

Bat Surveys Report

Cloy Bank Farm, Cloy Lane, Overton, Wrexham LL13
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William and Cassandra Lloyd

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1. Introduction

1.1 Site description, location, and context

The site is located at National Grid Reference SJ 39836 43075 and has an area of approximately 1ha comprising farm buildings and associated car parking. It is surrounded by arable fields and scattered trees/patchy woodland with the River Dee to the west. The surrounding habitat offers very good foraging and communing opportunities for bats.

1.2 Purpose, aims and objectives of this report

The Bat Roost Assessment indicates (ArbTech) that two bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely absence of a bat roost in the building

The purpose of this report is therefore to establish use of the building for bats by means of one dawn and dusk emergence surveys. This survey shall be carried out at the identified points of potential entry or shelter for bat species identified in the BRA. We shall aim to establish absence or presence on the development site in reference to the use of the building by bats. The objective of the report is to be able to assess the bat use in the building, the impact of construction and any applicable mitigation measures in relation to the extent and use of the site by bats.

2. Methods

2.1 Summary of survey methods

The BCT January 2016 good practice survey guidelines shall be used to design and inform the survey effort with particular regard to section 7.1 page 49-52.

The BCT January 2016 good practice survey guidelines recommend a minimum survey effort for buildings with moderate potential to support roosting bats of a dusk emergence and a pre-dawn re-entry surveys.

During the survey three surveyors were positioned to observe the building. The survey was undertaken in good weather conditions and during the optimal season for bat activity.

Generally the surveyors record weather and all bat activity including the number of bats emerging / passes, species detected, behaviour for example feeding or commuting, flight direction and any relevant comments. Each surveyor used an Echo Meter Touch and a BatBox Duet/Elekon detector. There were no weather or HS related constraints and all bats were detectable with the equipment used.

Each surveyor was placed so as to have an unobstructed view of elevations on the building to as to be able to view all parts of the potential roost features. Surveyor positions allowed for coverage of all identified features in the initial report.

2.2 Pre Survey data search

Refer to ArbTech PRA.

2.3 Surveyor information

Simon Brain (Managing Director) has attained a Post Graduate Certificate in Biological Recording and has attended FSC Field Courses for Land mammals, Songbird identification, Barn Owls (CIEEM) and Advanced Bird Survey Techniques (Level M). He has four years experience in bat and avian work. He has accumulated over 450 hours of bat contact time and holds an NE Class 2 license (70619:OTH:CSAB:2016) and NRW S092437/1. He has attended courses for trees and bats, bat survey techniques, mitigation and handling and attended three european workshops. Dawn Good fellow is an experienced senior ecologist with a number of years of bat experience. Remaining surveyors have a number of years of bat surveying experience.

3. Emergence Survey - Results

3.1 Dusk emergence results

Summary

No bats were seen to emerge from the building and it was considered that bats and bat roosts were absent from the building during the survey. Two bat species were recorded (Common /Soprano Pipistrelle, Myotis and Noctule) as commuting within detector range.

Detailed survey records

Site: Cloy Bank Farm, Wrexham - Visit 1 of 2 (dusk)

Date: 25/05/23

Lead Surveyor: SB

Conditions/Wind - Start: Dry, 30% cloud cover, NW 16 km/hr

Conditions/Wind - End: Dry, 25% cloud cover, NW 16 km/hr

Sunset: 21:13hrs

Start time: 20:43hrs

End time: 23:13hrs

Temperature - Start: 12°C

Temperature - End: 11°C

Surveyor: Mike Bazley - positioned at N corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
21:47	Myotis sp.	Bat heard but no visual.
22:01	Bat	Bat observed flying/circling over road but not heard.
22:02	C. Pip	Bat observed flying along road from SW to NE.
22:06	C. Pip	Bat observed flying along road from SW to NE.
22:11 – 22:14	S. Pip	Bat heard (2 x social calls) and observed flying along road from SW to NE.
22:15	C. Pip	Bat heard and observed flying past several times.
22:34	C. Pip	Bat heard but no visual.

Surveyor: Phil Scurfield - positioned at W corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
22:02	C. Pip	Bat observed flying/foraging along road from SW to NE.
22:06	C. Pip	Bat observed flying/foraging along road from SW to NE.
22:11	C. Pip	Bat observed flying/foraging along road from SW to NE to SW.
22:11	S. Pip	Bat observed flying from over roof between farmhouse and survey building, from SE to NW.
22:14	S. Pip	Bat observed flying/foraging along road from NE to SW.
23:01	C. Pip	Bat heard but no visual.

Surveyor: Simon Brain - positioned at E corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
21:43	C. Pip	Bat heard and observed flying in through windowless gap and out again.
21:51	C. Pip	Bat heard and observed flying in through windowless gap and out again.
21:51	C. Pip	Bat heard and observed foraging around farmyard.
22:02	C. Pip	Bat heard and observed foraging around farmyard.
22:11	S. Pip	Bat heard but no visual.

22:16	S. Pip	Bat heard and observed flying through farmyard, from west to east.
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Surveyor: Tracey Minogue - positioned at S corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
21:43	C. Pip	Bat heard but no visual.
21:52	C. Pip	Bat heard and observed flying towards barn from the east.
22:02	C. Pip	Bat heard and observed flying towards barn from the E corner.
22:10	C. Pip	Bat heard and observed flying from SW near barn.
22:16	S. Pip	Bat heard and observed near S corner of barn.
22:18	Bat	Bat not heard but observed near S corner of barn.

No bats recorded as emerging from the building observed

Site: Cloy Bank Farm, Wrexham - Visit 2 of 2 (dawn)

Date: 15/06/23

Lead Surveyor: SB

Conditions/Wind - Start: Dry, 60% cloud cover, NW 0 mph, 88% humidity

Conditions/Wind - End: Dry, 0% cloud cover, N 1 mph, 92% humidity

Sunrise: 04:45hrs

Start time: 02:45hrs

End time: 05:15hrs

Temperature - Start: 12°C

Temperature - End: 11°C

Surveyor: Ryan Whitmarsh - positioned at N corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
03:34 – 03:35	Bat	Bat not heard but observed circling roof above eastern corner of barn.
03:37	C. Pip	Bat heard but no visual.
03:38 – 03:39	Bat	Bat/s not heard but 2 x bats observed flying above roof near eastern corner of barn.
03:41	C. Pip	Bat heard but no visual.
03:42 – 03:44	S. Pip & C. Pip	Bat/s heard and 4 x bats observed flying above roof of eastern corner of barn.
03:46	C. Pip	Bat heard and observed flying over roof of barn, before heading NE.
03:51 – 03:53	S. Pip	Bat heard for a couple of minutes but no visual.
04:40 –	Bat	Bat not heard but observed circling adjacent property (house) for several

04:43		minutes.
04:44	Bat/s	Bat not heard but observed circling adjacent house.

Surveyor: Jack Mallinder - positioned at W corner of barn (PM500-384 & Sonobat Live used)

Time (hrs)	Species	Comment
02:58	C. Pip	Bat heard but no visual.
03:33	Myotis sp.	Bat heard (briefly) and observed passing along roadside from NE to SW.
03:34	Myotis sp.	Bat heard but no visual.
03:43	C. Pip & Myotis sp.	Bats heard and 2 x bats observed passing along roadside from NE to SW.
04:00	C. Pip	Bat heard but no visual.

Surveyor: Simon Brain - positioned at E corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
03:37	C. Pip	Bat heard and observed flying N to S.
03:39 – 03:46	C. Pip	Bat heard and observed circling the roof above the barn for approximately 7 minutes.
03:52 – 03:54	S. Pip	Bat heard and observed flying near the SE face of the barn for approximately 2 minutes.
04:01	C. Pip	Bat heard and observed flying in and straight out of windowless gaps in barn, then disappearing from view towards NE of farmhouse.

Surveyor: Dawn Goodfellow - positioned at S corner of barn (EMT 2 used)

Time (hrs)	Species	Comment
02:58	C. Pip	Bat heard but no visual.
03:17	C. Pip	Bat heard but no visual.
03:33	Myotis sp.	Bat heard and observed (above roof) foraging along roadside of barn.
03:39 – 03:48	C. Pip	Bat heard frequently and regularly and observed flying in and out of windowless gaps.
03:42 – 03:43	Myotis sp.	Bat heard and observed foraging around farmyard.
03:52	C. Pip	Bat heard but no visual.
04:01	Bat	Bat not heard but observed flying in and straight out of windowless gaps in barn, then disappearing from view towards NE of farmhouse.

No bats recorded as entering the building observed.

4. Constraints and legislation

4.1 Constraints on survey information or equipment

It was considered that no constraints were applicable.

4.2 Potential impacts of development

All UK bat species and their roosts (occupied or unoccupied) are legally protected and demolition of a roost site is a criminal offence.

4.3 Legislation and Policy guidance

All bats are European Protected Species as defined by Bern and Bonn Conventions, Conservation of Habitats and Species regulations 2010, Habitats Directive Annex 4, some are also Annex 2.

All bats are protected by domestic legislation including Schedule 5 of the Wildlife and Countryside Act 1981 as amended, CROW and NERC Act 2006.

5. Recommendations and mitigation, compensation and enhancement measures

5.1 Further survey effort

In relation to the existing building and in accordance with the BCT good practice guidelines February 2016 absence of bats has been established by means of the emergence survey and therefore further surveys are not required.

5.2 Mitigation, compensation and enhancement measures

No bats were recorded in the building and therefore no measures are required to mitigate the effects of development on bats in this instance or to compensate for their presence. No roosts were identified during the surveys and therefore no EPS license is required for development to commence.

Enhancement measures

There is no loss of any roost type on the site and no roosts were discovered on survey. The site is being used for regular commuting and feeding. Specific mitigation for loss of foraging and commuting routes is not required. Under the National Planning Policy Framework 2012 and the NERC Act 2006 there is a requirement to improve existing environment through enhancement.

The development proposals can maintain the ecological connection between the site and the locality. Where new planting is to be introduced native tree and shrub planting plan is preferred. Species of local provenance are recommended in preference to non-native, ornamental species. Planting of tree and shrub species that support a high insect biomass and provide a potential food source for bats throughout the bat activity period (spring to autumn) such as rowan, silver birch, alder buckthorn, dogwood, crab apple and wild plum are recommended..

Research has found that lighting can cause considerable disturbances to bats and may interfere with bat navigation during nocturnal commuting flights to suitable feeding sites. It is recommended by the Bat Conservation Trust and Institute of Lighting Engineers that lighting at ground level should be below 3 Lux (BCT & ILE 2008). The site was found to be largely unaffected by lighting and the redevelopment will seek to ensure that lighting will be appropriately designed to ensure minimal light spill, particularly on the vegetated boundary of the site. This could be achieved by:

- Ensuring lights are only erected where they are needed, illuminated only during the time period that they will be used, and at levels that enhance visibility.
- Using narrow spectrum bulbs, to lower the range of species affected by lighting, and avoiding the use of light sources that emit ultraviolet.
- Ensuring that there are no bare bulbs or lights that point upwards.
- Ensuring that the spread of light is kept near to or below the horizontal plane.
- Reducing the height of the lighting columns since light at a low level reduces ecological impact.
- Ensuring only low level lighting that is as directional as possible is provided and that light emitted from these fixtures is below 3 lux at ground level.

- LED lighting, ideally amber LED (bat-lamps) that have a negligible UV component may be a preferred option since these show a low insect attractiveness comparable to low pressure sodium lamps and they are more directional, thus reducing light spill
- Where possible, external lights should comprise sensor activated lamps) so that lights are only operational when they are needed.
- Avoiding the illumination of habitat features used by bats, notably the boundary tree and linear hedgerows.

5.3 Mitigation licenses

In relation to the building there are no requirements for mitigation licensing as there is no requirement for anyone to carry out activity prohibited under wildlife legislation.

6. Summary

- 6.1 No bats were found to emerge from the building. As a result, no measures are required to mitigate the effects of development on bats and there is no requirement for an EPS license (derogation or low impact) from Natural Resources Wales in this instance.