

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

Highwood, Hitchwood Lane, Preston, Hitchin, Hertfordshire SG4 7RY

Client:

Michelle Sweeney

Report date:

22/08/2024

Project:

This report is prepared to inform a planning application for the proposal described as:
“The renovation and repurposing of an agricultural building into a domestic dwelling”.

This report is supplementary to the Preliminary Roost Assessment report completed by Arbtech Consulting Ltd (2024).

BERS survey methodology and legislation can be found in the Arbtech Supplement: [BERS Methodology and Legislation - 2024.](#)

This report is an addendum to and must be read in conjunction with the Preliminary Roost Assessment completed by Arbtech Consulting Limited (2024) for the same site address. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.	
Executive Summary	
Background PRA – Arbtech, August 2024 Number of buildings on site – 1 (B1) Buildings requiring further survey –B1 B1 Evidence of bats – None Habitat value –Low <i>BERS results</i> Building (B1): The survey did not record any bat roosting activity. Limited bat activity was observed. The development will need to be permitted by a bat mitigation licence.	
The site surveys were designed and managed by Inez Daly, Accredited Agent on Natural England Bat Licence Number 2018-33540-CLS-CLS.	
See surveyor locations in the BERS plan in Appendix 1	
<i>Limitations</i>	None.

Field Survey							
Dusk Emergence Survey 1							
Building B1							
<i>Surveyor and position</i>		Lead Surveyor 1 - Inez Daly – Accredited Agent on Natural England Bat Licence Number: 2018-33540-CLS-CLS– observing north and west elevations Surveyor 2 - Indy Jai – observing the east and south elevations					
<i>Weather (start/end)</i>		Temperature (°C): 21 Relative humidity (%): 77 Cloud cover (%): 45 Wind (m/s): 3 Rain: None			Temperature (°C): 20 Relative humidity (%): 72 Cloud cover (%): 20 Wind (m/s): 2 Rain: None		
<i>Equipment used</i>		Echometer Touch 2, Magenta Hetrodyne detector, IR camera (Nightfox Red, Nightfox Whisker), IR torches, clipboards, pens, radios, anemometer.					
Results							
Date of survey	Sunset Start - End	Species and numbers	Roost type	Structure reference	Roost location	Access points (include # of them)	Dimensions and explanation of roost location
05/08/2024	Sunset 20:43 20:28 – 22:13	N/A	N/A	B1	N/A	N/A	N/A
Surveyor observations							

<i>Surveyor 1</i>	No emergences seen. First activity noted at 21:05 of a heard not seen (HNS) common pipistrelle (CPIP). CPIPs were HNS at 21:27, 21:32, 21:35, 21:36-21:46, 21:55-22:05, and 22:06-22:13, with distinct foraging and social calls throughout. One CPIP was observed foraging at 21:22; one south to north pass was observed at 21:32. HNS activity was attributed to foraging CPIPs to north of elevation. One barbastelle (BARB) was HNS faintly at 21:48. One Leisler's bat was HNS at 21:57 and intermittently between 22:00- 22:05.	
<i>IR position 1</i>	No emergences recorded. No additional bat activity recorded.	

<i>Surveyor 2</i>	No emergencies observed. One CPIP was observed foraging in western field beyond B1. CPIPs were HNS at 19:52, 22:00, 22:09 and 22:11. One soprano pipistrelle (SPIP) was HNS at 21:45. One noctule was HNS at 22:12.	
<i>IR position 2</i>	No emergencies recorded. No additional bat activity recorded.	

Conclusions, Impacts and Recommendations	
<i>Survey Results Summary</i>	No roosts were identified in B1 . Main foraging activity was noted beyond B1 to the north and further afield to the west. Infrequent passes noted; no distinct commuting routes found.
<i>Impact Assessment</i>	The proposed works involve the renovation and repurposing of B1 into a residential dwelling. Current roosting features are likely to be removed or obstructed. Bats present at time of works could be disturbed, injured or killed. Further landscaping is unlikely to affect current foraging habitat; however an increase of light spill from the development could disturb commuting and foraging bats on site. B1 is not suitable to host maternity colonies.
<i>Recommendations</i>	No roosts identified in B1. As the proposed development is only to affect B1, further bat surveys are considered to be disproportionate. In the unlikely event that a bat or evidence of a bat is discovered during development all work must stop and a bat licensed ecologist contacted for further advice. A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: - Light spill on to the western field and towards northern treeline to be avoided. - Use narrow spectrum light sources to lower the range of species affected by lighting. - Use light sources that emit minimal ultra-violet light. - Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. - Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal - Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.

	- External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. - Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.
<i>Enhancements</i>	Consider mounting bat boxes to retained external walls or integrating bat boxes into renovated or created walls where possible. Boxes should be placed at eaves level, south or southwest facing, unlit by artificial light, unobstructed entrance and away from windows. Further enhancements include retaining and creating any lost foraging and commuting habitats by establishing dark corridors and planting native flowering shrubs and trees on site, ensuring no external light spill occurs to the north and the west of B1 . Consider a relaxed mowing regime along field and lawn edges.

Appendix 1: BERS plan

Version control			
Status	Issue	Name	Date
Draft	0.1	Inez Daly, BA (Hons), Accredited Agent on Natural England Bat Licence Number 2018-33540-CLS-CLS	23/08/2024
Proof	0.2	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	19/09/2024
Final	1.0	Inez Daly, BA (Hons), Accredited Agent on Natural England Bat Licence Number 2018-33540-CLS-CLS	23/09/2024

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