



**GARAGE AT GRAWEN HOUSE, GRAWEN LN, CEFN COED-Y-
CYMMER, MERTHYR TYDFIL**

**BAT SURVEY
ISSUE 1, VERSION C**

MAY 2020

Judith Davies

GARAGE AT GRAWEN HOUSE

Bat Survey Report

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EXECUTIVE SUMMARY

It is proposed to change the use of an existing garage and to extend it in order to convert the building into a single bedroom dwelling.

An initial bat inspection survey was undertaken in May 2020. The results indicated that the building is of low potential for roosting bats and as such a single emergence survey was undertaken.

The surveys failed to identify any bats roosting within the property.

A European Protected Species Licence will not be required in this instance unless bats or evidence of bats are discovered during the works. To safeguard this unlikely eventuality, works to the roof will be carried out in accordance with a method statement and supervision by an experienced licensed bat ecologist.

No evidence of breeding birds was found on the exterior or interior of the building.

1 INTRODUCTION

1.1 Background

BE ECOLOGICAL LTD was commissioned by Judith Davies to undertake an initial bat inspection survey and subsequent activity survey of a garage at Grawen House, Merthyr Tydfil in support of a planning application to convert the building to a residential dwelling.

This report includes the findings of the aforementioned bat activity surveys undertaken in the appropriate season.

The surveys were undertaken in line with the current guidance on standards for bat surveys (Bat Conservation Trust, 2016¹).

1.2 Site description

The garage subject of this survey is located at Grawen House, Cefn-Y-Coed-Y-Cymmer, Merthyr Tydfil (Figures 1 and 2). The property is a two storey brick-built structure under a hipped slate roof, the ridge of which is oriented generally north west to south east. In recent years there has been a shed adjacent to the north western elevation, however, this is no longer present.

The roof appears to be in a generally good order, however, there are possibly a small number of access points beneath raised hips and ridge tiles. No slipped slates were noted on the pitches of the roof. External timberwork (eg. Fascias, barge boards etc) appears to be in good condition with no gaps beneath them. These areas are tightly sealed.

The property is situated within an enclosed tarmac/brick yard on the fringe of Cefn Coed. There are houses and associated infrastructure to the east and south. There is a garden to the south with an extensive area of woodland to the south and north west of the site. The Af64 severs the woodland at the south of the property. There is good connectivity to the wider landscape.

¹ *Bat Surveys for Professional Ecologists - Good Practice Guidelines* (Collins, J (Ed). BCT, 2016)



Figure 1: Detailed view of the garage (arrowed red)



Figure 2: View of wider landscape surrounding the garage (property arrowed red)

1.3 Proposed development

It is proposed to convert and extend the garage into a one bedroom residential dwelling.

The existing roof lights on the south western elevation are to be converted to dormer windows and the building is to be extended on the north western elevation. The extension will be tied into the existing roof. Please see drawing Grawen House 13 for further details



2 LEGISLATION & POLICIES

2.1 Conservation of Habitats & Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) provides safeguards for European Protected Species (those listed under Annex IV Habitats Directive). With regards to bats, this makes it an offence to:

- Deliberately (or recklessly in Scotland) capture, injure or kill a bat
- Deliberately (or recklessly in Scotland) disturb a bat in a way that would (significantly in Scotland) affect its ability to survive, breed or rear young (or hibernate or migrate in England, Wales and Northern Ireland) or (significantly in England, Wales and Scotland) affect the local distribution or abundance of the species.
- Damage or destroy a roost (this is an 'absolute' offence)
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat

2.2 Wildlife & Countryside Act 1981

The Wildlife & Countryside Act 1981 (as amended) is the legislation for England and Wales for nature conservation, making it an offence to:

- Intentionally or recklessly disturb a bat at a roost
- Intentionally or recklessly obstruct access to a roost

2.3 The Environment (Wales) Act 2016

The Environment (Wales) Act 2016 requires that all public authorities, when carrying out their functions in Wales, seek to "maintain and enhance biodiversity" where it is within the proper exercise of their functions. In doing so, public authorities must also seek to "promote the resilience of ecosystems". This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act. In Wales, this legislation replaces and enhances the Natural Environment and Rural Communities Act (2006) which sought to raise the profile of biodiversity and to make sure that it is considered in all local authority decisions by ensuring that "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.". Other elements of NERC 2006 may still apply.

3 METHODOLOGY

3.1 Data Search

The South East Wales Biodiversity Records Centre (SEWBRc) were formerly requested to supply a Bat and Roof-nesting Birds (BARB) survey for the site (0201-081). The survey to provide; bat records within a 2km buffer, roof nesting birds within 150m buffer plus a list of all Special Areas of Conservation (SAC) and sites of Special of Special Scientific Interest (SSSI) designated for bat species within a 10km site buffer.

3.2 Survey Objectives

- To carry out an initial bat inspection survey along with the recommended activity surveys
- To present the above details and if necessary recommendations for mitigation, future research and compensation within this report.
- To carry out a scoping survey for breeding birds

3.3 Survey Summary

The bat survey comprised of three parts:

- Part 1- Initial bat inspection survey
- Part 2- A data search
- Part 3- A single activity survey

3.4 Surveyor Information

The survey was run by Beth Evans. Beth is the owner of BE ECOLOGICAL LTD and has a postgraduate degree in Environmental Biology: Conservation & Resource Management, specialising in British bats. Beth has six years' experience of ecological surveys, both in a small scale and large multi-disciplinary context. Beth also holds Natural Resources Wales and Natural England bat licences to disturb and handle bats.

Beth Evans was assisted during the activity surveys by Stephen Shutt and Sylvia Sanyalou. Stephen is an experienced licensed ecologist and Sylvia has undertaken a number of surveys with BE Ecological Ltd and is currently training to be an ecologist.

3.5 Internal & External Inspection

An initial inspection survey was carried out on 7th May 2020 to search all buildings, both externally to identify potential bat roosting areas and signs of bat use including; live bats, dead bats, droppings, urine staining, grease marks and discarded prey items. The buildings and all areas/items of interest were recorded and photographed. Extension ladders/steps were used to safely access roof areas and fascia boards etc; where no safe access was available the survey was conducted using, close focus binoculars and/or a high powered lamp.

3.6 Activity Surveys (emergence/re-entry surveys)

Building 'emergence' and 're-entry' surveys were carried out on the following dates, times and weather conditions. Climatic conditions including rain, wind, temperature and cloud cover were recorded for each survey using a hand held Kestrel 4500 weather station.

3.6.1 Survey 1- 16th May 2020

A dusk survey was carried out on 16th May using two surveyors, positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with cameras and Batlogger M detectors.

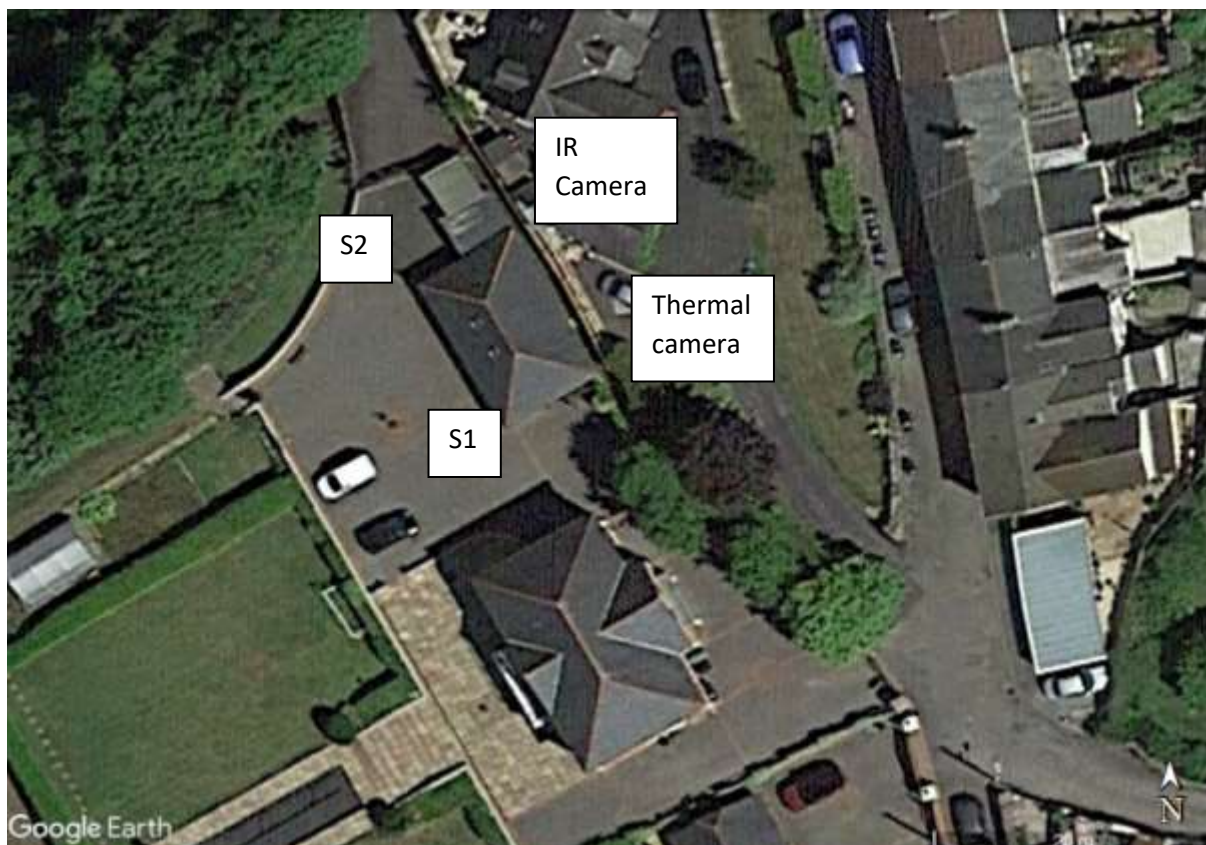


Figure 3: Approximate surveyor locations

3.7 Survey limitations

Any survey for bat species can only be a series of snapshots in time. Bats are highly mobile, long lived creatures (capable of living up to 30 years, sometimes longer) with complex social structures and utilising multiple roost sites within a year. The implications of this are that surveys and surveyors have to make informed assumptions based on observations, recorded data, local information and a detailed knowledge of the species.

4 RESULTS

4.1 Data Search

This site is not within 10km of either a SSSI or SAC that has been designated for bat species within Wales.

A total of 294 records were returned within the data search. The closest bat record appears to be of a large pipistrelle sp. roost approximately 180m from the site. The second closest roosting record is from a bridge, approximately 260m from the site. The record is of a suspected maternity roost of pipistrelle bats. Other records in the wider vicinity include species such as pipistrelle, myotis sp., noctule, lesser horseshoe and daubentons.

12 bird records were returned within the data search. The closest of which (522m away) refer to swift, red start, blue tit, swallow and kestrel.

4.2 Inspection survey

4.2.1 External survey results

The survey carried out by BE Ecological Ltd revealed no droppings or evidence of bats on the exterior of the building, however, access and roosting potential for bats was identified in the form of:

- Small number of potentially lifted ridge/hip tiles

Please see appended plates for photographs of the property exterior. Other than these areas, the building is well sealed with no obvious gaps and no apparent slipped slates on the pitches of the roof.

As such, the property was categorised as being of low potential for roosting bats and further emergence/re-entry surveys were recommended.

A single sparrow was seen on the roof of the main house.

4.2.2 Internal survey results

Internally, the property is split into two floors. The first floor only covers half of the ground floor (to the south east). This area is boarded out and has a vaulted ceiling. There is no roof void above this area, only the gap between the internal ceiling and roof covering.

The remainder of the garage is open from floor to ridge and is a typical rafter and purlin style roof. The area is currently used for storage. The timbers are extremely clean, in good order and are lined with bitumen felt. The timbers sit on the wall plates of the garage, sealing the building off from any access via the soffits.

No bats or evidence of bats was found in this location.

4.3 Activity surveys

The surveys were undertaken as per the table below:

4.4 Survey Schedule and Weather Conditions

Table 1: Schedule and weather conditions

Visit	Date (sunrise) (sunset)	Start End	Time	Temp C	Wind	Cloud Cover	Notes
Survey 1 16.05.2020	21:03	Start	20:30	14	Low	30%	Dry evening, insects flying
		End	23:05	12	Low	15%	

4.5 Activity Survey Results

4.5.1 Survey 1- 16th May 2020

Only a total of five bat calls were recorded throughout the survey. The first bat heard was a common pipistrelle, heard at approximately 15 minutes post sunrise. The bat was not seen. A further four bat calls were heard throughout the course of the survey, another belonging to common pipistrelle, two belonging to a soprano pipistrelle and a single call belonging to a myotis sp. (likely a whiskered bat).

No bats were seen interacting with or emerging from the building on this date. Bat activity had ceased by 22:30 and no further bats were seen or heard throughout the course of the survey.

4.6 Identified Roosts

4.6.1 Survey 1

No bats emerged from the building on this date.

4.7 Conclusion

Overall levels of bat activity at the site were extremely low at the site with only five bat calls heard throughout the course of the survey. There is not a vast amount of vegetation in close proximity to the building for foraging and commuting. It is likely that insects will be found along the wooded boundaries rather than over a brick yard and therefore it is considered likely that there are much better habitats for bats available at this location.

Based on the current evidence, it is considered that mitigation and an NRW development licence will not be required unless bats or evidence of bats are encountered during the works.

In addition to the above, the proposed works do not impact any of the potential access points identified. The work is only to replace the existing roof lights with dormer windows and the tie in an extension on the north western pitch.

As such it is considered that the works can proceed providing they are undertaken in line with a method statement and ecological supervision.

4.8 Breeding Birds

No evidence of breeding birds was found throughout the property. A single sparrow was observed on the main dwelling during the inspection survey.

5 INTERPRETATION & IMPACT ASSESSMENT

5.1 Active Season Usage

It is considered that the property is not a bat roost.

5.2 Hibernation Season Usage

It is unlikely that bats will use the property for hibernation purposes

5.3 Breeding Birds

No evidence of breeding birds was found throughout the property.

5.4 Ecological Impacts of development

The impacts of the development have been assessed using the current information of the proposed works. Should any changes be made to the proposed works, the assessment will need to be reviewed and amended as necessary.

It is considered unlikely that the property is a bat roost and no evidence of nesting birds was found throughout the property. As such bats and birds are unlikely to be affected by the proposed development.

Mitigation will not be required.

6 ENHANCEMENT

6.1 Bats

A Schwegler 1FF bat box will be attached to the north west elevation of the property. Should the 1FF prove difficult to source, an eco bat box (crevice box) <https://www.nhbs.com/title?slug=eco-bat-box> will be installed in its place.

6.2 Birds

A Schwegler 1SP Sparrow Terrace or the following <https://www.nhbs.com/sparrow-terrace-nest-box> will be attached to the south eastern elevation of the property.

7 RECOMMENDATIONS

7.1.1 Timing

It is considered that the building is not a bat roost, as such, the work can be undertaken at any time of year.

7.1.2 Timber/roofing materials

It is considered that the building is not a bat roost, as such, restrictions on roofing materials are not required.

7.1.3 Lighting

Potential access points and bat boxes will not be directly illuminated. All external lighting will face downwards and be set on timers to ensure that bats can use the area should they wish. – In addition to this, any onsite lighting will conform to the following guidelines:

<https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

7.1.4 Bat Licensing

A European Protected Species Licence obtained from Natural Resources Wales will not be required before any works commence. If at any point bats or evidence of bat is found, all works must cease and NRW consulted. Further surveys and/or a licence may be required prior to works recommencing

7.1.5 Supervision

Supervision for the removal of tiles for the tying in of the extension and for the creation of dormer windows is required.

8 METHOD STATEMENT

1. A suitably licenced and experienced ecologist will be on site/call for the duration of the works.
2. Before any work begins on site, a briefing for contractors and other site-staff 'toolbox talk' will be given by an ecologist. The briefing will cover the issues in respect of protected species they may encounter on site, where they might find them, methods of working, and what they need to know to avoid committing an offence. Every briefing attendee will be provided with a copy of a Method Statement and the contact details of an ecologist and Natural Resources Wales.
3. All suitable bat roosting features will need to be removed by hand (slates) and inspected by the onsite bat ecologist.
4. The tiles will also need to be removed manually, one at a time, with the bed and underside inspected for bats/sign of bats by the onsite ecologist before moving onto the next.
5. The area that the extension is to be tied into will be checked for the presence of bats by the onsite ecologist.
6. Only when the onsite bat ecologist is happy that there is no further potential for bats, may he/she leave and the works continue with no supervision. A licensed bat ecologist will be on call for the remainder of the works. In the unlikely event that bats are found during a period that the licensed bat ecologist is not present on site, all works must cease and the licenced bat ecologist engaged.
7. If bats or their signs are found, a EPS licence may be required before works can legally resume.

9 REFERENCES

Bat Conservation Trust. (2016) *Bat Surveys - Good Practice Guidelines*. Bat Conservation Trust, London.

Mitchell-Jones, A.J. & McLeish, A.P. (2004) *The bat workers' manual (3rd Edition)*. Joint Nature Conservation Committee.

Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. Natural England

The Conservation of Habitats and Species Regulations 2017 (as amended) (HMSO).

The Natural Environment and Rural Communities Act (2006) (as amended) (HMSO).

The Wildlife and Countryside Act 1981 (as amended) (HMSO).

APPENDIX A- SITE PHOTOGRAPHS

Plate 1- north and south western elevations



Plate 2- south western elevation



Plate 3- south eastern elevation



Plate 4- photograph of vaulted ceiling



Plate 5- photograph of north western end of garage



Plate 6- photograph of south eastern end of garage



Appendix B- Drawings showing enhancements

