak maternity season for bats; the second is later within the maternity season window, approaching the transitional roosting period.

## 3.5.2. Survey Effort

The surveys undertaken conform with the recommended survey effort with regards to a Moderate Potential building. However once a roost is confirmed, the survey effort required is that which is necessary to characterise the roost appropriately and this relies on expert judgement.

In this instance, the second of the two PAS was undertaken at the end of August 2024. It is not considered that further surveys undertaken in September 2024 are likely to yield additional information which would affect the characterisation of the roost and the outline of the mitigation measures – transitional roost is assumed as a precaution (see 3.4).

The baseline data gathered to date is considered to be appropriate and proportionate to:

- Characterise the use of the building by roosting bats;
- Identify the impacts arising from the proposed works;
- Outline mitigation proposals necessary to avoid negative impacts to roosting bats; ensure continued provision of the roost in the long term; and secure the Favourable Conservation Status (FCS) of the population;
- Build in additional precautionary safeguards to control residual risk including timing of works outside of the maternity season and an extended scope of ecological oversight on other suitable features during roof removal;
- Provide an appropriate compensation roost and enhancement roosting features within the property and grounds.

The information gathered to date is considered sufficient to support an EPSML with reference to Licencing Policy 4<sup>3</sup>, taking into account the proportionality of delaying the project for 10 months until additional surveys could be completed in summer 2025.

#### 3.5.3. Survey Conditions

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

3.5.4. Visibility and Coverage

The surveys were comprehensive with regards to surveyor visibility.

## 3.5.5. NVA Footage

The NVA footage comprehensively covered the aspects of the building where potential roosting or access features were identified, almost exclusively associated with the gable ends.

The surveyors observed the eaves and roof pitch as a precaution, but the limited FOV of the NVAs was focussed upon those locations where suitable access features were identified.

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/guidance/european-protected-species-policies-for-mitigation-licences

# 4. Mitigation Strategy

# 4.1. Impact Assessment

The PAS surveys confirmed behaviour indicative of the following roosts:

• A non-breeding summer roost used by individual common pipistrelle bats.

As a precaution, the following additional roost use is also assumed:

• A transitional period roost used by individual common pipistrelle bats.

The re-roofing proposals, in the absence of mitigation, would result in the modification/destruction of the roost and the potential to disturb, kill or injure the roosting bats. This can be controlled through appropriate method of working which would be secured by an European Protected Species Mitigation Licence (EPSML).

## 4.2. Additional Survey Requirements

It is not considered that further surveys are required to characterise the roost – see Section 3.5.2 for full discussion of this point.

## 4.3. European Protected Species Mitigation Licence (EPSML)

## 4.3.1. Overview

The works affecting the roof of the property must be completed under an EPSML which would need to be in place prior to works commencing. The works must then proceed in accordance with the requirements of the EPSML.

An EPSML is a derogation licence which allows an otherwise-unlawful act to be undertaken – in this case the destruction of a bat roost and the disturbance of roosting bats. The method of working would ensure avoidance of impacts such as killing/injuring of bats. The EPSML would include mitigation measures and other commitments which must be met in order for the licence to be valid.

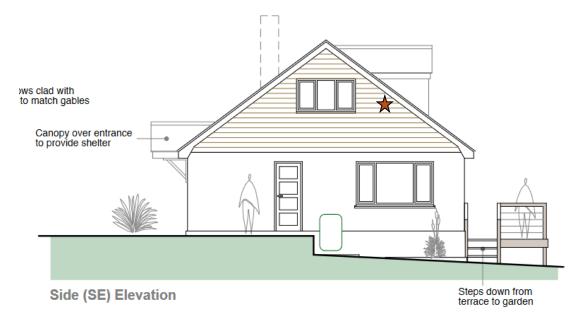
# Planning Permission must be secured prior to application for Natural England for the EPSML derogation.

Works must adhere to the methodology and measures outlined in the EPSML.

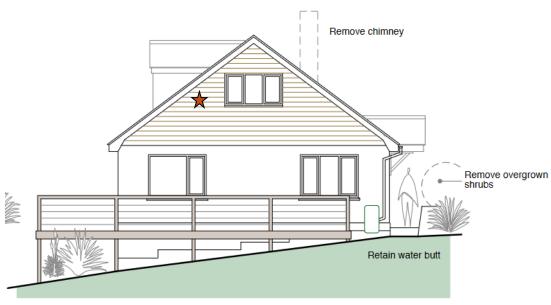
#### 4.3.2. Mitigation Measures

The following conditions and caveats would be included within the EPSML and must be strictly adhered to during the works in order to ensure legislative compliance. Please note this is broadly comprehensive though additional minor constraints or requirements may be necessary in the final EPSML document through dialogue with Natural England.

- Works can proceed during the transitional or winter periods from mid-September to end-April inclusive;
- Prior to the commencement of licenced works, the Licenced Bat Worker would provide a Toolbox Talk to contractors to ensure they understand the locations where bats may be found; the methodology which would minimise the risk of harm to bats; and the protocol to follow if a bat is identified.
- Installation of a bat box in a suitable location within the grounds of the property to ensure that there is a place where any bats encountered during works can be safely placed. This should then be retained undisturbed and in perpetuity.
- Key elements of the works should be undertaken under a 'soft strip' methodology whereby the south-eastern gable structure including overhang, soffits and cedar shingles within 1m of the gable would be removed under the ecological oversight of a Licensed Bat Worker. If bats are identified, they would be captured by hand and moved to a place of safety.
- As an additional measure to control residual risk associated with the application of LP4 to this application (see Section 3.5.2), the removal of shingles within 1m of the north-western gable as well as those within 1m of the eaves on both aspects would also be subject to ecological oversight.
- Once the soft-strip works have been completed, further works to the property can proceed with distance supervision.
- Following completion of the works, a bat box designed for use by common pipistrelle bats would be situated on the south-eastern gable in the location where the confirmed roost was located (see Plan 01). A second bat box would be installed on the north-western gable to provide further enhancement (see Plan 02). The installation of these features would be completed under the direction of the Licensed Bat Worker who would confirm and sign off the installation at the end of works.
- Any replacement of woodwork in locations where bats may access should ensure that wood treatments are safe for bats a list of approved treatments will be provided by the Licenced Bat Worker.
- The proposals would involve the sealing of the roof space to prevent access by bats as no roosting features would be restored associated with the roof structure itself, it would not be necessary to control roofing membrane specifications.



**Plan 01** – showing the proposed location of the compensation bat box (indicated by the red star) at the location of the confirmed roost on the south-eastern gable.



Side (NW) Elevation

**Plan 02** – showing the proposed location of the mitigation/enhancement bat box (indicated by the red star) on the north-western gable.

# 4.4. Precautionary Method of Working (PMW)

The works involving the replacement of existing windows can proceed without further ecological oversight, but the contractors undertaking the works should be aware of locations where there is a low risk of bats being present; how to undertake works in such a way that the risk to bats is minimised; and the procedure to follow if bats are encountered.

The PMW strategy is provided in Appendix 2 of this document in order to provide an individual document tailored to specific working areas. This detail is not repeated here for brevity.

# Appendix 1 – NVA Screenshots



**NVA1** – showing footage from the Nightfox Whisker at position S1. This is covering the southeastern side of the building and includes all identified potential access features on this aspect.



**NVA2** – showing footage from the Nightfox Whisker at position S2. This is covering the north-western side of the building and includes all identified potential access features on this aspect.

# Appendix 2 – PMW for Non-Licenced Works

# Rationale

Potential access features for bats were identified associated with one of the window frames; however no emergence was identified following two PAS surveys which is sufficient to conclude Likely Absence from this feature. It would not therefore be necessary to undertake replacement and repair of these features under an EPSML.

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

These works do not require ecological oversight by a Licensed Bat Worker or to be undertaken under an European Protected Species Mitigation Licence (EPSML).

#### Features where additional care and vigilance are required

The contractors undertaking the works should be aware that the following structural features have potential to support exploratory or transient use by roosting bats.

Features on the building which could provide roosting opportunities for bats:

• Gaps around the window frame on the south-eastern gable of the property.

Further details of these features along with illustrative photographs are provided in the PRA report.

## Methodology Guidance

The following guidance outlines measures required to ensure that contractors are suitably informed of the potential for bats to be present, and undertake works in a manner which minimises the risk of impact to bats in the unlikely event of their presence.

# Measures entailed by a Precautionary Method of Works

- Contractors undertaking the works should be informed of the potential for bats to be present in the features outlined.
- Contractors should be aware of their own legal obligations with regards to bats;

- Where possible, any gaps or cavities around the window frames should be visually inspected by contractors before works. If no bats are identified, the window frames should be removed carefully and by hand such that in the highly unlikely event of bats being present, they are not injured and can disperse freely.
- In the event of bats being encountered, works should cease and the Licensed Bat Worker 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 Licensed Bat Worker cannot be contacted for advice.