

Preliminary Roost Assessment

Survey site:

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

Client:

Michelle Sweeney

Survey date:

2nd August 2024

Project:

This report is prepared to inform a planning application with the North Hertfordshire District Council. The proposal is described as:
The renovation and repurposing of an agricultural building into a domestic dwelling.

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

The site survey was undertaken by Inez Daly, BA (Hons), Accredited Agent on Natural England Bat Licence Number 2018-33540-CLS-CLS.					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
02/08/2024	21	69	20	14	None
PRA Survey Factor		Detailed using desk study and site survey. Any specific limitations noted within relevant section. 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.			
See PRA plan in Appendix 1, BERS plan in Appendix 2, location plan in Appendix 3, and proposed plans in Appendix 3.					
Background and Site Location					
Summary of site and desk Study		The chicken shed (B1) and the surrounding grounds at Highwood, Highwood Lane (hereafter referred to as ‘the site’), contains a single-storey, timber and concrete brick-built structure, located at National Grid Reference TL18882440. The site comprises an area of 0.5ha and is contained within the 9ha area of the Highwood property. Proposed plans are limited to the site. No developments involving further buildings or grounds are proposed. The site is located in the rural village of Preston, Hertfordshire. Grazing and domestic landscaped fields surround the site on all sides, with agricultural fields further south. There are lines of trees throughout the property, providing excellent connectivity to the wider environment. The mixed hedgerow and treeline to the north of the site is of particular importance—based on historic aerial imagery, this vegetated feature predates much of the current developments on the property by at least ten years. The longevity increases the likelihood of bats utilizing the trees and hedgerow as generations of bats have been able to forage and roost along this stretch for years. The rural setting of Highwood within the countryside and village indicates a prime location for bats; however, B1 may not be suitable for roosting bats due to previous damage to the building.			

	To the author’s knowledge, no previous ecology reports have been produced for this site. The following EPSLs were found within 2km of the site. <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2019-38736-EPS-MIT</td><td>Common pipistrelle (CPIP), soprano pipistrelle (SPIP)</td><td>1 km northwest</td><td>Damage of a resting place</td></tr><tr><td>EPSM2012-4641</td><td>CPIP, Brown long-eared (BLE), Natterer’s bat (NATT)</td><td>2 km northwest</td><td>Impact to breeding sites; destruction of breeding site; destruction of a resting place</td></tr></table> Wain Wood SSSI is located 1 km northwest to the site, containing ancient semi-natural oak and hornbeam woodland. The site lies within the Impact Risk Zone of this SSSI; due to the small scale of the project it is unlikely for the developments to have a harmful effect to the SSSI. There are no Special Areas of Conservation (SACs) within 10 km of the site. The site is not subject to any designation.	EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2019-38736-EPS-MIT	Common pipistrelle (CPIP), soprano pipistrelle (SPIP)	1 km northwest	Damage of a resting place	EPSM2012-4641	CPIP, Brown long-eared (BLE), Natterer’s bat (NATT)	2 km northwest	Impact to breeding sites; destruction of breeding site; destruction of a resting place
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Limitations	Formal proposed plans unavailable at time of report. Report must be updated once plans are available.												

Field survey results	Photos
<i>Summary of Survey Findings (including UKHabs codes)</i> There is one building on site. u1b5 The chicken shed (B1) is a timber and concrete brick structure, previously used as its namesake. The exterior of B1 is constructed of timber cladding, which contains a multitude of gaps and holes as the wood has aged. Warped timber cladding makes excellent roosting habitat for crevice dwelling bats. However, the lack of insulating material between the exterior cladding and interior wall does not provide optimal shelter from wind and as such lowers the value of this feature for roosting bats. There are no exterior roofing materials on B1. According to the client, the exterior roofing materials of B1 were torn off during a storm earlier in 2024; the last remnants of the roof are sarking boards attached to the battens. These allow a great deal of light spill to the interior. The interior of B1 is bare and lacks finish. Exposed	 <i>Figure 1. South and east elevations of B1.</i>  <i>Figure 2. North and west elevations of B1.</i>

construction beams are visible, as are sheets of damaged building paper. This paper is the only separation from the interior to the exterior timber cladding, with the exception of a section of exposed breathable membrane in the north wall. There are two small windows on the east elevation of **B1**. As such there are very few dark areas of the building and the exposed nature of the interior makes **B1** relatively inhospitable to bats. Nonetheless, it is possible for bats to make use of the interior as a feeding roost; no evidence of such usage was found.

g4, u1c

The majority of the site consists of amenity grassland, largely disturbed by previous use of heavy machinery. During the storm, many trees and vegetation to the south of the site sustained extensive damage. The site has since hosted several large piles of dead vegetation and branches, cleared by heavy machinery. The northern treeline remains unchanged; the conifer southern treeline and the ornamental trees lining the established gravel path



Figure 3. Two examples of warped exterior cladding, north and west elevations, respectively.



*Figure 4. Interior of **B1**, facing north. Exposed construction paper visible throughout. Breathable membrane visible at left of northern elevation.*

	leading to the property remain intact. Given the current state of the building, B1 is not suitable to host maternity colonies, and it is unlikely that individual bats are using this building for roosting. However, the warped cladding may provide temporary shelter and as such the building is assessed to have low value for roosting bats.	 Figure 5. Nesting pigeon.  Figure 6. Destroyed vegetation in piles to the north and northeast of B1.
Foreseen Impacts	At time of report no formal plans are available. Roosting habitat To the author's knowledge, B1 is to undergo extensive refurbishing to accommodate the repurposing of the building from agricultural to domestic. As the exterior wooden cladding is unfit for purpose, it is likely to be removed during developments. Any bats present within B1 at times of works may be disturbed, injured or killed.	

	Foraging and commuting habitat To the author's knowledge the proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. However, the use of lighting during works, and the erection of permanent exterior lighting, may spill onto foraging or commuting habitats which may deter bats from using these areas.
<i>Recommendations</i>	Roosting habitat Due to the low value for roosting bats, one bat emergence and re-entry survey (BERS) is required for B1 during the active bat season (May – September) to confirm presence or likely-absence of bats roosting in or on the building. Two surveyors assisted by night vision aids (NVAs) are to provide adequate coverage of all elevations. In the unlikely event a bat roost is identified within B1, further licencing will be required, including a European Protected Species Licence (EPSL) application to Natural England. The EPSL application requires that all surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. Foraging and commuting habitat Lighting mitigation may be required based on the BERS outcome. Further site enhancements to follow post BERS.
Trees – Ground Level Tree Assessment	
<i>Summary of Survey Findings</i>	No trees surveyed.
<i>Foreseen Impacts</i>	To the author's knowledge no impacts are scheduled for trees within the site.
<i>Recommendations</i>	Retain current trees insofar as possible.

Nesting Birds	
<i>Summary of Survey Findings</i>	One nesting wood pigeon was found within B1 . Exposed rafters and open access to the interior via damaging sarking boards provides excellent nesting habitat for birds. Birds could use peripheral treelines for nesting.
<i>Foreseen Impacts</i>	Proposed development will result in the destruction of active bird nests. Works on site may disturb any nests present within site treelines. Further landscaping development may affect foraging grounds on site.
<i>Recommendations</i>	All active nests to be retained until the young have fledged. As there is an active nest within B1 no works may commence until the nest is no longer in use. Following this, any building or vegetation disturbance should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building and nearby vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. Beyond B1, precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. The installation of one bird box on a mature tree on site boundaries or on the redeveloped building will provide additional nesting habitat for birds, e.g. Schwegler No 17 Swift Nest Box (buildings), Bark Boxes Blue Tit 25mm (trees), Woodstone Nest Box (buildings or trees), or a similar alternative brand. Consider a multi-use large bird nest box to provide alternative nesting habitat for wood pigeons.

Appendix 1: PRA plan



Appendix 2: BERS map



Appendix 3: Location plan



Appendix 4: Proposed plan

No formal plans available.

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Version control			
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Draft	0.1	Inez Daly, BA (Hons), Accredited Agent on Natural England Bat Licence Number 2018-33540-CLS-CLS.	09/08/2024
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