

BAT PRESENCE/ABSENCE SURVEYS OF:

WARLEGGAN FLATS CHURCH STREET ST MARY'S ISLES OF SCILLY TR21 0JT

Client: Warleggan Management Ltd c/o Joseph Payne

Our reference: BS38-2020PAS

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Non-Technical Summary

- On 29th January 2021, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) of Warleggan Flats, Church Street, St Mary's, Isles of Scilly, TR21 0JT (BS38 - 2020). These surveys were undertaken to establish baseline conditions, determine the importance of any ecological features within and around the survey areas and to establish the actual or potential use of the building by bats to help inform the determination of planning application P/21/009.
- These surveys concluded that Warleggan Flats had low potential to support roosting bats. One presence/absence survey was recommended, and the results of this survey are outlined in the Presence/Absence (PAS) report.
- A dusk emergence survey conducted on 11th May 2021 did not identify any bats emerging from potential roosting sites associated with the building but did identify a small number of bats commuting in the general area of the development.
- Both the PEA/PRA and PAS reports should be considered together to provide a comprehensive assessment of nature conservation issues at the site.
- The results **confirm the likely absence** of bats using Warleggan Flats as a roost
- The recommendations from the PEA/PRA along with this report, suggest **no further surveys and no requirement to obtain an EPS license.**
- To assist the local authority to meet its legal obligation to provide a net gain in biodiversity the installation of a single free-standing bat box at the apex of the gable of one of the north-facing dormer windows could be undertaken.

1.0 Introduction

1.1 Background

A Preliminary Roost Assessment report (BS38-2020) dated 29th January 2021 identified that the building under consideration provided low roosting potential for bats. Additional presence/absence surveys were recommended to meet best practice guidance to support the planning application P/21/009. This report outlines the results of this additional survey.

1.2 Survey Objectives

The objectives of this Presence and Absence Survey (PAS) report, is to provide further ecological information to support the planning proposal by:

- Ascertaining if roosting bats are present at the application site.
- To identify the location of these bat roosts (including exit/entry points)
- Subjecting this information (and the information from the PEA and PRA) to evaluation and impact assessment
- To provide advice on the potential for contravention of legislation/policy
- To provide recommendations on any further actions needed (i.e., further surveys, licensing, mitigation, or enhancement)

1.3 Surveyor details

The survey was undertaken by Darren Hart BSc of the Isles of Scilly Wildlife Trust and with the assistance of Rob Carrier. Darren has undertaken professional Bat Licence Training and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2020-46278-CLS-CLS which permits him to survey bats using artificial light, endoscopes, hand, and hand-held static nets.

2.0 Methodology

2.1 Bat Dusk emergence survey

The objective of the dusk emergence surveys was to detect active bat use of the site and identify any exit locations being used around the building. Survey effort was concentrated on areas of the site where suitable features or bat field signs were noted from the PRA. The survey involved:

- Starting the survey 15 minutes before sunset and continuing for approximately 1.5-2hours after¹
- Identification of bat species primarily using ultrasound characteristics. To aid identification flight and habitat characteristics were also noted (where possible) to determine the species.
- Identifying exit locations of bats by standing at different vantage points around the building that offered visual contact with any potential exit point previously recorded. Surveyors stood no more than 50m apart, or away from the building (see Fig 1 for location of surveyors).

2.2 Equipment

The following equipment was used for the dusk emergence survey at the site:

- Anabat Express (Frequency Division) static bat recorder
- Elekon Batscanner Stereo Heterodyne
- Elekon Batscanner Heterodyne
- Magenta Bat 4 Bat Detector
- Bestguarder WG-50 Night vision camera

Sound recordings were analysed using Anabat Insight software (version 1.9.2) to confirm surveyors' identification of species.

2.3 Survey Limitations

Surveys carried out during a specific season can only provide information on bat presence at that particular time, as bats are highly mobile in nature and may only use buildings at certain times of the year that favour a particular part of their roosting, maternity, and hibernating requirements.

3.0 Results

3.1 Weather conditions, temperatures, and timings

Survey Information:	Start and End Times:	Conditions (Start):	Conditions (End):
Dusk emergence: 11/5/21	Start: 20:43 Sunset: 20:58 End: 22:13	Temp: 11°C Humidity: 85% Wind speed: mph – 19WSW Cloud cover: 80% Rain: none	Temp: 10°C Humidity: 80% Wind speed: mph – 16WSW Cloud cover: 5% Rain: none
	Surveyors 1. Rob Carrier 2. Darren Hart	Notes: Light Lux 2 was recorded at 21:33	

Table 1. Site conditions for the dusk emergence survey 11-5-21



Photo 1. Surveyor location for the dusk emergence survey 11-5-21

3.2 Dusk emergence roost survey results

During the dusk emergence survey no bats were seen exiting or leaving the development from those potential roost features identified during the PEA/PRA, or any other area of the building affected by the planning application proposal. All bat activity was confined to commuting behaviour only. All species recorded were Common Pipistrelle (*Pipistrellus pipistrellus*).

In total 3 bat passes were recorded, the first 20 minutes after sunset, well within the normal temporal parameters of this species^{2,3}. Only one call was picked up by both surveyors and with surveyor 2 recording all 3 calls suggesting that most activity was concentrated west of the development (See Appendix A). Activity level was deemed low however this may be because of the relatively low temperatures. Bats are known to fly when temperatures rise above 8°C if insects are active, but as flight is energetically demanding and if insect levels are low hunting may not be profitable⁴, therefore low numbers of prey may also be a reason for reduced bat activity during the survey.

3.3 Summary

The result of the dusk emergence survey has confirmed the likely absence of bats at Warleggan Flats. However, the results can only be based on presence/absence at a particular time as bats are highly mobile in nature and may use the building at other times of the year. Avoidance measures set out under Section 5 will help to reduce the probability of committing an offence if bats were found during the demolition phase of the proposed works.

4. Evaluation of Results

To identify which ecological features are important and which could potentially be affected by the proposed project, an evaluation of their importance for example, in a geographical context, degree of scarcity or level of protected status needs to be undertaken⁵. The table below outlines those features identified as important, the nature conservation legislation relevant to those features and an assessment of the level of impact from the proposed development on those features.

Ecological Feature	Relevant Legislation	Evaluation (of importance)	Mitigation Hierarchy	Impact Level
Bats	CHSR, W&CA	Local	A, & E	Low
<p>Impact to roost site: Confirmed likely absence of a bat roost at Warleggan Flats suggests that the impact to a roost site at this location is low. However, if a roost were located this would have a negative effect on the population status of Common Pipistrelle bats on the Isles of Scilly. Therefore, consideration and due care must be considered and undertaken at the following stages:</p> <p>Impacts to bats:</p> <p>Demolition: – Undertaking Reasonable Avoidance Measures (RAM) can reduce the likelihood of negatively effecting the local population status and minimise the probability of committing an offence with respect to bats and their roosts if measures are adhered to.</p> <p>Construction: – A positive impact on the local population of Common Pipistrelle bats may result through the incorporation of new roost(s) in the new buildings⁶</p>				
<p>Key to Legislation and Mitigation Hierarchy</p> <p>CHSR – Conservation of Habitats and Species Regulations 2017⁷ - http://www.legislation.gov.uk/uksi/2017/1012/made W&CA – Wildlife & Countryside Act 1981 (as amended)⁸ - http://www.legislation.gov.uk/ukpga/1981/69/contents HRA – Hedgerow Regulations Act 1997⁹ - https://www.legislation.gov.uk/uksi/1997/1160/made A – Avoid, M – Mitigate, C – Compensate, E – Enhancement</p>				

5. Recommendations and Mitigation

The recommendations in this section are provided as information only and specialist legal advice may be required. If works are delayed for more than one year, then re-assessment may be required.

5.1 Survey constraints

The surveys were undertaken at an appropriate time of year, during the main summer active season.

5.2 Further survey requirements

No further surveys are recommended with regards to the proposed development – it is considered that this report, alongside the PEA/PRA (BS38) constitute a comprehensive ecological baseline from which to assess the impacts of the application.

5.2 EPS Licence requirement

For any development that is likely to commit an offence (or offences) in respect to a European Protected Species (EPS) i.e., bat, or their habitat, a licence will be required. In this instance based on sufficient survey work **no licence is required**. If, in the unlikely event a bat was found during the demolition phase of the project, Reasonable Avoidance Measures (RAM) must be followed and will determine any further action, such as licensing if necessary.

5.4 Planning Recommendation(s)

The information gathered in the PEA/PRA (BS38-2020) and this report is sufficient to support a planning application with regards to protected species in accordance with relevant best practice guidelines.

It is considered that the impacts of the proposed works on protected species can be mitigated sufficiently to ensure that the conservation status of Common Pipistrelle on St Mary's is not negatively impacted. The mitigation outlined in Section 5.5. would represent appropriate measures.

It is recommended that planning permission be granted if compliance with the recommendations in Section 5.5 of this report is conditioned.

5.5 Mitigation Proposals

5.5.1 Avoidance (A) – Bats

As there is a very low risk that bats may roost within the building, prior to demolition, precautions should be taken to reduce the probability of committing an offence. By undertaking Reasonable Avoidance Measures (RAM), if affected RAM should include:

- i. When roofing works are planned these should avoid the main breeding and mating season of *Vespertilionidae* bats, work should typically take place between the 1st November and 1st May inclusive, however the months of **November to February should be avoided where possible** as this is when bats enter a time of reduced activity and torpor which makes disturbance impacts more significant.
- ii. Ensure all workers on site (including sub-contractors) are made familiar with bat legislation and agree to work in accordance with and fully follow best practice measures.
- iii. Carry out prior to demolition careful checks of any cracks/crevices and cavities in or on the building. Signs of usage include bat droppings, dis-colouration or polishing of access points where bats rub against them, urine stains and a lack of cobwebs, particularly if other crevices around them have plenty.
- iv. Individual bats may be found in/under; cladding, between timber boards, between corrugated sheeting, in soffit boxes, behind lead flashing and sometimes just clinging to timber beams around joins as well as other areas. When any of these are removed, please do so carefully, lifting outwardly, and checking for bats continually. If in doubt, consult a licensed bat worker.
- v. Try to minimise any dust generated from demolition works from entering off-site buildings and gardens.
- vi. In the unlikely event that a bat is found please see below:

1. At no point should a worker handle a bat. Untrained handling may cause undue stress and injury to the bat, and if bitten may expose the worker to rabies-related European Bat Lyssavirus
2. Where possible replace any covering without damaging the bat, then halt works and contact **Natural England** (Tel: 0845 601 4523), or the **Bat Conservation Trust Helpline** (0845 1300 228), or **IoSWT** (01720 422153) for advice.
3. Any bats that go to ground should be covered with a box and left alone until a licensed bat worker arrives to assess the condition of the bat.
4. If the bat attempts to fly at any point allow it to do so. Preventing natural behavior will cause unnecessary stress and may cause injury. Attempt to see where bat goes. If the bat returns to the building, halt works and report the escaped bat to the local bat worker.

5.5.2 Enhancement (E) – Bats

The Isles of Scilly have the most southern population of Common Pipistrelle (*Pipistrellus pipistrellus*) bats in the United Kingdom. The islands also hold small populations of Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long-eared Bat (*Plecotus auritus*) both UK Biodiversity Action Plan (BAP) priority species and holds records for the rare Nathusius Pipistrelle (*Pipistrellus nathusii*). Any loss of roosting, commuting or foraging sites could have a detrimental effect on these species distributions as a whole and cause a net loss in biodiversity on the islands.

Each local planning authority in England and Wales has a statutory obligation under Part 3 Section 40 of the Natural Environment & Rural Communities Act 2006¹⁰ (NERC 2006) to have due regard for biodiversity when carrying out their functions and under Section 15 paragraph 170(d) of the NPPF 2019¹¹, all planning policies and decisions shall contribute to and enhance the natural and local environment by providing net gains in biodiversity. **Therefore, to assist in meeting these obligations the following suggestion should be undertaken:**

- i. Erect one free-standing 'Kent' style bat box developed for crevice-dwelling species (see Appendix B for supplier details) at the apex of the gable of one of the north-facing dormer windows. Erect as high as possible, but below the level of the fascia. See Appendix B for supplier details.

6. Bibliography

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5. CIEEM. (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal (2nd edition). Chartered Institute of Ecology and Environmental Management, Winchester.
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9. H.M.S.O. (1997). *The Hedgerow Regulations 1997*. London
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APPENDIX A – BAT CONTACTS SURVEY TABLE

Date:	11/5/21 – Dusk emergence survey			
Survey Type:	Surveyor 1	Surveyor 2	Surveyor 3	Night vision camera
Location:	Unseen and unseen	Unseen, unseen, and unseen		
Exit/Entry point:	None recorded	None recorded		
Time(s):	21:58 and 22:13	21:18; 21:33 and 22:13		
Species of bat:	Common pipistrelle	Common pipistrelle		
Roost present:	None confirmed	None confirmed		

(fb) – feeding buzz

APPENDIX B – SUPPLIERS

1. Natural History Book Service
1-6 The Stables
Ford Road
Totnes
Devon, TQ9 5LE
Tel: 01803 865913
Email: customer.services@nhbs.com
Website: <https://www.nhbs.com/>
2. Habibat
Tel: 01642 724626
Email: <http://www.habibat.co.uk/contact>
Website: www.habibat.co.uk
3. Dreadnought Tiles
Dreadnought Works
Brierley Hilly
West Midlands, DY5 4TH
Tel: 01384 77405
Email: sales@dreadnought-tiles.co.uk
Website: www.dreadnought-tiles.co.uk
4. Wildlife & Countryside Services
Covert Cottage
Pentre Lane
Rhuddlan
North Wales, LL18 6LA
Tel: 0333 9000927
Email: support@wildlifeservices.co.uk
Website: www.wildlifeservices.co.uk
5. Wildcare
Eastgate House
Moreton Road
Longborough
Gloucestershire, GL56 0QJ
Tel: 01451 833181
Email: sales@wildcare.co.uk
Website: www.wildcare.co.uk