



Scoping Survey for Bats

November 16th 2019

Surveyor: Nicholas Bunn

Address: 33 Glanbrydan Avenue, Uplands, Swansea SA2 0HX

License No:
S086667/1

Client:
Hannah & Matthew Rees

Survey Address: 89 Wenallt Road, Tonna, Neath SA11 3QH

Grid Reference: SS 779 988

Signed: 

Date: 25th November 2019

Executive Summary

A full daytime inspection of the above property was carried out on the 16th November 2019. The purpose of the inspection was to establish if the building presents suitable bat roosting opportunities.

No evidence was seen during the building inspection to indicate bat usage. All soffits and fascia were uniformly tight to the walls offering limited cavity entrances for bats to use as roosting spaces. The cavities which were present were traced into the roof void, with no evidence of use by bats.

Extensive inspections were carried out in the roof void with no evidence of bat guano, live bats or any other evidence of bat occupation such as moth/butterfly wings, urine staining or fur marks to potential crevices.

It was determined, based on the evidence found, that this building is not suitable, due to limited crevice space and lack of any signs of bat use, to support roosting bats.

No further visits were made.

Contents

Executive Summary	2
Contents	3
1. Introduction	4
1.1 Purpose of Survey	4
1.2 Proposed Development	4
1.3 Site Context	4
1.4 Survey Details	5
1.5 Previous Reports	5
2. Methodology	5
2.1 Desk Study	5
2.2 Survey Methodology & Details	5
3. Results	7
3.1 Preliminary Roost Assessment	7
3.2 Roost Characterisation	7
3.3 Bat Activity Summary	7
4. Discussion	7
4.1 Data Evaluation	7
4.2 Limitations of Survey	7
4.3 Relevant EU & UK Legislation	7
5. Impact Assessment	8
5.1 Summary	8
5.2 Considerations for External Lighting	9
5.3 Notes on Roofing Membranes	10
6. Recommendations	10
6.1 Further Surveys	10
6.2 EPS License Requirements	10

1. Introduction

1.1 Purpose of Survey

The survey was conducted to produce a summary of the potential of this building to provide roosting opportunities for bats and to establish whether there is evidence to support this potential.

1.2 Proposed Development

The proposed development is a demolition of the property with a new build proposed on or near the same footprint.

1.3 Site Context

The site is located in a rural area to the south of the village of Tonna (see red arrow, Figure 1). There is a large area of woodland (Wenallt Wood) immediately to the north of the site, and Mosshouse Wood lies 500 m south of the site. There are additional areas of woodland scattered in all directions from the site. The River Neath flows 500 m to the north at its nearest point.

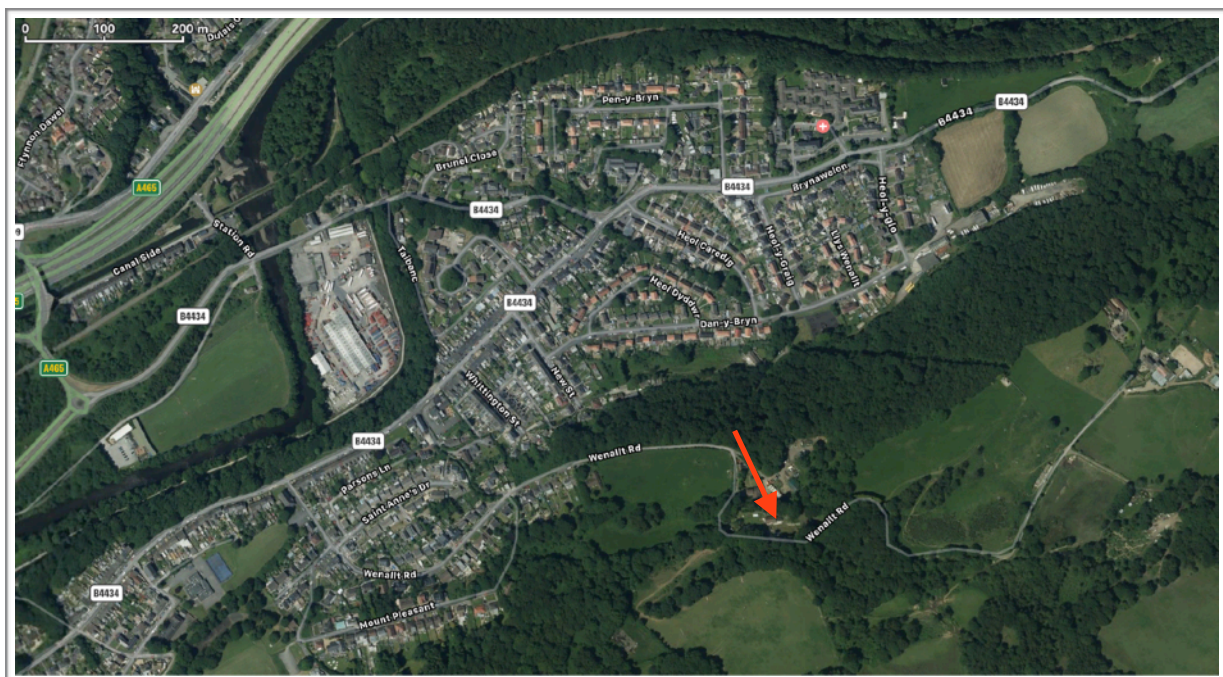


Figure 1: Site setting (arrowed).

1.4 Survey Details

Survey Personnel:

- **Nicholas Bunn:** Experienced and licensed lead surveyor who has been involved in bat conservation for many years.

Specialist equipment used:

- High powered LED LENSER hand held torch (P17.2) and head torch (H14.2)
- Binoculars

Pertinent survey data:

Table 1.

Date of Survey	Time on site	Temperature	Wind Speed	Grid Reference
16.10.2019	14:00 (Scoping inspection)	11°C	Very Light	SS 779 988

1.5 Previous Reports

No previous data regarding bat surveys was made available prior to this survey. It is presumed that no survey for bats has ever taken place at this property.

2. Methodology

2.1 Desk Study

A desktop study was carried out using aerial photographs to determine suitable nearby foraging habitats and potential flight paths. A data search was not deemed necessary as one visit was sufficient to determine that the building is unsuitable for bat use.

2.2 Survey Methodology & Details

A daylight visual assessment of the building was carried out, which involved an external inspection of the structure, seeking signs of the presence of bats. The survey involved examining outer surfaces from the ground and looking for signs such as bat guano on ledges, sills and walls.

A high powered lamp was used to examine potential access and roosting areas. Any gaps or crevices in the structures were inspected as closely as possible. The context of the buildings within the surrounding landscape was also assessed.

External/internal features and cavities for potential bat use were assessed as very unlikely for the following reasons:

- All of the fascia/soffit boards are fitted tight to the walls (see Photos below).
- Moulded clay roof/ridge tiles are also tightly fitting (see Photo 4) and presented no gaps for bat entry.
- No bat guano was found on any external walls, floors, window ledges etc.,
- The roof void did not present any evidence of bat occupation whatsoever, supporting the view that this property does not have current or past use by bats.



Photo 1: West facing gable end



Photo 2: West facing wall/soffit interface



Photo 3: South facing elevation



Photo 4: Tight fitting moulded clay roof tiles



Photo 5: West facing gable end



Photo 6: Side elevations

3. Results

3.1 Preliminary Roost Assessment

The building was erected sometime in the Mid 20th C and is a brick built bungalow on a concrete base. The roof comprises moulded clay tiles with a small amount of tight lead flashing around two chimneys.

3.2 Roost Characterisation

This building was deemed to have very low potential for bat use.

3.3 Bat Activity Summary

No bats or evidence of current/past bat occupation was seen during the inspection. However, Mid-November is not considered optimum time for bat activity as it is within the traditional hibernation period October-March. However, bats will become active at various periods within this time frame, especially in milder periods of autumn, winter and early spring.

4. Discussion

4.1 Data Evaluation

No data relating to positive bat use of this building was collected during the survey.

4.2 Limitations of Survey

The pertinent limitation of this survey is that the external components of the roof were not directly accessed but were viewed in sufficient detail with binoculars from the ground.

4.3 Relevant EU & UK Legislation

Planners and Natural England will require that the site maintains, restores or creates such features on completion of the work that will encourage continued/new use of the location by bats, and that the status of the species is not jeopardised if they consent to the development proceeding.

All bats and their roosts are protected by various legislation including:

- 1. The Wildlife and Countryside Act 1981 (as amended).**
- 2. The Conservation of Habitats and Species Regulations 2017**

This offers comprehensive protection and the following section applies to planning:

3.2 Regulation 9(5) provides that “a competent authority, in exercising any of their functions, must have regard to the requirements of the Habitats Directive so far as they may be affected by the exercise of those functions. A Planning Authority is a competent authority for the purposes of these Regulations and is exercising a function in deciding whether or not to grant planning permission.”

Under these laws it is an offence to deliberately kill or injure a bat, to disturb a bat or to damage, destroy or block access to a roost. Bat roosts are protected under these laws whether the animals are present at the time of survey or not. Natural Resources Wales are empowered to issue licences to carry out work to bat roosts for reasons of overriding public interest.

Under the Wildlife and Countryside Act 1981, all nesting birds and their nests are protected. Once a bird places a single piece of material then it constitutes a nest. It is then an offence to cause damage to the bird, nest, eggs or chicks and immediate habitat which is likely to result in damage by causing the bird to desert its nest. This covers all bird species, with a small number of exceptions (pest species which can be controlled by special license).

5. Impact Assessment

5.1 Summary

It would be desirable to encourage bats to use the building post development by incorporating suitable accommodation for bats.

Crevice dwellers in general will typically find roosting opportunities at gable end apexes provided suitable gaps are present. Other areas are also used i.e. behind barge boards, within soffits, beneath roof tiles and ridge tiles, around chimneys, etc., this list is not exhaustive but illustrates the diversity of locations within a building that bats will use for roosting purposes.

It will not be practical to incorporate all of these features but one or more of the following would be desirable to enhance the potential for bats to roost in the property post development:

- Gaps behind hanging tiles and/or weather boarding
- Small gaps behind fascia boards and entrances to soffits

- Specialist roof tiles designed to allow bats to crawl into the void between roof tile and felt
- Specialist bat bricks to be incorporated into walls at suitable height (optional)
- Mortar free end ridge tiles to allow access within the gaps
- Bat boxes may be placed on the building itself or nearby trees.

If any of the above features are incorporated, the surveyor will monitor the building post development to assess any potential success in bat use of the new features.

5.2 Considerations for External Lighting

External lights can delay the timing and prolong the duration of emergence for some species. External lighting reduced the number of *Pipistrellus pygmaeus* emerging from roosts (Downs et al. 2003)¹.

Bats may miss the peak in abundance of insects that occurs at dusk, thereby reducing the quality of foraging time, impacting the fitness of individuals and the roost as a whole. Lighting which spills directly into a roost can cause roost abandonment or death and should be avoided. Such disturbance would constitute an offence.

Illumination of a roost entrance can have consequences for predation and connectivity. Bats may be forced to use alternative exits if available. Alternative exits may be suboptimal in terms of predation risk. Alternative exits may increase predation risk due to their location in relation to the surrounding landscape (e.g., bats may be forced to fly across open areas or roads once leaving the exit) or due to their situation (e.g., located low to the ground or near a window sill enabling easy access for predators such as domestic cats)². External lighting should be kept to a minimum and not be directed at roost entrances or emergence pathways.

¹ Downs, N.C., Beaton, V., Guest, J., Polanski, J., Robinson, S.L. & Racey, P.A. (2003) The effects of illuminating the roost entrance on the emergence behaviour of *Pipistrellus pygmaeus*. *Biological Conservation*, 111, 247-252.

² Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation

Lighting should be positioned below the horizontal plane of bat emergence points and have Passive Infra Red (PIR) triggers to minimise illumination.

5.3 Notes on Roofing Membranes

When bats and breathable roofing membranes come together, anecdotal evidence suggests it may not end well for either party. There have been some reports of bats becoming entangled in membranes and damage to membranes caused by bats.

When/if roofing felt is to be installed in a roof that is used by bats then the use of bituminous roofing felt is encouraged. Bituminous felt is dark-coloured, with a rough surface that bats can grip onto and will help maintain a suitable and safe environment for bats within the roof void/structure.

Breathable Roofing Membranes (BRMs), made from spun-bond polypropylene/polyethylene filaments, should not be installed into a roof that is used by bats.

The long fibres that make up BRMs have a tendency to be pulled out by roosting bats and pose an entanglement threat to the bats.

BRMs are not obligatory under any Building Regulations. Ventilation, regardless of the roofing felt or BRM used, is still required (see British Standard BS 5250:2011).

6. Recommendations

6.1 Further Surveys

No further action is necessary with respect to bat monitoring of this property based on the findings of this survey.

6.2 EPS License Requirements

No licensing is required with regard to bats at this property.