1 FERNBANK COTTAGES, CROCKERS ASH, WHITCHURCH, HEREFORDSHIRE

BAT SURVEY

ISSUE 1, VERSION A

JUNE 2020

Mr Richard Palmer

1 FERNBANK COTTAGES, CROCKERS ASH, WHITCHURCH, HEREFORDSHIRE

Bat Survey Report

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BE ECOLOGICAL LTD
2, Park View House
Heolgerrig
Merthyr Tydfil
CF48 1SY

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EXECUTIVE SUMMARY

It is proposed to extend 1 Fernbank Cottages, Crockers Ash, Whitchurch, Herefordshire.

An initial bat inspection survey was undertaken on 3rd June 2020. During the inspection, no droppings were found within the roof void of the property.

The subsequent activity surveys revealed that the property is an occasional day roost for no more than a single common pipistrelle.

It is considered that the building is a roost for single bats only and as such, the work can be undertaken at any time of year providing that the work is us undertaken in line with a licence and ecological supervision.

A Protected Species Licence from Natural England will be required prior to works commencing. Mitigation will be mandatory.

Whilst no nests were identified during the survey, a number of sparrows exhibiting breeding behaviour were noted in the vicinity of the roof. A check for nesting birds will be undertaken

Surveys will be valid for a period of 24 months only.

1 INTRODUCTION

1.1 Background

BE ECOLOGICAL LTD was commissioned by Mr Richard Palmer to undertake an initial bat inspection survey and subsequent activity survey of 1 Fernbank Cottages, Crockers Ash. Whitchurch, Herefordshire in support of a planning application to extend the property.

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, 2016[1]).

1.2 Site description

1 Fernbank Cottages is a two storey domestic structure, stone built under a simple pitch roof, the ridge of which is oriented north east to south west. There is a single storey extension of brick under a slate roof to the north western end of the property. External timber work is present along fascias and barge boards and appears to be in a generally good order. The property has a chimney in the centre of the ridge. There is a dormer and a velux window on the south eastern elevation of the property.

There are gardens to the front (north west) and rear elevations. The property is bounded by the front and side by roads. It is located on the south western edfe of the hamlet of Crockers Ash in a wholly rural landscape with pastoral fields to the west, north and east and mature broad-leaved woodland to the south.

The wider landscape is of pastoral fields, dilineated by mature hedges in which there are numerous mature trees. There are numerous small woodlands to the north and extensive areas of both broad leaved woodland and conifer plantation to the south.

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

Figure 1: Detailed view of the property (boxed red)

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

1.3 Proposed development

It is proposed to extend the property on the south eastern elevation. The new extension will not impact the existing roof space and will tie in just below the existing Velux window (below the upstairs landing). The proposed new Velux windows will also tie in to the existing

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 Natural Environment and Rural Communities Act 2016

The Natural Environment and Rural Communities Act (2006) is 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.".

3 METHODOLOGY

3.1 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

3.2 Survey Summary

The bat survey comprised of three parts:

- Part 1- Initial bat inspection survey
- Part 2- Dusk emergence survey
- Part 3- Dawn re-entry survey

3.3 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. Stephen is an experienced licensed ecologist who holds both

3.4 Internal & External Inspection

An initial inspection survey was carried out on 3rd June 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.

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3.5 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.

3.5.1 Survey 1- 19th June 2020

A dusk survey was carried out on 19th June using a single surveyor and two cameras , positioned in such a way that all areas of the building to be affected was visible. Surveyors and cameras were equipped with Batlogger M detectors.

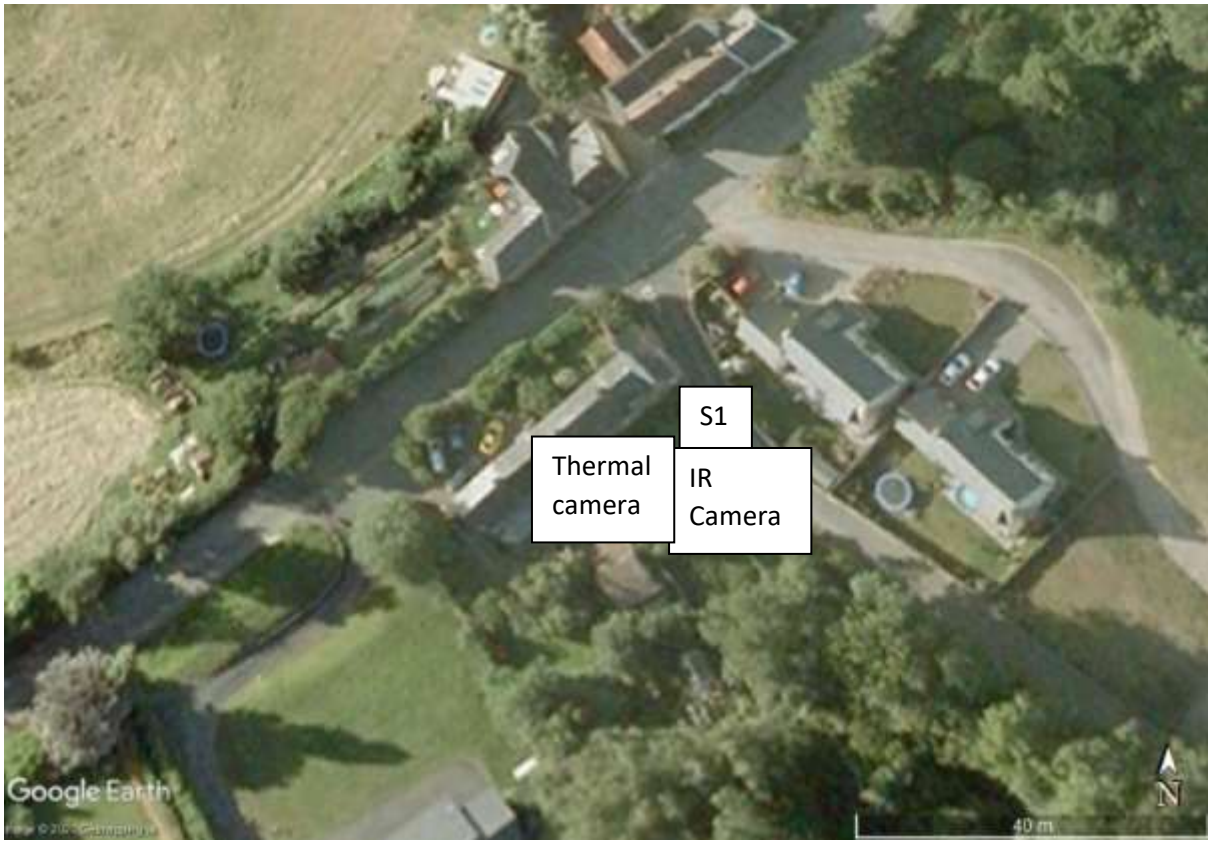

Figure 3: Approximate surveyor locations

3.5.2 Survey 2- 3rd July 2020

A dawn survey was carried out on 3rd July using a single surveyor and two cameras , positioned in such a way that all areas of the building to be affected was visible. Surveyors and cameras were equipped with Batlogger M detectors.

3.6 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.

A data search was not undertaken. However, this is not thought to be a limitation due to the fact that during the first survey, nine species of bat were recorded on site, the minor works involved and the presence of a large maternity roost of soprano pipistrelles was identified in the house next door (more than 100). Additionally, due to the location of the building, a large amount of data would be held by welsh record centres and as far as we are aware, there is no reciprocal arrangement between Herefordshire and those data providers. Requesting a search from both was thought to be an unnecessary cost due to the reasons outlined above.

The decision to terminate the surveys after the second visit was made due to the fact that surveyors were able to confidently categorise the roost from the data during the previous two surveys.

4 RESULTS

4.1 Inspection survey

4.1.1 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/slates
- Gaps beneath fascias
- Gaps in stonework of chimney

Please see appended plates for photographs of the property exterior.

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

4.1.2 Internal survey results

Internally the roof is lined with bitumen felt which has been torn in a number of places and has a maximum joist to ridge height of 700mm and is used for general storage. The roof is insulated at joist level, the combination of insulation and stored items prevents access. Generally, the roof appears to be in a good condition.

No evidence of bats was found at this location.

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4.2 Activity surveys

The surveys were undertaken as per the table below:

4.3 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 19.06.20	21:33	Start End	21:00 22:33	14 13	Low Low	30% 15%	Dry evening, insects flying
Survey 2 03.07.20	04:58	Start End	03:30 05:15	12 12	Low Low	30% 15%	Dry morning, insects flying

4.4 Activity Survey Results

4.4.1 Survey 1- 19th May 2020

A total of seven bat species were heard throughout the course of the survey. Common pipistrelle, soprano pipistrelle, noctule, myotis sp., serotine, brown long-eared and lesser horseshoe.

The first bat heard was a soprano pipistrelle. The bat emerged from beneath the fascia on the building next door. This was shortly followed by numerous other soprano pipistrelles from various locations on the neighbouring buildings.

At 22:14, a single soprano pipistrelle was seen emerging from beneath the fascia on the south east elevation of the property (figure 4, arrowed white).

Pipistrelle activity across the garden was constant for the entire survey with bats foraging and feeding.

The majority of other species were heard and not seen and it has been assumed that these bats were flying alongside the woodland edge to the rear of the property.

No other bats emerged from the property on this date.

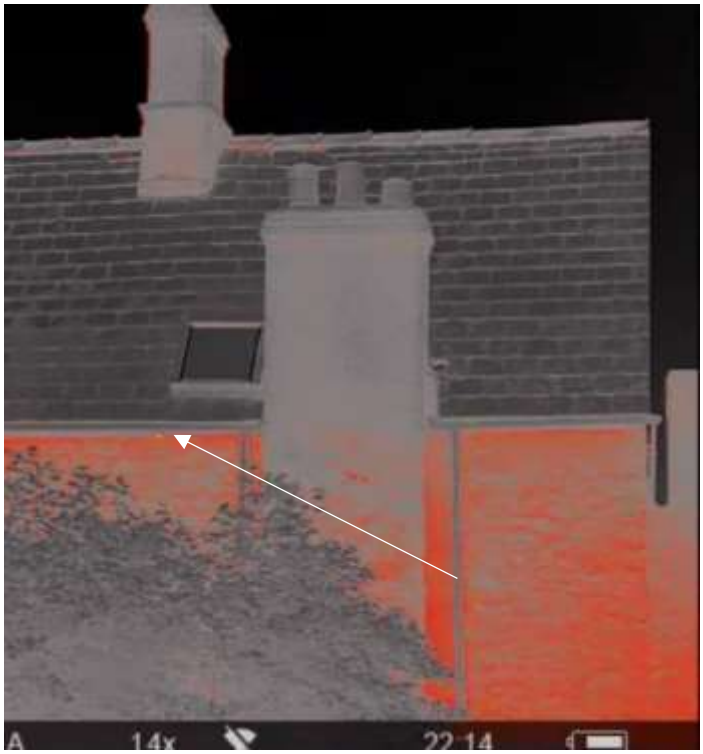

Figure 4: Location that soprano pipistrelle emerged (figure 6, arrowed white). Yellow highlight is the bat emerging on the thermal camera

4.4.2 Survey 2- 19th May 2020

The first bat call heard was a soprano pipistrelle heard at 03: 26. Between 03:26 and sunrise more than 100 soprano pipistrelles re-entered the neighbouring property. The exact location was not identified but the ridge appeared to be the main point of interest.

Brief lesser horseshoe and brown long-eared calls were heard, however none were seen.

No bats re-entered the property under survey on this date.

4.5 Identified Roosts

4.5.1 Survey 1

The property was identified as a roost for a single soprano pipistrelle on this date.

4.5.2 Survey 2

The property was not identified as a bat roost on this date.

4.6 Conclusion

As expected, due to the properties location, a total of seven species were heard throughout the course of the survey.

It is considered that despite there being a large soprano pipistrelle roost in the neighbouring property, only one soprano pipistrelle is using the areas to be affected by the proposed works.

Based on the current evidence, it is considered that mitigation and an NRW development licence will be required

4.7 Breeding Birds

No evidence of breeding birds was found throughout the property. However, from behaviour alone, it appears that sparrows are nesting somewhere in the property.

5 INTERPRETATION & IMPACT ASSESSMENT

5.1 Active Season Usage

It is considered that the property is a day roost for no more than a single soprano pipistrelle, likely a male bat roosting in proximity to the females in the neighbouring building.

5.2 Hibernation Season Usage

It is unlikely that bats will use the property for hibernation purposes. However, it is always possible bats will remain in the roof over the winter.

5.3 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.

The property has been identified as a roost for a single soprano pipistrelle bat. As the works will result in the destruction of a roost, a licence and mitigation will be required.

6 Mitigation

6.1 Bats

Temporary mitigation will be required. A tree mounted bat box will be available on site, prior to works commencing.

Permanent mitigation will be in the form of a no more than 15mm gap between the wall plate and the barge boards of the new extension. Bats will be prevented from accessing the roof at this location as there is likely to be breathable membrane used in the new extension. However, they will still be able to access the roof from the fascia adjacent to the extension.

7 RECOMMENDATIONS

7.1.1 Timing

It is considered that the building is used by single bats only, as such, the work can be undertaken at any time of year.

7.1.2 Timber/roofing materials

Type 1 bitumen felt must be used on the wall plates of the new extension. Breathable membrane can be used in the new extension providing the wall plates are blocked off with the use of tight fitting battens and plaster. At no point will bats be able to access the breathable membrane.

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 England will be required before any works commence.

7.1.5 Supervision

Supervision for the demolition of the building.

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. The temporary bat box will be installed under the supervision of the named ecologist.

3. 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 England.

4. All suitable bat roosting features will need to be removed by hand (fascia and tiles) and inspected by the onsite bat ecologist.

5. The slates 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. 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