

77 Albert Road
Caversham Heights
Reading
Berkshire
RG4 7AW

Bat Emergence Survey

Report prepared by Conor Watson ACIEEM; reviewed by John Wenman MCIEEM
Ref: R3495/a

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1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Mr Duncan Moir to undertake a bat emergence survey at 77 Albert Road in Caversham Heights, Reading. The emergence survey was commissioned to accompany a planning application to be submitted to Reading Borough Council seeking consent for a part two storey, part single storey rear extension.
- 1.1.2** The survey was commissioned following a Preliminary Roost Assessment (PRA) completed by John Wenman Ecological Consultancy LLP on the 29th March 2023. The PRA found no evidence of bat presence but did identify external features resembling potential roosting sites suitable for crevice-dwelling bats confined to hanging tiles on the gable ends where tiles were slightly lifted, slipped or missing; the property was assigned low suitability for roosting bats.
- 1.1.3** During the evening emergence survey conducted on the 11th July, a common pipistrelle bat took shelter during a rain shower by entering through a missing hanging tile on the rear gable at 21:53 and later emerging at 21:57. This survey finding demonstrates that an individual male or non-breeding female bat uses the house as a night roost – a roost of low conservation significance.
- 1.1.4** The survey findings demonstrate that the work to connect the extension to the existing gable will not directly affect the location of the night roost. The existing hanging tiles will not be impacted during the proposed work and the bat roost will therefore be retained in the long-term.
- 1.1.5** There is a chance that the bat roost could be occupied during the day in addition to its confirmed night roost status. However, a non-licensed method of working would prevent any licensable disturbance from noise, dust and vibrations during construction activities. A non-licensed method statement detailing the necessary avoidance measures is set out in **Section 5.3**.
- 1.1.6** The planning proposals provide scope to enhance the suitability of the property for roosting bats. The rear gable of the new extension will be clad in hanging tiles and a couple of access points will be left between tiles to provide additional roosting opportunities for crevice-dwelling bat species.

2 INTRODUCTION

2.1 Project Background

- 2.1.1** John Wenman Ecological Consultancy LLP was commissioned by Mr Duncan Moir to undertake a bat emergence survey at 77 Albert Road in Caversham Heights, Reading. The emergence survey was commissioned to accompany a planning application to be submitted to Reading Borough Council seeking consent for a part two storey, part single storey rear extension.
- 2.1.2** The survey was commissioned following a Preliminary Roost Assessment (PRA) completed by John Wenman Ecological Consultancy LLP on the 29th March 2023 (Report Ref.: R3404/b). The PRA found no evidence of bat presence but did identify external features resembling potential roosting sites suitable for crevice-dwelling bats, such as pipistrelle (*Pipistrellus* spp.) and small *Myotis* species. The potential roosting sites were confined to hanging tiles on the gable ends where tiles were slightly lifted, slipped or missing. Taking into account the low number of small scale potential roosting sites and the suburban environment, the property was assigned low suitability for roosting bats.
- 2.1.3** In accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins 2016), one evening emergence survey was conducted on the 11th July 2023 to determine the presence or likely absence of roosting bats within the property. This report presents the findings of the bat emergence survey and provides recommendations based on those findings.

2.2 Legislative Background

- 2.2.1** All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 ('Habitat Regulations'). In summary, the legislation combined makes it an offence to:
- Damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat;
 - Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair the ability of bats to survive, breed

or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species; and

- Deliberately kill, injure or take any bat.

2.2.2 The government's statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests have been met:

- **Regulation 55(9)(a)** - there is "no satisfactory alternative" to the derogation.
- **Regulation 55(9)(b)** - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range"; and
- **Regulation 55(2)(e)** - the derogation is for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

2.2.3 Local Planning Authorities (LPAs) have a statutory duty under Regulation 7(3e) of the Habitat Regulations to have regard to requirements of the Habitats Directive in the exercise of their functions. The LPA must therefore consider and determine whether these three tests are likely to be satisfied by applications where survey findings show that an EPS mitigation licence is necessary before granting planning permission.

2.2.4 EPS mitigation licence applications can be submitted once all necessary planning consents have been granted and Natural England aim to issue a licence decision within 30 working days.

2.2.5 Licensable projects affecting small numbers of seven commonly occurring species occupying roosts of low conservation importance may fall under the remit of the low impact Bat Mitigation Class Licence WML-CL21 (BMCL). The BMCL permits 'Registered Consultants' or accredited agents appointed by them to carry out licensable operations on site on behalf of clients

following the registration of sites with Natural England at least 15 working days before the work is due to start.

- 2.2.6** Survey data supporting EPS mitigation licence applications or the registration of the site under the BMCL must be up to date, i.e. have been conducted within the current or most recent optimal survey season, i.e. May to August. Therefore, if surveys show bats are present and licensable work is delayed until during or after the next survey season, updated surveys will be required to support an application or site registration.

2.3 Site Location and Context

- 2.3.1** The property is a detached residential dwelling located on the south-western side of Albert Road in Caversham Heights, Reading (OS grid reference: SU 70635 75649).
- 2.3.2** The dwelling is in a suburban setting neighbouring St Andrews Church and surrounded by residential properties with gardens and trees. Small parcels of broadleaved woodland are present in residential gardens approximately 280m south, 360m east and 480m west of the dwelling. The River Thames, a well-known commuting and foraging corridor for bats, is less than 800m to the south of the dwelling.

3 SURVEY METHODOLOGY

3.1 Desk Study

- 3.1.1** MAGIC was examined for granted European Protected Species (EPS) applications within a 1-kilometre radius of the property.

3.2 Evening Emergence Survey

- 3.2.1** The emergence survey was undertaken on the 11th July 2023 by two surveyors experienced in conducting bat surveys with detectors and night vision aids. Meghan Porter, registered under Natural England Bat Survey Class Licence CL17 (Registration No.: 2023-11300-CL17-BAT), was positioned in the rear garden (Survey location 1) while John Wenman MCIEEM, registered under Class Licence CL18 (Registration No.: 2016-23859-CLS-CLS), was located at the front of the property (Surveyor location 2) – refer to plan in **Appendix 1**.
- 3.2.2** The emergence survey was conducted using AnaBat Scout and Echo Meter Touch 2 Pro detectors with Night Vision Binoculars and a Sionyx Aurora Pro with a Sionyx infrared torch. The AnaBat and Echo Meter recordings were later analysed using Kaleidoscope computer software; the Night Vision and Sionyx camera footage was examined using VLC media player.
- 3.2.3** The emergence survey commenced 15 minutes before sunset and continued for 1 hour and 30 minutes after sunset.
- #### **3.3 Survey Constraints**
- 3.3.1** There were no significant constraints to the emergence survey, which was undertaken at a suitable time of year, i.e. May to August, in conditions suitable for bat activity, i.e. dry with air temperatures at 10°C or above at sunset (Collins 2016). There were two short rain showers at 21:50 and 22:00 but bat activity was recorded before and after.

4 SURVEY FINDINGS

4.1 Desk Study

4.1.1 MAGIC highlighted five granted European Protected Species (EPS) applications within 1-kilometre radius of the property. The closest application was 590m south of the property and granted the destruction of common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared bat (*Plecotus auritus*) resting places in 2017 (Case ref.: 2016-27061-EPS-MIT). Another application, located 860m west of the property, granted the destruction of a soprano pipistrelle (*Pipistrellus pygmaeus*) breeding roost in 2017 (Case ref.: 2017-29064-EPS-MIT). The rest of the applications grant the destruction of various common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) resting places between 2014 and 2019.

4.2 Evening Emergence Survey – 11th July 2023

4.2.1 Survey details and findings are summarised in **Tables 1-2** below, illustrated in a survey plan in **Appendix 1** and annotated on stills of camera footage in **Appendix 2**; raw bat detector data is presented in **Appendix 3**.

4.2.2 A common pipistrelle bat (*P. pipistrellus*) was filmed on the Night Vision Binoculars taking shelter during a rain shower by entering through a missing hanging tile on the rear gable at 21:53 and later emerging at 21:57 (see **Appendices 1 & 2**).

4.2.3 The level of bat activity was low and characterised by occasional foraging passes by soprano pipistrelle bats (*P. pygmaeus*). Both surveyors observed a soprano pipistrelle (*P. pygmaeus*) at 22:10 and heard passing noctules (*Nyctalus noctula*) at 21:56 and 22:40.

Table 1. Weather conditions and survey timings.

Weather	Wind (BF0-12)	Cloud cover (oktas)	Precipitation	Temperature (°C)	
				Start	Finish
	2-3	7/8	Rain showers	17	16
Start time	21:03	Sunset time	21:18	Finish time	22:48

Table 2a. Surveyor Location 1 recordings.

Species	Recordings*	Emergences	First recording (minutes after sunset)
<i>Nyctalus noctula</i>	3	None	21:56 (28)
<i>Pipistrellus pipistrellus</i>	2	1	21:57 (29)
<i>Pipistrellus pygmaeus</i>	4	None	22:10 (52)

Table 2b. Surveyor Location 2 recordings.

Species	Recordings*	Emergences	First recording (minutes after sunset)
<i>Nyctalus noctula</i>	3	None	21:56 (28)
<i>Pipistrellus pygmaeus</i>	5	None	22:10 (52)

*recordings are the number of times that the detector was triggered when bat calls were detected.

5 DISCUSSION AND RECOMMENDATIONS

5.1 Assessment of Bat Roost Status

5.1.1 A common pipistrelle bat (*P. pipistrellus*) took shelter during a rain shower by entering through a missing hanging tile on the rear gable at 21:53 and later emerging at 21:57 (see **Appendices 1 & 2**). This survey finding demonstrates that an individual male or non-breeding female common pipistrelle bat (*P. pipistrellus*) uses the house as a night roost – a place to rest or shelter during the night. Night roosts used by common pipistrelle bats (*P. pipistrellus*) are considered to have low conservation significance (Mitchell-Jones 2004).

5.1.2 The common pipistrelle (*P. pipistrellus*) is one of the most abundant and widespread bats in Great Britain. This species occurs in almost any habitat type and is well adapted to the built environments; they are one of the species most regularly reported roosting in houses and churches (Mathews *et al.* 2018). The desk study revealed a known non-breeding roost for common pipistrelle bats (*P. pipistrellus*) 590m south of the property (Case ref.: 2016-27061-EPS-MIT).

5.2 Impact of Proposals and Recommendations

5.2.1 The planning proposals involve the construction of a part two storey, part single storey rear extension and the survey findings demonstrate that the work to connect the extension to the existing gable will not directly affect the location of the common pipistrelle (*P. pipistrellus*) night roost. The existing hanging tiles will not be impacted during the proposed work and the bat roost will therefore be retained in the long-term.

5.2.2 Bats are a highly mobile animal and there is a chance that the bat roost could be occupied during the day in addition to its confirmed night roost status. However, a non-licensed method of working would prevent any licensable disturbance from noise, dust and vibrations during construction activities. A non-licensed method statement detailing the necessary avoidance measures is set out in **Section 5.3** below.

5.3 Non-licensed Method Statement

5.3.1 The following non-licensed avoidance measures will be adopted to prevent

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the licensable disturbance of bats and ensure the proposed works proceed lawfully:

- A toolbox talk to the contractors working on site will be undertaken by a suitably qualified ecologist detailing the location of the bat roost, the legislation that protects bats and their roosts, good working practices, the measures that are required to protect bats during the work and what to do if bats are found;
- Any scaffolding erected will avoid blocking access into the bat roost;
- A pre-works inspection of the hanging tiles to be removed to facilitate the construction of the extension will be undertaken from scaffolding by a suitably qualified ecologist.
- A 'soft strip' approach to the removal of hanging tiles to facilitate the construction of the extension will be adopted, i.e. by gloved hands and with handheld tools under the direct supervision of a suitably qualified ecologist;
- The removal of hanging tiles to facilitate the construction of the extension will be timed to avoid the peak winter hibernation period (i.e. mid-November to February) to prevent disturbing torpid bats;
- Any spot repairs to existing hanging tiles will be undertaken under the direct supervision of a suitably qualified ecologist to ensure that access into the bat roost is retained;
- In the unlikely event that bats are encountered during the course of the construction, the work will stop immediately and a suitably licensed ecologist will be called to site to attend the bat(s) and provide further advice on how to proceed.

5.3.2 If these non-licensed avoidance measures are adhered to, the proposed work is considered highly unlikely to result in the damage or destruction of the bat roost or cause injury or disturbance to bats. Any residual disturbance caused would not impair the ability of bats to survive, breed or reproduce, nurture their young or hibernate; or significantly affect the local distribution or abundance of common pipistrelle bats (*P. pipistrellus*). Therefore, a European Protected Species (EPS) mitigation licence would not be required to allow these works to proceed lawfully.

5.3.3 The planning proposals provide scope to enhance the suitability of the

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property for roosting bats (refer to **Appendix 4**). The rear gable of the new extension will be clad in hanging tiles to match existing and a couple of access points will be left between tiles (i.e. 15-20mm gaps) to provide additional roosting opportunities for common pipistrelle (*P. pipistrellus*) and other crevice-dwelling bat species. Hessian-reinforced bitumen roofing felt (i.e. traditional 1F) or non-bitumen coated membranes that have been certified to pass the snagging propensity test should be used to line the hanging tiles; other non-bitumen coated membranes can be harmful to bats and must be avoided.

6 REFERENCES

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition*. Bat Conservation Trust, London.

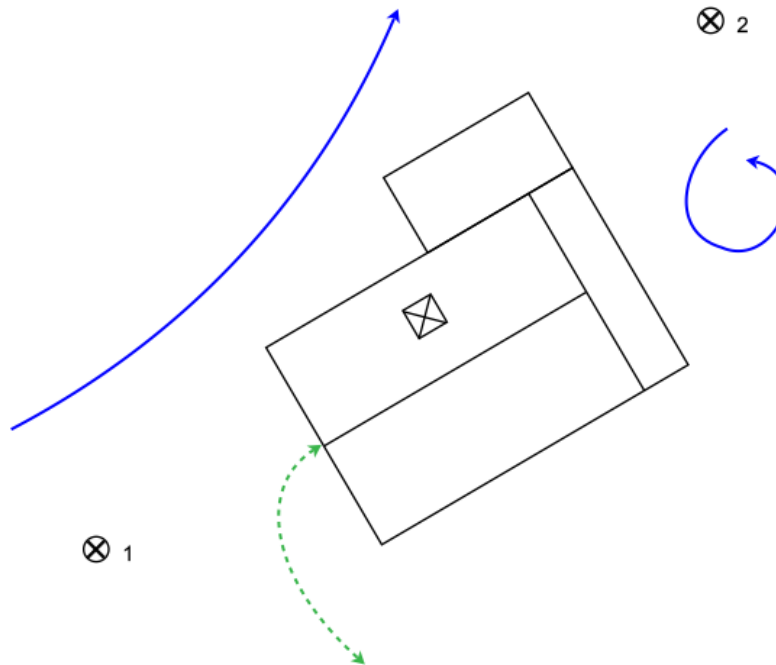
Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough. ISBN 978-1-78354-494-3.

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd Edition)*. JNCC, Peterborough.

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APPENDIX 1 – BAT EMERGENCE SURVEY PLAN



 Surveyor location
  Common pipistrelle entry/emergence
  Soprano pipistrelle flight path

Drawn by:	Date:	Scale:	77 Albert Road Caversham Heights	
CW	July 2023	Not to scale	Bat Emergence Survey Plan	

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APPENDIX 2 – NIGHT VISION CAMERA FOOTAGE



1. Common pipistrelle entering roost through missing hanging tile (highlighted in blue) at 21:53 (Survey location 1).



2. Common pipistrelle emerging from roost through missing hanging tile (highlighted in blue) at 21:57 (Survey location 1).

APPENDIX 3 – RAW DETECTOR DATA

Evening Emergence Survey – 11th July 2023

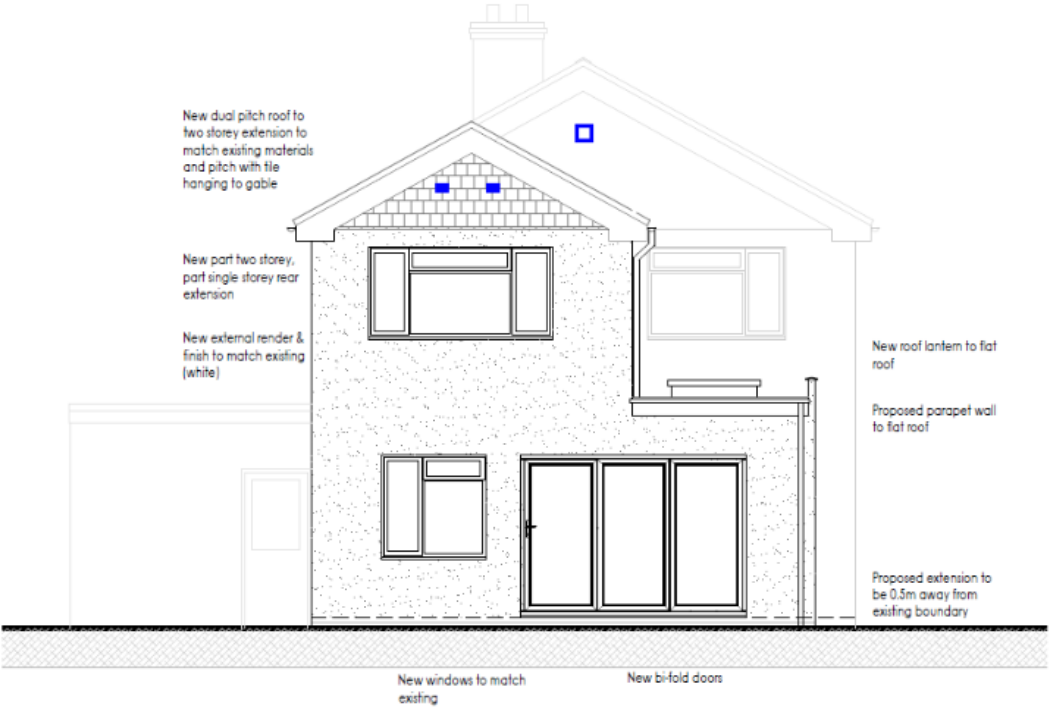
Survey Location 1 – Echo Meter Touch 2 Pro

Time	Species
21:56:51	<i>Nyctalus noctula</i>
21:57:10	<i>Nyctalus noctula</i>
21:57:29	<i>Pipistrellus pipistrellus</i>
22:10:30	<i>Pipistrellus pygmaeus</i>
22:10:57	<i>Pipistrellus pygmaeus</i>
22:13:10	<i>Pipistrellus pygmaeus</i>
22:13:47	<i>Pipistrellus pipistrellus</i>
22:40:51	<i>Nyctalus noctula</i>
22:41:47	<i>Pipistrellus pygmaeus</i>

Survey Location 2 – AnaBat Scout

Time	Species
21:56:51	<i>Nyctalus noctula</i>
21:56:6	<i>Nyctalus noctula</i>
22:10:24	<i>Pipistrellus pygmaeus</i>
22:11:06	<i>Pipistrellus pygmaeus</i>
22:13:52	<i>Pipistrellus pygmaeus</i>
22:17:54	<i>Pipistrellus pygmaeus</i>
22:28:53	<i>Pipistrellus pygmaeus</i>
22:40:52	<i>Nyctalus noctula</i>

APPENDIX 4 – SPECIFICATIONS FOR ENHANCEMENT



- Common pipistrelle night roost retained behind existing hanging tiles on rear gable
- 15-20mm gap between hanging tiles on new gable extension providing roosting opportunities for common pipistrelle and other crevice-dwelling bat species

Annotated by:	Date:	Scale:	77 Albert Road Caversham Heights	
CW	July 2023	Not to scale	Specifications for Enhancement (elevation drawing by ADSJ Associates)	

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