

107 Charlestown Road, Charlestown, St. Austell, Cornwall PL25 3NL

Mrs. Fiona Randall

Bat Survey - Preliminary Roost Assessment

4th November 2022

Status	Issue	Name of Author/Reviewer	Date
Draft	0	India Long, BSc (Hons) QCEEIM- Assistant Ecologist	04/11/2022
Reviewed	0	Simon Pidgeon, BSc (Hons) MRSB – Director/Principal Ecologist	05/11/2022
Final	1	India Long, BSc (Hons) QCEEIM- Assistant Ecologist	04/11/2022

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Executive Summary

Quantock Ecology Ltd undertook a Preliminary Roost Assessment at 107 Charlestown Road, Charlestown, St Austell, Cornwall PL27 3NL on the 3rd November 2022. The aim of the assessment was to consider the value and suitability of the structures for roosting bats. The development proposals briefly comprise the reroofing and extension to the existing dwelling.

Table 1: Summary of results

Building reference	Value of building for	Recommendations for further survey and assessment
	roosting bats	
B1 – Existing Dwelling	Negligible Habitat Value	No further surveys or mitigation is required; however, site enhancements are recommended.

The survey concluded that building B1 provides a negligible habitat value for roosting bats. As such, no further survey is required on building B1. In the unlikely event that bats are discovered at any point during the development, works must cease until advice has been sought by a licensed bat ecologist.

1.0 Introduction and Context

1.1 Background

Quantock Ecology were commissioned by Mrs. Fiona Randall to undertake a Preliminary Roost Assessment (PRA) at 107 Charleston Road, St. Austell. The assessment is informed by the Bat Conservation Trust publication: *Bat Surveys – Good Practice Guidelines* (Collins, J. 2016).

No previous ecological assessments are understood to have been undertaken at the site.

1.2 Scope of the Report

This report provides a description of all structural features suitable for roosting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on constraints to the proposals as a result of roosting bats, and summarises the requirements for any further surveys, to inform subsequent mitigation proposals, achieve planning or other statutory consent, and to comply with wildlife legislation.

The aim of the assessment was to determine the presence or evaluate the likelihood of presence of roosting bats, and to gain an understanding of how they could use the building or structure. To achieve this, the following steps have been taken:

- A desk study has been carried out, including the use of freely available resources such as Google Earth and the MAGIC online database.
- A field survey has been undertaken, including an external and internal inspection of the building.
- An outline of likely impacts on any known roosts has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on European Protected Species Mitigation Licensing if appropriate.

A survey plan is presented in Appendix 1 and the proposed project plan is included in Appendix 2. Photographs taken during the site survey are included in Appendix 3, and a summary of relevant legislation can be found in Appendix 4. Desk study records can be provided on request (if applicable), with a summary presented in Appendix 5.

1.3 Site Context

The site is located at National Grid Reference SX 036 518 and comprises one building.

The site is situated within the village of Charlestown, ~1.5km south of St. Austell, Cornwall. The local landscape is predominantly a mixture of arable and pastural farmland, bordered by mature hedgerows with scattered trees. Large areas of woodland are present in the 2km search area. At their closest these lie ~100m southwest of the site. The surrounding village of Charlestown consists of moderate density detached and semi-detached housing, with residential gardens containing scattered trees. Several large waterbodies can be found across the landscape, the closest of which is situated ~160m southwest of the site. The site. The site is located ~480m from Charlestown beach.

Connectivity to and from the site into the wider landscape is present; mostly in the form of the residential gardens surrounding the site, leading to mature tree heavy hedgerows and woodland features.

1.4 Project Description

This report is prepared to accompany a planning application to be submitted to Cornwall County Council. The proposals involve the re-roofing and extension of the existing dwelling (preliminary plans included in Appendix 2). The programme for the scheme is yet to be confirmed.

All works areas, storage and haul routes will be included within the site boundaries; access will be provided by existing roads and as such, no additional working footprints are anticipated.

2.0 Methodology

2.1 Desk Study

Existing bat records relating to the site and a surrounding 2km radius (the study area) were not requested from The Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS). This is primarily due to the relatively small scale of the proposed development.

A review of the following information sources has also been undertaken to inform the assessment:

- Landscape structure using aerial images from Google Earth
- Designated sites, habitat and species data held on Magic.gov.uk
- Information on the surrounding area using OS Opendata 2022

2.2 Site Survey

The survey was undertaken by India Long, BSc (Hons) on 3rd November 2022. India holds a Natural England bat licence number: 2022-10301-CL17-BAT.

The building that will be impacted by the project proposals (the survey area) was assessed for its potential to support roosting bats. The surveyor systematically searched for features suitable for roosting bats and signs of bat activity, by conducting a non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the buildings for potential access/egress points, and for signs of bat use. An internal inspection of the building was also made, using an endoscope, torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters (where applicable) and frames and carried out a detailed search of numerous features within the roof space.

2.2.1 Breeding birds and other incidental observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for breeding barn owls *Tyto alba*.

2.3 Suitability Assessment

The building was categorised according to the likelihood of bats being present, in line with best practice guidelines (Collins, J. 2016); the features of the building that dictate the likelihood of roosting bats are summarised in Table 2. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Likelihood of bats	Feature of building and its context	
being present		
Higher	Buildings/structures with features of particular significance for roosting bats e.g.	
	mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding	
	landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined	
	watercourses and grazed parkland. Site is connected with the wider landscape	
	by strong linear features that would be used by commuting bats e.g. river and or	
	stream valleys and hedgerows.	
	Site is proximate to known or likely roosts (based on historical data).	
Lower	A small number of possible roost sites/features, used sporadically by more	
	widespread species.	
	Habitat suitable for foraging in close proximity, but isolated in the landscape. Or	
	an isolated site not connected by prominent linear features.	
	Few features suitable for roosting, minor foraging or commuting.	

Table 2: Features of a building that are correlated with use by bats during the summer

2.4 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site.

This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on the site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study.

Due to the ongoing works being undertaken on the building prior to the survey, a lack of features that may have present prior to the works meant any signs of bats may have been disturbed or destroyed. However, due to the presence of expandable foam used prior to works being undertaken, access into the building by bats is deemed highly unlikely and this is not assessed to be a limiting factor to the survey.

3.0 Results and Evaluation

3.1 Desk Study Results

A summary of desk study results is provided below; further details are included in Appendix 5.

3.1.1 Designated sites

The MAGIC database suggests there is one statutory designated site and no non-statutory sites within 2km of the site (the study area). Their location and extent are illustrated in Appendix 5. Table 3 provides details of the designated sites including their reasons for notification.

Designated Site Name	Distance and direction from Site (approx.)	Reasons for Notification and integral value (Natural England Citation)
Statutory Sites	·	·
Cornwall AONB	1.5km southwest	 "This AONB Section embraces the The Fal Ria; including Mylor, Feock and the Roseland Coast to Porthpean. A winding network of intertwining creeks and river valleys is set amongst a landscape of steep-sided, twisting valleys. Low rocky cliffs and headlands shelter sandy beaches. There are many distinctive landmarks and subtle historic remains, including castles at St. Mawes and its counterpart at Pendennis Castle, as well as St. Anthony's lighthouse". Taken from: https://www.cornwall- aonb.gov.uk/southcoastcentral
Non statutory S		
N/A		N/A
N/A	IN/A	

Table 3: Designated sites within 2 km of the site

3.1.2 Landscape

The MAGIC database shows several areas of priority habitat deciduous woodland, predominantly to the east and south of the site, but also to the north and east of the site; the closest being ~60m southeast of the site. Several patches of broadleaf woodland are present, the closest ~155m northeast of the site and larger patches ~1km east of the site.

An area of mixed woodland (mainly conifer) is present ~1km northeast of the site and ~1.5km southwest of the site. An area of priority habitat wood pasture and parkland is located ~1.8km east of the site. One small area of traditional orchard is located ~1.4km southeast of the site.

The site is located ~1km north from the coast of St Austell bay that comprises priority habitats such as Maritime cliffs and slopes, that are present 460m south to the site and stretch across the coast within the ~2km radius. Intertidal substrate foreshore habitat is also present in several locations across the shore, the closest being ~650m south of the site.

These habitats are likely to be classified as priority habitats of principle importance, and of value to bats.

A review of aerial photographs (Figure 1) and OS maps shows how the site is situated in relation to the wider landscape.



Figure 1: Aerial photo of site, showing landscape structure

3.1.3 European Protected Species Licencing

The MAGIC database shows six granted European Protected Species Mitigation Licences (referring to bats) within 2km of the site. The details of these are shown below:

Table 4:	Granted	EPSML's	within 2	2 km	of the	site
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Case reference	Approx.	Bat Species	Licence	Licence	Impacts allowed by
of granted	distance	Effected	Start Date:	End Date:	licence
application	from site				
2018-37696-	210m	BLE	16/10/2018	30/04/2019	Destruction of a
EPS-IVITI	Southeast				resting place.
2018-33805-	650m	BLE,C-PIP,G-	16/03/2018	01/03/2028	Damage of breeding
EPS-MIT	Southwest	HORSE,L-			site, destruction of a
		HORSE, WHISK			resting place.
2018-33805-	650m	BLE,C-PIP,G-	10/01/2020	31/03/2028	Damage of breeding
EPS-MIT-2	Southwest	HORSE,L-			site, destruction of a
		HORSE, WHISK			resting place.
EPSM2010-	805m	C-PIP;L-	24/06/2010	23/06/2012	Destruction of a
1972	Southwest	HORSE;BLE			resting place
EPSM2013-	1km	L-	01/03/2014	30/09/2016	Destruction of a
6805	Southeast	HORSE;BLE;DAUB			resting place
2015-6700-	1.9km East	BLE,C-PIP,G-	06/03/2015	05/03/2020	Destruction of a
EPS-MIT		HORSE,L-			resting place
		HORSE,SER			

3.1.4 Historical records

The Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) were not contacted to provide bat records within 2km of the site. This was primarily due to the small scale of the proposed development.

3.2 Survey Results

3.2.1 Weather parameters

The weather conditions during the survey are detailed in the table below.

Table 5: Environmental variables during survey

	03/11/2022
Temperature	17°C
Relative Humidity	79%
Cloud Cover	70%
Wind	4/8
Precipitation	Light Rain

3.2.2 Building description

The building within the survey area comprised a stone built dwelling that had no main roof. The structure is referenced, as illustrated in the map in Appendix 1.

B1- Existing building

Building description

The building within the survey area comprised a stone mid terrace dwelling. In its current state, the main part of the building had no roof tiles due to ongoing roof works and was partially exposed to the elements (see Appendix 3, photo 3). The building had a small extension to the southwest elevation that was mono pitched with a natural slate tile roof and clay ridge tiles (see Appendix 3, photo 2). The building had no loft space that could be accessed as the building lacked ceilings between the upper level. Internally, the roof frame was of timber construction. The building is referenced, as illustrated in the map in Appendix 1.

Evidence of bats

No evidence of bats, such as droppings, urine staining and discarded insect wings/casings were noted during the survey. Any gaps identified during the survey had been previously filled with expandable foam, preventing access into the building by bats or birds (see Appendix 3, photo 4).

3.2.3 Breeding birds and other incidental observations

No evidence of breeding birds was recorded in or on the building during the survey

3.3 Evaluation – Likelihood of bats being present

Taking the desk based assessment and site survey results into account, the following value for roosting bats has been placed on each building.

Table 6: Evaluation of buildings/st	tructures o	n site
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Reference	Value for / Likelihood of bats	Brief summary of justification
	using the building for roosting	
B1- Existing	Negligible	The building comprised an exposed roof and no loft
dwelling		space, resulting in a draughty, bright and exposed
		space which was open to the elements. The building
		had a small extension to the southwest elevation that
		was had a natural slate tile roof, however, the tiles
		were tight fitted with no gaps identified. The building
		provides no suitable features for crevice dwelling bats
		to utilise. Some gaps were identified internally at the
		gable ends within the stonework; however,
		expandable foam had been used previously blocking
		any gaps identified preventing access points for bats
		and birds into the building. No evidence of bats or bat
		activity was noted within the building.

4.0 Conclusions and Recommendations

4.1 Conclusions and Impact Assessment

The PRA concludes that building B1 in its current state provides negligible habitat value for roosting bats. This is due to a lack of features on the building suitable for crevice dwelling species in conjunction with the building being bright, draughty and exposed to prevailing weather conditions. Any gaps identified within the stonework had been previously filled by expandable foam, leaving no access points into the building for bats or birds to utilise. No evidence of bat activity within the building was identified and it is considered that bats are likely absent from the building.

With a likely absence of roosting bats present within the building there are not anticipated to be any impacts on the species as a result of the proposed works.

Bats are protected under the Wildlife and Countryside Act and Conservation Regulations; see Appendix 4 for a summary of legislation protecting bats in the UK.

4.1.1 Breeding birds and other incidental observations

No active or historic bird nests were recorded during the survey. As such, it is unlikely that birds would be utilising the building. However, care should be given if nesting activity is observed during the development, then advice should be sought from a suitable experienced ecologist.

Legislation protects all wild birds whilst they are breeding, and prohibits the killing, injuring or taking of any wild bird or their nests and eggs. Certain species of bird, including the barn owl, are subject to special provisions; it is an offence to disturb any bird or their young during the breeding season.

4.2 Recommendations

4.2.1 Survey and assessment

Best practice survey guidelines (Collins, J. 2016) recommend additional surveys for all buildings assessed as having low to high suitability for roosting bats. The survey effort recommended at this stage is iterative and if bats are recorded emerging from the buildings, the survey effort should be adjusted to provide sufficient information to inform European Protected Species Mitigation licensing (EPSML). Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. Appropriate justification for this assessment is provided in Section 3.0 and Table 6 of this report. However, if bats are found during any stage of the development, work should stop immediately and a suitably qualified ecologist should be contacted to seek further advice.

Careful consideration should be given to any future lighting across the site. Although not confirmed, it is likely that bats are using the southern/northeast boundaries of the site for foraging/commuting. As such, a dark corridor should be maintained along these areas. Any future lighting should be kept to a minimum, and in like with guidance produced by the Bat Conservation Trust and Institute of Lighting Professionals: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/.

Recommendations for further survey or assessment associated with each building are provided in Table 7.

Table 7: Survey recommendations

Building Ref	Value for / Likelihood of supporting roosting bats	Recommendations
B1- Existing dwelling	Negligible Habitat Value	No further surveys or mitigation is required. However, site enhancements are recommended

4.2.2 Breeding birds

No evidence of breeding birds was recorded during the survey.

4.2.3 Enhancements

The installation of a single Schwegler 1FF or 2FN bat box could be considered; erected on the existing dwelling or any suitable trees on site within the property boundary. This should be installed facing a southerly direction, approximately 3-5m above ground level. Such a box would provide additional roosting habitat for bats present within the local area.

5.0 Bibliography

- British Trust for Ornithology (2022) <u>https://www.bto.org/how-you-can-help/providing-birds/putting-nest-boxes-birds</u>
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Google Earth (2022) accessed on 27/10/2022.
- Magic database (2022) <u>http://www.magic.gov.uk/MagicMap.aspx</u> accessed on 27/10/2022.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- National Planning Policy Framework (2019) <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_dat</u> a/file/810197/NPPF_Feb_2019_revised.pdf
- Natural England Designated Sites View. Ash Priors Common LNR (2022) Available at: <u>https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1008752</u>

Appendices

Appendix 1: Survey Plan



PRELIMINARY ROOST ASSESSMENT

Appendix 2: Proposed Site Plan







Appendix 3: Photographs

Appendix 4: Legislation and Planning Policy related to bats

LEGAL PROTECTION

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2.

Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

a) to impair their ability:

(i) to survive, breed, or reproduce, or to rear or nurture young

(ii) to hibernate or migrate

b) to affect significantly the local distribution or abundance of the species

• Damage or destruction of a breeding site or resting place

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant statutory authority (e.g. Natural England) will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008)

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Appendix 5: Desk Study Information

MAGIC

Designations

Habitats

PRELIMINARY ROOST ASSESSMENT

BACK PAGE

Contact details:

Quantock Ecology Ltd 01823 414457 enquiries@quantockecology.co.uk

> Quantock Ecology Ltd https://quantockecology.co.uk