



Leigh Ecology Ltd

Protected Species and Habitat Surveys

Tyn Y Coed, Chester Road, Rossett, Wrexham

On behalf of Fiona McClements.

Bat Activity Survey Report

Report number: ROS/01/22

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IMPORTANT INFORMATION TO READERS

This report has been prepared for Mrs. Fiona McClement, in accordance with the terms and conditions of appointment for bat activity surveys. Leigh Ecology Ltd cannot accept any responsibility for the use of or reliance on the content of this report by any third party.

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.

Surveys and assessments are undertaken on the understanding that nothing in our reports will be omitted, amended or misrepresented by the client or any other interested party.

Please be aware the information contained within this report is valid for a period not exceeding two years. After this time, data contained within will require updating.

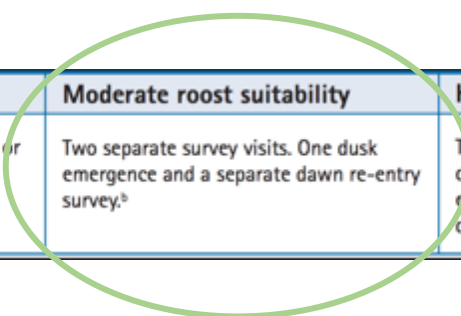
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Introduction

Leigh Ecology Ltd was commissioned by Mrs. Fiona McClement to undertake a series of bat activity surveys on a detached dwelling, with both single-storey and two-storey configuration; said dwelling is the subject of a planning application for demolition of the existing building and the construction of new dwellings on the site, located at Chester Road, Rossett, Wrexham.

The client has previously commissioned a bat scoping survey, conducted by Rachel Hacking Ecology in April 2022. This survey stated that all tiles are in place, with no missing or slipped tiles. Where chimneys and ventilation pipes occur, the lead flashing is intact and flush to the tiles. The roof edges are generally well-sealed, with most mortar intact although parts are crumbling. Soffits and bargeboards exist in places. These are mostly intact and flush to the walls, but some have small gaps between wooden panels.

During the bat scoping survey, undertaken by Rachel Hacking Ecology, a small number of bat droppings (<5) were found scattered on top of the insulation within the double-storey loft void; therefore, the building was assessed as providing **moderate roost suitability** and two bat activity surveys were 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 surveys.

The two dusk emergence surveys were undertaken on the 12th of July and the 25th of August 2022 and were undertaken in accordance with the Bat Conservation Trust, Bat Surveys Good Practice Guidelines (2016).

The surveys were led by Roy Leigh ACIEEM, a licensed bat surveyor, number 2015-15883 –CLS.

For the emergence surveys, 5 surveyor points monitored the building to ensure complete coverage for any emerging bats. Both surveys 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 dwelling, in order to view the elevation, and roof, and gain full coverage simultaneously.

No bats were noted emerging from the target building during the two activity surveys.

The surveys detected at least 2 Common Pipistrelle bats foraging at all sides of the building, but these bats are not considered to be currently roosting within the building. They were picked up by surveyors entering the site for the South.

Soprano Pipistrelle bats were also recorded foraging, mainly within the tree line to the north of the site; Again, these bats are not considered to be currently roosting within the target 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 bat roost**, it is likely the bats recorded roost locally; the adjacent buildings and surrounding area offer good habitat for both roosting and foraging.

The bat droppings recorded during the initial scoping survey are likely the result of a transient roost¹, that is not currently in use. *Recommendations on this can be found further on within this report.*

¹ Transient roosts are sites bats use in spring and fall when moving between hibernacula and maternity colonies

Methodology

The surveys were led by Roy Leigh ACIEEM, a licensed bat surveyor, number 2015-15883 –CLS.

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

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

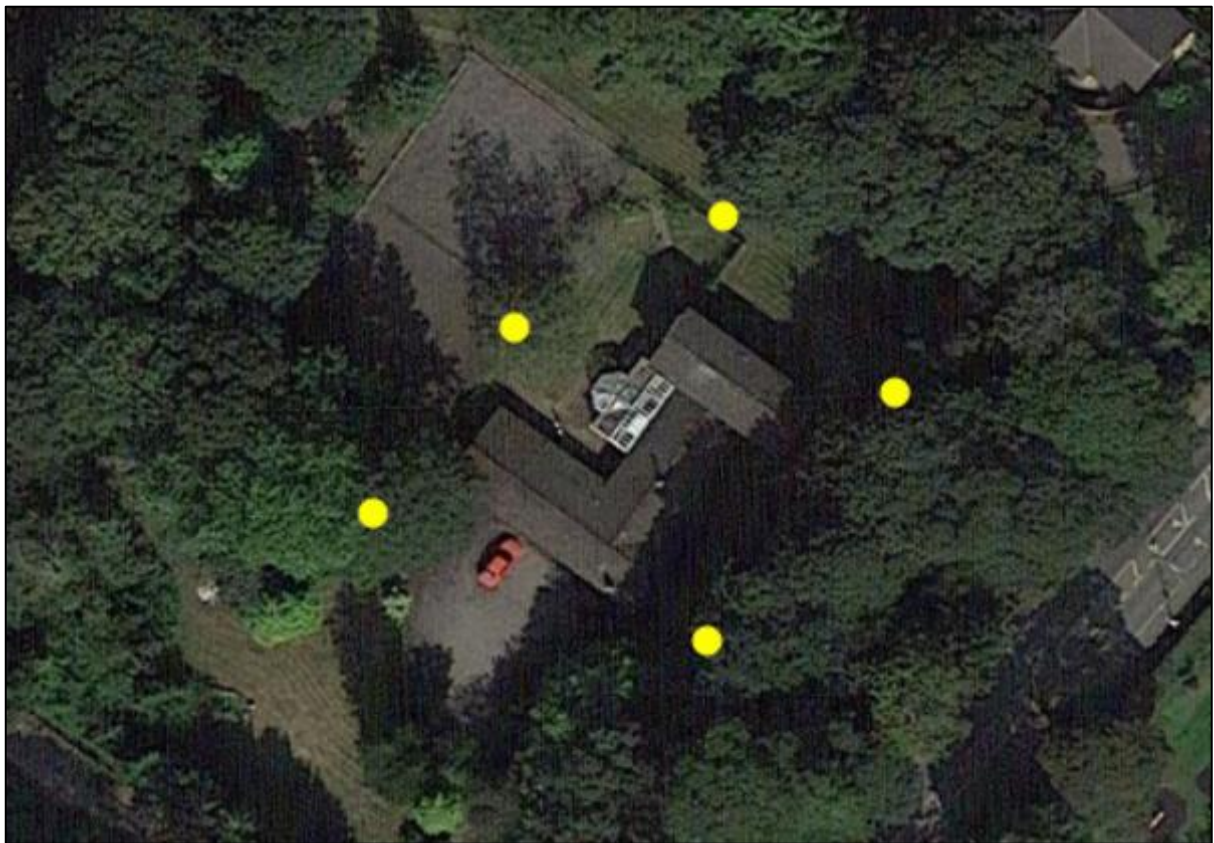


Figure 1 - Surveyor Positions.

Dusk Emergence Results

12th July 2022

Start time	End time	Dusk time	Starting temp °	End temp °	Wind	Rain	Cloud %
21:05	22:45	21:33	22	19	0	0	30

21:52	SOPRANO PIPISTRELLE	Heard not seen (north of site)
21:52	COMMON PIPISTRELLE	Foraging at front of house (south-east)
21:53	COMMON PIPISTRELLE	Heard not seen (north of site)
21:53	SOPRANO PIPISTRELLE	Passing over SE to NW
21:55-22:09	COMMON PIPISTRELLE	2 bats foraging together around the house, all sides
22:00	NOCTULE	Passing overhead
22:12-end	SOPRANO PIPISTRELLE	Foraging in trees (far north of site)
22:12-end	COMMON PIPISTRELLE	At least 2 bats foraging around north side of site



25th August 2022

Start time	End time	Dawn time	Starting temp °	End temp °	Wind	Rain	Cloud %
20:00	21:45	20:16	16	13	0	0	10

20:35	COMMON PIPISTRELLE	Passing in tree line at north of site
20:39	COMMON PIPISTRELLE	Foraging over roof
20:42	SOPRANO PIPISTRELLE	Heard not seen
20:43-end	SOPRANO PIPISTRELLE	Foraging in trees at north of site
20:44-end	COMMON PIPISTRELLE	Foraging in trees at north of site
20:55	NOCTULE	Passing overhead



Conclusions and Recommendations

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

Given that the Bat Scoping survey identified a small number of scattered droppings, the building is likely used as a transient roost outside of the core activity period.

All bat roosts are fully protected under the Wildlife and Countryside Act 1981 (and amendments) and The Conservation of Habitats and Species Regulations 2010, which defines these animals as European Protected Species. An offence would be committed if roosts, whether occupied or not, were destroyed, damaged or obstructed, or if bats themselves were harmed or disturbed.

Therefore, in order to comply with local biodiversity gain policy, it is suggested that three bat boxes/bricks are erected onto the new elevations 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.

It is also suggested that the landscape proposals and the development of new dwellings should compensate for the loss of habitat by providing a network of landscape features such as trees, water features and scrub areas and provision of bat roost opportunities within the buildings, designed for the species occurring within the immediate area.



The Enclosed Bat Box 'C' from Ibstock is designed for the pipistrelle bat. It is ideal for new builds as it can be integrated directly into the brickwork to produce a discrete but attractive home for bats.



1FR/2FR Schwegler Bat Tubes



Woodstone Exterior Bat Box

During the demolition period, bat safeguarding measures should be employed under the supervision of a suitably experienced and licensed ecologist.