# BAT AND BARN OWL SURVEY OF BUILDINGS AT SEA VIEW FARM, OLD PORTREATH ROAD, REDRUTH, CORNWALL TR16 4JA

**June 2023** 



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# BAT AND BARN OWL SURVEY OF BUILDINGS AT SEA VIEW FARM, OLD PORTREATH ROAD, REDRUTH, CORNWALL TR16 4JA

O.S. Grid Ref: SW 68631 44023 20th June 2023 Survey date: **Surveyors:** Amy Horn-Norris BSc (Hons) MSc MCIEEM CSJK Bat licence registration number: 2022-10506-CL18-BAT Anna Tomlin BSc (Hons) Time spent on site: 45 minutes **Taxonomic groups:** Bats **Birds** Report author: Anna Tomlin BSc (Hons) Report completed: 31st July 2023 Filename & Issue number BBO\_Sea\_View\_Farm\_F1x Report for: Mr Brandon Roth **Report No:** 22-134\_BBO\_Seaview Farm Document approved by: Amy Horn-Norris, Director Bat licence registration number: 2022-10506-CL18-BAT **Signature:** 

1st August 2023

Spalding Associates (Environmental) Ltd

Date:

# 1. INTRODUCTION

Spalding Associates (Environmental) Ltd were instructed by Mr Brandon Roth to carry out a Bat and Barn Owl survey of Sea View Farm, Old Portreath Road, Redruth, Cornwall. The proposal is to demolish the existing barn to replace with a new building used as kennels.

### 2. DESCRIPTION OF BUILDINGS

The buildings surveyed included a long, open-fronted pole barn with a small lean-to and a nearby stable-block.

The main building on site is a pole barn, fully open to the east with the lean-to extension connecting to the north face of the barn. This mono-pitched extension is composed of concrete blockwork walling for the north and west walls and with the south side open to the external north face of the main barn building. Access into this lean-to extension is through a large metal double door on the east face. Internally, the space is currently in use for storage of machinery and small vehicles. The roof of the lean-to is composed of a mix of metal corrugated sheeting and a translucent composite material sheeting supported by a timber frame. The space is bright internally being lit with natural light.

Photos 1 and 2: Internal view of the lean-to extension (left); east face of the extension showing metal double doors (right).





The main barn building walling is composed of corrugated metal sheeting for the south and west walls with the northern wall composed of rendered concrete blockwork to approximately 2 metres high with corrugated metal sheeting composing the top half of this wall. This barn is open to the elements and is light and draughty internally, with no enclosed roof void space. At the time of survey it was currently in use for storage of machinery and fencing materials.

A metal frame supports corrugated metal sheeting roofing and ridge tiles of a composite material which are loose and ill-fitted. There is a missing corrugated panel on the western aspect of the roof at the south end which allows in additional light. Ivy *Hedera helix* densely covers the southern external wall of the barn and is encroaching internally onto the south wall.







Photos 3 and 4: East face of the main barn; internal south face of the barn.

There is an old single-storey stable building located adjacent to the main barn building which is not currently included within the proposal to demolish. A brief internal and external inspection was conducted to assess if this building in close proximity could support a bat roost. The old stable building is relatively dark internally with some natural light entering through the stable doors and a metal mesh on the northern face. Walling is comprised of breeze blocks here and internally a timber frame supports corrugated metal sheeting. Dense Ivy covers the north, south and west faces of this building.

Photo 5: North face of the adjacent stable building.



# 2.1. Surrounding Landscape

Sea View Farm is located approximately 2.4 kilometres to the north-west of Redruth town centre. The buildings surveyed are immediately adjacent to Old Portreath Road which runs along the west side of the survey site. The buildings are surrounded by arable fields and are immediately surrounded by a small cluster of farm buildings and house to the east and west on the other side of Old Portreath Road. These other surrounding buildings likely produce some light spill onto the surveyed buildings. The surrounding network of hedgerows along field margins in the wider area offer connectivity through the landscape. Bats may commute along these field margins to foraging areas such as surrounding woodland areas in Tolgus valley.

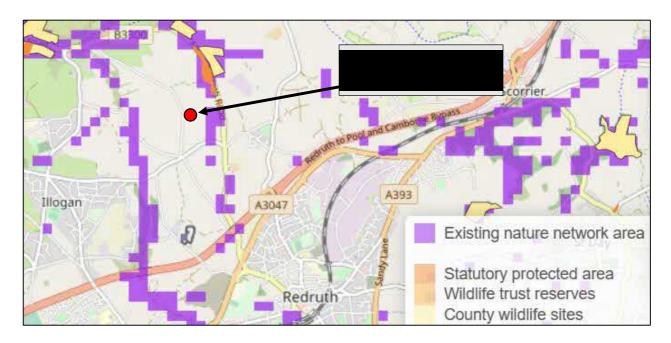


Figure 1: Existing nature networks surrounding Sea View Farm, Old Portreath Road, Redruth, Cornwall. (Source Lagas Nature Network Maps: 2023, <a href="https://www.lagas.co.uk/app/product/nature-network">www.lagas.co.uk/app/product/nature-network</a>).

### 2.2. Assessment of Potential for Bats and Barn Owls

The survey includes an assessment of the building to determine its suitability for bats and birds. This includes a structured evaluation for bats based on the characteristics of the roost which allows a broad categorisation of its potential. In terms of birds and in particular Barn Owls, features such as direct access and external materials also enable indicative values to be placed on the likelihood of presence.

The building was assessed for bats and birds based on its features and potential roosting opportunities. The barn has very limited potential to support bats internally and no evidence of bats was found within the building. Externally, there is low potential for bats to roost behind dense Ivy. In the context of Barn Owls the barn offers low potential to support a roost.



In summary, the building was assessed as having low potential for bats and relatively low value for birds.

Category (Bat Potential)	Description
Negligible value	Building, structure or tree where surveyor has not identified any suitable potential roosting features, or where those that are present are of such poor quality or condition, such that bats are highly unlikely to use them.
Low value	Building, structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate value	Building, structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High value	Building, structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Confirmed Roost	Bats or signs of bats, such as droppings and / or feeding remains, found, or information provided via desk study which indicates a roost.

Table 1: Classification of buildings and trees, according to their potential to support roosting bats (Based on Collins, 2016).

### 3. METHODS

### **3.1.** Bats

With the aid of a high-power torch the building was carefully searched internally and externally for bats or any signs of bat presence, past or present. This included searching for droppings, feeding remains and individuals as well as searching for potential entry points, polishing, or scratching of woodwork (indicating use by bats) and for cavities capable of providing roosting space for bats.

All surfaces were examined where accessible, internally and externally, as well as ledges, hanging tiles and other protruding features for bat droppings and feeding evidence. Any cavities present and open areas were searched with a torch for roosting bats, as were any cavities present along the wall tops, between the roof timbers and walls and around any openings.

As bats can leave little evidence of their occupation, this survey included an assessment of the potential of the buildings and features of the buildings to support roosting bats.

The survey was carried out at 18:00 on 20<sup>th</sup> June 2023 and the weather was sunny, cloudy with 11mph WNW winds and a temperature of 17°C.



### 3.2. Barn Owls

With the aid of a torch any access points which could admit Barn Owls into the building were searched for and any ledges present within the building which were thought to have the potential to be used by nesting or roosting Barn Owls were searched for owl pellets, feathers, and nest debris, as were the floors and beneath crossing timbers.

### 3.3. Swallows and other birds

Suitable ledges and spaces which could provide nesting space for Swallows and other birds were inspected for evidence of previous or current nest building attempts.

# 4. RESULTS

#### **4.1.** Bats

No evidence of the use or occupation by bats was found in any of the buildings on site.

The barn and lean-to are in frequent use, open to the elements and bright internally with natural light providing negligible value to bats as a day roost. The nearby stable block is darker internally however is still subject to natural light through the stable doors and a metal mesh on the northern face. The stable-block has no roof void and is densely cobwebbed internally.

Externally, gaps behind dense Ivy coverage on the stable-block and open pole barn offer low potential for roosting bats.

### 4.2. Barn Owls

No evidence of the use or occupation of this building by Barn Owls was found.

# 4.3. Swallows and other bird species

Birds have recently nested within the open pole barn.

There is a disused bird nest (possibly Blackbird *Turdus merula* or Song Thrush *Turdus philomelos*) located on a wooden beam that extends along the western wall. A further two old bird nests (possibly Blackbird or Song Thrush) are present within the Ivy on the internal south wall supported by the metal frame and at the intersection between the corrugated metal roofing and walling, supported by a metal frame. The heavy Ivy on the southern wall of the pole barn and on the north, south and west faces of the stable block also has potential to be used by birds for nesting (1<sup>st</sup> March to end of August).

No other evidence of roosting or nesting birds was found within or on the externals of the buildings.



### 5. RECOMMENDATIONS

### **5.1.** Bats

The building was assessed as holding low potential for bats. In any building a bat may occasionally roost. If in the unlikely event that a bat is encountered unexpectedly during the works, the works must stop immediately and Spalding Associates or Natural England contacted for advice.

### 5.2. Barn Owls

No recommendations necessary.

# 5.3. Swallows and other bird species

Any proposed works to the buildings should be completed outside of the bird nesting season (1<sup>st</sup> March to 31<sup>st</sup> August). If this is not practicable the buildings should first be checked by an ecologist and if birds are found the works must wait until chicks have fledged.

### 6. MITIGATION AND ENHANCEMENTS

### **6.1.** Bats

No mitigation is required.

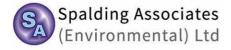
However, if the owners wished to do so, new roosting opportunities for bats could be incorporated into the new buildings. This could be accomplished by installing purpose-built bat boxes onto/into the walls of the new buildings or by spacing off the fascia boards to create a cavity behind with access to the wall tops. If mitigation is carried out, care should be taken that no light sources reach the roost entrances. This would help to increase the biodiversity value of the site. If access to internal areas of the roof is provided, traditional Type 1F bitumen felting or a certified 'bat-safe' alternative should be used on new roofing as bats can become entangled within modern breathable roof membranes.



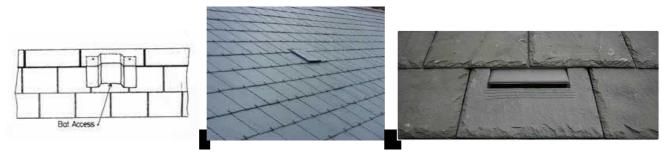




Examples of Integrated Bat Blocks which can be incorporated into new buildings.



Bat slates could be incorporated into the design of the new roofing. These can be built by making the appropriate shape with an off-cut of lead. The opening should be 15-25mm wide by at least 50mm long. This allows bats to land on the roof and crawl into the roof void or area behind the tiles. Alternatively, a Bat Vent can be purchased and are available in a number of slate finishes and sizes. The bat slates or vents will be installed approximately one third of the way down the roof slope. A small hole (25mm x 50mm) will be cut into the roof lining/membrane under the bat slate to allow bats to access the roof void.



Examples of bat slate designs, and bat vents.

Modified ridge tile bat accesses can be created by overlapping one ridge tile over its neighbours. The gap created should be 15-25mm wide by at least 50mm long. Mortar should be applied sparingly on nearby ridge tiles so that a tunnel-like void is created through several ridge tiles. A small hole (25mm x 50mm) should be cut into the roof lining/membrane under the ridge tile to ensure bats can crawl into the roof void, for example ridge tile designs.



Examples of modified ridge tiles.

# 6.2. Barn Owls

No mitigation required.

# 6.3. Swallows and other bird species

The site has very limited value for birds.

However, if the owners were interested in creating opportunities for birds, new nesting provisions for birds could be incorporated into the new buildings in the form of prefabricated nest boxes or mounted onto nearby trees to benefit a variety of bird species including Blackbird, Blue Tit and Great Tit. Incorporating overhanging eaves and installing nest boxes directly beneath the eaves could benefit species such as Swift, Swallow, House Martin and House Sparrow.



### 7. LEGISLATION

### **7.1.** Bats

Bats in England have been protected under a number of regulations and amendments but the most up to-date and relevant are:

- The Conservation of Habitats and Species Regulations 2017
- Wildlife and Countryside Act 1981 (Section 9)

The result of Regulations and Acts is that all species of bat and their breeding sites or resting places (roosts) are protected under law. It is an offence to:

- Deliberately capture, injure or kill a bat
- Deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young or significantly affect the local distribution or abundance of the species
- Intentionally or recklessly disturb a bat at a roost
- Intentionally or recklessly obstruct access to a roost whether bats are present or not
- Damage or destroy a roost whether bats are present or not
- Possess, control, transport, sell exchange or offer for sale/exchange any live or dead bat or any part of a bat

Through the Conservation (Natural Habitats &c.) Regulations 1994 (this has been updated and consolidated with subsequent amendments by the Conservation of Habitats and Species Regulations 2017 mentioned above) bats were designated a European protected species as part of Europe wide effort to conserve certain plant and animal species.

Any development which is likely to result in the disturbance of a European protected species, or damage to its habitat usually requires a European protected species licence from Natural England.

'Development' is interpreted broadly to include projects involving demolition of buildings, rebuilding, structural alterations and additions to buildings.

### **7.2.** Birds

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to intentionally:

- Kill, injure or take any wild bird.
- Take, damage or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.

The Conservation of Habitats and Species (Amendment) Regulations 2012 require public bodies to help "preserve, maintain and re-establish habitat for wild birds."

Barn Owls and other birds listed in Schedule 1 of the Wildlife and Countryside Act 1981 are given a further level of protection against disturbance whilst breeding.

