



**CRYNALLT FARM HOUSE, CRYNALLT ROAD, CIMLA, NEATH,
SA11 3RL**

**BAT SURVEY
ISSUE 1, VERSION A**

JULY 2020

Mr Hunkin

CRYNALLT FARM HOUSE, CRYNALLY ROAD, CIMLA, NEATH**Bat Survey Report**

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CONTENTS

1	INTRODUCTION.....	3
1.1	Background	3
1.2	Site description	3
1.3	Proposed development.....	5
2	LEGISLATION & POLICIES.....	6
2.1	Conservation of Habitats & Species Regulations 2017 (as amended)	6
2.2	Wildlife & Countryside Act 1981.....	6
2.3	The Environment (Wales) Act 2016	6
3	METHODOLOGY	7
3.1	Survey Objectives.....	7
3.2	Survey Summary	7
3.3	Surveyor Information.....	7
3.4	Internal & External Inspection	7
3.5	Activity Surveys (emergence/re-entry surveys).....	7
3.6	Survey limitations	10
4	RESULTS.....	11
4.1	Inspection survey	11
4.2	Activity surveys	12
4.3	Survey Schedule and Weather Conditions.....	12
4.4	Activity Survey Results	12
4.5	Identified Roosts	14
4.6	Conclusion.....	14
4.7	Breeding Birds.....	14
5	INTERPRETATION & IMPACT ASSESSMENT.....	15
5.1	Active Season Usage	15
5.2	Hibernation Season Usage	15
5.3	Breeding Birds.....	15
5.4	Ecological Impacts of development	15
6	Mitigation.....	16
6.1	Bats.....	16
7	RECOMMENDATIONS.....	16
8	REFERENCES.....	17

EXECUTIVE SUMMARY

It is proposed to demolish the current farm house on the site and leave the site bare. The existing cottage will be retained.

An initial bat inspection survey was undertaken in May 2020. No droppings were found within the interior of the building. Full access to the roof space was not possible due to its small size and unsafe floors. There is no large roof space above the ceilings, however, there appears to be small void above internal ceilings at various locations across the house.

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

It is considered that the building is a roost for single bats only and as such, work can proceed at any time of year.

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

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

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

1 INTRODUCTION

1.1 Background

BE ECOLOGICAL LTD was commissioned by Mr Hunkin to undertake an initial bat inspection survey and subsequent activity surveys of Crynnallt Farm House in support of a planning application to demolish the Farm House. The cottage will be retained in its entirety.

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 is a two storey farmhouse beneath a slate roof that is rendedred on all elevations. There is a single storey pitched extension ot the north east (to be retained). There are three main ridges on the property, one which runs north east to south west and two which run north west to south east. There are dormer wundows to the north east, north west and south west. There are gables that face south east and a single gale that faces north east.

The property is ina state of disrepair with numerous holes in the roof as a result of slipped and/or missing slates. Fascias and barge boards where present are of timber and in a state of disrepair.

There is a courtyard to the north and an overgrown garden/patch of land to the south. The property is surrounded by mature trees that provide some allbeiot severed connectivity to the wider landscape. The wider landscape comprises of housing and associatewd infrastrucuture to the north, east and west. The landscape to the south appears to be comprised of agricultural fields bounded by mature hedgerows.

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 demolish the Farm House due to it being the subject of a demolition order. The single storey cottage to the north east will remain.

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 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- Dusk emergence survey
- Part 4- 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 Nicholas Bunn and Rob Nelms. Nicholas Bunn is a fully licensed ecologist with numerous years' experience. Rob Nelms is an assistant surveyor and has been training with various consultancies across Wales.

3.4 Internal & External Inspection

An initial inspection survey was carried out in 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.

3.5 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- 8th May 2020

A dusk survey was carried out on 5th May using three surveyors ,positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with cameras and EM3 detectors.



Figure 3: Approximate surveyor locations

3.5.2 Survey 2- 19th May 2020

A dusk survey was carried out on 19th May using two surveyors and an infra red camera ,positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with cameras and EM3 detectors.



3.5.3 Survey 3- 2nd July 2020`

A dawn survey was carried out on 2nd July using two surveyors and an infra red camera, positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with cameras and EM3 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.

The roof is extremely hard to view from the ground. As such, in some instances, educated assumptions have been made based on the number of bat calls heard/ the number of bats seen flying over the building and the comparison of surveyors notes.

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 on all buildings in the form of:

- Slipped slates
- Gaps beneath timber work at some locations
- Gaps beneath ridges

Please see appended plates for photographs of the property exterior.

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

4.1.2 Internal survey results

An internal inspection was done of the ground and first floor only. Internally, the house is in a serious state of dilapidation, the plaster work is damp, there are holes in the ceilings and the floorboards are not safe to walk on at various locations.

There appears to be small (not full roof voids) above the internal ceilings at various locations across the property. No evidence of bats were found on the ground and first floors.

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 08.05.2020	20:46	Start	20:30	14	Low	30%	Dry evening, insects flying
		End	22:45	12	Low	15%	
Survey 2 19.05.2020	21:07	Start	20:45	14	Low	80%	Dry evening, insects flying
		End	23:00	12	Low	80%	
Survey 3 02.07.2020	05:00	Start	03:30	14	Low	30%	Dry morning, insects flying
		End	05:10	12	Low	15%	

4.4 Activity Survey Results

4.4.1 Survey 1- 8th May 2020

The first bat call heard was a soprano pipistrelle at 20:59. The bat was seen commuting overhead from south to north. Occasional soprano and common pipistrelle bats were observed flying in the same direction as the above, however, no significant bat activity was recorded at the site.

No bats emerged from the building on this date.

4.4.2 Survey 2- 19th May 2020

The first bat call heard was a common pipistrelle at 21:09. The bat was seen emerging from beneath the barge board of gable (figure 6). The infra red camera revealed three bats that may have emerged from the ridge of the property, however, it could not be concluded with any confidence at all that the bats had emerged from this location, due to the fact that bat calls were heard and bats seen at the front of the property immediately prior to the bats “emerging” from the ridge.

Again, a small number of common and soprano pipistrelle were seen commuting from south to north throughout the survey.

No other bats emerged on this date.



Figure 6: common pipistrelle emergence point (arrowed red)

4.4.1 Survey 3- 4th June 2020

No bats were heard throughout the course of the survey, excluding a single common pipistrelle that was observed by surveyors foraging over the garden for approximately 20 minutes prior to sunrise. The bat did not re-enter the building and commuted west just before sunrise.

4.5 Identified Roosts

4.5.1 Survey 1

The property was not identified as a bat roost.

4.5.2 Survey 2

The property was identified as a bat roost for no more than a one common pipistrelle bat.

4.5.3 Survey 3

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

4.6 Conclusion

Overall levels of bat activity at the site were relatively low at the site.

During the second survey, there was a query as to whether three bats had emerged from the ridge or flown over from the opposite side. Following repeated analysis of the infra red footage, comparison of surveyor notes and confirmation on a dawn survey, it is considered that these bats did not emerge at this location.

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.

5 INTERPRETATION & IMPACT ASSESSMENT

5.1 Active Season Usage

It is considered that the property is a bat roost.

5.2 Hibernation Season Usage

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

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.

The property has been identified as a day roost for no more than a single common pipistrelle bat. As the building will be demolished and result in the destruction of a roost, a licence and mitigation will be required.

6 Mitigation

6.1 Bats

A bat box on a pole will be mounted on a pole within the south eastern boundary of the site. The bat box will be a Schwegler 1FF or similar.

The box will be installed prior to the work commencing so that it can be used as temporary mitigation should anything be found throughout the course of the work.

7 RECOMMENDATIONS

7.1.1 Timing

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 it is carried out in line with a licence and ecological supervision.

7.1.2 Timber/roofing materials

N/A.

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 be required before any works commence.

7.1.5 Supervision

Supervision for the demolition of the building.

8 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









