1 The Street, Brome, Eye

Bat Survey Report

On Behalf of Mr S Shales via Ashley Largent Associates Ltd

Version 1 | June 2022

Document Control

Version	Date	Produced by	Reviewed by	Notes
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This report does not purport to provide legal advice. This report provides ecological conditions (specific to bats) for the aforementioned site and is considered relevant for a period of no more than 12 months from the date of survey (May 2022).

The Main House and Outbuilding to be Converted

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Executive Summary

In October 2021 Practical Ecology Ltd undertook a Preliminary Ecological Appraisal (PEA) report at 1 The Street, Brome, Eye, Suffolk. The PEA survey adjudged the two buildings onsite to have low suitability for roosting bats. It was therefore recommended that a bat activity survey was undertaken to confirm the status of bats in the buildings.

A dusk survey was undertaken on 17th May 2022. No bats were seen to emerge or re-enter either building and consequently it is not considered that the proposed development will impact roosting bats.

As per recommendations within the PEA, a bat box should be installed on the garage onsite and three boxes on a tree within the garden to enhance the Site for bats.

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1. Introduction and Background

Practical Ecology Ltd was commissioned by Mr S Shales to undertake a bat survey of the proposed development at 1 The Street, Brome, Eye, herein referred to as the "Site".

The building was considered to have *Low Suitability*[1] during the Preliminary Ecological Appraisal (PEA)[2] undertaken in October 2021. Potential roost features were noted on the southern elevation of a residential property and on an outbuilding to be converted. All features noted were lifted or slipped clay pan tiles.

1.1 The Site

The Site is approximately 0.1 ha (central OS grid reference TM 15365 76608, postcode IP23 8AE) and is located in Brome, Suffolk, c.4 km southeast of the town of Diss. The Site comprises of a residential property with two outbuildings and an associated vegetated garden and gravel access track and parking. The Site is surrounded by the other residential properties and gardens, a minor road, and on the east and south by a parcel of woodland. A Site Plan along with a red line boundary is provided in Figure 1, below (ALG Ltd, 2021, GO28 001).

Figure 1: Site Boundary

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1.2 Proposals

The proposals include a ground floor extension linking to an existing outbuilding which is to be converted. Proposal plans are provided in Appendix 1 (ALG Ltd, 2021, GO28 003 0).

1.3 Legislation

Bats are protected under section 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended) and are a Schedule 2 species protected by the Conservation of Habitats and Species Regulations (amendments) (EU Exit) (2019) which continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

The Countryside and Rights of Way (CRoW) Act 2000 also contains a provision for custodial sentences. Taken together it is illegal to:

- Deliberately kill, injure or capture any wild animal of a Schedule 2 species;
- Deliberately disturb wild animals of any Schedule 2 species in such a way to be likely to:
    - Significantly impair their ability:
        a) To survive, breed or reproduce, or to rear or nurture young;
        b) In the case of animals of a hibernating or migratory species, to hibernate or migrate.
    - Significantly affect the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place, even if bats are not in current occupation;
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or any part thereof;
- Intentional or reckless disturbance (at any level); and
- Intentional or reckless obstruction of access to any place of shelter or protection.

Penalties for offences include unlimited fines and up to 6 months imprisonment instead of, or in addition to, a fine. Along with significant development delay until appropriate mitigation has been agreed and completed.

The NERC Act 2006 also lists bats as a species of principal importance under Section 41 and Section 40 requires every public body in the exercising of its functions to 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.

2. Methods

2.1 Emergence / Re-Entry Surveys

The survey was led by Cyrise Weaire BSc (Hons), M:CIEEM, and Ecologist with over 16 years' experience and Alex Jessop BSc (Hons), MSc, an Ecologist with over four years' experience.

Each surveyor watched a section of the buildings for the entirety of the survey to provide coverage of all potential roost features and to relay information on any bat activity to other surveyors. Each surveyor carried a bat detector: detectors used were Echo Meter Touch 2 (iOS). Any bats seen during the surveys were noted, and the bat detector data was

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analysed to corroborate sightings. In addition to this, infrared cameras, supported by separate infrared floodlights, were used as surveyors viewing aids and to record any activity onsite.

Details of the activity surveys undertaken on the site are provided in Table 1 below. Surveyors were positioned around the building to provide coverage of all potential roost features and to relay information on any bat activity to other surveyors.

The dusk emergence survey was undertaken in periods of suitable weather: above 10°C, minimal wind, and no precipitation which could impact bats flying. These times and conditions are in accordance with Bat Conservation Trust guidance[1] for completing activity surveys on buildings.

Table 1: Survey Date and Time

Date	Survey Type	Sunset / Sunrise Time	Survey Start / End	Weather
17th May 2022	Dusk Emergence	20:47	20:32 – 22:25	50% - 1--% Cloud Cover, 1 Beaufort, 19°C - 15°C. No rain was recorded until 22:25 when a light rain shower occurred

Surveyor locations are shown with blue circles in Figure 2, below:

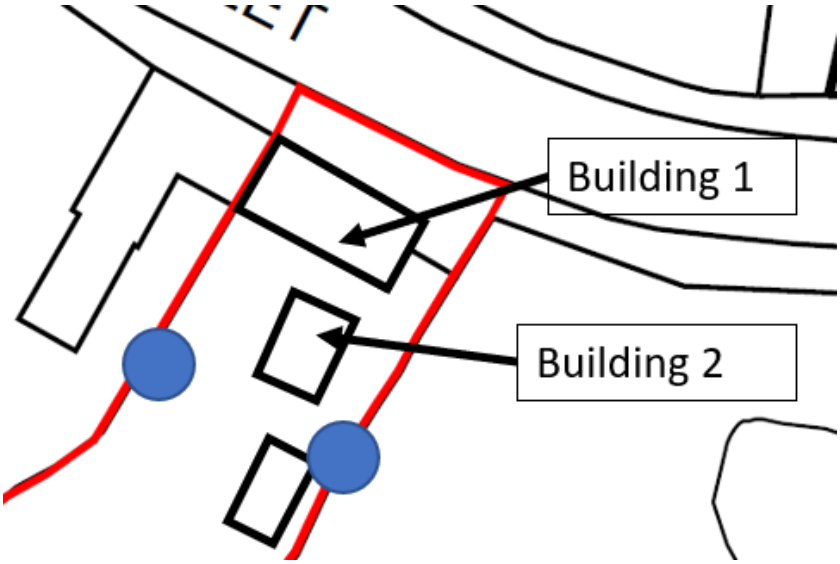

Figure 2: Surveyor Locations

2.2 Limitations to Survey

The surveys were undertaken without limitation. While a brief rain shower ended the survey, over 90 minutes had passed since sunset and as such, it was considered that enough data to provide findings had been gained.

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3. Results

3.1 Dusk Emergence Survey

No bats were observed emerging from the buildings by any surveyor.

The following species of bat were recorded foraging over the Site during the survey:

- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Noctule (*Nyctalus noctule*)
- Serotine (*Eptesicus serotinus*)

4. Recommendations

As per recommendations within the PEA, a wall mounted bat box should be placed onto Building 3/ the garage, as part of best practice to compensate for the loss of potential roosting features. This should be on the south aspect, at least 2.5 m above ground level and away from any direct artificial illumination. Suggested enhancements are to install Kent-style bat boxes on the mature oak tree in the garden of the Site.

Any lighting schemes to be installed during and post-construction must be designed to prevent unnecessary light spill onto retained vegetation or any bat boxes installed as part of the development. The following guidance[34] must be followed:

- Minimise light spill by eliminating any bare bulbs and upward pointing light fixtures. The spread of light must be kept near to or below the horizontal plane, by using as steep a downward angle as possible and/or shield hood. Flat, cut-off lanterns are best.
- Luminaires must feature peak wavelengths higher than 550 nm to avoid the component of light most disturbing to bats[5].
- A warm white spectrum (ideally <2700Kelvin) must be adopted to reduce blue light component.
- All luminaires must lack UV elements when manufactured. Metal halide, fluorescent sources must not be used.
- Limiting the height of lighting columns to eight metres and increase the spacing of lighting columns[6] will reduce the spill of light into unwanted areas such as the aforementioned habitats.
- Artificial lighting proposals must not directly illuminate trees or bat box locations.

With these lighting measures implemented, it is considered that any potential adverse effects from lighting upon bats will be minimised.

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5. References

[1] Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed). The Bat Conservation Trust, London

[2] Practical Ecology Ltd, 2020, 169-171 Golders Green PEA Report, V1 November 2020.

[3] Miles, J., Ferguson, J., Smith, N., and Fox, H., 2018. Guidance Note 08/18 Bats and artificial lighting in the UK. [pdf] Available at: https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf.

[4] Gunnell, K., Grant, G., and Williams, C., 2012. Landscape and urban design for bats and biodiversity. Bat Conservation Trust, London, UK.

[5] Stone, E.L., Jones, G., Harris, S., 2012. Conserving energy at a cost to biodiversity? Impacts of LED lighting on bats. Glob. Change Biol. 18, 2458–2465.

[6] Fure, A., 2012. Bats and Lighting – six years on. The London Naturalist 91, 69-88.

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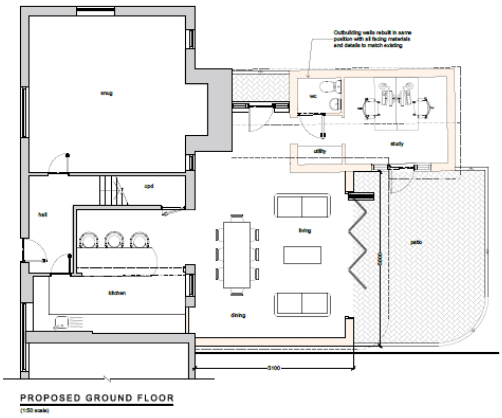
Appendix 1: Proposal Plan

1 THE STREET, BROME

GENERAL NOTES:
UNLESS NOTED OTHERWISE:
1. This drawing is to be read in conjunction with all relevant drawings, details, sketches, reports, calculations and specifications



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