

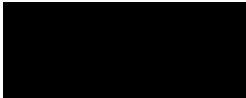
## Phase 1 bat and nesting bird survey report

**Site:** Subway at A30 Services,  
Altarnun,  
Cornwall,  
PL15 7RR

**For:** Ms. T. Colwill

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

**March 2024**

	Name	Date	Signature
Report prepared by:	Richard Bates, BSc ACIEEM	21.03.24	

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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.

Devon & Cornwall Ecology,  
The Flat,  
Holly Bridge House,  
Fletchersbridge,  
Bodmin,  
Cornwall,  
PL30 4AN


Reference Number: DCE1669

## Contents

<b>Executive Summary</b> .....	4
1. Introduction .....	5
2. Species records and desktop survey .....	6
3. Methodology .....	6
4. Results.....	9
4.1.1 Bats and nesting birds – Commercial building 1 .....	9
4.1.2 Bats and nesting birds – Utility outbuilding 2 .....	10
4.2 Bats – Commuting and Foraging .....	11
5. Recommendations .....	11
5.1 Bats .....	11
5.2 Nesting birds.....	12
5.3 Site enhancements .....	12
6. References .....	13
Appendix 1: Legislation (summary).....	14
Appendix 2: Additional Site Photographs .....	16
Appendix 3: Examples of suitable site enhancement measures .....	17

## Executive Summary

Survey date: 20<sup>th</sup> March 2024  
Location: Subway restaurant, A30, Altarnun, Cornwall, PL15 7RR  
Grid Reference: SX 24645 80234  
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 commercial premises and outbuilding. The survey was undertaken to support a planning application to demolish and replace an existing extension. This will include the demolition of a disused utility outbuilding as well.

An internal and external inspection of the building was conducted on the 20<sup>th</sup> March 2024, 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*, 2023).

The survey found negligible potential for crevice dwelling bats internally or externally and no evidence of bats. No further survey work is required. **Simple precautions to be undertaken during the development have been included in section 5** in the unlikely event that bats are found.

Nearby linear features (hedgerows/walls on site boundaries) were assessed as having low to 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.

The survey recorded bushy vegetation on the south side of the utility building. This has some potential to support common bird species and is adjacent to open fields. As such **recommendations have been included in section 5** to minimise the risk of disturbance to nesting birds.

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 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 Subway restaurant building at an A30 services. The survey was undertaken to support a planning application to demolish and replace and existing extension. This will include the demolition of a disused utility outbuilding. 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 client, Ms. Colwill, and is located in an rural setting at a services on the A30 dual carriageway. The proposed development is centred on grid reference SX 24645 80234 and comprises a commercial building with extensions and a disused utility outbuilding. In its immediate setting the site is bordered by further commercial buildings to the east, a busy dual carriageway to the north and agricultural fields to the east and south.

In the wider landscape the site is in a setting that is mostly favourable for bats; an extensive network of agricultural fields is present to the south, east and west, with woodland copses to the south. These areas of woodland are likely to offer good foraging and commuting opportunities for bats. No significant urban development is present within 2km of the site. The only significant barrier is the adjacent A30 dual carriageway. The expanse of this road is likely to present a significant barrier to bats, with the habitat to the north largely isolated from the site. However, the site is still considered to have good connectivity to the wider landscape, particularly to the south.





Site layout at Subway A30 services (Google Earth Pro).

— Approximate building outline

## 2. Species records and desktop survey

A data search of records from the local biological records centre has not been undertaken for this site. The phase 1 survey had identified negligible bat potential within the proposed work areas. It is considered unlikely that the proposed development will impact on bats or their roosts. It is therefore considered unlikely that a search of local records will provide any further actionable information.

In addition a search of publicly available records returned no instances of bats within 2km of the site. A search of granted European Protected Species licences (through the Natural England *Magic Map* website) also returned no instances 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 building 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*, 2023). 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**

<b>Confirmed Roost</b>	Evidence of bat occupation found, including live bats, droppings, corpses, grease and/or scratch marks and urine staining.
<b>High Roosting Potential</b>	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.
<b>Moderate Roosting Potential</b>	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.
<b>Low Roosting Potential</b>	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.
<b>Negligible Roosting Potential</b>	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*, 2023):

**Table 2 - Criteria for assessing bat commuting and foraging habitats**

Suitability	Description of habitats
<i>Negligible</i>	Negligible commuting features on site and/or unsuitable foraging features, such as large areas of hard standing.
<i>Low</i>	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.
<i>Moderate</i>	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.
<i>High</i>	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 – Commercial building 1

The survey noted the following about the building:

#### *Building B1*



*Photograph 1– View of the south aspect where the extension is located.*

- The building is a single storey commercial property with a pitched roof and a two part single storey extension.
- The roof of the building has flat fibreboard tiles that are in very good condition. No gaps were noted beneath the tiles.
- Concrete ridge tiles are present and in good condition. No suitable gaps were noted beneath the ridges.
- Wooden/plastic weatherboarding is present on the east gable end. This is in good condition; individual knotholes were noted in the boards but these are small and located outside of the proposed work area. The boards that are located on the east side of the extension are well sealed with no gaps.
- uPVC guttering is present and in good condition. No gaps were noted behind the guttering.
- uPVC windows and doors are present on all aspects. These are well fitted with no gaps around frames.
- The extension has a smaller, mono-pitched fibreboard tile roof and a larger flat bituminous felt roof. Both sections of roof are in good condition with no gaps beneath tiles or the edges of the felt.
- The mono-pitched roof section of the extension is sealed to the main building with lead flashing. This is in very good condition no gaps beneath the lead.

- uPVC bargeboards are present on the south side of the building. One short area of gaps was noted beneath the west end of the building but could be closely inspected from ground level. The gaps were found to be completely cobwebbed over with no signs of use by bats.
- The edge roof tiles are well sealed to the weatherboarding. No suitable gaps were noted.
- A full survey of the exterior recorded **negligible** potential for bats. The building extension has no internal spaces and as such has no internal potential for bats.

#### 4.1.2 Bats and nesting birds – Utility outbuilding 2

##### *Building B2*



*Photograph 1– View of the east aspect of the utility outbuilding.*

- The building is a small, single storey breezeblock utility outbuilding with a bituminous felt roof. The walls are rendered on all aspects.
- The felt roof is well fitted with no gaps beneath the edges.
- uPVC bargeboards are present on the building. These are well fitted with no gaps beneath them.
- One wooden door is present. This is well fitted with no gaps around the edges.
- Dense bushy vegetation is present across the whole of the south aspect of the building. This has no potential to support roosting bats but has potential to support nesting birds. **Recommendations have been included in section 5** regarding nesting birds.
- The building has no internal void spaces and is fully tiled as a shower facility. It is currently disused but has many stored items inside. These could be closely inspected – no evidence of bats was found inside and **negligible** potential for roosting was noted internally.
- A full survey of the exterior recorded **negligible** potential for bats.

## 4.2 Bats – Commuting and Foraging

Linear features (such as hedgerows, walls and fences) of the site and neighbouring properties were assessed as having **low to moderate** foraging and commuting opportunities for bats, based on guidance summarised in Table 2. The proposed development has been designed to be complementary to its surroundings and will minimise any potential impacts. No known roosting opportunities will be affected. 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 of the building recorded **negligible** potential for bats within building. As such no further survey work is required for this development. 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 roof tiles affected by the development will be removed by lifting them from the battens or ridge. The tiles 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 guttering, bargeboards and weatherboarding will be carefully lifted away from the building using hand tools. The reverse side of all these features will be checked to ensure no bats are present 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 low to moderate foraging and commuting opportunities for bats. The proposed work is a small-scale development of the site and may include additions such as external 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 Nesting birds

The phase 1 survey noted the presence of dense vegetation with potential to support nesting birds. Although no evidence of recent nesting activity was recorded, simple precautions will be undertaken to minimise the risk of disturbing nesting birds during the proposed development.

- Where possible, clearance of the vegetation will commence outside of the bird nesting season (March – August). If works cannot commence in the timeframe detailed above, a search of the vegetation for nesting birds will be undertaken by an ecologist immediately prior to work commencing.
- Should nesting birds be recorded, a 3m buffer zone will be established around the nest and work in that area will cease until the fledglings have left the nest.
- Arrangements for replacement nesting opportunities will be provided as part of the development (see section 5.3 below).

## 5.3 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 building, one Schwegler bat tube will be installed at the site. If a bat box is included this will be installed on an external wall or suitable mature tree. 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 Kerslake, L. (2023). *Bat Surveys for Professional Ecologists Good Practice Guidelines (4<sup>th</sup> Edition)*. 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 21.03.24]

## 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 north aspect of the building.*



*Photograph 2 – Closer view of the extension to be removed.*



*Photograph 3 – View of the east aspect.*



*Photograph 4 – View of the west aspect.*



*Photograph 3 – View of the south aspect of utility building showing vegetation.*



*Photograph 4 – View of the mostly well sealed bargeboards.*



### 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.**



Example of 'bee bricks' that can be incorporated into new buildings or stand-alone insect houses. Either design should be installed at a minimum of 1m from ground level, preferably on south facing wall for warmth.



Type 24

Example of a suitable wall/tree mounted bird box and a Schwegler bird brick, to be installed in a sheltered location out of the prevailing wind. Not to be installed in south facing locations to prevent overheating of eggs or chicks.