

Bat Emergence Survey



35 Gray's Lane,
Hitchin, SG5
2HH

On Behalf of:
Pentangle Design Group

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Document Properties

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1 Introduction

1.1.1 Coyne Environmental Ltd has been instructed to undertake a dusk Emergent Bat Survey (BES) at 35 Gray's Lane, Hitchin, SG5 2HH. This is to provide

further evidence of bats (European Protected Species) following a Preliminary Ecological Appraisal (PEA) undertaken on the 10th of December 2025. The PEA identified the main dwelling as a bungalow with a concrete tiled roof in reasonable condition, with small areas where bats would be able to access. No evidence of bats was found during the PEA; however, a BES has been undertaken to inform the planning application to North Hertfordshire District Council.

- 1.1.2 The proposal is for a replacement dwelling with a covered pergola and open swimming pool in the rear garden at 35 Gray's Lane, SG5 2HH. This is a self-build application. The surveys were conducted on the 6th of August 2026 and the 27th of August 2026.



Figure 1: Site shown in relation to Hitchin

2 Site

- 2.1.1 35 Gray's Lane is in the western part of Hitchin, Hertfordshire (central grid reference TL 17778 29096), close to Tilehouse Street Baptist Church. Hitchin is one of the oldest continuously occupied urban centres in Hertfordshire. The site is surrounded by further residential properties which are in good upkeep, in contrast to the unmanaged 35 Gray's Lane. The site is at the western edge of Hitchin, where many houses have extensions into their large gardens.
- 2.1.2 The main dwelling is a bungalow in moderate condition with a concrete tiled roof in reasonable condition. The windows are PVC and are in good condition, with the rear of the building having a sliding patio door. A single garage is attached to the dwelling. The front of the property includes a concrete driveway with ornamental planting on either side and a front porch.

- 2.1.3 The rear of the site is mainly large bramble scrub which has recently been cut back. A poor condition wooden barn is present at the south-east of the garden with a felt roof and plastic windows. Eight trees are present within the rear garden, with a large amount covered in ivy. A mixed hedge of laurel and holly, also covered in ivy, is present in the rear garden.
- 2.1.4 The PEA identified small areas on the roof where bats would be able to access, though no evidence of bats was found during the inspection. An Oughtonhead Lane SSSI is located 0.54 miles to the north-west. No ponds are present within the 500-metre buffer zone.

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). This survey was 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 Survey (BES) has 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. This survey has been created to inform the Local Planning Authority (LPA) on EPS activity at the site in question. The bat surveys

undertaken are under the bat licence of Kenneth Coyne, Bat Licence No 2015-15943-CLS-CLS.

4.2 Equipment

- 4.2.1 Both surveys were conducted at dusk in weather conditions within the acceptable limits for bat surveys. The lead ecologist was Kenneth Coyne alongside Matthew Plumtree. 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. On Night 1 (6th August 2026), two cameras were deployed: one positioned at the rear of the property and one covering the front elevation including the porch. On Night 2 (27th August 2026), both cameras were repositioned to cover the front porch area, focusing on the potential emergence point identified during the first survey. 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 the survey progresses.

5 Survey Sheet Data

5.1.1 Night 1 – 6th August 2026

Table 1 Species and Activity Key

Key	
Species	
Common Pipistrelle	CP
Soprano Pipistrelle	SP
Noctule	N
Leisler's	LN
Brown Long Eared	BLE
Behaviours	
Feeding	F
Hawking	H
Commuting	C
Passing	P
Distant Pass	DP
Seen	S
Constant Activity	CA
Emergence	E

5.2 Data

Table 2 Weather and Time – Night 1

Start time: 20:24 (Sunset time: 20:39)	Finish time: 22:24
Temperature: 18°C	Temperature: 16°C
Humidity: 51%	Humidity: 42%
Cloud Cover: 70%	Cloud Cover: 30%
Wind: 1/8	Wind: 1/8
Precipitation: 0/10	Precipitation: 0/10

Table 3 Kenneth Coyne – Night 1

Surveyor Name:	Kenneth Coyne		
Species	Activity	Time	Notes
cp	p	8.50	not seen
cp	f	9.15	seen
cp	f	9.20	same bat
cp	p	9.21	not seen
n	p	9.22	light call
cp	p	9.22	not seen

Table 4 Matthew Plumtree – Night 1

Surveyor Name:	Matthew Plumtree		
Species	Activity	Time	Notes
cp	dp	9.18	not seen
cp	f	9.23	not seen
sp	p	9.34	light calls
cp	f	9.47	seen
sp	p	21.53	not seen

5.2.1 Night 2 – 27th August 2026

Table 5 Weather and Time – Night 2

Start time: 19:44 (Sunset time: 20:01)	Finish time: 21:30
Temperature: 20°C	Temperature: 17°C
Humidity: 72%	Humidity: 80%
Cloud Cover: 45%	Cloud Cover: 100%
Wind: 3/8	Wind: 1/8
Precipitation: 0/10 (light rain began during survey)	Precipitation: 0/10

Table 6 Kenneth Coyne – Night 2

Surveyor Name:	Kenneth Coyne		
Species	Activity	Time	Notes
N	P	19:50	Not seen
CP	F	19:57	Seen

Table 7 Matthew Plumtree – Night 2

Surveyor Name:	Matthew Plumtree		
Species	Activity	Time	Notes
CP	P	20:46	Distant pass
CP	F	21:01	

Figure 2: Marked surveyor's positions



6 Results

- 6.1.1 Two dusk emergence surveys were conducted at 35 Gray's Lane on the 6th of August 2026 (Night 1) and the 27th of August 2026 (Night 2).
- 6.1.2 Night 1 was conducted in suitable weather conditions with light wind, no precipitation and a starting temperature of 18°C. A possible emergence was observed from the front porch area of the dwelling. This observation was considered inconclusive as it could not be definitively confirmed as an emergence from the building. The bat may have been commuting past the front of the property near the building rather than emerging from the porch structure.
- 6.1.3 Night 2 was conducted on the 27th of August 2026 in suitable weather conditions with a starting temperature of 20°C. Light rain began later in the survey, but conditions remained within acceptable limits. Both cameras were positioned to cover the front porch area, focusing on the potential emergence point identified during Night 1. No emergence or re-entry was recorded from the porch or any other part of the building. Common pipistrelle passes and foraging activity were recorded by both surveyors at distance from the building, with a single noctule pass also detected.

7 Footage Analysis

- 7.1.1 Two Nightfox Thermal Master DV2 cameras were deployed during both surveys. On Night 1, one camera covered the rear elevation, and one covered the front elevation including the porch. On Night 2, both cameras were repositioned to cover the front porch area to focus on the potential emergence point. All recordings were 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.
- 7.1.2 Night 1: The rear camera recorded no emergence or re-entry from the rear elevation of the property. The front camera captured a possible emergence from the front porch area. However, upon detailed review the footage did not show the bat emerging from the soffit or any part of the building structure. The bat appeared to be commuting near the building rather than emerging from within it.
- 7.1.3 Night 2: Both cameras covering the front porch recorded no emergence or re-entry from the building. No bats were recorded entering or leaving the porch or

any part of the building structure during the survey. Survey footage will be stored to allow for reference for two years from the date of the surveys.

8 Conclusion

- 8.1.1 Coyne Environmental Ltd was instructed to conduct dusk Bat Emergence Surveys at 35 Gray's Lane, Hitchin, SG5 2HH, in support of a planning application for a replacement dwelling with a covered pergola and open swimming pool.
- 8.1.2 The PEA undertaken on the 10th of December 2025 identified the bungalow as having small areas on the roof where bats could access, though no evidence of bats was found during the inspection. Two dusk emergence surveys were undertaken on the 6th and 27th of August 2026 to further assess the building for bat activity.
- 8.1.3 During Night 1, a possible emergence was observed from the front porch area. However, detailed review of the thermal camera footage did not show the bat emerging from the soffit or any part of the building structure. Night 2 was conducted with both cameras focused on the front porch to obtain a definitive result. No emergence or re-entry was recorded from the porch or any other part of the building during the second survey.
- 8.1.4 Given the absence of any confirmed emergence across two surveys, and that the Night 1 footage did not show a bat emerging from the building, Coyne Environmental Ltd is satisfied that there is no bat roost present within the property. No further emergence surveys are required and works may proceed.
- 8.1.5 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.

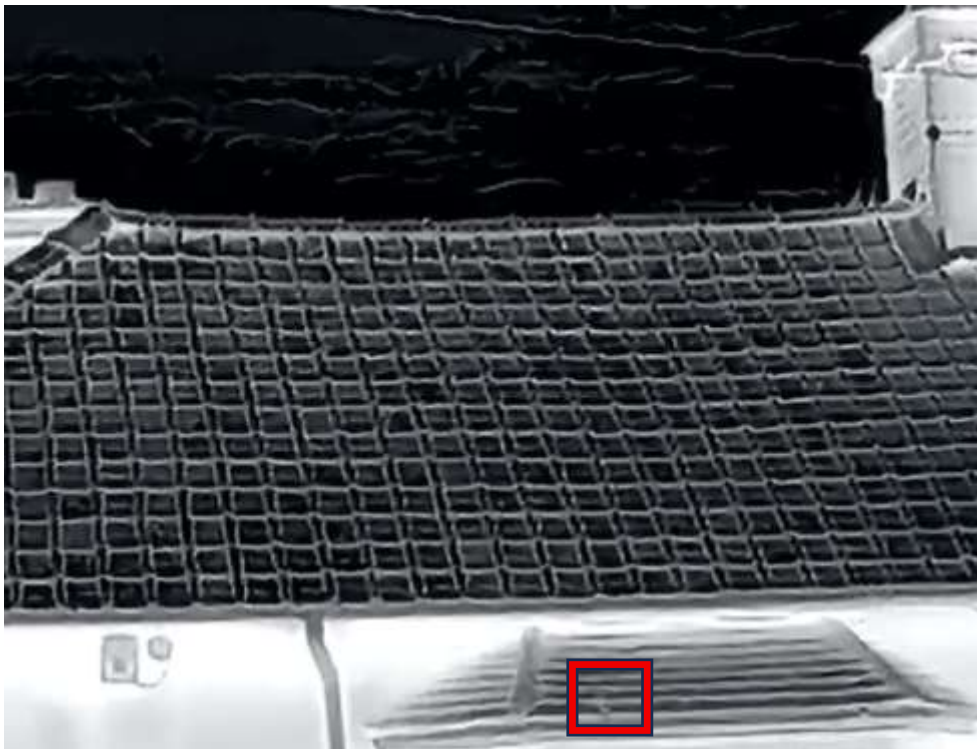


Figure 3: Front elevation possible emergence



