

## Bat Emergence Survey



25 Lower Road,  
Breachwood  
Green, SG4 8NS

On Behalf of:  
**Pentangle Design Group**

**July 2026**

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## 1 Introduction

- 1.1.1 Coyne Environmental Ltd has been instructed to undertake an ecological assessment of 25 Lower Road, Breachwood Green, Hitchin, SG4 8NS to establish if there is any ecology of interest present at the site. This survey is to assist the Local Planning Authority (LPA) decision for planning permission. A Preliminary Ecological Appraisal (PEA) was conducted in April 2026 and identified that building B1 required a Bat Emergence Survey (BES). Two BES surveys were conducted in accordance with the Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, J. 2023).
- 1.1.2 This report should be read in conjunction with other ecological reports, if present in the planning permission, to assist the LPA. The BES surveys were conducted on the 22nd of May 2026 and 30th of June 2026, conforming with BCT guidelines for bat emergence surveys on weather and timings.



Figure 1: Site shown in relation to Breachwood green

## 2 Site

- 2.1.1 The proposal is seeking planning approval for the erection of three dwellings on the site of an abandoned residential property at 25 Lower Road, Breachwood Green, Hitchin, SG4 8NS (Grid Ref: TL 15397 22075). The site extends to approximately 0.25 hectares within a predominantly agricultural landscape. Breachwood Green is a small rural settlement within the parish of King's Walden in North Hertfordshire.
- 2.1.2 The site comprises an abandoned residential property (B1) with associated outbuildings, unmanaged garden, introduced shrub planting, bramble scrub, bare ground and boundary hedgerows. A garage/storage building (B2) and a barn (B3) were previously present but have been demolished prior to the BES surveys being conducted. Open farmland extends to the east and north, with Watkins Wood ancient woodland located approximately 130m to the north. The native hedgerow boundaries provide linear commuting features linking the site to the wider landscape.
- 2.1.3 The PEA conducted in April 2026 originally assessed B3 (barn) as having moderate bat roost suitability based on gaps between timber roof boarding, multiple entry points and insect remains. B3 was demolished before the recommended emergence survey could be conducted. Potential bat activity was subsequently observed in association with B1 (the residential building), and the BES surveys were therefore conducted on B1 to establish the presence or likely absence of roosting bats.

### 3 Legislation

- 3.1.1 European and UK legislation details the management and protection of biodiversity and ecology within the UK planning systems. The Wildlife and Countryside Act 1981 is the main protection for wildlife, including European Protected Species (EPS), such as bats under Schedule 5 and 9, alongside the England and Wales Habitats Regulations 2017. This dual system of protection ensures all species of bats, alongside their breeding and resting sites are protected. Bats are classified as EPS and Outline Mitigation and Compensation Strategies are materials which must be considered in planning applications where bats or their habitats may be affected.
- 3.1.2 ODPM circular 06/05 (paragraph 99) is explicit in stating that where there is a reasonable likelihood of the presence of protected species it is essential that the extent that they are affected by the development is established. Surveys must be conducted before a decision can be reached (as stated in ODPM circular 06/05). These surveys were undertaken in accordance with the Bat Conservation Trust Good Practice Guidelines, 4th edition, 2023.

## 4 Guidance & Equipment

### 4.1 Guidelines

4.1.1 The Bat Emergence Surveys (BES) have been undertaken in accordance with Bat Surveys for Professional Ecologists, Good Practice Guidelines (4th edition). This report has considered the Wildlife and Countryside Act 1981, EEC Habitat Directive 92/43/EEC (1992) and the Conservation of Habitats and Species Regulations 2010. These surveys have been created to inform the Local Planning Authority (LPA) on EPS activity at the site in question. The bat surveys undertaken for each survey are under the bat licence of Kenneth Coyne, Bat Licence No 2015-15943-CLS-CLS.

### 4.2 Equipment

4.2.1 The first survey was conducted on the 22nd of May 2026 at dusk with two surveyors: Sara Bates (lead ecologist) and Matthew Plumtree. The second survey was conducted on the 30th of June 2026 with three surveyors: Sara Bates, Matthew Plumtree and Josh. Weather conditions on both survey nights were within the acceptable limits for bat surveys. All surveyors were equipped with bat detectors including Echo Meter Touch 2 Pro's and a Magenta Bat 5, additionally, a 1000 lumen torch was present, where needed, with bat activity recorded on standard pro-forma sheets.

4.2.2 The Night Vision Aids (NVA) used at the time of the surveys were Nightfox Thermal Master DV2 cameras which have an increased field of view. Alongside these cameras Night Arc footage analysis software v1.2.0 is used for motion detection analysis. The software allows for easier analysis of potential emergences and emphasises movement during recordings that may have been missed by surveyors due to darkness as each survey progresses.

## 5 Survey 1 – 22<sup>nd</sup> May 2026

5.1.1 The first survey was conducted on the 22<sup>nd</sup> of May 2026

**Table 1 Species and Activity Key**

| Key                 |     |
|---------------------|-----|
| Species             |     |
| Common Pipistrelle  | CP  |
| Soprano Pipistrelle | SP  |
| Brown Long eared    | BLE |
| Behaviours          |     |
| Feeding             | F   |
| Commuting           | C   |
| Passing             | P   |
| Distant Pass        | DP  |
| Seen                | S   |

## 5.2 Data

**Table 2 Weather and Time at Survey 1**

| Start time: 20:45 (Sunset time: 20:58) | Finish time: 22:28  |
|----------------------------------------|---------------------|
| Temperature: 20°C                      | Temperature: 19°C   |
| Humidity: 73%                          | Humidity: 73%       |
| Cloud Cover: 27%                       | Cloud Cover: 38%    |
| Wind: 1-2/8                            | Wind: 1/8           |
| Precipitation: 0/10                    | Precipitation: 0/10 |

**Table 3 Sara Bates sheet data (Survey 1)**

| Surveyor Name: | Sara Bates |       |                                                                                    |
|----------------|------------|-------|------------------------------------------------------------------------------------|
| Species        | Activity   | Time  | Notes                                                                              |
| CP             | P          | 21:10 | Over buildings<br><br>Over buildings<br><br>x2 seen at once<br><br>x1 seen at once |
| CP             | F/S        | 21:25 |                                                                                    |
| SP             | P          | 21:30 |                                                                                    |
| CP             | P/S        | 21:48 |                                                                                    |
| CP             | P/S        | 21:51 |                                                                                    |
| SP             | F          | 21:51 |                                                                                    |
| CP + SP        | P/S        | 21:52 |                                                                                    |
| SP             | P/S        | 21:53 |                                                                                    |
| SP             | F/S        | 21:54 |                                                                                    |
| CP             | P/S        | 22:00 | Towards front of site                                                              |
| SP             | P          | 22:01 |                                                                                    |
| CP             | P/S        | 22:02 |                                                                                    |
| CP             | F/P        | 22:05 |                                                                                    |
| CP             | DP         | 22:05 |                                                                                    |
| Unidi          | P/S        | 22:17 |                                                                                    |
| CP             | P          | 22:16 |                                                                                    |
| CP             | DP         | 22:26 |                                                                                    |

**Table 4 Matthew Plumtree sheet data (Survey 1)**

| Surveyor Name: | Matthew Plumtree |       |                              |
|----------------|------------------|-------|------------------------------|
| Species        | Activity         | Time  | Notes                        |
| CP             | P                | 21:20 | Check cameras                |
| CP             | F                | 21:25 | Check cameras, over building |
| SP             | P                | 21:30 | Over building                |

|     |    |       |                             |
|-----|----|-------|-----------------------------|
| CP  | P  | 21:47 |                             |
| SP  | S  | 21:44 | Flying outside front porch  |
| SP  | F  | 21:51 | Feeding outside front porch |
| CP  | F  | 21:51 | Over house                  |
| SP  | F  | 21:52 | Over the house, seen        |
| SP  | P  | 21:54 | Seen                        |
| SP  | F  | 22:00 | Seen                        |
| CP  | P  | 22:02 |                             |
| CP  | P  | 22:02 |                             |
| CP  | F  | 22:03 |                             |
| CP  | P  | 22:03 |                             |
| CP  | DP | 22:05 |                             |
| BLE | P  | 22:17 |                             |
| SP  | P  | 22:18 |                             |

**Figure 2: Marked positions of surveyor's on survey 1**



## 6 Survey 2 - 30<sup>th</sup> of June 2026

6.1.1 The second survey was conducted on the 30th of June 2026.

**Table 5 Weather and Time at Survey 2**

| Start time: 21:09 (Sunset time: 21:24) | Finish time: 22:55  |
|----------------------------------------|---------------------|
| Temperature: 18°C                      | Temperature: 17°C   |
| Humidity: 77%                          | Humidity: 79%       |
| Cloud Cover: 76%                       | Cloud Cover: 70%    |
| Wind: 1/8                              | Wind: 1-2/8         |
| Precipitation: 0/10                    | Precipitation: 0/10 |

**Table 6 Sara Bates sheet data (Survey 2)**

| Surveyor Name: | Sara Bates |       |       |
|----------------|------------|-------|-------|
| Species        | Activity   | Time  | Notes |
| CP             | C          | 22:07 | Seen  |
| CP             | F          | 22:07 | Seen  |
| CP             | DP         | 22:07 |       |
| CP             | P          | 22:23 |       |
| CP             | P          | 22:31 |       |
| CP             | DP         | 22:41 |       |

**Table 7 Matthew Plumtree sheet data (Survey 2)**

| Surveyor Name: | Matthew Plumtree |       |       |
|----------------|------------------|-------|-------|
| Species        | Activity         | Time  | Notes |
| CP             | C                | 21:51 |       |
| CP             | F                | 22:00 |       |
| CP             | DP               | 22:06 |       |

**Table 8 Josh sheet data (Survey 2)**

| Surveyor Name: | Josh     |       |       |
|----------------|----------|-------|-------|
| Species        | Activity | Time  | Notes |
| CP             | DP       | 22:00 |       |
| CP             | P        | 22:07 |       |
| CP             | P        | 22:19 |       |
| CP             | DP       | 22:19 |       |
| CP             | P        | 22:41 |       |

**Figure 3: Marked surveyors positions on night 2 of 2**



## 7 Results

- 7.1.1 The first survey (22 May 2026) recorded moderate bat activity across the site, with feeding and passing behaviours from Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and a single Brown Long-eared (*Plecotus auritus*) pass. Activity was concentrated around the building and hedgerow boundaries, with bats observed feeding over and around B1 and along the front porch area. A possible emergence was noted visually during the survey; however, subsequent review of the camera footage did not confirm this observation.
- 7.1.2 The second survey (30 June 2026) recorded low bat activity, limited to Common Pipistrelle. Activity comprised occasional commuting, feeding and distant passes across the site. No bats were observed entering or exiting B1 at any point during the survey. Light rain began at approximately 22:37, after which no further bat activity was recorded. Two hedgehogs were noted during the survey along with deer droppings.
- 7.1.3 No confirmed bat emergence or re-entry was observed from building B1 during either survey. The bat activity recorded on both nights was consistent with bats commuting and foraging across the wider landscape, using the hedgerow network and adjacent habitats rather than roosting within the building.

## 8 Footage Analysis

- 8.1.1 The Thermal Master DV2 cameras were positioned to cover the elevations of B1 during both surveys. Recordings continued throughout the entire duration of each survey. Analysis of the footage was conducted within Night Arc v1.2.0, where motion is highlighted from the footage for user review. The software detects and flags bat activity to improve bat analysis.
- 8.1.2 On the first survey, a possible emergence was noted visually by the survey team. Camera footage covering the relevant elevation was reviewed in detail. The footage did not confirm any emergence from the building. The visual observation may have been a bat passing close to the building facade rather than emerging from a roost feature.
- 8.1.3 On the second survey, no visual emergences were noted and the camera footage confirmed this. No bats were recorded entering or leaving B1 on either survey. Survey footage will be stored to allow for reference for two years from the date of each survey.

## 9 Conclusion

- 9.1.1 Coyne Environmental Ltd has been instructed to conduct BES of 25 Lower Road, Breachwood Green, Hitchin, SG4 8NS. Two surveys were undertaken following the identification of potential bat activity at building B1, after the originally assessed barn (B3, moderate suitability) had been demolished. The surveys were conducted in May and June 2026, separated by 39 days, within the optimal survey period and in accordance with the BCT Good Practice Guidelines (4th edition, 2023).
- 9.1.2 The first survey recorded moderate bat activity with Common Pipistrelle, Soprano Pipistrelle and Brown Long-eared bats feeding and commuting across the site. A possible emergence was observed visually but was not confirmed by camera footage. The second survey recorded low bat activity limited to Common Pipistrelle, with no emergence or re-entry observed visually or on camera footage.
- 9.1.3 Two surveys are appropriate for a site with moderate roost suitability under current BCT guidelines. The results across both surveys are consistent: bats use the garden and hedgerow boundaries for commuting and foraging, but B1 does not support an active roost. The unconfirmed possible emergence on the first survey prompted the second survey, which produced no evidence of roosting activity. A third survey is not required as the two surveys provide sufficient evidence to characterise the roost status at this site.
- 9.1.4 Coyne Environmental Ltd concludes that B1 has no evidence of an active bat roost, and no confirmed bat emergences were noted across either survey or the associated footage analysis. No further surveys or licencing are required for the site.
- 9.1.5 Precautionary Advice: Notwithstanding the findings of this assessment, bats are a European protected species and should any bats, or evidence of bats, be discovered during works, all activities must cease immediately. A suitably qualified ecologist should then be contacted for advice, and works must not recommence until appropriate mitigation measures have been agreed and implemented, in accordance with relevant legislation and guidance.