

Bat Survey Report

83 Wilderness Road, Reading, RG6 7RF

Ref: 241852

Client: Ribina Mustafa



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SUMMARY

Planning permission is being sought for works at 83 Wilderness Road, Reading, RG6 7RF. The proposals are for a two-storey side extension and single-storey rear extension, following the removal of the existing attached garage, lean-to extension and conservatory.

As this could impact on features typically used by bats as roosting places, a daytime inspection was undertaken on 14th October 2024 to assess the building for signs of bat occupation.

All the external and internal structures, especially those associated with the roof and walls of the building were examined. Features such as cracks in walls, gaps in soffit boards and lifted roof tiles were searched for during the inspection. The building has a loft void which was inspected during the survey.

No evidence of bats was recorded within the loft void, and no potential roost features were identified within the areas to be impacted under the proposals therefore no further surveys are required. Potential roost features were identified on the northern and southern elevations, which will not be impacted. If plans change to include any works to the roof on the northern and southern elevations, further bat surveys will be required. If the scaffolding for the proposed extensions is to be installed in front of the roof tiles on the northern and southern elevations, the works should be undertaken in winter (and not exceed the end of March) to ensure that access to the potential roost features is retained during the active season for bats, if this is not possible further surveys will be required. Construction works should take place during daylight hours only, with no illumination at night.

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Revision	Description	Date
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1. INTRODUCTION

Indigo Surveys were commissioned by Ribina Mustafa to complete a Preliminary Roost Assessment (PRA) at 83 Wilderness Road, Reading, RG6 7RF (Grid Reference SU 74144 71410). The proposals are for a two-storey side extension and single-storey rear extension.

The site is located in the south-east of Reading, in a residential area. The site is bordered by residential properties with vegetated gardens to the east, south and west and woodland within the University of Reading campus to the north. There are lakes to the north, east and south and fragments of woodland in all directions in the wider landscape.

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 adds 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). It is illegal to:

- 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; and
- 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. METHODS

To fully assess bat occupation of a particular site, the Bat Conservation Trust (2023) 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. Table 1 below describes the suitability categories used when inspecting structures.

Category	Roosting habitat present	Survey requirements
Negligible	No features that could be used by roosting bats.	No further surveys required.
Low	A structure with one or more features that could be used by opportunistic individual bats. However, the features do not provide suitable conditions or space for larger roosts.	One further survey required (between May to August).
Moderate	A structure with one or more features that could be used by individual bats, but not suitable as a significant roost.	Two further surveys required (between May and September).
High	A structure with features suitable for use by larger numbers of bats or individuals over a prolonged period.	Three further surveys required (between May and September).
Confirmed	Direct evidence of bats, including droppings, previous site records, or presence of individuals.	

Table 1: Structure suitability categories

Roosting places vary depending on the species. Pipistrelles (*Pipistrellus* sp.) usually inhabit narrow cracks or cavities on the exterior of buildings, but they will roost in similar niches inside

larger barns. Typical sites include soffit boxes, 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 bat (*Plecotus auritus*), myotis bats (*Myotis* sp.) including Natterer's bat (*Myotis nattereri*), whiskered/Brandt's bat (*M. mystacinus*/*M. brandtii*), and lesser horseshoe (*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.

Daytime walkovers can be carried out at any time of the year, but dusk emergence 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 is sub-optimal. The air temperature at the start of each survey must be at least 10°C or above.

Nocturnal survey visits must be a minimum of three weeks apart, and the number of surveys is dependent on the evidence found or the suitability of the site for bats.

Where bats are found, or there is evidence of bat occupation or activity, such as bat use is confirmed, the number and timing of visits will be decided by the ecologist and will be appropriate for the type of roost. In general, at least two nocturnal surveys must be carried out, both of which must be emergence surveys.

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

For a site with no evidence but low suitability, just one nocturnal survey is required, this to be in the optimum period.

For moderate suitability a minimum of two nocturnal surveys are needed, with high suitability, three nocturnal surveys will be necessary, of which two must be in the optimum period.

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 14th October 2024 a thorough inspection of the building was made by Beth England BSc (Hons), MSc (licence reference 2023-11760-CL17-BAT), including the exterior and interior walls, roof coverings, eaves, gables, window casements and door frames. 8x32 binoculars and a high-powered torch were used for the inaccessible/unreachable areas.

The results of the survey are detailed in Section 3.

3. RESULTS

3.1 Desk Study

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

According to MAGIC, there are nine European Protected Species (EPS) licences for bats within 2km of the site. Details of the licences are provided in Table 2 below.

Licence number	Species	Date	Location and direction from site
EPSM2012-4478	Common pipistrelle (<i>Pipistrellus pipistrellus</i>) and soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	2012-2016	0.6km N
2014-500-EPS-MIT	Common pipistrelle and soprano pipistrelle	2014-2016	0.6km N
EPSM2010-2266	Common pipistrelle and brown long-eared bat	2010-2011	0.7km NW
EPSM2010-2126	Common pipistrelle	2010-2012	1.2km NW
EPSM2012-4390	Brown long-eared bat	2012-2015	1.6km E
2014-441-EPS-MIT	Common pipistrelle and soprano pipistrelle	2014-2019	1.6km NE
2014-3941-EPS-MIT	Common pipistrelle and soprano pipistrelle	2014-2019	1.7km NW
2014-3941-EPS-MIT-1	Common pipistrelle and soprano pipistrelle	2014-2019	1.7km NW
2014-3941-EPS-MIT-2	Common pipistrelle and soprano pipistrelle	2015-2019	1.7km NW

Table 2: European Protected Species licences for bats within 2km

3.2 Location

The site is located in the south-east of Reading and is 1.8km north of the M4 motorway. The Ordnance Survey Grid Reference is SU 74144 71410 (Appendix 1).

3.3 Site Description

The survey site comprises one residential property (B1) (Photographs 1-4). To the north of B1 is a driveway with an amenity lawn and introduced shrubs, and to the south is a vegetated garden (Photographs 5 and 6).



Photograph 1: Northern elevation of B1.



Photograph 2: Northern elevation of the attached garage of B1.



Photograph 3: Western elevation of B1.



Photograph 4: Southern elevation of B1.



Photograph 5: Driveway to the north of B1.



Photograph 6: Vegetated garden to the south of B1.

The layout of the site is shown in the aerial photograph in Appendix 2. The site is within a residential area, surrounded by residential properties with vegetated gardens to the east, south and west and woodland to the north. The surrounding habitats have moderate foraging suitability, and the network of residential gardens could act as a commuting corridor to surrounding lakes and woodland in the wider landscape.

3.4 Building Survey

The daytime inspection was carried out on 14th October 2024, commencing at 2pm. The weather conditions during the survey were recorded and are presented in Table 3 below.

Parameter	Value
Temperature (°C)	12
Cloud cover (%)	100
Precipitation	No rain
Wind speed (Beaufort scale)	2

Table 3: Weather conditions during the survey (14/10/2024)

B1 is a semi-detached brick-built house c. 7m in height with a hipped roof and clay tiles. There is an attached garage on the western elevation with a flat felt roof and a pitched section with bay windows on the northern elevation. There is a single-storey lean to extension and a conservatory on the southern elevation.

The loft void has a timber frame and is c. 2.5-3m in height to the apex (Photographs 7 and 8). It is lined with wooden sarking and has a small area of boarding; it was possible to view most areas from the centre. There is heavy cobwebbing across the entire loft. There is light ingress caused by a gap at the ridge, which is covered by cobwebbing (Photograph 9). No draughts or other light ingress was recorded. No evidence of bats was recorded.

The interior of the garage was inspected, no evidence of bats was recorded (Photograph 10). The building is in good condition with well-sealed soffits. There are missing and lifted tiles on the northern elevation (Photograph 11) and gaps beneath the hanging tiles under the first-floor window (Photograph 12). There are missing tiles and a gap beneath the lead flashing next to the chimney on the southern elevation (Photograph 13). The lean-to extension on the southern elevation has a flush roof with no potential roost features. The western roof was inspected from

the road with binoculars due to visibility issues, no potential roost features were identified (Photograph 14).



Photograph 7: Loft void of B1.



Photograph 8: Loft void of B1.



Photograph 9: Location of light ingress within the loft void of B1.



Photograph 10: Interior of the garage of B1.



Photograph 11: Missing/ lifted tiles on the northern elevation of B1.



Photograph 12: Gaps beneath the hanging tiles on the northern elevation of B1.



Photograph 13: Missing tiles on the southern elevation of B1.



Photograph 14: Roof on the western elevation of B1.

Due to a lack of evidence of bats within the loft and heavy cobwebbing, it is considered highly unlikely that bats are entering the void to roost. There are potential roost features on the roof on the northern and southern elevations which will not be impacted under the proposals. No potential roost features were identified on the western elevation or on the garage (which will be removed under the proposals). There are no potential roost features on the lean-to or conservatory on the southern elevation which are also proposed for removal.

4. CONCLUSIONS AND RECOMMENDATIONS

The areas of B1 to be impacted have negligible suitability for roosting bats, due to a lack of evidence and potential roost features. No evidence of bats was recorded in the loft void, which the proposed extension will be connected to. There are potential roost features with moderate suitability in the form of lifted hanging tiles and missing/ lifted roof tiles on the northern elevation and missing roof tiles and lifted flashing on the southern elevation. None of these features will be impacted under the proposals. If the proposals change to include works to the northern and southern elevations, two further bat surveys will be required. If the scaffolding for the proposed extensions is to be installed in front of the roof tiles on the northern and southern elevations, the works should be undertaken in winter (and not exceed the end of March) to ensure that access to the potential roost features is retained during the active season for bats, if this is not possible further surveys will be required. Construction works should take place during daylight hours only, with no illumination at night. The surrounding habitats provide moderate foraging opportunities for bats.

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 eaves boarding, between roof felt and roof tiles or in cavity walls.

As such they can be difficult to find, so the suitability for roosting is also assessed.

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.

5. REFERENCES

Collins, J. (2023). *Bat surveys for Professional Ecologists: Good Practice Guidelines (4th edn)*. The Bat Conservation Trust, London.

English Nature. (2004). *Bat mitigation guidelines*. English Nature. Peterborough.

MAGIC. *Multi-Agency Geographic Information for the Countryside*.

Mitchell-Jones A. J. & McLeish. (2004). *Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

Stebbing R.E. (1986). *Which bat is it?* The Mammal Society and The Vincent Wildlife Trust, London.

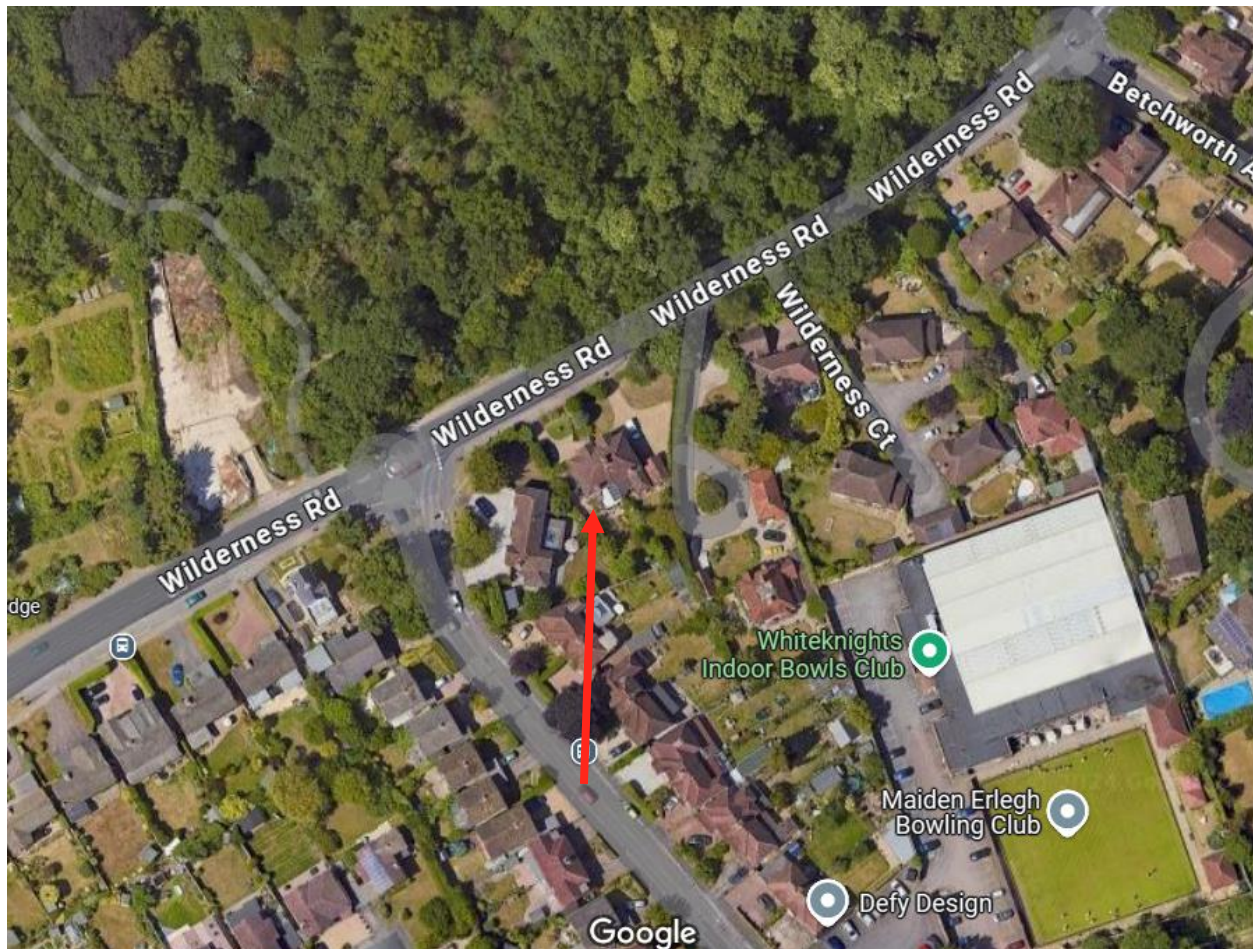
The Vincent Wildlife Trust. (2003). *The Bats of Britain and Ireland*. The Vincent Wildlife Trust, Ledbury.

APPENDICES

Appendix 1: Location Plan

Appendix 2: Site Layout

APPENDIX 1: LOCATION PLAN



83 Wilderness Road, Reading, RG6 7RF

APPENDIX 2: SITE LAYOUT



83 Wilderness Road Layout