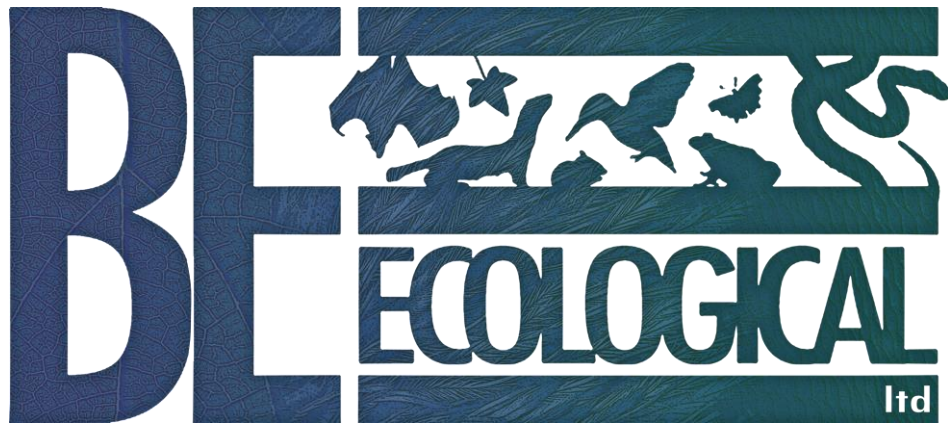




CHURCH STREET, PENYDARREN, MERTHYR TYDFIL

BAT SURVEY

ISSUE 1, VERSION B

SEPTEMBER 2023

Bat Survey Report

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EXECUTIVE SUMMARY

It is proposed to convert a Church Hall at Church Street, Penydarren, Merthyr Tydfil.

An initial bat inspection survey was undertaken on 7th June 2023 in order to inform a planning application to convert the building. The results of the survey indicated that the building is at least of moderate potential for roosting bats.

Subsequent emergence surveys did not identify the building as a bat roost.

A European Protected Species Licence will not be required.

As bat surveys are only a series of snapshots in time, to safeguard the unlikely event that bats are present within the building at the time of works, all work will be carried out in line with a method statement and ecological supervision.

There are numerous pigeons roosting within the property.

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 the property 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 property subject of this survey is located at Church Street, Penydarren, Merthyr Tydfil.

The building comprises of a large block, two storey in height beneath a slate roof. The ridge of the property runs south east to north west. There is a single storey wing to the south west.

Barge boards and fascias where present are timber and in a poor state of repair. The property has numerous smashed windows and kicked in boarding as a result of vandalism

The property is surrounded by trees to the south and church street to the north. There is good connectivity to the wider landscape to the south.

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

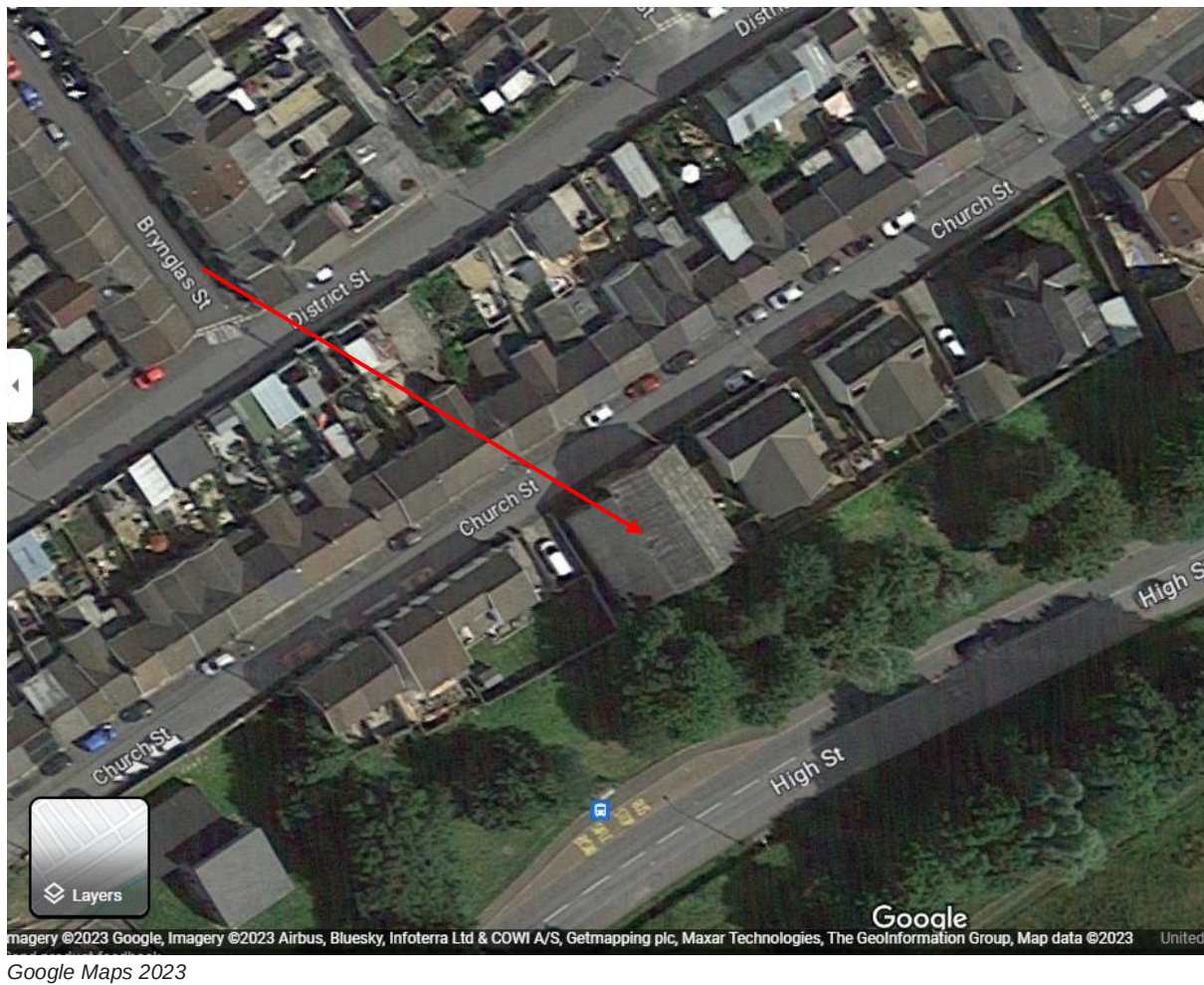


Figure 1: Approximate location of site

1.3 Proposed development

It is proposed to convert the property to a residential dwelling.

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 (0234-369). 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 Sebastian and Jenny Fitzgerald, Michael Hogan, Sylvia Sanyalou and Dion Rowles. Stephen Shutt is an experienced licensed ecologist Michael Hogan is an experienced freelance ecologist that was licensed in Wales for many years and has recently returned to work following a leave of absence from ecology. Dion Rowles is training towards his bat licence and has undertaken numerous activity surveys with BE Ecological Ltd over the last two seasons.

3.5 Internal & External Inspection

An initial inspection survey was carried out on 17th April 2023 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- 7th June 2023

A dusk survey was carried out on 7th June 2023 using surveyors and 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 and M2 detectors.

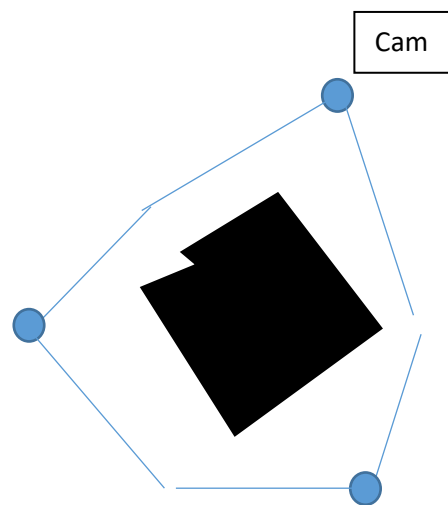


Figure 3: Approximate surveyor/camera locations (surveyors/camera marked as a blue circle; line of sight lined blue)

3.6.2 Survey 2- 3rd July 2023

A dusk survey was carried out on 7th June 2023 using surveyors positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with Batlogger M detectors. Cameras were attempted to be deployed, however, due to anti-social behaviour at the site, the decision to remove them was made due to their high expense and surveyor safety.

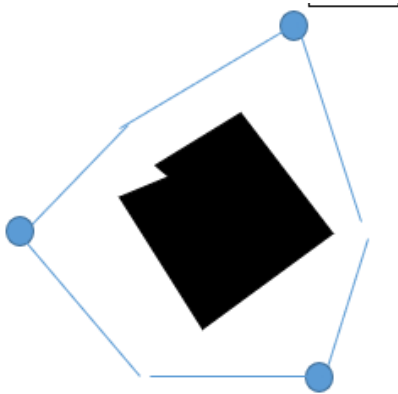


Figure 4: Approximate surveyor/camera locations (surveyors/camera marked as a blue circle; line of sight lined blue)

3.6.3 Survey 3- 27th July 2023

A dusk survey was carried out on 27th July 2023 using surveyors and cameras ,positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with Batlogger M and M2 detectors.

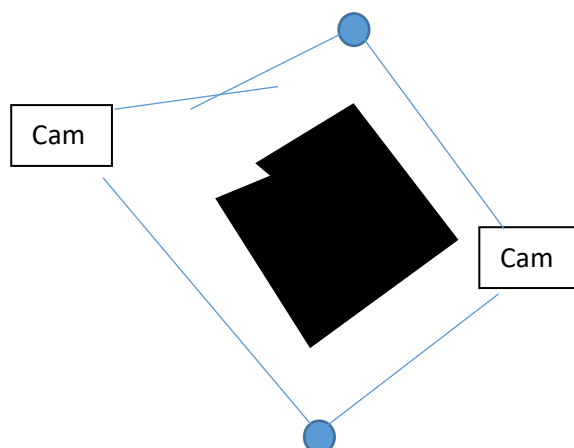


Figure 5: Approximate surveyor/camera locations (surveyors/camera marked as a blue circle; line of sight lined blue)

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.

At present the roof is open to the elements and is wet internally with lots of pigeons and pigeon excrement. The floor at the entrance of the building is rotten and not safe to walk on. The pigeon guano on the floor is quite thick in places and very slippery to walk on. The slates of the roof have fallen in over time and are continuing to do so. The basement is not accessible. The floor above the basement is falling in, therefore it is neither safe to walk to the basement nor in the basement. The beams are not structurally safe and there is debris throughout obscuring the floor. The roof and floor structures are not sound and are unsafe for human access. The building is continuing to deteriorate. Given this, the risks associated with entering the building are too high and will not be covered by insurance. As such, full entry into the building was not possible. The interior of the building was able to be inspected from the side door that has been broken into and photographs were taken from this location, however, further entry was not possible.

Originally the LPA ecologist requested the placement of a static detector within the building. In addition to the above, access for siting the detector in the appropriate location is not possible, the client is having ongoing issues with vandalism. Any detector along with the data would be stolen at the first opportunity. Therefore it was deemed impossible to deploy a detector safely.

No cameras were deployed on the second survey. BE Ecological Ltd attempted to deploy cameras, however, anti-social behaviour at the site resulted in the cameras being taken away due to their expense and surveyor safety.

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 202 records were returned within the data search. The closest three bat records are of common pipistrelle bats, the closest being 109m from the development site. All of the records refer to bats in flight. Other records greater than 300m away refer to myotis sp., serotine, noctule, pipistrelles and brown long-eared.

19 bird records were returned within the search. The closest record being swift, 105m from the site. The next two closest records refer to starling and peregrine falcon.

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

- Holes beneath barge boards
- Open holes in the roof
- Slipped slates
- Smashed windows and open doors

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

At present the roof is open to the elements and is wet internally with lots of pigeons and pigeon excrement. The floor at the entrance of the building is rotten and not safe to walk on. The pigeon guano on the floor is quite thick in places and very slippery to walk on. The slates of the roof have fallen in over time and are continuing to do so. The basement is not accessible. The floor above the basement is falling in, therefore it is neither safe to walk to the basement nor in the basement. The beams are not structurally safe and there is debris throughout obscuring the floor. The roof and floor structures are not sound and are unsafe for human access. The building is continuing to deteriorate. Given this, the risks associated with entering the building are too high and will not be covered by insurance. As such, full entry into the building was not possible. The interior of the building was able to be inspected from the side door that has been broken into and photographs were taken from this location, however, further entry was not possible.

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 07/06/23	21:28	Start	21:15	14	Low	30%	Dry evening, insects flying
		End	23:25	14	Low	15%	
Survey 2 03/07/23	21:35	Start	21:15	16	Low	100%	Dry evening insects flying
		End	23:20	16	Low/moderate	100%	
Survey 3 27/07/23	21:11	Start	21:15	18	Low	60%	Dry evening, insects flying
		End	23:10	18	Low	50%	

4.5 Activity Survey Results

4.5.1 Survey 1- 7th June 2023

The first bat heard was a common pipistrelle approximately 15 minutes post sunrise. The bat was seen commuting along the trees at the rear of the property. Throughout the survey, a small number of common and soprano pipistrelles were observed foraging along the vegetation to the rear and back and forth the street at the front of the property.

At 22:24, a greater horseshoe bat was observed flying through Church Street at quite some speed from north east to south west. The bat was observed by both surveyors stood at the front of the property.

No bats emerged from nor interacted with the building on this date.

4.5.1 Survey 2- 3rd July 2023

Again the first bats heard were common pipistrelles approximately 15 minutes post sunrise. Bats were seen commuting back and forth Church Street on an occasional basis. Again common and soprano pipistrelles were observed foraging along the vegetation to the rear of the site. The bats appeared to commute from the north east.

No bats emerged from nor interacted with the building on this date.

4.5.2 Survey 3- 27th July 2023

Bat activity was very similar to that of the previous surveys with common and soprano pipistrelles foraging to the rear of the site approximately 15 minutes post sunrise. A single myotis sp. bat call was heard and seen foraging along the rear of the property.

Again no bats emerged from nor interacted with the building on this date.

4.5.3 Identified flight paths (arrowed red)

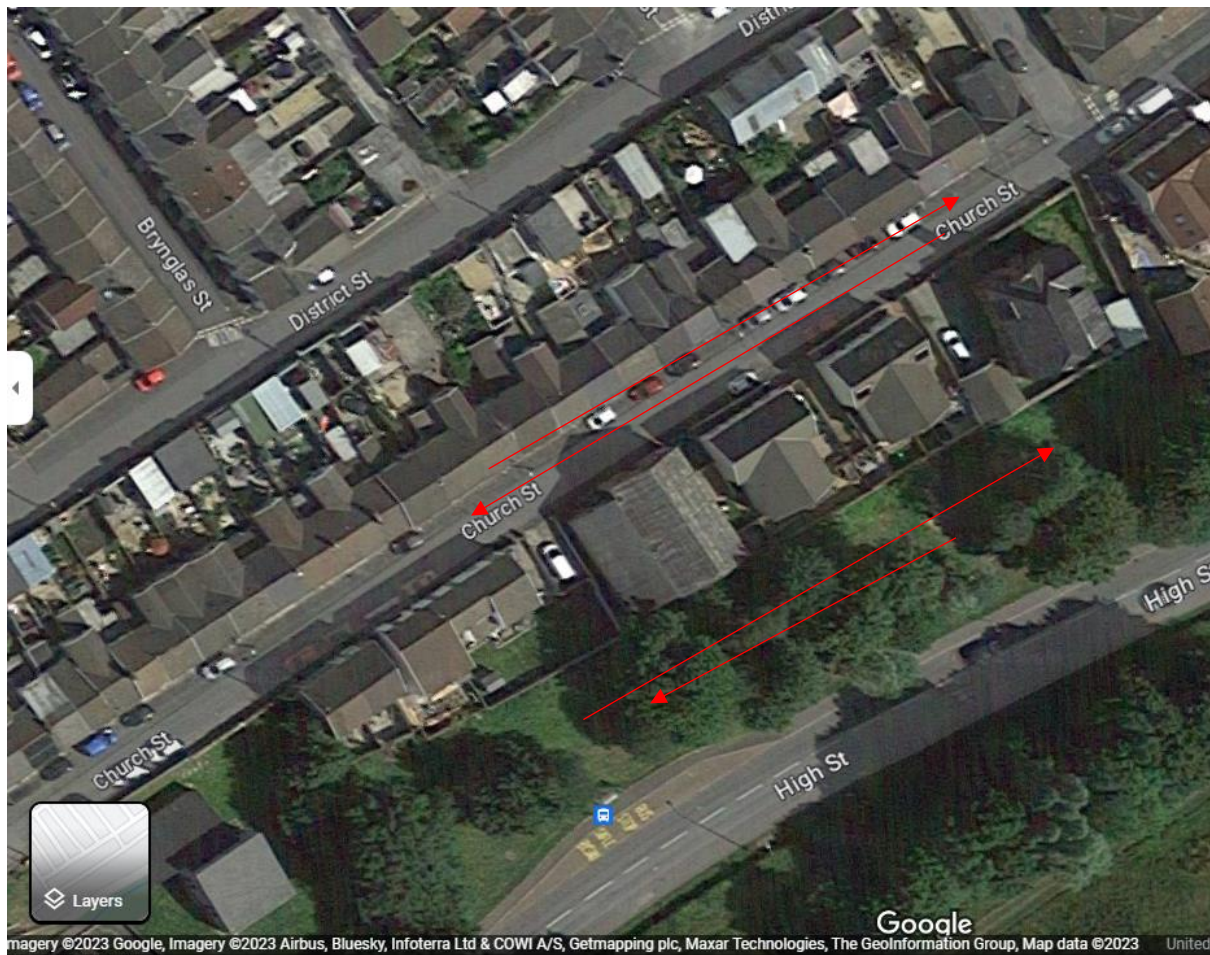


Figure 5: Identified flight paths (Google Maps, 2023)

4.6 Identified Roosts

4.6.1 Survey 1

The property was not identified as a roost.

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.

Conclusion

Generally bat activity at the site is low with only a small number of common and soprano pipistrelles foraging and commuting around the site. The majority of activity was identified to the rear of the site adjacent to the trees.

A single greater horseshoe bat was observed commuting down Church Street. This was considered to be an unusual occurrence due to the fact that the bat was not heard again on other surveys and due to the amount of light spill present within the street. A single myotis bat call was heard (likely whiskered/brandts) based on call shape during the last survey.

The property has not been identified as a bat roost and therefore a licence from Natural Resources Wales will not be required prior to any works being undertaken on the building providing that the work is undertaken in line with a method statement and ecological supervision.

Breeding Birds

The building has a large number of roosting pigeons. The interior of the building is covered in pigeon guano.

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 possible that bats will use the property over winter, however, this is considered less likely due to the ongoing deterioration of the building and the disturbance at the site. Works will not be carried out over the winter months.

5.3 Breeding Birds

There are numerous pigeons roosting within the property. Works will only be undertaken at a time that the birds do not have active nests or dependent young.

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 not a bat roost and providing that the works are undertaken in line with a method statement and close ecological supervision, impacts on roosting bats are considered unlikely.

If at any point bats or evidence of bats are found, all works will cease and NRW consulted. Further surveys and a licence may be required prior to works recommencing.

6 MITIGATION/COMPENATION /ENHANCEMENT

6.1 Bats

Two of the following <https://www.nhbs.com/1wq-schwegler-summer-winter-bat-roost> (or equivalent) boxes or similar will be attached to the rear of the property. . The bat boxes will be positioned at a height of no less than 3.5m from the ground.

A small gap (15-20mm) will be left between the fascias/soffits and the wall on all elevations to provide roosting opportunities for bats. These elevations will not be illuminated.

6.2 Birds

A Schwegler 1SP Sparrow Terrace or the following <https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box?bkfno=210670> will be attached to the eastern elevation of the property.

7 RECOMMENDATIONS

7.1.1 Timing

N/A the property was not identified as a bat roost.

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 not be required before any works commence.

7.1.5 Supervision

Supervision for the removal of the roof will be required and any repointing of the walls.

8 METHOD STATEMENT (NON-LICENSED)

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. Before any work commences, the exterior and interior of the building (where safe to do so) will be checked by the ecologist for the presence of bats and birds.
4. All suitable bat roosting features will need to be removed by hand (slates and roof timbers) and inspected by the onsite bat ecologist.
5. Any cavities/stonework to be repointed will be thoroughly endoscoped by the onsite ecologist
6. Any potential bat roosting features 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.
7. 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.
8. 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- Photograph of rear elevation showing boarded up and smashed windows



Plate 2: Photograph of side elevation

Plate 3- photograph of broken in side door



Plate 4- photograph of interior with caved in areas



Plate 5- photograph of slipped and falling slates



Plate 6- photograph of pigeon guano



Plate 7- photograph of splaying roof



Plate 8- photograph of rear elevation

