# BAT PRESENCE/ABSENCE SURVEYS OF:

# CARNWETHERS COUNTRY GUEST HOUSE
# GREEN LAND
# PELISTRY
# ST MARY'S
# ISLES OF SCILLY
# TR21 0NX

*Client: Mr Jeff Knowles*

*Our reference: BS31-2020PAS*

*Report date: 17th August 2020*

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*Report peer reviewed: Sarah Mason.*

*Report signed off: Sarah Mason.*

***REPORT ISSUED IN ELECTRONIC FORMAT ONLY***

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## Non-Technical Summary

- On 23rd June 2020, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological Appraisal (PEA) and a Preliminary Roost Assessment (PRA) of an outbuilding at Carnwethers Country Guest House, Green Lane, Pelistry, St Mary's, Isles of Scilly, TR21 0NX in order to establish baseline conditions, determine the importance of any ecological features within and around the survey area and to establish the actual or potential use of the building by bats to help inform the determination of a future planning application.
- Two presence/absence surveys were recommended, and the results of these surveys are outlined in this Presence/Absence (PAS) report.
- A dusk survey conducted on the 28th July 2020 did not identify any bats emerging from roosting sites associated with the building but did identify bats commuting and foraging along the shelterbelt edge to the north-east of the property and over the swimming pool immediately north of the proposed development.
- A dawn re-entry survey conducted on the 11th August did not identify any bats returning to potential roosting sites associated with the building. Foraging behaviour was again noted in and around the pool area and commuting behaviour seen along the shelterbelt edge to the north-east as well as the southern boundary hedge of the property.
- 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 the outbuilding at Carnwethers Guest House 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.
- Mitigation measures for bats should include the installation of free-standing bat box(es) at each gable end of the modified roof of the outbuilding.

# 1.0 Introduction

## 1.1 Background

A Preliminary Roost Assessment report (BS31-2020) dated 23rd June 2020 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 a future planning application. This report outlines the results of these additional surveys.

## 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 Mason BSc (Hons) of the Isles of Scilly Wildlife Trust and with the assistance of Rob Carrier and Rhianna Pearce. Darren has undertaken professional Bat Licence Training and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2020-46277-CLS-CLS which permits him to survey bats using artificial light, endoscopes, hand, and hand-held static nets.

# 2.0 Methodology

## 2.1 Dusk emergence and Dawn re-entry surveys

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;

- The survey timings accord with best practice guidance, with dusk surveys commencing 15 minutes before sunset and continuing for approximately 1.5-2hours after[1]. Dawn re-entry surveys commenced 1.5 hours before sunrise and continued until 15 minutes after sunrise[1];
- commenced
- Identification of further bat species primarily using ultrasound characteristics. To aid identification flight and habitat characteristics were also noted (where possible) to determine the species.
- The surveys were designed with sufficient surveyors appropriately positioned to ensure that all potential access points to the building could be observed simultaneously.
- The use of a night vision camera assisted in Identifying how bats may use the surrounding habitat
- The surveys also identify the number of bats leaving or entering the building

## 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 Hetereodyne
- Elekon Batscanner Heterodyne
- Magenta Bat 4 Bat Detector
- Bestguarder WG-50 Night vision camera

Sound recordings were analysed using Anabat Insight software 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 favours 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:** 28/7/20 | Start: 20:57<br>Sunset: 21:12<br>End: 22:45 | Temp: $18^0$C<br>Humidity: 67%<br>Wind speed: 13mph - WNW<br>Cloud cover: 25%<br>Rain: none | Temp: $12^0$C<br>Humidity: 93%<br>Wind speed: 12mph -WNW<br>Cloud cover: 15%<br>Rain: none |
| | **Surveyors** | | |
| | 1. Darren Mason<br>2. Rob Carrier<br>3. NV Camera<br>4. Rhianna Pearce | Notes: Light level at Lux 2: 21:40 | |

*Table 1. Site conditions for dusk emergence survey 28-7-20*


*Location of surveyor for the dusk emergence survey 28-7-20*

| Survey Information: | Start and End Times: | Conditions (Start): | Conditions (End): |
|---|---|---|---|
| **Dawn re-entry** 11/8/20 | Start: 04:42<br>Sunset: 06:12<br>End: 06:17 | Temp: 21.5$^0$C<br>Humidity: 77%<br>Wind speed: 7mph NW<br>Cloud cover: 100%<br>Rain: none | Temp: 18.5$^0$C<br>Humidity: 81.5%<br>Wind speed: 4mph WSW<br>Cloud cover: 85%<br>Rain: Yes |
| | **Surveyors** | | |
| | 1. Darren Mason<br>2. Rob Carrier<br>3. NV Camera | Notes: | |

*Table 2. Site conditions for dawn re-entry survey 11-8-20*


*Location of surveyors for dawn re-entry survey 11-8-20*

### 3.2 Dusk emergence and dawn re-entry survey results

The species confirmed from the dusk emergence survey was Common Pipistrelle (*Pipistrellus pipistrellus*). During the dusk emergence survey no bats were seen leaving or entering the outbuilding. Activity during this survey was dominated by commuting behaviour (as noted from calls recorded on heterodyne and the Anabat Express), particularly along the south-east edge of the Monterey Pine (*Pinus radiata*) shelterbelt north-east of the outbuilding. In total 19 bat contacts were made, the first at 21:42 and the last at 22:39pm

The species confirmed during the dawn re-entry survey was Common Pipistrelle. Throughout the survey period no bats were seen to enter or leave the outbuilding. In contrast to the dusk emergence survey, activity was dominated by feeding. A short intense period immediately at the start of the survey recorded several bat passes within the garden to the north-east of the swimming pool picked up by both surveyors between 04:41 and 04:44am. Feeding activity was recorded again by surveyor 1 from between 04:47 and 05:05am. After this period both surveyors recorded commuting activity only until just before dawn when surveyor 2 recorded bat feeding activity along the eastern elevation of the main guest house, before moving on to feed amongst the palms and trees north of the outbuilding.

### 3.3 Summary

The results of the dusk and dawn surveys have confirmed the likely absence of bats at the outbuilding immediately to the south-east of Carnwethers Guest House. However, the results can only be based on presence/absence at a particular time as bats are highly mobile in nature 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 to be found during the demolition phase of the 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 undertaken[2]. 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[3], W&CA[4] | Local | A, & E | Low |
| | **Impact to roost site:** Confirmed likely absence of a bat roost at the outbuilding immediately south-east of Carnwethers Guest House 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:<br>**Impacts to bats:**<br>**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.<br>**Construction:** – A positive impact on the local population of Common Pipistrelle bats may result through the incorporation of new roost(s) in the new buildings[5] | | | |

| Key to Legislation and Mitigation Hierarchy |
|---|
| CHSR – Conservation of Habitats and Species Regulations 2017[3] - http://www.legislation.gov.uk/uksi/2017/1012/made<br>W&CA – Wildlife & Countryside Act 1981 (as amended)[4] - http://www.legislation.gov.uk/ukpga/1981/69/contents<br><br>**A** – Avoid, **M** – Mitigate, **C** – Compensate, **E** – Enhancement |

# 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 (BS31-2020), 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 (BS31-2020) and this report is sufficient to support a planning application in accordance with relevant best practice guidelines and to ensure protected species are considered.

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 and 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 2006[6] (NERC 2006) to have due regard for biodiversity when carrying out their functions and under Section 15 paragraph 170(d) of the NPPF 2019[7], 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 two free-standing bat boxes developed for crevice-dwelling species (see Appendix B for supplier details) one on each of the north-east and south-west modified gable ends of the outbuilding. Erect as high as possible (apex of gable) below the level of the fascia.

## 6. Bibliography


1. Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust

2. 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.

3. H.M.S.O. (2017). *The Conservation of Habitats and Species Regulations.* London.

4. H.M.S.O. (1981). *The Wildlife and Countryside Act 1981* (as amended). London.

5. Mitchell-Jones, A.J. (2004). Bat mitigation guidelines. English Nature.

6. H.M.S.O. (2006). *The Natural Environment and Rural Communities Act 2006*. London

7. Ministry of Housing, Communities & Local Government. (2019). *National Planning Policy Framework*. OGL

# APPENDIX A – BAT CONTACTS SURVEY TABLES

| Date: | 28-7-20 – Dusk emergence survey | | | |
|---|---|---|---|---|
| **Survey Type:** | **Surveyor 1** | **Surveyor 2** | **NV Camera** | **Surveyor 4** |
| **Location:** | Unseen, SW to NE, unseen NW to SE, NW to SE, unseen, unseen, unseen, unseen, unseen, unseen, unseen and unseen | Unseen, unseen, unseen, unseen, unseen, unseen and over swimming pool | No contacts recorded | Unseen, unseen and unseen |
| **Exit/Entry point:** | None recorded | None recorded | None recorded | None |
| | | | | |
| **Time(s):** | **21:42**; 21:44; 21:45; 21:57; 22:03; 22:09; **22:10**; 22:18; **22:27**; 22:29; **22:31**; 22:32; **22:36** and 22:39 | 21:42; 21:54; 22:04; 22:10; 22:13; 22:15 and 22:28 | No contacts recorded | 22:27; 22:31 and 22:36 |
| **Species of bat:** | Common pipistrelle | Common pipistrelle | None recorded | Common pipistrelle |
| **Roost present:** | None confirmed | None confirmed | None confirmed | None confirmed |

*(fb) – feeding buzz*

| Date: | 11-8-20 – Dawn re-entry survey | | |
|---|---|---|---|
| **Survey Type:** | **Surveyor 1** | **Surveyor 2** | **NV Camera** |
| **Location:** | Unseen, unseen, unseen, unseen, unseen, unseen, unseen, unseen, unseen, unseen, unseen, unseen, unseen, N to S, unseen and E to W | Feeding around palm/trees NW of outbuilding, unseen, unseen, unseen, unseen, unseen, unseen, feeding by main house and feeding around palm/trees NW of outbuilding | No contacts recorded |
| **Exit/Entry point:** | None recorded | None recorded | None recorded |
| | | | |
| **Time(s):** | 04:37; 04:40; 04:43; 04:46; **04:47** (fb); 04:52 (fb); 04:53 (fb); 04:57 (fb); **05:02** (fb); 05:05 (fb); 05:24; 05:34; **05:35**; 05:41; 05:46; **05:50**; 05:53 | 04:42; 04:47; 04:49; 04:53; 05:02; 05:06; 05:23; 05:35; 05:49 and 05:50 | |
| **Species of bat:** | Common pipistrelle | Common pipistrelle | None recorded |
| **Roost present:** | None confirmed | 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