THE OLD SCHOOL, HERTFORDSHIRE

Nocturnal Bat Survey Report

December 2022

Collingtonwinter
environmental

Report Control Sheet

Project Name: *The Old School, Hertfordshire*
Project Reference: *CW20-486*
Report Title: *Nocturnal Bat Survey Report*
Report Reference: *CW20-486 RPT 001*
Printing Instructions: *Print at A4 Portrait, Double Sided.*

Rev	***Date***	***Description***	***Prepared***	***Reviewed***	***Approved***
/	14/09/2022	Draft report sent to Client for comment.	KB	OC	OC
//	16/12/2022	Amended following designs	KB	OC	OC

CONTENTS

1 INTRODUCTION

1.1. SCOPE & PURPOSE

1.1.1. Collington Winter Environmental Ltd was commissioned by Patrick Davies to undertake a nocturnal bat survey at the site at The Old School, The Street, Furneux Pelham, Buntingford, Hertfordshire, SG9 0LH. This report has been produced to inform a planning application.

1.1.2. The author of this report is Katie Bird, Principal Ecologist at Collington Winter Environmental Ltd. The project. Katie is highly experienced managing schemes and has produced many ecological reports to inform planning permission. Olivia holds a Class 2 Natural England Bat Licence and is experienced assessing sites for bat roosting potential.

1.1.3. A Preliminary Roost Assessment was undertaken of the site in July 2022 by John Dobson BSc of Essex Mammal Surveys which found the building to provide moderate bat roosting potential. Therefore, two nocturnal emergence surveys were recommended, the results of which are detailed in this report.

1.2. LOCATION

1.2.1. Please refer to Figure 1.1 for the approximate site location. The site is located to the south of The Street and adjacent of The Causeway. The building itself is surrounded by other residential units as well as a primary school on the eastern aspect of the building. The area is surrounded by agricultural fields and woodlands. Grid reference: TL 43175 27901.

Figure 1.1 Site Location

1.3. OBJECTIVES

1.3.1. The objectives of the Nocturnal Bat Survey are as follows:

- Identify any bats roosting within the buildings.
- Assess the value of the buildings for roosting bats.
- Identify the species assemblage of bats using the site.
- Provide recommendations on any further surveys or mitigation required for bats.

2 METHODOLOGY

2.1. NOCTURNAL BAT SURVEY

2.1.1. The nocturnal survey was undertaken as a dusk survey on 10th August 2022 and as a dawn survey on 26th August 2022 by three qualified surveyors.

2.1.2. Please refer to Figure 2.1 for locations of vantage points used during both surveys.

Figure 2.1 Surveyor Locations

2.1.3. The surveys were undertaken in line with guidance as set out in Collins (2016). Surveyors used heterodyne handheld bat detectors. All surveyors were suitably experienced undertaking bat emergence surveys. Please refer to Table 2.1 for details of surveyors.

Date	Sunset/ Sunrise Time	Start	Finish	Surveyors	Weather Conditions
10/08/2022	20:31	20:16	21:59	VP1 - Jacob Ng VP2 – Andrew Taylor VP3 – Katie Bird	Temp at start/end: 23 Celsius Cloud start: 0 Cloud finish: 0 Wind: 0 max (Beaufort scale)
26/08/2022	20:24	20:09	21:54	VP1 – Jacob Ng VP2 – Andrew Taylor VP3 – Darnell Shaw	Temp at start/end: 21 Cloud start: 2 Cloud finish: 3 Wind: 0 max (Beaufort scale)

2.2. SURVEY LIMITATIONS

2.2.1. Due to the surveys being conducted by observation during low light conditions, this may cause constraint of visual assessments. No surveyors were visually constrained during the survey, other than that of low light conditions, and all potential roosting features were observed throughout the survey time period.

3 SURVEY RESULTS

3.1. DUSK SURVEY (10/08/22)

3.1.1. Bat activity was recorded throughout the survey, with common pipistrelle *(Pipistrellus pipistrellus)* observed foraging or commuting in proximity of VP1, VP2 and VP3. Other species recorded included noctule (*Nyctalus noctula*) observed commuting northeast by VP1 at 20:53 and brown long-eared bat (*Plecotus auritus*) heard by VP3 at 21:50.

3.1.2. The first bat was recorded at 21:40 (approximately nine minutes after sunset) by VP3 and was common pipistrelle, with a second bat passing five minutes later. It was observed by VP3 commuting over the building from east to west. Several common pipistrelles were observed commuting southwards by VP2 and then using the garden space to forage. This behaviour was recorded for the duration of the survey.

3.1.3. No roost locations were observed throughout the survey.

3.2. DAWN SURVEY (26/08/22)

3.2.1. No bat activity or roost locations were observed or recorded throughout the survey.

3.3. ASSESSMENT

3.3.1. Bat activity was solely recorded throughout dusk survey with only common and widespread species being identified within the local area. Foraging activity was mainly recorded commuting around the building and utilising the garden space for foraging purpose. The dawn survey presented no activity, though the survey was completed during optimum conditions and in line with relevant guidance.

3.3.2. No bat roosts were located on site during the survey.

3.3.3. Due to no bat roosts being located on site, no further licences or surveys are required to proceed with the proposed development.

4 RECOMMENDATIONS AND MITIGATION

4.1. IMPACT ASSESSMENT

4.1.1. The proposed development works will include the erection of a single storey ancillary extension to the front, and the rear of The Old School. The proposal also includes a rear extension and refurbishment of the outbuilding located on the northern aspect of the site. The Old School site has an existing historic licence (EPSM2009-1357).

4.1.2. The evidence indicates that the roost within the outbuilding is historic, as there were no fresh droppings, no bats and no bats emerged or re-entered the property to roost. Whilst no evidence relating to the main house of any roosting was identified. There is a variety of alternative roosting provisions locally, including residential properties on all aspects, as well as St Mary the Virgin church located adjacent to the north of the site.

4.1.3. No roosts were identified within the outbuilding across both surveys and as such there is not considered to be a risk of injuring and/or killing bats or disturbing/destroying a known bat roost as a result of the proposed works. As such, an additional Natural England European Protected Species License (EPSL) is not required to be obtained prior to further works being completed on the buildings.

4.1.4. To ensure the planned development is in full compliance with European and national legislation, and national and local biodiversity planning policy an appropriate and proportionate program of mitigation and enhancement must be agreed to ensure protection and enhancements for bats.

4.2. MITIGATION

PRE-COMMENCEMENT

4.2.1. This ecological method statement must be adhered to, it provides project supervision and will ensure that best practice and compliance is adhered to. If there is a delay of greater than one year from the date of this report, further survey effort will be required. Bats are highly mobile wild animals and may be encountered within a building following negative activity survey results.

4.2.2. In order to avoid significant impacts in both the short term and longer term, a proposal to create a designated bat loft in the similar location as the existing loft within the outbuilding (where historic droppings have been identified) and the retention of the bat loft relating to the main house has been completed. This would aim to recreate and enhance roosts that were previously present is a near like-for-like manner.

OUTBUILDING

4.2.3. A designated bat loft will be created on the northern aspect of the property, the existing bat access tiles will be re-purposed and positioned on the northern aspect of the site. If these access tiles are not suitable to reuse, similar access tiles will be used. In addition, two integrated bat bricks (x2) are also to be included on the eastern elevation of the building to provide additional bat roosting options. Multiple bat boxes are located within the site already, and it was deemed more suitable to include integrated bat boxes.

4.2.4. The roof construction will be of similar construction of what currently exists. Bitumen Felt is to be used as part of the bat loft. Please refer to the proposed designs for details of the bat loft. The proposed bat loft is to be positioned within the similar location as the existing roost with the 1.74m x 6m x 1.47m (h). The bat loft is smaller than what currently exists, however due to no bat roosts being present and due to the presence of other roosting opportunities, the inclusion of this bat loft is considered appropriate to the scale of this development.

4.2.5. All bats have some degree of sensitivity to artificial, night-time lighting. Introducing artificial lighting to areas that are not currently illuminated may sever important bat flight lines and discourage bats from using roost provisions. It is recommended external lighting is not to be provided on the building to ensure roosting bats are not impacted by introduced lighting.

- If lighting is essential, the following recommendations should be considered as part of the proposed lighting designs: Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.

- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill from unintended areas.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating habitats of value.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
- Column heights of lighting can be considered to minimise light spill

METHOD

4.2.6. A tool box talk must be given to the contractors prior to commencement of works, which will include: background legislation in relation to bats; the most likely areas to expect bats (based on the survey results), good working practice and, details of what to do if a bat or additional evidence of bats is discovered. In the unlikely event that bats, or evidence of other roost locations are found, works must stop immediately and Natural England or the project ecologist contacted immediately, and any requisite license obtained.

TIMING OF WORKS

4.2.7. Any works that have the potential to disturb bats during the bat activity period (May to September) for example, removing the roof tiles, and must be conducted outside this period. If the works cannot be undertaken during the period and should bats be encountered during this period or at any time during the work, then all work must stop and an EPSL will be required.

4.2.8. All work must be undertaken in normal working, daylight, hours, which is in accordance with best working practice and allows the project ecologist or their agent to address any issues if bat(s) are found during the construction work.

ECOLOGICAL SUPERVISION

4.2.9. Prior to construction of any elements of the roof (internally or external), the building must be inspected for any new evidence of bats and the project ecologist or their agent must be available (on-call) to provide advice should it be required. The existing bat droppings should be cleaned to see if any new droppings are present, prior to the works commencing. Selected features will be removed under the ecologist's supervision (i.e. roofing tiles).

4.2.10. If, during the work, when the licenced bat worker is not on-site, and a bat is discovered, it should be re-covered, if safe to do so. However, if it appears to be injured or in immediate danger, then the animal should be carefully placed in a small box (e.g. shoe box) by either handling the bat with thick gloved hands or covering the bat with the box and sliding a thin piece of cardboard under to create a floor to the box. A clean piece of cloth loosely crumpled will be placed in one corner of the box (to allow the bat to crawl under and hide), a few small air holes will be put into the lid of the box, and a very shallow container (e.g. foil milk bottle top) of water will be placed in one corner of the box. The licensed bat worker must then be contacted immediately and all work must stop until the licensed bat worker has been consulted.

5 BIBLIOGRAPHY

- Bat Conservation Trust (2018). Bats and Artificial Lighting in the UK: Bats and the Built Environment Series.
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition. The Bat Conservation Trust, London.
- Essex Mammal Surveys (2022). Bat Survey of The Old School, Furneux Pelham.
- Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.
- Jones & Sons Environmental Services Ltd (2009). Bat Method Statement.
- Mitchell-Jones (2004). Bat Mitigation Guidelines: Working Today for Natura Tomorrow. English Nature.
- Mitchell-Jones and McLeish (2004). Third Edition Bat Workers' Manual.
- Natural England (2010). Licence issued under regulation 53(1) in respect of certain European protected species: EPSM2009-1357


Collingtonwinter
environmental