



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-NBS-V1-B

CLIENT

Peter & Keeley Grayson

ARBORICULTURAL CONSULTANCY

SEED-ARB.CO.UK

DOCUMENT CONTROL

Date	Author	Checked	Revision
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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.
- 1.1.2. The author of this report is Rhiannon Hobbs MSc (Hons), Seasonal Ecologist. The project has been managed and overseen by Katie Bird MEnvSci, ACIEEM Principal Ecologist. 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).
- 1.1.6. An updated Bat Survey was completed in May 2024, due to the nocturnal surveys completed in September 2023 being considered as sub-optimum.

Site Location

- 1.1.7. 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.

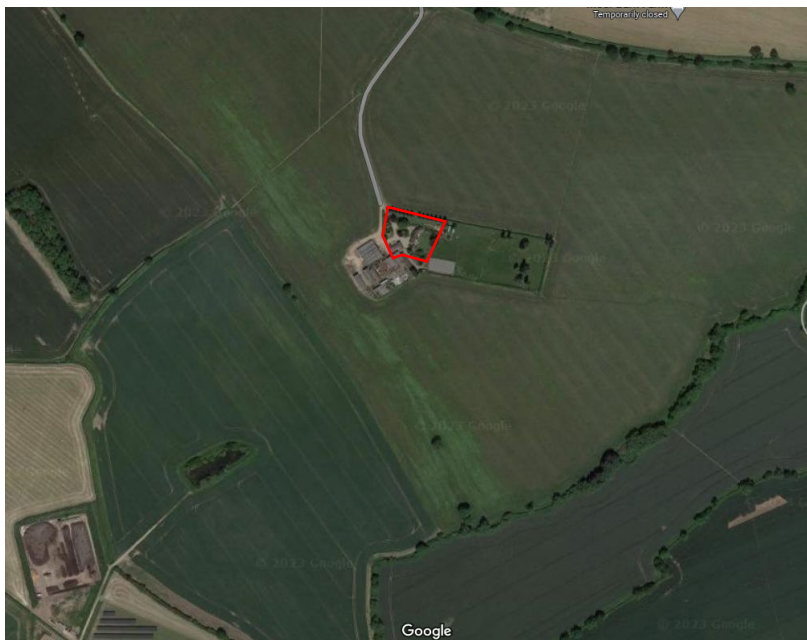


Figure 1 - Site Location Plan

Objectives

1.1.8. The objectives of the PRA are as follows:

- Identify any areas of bat roosting potential within the building
- 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

Nocturnal Bat Survey

- 2.1.1. The Nocturnal Survey was undertaken as a dusk survey on 15th May 2024 by four qualified surveyors with 4 infrared cameras (Nightfox Red, Digital Night Vision Goggles) placed on vantage points (VPs) 1, 3, 6, and 8.
- 2.1.2. Please refer to Figure 2 for locations of VPs used during the dusk survey.

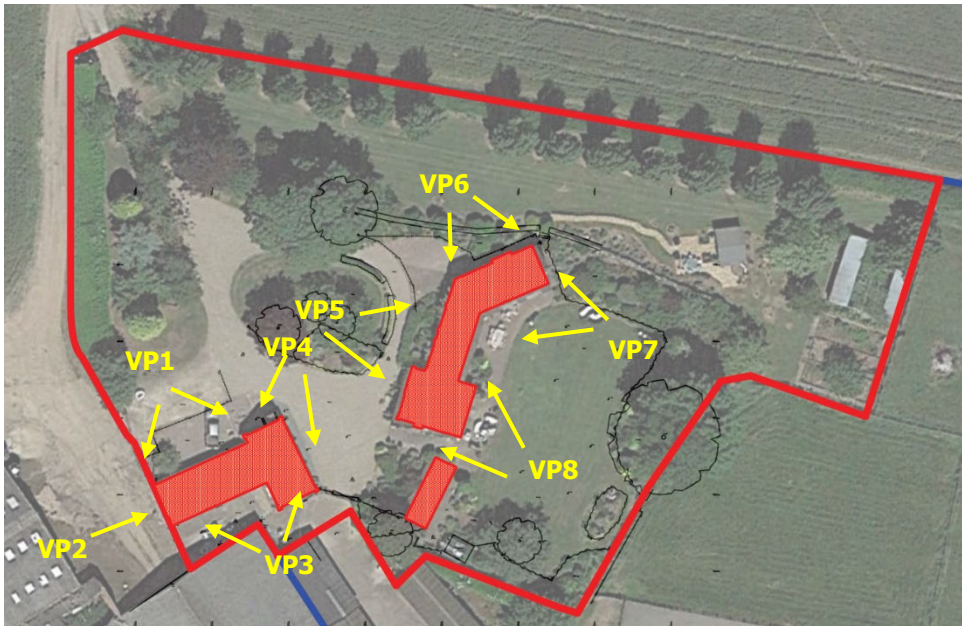


Figure 2 - Site Location Plan

- 2.1.3. The survey was undertaken in line with guidance as set out in Collins (2023). Surveyors used Echo Meter Touch 2 bat detectors. All surveyors were suitably experienced undertaking bat emergence surveys. Please refer to Table 1 below for details of surveyors. The camera footage was reviewed by competent ecologists within 1 week of the survey using relevant media players.

Table 2 - Bat Survey Details

Date	Sunset/ Sunrise Time	Start	Finish	Surveyors	Weather Conditions
15/05/2024	20:57	20:42	22:27	VP2 – Michael Boucher VP4 – Katie Smith VP5 – Shona Bancroft VP7 – Matthew Jones	Temp: 15 Celsius Cloud: 3/8 Wind: 0 (Beaufort scale)

Limitations

- 2.1.4. A security camera was located on along the viewpoint of VP1, this meant that the footage from the camera on VP1 was not clear throughout the survey and it has been discounted. The security camera affected the infrared beam. This is not considered a major constraint to the assessment as this aspect of the building was visible from VP4 throughout the survey.

3. Survey Results

Dusk Survey (15/05/2024)

- 3.1.1. Bat activity was recorded throughout the survey with only common and widespread species identified. The first bats were identified at 21:24 by VP2 and these were 2 common pipistrelles (*Pipistrellus pipistrellus*), a brown long-eared (*Plecotus auritus*), and a noctule (*Nyctalus noctule*) seen in the barn to the south of B1 by VP2 (outside of the application boundary). VP2 recorded continuous activity in and around the barn throughout the rest of the survey with other species recorded being natterer's (*Myotis nattereri*), soprano pipistrelle (*Pipistrellus pygmaeus*), and leisler's (*Nyctalus leisleri*).
- 3.1.2. VPs 4 and 5 similarly recorded foraging activity around the buildings with species limited to common pipistrelle, brown long-eared, and noctule and VP7 recorded the same species but in fewer numbers.
- 3.1.3. A review of the IRC camera footage identified more activity but did not identify any bats emerging and/or re-entering from the buildings at the points of view. Please refer to Table 2 for the images of the cameras at the darkest point. However, no roost locations were recorded during the dusk survey.

Table 3 – Camera footage at the darkest point.

Vantage Point	Camera screenshot
VP3	
VP6	



4. Assessment

- 4.1.1. Bat activity was recorded throughout the survey with only common and widespread species being identified within the local area. Foraging activity was mainly in the barn to the south (outside of the site boundary).
- 4.1.2. No bats were observed emerging from any potential roosting feature during the survey. As such, no roost locations were observed during the survey.

5. Recommendations & Mitigation

Impact Assessment

- 5.1.1. As no bat roosts were identified during this recent survey, and the surveys completed in September 2023, there is not anticipated to be an impact upon roosting bats during development. No further surveys or mitigation relating to roosting bats is deemed necessary.
- 5.1.2. If in the unlikely event a bat is discovered during the construction phase, all works are to cease and a licensed bat ecologist contacted immediately.

Lighting Mitigation

- 5.1.3. 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.
 - 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.
 - Internal lighting should be positioned away from windows to minimise light spill.
 - 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.
 - Avoid illuminating the eastern woodland and the bat box locations.
 - 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.

Summary

- 5.1.4. The building was not found to support roosting bats any species. Only common and widespread species were identified foraging throughout the survey and their frequency was minimal.
- 5.1.5. As no bats were identified emerging from the building, it is not anticipated that roosting bats will be impacted by the proposed development. No further surveys are required with the proposed development.
- 5.1.6. It is recommended that lighting mitigation measures are implemented to protect foraging and commuting bats within the local area.

6. Bibliography

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