



Leigh Ecology Ltd

Protected Species and Habitat Surveys

Outbuilding at Willington Lodge, Wrexham, SY13 3BZ.

On behalf of CB Homes

Bat Activity Survey Report

Report number: WILL-02/23

Author: C. Evans

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Approved: R. Leigh

IMPORTANT INFORMATION TO READERS

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The advice contained in this report is based on the information available and/or collected during the period of study. We cannot completely eliminate the possibility of important ecological features being found through further investigation and/or by survey at different times of the year or in different years.

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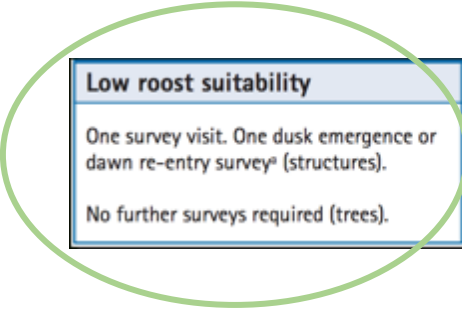
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Introduction

Leigh Ecology Ltd was commissioned by CB Homes to undertake a single bat activity survey on an active stable building, featuring a high roof and an open configuration; said building is the subject of a planning application for renovation works and is located at Willington Lodge, Wrexham, SY13 3BZ.

The client has previously commissioned a bat scoping survey, conducted by Leigh Ecology in April 2023- Will/23/001. This survey recorded several large potential entry points and a number of sizable brick pillars; consequently, the building was classified as **low roost suitability**; therefore, a single bat activity survey was suggested.



Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

Leigh Ecology Ltd was commissioned to undertake the recommended phase 2 survey.

The dusk emergence survey was undertaken on the 13th of June 2023 and in accordance with the Bat Conservation Trust, Bat Surveys Good Practice Guidelines (2016).

The survey was led by Roy Leigh ACIEEM, a licensed NE and NRW bat surveyor, number 2015-15883 –CLS.

For the emergence survey, 4 surveyor points monitored the building to ensure complete coverage for any emerging bats. The survey began 30 minutes before the recorded dusk time and continued for 90 minutes after.

The surveyors used Wildlife Acoustics Echometer/IPAD 4 and EMT pro bat detectors to record the echolocations of active bats. The surveyors were positioned as shown in *figure 1*, to ensure full coverage of the building, in order to view the elevation, and roof, and gain full coverage simultaneously.

No bats were noted emerging from the target building.

The surveyors detected 1 Common Pipistrelle bat and 1 Soprano Pipistrelle bat foraging initially at the front of the barn; the bats subsequently began foraging in and out of the barn, using the large front opening as a primary entry point. Both species of bat were noted at the surveyor points located within the front courtyard and are not considered to be roosting within the building.

Noctule Bat activity was recorded overhead, this species is not considered to be roosting within the proposal footprint.

Given the results, one can assume that **the building does not currently hold a day bat roost**, it is likely that the proposal barn provides a feeding perch and that the bats recorded roost locally; the adjacent buildings and surrounding area offer good habitat for both roosting and foraging.

Methodology

The survey was led by Roy Leigh ACIEEM, a Natural Resources Wales licensed bat surveyor.

For the emergence survey, 4 surveyor points monitored the building to ensure complete coverage for any emerging bats. The survey began 30 minutes before the recorded dusk time and continued for 90 minutes after.

The surveyors used Wildlife Acoustics Echometer/IPAD 4 and EMT pro bat detectors to record the echolocations of active bats.

Additional coverage was achieved using a Track IR Pro 19mm thermal imaging camera, used to locate bat emergence points and activity areas.

The surveyors were positioned at each corner of the building in order to view the elevation, and roof, and gain full coverage simultaneously (see surveyor location plan below).



Figure 1 - Surveyor Positions.

Dusk Emergence Results

Site	Date	Sunset/Sunrise
Willington Lodge	13.06.23	21:36
Wind (0-5)	Rain (0-5)	Cloud %
1	0	5
Start time	End time	Temperature
21:05	23:00	21

Species	Emerged Y/N	First Registration	Approximate Number	Comments
Noctule	No	21:39	1	Overhead
Soprano pipistrelle	No	22:15	1	Seen entering the barn to forage. Constant foraging activity noted within the barn.
Common pipistrelle	No	22:19	1	Seen entering the barn to forage. Constant foraging activity noted within the barn.

	Considered to be roosting in subject building (licence required)
	Foraging within subject building (mitigation required)
	Foraging in vicinity of subject building only (no action required)



Conclusions and Recommendations

The results of the activity surveys indicate that the target building does not currently contain a bat roost.

Analysis of the behaviour timing of activity etc.. lead to the conclusion that the building is used for foraging particularly in poor weather conditions.

Therefore, given that the building does not contain a current roost, it is suggested that the proposed works proceed with caution and any bat related constraints should be covered by adhering to a bat safeguard method statement/ soft strip methods provided to the construction workers in the form of a toolbox talk and the commencement of the works.

However, in order to comply with local biodiversity gain policy, it is suggested that three bat boxes/bricks are erected on the elevation facing away from the street/local flood lighting.

Where lighting is absolutely necessary in areas of tree/shrub planting this will be low wattage, directional, low level and/or shaded to minimise light spill (<1Lux) onto potential flight lines and foraging habitat to ensure that the overall impact caused by lighting the site is negligible. The lighting scheme will be designed with regard to guidance such as the Bat Conservation Trust Statement on the impact and design of artificial light on bats, and the Institution of Lighting Professionals Guidance Notes, to minimise disturbance to bats and other wildlife due to artificial lighting.