



Preliminary Bat & Bird Assessment

Site:

Great Treburrick Farm, St. Eval, Cornwall, PL27 7UR

Grid References:

Barn 1: SW 86623 70931, Barn 2: SW 86642 70924

23rd May 2023

Version 1



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Document Control:

Site Name:	Great Treburrick Farm, St. Eval, Cornwall, PL27 7UR
OS Grid Reference:	Barn 1: SW 86623 70931 Barn 2: SW 86642 70924
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Client:	Richard Old
Report Reference Number:	P4E3009
Version:	01
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Declaration:

"The information, evidence and advice, which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology & Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions."

Chloe Balmer	
Kim Jelbert	

Report Lifespan:

Ecological features can change over time, particularly if site management/ use changes. Typically, preliminary bat and bird assessments are valid for 18 months (until October 2024).



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Summary

Bat evidence?	<p>Two barns at Great Treburrick Farm, St. Eval, Cornwall, PL27 7UR were surveyed for evidence of roosting bats on 24th April 2023.</p> <p><u>Barn 1:</u> All parts of the barn were accessible and could be fully inspected. No evidence of roosting bats was observed within the interior of the barn, and very few external features with potential to support roosting bats were observed. Barn 1 was assessed as being of 'negligible suitability' for roosting bats.</p> <p><u>Barn 2:</u> All parts of the barn were accessible and could be fully inspected. No evidence of roosting bats was noted on the exterior or within the interior of the barn, but a small number of external features were identified that have potential to support roosting bats (gaps within old stonework and gaps between lifting ridge and roof tiles). The rural nature of the site and surrounding landscape further increases the potential of the site for roosting, foraging and commuting bats. Barn 2 was, therefore, assessed as being of 'low suitability' for roosting bats.</p>
Bat mitigation recommendations?	<p><u>Barn 1:</u> Precautionary recommendations are provided. There is opportunity to enhance the value of the building for bats post-development.</p> <p><u>Barn 2:</u> In accordance with best practice guidance, one bat emergence or re-entry survey is required of Barn 2 to inform the planning application and subsequent building works. Bat emergence and re-entry surveys can only be undertaken between May and September; where only one survey is required then this should be undertaken between May and August. If a bat is observed to emerge from the building during this survey, then at least one additional emergence survey will be required to inform the planning application.</p>
Bird evidence?	<p>Evidence of old barn swallow (<i>Hirundo rustica</i>) nests and an old, likely blackbird (<i>Turdus merula</i>) nest were observed within the two barns on-site.</p> <p>No evidence of barn owl was noted and no suitable access or roosting/ nesting features were identified. Barn 1 was open but internally no resting or nesting features were identified. The barns at Great Treburrick Farm were assessed as being of 'negligible suitability' for barn owl.</p>
Bird mitigation recommendations?	<p>Works to the barns should be undertaken between October and February, when birds will not be nesting, or, alternatively, preceded with a thorough search for nesting birds (to be undertaken by an ecologist) immediately prior to works commencing. NB. Timing of works must not conflict with pending bat mitigation recommendations; to be confirmed following completion of the further bat survey.</p> <p>Alternative provision for nesting swallows must be made within the site post-development in the form of x3 pre-fabricated swallow nest boxes, installed in suitable locations. There is opportunity to make provision for nesting birds within the fabric of/ exterior of the replacement building(s) and enhance their value for birds post-development.</p>



1.0 Introduction

1.1 Background

Richard Old commissioned Plan for Ecology Ltd to undertake a Preliminary Bat and Bird Assessment (sometimes referred to as a Bat and Barn Owl Assessment) of two barns at Great Treburrick Farm, St. Eval, Cornwall, PL27 7UR (OS Grid Ref for Barn 1: SW 86623 70931 and for Barn 2: SW 86642 70924) in April 2023. The client proposes to demolish the barns and rebuild one residential dwelling.

1.2 Project Administration

Property Address:	Great Treburrick Farm, St. Eval, Cornwall, PL27 7UR
OS Grid Reference:	Barn 1: SW 86623 70931 Barn 2: SW 86642 70924
Client:	Richard Old
Planning Authority:	Cornwall Council
Planning Reference Number:	Unknown
Report Reference Number:	P4E3009
Proposed work:	Demolish and rebuild for residential use (single dwelling)
Survey Date:	24 th April 2023
Ecologist & Licence Number:	Chloe Balmer MSci (Hons) ACIEEM; Bat licence No: 2020-47040-CLS-CLS; Barn Owl licence No. 2022-10943-CL29-OWL.

1.3 Legislation & Planning Policy

Planning: The local planning authority has a statutory obligation to consider impacts upon protected species resulting from development. Planning permission will not be granted with outstanding ecological surveys, and if applicable an appropriate mitigation plan.

Bats: In the UK all bat species are listed on Annex IV(a) of the European Communities Habitats Directive and as such are European Protected Species (EPS). In Britain protection of bats is achieved through their inclusion on Schedule 2 of the Conservation and Habitats Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (HM Government, 2019)), Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 12 of the Countryside and Rights of Way Act 2000 (HM Government, 1981, 2000, 2017).

As a result of this statutory legislation it is an offence to:

Deliberately capture, injure or kill a bat;

Intentionally or recklessly disturb a bat/s in its roost;

Intentionally or recklessly damage, destroy or obstruct access to a bat roost (even if bats are not occupying the roost at the time);

Possess or sell or exchange a bat (dead or alive) or part of a bat.



Works with potential to cause significant disturbance to roosting bats may require a European Protected Species (EPSL) licence or Bat Mitigation Class Licence (CL21) from Natural England before works can legally commence. Works likely to result in less significant disturbance may be carried out under a Bat Mitigation Method Statement. The magnitude of disturbance and, therefore, the requirement for an EPSL, Bat Mitigation Class Licence or method statement is assessed on a case-by-case basis by the bat ecologist. The Bat Mitigation Method Statement or EPSL must be prepared and/or applied for by a suitably experienced and licenced bat ecologist. Where planning permission is required, the appropriate licence cannot be obtained until planning permission has been granted.

Birds: In Britain the nests (whilst in use or being built) and eggs of wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended) (HM Government, 1981). The barn owl (*Tyto alba*) is listed on Schedule 1 of the Wildlife and Countryside Act (HM Government, 1981); this legislation makes it an offence to:

Intentionally capture, injure or kill a barn owl;

Intentionally or recklessly disturb a barn owl whilst nesting;

Intentionally or recklessly disturb a dependent young barn owl.



2.0 Methodology

The ecologist (Chloe Balmer) assessed the suitability of the barns and the surrounding habitat to support bats and birds. A high-power torch was used to illuminate all accessible areas of each building with potential to support roosting bats and roosting/ nesting birds. The ecologist searched for signs of bats and birds including droppings, staining, feeding remains, bird nests, barn owl pellets and liming.

The assessment was carried out in accordance with the 'Bat Survey for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2016).

2.1 Ecological Evaluation

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 Limitations

All parts of the barns at Great Treburrick Farm were accessible and could be visually inspected for evidence of bats and birds. Weather during the survey was in line with seasonal norms i.e., light drizzle between showers, full cloud and a temperature of 12°C. There are no limitations associated with weather conditions. Barn 2 supports exterior features (i.e., gaps and crevices associated with roof and ridge tiles and gaps in stonework) that could not be visually inspected for roosting bats. These features have potential to provide suitable roosts sites for bats. The roof of each building was viewed from ground level; it is possible that some potential roost features (PRFs) are present but not visible from the ground.



3.0 Assessment Results

3.1 Site Description

The two barns are located within Great Treburrick Farm approximately 1 km west of Penrose, c. 1.3 km southeast of Porthcothan and c. 9 km northwest of St Eval, Cornwall. The barns are located centrally within the farmstead and are located west of the rural lane leading to Great Treburrick Farm. The area is rural in character with further agricultural buildings within the nearby vicinity. Pockets of Deciduous Woodland (UK BAP Priority Habitat/ Section 41 NERC Act, 2006 Habitat of Principal Importance) are present c. 280m east and west of the site. Habitats in the wider area comprise predominantly mixed farmland with pockets of broadleaved woodland; and small towns and villages. Buildings in the wider area comprise a mixture of period and modern properties with vegetated gardens, outbuildings and barns. In combination, these features provide potential high-quality foraging and roosting habitat for bats, and suitable nest sites, roosts and foraging habitat for birds.

3.2 Bat Assessment

The visual assessment was undertaken on 24th April 2023.



Figure 1: Aerial view of the two barns; the yellow outline is referred to as Barn 1 and the red outline refers to the total area of Barn 2 (though most of the northern section is dilapidated).

Barn 1:

Barn 1 is a detached open fronted barn of part block and part corrugated likely asbestos sheeting (or cement fibre) construction with a curve/ domed roof of the same corrugated material supported by two timber cylindrical posts on the open eastern elevation (Figs 2-3). The exterior is exposed block with no obvious gaps observed within the blockwork. There were wooden and metal sheeting doors on the western elevation; the doors were largely blocked up. One glazed window was observed on the western elevation, the panes were largely tight but gaps were seen beneath the window-sill and blockwork. The roof sheeting appeared to be well joined to the blockwork walls, but the internal walls were wet. There were no fascia boards or guttering or downpipes present. Externally, there were very few features suitable for bat roosting locations.



Internally, the barn was used for storage and was well-lit from the open fronted nature of its design, the interior space was draughty and the walls were wet. No evidence of bats using Barn 1 for roosting was observed; furthermore, the draughty well-lit space and wet walls indicate that it is unlikely to be used for roosting by bats.

No evidence of the use of Barn 1 at Great Treburrick Farm by roosting bats was found and very few external features were observed which have potential to support roosting bats. Overall, Barn 1 at Great Treburrick Farm was assessed as being of negligible suitability for roosting bats.



Figure 2: View of the south and western elevations of Barn 1.



Figure 3: View of the open nature of the eastern elevation of Barn 1.



Barn 2:

Externally Barn 2 is a detached barn comprising of multiple sections and construction types (Figs 4-8). A likely original stone building (Fig 6) was extended and is connected to block-built sections to the north and south (Figs 4-5, 7-8). The stone-built section has a slate tiled pitched roof with concrete ridge tiles. The northern part of the pitched roof is largely missing and dilapidated, but part of the roof to the south is slightly more intact (Fig 6); here slate tiles and concrete ridge tiles were observed to be lifting in places, creating small gaps beneath which have potential to support roosting bats by providing roosting locations for crevice dwelling bats. The block-built sections to the north have pitched roofs of corrugated metal sheeting (Figs 7-8); the southern block-built section (Fig 4) features a pitched roof of likely asbestos (or other cement fibre) corrugated sheeting material. All corrugated sheeting is supported by timber joists with a metal A-frame, the slate tiles are supported by a timber unlined A-frame. The exterior is exposed and largely dilapidated; on the northern gable end a large gap between the two block walls is present (Fig 7). This part of the building appeared to be structurally unstable. On all elevations, doorways and windows were unglazed and open (previously used to house livestock). The stone-built section features small gaps within the stonework and beneath flaking render (Fig 9); these areas have potential to support roosting bats by providing roosting locations for crevice dwelling bats.

Internally, the barn was used for storage and is now empty other than for the debris from the dilapidated/ collapsing barn. The space was well-lit throughout from the open nature of the building. As a whole, the interior space was draughty and the walls and timber panels were wet/damp (Figs 10-12). No evidence of bats using Barn 1 for roosting was observed; furthermore, the draughty space and wet wall/ timbers limits the potential that it is used for roosting by bats.

No evidence of bats using Barn 2 at Great Treburrick Farm for roosting was observed. The state of the interior lessens its suitability due to the draughty exposed nature and wet/ dampness from the dilapidated corrugated roofs. Barn 2 does, however, support a small number of external features with potential to support roosting, crevice dwelling bats (gaps beneath lifting slate roof tiles, under ridge tiles and within the stonework of the stone-built section). The rural nature of the site and surrounding landscape makes the site suitable for roosting, foraging and commuting bats. Overall, the Barn 2 at Great Treburrick Farm was, therefore, assessed as being of 'low suitability' for roosting bats.



Figure 4: View of the eastern and southern elevations of Barn 2.



Figure 5: View of the southern and western elevations of Barn 2.



Figure 6: View of part of the stone-built section on the western elevation of Barn 2.

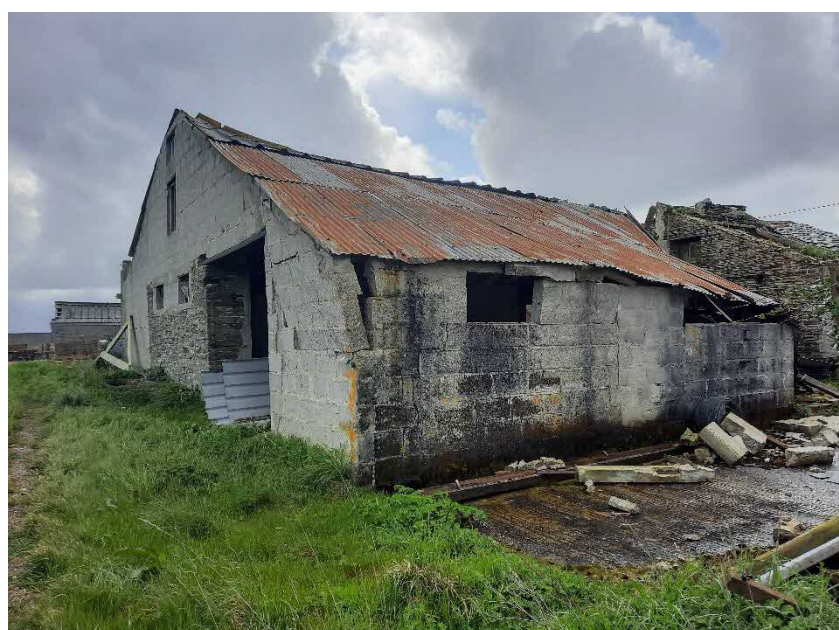


Figure 7: View of part of the block-built section on the northwest elevations of Barn 2.



Figure 8: View of part of the block-built dilapidated section on the northeast elevations of Barn 2.



Figure 9: View of gaps within the stonework and beneath render (shown by the yellow arrows) on the western elevation of the stone-built part of Barn 2.



Figure 10: Internal view of part of the dilapidated block-built section in Barn 2.



Figure 11: Internal view of part of the dilapidated stone-built section in Barn 2.



Figure 12: Internal view of part of the block-built section in Barn 2.



3.3 Bird Assessment

Multiple old barn swallow (*Hirundo rustica*) nests were observed within each barn, both on and under timber joists (Fig 13). Within Barn 2, smaller nests likely created by blackbird (*Turdus merula*) and repurposed by a tit species (*Parus* sp.), were observed at the wall top under timber paneling (Fig 14).

No evidence of barn owls using the barns was noted, but Barn 1 provides suitable access for barn owl (open fronted); however, no resting or nesting sites within Barn 1 were observed. In the absence of evidence, both barns were assessed as being of 'negligible suitability' for nesting, breeding or resting barn owls.



Figure 13: View of an old barn swallow nest (yellow circle) under the timber joists within Barn 2.



Figure 14: View of an old likely blackbird nest that has been repurposed by a tit species (yellow circle); located under the timber joists at the wall top within Barn 2.



4.0 Mitigation Recommendations

4.1 Bat Mitigation

Barn 1:

Barn 1 was assessed as being of 'negligible suitability' for roosting bats.

Although no current evidence of roosting bats was found, absence cannot be assumed. A precautionary approach should be adopted. The building contractors should be made aware that bats can roost unseen within the barn structure. In the unlikely event that a bat is uncovered during works, the bat must not be handled, and works must stop immediately (as soon as it is safe to do so). Advice must be sought from an experienced and licensed bat ecologist (Plan for Ecology Ltd: 01326 218839) or the Bat Conservation Trust (Tel: 0345 1300 228). In this scenario, it may be necessary to obtain a bat licence from Natural England before works are permitted to resume. See Section 1.3 for relevant legislation.

Further surveys for Barn 1 are not recommended as part of this assessment.

Barn 2:

No evidence of roosting bats was observed within Barn 2, although a small number of exterior features on this barn have some potential to support crevice dwelling bats. The rural nature of the site and surrounding landscape further increases the potential of the site for roosting, foraging and commuting bats.

In accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), Barn 2 at Great Treburrick Farm was assessed as being of 'low suitability' for roosting bats, due to the absence of direct evidence of bats, and the presence of only a small number of potential bat roosting locations. A single further survey of Barn 2 is, therefore, required to determine the importance of the barn for bats.

One bat emergence or re-entry survey is required of Barn 2 at Great Treburrick Farm between May and August, to inform the planning application and subsequent building works (Collins, 2016). If a bat is observed to emerge from the barn during this survey, then at least one additional emergence/ re-entry survey (between May and Sept) will be required to inform the planning application. This survey will determine the species, number of individuals, bat access points and timings of usage.

Please note that planning permission is unlikely to be granted with outstanding ecological surveys. This report must be updated with the results of the recommended further survey or superseded with a standalone bat survey report, following provision of the final site plan and prior to submission of the planning application.

4.2 Bird Mitigation

Evidence of old barn swallow nests were observed within both barns and a blackbird nest (repurposed by a tit species) was observed within Barn 2. Alternative provision for nesting swallows should be made within the replacement building within the site. Suitable products include three No. 10 Schwegler Swallow Nest. The alternative barn swallow nest boxes must be situated within an alternative outbuilding, garage or partially covered area, such as a porch, with suitable permanent access via e.g. an open door or window. Suitable products are available at <https://www.nhbs.com>, and <https://www.wildcare.co.uk/>.



A precautionary approach should be adopted during works. Works to the barn should be avoided during the bird nesting season (March to September inclusive) or preceded with a thorough search for nests, to be undertaken by an ecologist. If, during works, an active bird nest is uncovered, works must stop immediately (as soon as it is safe to do so) and delayed until nesting activity has ceased. Works are most likely to be delayed between April and July.

4.3 Opportunities for Biodiversity Enhancement

Net gain is described as a measurable target(s) for development projects where impacts on biodiversity are outweighed by the mitigation hierarchy approach to first avoid, and then minimise, impact including through restoration and/ or compensation (Baker et al., 2019). Biodiversity net gain is an approach to development, and/or land management, that aims to leave the natural environment in a measurably better state than it was beforehand.

The biodiversity value of the site for roosting bats and nesting birds post-development could be enhanced by installing bat boxes and bird boxes within the fabric of the replacement building, or on the building exterior (on north and east elevations for bird boxes and south and west elevations for bat boxes). The value of the site for invertebrates could be enhanced by installing bee bricks within the replacement building or bee posts within landscaped parts of the site. Plan for Ecology Ltd can provide detailed recommendations upon request. These recommendations are in accordance with the Cornwall Planning for Biodiversity Guide (Cornwall Council, 2018).

NB: suitable products are available from www.nhbs.com, www.wildcareshop.com and www.greenandblue.co.uk



5.0 References

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