

**Bat Survey Report for
Outbuilding,
Rose Cottage,
High Street, Blockley,
Moreton-in-Marsh, GL56 9HF**



NKM Associates

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QUALITY CONTROL

Date	Version	Name
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The information in this report has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. The conclusions and recommendations expressed are reasoned judgements based on the evidence.

Every reasonable attempt has been made to comply with BS42020:2013 *Biodiversity – Code of practice for planning and development*, *CIEEM Guidelines for Ecological Report Writing* (CIEEM, 2017) and Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition, Collins, 2016). If there has been deviation from recognised practice, justification/explanation has been given.

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SUMMARY

At Rose Cottage on High Street in Blockley, planning permission is being sought to redevelop the outbuilding.

As this could impact on features typically used by bats as roosting places, a diurnal inspection was undertaken on 24th August 2023, to assess the buildings for signs of bat occupation.

All the external and internal structures, especially those associated with the roof and walls of the buildings were examined.

No signs of bat activity or occupation were found, and the suitability for roosting pipistrelles *Pipistrellus sp* or other bat species was considered negligible, as there were no suitable crevices or gaps.

At the time of the survey, the outbuilding was not identified as a bat roost or hibernation site, and as such no further surveys or mitigation measures are required.

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No birds' nests were found in or on the outbuilding.

1. INTRODUCTION

In mid-August 2023, NKM Associates was instructed by Tyack Architects, to undertake a bat survey of the outbuilding at Rose Cottage on High Street in Blockley. On 24th August 2023, a visit was made to the property to undertake a diurnal inspection of the buildings to check for signs of bat occupation.

The result of the survey is contained in this report.

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CROW) and the Natural Environment and Rural Communities Act 2006 (NERC), which add an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations (the Habitats Regulations), which defines 'European protected species of animals'. In England this is the Conservation of Habitats and Species Regulations 2010, in Scotland the Habitat Regulations 1994 (as amended), and in Northern Ireland the Conservation Regulations 1995.

All bats are also protected under the Bern Convention Appendix II, the Bonn Convention Appendix II, and the Wild Mammals (Protection) Act 1996.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats*
- ❑ *Deliberately disturb bats (whether in a roost or not)*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts*
- ❑ *Damage or destroy roosts*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

2. METHODOLOGY

To fully assess bat occupation of a particular site, the Bat Conservation Trust (2016) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal surveys.

The diurnal walkover provides an opportunity to check for signs of occupancy, such as droppings, scratch marks, feeding remains, carcasses, or even animals in residence, whilst nocturnal surveys (if required) allow numbers and species of bats to be confirmed. The latter are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent, but suitability of roosting is considered medium to high.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats *Plecotus auritus*, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus*/*M. brandtii*), and Lesser Horseshoe Bats *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where they butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Diurnal walkovers can be carried out at any time of the year, but nocturnal surveys should only be undertaken when bats are out of hibernation and in their summer roosts. The recommended period is from May to September inclusive, with May to August optimum and September sub-optimum. The season can be extended into October, although particularly cold weather will render this inadvisable. Indeed, the air temperature at the start of each survey must be at least 10°C or above.

Nocturnal surveys must be a minimum of two weeks apart, and the number of surveys is dependent on the evidence found or the suitability of the site to bats.

Where bats are found, or there is evidence of bat occupation or activity, i.e., bat use is confirmed, the number and timing of nocturnal surveys will be decided by the ecologist and will be appropriate for the type of roost. In general, at least two nocturnal surveys will be carried out, both of which can be emergence surveys, or one emergence and one dawn re-entry.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

However, for a site with **no evidence but low suitability**, just one nocturnal survey is required, this to be in the optimum period, and either an emergence or a dawn re-entry.

For **medium suitability** a minimum of two nocturnals are needed, of which one must be in the optimum period, and one must be a dawn re-entry survey.

With **high suitability**, three nocturnals will be necessary, of which two must be in the optimum period. At least one of these must be a dawn re-entry survey, with the third visit either an emergence or a dawn re-entry.

For sites < 5 ha in size, and/or regularly shaped structures, at least two surveyors must be present, with more surveyors at larger sites and more complex buildings, e.g., those with multiple elevations and/or roof structures.

On 24th August 2023 a thorough inspection of the outbuilding at Rose Cottage was made by Neil Musgrave (Natural England bat licence No. 2020-44602-CLS-CLS), including the exterior and interior walls, roof coverings, eaves, gables, window casements and door frames.

8x42 binoculars and a Fenix TK75 torches were used for the inaccessible / unreachable areas. On this occasion an endoscope was not used, as there were no crevices and cavities that could not be inspected with a torch or by use of binoculars from a ladder.

The result of the survey is detailed in [Section 3](#).

3. RESULTS

3.1 Desk Study

In view of the small scale of the proposed works, the likely low impact on bats, and in line with current guidance on accessing and using biodiversity data (CIEEM, 2016), a detailed background data search was not carried out in this case.

However, within 2.0 km of Rose Cottage, the following European Protected Species licences for bats were issued by Natural England:

- 2020 1.30 km north for Daubenton's bat *Myotis Daubentonii* and Soprano Pipistrelle *Pipistrellus pygmeus*.

3.2 Location

Blockley is a village located approximately 5 km northwest of Moreton-in-Marsh. High Street runs through the centre of the village, with Rose Cottage approximately 380 m southwest of the junction between the B4779 road and School Lane. The Ordnance Survey Grid Reference of the cottage is SP 16080 34508 ([Appendix 1](#)).

3.3 Site Description

The Survey site comprised a detached pitched roofed outbuilding (Figs, 1-2).



Figs. 1 & 2 Front View (L) and rear view (R)

To the front of the outbuilding was a narrow lane, with houses and garages and mature trees on the opposite side of the lane (Fig. 3). The rear garden was laid to lawn with mixed planted vegetation (Fig. 4).



Figs. 3 & 4 Lane to the front of the building (L) and rear garden (R)

The layout of the site is shown in the aerial photograph in [Appendix 2](#).

3.4 Building Survey

The daytime inspection was carried out on 24th August 2023 commencing at 13:30. The weather conditions during the time of the survey were recorded and are presented in Table 1 below.

Parameter	Value
Temperature (°C)	25
Cloud cover (%)	75
Precipitation	None
Wind speed (Beaufort scale)	0

Table 1 Weather conditions during the diurnal survey

3.4.1 Bats

The ridge was intact and sealed, all the roof tiles were tightly overlapping (Figs. 5 and 6).



Figs. 5 & 6 Ridge and roof tiles to the front (L) and rear (R)

The gables were sealed with the roof verges cement sealed to the gable barge boards (Figs. 7 and 8).



Figs. 7 & 8 Sealed gables

The eaves of the cottage were finished with tightly fitting fascia boards (Fig. 9).



Fig. 9 Tightly fitting fascia board

The brick and stone walls were sound throughout, whilst all the window casements and door frames were tightly fitting.

No signs of bat activity were found around the outside of the outbuilding.

Internally the outbuilding was open to the unlined roof. The ridge and gable ends were lightly cobwebbed (Figs. 10 - 12).



Fig. 10 Lightly cobwebbed ridge



Figs. 11 & 12 Lightly cobwebbed gable ends

Light penetrated through the windows, and no evidence of bat activity was found inside the outbuilding.

3.4.2 Other species

No birds' nests were found in or on the outbuilding.

4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October. Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls. As such they can be difficult to find, so the suitability for roosting was also assessed. This was considered **negligible**, as there were no suitable crevices or cavities.

Another bat frequently encountered in buildings is the Brown Long-eared Bat. This is also a common species, but unlike pipistrelles, they prefer the dry, warm space of the loft or roof void, and can often be found hanging from roof timbers, especially rafters and the ridge board next to chimney breasts. **No signs of Brown Long-eared Bat activity were found or of any other species that prefer roof voids.**

At the time of the survey, the outbuilding was not identified as a bat roost or hibernation site, and as such no further surveys or mitigation measures are required.

*

No bird nests were found in or on the outbuilding.

5. REFERENCES

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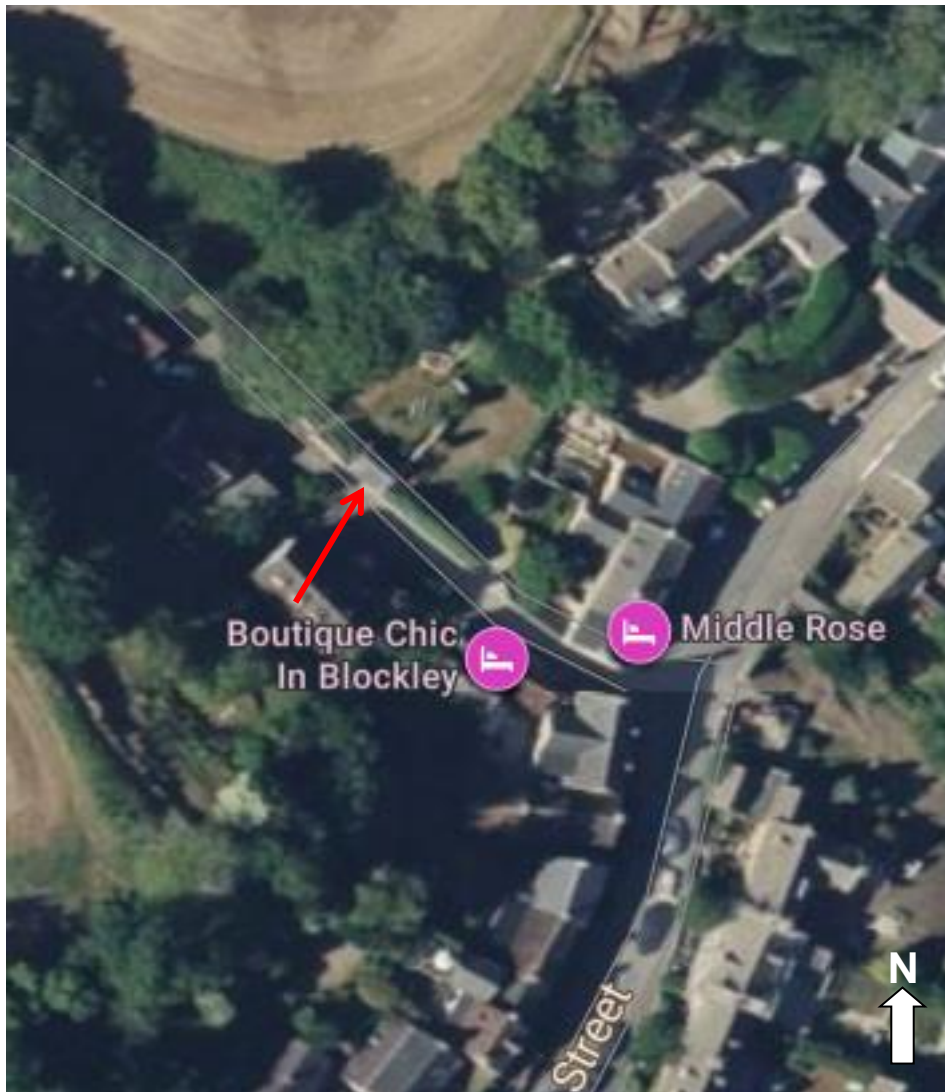
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APPENDICES

Appendix 1: Location plan

Appendix 2: Site layout

Appendix 1: Location plan



Outbuilding, Rose Cottage off High Street, Blockley

Appendix 2: Site layout



Outbuilding

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