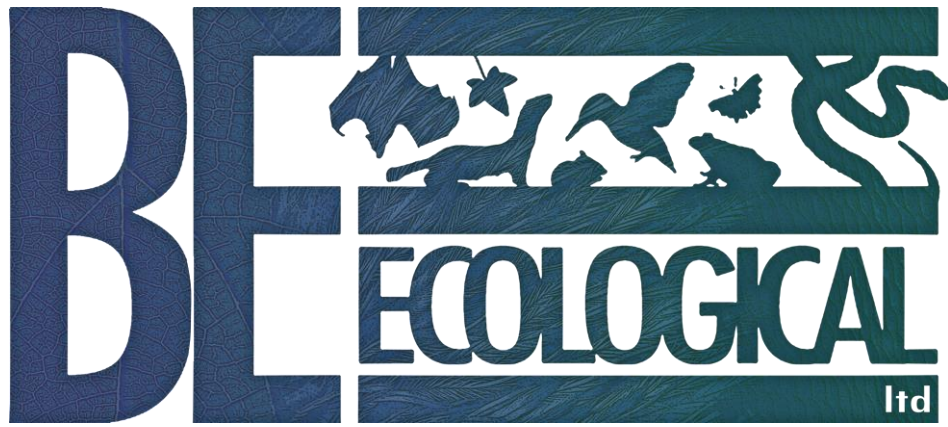




WEBSTER HOUSE, DYNEVOR STREET, MERTHYR TYDFIL

**BAT SURVEY
ISSUE 1, VERSION D**

JUNE 2022

WEBSTER HOUSE

Bat Survey Report

Document control

Issue	Author	Checked	Approved	Date
1	BE	BE		12/06/2022

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Approved by	Date
1	A	Minor amendments	BE	12/06/22
1	B	Minor amendments	BE	13/06/22
1	C	Minor amendments	BE	29/06/22
1	D	Minor amendments	BE	07/07/22

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EXECUTIVE SUMMARY

It is proposed to refurbish and extend Webster House, Dynevor Street, Merthyr Tydfil.

An initial bat inspection survey was undertaken in January 2022 in order to inform a planning application to extend the building. The results indicated that the building is of low potential for roosting bats and as such further surveys were recommended.

Permitted development works were already being undertaken on the building prior to the scoping survey. After the scoping survey, a number of pillars scheduled for removal were removed from the building. During the removal of one of these pillars, the contractor encountered two bats of unknown species resting between the pillar and the soffit of the existing building. Having dealt with bats previously, one of the contractors suggested that they were a pipistrelle species. The contractor stopped work and contacted BE Ecological Ltd who then advised again that no more works were to proceed on the building until such a time that the further surveys were complete and that a licence from Natural Resources Wales was in place. There is scaffolding present on the building since the original scoping survey, however, it does not appear to block any potential access points. The scaffolding is fixed to the wall only. There has been no further work on the site since the contractor identified the bats. Despite the building being identified as a bat roost, there are very few obvious access points into the building for roosting bats. The bats were no longer present for BE Ecological Ltd to confirm any identification of species.

Subsequent emergence surveys revealed that the building is a roost for up to two soprano pipistrelle bats. As the bats found during works were not identified when encountered, any licence will also cover common pipistrelles as it is reasonable to assume that the bats were found were of a pipistrelle species.

A European Protected Species Licence will be required along with mitigation and compensation prior to any works re-commencing on the building.

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 the client to undertake an initial bat inspection survey and subsequent activity survey of a garage at Webster House, Dynevor Street, Merthyr Tydfil in support of a planning application to refurbish the building.

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).

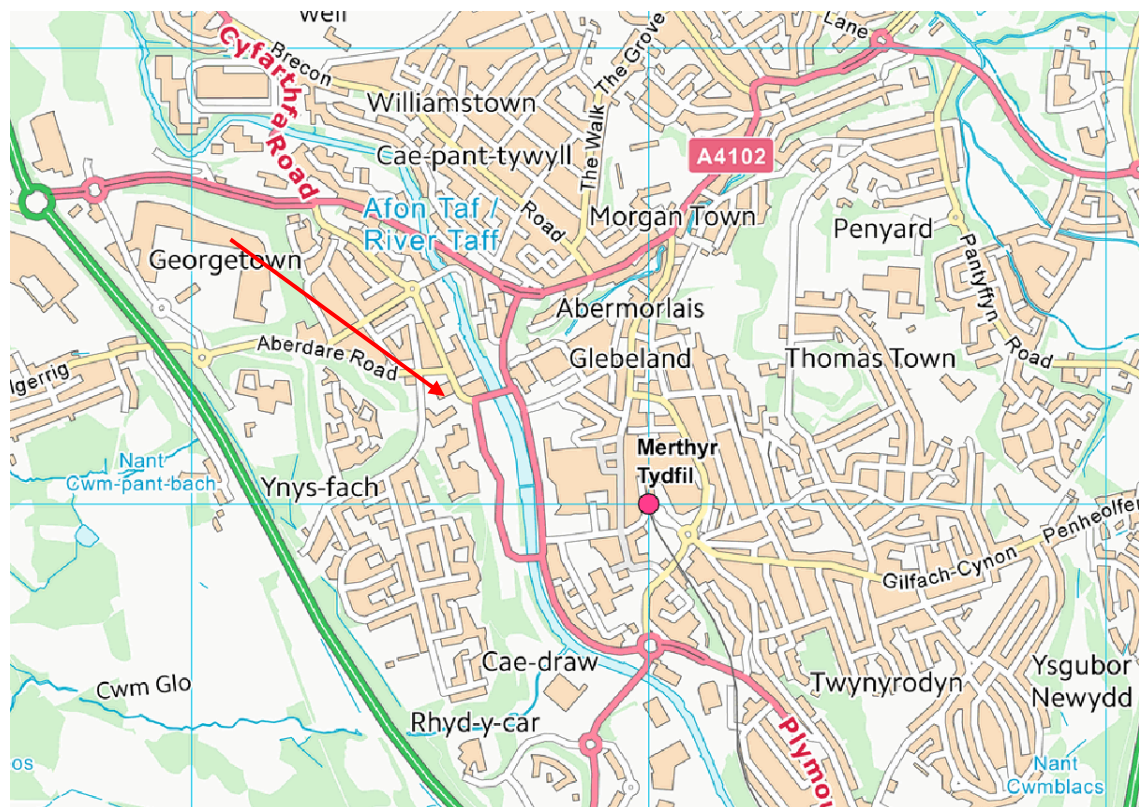
1.2 Site description

The property subject of this survey is located at Webster House, Dynevor Street, Merthyr Tydfil (Figure 1).

The building is not a conventional shaped building. The property is constructed of breezeblock and brick beneath a slate roof. The building has a small pitch in the middle with an attached large monopitch either side of it. There are a number of decorative pillars surrounding the building. There was originally a small single storey extension with shutter doors on north western corner of the property, however, this has now been removed. There is also a single storey area to the north eastern elevation.

There is not much vegetation within the grounds of the site, however, there are some trees along the peripheries. There is some connectivity to the wider landscape that comprises of patches of trees, broad-leaved woodland and the River Taff.

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



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Figure 1: Approximate location of site

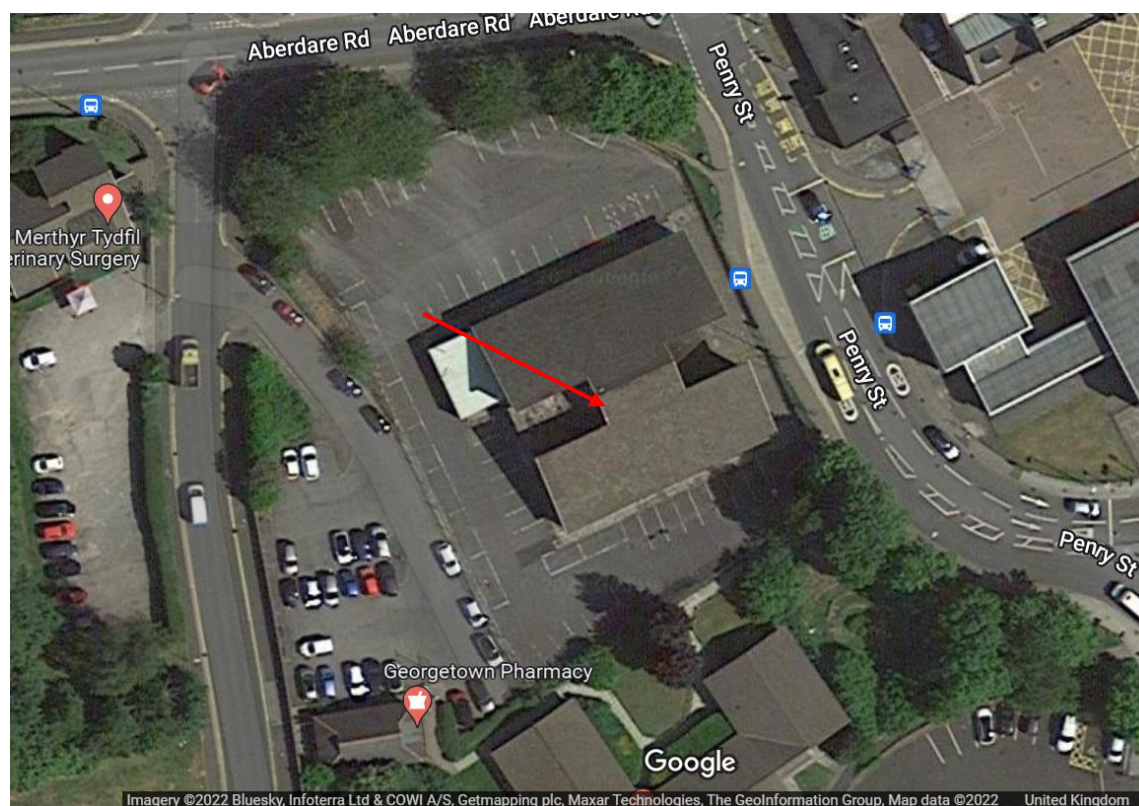
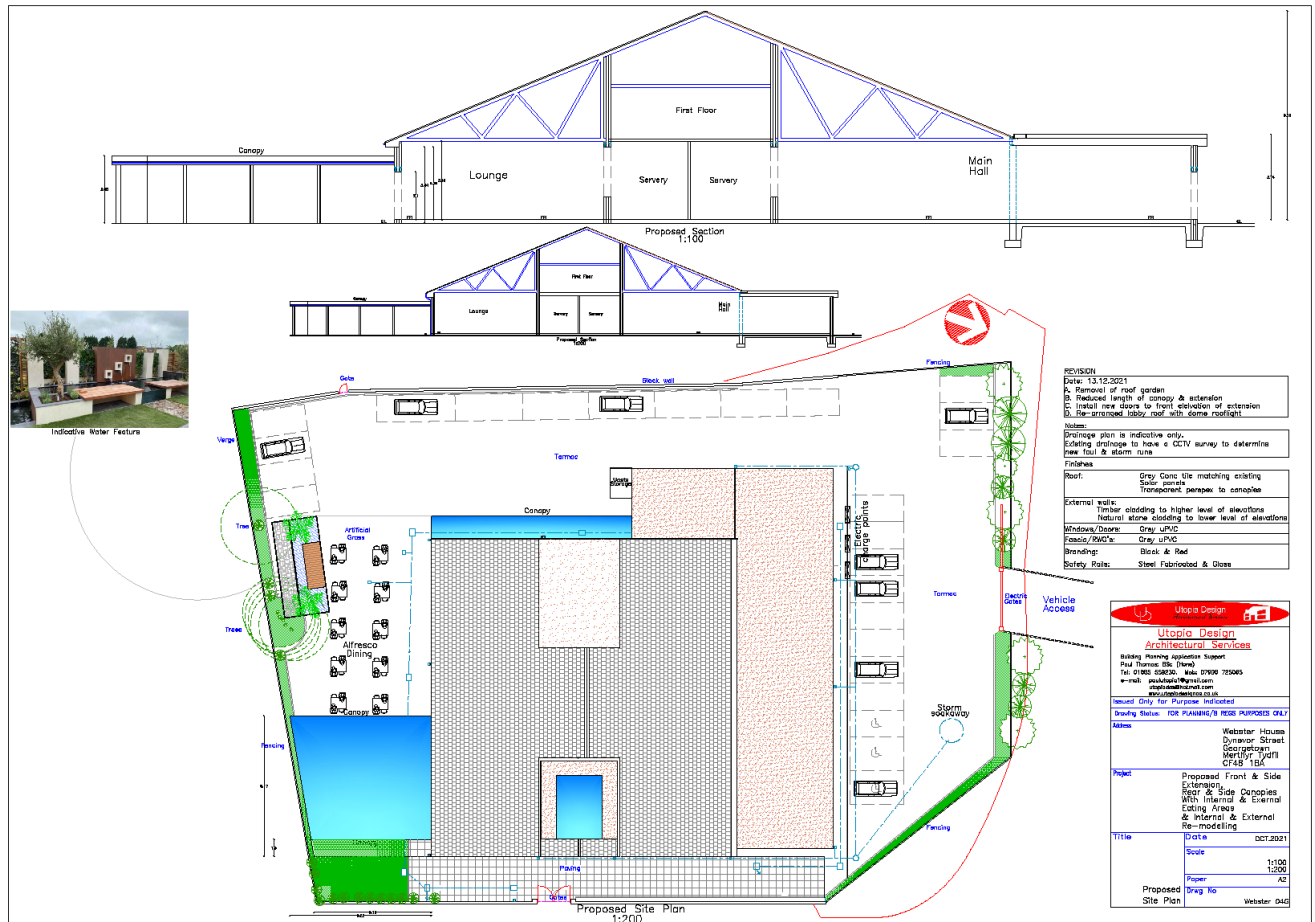


Figure 2: Detailed view of property (Image courtesy of Google 2022)

1.3 Proposed development

It is proposed to refurbish and extend the property. The roof will be replaced as part of the proposals



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 (SEWBrEC) 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 five parts:

- Part 1- Initial bat inspection survey
- Part 2- A data search
- Part 3- A single activity survey
- Part 4- A second activity survey
- Part 5- A third 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.

3.5 Internal & External Inspection

An initial inspection survey was carried out on 10th January 2022 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- 3rd May 2022

A dusk survey was carried out on 3rd May 2022 using three surveyors and a thermal imaging camera, positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors and cameras were equipped with Batlogger M detectors.



Figure 3: Approximate surveyor locations

3.6.2 Survey 2- 24th May 2022

A dusk survey was carried out on 24th May 2022 using three surveyors and two thermal imaging cameras, positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors and cameras were equipped with Batlogger M detectors.

3.6.3 Survey 3- 9th June 2022

A dusk survey was carried out on 9th June 2022 using three surveyors, an infra red camera and a thermal imaging camera, positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with Batlogger M detectors.

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

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

A total of 194 records were returned within the data search. The closest bat record appears to be of pipistrelle and brown long-eared bats foraging along the Taff Trail. The closest roosting record appears to be of a single common pipistrelle bat found 222m from the site. Other records in the wider vicinity include species such as pipistrelle, myotis sp., noctule, lesser horseshoe and daubentons.

21 bird records were returned within the data search. The closest of which (522m away) refer to swallow 95m from the site.

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. A small number of access points were noted on the exterior of the building

- Small number of potentially slipped slates
- Small number of gaps at soffit level (generally the soffits are tight, however a very small number of gaps were noted)

Please see appended plates for photographs of the property exterior. Other than these areas, the building appears to be well sealed.

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

No birds were noted during the survey.

4.2.2 Internal survey results

Internally, the property has already been gutted. The roof is unlined and the ceiling timbers are still in place. There are puddles on the ground where the roof is leaking in places. There is access to all areas of the building where the roof spaces would have been originally due to each section being connected.

The building is now a shell and in a state of disrepair.

No bats or evidence of bats was found in this location. Please see appended plates for photographs

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 03/05/2022	20:41	Start	20:25	14	Low	30%	Dry evening, insects flying
		End	22:30	12	Low	15%	
Survey 2 23/05/2022	21:11	Start	20:55	15	Low	100%	Small amount of drizzle at start of survey
		End	23:00	15	Low/moderate	100%	
Survey 3 09/06/2022	21:30	Start	21:15	16	Low	60%	Dry evening, insects flying
		End	23:10	14	Low	50%	

4.5 Activity Survey Results

4.5.1 Survey 1- 3rd May 2022

A small number of common and soprano pipistrelle bats were heard and seen throughout the survey.

The first bat heard was a common pipistrelle, the bat was seen flying high overhead from north to south. This was shortly followed by a further 2-3 common pipistrelles that commuted from the north and foraged around the trees along the northern perimeter of the site. At approximately 21:10, a single soprano pipistrelle was seen exiting the property from what appeared to be the apex of the gable on the western elevation of the property. This was shortly followed by a second soprano pipistrelle.

The access point was not immediately obvious due to the height of the building and viewing angle, however, surveyors the other side of the building did not have bats fly over the building so the likely access point was confirmed as beneath the barge board on the western elevation (figure 4 below).

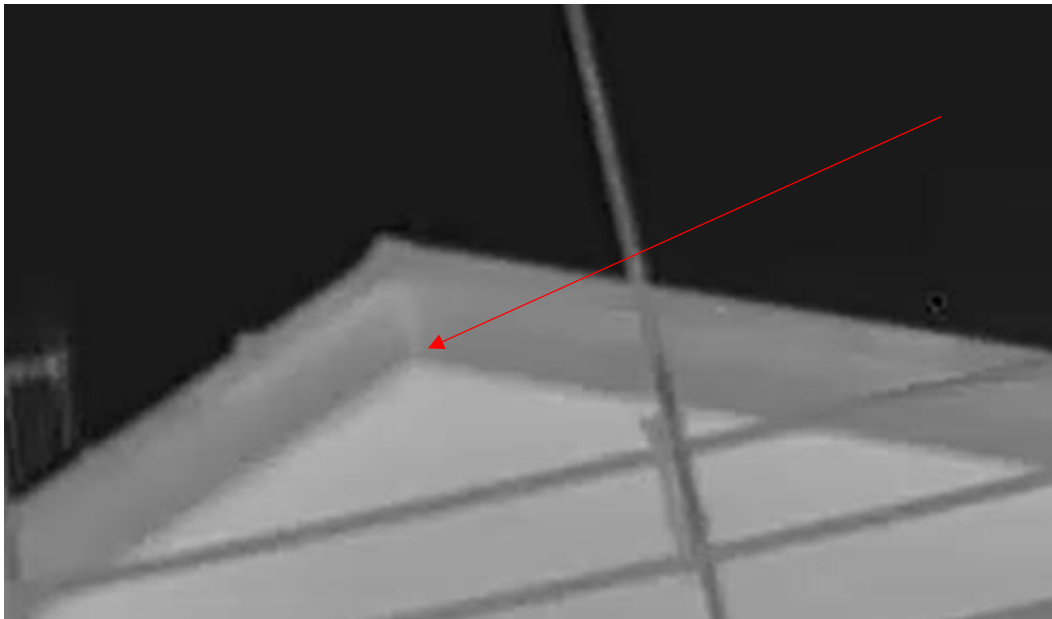


Figure 4: Approximate location of soprano pipistrelle emergence

4.5.1 Survey 2- 23rd May 2022

There was a small amount of rain at the start of the first survey. However, the first bat call heard was a common pipistrelle approximately 10 minutes post sunrise. This was shortly followed by a further two common pipistrelle bats, the bats were seen foraging around the trees to the north of the site. Bat activity had ceased approximately 2 hour and 15 minutes post sunrise.

No bats were seen emerging from the property by neither the cameras nor surveyors.

4.5.2 Survey 3- 9th June 2022

A number of common and soprano pipistrelles were heard throughout the course of the survey. Again bats appeared to commute from the north to forage around the trees along the northern perimeter of the site. Again bat activity had ceased by approximately one hour after sunset, no bats were seen emerging from the property on this date by neither surveyors nor cameras.

4.5.3 Identified flight paths (arrowed red)

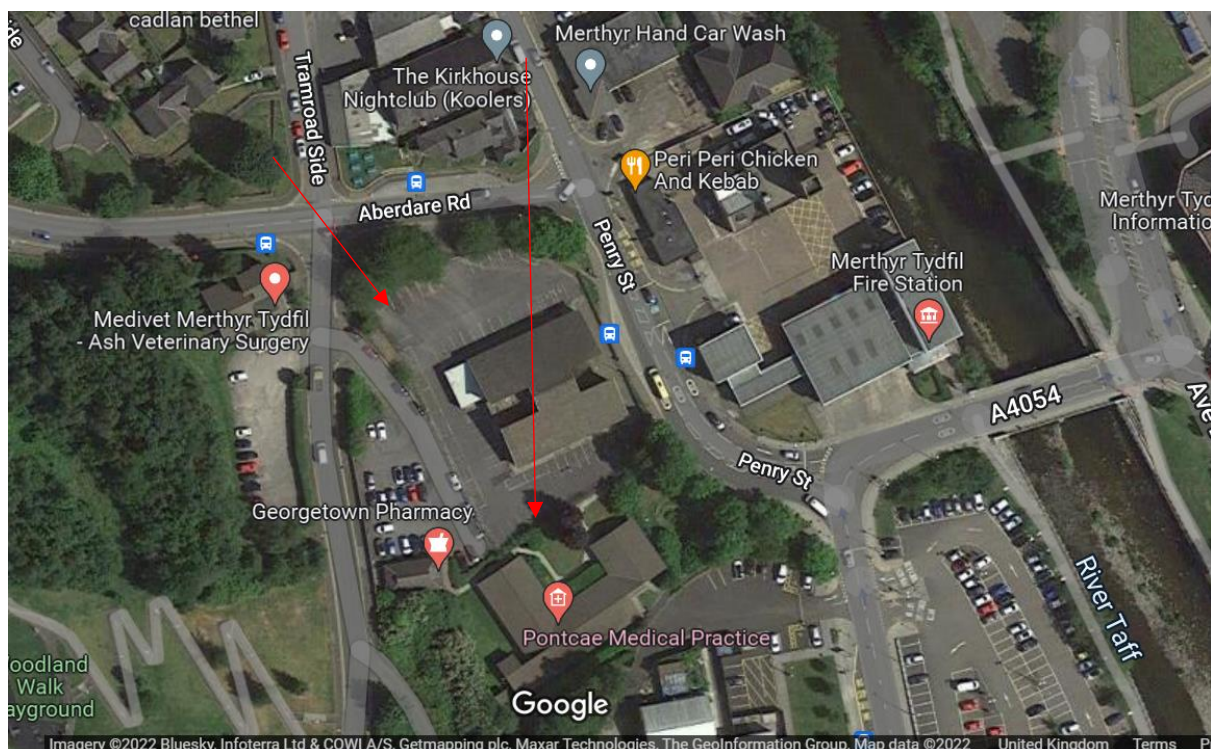


Figure 5: Identified flight paths

4.6 Identified Roosts



Figure 6: :Location of roosts (soprano pipistrelle (arrowed red)); unidentified bats found in pillar during works (arrowed yellow)

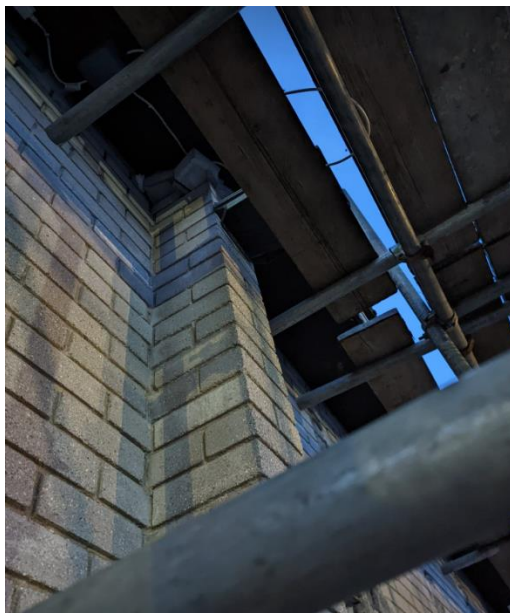


Figure 7: Photograph of pillar being removed where bats were seen near to soffit

4.6.1 Survey 1

The property is likely a roost for up to two soprano pipistrelle bats

4.6.2 Survey 2

The property was not identified as a roost

4.6.3 Survey 3

The property was not identified as a roost.

4.7 Conclusion

Generally bat activity at the site is low with only two species heard throughout the survey, common and soprano pipistrelle. The bats appear to favour foraging along the northern boundary of the site.

It is considered likely that the bats seen by the contractors were pipistrelles given that two emerged from the building on the first survey. Despite the property being a bat roost, access points for bats into the property appear to be few and far between. There are no droppings present within the building.

Given the locations the bats were seen, it is possible that they are just roosting on the exterior of the building (beneath barge board, beneath soffit/pillars).

A licence from Natural Resources Wales will be required prior to any works being undertaken on the building.

4.8 Breeding Birds

No evidence of breeding birds was found throughout the property. Ducks were seen flying overhead during the surveys.

5 INTERPRETATION & IMPACT ASSESSMENT

5.1 Active Season Usage

It is considered that the property is a roost for up to two soprano pipistrelles.

5.2 Hibernation Season Usage

It is possible that bats will use the property over winter considering the bats were seen by the contractors in January.

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 likely that the property is a roost for up to two soprano pipistrelles (maximum of four bats if the bats using the pillar are assumed as different bats to those using the barge board). However, it is considered much more likely that the property is a roost for two bats only. However, as the bats that were found initially were not identified to species level, any licence will cover both common and soprano pipistrelle and up to four bats.

6 MITIGATION/COMPENATION /ENHANCEMENT

6.1 Bats

A gap will be left on the rear of the building between the wall and barge boards. Access points for crevice-dwelling bats can be as small as 15-20mm high x 20-50 mm wide. These gaps will be left at the two locations where bats were encountered (figure 6).

Two Schwegler 1FF bat boxes will be attached to retained vegetation in the boundary of the site. 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. One of these bat boxes will be used as temporary mitigation and the other as an enhancement. Both will be retained in situ. The bat boxes will be positioned at a height of no less than 3.5m from the ground and will face either south or east.

6.2 Birds

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

7 RECOMMENDATIONS

7.1.1 Timing

It is considered that the building is a roost for single bats only. Bats were seen in the building during January and therefore they are likely to be present in the winter. As such, the winter period should be avoided.

7.1.2 Timber/roofing materials

The roof of the building will be lined with BS747 Type 1F bitumen roofing felt ONLY throughout. No breathable membrane will be used.

Where treatment of existing timbers is required in-situ, only products suitable for use around bats will be used, as specified by Natural England and DEFRA at <https://www.gov.uk/guidance/bat-roosts-use-of-chemical-pest-control-products-and-timber-treatments-in-or-near-them>. A copy of the approved list will be issued to all contractors. New timbers will be pre-treated prior to installation.

7.1.3 Lighting

Newly created 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/>

Flight paths to the bat boxes and the newly created bat mitigation will be kept dark at all times.

7.1.4 Bat Licensing

A European Protected Species Licence obtained from Natural Resources Wales will be required before any works commence.

7.1.5 Supervision

Supervision for the removal of the roof will be required.

8 METHOD STATEMENT (ONCE A LICENCE HAS BEEN OBTAINED)

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. Prior to works commencing, the bat boxes will be erected within the retained trees of the site under the supervision of the licensed ecologist.
4. All suitable bat roosting features will need to be removed by hand (slates) and inspected by the onsite bat ecologist.
5. 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.
6. If at any point bats are encountered, all works will cease until such a time the supervising ecologist has captured the bat and moved it out of harms way and into the previously erected bat boxes. Works will not recommence until such a time that the supervising ecologist has given permission to do so.
7. If at any point more bats than stated in the licence are discovered or bats of any other species not named in the licence are encountered, all works will cease and NRW will be consulted. Works will not recommence until such a time NRW have given the permission to do so. This may involve further survey effort or an amendment to the licence.
8. 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.

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







