

Phase 1 bat and nesting bird survey report


Site: Lambs Barton Cottage,
Crackington,
Bude,
EX23 0NF

For: Mr. & Mrs. Mellor

Report

prepared by: Richard Bates, ACIEEM, BSc(Hons).


November 2023

	Name	Date	Signature
Report prepared by:	Richard Bates, BSc ACIEEM	15.11.23	

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PLEASE NOTE: The contents of this report are based on the latest survey data. Should a period of more than 12 months pass between the issuing of this report and work commencing on a project, an update survey of the site may be required.

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Executive Summary

Survey date: 9th November 2023
Location: Lambs Barton Cottage, Crackington, Bude, EX23 0NF
Grid Reference: SX 15212 96715
Surveyor: Richard Bates, ACIEEM BSc, bat licence ref: 2017-30400-CLS-CLS

Devon and Cornwall Ecology was commissioned to undertake a phase 1 bat and nesting bird survey of a residential property on behalf the clients, Mr. & Mrs. Mellor. The survey was undertaken to support a planning application to extend the property.

A full internal and external inspection of the building was conducted on the 9th November 2023, looking for signs of use by bats and/or nesting birds. The survey was conducted in suitable weather conditions and in line with guidance available in Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins et al, 2016).

The survey found limited potential for crevice dwelling bats externally with negligible potential within proposed work areas. No voids are present on the building and as such no internal potential is present. No further survey work is required but simple precautions have been included in section 5 to be undertaken during the development.

Nearby linear features (hedgerows/walls on site boundaries) were assessed as having moderate potential to support foraging and commuting bats. The proposed development will not impact on these features directly, but may result in disturbance through additional artificial lighting. Recommendations have been made in section 5 to minimise this disturbance.

One small bird nest was recorded on the southeast corner of the building. However, this area will remain unaffected and no further survey work is required regarding nesting birds.

As part of the National Planning Policy Framework (2023), local planning authorities aim to secure enhancements for biodiversity for all developments. To achieve this aim recommendations for simple site enhancements have been included in section 5.

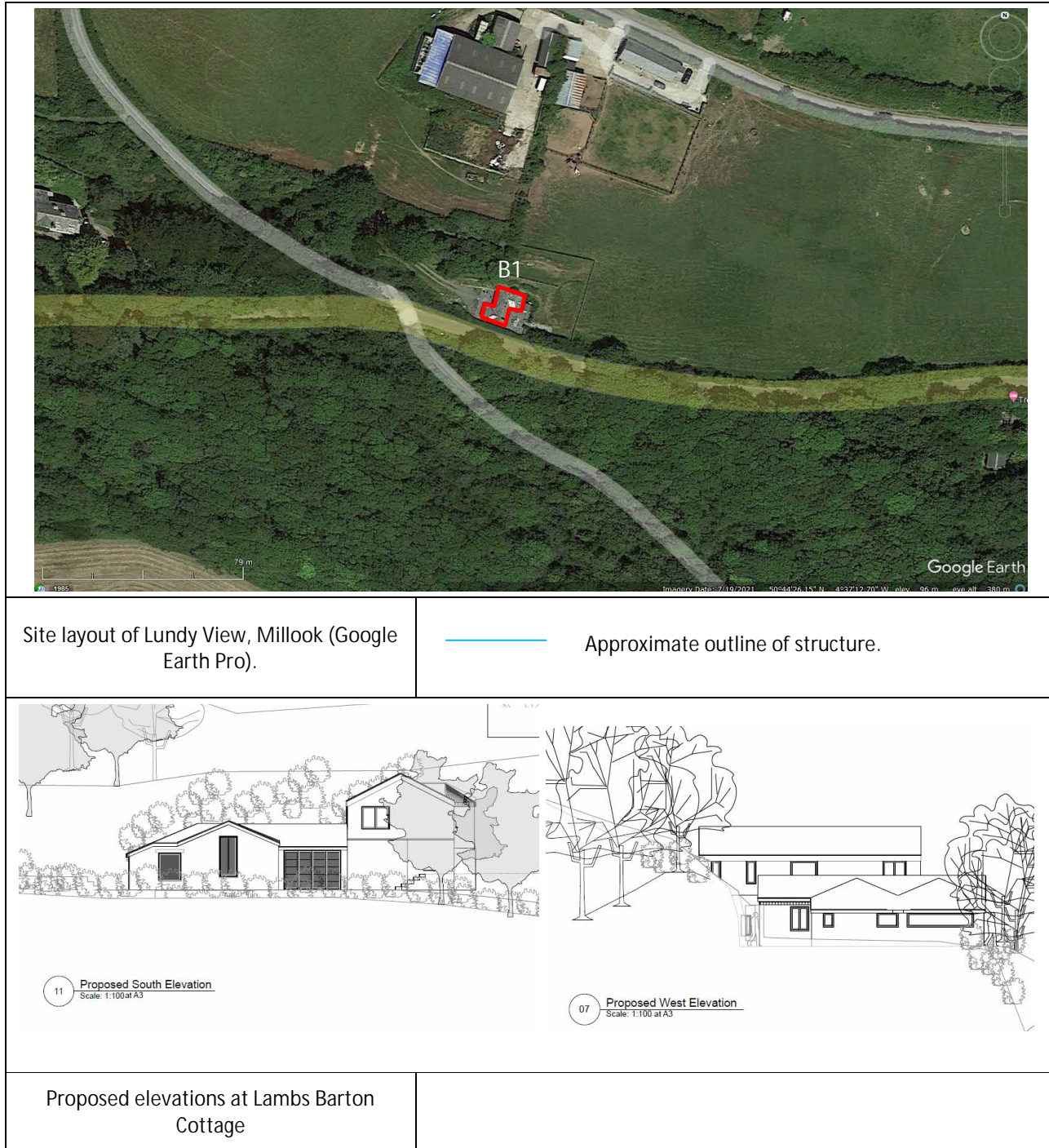
1. Introduction

Devon & Cornwall Ecology were commissioned to undertake a phase 1 bat and nesting bird survey of a residential property called Lambs Barton Cottage. The survey was undertaken to support a planning application to extend the property. The survey was undertaken by Ecologist Richard Bates BSc (Hons) who is an experienced field ecologist and consultant with a licence to survey for bats (2017-30400-CLS-CLS, Level 2). Subject to a Professional Code of Conduct, Richard is an Associate Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

The site is under the ownership of the clients, Mr. & Mrs. Mellor. It is in a rural setting outside of any significant urban development. The proposed development is centred on grid reference SX 15212 96715 and comprises a single storey residence. In its immediate setting the site is bordered by a rural lane to the south, agricultural fields and farm buildings to the north and east and by another residence to the west.

In the wider landscape the site is in a rural setting that is favourable to bats; an extensive east-west aligned wooded river valley is present just to the south of the site. This woodland is likely to provide good foraging and commuting opportunities for bats. It is also connected to a network of agricultural field and additional woodlands in the wider landscape. The closest significant urban development is the village of Crackington, approximately 700m south of the site. No other significant urban development or transport infrastructure is present within 3km of the site. The site has good connectivity to wider landscapes through a network of hedgerows and country lanes. However, habitats to the west are limited due to the north Cornwall coastline, located approximately 1km from the site. Although the coastline does offer good habitat for some protected species, it is of less value to bats due to its exposed conditions and lack of substantial vegetation.





2. Species records and desktop survey

A site specific data search of protected species records has not been requested for this development. It is considered unlikely that a data search will provide productive information given the development is highly unlikely to impact on protected species. Neighbouring habitats will remain intact and unaffected by the development. Provided the recommendations on artificial lighting in section 5 are complied with, no impact on bat foraging or commuting opportunities are predicted.

However, a search of publicly available records returned instances of brown long-eared (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*) soprano pipistrelle (*Pipistrellus pygmaeus*), Natterer's (*Myotis nattereri*), Barbastelle (*Barbastella barbastellus*), Leisler (*Nyctalus leisleri*) and greater horseshoe (*Rhinolophus ferrumequinum*) bats within 2km of the site.

A search of granted European Protected Species licences (through the Natural England Magic Map website) returned no records of a bat licence being issued within 2km of the site.

3. Methodology

Equipment

- Camera
- Binoculars
- Ladder
- Endoscope

The bat survey consisted of a full internal and external inspection of the buildings due to be affected by the proposed works. The survey method consisted of searching for evidence of bats, including bat droppings, corpses, scratch marks, urine staining, grease marks and clean cobweb free areas. Particular attention was paid around potential access points, attic spaces (where accessible) and crevice roosting features within each structure and on its outside. Binoculars were used to assess potential crevice features. Bats do make audible squeaks and these were listened out for by the surveyor during the survey. The methodology used to search this site is consistent with the guidelines provided in the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins et al, 2016). The building was assessed for their potential to support roosting bats based on the criteria set out in Table 1 below:

Table 1 - Criteria for assessing bat roosting potential of buildings and trees

Confirmed Roost	Evidence of bat occupation found, including live bats, droppings, corpses, grease and/or scratch marks and urine staining.
High Roosting Potential	Buildings or trees with significant roosting potential, either because they contain a large number of suitable features or the features present appear optimal due to their size, shelter, conditions and surrounding habitat.
Moderate Roosting Potential	Buildings or trees with one or more potential roosting features that may be used by bats but are unlikely to support a roost of high conservation status.
Low Roosting Potential	Buildings or trees with few features that may be used opportunistically by bats but are unlikely to be used on a regular basis due to the size, location, conditions and/or suitability of nearby habitat.
Negligible Roosting Potential	Buildings and trees with negligible suitable features and poor quality surroundings.

The site was also assessed for potential to support commuting and foraging bats, based on the criteria set out in Table 2 below, adapted from the Good Practice Guidelines (Collins et al, 2016):

Table 2 - Criteria for assessing bat commuting and foraging habitats

Suitability	Description of habitats
Negligible	Negligible commuting features on site and/or unsuitable foraging features, such as large areas of hard standing.
Low	Habitats that could be used by small numbers of commuting bats, such as gappy hedgerows or sites with limited connectivity to the wider landscape. Suitable but isolated foraging habitat that could be used by small numbers of bats, such as small patches of scrub or lone trees.
Moderate	Continuous commuting habitats connected to the wider landscape, such as a line of trees and scrub or linked residential gardens. Habitat that can be used for foraging and is connected to the wider landscape, such as trees, scrub, grassland and water.
High	Continuous, high quality habitat with good connectivity to the wider landscape. This would include features such as watercourses, river valleys, hedgerows and woodland edges. High quality foraging habitat that well connected to the wider landscape and likely to be used regularly by bats, such as broadleaved woodland, tree lined watercourses, grazed parkland or sites that are close to and/or connected to known roosts.

A summary of legislation relating to bats can be found in Appendix 1 of this report.

4. Results

4.1.1 Bats and nesting birds – Residential building B1

The survey noted the following about the building:

External



Photograph 1 – View of the west aspect.

The building is a single storey stone building with a pitched and hipped slate roof.

The slate tiles are in mostly good condition. Small gaps are present within the proposed work areas. However, these could be closely inspected from ground level and were found to be shallow and cobwebbed over.

The edge roof tiles are sealed with concrete. No gaps were noted beneath these tiles on the gable ends.

A small number of gaps were noted beneath ridge tiles on the main part of the building. These are outside of the proposed work areas and will not be affected by the development.

Velux windows are present and in good condition. No gaps were noted around the frames or beneath adjacent tiles.

Wooden bargeboards are present. Small gaps were noted beneath the boards where they meet the uneven stone walls. One gap in the southeast corner of the building was noted as having a disused small bird nest. This nest is outside of the proposed work areas and a sufficient distance that no disturbance to the nest is predicted.

Individual gaps beneath bargeboards were inspected using an endoscope. The gaps were found to lead to cobwebbed, used areas of wall top. No evidence of bats was found in these gaps.

uPVC door and window frames are present. These are in good condition with no gaps around the frames.

Metal guttering is present and in good condition. No gaps were noted behind the guttering.

4.2 Bats – Commuting and Foraging

The shrubs and hedges of the site boundary were assessed as having moderate foraging and commuting opportunities for bats, based on guidance summarised in Table 2. The southern boundary of the site was assessed as presenting the highest suitability for foraging and commuting bats, given the connectivity to nearby woodland.

The proposed development has been designed to be complementary to its surroundings and will minimise any potential impacts. No significant additional lighting is proposed and none is predicted to fall on the nearby boundaries. All boundary features will remain intact and fully accessible for foraging bats both during and post-construction.

Recommendations have been included in section 5 to minimise disturbance to foraging and commuting bats. Provided these recommendations are adopted, it is unlikely that the proposed development will have any significant impact on bat foraging or commuting and no further survey work is required.

Survey Constraints

No significant constraints were noted.

5. Recommendations

5.1 Bats

The phase 1 survey recorded limited potential for bats at the site and negligible potential within proposed work areas. As such no further survey work is required for this structure. However, bats do move around regularly and can adopt new roosts. Although it is unlikely that bats will adopt this building, a simple precautionary approach will be undertaken:

All tiles affected by the development will be removed by lifting them from the batons. The panels will not be slid from the roof as this can cause accidentally crushing injuries if bats are present. The reverse side of all tiles will be inspected to ensure no bats are present. Should bats be encountered during this process, all work will cease immediately and a licensed ecologist will be consulted.

All bargeboards and other fascia will be carefully removed using hand tools. The reverse side of all lengths of fascia will be checked for bats before being lowered to ground level.

If a bat is discovered during any other works at the site, all works will cease immediately and a licensed ecologist will be consulted. This advice may include leaving the bat to disperse of its own accord or waiting for the licensed handler to arrive and move the bat. Builders and contractors are explicitly forbidden from handling bats.

The site boundaries were assessed as having moderate foraging and commuting opportunities for bats. The proposed work is a small scale development of the site but may include artificial lighting. Any proposed lighting plan will incorporate the following (where applicable) to minimise the potential for light disturbance:

Construction work on site will be limited to daylight hours only. No artificial use of lighting will be used for construction during the hours of darkness.

External lighting used to illuminate any building entrances will use motion sensors. The use of sensors will reduce the amount of time the lights are on to only when needed.

All external lights will be angled downwards and away from the site boundaries. The spread of light from these sources will be minimised by using hoods or cowls to limit light spill to below the horizontal, in line with guidance available in Landscape and urban design for bats and biodiversity (Gunnel, Grant, & Williams, 2012).

Any required footpath lighting will consist of ground level bollard-style lighting or poll mounted lighting where an incorporated hood will direct the light downwards and away from the nearby foliage and commuting features. For either design, lighting will be restricted to providing 3 lux or less at ground level, in line with guidance available in Bats and Lighting in the UK: Bats and the Built Environment Series (Bat Conservation Trust, 2008).

Where available, external lighting will incorporate LED luminaires or narrow spectrum bulbs that emit minimal ultra-violet light, as recommended in guidance from the Bat Conservation Trust & Institute of Lighting Professionals (2018) and the Bat Conservation Trust (2008) respectively. This will avoid attracting insects to lit areas, maintaining the availability of those insects for foraging bats.

5.2 Site enhancements

As part of the National Planning Policy Framework (2019), local planning authorities aim to secure enhancements for biodiversity for all developments. To achieve this aim the following will be incorporated into the design proposals for this site. Illustrative examples and suitable locations for these enhancements are available in Appendix 3:

Provision should be made for pollinating insects on site. A number of commercial products are available to 'house' important pollinators such as solitary bee and solitary wasp species. A minimum of one suitable product should be included to provide nesting opportunities. These may be free standing, attached to trees or installed on buildings. The provision of nesting opportunities for pollinators will be of benefit to a range of important insect species, the plants they pollinate and the mammals and birds that prey on them.

A minimum of one Schwegler brick nest boxes, or other suitable tree/building mounted bird box, should be installed at the site. The box will be positioned as high as possible on the wall or tree, a minimum of 3m from ground level. The boxes should also be located on a north facing aspect out of the prevailing wind and strong sunlight. The addition of bird boxes will provide nesting opportunities for common bird species.

One Schwegler 2F or 1FF bat box or, if compatible with the new extension, one Schwegler bat tube will be installed at the site. If a bat box is included this will be installed on an external wall. The box/tube will be positioned a minimum of 3m from ground level in a sheltered location. The box/tube also requires a clear, uncluttered flight path to the entrance point and will not be illuminated by any artificial light sources.

6. References

Bat Conservation Trust (2008). Bats and Lighting in the UK: Bats and the Built Environment Series. Bat Conservation Trust.

Bat Conservation Trust & Institute of Lighting Professionals (2018). Bats and Artificial Lighting in the UK. <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting>

Collins, J., Charleston, P., Davidson-Watts, I., Markham, S. and Kerlake, L. (2016). Bat Surveys for Professional Ecologists Good Practice Guidelines. Bat Conservation Trust, London.

Gunnel, K., Grant, G., and Williams, C., (2012). Landscape and urban design for bats and biodiversity. Bat Conservation Trust.

Natural England (2020). Magic Map. Available at:

<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx> [Accessed 15.11.23]

Appendix 1: Legislation (summary)

Wildlife Protection legislation

This appendix details the legislation relevant to the protection of species and habitats. It also details the relevant policies within national, regional, and local planning policy.

National Planning Policy Framework (2018)

The National Planning Policy Framework (NPPF) is the Government's vision for biodiversity in England and is considered by local councils during all planning applications where development is proposed. The NPPF has a broad aim that any construction, development or regeneration proposals should maintain and enhance biodiversity, with the aim of securing biodiversity enhancements for all developments in order to facilitate sustainable development.

Biodiversity Action Plans (BAPs): BAPs set out policy for protecting and restoring priority species and habitats as part of the UK's response as signatories to the Convention on Biological Diversity. BAPs operate at both a national and local level with priority species and habitats identified at a national level and a series of Local BAPs that identify ecological features of particular importance to a particular area of the country. The requirement to consider and contribute towards BAP targets was strengthened through the Countryside and Rights of Way (CRoW) Act 2000. Although now superseded by other legislation, the lists drawn up under the BAPs are still valuable reference sources on local and national wildlife priorities.

Natural Environment & Rural Communities (NERC) Act (2006)

The NERC Act 2006 amends the above mentioned CRoW Act, obliging local authorities to include biodiversity considerations in their duties, including in consideration of planning applications. Under Section 41 of the Act, this consideration is based on lists of organisms and habitat types deemed to be of principal importance to in conserving biodiversity. These lists are primarily based on lists created for the UK and local authority BAPs.

Mammals:

Otters, dormice, water voles, and all bat species are fully protected under section 9 (5) of the Wildlife and Countryside Act 1981 (as amended). According to this act it is an offence to:

- Intentionally capture, kill or injure one of these animals
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used by one of these animals for shelter or protection
- Intentionally or recklessly disturb an animal whilst it is using this place
- sell, offer for sale or advertise for one of these animals live or dead

Designated as European Protected Species' otters, dormice, and all bat species receive additional protection from the Conservation of Habitats and Species Regulations 2010, under Schedule 2 which implements the EC Directive 92/43/EEC in the United Kingdom. In accordance with this act, it is an offence to:

- Deliberately capture or kill a European Protected Species

Deliberately disturb a European Protected Species

Damage or destroy the breeding site or resting place of a European Protected Species

The greater and lesser horseshoe bats, barbastelle and bechstein's bats, are also listed under Schedule 2 of the Conservation of Habitats and Species Regulations. Areas which support populations of these species can therefore be considered for designation as a Special Areas of Conservation (SACs).

Birds:

Please Note: All breeding birds and their nests are protected under the general protection of Section 1 of the Wildlife and Countryside Act, 1981 as amended. This makes it an offence to disturb breeding birds.

Appendix 2: Additional Site Photographs



Photograph 1 – View of the east aspect of the building.



Photograph 2 – View of the south gable end.



Photograph 3 – Example view of bargeboard gaps that were inspected via endoscope.



Photograph 4 – View of the sealed edge tiles on the south gable end.

Appendix 3: Examples of suitable site enhancement measures



Schwegler 2F Schwegler 1FF

Examples of tree or wall mounted bat boxes. Box should comprise one Schwegler 2F or Schwegler 1FF bat box to provide suitable roosting site for multiple bat species.



Schwegler 2FR

Example of Schwegler 2FR bat tube, designed to be incorporated into wall. To be installed on south or east aspect for protection from prevailing wind. Requires no maintenance and can be painted/rendered.

For either design, box should be located a minimum of 3m from ground level and with a clear, uncluttered flight path to the box entrances. Boxes must not be illuminated from any nearby artificial lighting.

