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Barn at Trevangleth
Halvasso, Cornwall

Bat and Nesting Bird Surveys

Ref:
BE703a

Date:
28th May 2021

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For:
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CIEEM REGISTERED PRACTICE 2020-2021

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1. INTRODUCTION

It is proposed to convert and extend a barn at Trevangleth to create a dwelling. The address of the site is Trevangleth, Halvasso, Cornwall, TR10 9BY. The OS Grid reference of the site is SW 73953 33280.

Bright Environment was commissioned by Chris Bird in April 2021 to carry out a visual bat and nesting bird survey to inform the planning application. Bats and nesting birds are legally protected (see Appendix 1). The visual survey was caried out on 30th April 2021. It was not possible to thoroughly search all features with potential to support roosting bats. The presence/ absence of bats could not be determined via the visual survey alone. The building was assessed as having low potential to support bats so a single emergence survey at dusk (between May and August) was recommended to prove absence.

This report details the results from the above surveys.

2. METHODOLOGY

The surveys were carried out following the guidance given in 'Bat Surveys for Professional Ecologists – Good Practice Guidelines' (Collins, 2016) and Barn owl survey methodology and techniques for use in ecological assessment (Shawyer, 2011). Impact assessment and mitigation follows the guidance provided by CIEEM (2018) and the 'Bat Mitigation Guidelines' (Mitchell-Jones, 2004).

2.1 Visual survey methodology

An assessment of the suitability of the building and surrounding habitats to support bats and nesting birds was made.

A detailed search of the interior and exterior of the building was carried out using a high powered torch to illuminate all areas thought suitable for bats and nesting birds. Any accessible cracks and crevices were investigated with the use of a torch and endoscope.

The survey involved looking for bats and nesting birds and for evidence of their use, including droppings, pellets, staining, liming, feathers and feeding remains. Survey details are shown in Table 1.

Potential bat roosts identified during the visual inspection of the building were categorised as to their suitability in accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins, 2016) as described below:

- Negligible: negligible features with potential to support roosting bats.
- Low: one or more features with potential to support individual bats on an occasional basis. Unlikely to support large numbers of bats.
- Moderate: one or more features with potential to support roosting bats but unlikely to be of high conservation status.
- High: one or more features with potential to support large numbers of bats on a regular basis.

2.2 Bat emergence survey methodology

One emergence survey was carried out, 27th May 2021, to record any bats emerging from the building. The survey commenced 15 minutes before sunset and continued until one hour after sunset. One surveyor was employed to provide coverage of the potential roost feature that could not be visually searched. An Echometer Touch bat detector, employing heterodyne and frequency division methods of detection was used.

Table 1 Survey details.

Date	Type of survey	Personnel - bat licence number	Weather conditions
30.4.21	Visual survey	Dr Janine Bright 2020-49235-CLS-CLS	Dry, calm, patchy cloud. Temp 11C
27.5.21	Emergence survey	Dr Janine Bright 2020-49235-CLS-CLS	Dry, calm, full cloud. Temp 10C

3. SURVEY RESULTS

3.1 Habitat description

Trevangleth is in a rural location. There are mature trees and woodland nearby and the surrounding landscape is dominated by mixed agriculture whereby the fields are bound by a network of native species-rich Cornish hedgerows. These habitats provide good foraging opportunities for bats.

The barn to be converted and extended is single storey and constructed of stone. It is in three sections. The northern two sections have a pitched roof of corrugated metal sheet and are used for storage. The middle section may have functioned as an animal shelter in the past as straw bedding was present. The southern section has a pitched roof with a vaulted ceiling within. This has a skylight on the west roof slope. The roof covering here is pressed tile with clay ridges. There are wooden soffit boxes.

Photograph 1. North and west elevations.

Photograph 2. South and west elevation.

3.2 Visual bat survey results

A search within the barn did not reveal any evidence of bats. The wall tops and under the ridge within the metal roof sections of the barn could all be thoroughly searched. In the southern section of the barn the roof is in good with no gaps between tiles or ridge tiles. The wooden soffits are, for the most part, tightly fitted (see Photograph 3); except one area where the soffit is broken (see photograph 4). This potential bat access point leads to a void between the vaulted ceiling and the roof covering. It was investigated with an endoscope but the full extent of the void could not be searched. The presence or absence or roosting bats in the southern roof could not be determined via a visual survey alone. The building has been assessed as having low potential to support bats, so a single emergence survey at dusk (between May and August) is required to prove absence.

No evidence of bats was found internally within the southern section; there is no access for bats into this room.

Crevices in the external stone walls were searched fully and no evidence of bats found.

Photograph 3. Tightly fitted soffit box.

Photograph 4. Broken soffit box and potential bat access.

3.3 Emergence survey results

No bats emerged from the building surveyed.

Three common pipistrelle bats were recorded flying and feeding nearby but did not emerge from the survey building.

3.4 Nesting bird survey results

No evidence of nesting birds was found at the time of the survey.

4. RECOMMENDATIONS

In accordance with the 'Bat Surveys for Professional Ecologists – Good Practice Guidelines' (Collins, 2016); sufficient survey effort has been employed to demonstrate the absence of bats within the barn at Trevangleth.

In the unlikely event that bats are discovered during the works, they must not be handled and works must stop immediately and advice sought from Bright Environment (Tel 07974 204078) or Natural (Tel 0300 060 3900).

No evidence of nesting birds was found. The nests and eggs of all wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981. A search for nesting birds should be carried out before works commence. If active nests are observed then works should be delayed until dependant young have fledged.

In compliance with the Biodiversity SPD the new dwelling will include a bee brick per and an integral bat box. The bee brick will be installed on the south-facing wall 1-2m above ground level. Bee bricks contain multiple cavities for bees to lay their eggs and are integral to a building (see photograph 5). The integral bat box will be installed flush with the wall surface (as shown in Photograph 6) and sited near the roof in a dark location. The 'Green and Blue' bat block is most suitable for a rendered or clad finish. The built-in woodstone box works well with a stone-faced finish.

Photograph 5. Example bee brick

Photograph 6. 'Green and Blue' bat block and built in woodstone bat box.

As ecological features can change over time it is recommended that this report is valid until June 2022.

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Appendix 1 Summary of relevant legislation, policies and case law

Bats

All British bat are European protected species and are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. Together, this legislation makes it illegal to:

- Intentionally kill, injure or capture a bat;
- Intentionally or recklessly disturb a bat;
- Intentionally or recklessly damage, destroy or obstruct access to a place of shelter or breeding (for example, bat roosts), and this applies regardless of whether the species is actually present at the time (for example, a bat roost used in the winter for hibernation is protected throughout the year, even during the summer when it is not occupied).
- Possess or transport a bat or any part of a bat, unless acquired legally;
- Sell, barter or exchange bats, or parts of a bat.
- Intentionally handle a wild bat or disturb an bat whilst using a place of shelter/ breeding unless licensed to do so by the statutory conservation agency (Natural England).

Barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, greater horseshoe and lesser horseshoe bats are priority species for conservation on the UK BAP and protected under the NERC Act 2006. Barbastelle, pipistrelle, greater and lesser horseshoe bats are county priority BAP species (CBI, 2004).

Case Law

There are several case laws in Britain relating to the duty of developers and planning authorities with respect to wildlife, resulting in several key principles summarised in the table below:

Case / Appeal	Providing support for
Morge v Hampshire County Council (2011)	'Disturbance' under the Conservation Regulations 2010 applies to an activity likely to impact negatively on the local population of a European Protected Species.
R v Cheshire East Council 'The Woolley Case' (2009)	Regarding European Protected Species, Local Authorities must apply the 'three tests' under the Conservation Regulations 2010 when deciding on planning applications: that there is no satisfactory alternative, there is an appropriate reason for the development, and that the development will not affect the favourable conservation status of protected species present.
APP/P9502/A/08/2070105 (Appeal decision, Brecon, 2008)	Para 18: Local Planning Authorities cannot condition provision of a mitigation scheme; detailed mitigation must be provided prior to determination.
APP/C0820/A/07/2046271 (Appeal decision, Padstow, 2007)	Para 18: Full survey information must be provided prior to determination; not just for protected species, but also for BAP species (in this case corn buntings).
R v London Borough Council Bromley (2006)	Para 30: Environmental Impact Assessment required at outline planning stage.
R v Cornwall County Council 'The Cornwall Case' (2001)	Surveys for protected species cannot be conditioned; must be undertaken prior to determination.

Barn owls and other nesting birds

The nests and eggs of all wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981. Barn owls are given greater protection against disturbance while breeding under Schedule 1 of the Act.

National Planning Policy Framework 2012

The National Planning Policy Framework (NPPF) sets out national planning policy that is committed to minimising impacts on biodiversity and providing net gains in biodiversity where possible. Under NPPF, local planning authorities have an obligation to promote the preservation, restoration and recreation of Priority habitats, ecological networks and the protection and recovery of Priority species as identified under the Natural Environment and Rural Communities Act (2006). Section 118 of the NPPF also requires enhancements for biodiversity. The NPPF also recognises the wider benefits of ecosystem services.