



DARWIN ECOLOGY
integrating nature conservation

Unit 6, The Wincombe Centre,
Wincombe Business Park, Shaftesbury,
SP7 9QJ

Email: info@darwin-ecology.co.uk
www.darwin-ecology.co.uk

Preliminary Roost Assessment

Agricultural barns at Belmont
Temple
Goonhaven
Cornwall
TR4 9QF

September 2021

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QUALITY CONTROL		
The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.		
Prepared by	Senior Ecologist Sophie Higgins	29.09.21
Approved By	Senior Ecologist Olatz Gartzia	04.10.21
<p>This report remains valid for 12 months from date of issue.</p> <p>Survey data are valid for 12-18 months from the date the survey was undertaken.</p>		

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Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

1. EXECUTIVE SUMMARY

- 1.1. Darwin Ecology Ltd was commissioned by Cornwall Planning Group to undertake a Preliminary Roost Assessment (PRA) at the agricultural barns located on at Belmont, Temple, Goonhavern, TR4 9QF, OS Grid Reference SW77783 53339. The surveys are required to support a planning application for the conversion of existing agricultural barns to form a single dwelling.
- 1.2. During the PRA, no bats or evidence of bats were identified in either of the stable blocks.
- 1.3. Swallow nests were identified inside which showed recent signs of use.
- 1.4. The habitats around the agricultural barns include hardstanding to the west and south with grazed improved grassland to the south, west and north-west. A species rich Cornish hedge runs along the eastern boundary with areas of dense scrub habitat.
- 1.5. There is potential to include provisions for bats into the new dwelling.

2. INTRODUCTION AND BACKGROUND

- 2.1. Darwin Ecology Ltd was commissioned by Cornwall Planning Group to undertake a Preliminary Roost Assessment (PRA) at the agricultural barns located on at Belmont, Temple, Goonhavern, TR4 9QF, OS Grid Reference SW77783 53339. The surveys are required to support a planning application for the conversion of existing agricultural barns to form a single dwelling.
- 2.2. The survey and report follow the Bat Conservation Trust (BCT) Good Practice Guidelines (2016).

Site Overview

- 2.3. The site lies in a rural area approximately 727m south-west of Goonhavern, Cornwall (Figure 1). There are two agricultural barns on site forming an L shaped building with a hard standing yard to the south/east. An access track comes into the site from the north through an improved grassland field bounded by a species rich Cornish hedge with dense bramble scrub habitat.
- 2.4. The immediate area comprises a horse grazed improved grassland fields to the west, south and north-west and a road to the east. There are no other residential properties within the neighbouring area. A dense deciduous woodland lies 78m east of the site. This woodland continues south-east and south-west of the site. A series of ponds are present in the wider area (see Figure 2).



Figure 1: Site location within the immediate area (Copyright Ordnance Survey Leisure Maps, 2021)

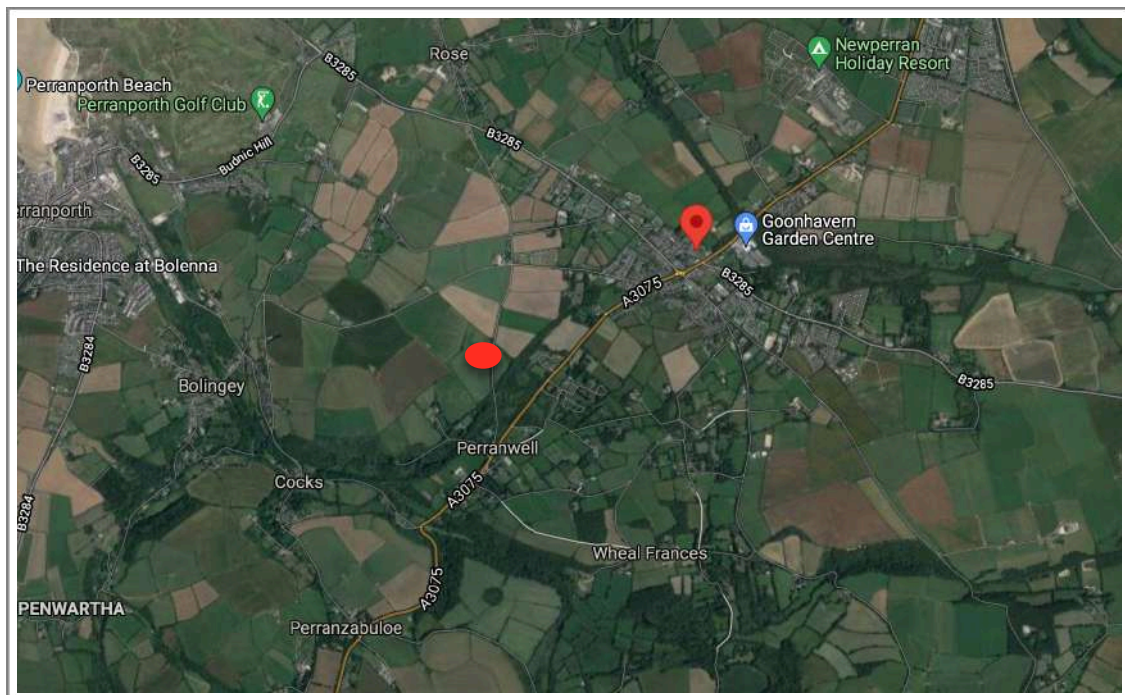


Figure 2: Site location within the wider area (Copyright Ordnance Survey Leisure Maps, 2021)

3. LEGISLATION & POLICY

General Wildlife Legislation

- 3.1. Wildlife in the United Kingdom (UK) is protected through European and national legislation, supported by national and local policy and guidance. Development can contribute to conservation and enhancement goals outlined by these various legislation and policy by retaining and protecting the most valuable ecological features within a site and incorporating enhancements to provide biodiversity net gain.
- 3.2. This section provides a brief summary of the principle legalisation and policy that triggers the requirement for PRA and further ecological assessments in the UK. The presence of protected species within a site are a material consideration during the planning process. PRAs and any necessary further ecological assessments provide an ecological baseline for a site and evaluation of the potential impact of proposals.
- 3.3. It is the responsibility of those involved with development works to ensure that the relevant legislation is complied with at every stage of a project. Such legislation applies even in the absence of related planning conditions or projects outside the scope of the usual planning process (i.e. permitted development projects or projects requiring Listed Building Consent only).

Bat Legislation

- 3.1. In England and Wales, all bat species and their roosts are legally protected under the European *Habitats Directive (1992)*; the *Conservation of Habitats and Species Regulations (2017)*; the *Wildlife and Countryside Act (1981) (as amended)*; the *Countryside and Rights of Way Act, 2000*; and the *Natural Environment and Rural Communities Act (NERC, 2006)*.
- 3.2. Barbastelle (*Barbastella barbastellus*), Bechstein's (*Myotis bechsteinii*), greater horseshoe (*Rhinolophus ferrumequinum*), lesser horseshoe (*Rhinolophus hipposideros*), brown long-eared, soprano pipistrelle (*Pipistrellus pygmaeus*), and noctule (*Nyctalus noctula*) bats are all species of principal importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.
- 3.3. You will be committing a criminal offence if you:
 - Deliberately capture, injure or kill a bat;
 - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
 - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; or
 - Intentionally or recklessly obstruct access to a bat roost.

- 3.4. The government's statutory conservation advisory organisation, Natural England, is responsible for administering EPS licenses that permit activities that would otherwise lead to an offence.
- 3.5. A licence can be obtained if the following three tests have been met:
- Regulation 53(9)(a) - there is "no satisfactory alternative" to the derogation, and;
 - Regulation 53(9)(b) - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" and;
 - Regulation 53(2)(e) - the derogation is for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

National Planning Policy

- 3.1. The *National Planning Policy Framework (2021)* aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.
- 3.2. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 170 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - 174 a) Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - 174 b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - 174 d) Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - 175) Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this

Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries;

176) Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimize adverse impacts on the designated area.

Specific policies regarding habitats and biodiversity comprise:

179) To protect and enhance biodiversity and geodiversity, plans should:

- a) identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

180) When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside of Sites of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the feature of the site that make it of special scientific

interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

- 3.3. *Circular 06/05: Biodiversity and Geological Conservation* provides guidance on the application of the law relating to planning and nature conservation and complements the *National Planning Policy Framework*.
- 3.4. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* provides the *UK Biodiversity Action Plan* and country level biodiversity strategies for England, based on the list of habitats and species listed on *Section 41* of the *Natural Environment and Rural Communities Act 2006*. These are considered the habitats and species of principal importance requiring conservation action.

4. METHODOLOGY

Desk Study

4.1. A desk study was undertaken for designated sites and bat species and habitat records within 2 km of the site:

- The MagicMap website was reviewed, to obtain information on any designated sites of nature conservation interest within 2 km of the site and details of any EPS licences issued within 2 km; and
- Google Maps and Ordnance Survey (OS) Leisure Maps was utilised to view aerial photographs, maps and mapnik data, and to assess the ecological context of the site within the wider landscape.

Preliminary Roost Assessment

4.2. Senior Ecologist, Sophie Higgins (Bat Licensed 2015-CLS - 18867) conducted a PRA on the 20th September 2021 in accordance with the following methodology:

External Survey

4.3. An investigation was carried out of external features with potential for use by roosting bats, such as gaps under roof and ridge tiles, gaps at soffit boxes or fascias. A search for bat droppings was made beneath each potential entry/exit point identified where accessible. The surveyor used binoculars and powerful, low-heat LED torch.

Internal Survey

4.4. An investigation was carried out of the roof void (including the floor and walls) for signs of bats roosting and the access potential into the roof void for bats. The surveyor looked for bats, bat droppings, likely access points, signs of feeding, dead bats, scratch marks and staining, and made a suitability assessment of the structure of the roof.

Limitations

4.5. Full access was provided and therefore no limitations were identified.

5. SURVEY RESULTS

Desk Study

5.1. Table one provides the results of the desk study.

Table 1: Desk Study Results			
Designated sites	Name and designation type	Reason for designation	Approximate distance from site
Within Site Boundaries	There are no designated sites within the site boundaries		
Within 4km of Site	Carnkief Pond Special Site of Scientific Interest (SSSI)	Carnkief Ponds is a sheltered stream valley. The site includes a wide range of habitats including swamp vegetation, deciduous woodland, herb-rich meadows and wet heath. The site supports a good assemblage of dragonflies.	1.3km south-east
	Carrick Heaths SSSI	Carrick Heaths comprises of 10 sites within 12km of Truro. The sites support rear plant flora.	2.2km south-east
	Ventongimps Moor SSSI	The moor supports dwarf shrub heath with areas of bog and willow-alder carr. The site supports rare damselflies.	1,86km south-east
	Penhale Dunes SSSI	Penhale dunes and slacks support an interesting assemblage of flora.	1.64km north-west
EPS Licences	EPSM-2013-5691 - allowed the destruction of a resting place for common pipistrelle and natterer's		1.3km south-west
	20143587-EPS— allowed the destruction of a breeding and resting site for brown long-eared bats.		1.12km north-east

Habitats

5.2. The agricultural barns lie along the eastern boundary of an improved grassland field, bounded by species rich Cornish hedges to the east. The field has post and wire fences with occasional semi-mature scattered trees. To the east of the access track is dense scrub of 3-4m.

Preliminary Roost Assessment

External Assessment

- 5.3. The agricultural barns were timber built with a corrugated metal roof. The buildings are single storey and are positioned in an L shape with a courtyard in the middle. The timber cladding is well sealed with no identified crevices between the timbers. Small gaps are present near the eaves which are wide and go straight into the agricultural barns. No bats were seen roosting in these areas.

Internal Assessment

- 5.4. Internally, there are gaps at the ridge of the agricultural barns where day light enters. Small gaps were seen where the ridge covers the corrugated metal sheeting. No bats were identified roosting in these areas. The timber frames fit well to the corrugated metal with no gaps identified. Internally, there was a lack of potential roosting features identified.

Nesting Birds

- 5.5. Swallow nests were identified inside the agricultural barns and a single bird box was hanging up on the southern gable end. There was no evidence of barn owls inside the agricultural barns



Photo 1: Southern view of agricultural barns



Photo 2: Eastern view of agricultural barns



Photo 3: Internal view of the roof.



Photo 4: Bird box inside agricultural barns

6. DISCUSSION AND RECOMMENDATIONS

Desk Study

- 6.1. There are no statutory designated sites within a 4km radius which are designated for bats.

Status of Bats on Site

- 6.2. The survey identified that the agricultural barns do not support a bat roost. The works to the building can continue with no impacts to bats.

Nesting Birds

- 6.3. Mitigation will be required to provide alternative nesting areas for swallows.
- 6.4. Under the Wildlife and Countryside Act, 1981 (as amended), all birds, their nests and eggs are protected during the breeding season, from killing/destruction, damage, and disturbance.
- 6.5. Swallows prefer to nest inside a building, preferring outbuildings which provide dark ledges such as beams to attach an open nest cup made from mud. The conversion of the barn will not have suitable features for swallows. However, purpose made covered nest box structure can be installed at the ridge of a gable wall or at the eaves of a building (Refer to Figure 3 for examples).
- 6.6. Conversion works will only take place once swallows have been confirmed to have left their nests, which usually occurs during September. If this time frame cannot be adhered to then an ecologist will attend site to check for swallow nests.



Figure 3: Examples of replacement swallow nest.

7. ENHANCEMENT RECOMMENDATIONS

- 7.1. National planning policy states that all developments should seek to enhance onsite biodiversity whether impacts on protected species are recorded or not. Incorporating enhancement features into new or renovated buildings should be carefully considered. These features can be simple and inexpensive, please see below for specific recommendations.

Bats

- 7.2. In the converted building there is potential to include integrated bat boxes and ridge features for bats.

Wildlife Beneficial Landscaping Scheme

- 7.3. Any future landscape planting should seek to enhance biodiversity, improve connectivity to the surrounding habitats and provide food and shelter for a wide range of wildlife. All amenity planting and formally landscaped areas should be designed using a variety of plant species beneficial for wildlife. These do not necessarily have to be native but should be chosen for their ability to provide nectar or fruit and should be non-invasive species. There are a number of specialist seed mixes available specific to certain soil types, growing conditions and designed to benefit different groups of species such as bees or butterflies and moths.
- 7.4. All habitats should be managed in a suitable way to encourage a wide variety of insects and other wildlife to use the site.
- 7.5. Further information regarding habitat creation, enhancement and management can be provided on request and submitted with further survey results for the final planning application.

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APPENDICES

APPENDIX 1 BATS & LIGHTING