Bat & Nesting Bird Survey

Gwarackewenbyghan, Boskennal,
St Buryan, TR19 6DF

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1. INTRODUCTION

1.1 Background

Mark Tunmore was instructed by Christopher Morris on 23 January 2023 to carry out a bat and nesting bird survey at a property known as Gwarackewenbyghan, located at Boskennal, St Buryan, Cornwall, TR19 6DF. The survey was requested in preparation for a planning application to carry out internal and extermal improvements on the granary building, to demolish the polytunnel and piggery and to construct living accommodation within the current footprint of a collapsed barn. The survey was carried out on 1 February 2023; the weather at the time was dry with 8/8 cloud cover, light winds and mild temperatures, thus providing optimal survey conditions.

1.2 Site description

The survey site (SW41242500) consisted of a complex of buildings located at the end of a short track leading from a minor road, approximately 650m south-east of the village of St Buryan in west Cornwall. For the purposes of this report the buildings are referred to as the granary, collapsed barn, piggery and polytunnel and are described individually below.

Figure 1. Eastern aspect of the granary.

Granary

This two-storey stone-built structure (Figure 1) was joined on to a dwelling on the west side of the building, which was not part of the landholding. The building is a Grade II listed building. The walls were tightly pointed and on the east side of the building two rows of square holes were present in two rows (Figure 2), totalling 14 in number. These were examined from a ladder and did not extend far enough down to support roosting bats due to sealing with cement (Figure 2); they did, however, have potential for nesting birds and the remains of a nest was found in one of them.

A flight of stone steps led up to the upper level on the north end of the building (Figure 3), which allowed close inspection of the wooden fascia there. Suitable gaps for roosting bats were present in places (Figure 4). At the front of the building the fascia was capped at the top and the gap was too large to allow use by bats; on the

southern gable a large gap at the eaves led into the roof void of the building, offering potential for bats (Figure 5).

Figure 2. Close-up of one of the square holes in the eastern aspect of the building.

Figure 3. Flight of stone steps on the north side of the granary.

Figure 4. Gap behind fascia on north side of the granary, suitable for roosting bats.

Figure 5. Open gap on the southern gable, leading into the roof void.

The hipped roof of the building was constructed of slate; occasional slates were missing, leaving suitable gaps; gaps were also present beneath ridge tiles in places. A single velux windows was present on the east side. Inside the building a boxed void was present on the upper floor but there was no access to this (Figure 6). On the ground floor a blocked fireplace was present.

Figure 6. Boxed void on the upper floor of the granary.

Figure 7. Ivy-covered lean-to on the south side of the granary.

Built on to the south side of the building there was a small lean-to, which was covered with a dense growth of ivy (Figure 7). The building was stone-built and cement rendered inside and out. No roof was present and the room was accessed from the west side via an open entrance (Figure 8); a recess was present above the entrance, on each side, which led to spaces within the wall (Figure 9).

Figure 8. Entrance to the lean-to on the west side.

Figure 9. Recess leading into the stonework at the edge of the lean-to entrance.

Where the granary joined on to the adjacent dwelling there was a gable of vertical slates on the adjacent building, which held potential for roosting bats; although not part of the property being surveyed, it could be ecologically impacted by any roof work taking place on the granary.

Collapsed barn

The remains of this single storey structure were located immediately to the east of the granary (Figures 10 & 11). It was stone built and the roof was missing with some stacked slates being the only evidence of this. The walls were largely intact but heavily covered with a growth of dense ivy, as well as some bramble and Buddleia; some gaps in the masonry were present in places, which held potentialfor roosting bats. The interior walls were covered with a lime render, which was in a poor state of repair. The remains of a tin roof were present at the back of the building, which provided a sheltered recess potentially attractive to nesting birds.

Figure 10. Eastern aspect of the collapsed barn, looking towards the granary.

Figure 11. Interior of collapsed barn.

Piggery

To the south of the collapsed barn was a domed structure known as the piggery, which was being used as a plant propogation area (Figures 12–14). The end walls and the lower part of the long sides were constructed of concrete block with the domed roof and some of the sides made of plastic sheeting (corex). It was accessed by two wooden doors at the northern end, which are kept closed. Soil and debris was present on the floor which may have made evidence of bats more difficult to see. Some gaps were present between the plastic sheets which made access by bats possible.

Figure 12. Southern and western aspect of the piggery.

Figure 13. Northern and eastern aspect of the piggery.

Figure 14. Interior of the piggery.

Polytunnel

Adjacent to the piggery were the remains of a collapsed polytunnel, which consisted of the steel framework and a few hanging fragments of the netting that formed the original structure (Figure 15).

Figure 15. Remains of the polytunnel.

The buildings were located within wooded grounds and surrounded by an agricultural landscape with arable and pasture fields with an extensive network of hedgerows. A narrow wooded valley is present approximately 400m to the south-west, which extends to the coastline, approximately 2km away. The landscape thus offers a high degree of habitat connectivity and quality foraging habitat for bats with relatively low levels of light pollution.

1.3 Proposed works

No plans were available at the time of writing and the following summary is based upon a verbal description of the likely works provided by the client.

Proposed work to the granary include fitting of new windows, possibly an extra velux window, replacing and enlarging the doors, putting a roof on the lean-to, some roof repairs and change to the ceiling to make it vaulted.

The collapsed barn will be strengthened by removing vegetation and repointing; living accomodation will be constructed within the footprint.

The piggery and the polytunnel will be demolished and a stuido will be built in the footprint.

1.4 Aims of the survey

The aims of the survey were to assess the potential for the buildings to support roosting bats, and to search for any evidence of use. Also to assess the suitability of the buildings to support nesting birds.

1.5 Survey limitations

Due to the structure of the ceiling in the granary there was no access to the enclosed roof void and it is not known if evidence of bats was present there. In the piggery, presence of soil and debris on the ground made searching for bat evidence difficult and the presence of just a few droppings could have been overlooked.

1.6 Evaluation

The potential of the site for roosting bats is categorized using the terms specified in *Bat Surveys for Professional Ecologists* (Collins, 2016), assigning suitability to one of four categories specified below:

- Negligible. Negligible habitat features on site likely to be used by roosting bats.

- Low. A structure with one or more potential roost sites that may be used by individual bats opportunistically but which does not provide appropriate conditions to be used regularly or by large numbers of bats.

- Moderate. A structure with one or more potential roost sites that could be used by bats but is unlikely to support a roost of high conservation value.

- High. A structure with one or more potential roost sites with obvious suitability for use by large numbers of bats on a more regular basis.

2. METHODS

2.1 Summary of methods

A visual survey was carried out, searching for evidence of bat use, including droppings, feeding remains and staining from urine or grease from fur. A high-powered torch was used to examine all parts of the buildings,

including behind fascia boards and lintels. A visual search was also carried out for evidence of nesting birds: presence of nests, accumulation of droppings or alarm calls from birds.

2.2 Surveyor information

The survey was carried out by Mark Tunmore (Natural England license number 2015-14995-CLS-CLS), who has been a licensed bat worker since 2008 and has worked extensively upon development projects in Cornwall and other parts of the UK.

3. RESULTS

3.1 Summary

No evidence of bats was found.

An old nest of a Wren *Troglodytes troglodytes* was present in one of the recesses above the door frame in the granary lean-to (see Figure 16).

Figure 16. Disused nest of Wren *Troglodytes troglodytes* in the door frame of the granary lean-to.

3.2 Assessment

With reference to the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) the granary is assessed as being of moderate potential for roosting bats due to the presence of internal and external features that could provide suitable roost areas. The collapsed barn is also of moderate potential, whilst the piggery is of low potential and the collapsed polytunnel is of negligible potential.

4. LEGISLATION AND POLICY

4.1 Bats

As a result of the substantial declines in bat populations that have taken place over the last century bats are legally protected by domestic and European legislation. All British bats are European Protected Species (EPS), listed under Annex IV (a) of the EC Habitats Directive. They receive legal protection under the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019. Additional legal protection is afforded under Section 9 of the Wildlife and Countryside Act (as amended by the Countryside and Rights of Way Act 2000), all British Bats being listed under Schedule 5 of the Act. In combination this makes it an offence to:

- Intentionally kill, injure or take a wild bat
- Intentionally or recklessly damage, destroy or obstruct access to a wild bat roost (regardless of whether bats are present at the time or not)
- Intentionally or recklessly disturb a wild bat while it is occupying a structure or place it uses for shelter or protection

Since 2007 it is no longer a valid defence to show that the killing, capture or disturbance of a species covered by the Conservation Regulations or the destruction or damage of their breeding sites or resting places was the incidental or unavoidable result of an otherwise lawful activity.

4.2 Nesting birds

All nests and eggs of wild birds are protected under Part 1 of the Wildlife and Countryside Act 1981 (and amendments).

4.3 Planning policy

The National Planning Policy Framework (NPPF) 2018 sets out government policy with regard to the consideration of biodiversity in planning decisions. The presence of a protected species is a material consideration when a planning authority is considering a development proposal that would be likely to cause harm to the species or its habitat. The NPPF states that if significant harm 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.

Under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 local authorities have a duty to have regard to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. The England Biodiversity List was published in compliance with section 41 of the Act and includes 941 species which make up the UK Biodiversity Action Plan Priority Species list. This includes seven of the UK's bat species (listed below).

The UK Biodiversity Action Plan (UK BAP) is the national strategy developed in response to the Convention on Biological Diversity signed in Rio in 1992. It identified the species requiring priority action to address their causes of decline and take action to maintain and conserve their biodiversity. Listed bats are:

- Barbastelle *Barbastella barbastellus*
- Bechstein's Bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Soprano Pipistrelle *Pipistrellus pygmaeus*
- Brown Long-eared Bat *Plecotus auritus*
- Greater Horseshoe Bat *Rhinolophus ferrumequinum*
- Lesser Horseshoe Bat *Rhinolophus hipposideros*

5. RECOMMENDATIONS

The proposed plans have potential to impact upon features that may hold roosting bats. In keeping with the national bat survey guidelines (Collins, 2016) befitting a moderate potential roost site, two emergence surveys are recommended at the granary and the collapsed barn between May and September, at least one of which must be between May and August.

Although the piggery is of low potential for bats and would normally require a single emergence survey, there are no suitable features for day roosting bats and an emergence survey would be pointless. The building does offer potential for night roosting bats, however, and a period of remote monitoring of seven nights is recommended between May and August. No surveys of the polytunnel are necessary.

Depending upon the findings of these additional surveys, an appropriate mitigation strategy will need to be formulated to maintain the favourable conservation status of any bat population found; this may involve carrying out the work at specific times of year and providing alternative roost areas. Until the surveys are completed no work must take place on the granary, collapsed barn and the piggery.

A precautionary approach to nesting birds must be adopted during building works. Birds may nest between March and September inclusive and if any nests are found within 5m of the works then work in that area must cease until nesting has finished. It is very likely that birds will nest in the granary lean-to, the eaves of the granary and the holes present in the walls of this building, as well as in parts of the collapsed barn; the poggery also offers potential for nesting birds. The safest way to avoid risk is for work to be scheduled to take place outside the nesting season; if work needs to take place during the nesting season then it must be done with full confidence that no nesting birds are present, in consultation with the ecologist.

It is possible to make specific provision for wildlife within new accommodation by the incorporation of dedicated roosting / nesting features. Cornwall Council (2018) requires that all new *residential* units provide at least one bat or bird box / brick. In addition, bee bricks should be provided at a rate of one for every two residential units. A number of products including bat-bricks, access slates / tiles, bird nest boxes and bee bricks are commercially available and can easily be built into the new development. Appropriate products should be specified on more detailed development plans with the input of an ecologist.

The findings of this survey report are valid for one year and may require updating if works do not take place within this period.

6. REFERENCES

Collins, J. (ed.), 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). Bat Conservation Trust, London.

Cornwall Council (2018). Cornwall Planning for Biodiversity Guide
https://www.cornwall.gov.uk/media/v1roqk0x/planning-for-biodiversity.pdf