



NOCTURNAL BAT SURVEY REPORT

SITE LOCATION

Moor Barns Farm,
Pipe Lane,
Orton-on-the-Hill,
Atherstone
CV9 3NF

ISSUE DATE

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SEED REF

1631-NBR-V1-A

CLIENT

Peter & Keeley Grayson

ARBORICULTURAL CONSULTANCY

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DOCUMENT CONTROL

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NOTE:

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1. Introduction

Scope & Purpose

- 1.1.1. Seed Arboriculture Ltd were commissioned by Peter & Keeley Grayson to undertake a Nocturnal Bat Survey for the proposed development at Moor Barns Farm, Pipe Lane, Orton-on-the-Hill, CV93NF. This includes the full demolishment of the current three dwellings on site to be replaced with two buildings.
- 1.1.2. The author of this report is Katie Brewer BSc (Hons), Assistant Ecologist. The project has been managed and overseen by Katie Bird MEnvSci, ACIEEM Principal Ecologist, who holds a Level 2 Class Bat Licence (Reference: 2020-48950-CLS-CLS). Katie is highly experienced managing schemes and has produced many ecological reports to inform planning permission.
- 1.1.3. A Preliminary Roost Assessment (PRA) was undertaken at the site in August 2023. The PRA assessed B1 and B3 as providing ‘**moderate**’ bat roosting potential (Please refer to Figure 2 for building locations).
- 1.1.4. B1 was identified as providing moderate bat roosting potential due to the lifted tiles identified throughout the roof, the missing mortar on multiple ridge tiles and the gaps which were observed between the brickwork and overhanging eaves which provided potential access points.
- 1.1.5. B3 was identified as providing moderate bat roosting potential due to the lifted tiles along the roof, gaps between the overhanging beams and the brickwork and cracks within the beams. Please refer to PRA report (1631-PRA-V1-A).

Site Location

- 1.1.6. Please refer to Figure 1 for the site location. The site is in Orton-on-the-Hill, a village and former parish in the Hinckley and Bosworth district of Leicestershire.



Figure 1 - Site Location Plan

Objectives

- 1.1.7. The objectives of the Nocturnal Bat Survey are as follows:
- Identify any bats roosting within the buildings.
 - Assess the value of the building 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

Desk Study

Nocturnal Bat Surveys

- 2.1.1. The nocturnal surveys were undertaken as a dusk survey on 19th September 2023 and a dawn on the 20th of September 2023 by four qualified surveyors.
- 2.1.2. Please refer to Figure 2 for locations of vantage points (VPs) used during the dusk survey.

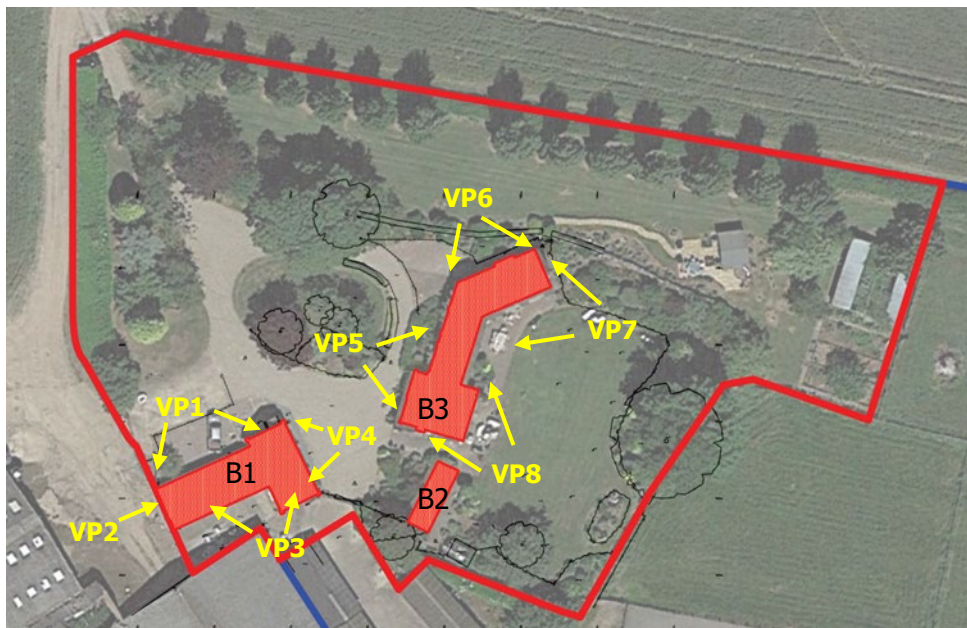


Figure 2 - Site Location Plan

- 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 1 below for details of surveyors.

Table 1 - Bat Survey Details

Date	Sunset/ Sunrise Time	Start	Finish	Surveyors	Weather Conditions
19/09/2023	19:13	18:58	20:43	VP1 – Benjamin Miles VP2 – Charlotte Nuttall VP3 – Iman Rafiq VP4 – Rhiannon Hobbs	Temp: 18 Celsius Cloud: 8/8 Wind: 5 max (Beaufort scale)
20/09/2023	06:48	05:18	07:02	VP5 – Iman Rafiq VP6 – Benjamin Miles VP7 – Rhiannon Hobbs VP8 – Charlotte Nuttall	Temp: 16 Celsius Cloud: 8/8 Wind: 3 max (Beaufort scale)

Limitations

- 2.1.4. 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.
- 2.1.5. The updated 2023 Collins Bat Survey Guidelines were released prior to the completion of this survey however, this survey was organised before the new guidelines were released. Therefore, the Collins 2016 guidance was followed throughout this survey.
- 2.1.6. A minimum of two surveys of each building are required, a minimum of one of these surveys should be completed between May – August as inline with Collins Bat Survey Guidelines 2023. The updated Collins Bat survey Guidance 2023 is to be followed throughout the second survey.

3. Survey Results

Dusk Survey B1 (19/09/2023)

- 3.1.1. Bat activity was recorded throughout the duration of the survey by all VPs on site. Species recorded included common pipistrelle (*Pipistrellus pipistrellus*), and unidentified bat (*Chiropter sp.*)
- 3.1.2. The first bat was recorded at 19:46 (approximately 33 minutes after sunset) by VP3 which consisted of a common pipistrelle which was heard and not seen. A common pipistrelle was recorded at 19:47 (approximately 34 minutes after sunset) by VP2 which consisted of a common pipistrelle commuting from south to north. Common pipistrelles were also identified foraging over VP2 and over the buildings adjacent to the site,
- 3.1.3. **There were no roost locations recorded throughout the duration of the survey.**

Dawn Survey B2 (20/09/2023)

- 3.1.4. There were no bats recorded throughout the duration of the survey by any of the VPs on site.
- 3.1.5. **No roost locations were observed throughout the survey.**

4. Assessment

- 4.1.1. Bat activity was recorded throughout the dusk survey on site with common species identified within the surrounding area of the site for commuting and foraging purposes. There were no bats observed emerging from any potential roosting features in B1 throughout the survey.
- 4.1.2. There was no bat activity recorded throughout the duration of the dawn survey by any VPs on site. Upon assessment of this survey, the weather conditions were suitable to conduct the survey as it was 16 degrees, and only light patches of rain were recorded. There was also a lack of wind recorded throughout the survey, these weather conditions are acceptable as per Collins 2023 Good Practise Guidelines for Professional Ecologists. The survey was also conducted on the 20th of September as a dawn survey, this is a time of year where bats are still active and bat activity was recorded on the dusk survey completed on the 19th of September.
- 4.1.3. The dusk survey recorded bats within the local area of the site however, there were no bats observed emerging from any potential roosting features during the survey. As such there were no roost locations identified.

5. Recommendations & Mitigation

Further Survey - Nocturnal Bat Survey

- 5.1.1. B1 and B3 were assessed as providing '**moderate**' bat roosting potential due to the number of potential roosting features identified which included lifted tiles throughout the roof and gaps within the overhanging eaves of the dwelling.
- 5.1.2. Best Practise Guidelines state a minimum of two nocturnal bat surveys are to be completed on a building assessed as providing moderate bat roosting potential and the first survey should be conducted between May – August. As such, to follow best practise guidelines, a minimum of one further survey on both buildings (B1 and B3) will be completed mid-June (the beginning of maternity season) to assess if there are any bat roosts present and if the dwelling support a maternity roost for bats. This will allow for relevant mitigation for the proposed works. This is to be conditioned as apart of the ongoing planning application and conducted in June 2024.
- 5.1.3. If bats are identified roosting within the dwelling throughout the nocturnal survey conducted in June, further surveys may be required to assess the roost further.

Impact Assessment

- 5.1.4. There is a risk of injuring / killing a bat during the demolition of the dwelling prior to a second survey completed at the site and a full assessment is completed.

Lighting Mitigation

- 5.1.5. 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. The following recommendations are to be considered within the scheme to minimise impacts of lighting. The recommendations are as follows:
- Keep site lighting to minimum levels.
 - LED lighting with a warm white light to be used over cool white light (<2700Kelvin).
 - Lighting feature peak wavelengths greater than 550nm.
 - Light placement to be downward facing to prevent excess horizontal or vertical light spill.
 - Avoid illuminating habitat of value.
 - Use of timed security lights should be set on motion-sensors and using short, 1 -minute timers, to minimise light use.

Summary

- 5.1.6. B1 and B3 were not found to support any roosting bat species throughout the duration of the survey, common pipistrelles were identified commuting and foraging within the surrounding areas of the site.
- 5.1.7. As the survey was conducted in September and the buildings were assessed as providing **‘moderate’** bat roosting potential, a minimum of one further nocturnal bat survey will be completed mid-June to best practise guidelines. This is to be conditioned as a part of the ongoing planning application and conducted in June 2024.
- 5.1.8. It is recommended that lighting mitigation measures are implemented to protect foraging and commuting bats within the local area.

6. 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.
- Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition. The Bat Conservation Trust, London.
- Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.
- Mitchell-Jones and McLeish (2004). Third Edition Bat Workers’ Manual.
- Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.