

**14 Buxton Avenue
Caversham
Berkshire
RG4 7BU**

Preliminary Bat Roost Assessment

Report prepared by Vicky Potts MCIEEM; reviewed by Conor Watson ACIEEM
Ref: R3472/b

July 2023



1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL
Telephone: 0118 3271810 Mobile: 07979 403099 E-mail: info@wenman-ecology.co.uk
www.wenman-ecology.co.uk

John Wenman Ecological Consultancy LLP is a limited liability partnership registered in England and Wales with registered number OC339057.
Registered office: 100 New Wokingham Road, Crowthorne, RG45 6JP where you may look at a list of members' names.

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION.....	4
2.1	Project Background	4
2.2	Legislative Background	4
2.3	Site Location and Context	5
3	SURVEY METHODOLOGY.....	7
3.1	Building Inspection	7
3.2	Survey Constraints	8
4	SURVEY FINDINGS	9
4.1	Overview	9
4.2	External Survey	9
4.3	Internal Survey	9
5	DISCUSSION AND RECOMMENDATIONS	11
5.1	Assessment of Bat Roost Potential	11
5.2	Impact of Proposals and Recommendations	11
5.3	Indicative and Provisional Mitigation Proposals.....	12
6	REFERENCES.....	14
	APPENDIX 1 – SITE PHOTOGRAPHS	15
	APPENDIX 2 – PRELIMINARY ROOST ASSESSMENT PLAN.....	19
	APPENDIX 3 – PROPOSED PLANS.....	20

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Mr Barnaby Smith to undertake a Preliminary Roost Assessment (PRA) for bats at 14 Buxton Avenue in Caversham, Berkshire. The PRA was commissioned in connection with planning proposals submitted to Reading Borough Council seeking consent for two storey side and front extensions and a single storey rear extension to replace the existing conservatory.
- 1.1.2** 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') (as amended). A survey of the exterior and interior of the property was undertaken on the 21st June 2023 by Vicky Potts CL18 and Meghan Porter CL17.
- 1.1.3** No evidence of roosting bats was found inside the roof space. The house had a low number of features that could potentially support typically crevice-dwelling species, such as pipistrelle and/or small *Myotis* species. The features comprise: a gap at the apex of the rear gable; large gaps behind timber soffit boxes at the eaves; slight gaps behind timber fascias on the flat roof extension; large gaps behind timber fascias at the southeast gable and narrow gaps at the front and rear gables. The property is considered to have low bat roost potential.
- 1.1.4** The survey findings demonstrate that the proposals will directly impact potential roosting sites, specifically the slight gaps behind timber fascias on the flat roof extension and large gaps behind timber fascias at the southeast gable. Therefore, the proposals could result in the damage or destruction of bat roosts and further survey is required to determine if bats are present or absent. The surveys should comprise at least one evening emergence or dawn re-entry survey completed in the period between May and August (Collins 2016).
- 1.1.5** Subject to the survey findings, a European Protected Species (EPS) mitigation licence (EPSML) or if applicable, registration of the site under the Bat Mitigation Class Licence (BMCL) may be required to allow the planned works to go ahead lawfully.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was commissioned by Mr Barnaby Smith to undertake a Preliminary Roost Assessment (PRA) for bats at 14 Buxton Avenue in Caversham, Berkshire.

2.1.2 The PRA was commissioned in connection with planning proposals submitted to Reading Borough Council seeking consent for two storey side and front extensions and a single storey rear extension to replace the existing conservatory (Planning Application No.: 230683).

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') (as amended). 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 planning proposals affecting EPS before granting planning permission.

2.2.4 If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

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), which would enable consultants registered by Natural England, or accredited agents appointed by them, to carry licensable work under the BMCL once sites have been registered in advance with Natural England. Registration forms must be submitted at least three weeks before work is due to start and if acceptable, Natural England aims to register sites within two weeks.

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 detached house is situated on the western side of 14 Buxton Avenue in Caversham, Berkshire (OS grid reference: SU 70526 75634).

2.3.2 The property is situated in a residential area with similar properties on all sides and gardens comprising scattered trees, shrubs and closely mown lawns. Recreational grounds are situated just over 100 metres to the north. A patch of woodland and

recreational fields is also situated 450 metres to the west at Mapledurham Playing Fields. Approximately 965 metres to the west of the house is the extensive grounds of Caversham Heath Golf Course, with areas of woodland, shrubs and grassland. The River Thames is located approximately 800 metres to the south of the site.

- 2.3.3** The immediate vicinity offers moderate suitability commuting and foraging to bats adapted to urban environments; the wider setting includes high suitability habitats for bats.

3 SURVEY METHODOLOGY

3.1 Building Inspection

3.1.1 A survey of the exterior and interior of the property was undertaken on the 21st June 2023 by Vicky Potts, registered under Natural England Bat Survey Class Licence CL18 (Registration no.: 2016-27162-CLS-CLS) and Meghan Porter, registered under Natural England Bat Survey Class Licence CL17 (Registration no.: 2023-11300-CL17-BAT).

3.1.2 The survey was undertaken with the aid of binoculars and a high power (1 million candle power) torch looking for signs of bat occupation and features that could offer potential roosting sites following standard survey guidelines (Collins 2016; Mitchell-Jones 2004; Mitchell-Jones & McLeish 2004).

3.1.3 The following may indicate the presence of a bat roost within a building:

- Bat droppings (these can be found externally, especially in sheltered areas such as windowsills, underneath roost entrances or internally within a roof space);
- Piles of insect remains, e.g. moth wings (these may be indicative of regular feeding sites used by species such as the brown long-eared bat);
- Staining at roost entrances or within the roost (urine and oil from fur can leave stains on timbers when bats are gathered for long periods); and
- Bats (live or dead).

3.1.4 Residential buildings may offer potential roosting sites in a number of locations; favoured locations include:

- Under roof, ridge and hip tiles, especially when loose or lifted tiles are present, or sections of mortar are missing;
- Under sections of raised lead flashing;
- Beneath lifted barge boards;
- At the gable ends – access is typically gained at the roof apex via gaps in the soffits or under roof tiles;
- At the eaves – gaining access via gaps between the soffits and wall; and
- Within an enclosed roof space – brown long-eared bats for example, will often cluster at the ridge beam.

3.2 Survey Constraints

- 3.2.1** Full access was available to the exterior and interior of the property and therefore there were no significant constraints to the survey. The weather conditions were sunny spells with a light breeze and an air temperature of approximately 23°C.
- 3.2.2** It should be noted that it is not always possible to inspect all potential roosting locations during a survey (i.e. wall cavities and crevices in the roof) and therefore an absence of bat evidence does not necessarily equate to evidence of bat absence.

4 SURVEY FINDINGS

4.1 Overview

- 4.1.1** Photographs of the property are presented in **Appendix 1** and a plan of the external and internal survey findings with associated target notes is shown in **Appendix 2**. The survey findings from the exterior and interior of the property are described as follows:

4.2 External Survey

- 4.2.1** The property was a detached house that had a pitched roof, a two storey flat roof extension to the front and a conservatory to the rear; an attached garage was present at the southern corner of the house (**Photographs 1 & 2**).
- 4.2.2** The pitched roof was covered in overlapping roof tiles that were occasionally lifted, particularly leading up to the front gable and on the rear elevation (**Photographs 3 & 4; Target notes 1 & 2**). The hip tiles at the western corner of the house and ridge tiles were all securely mortared (**Photograph 5; Target notes 3 & 4**). Lead flashing was tightly fitted around the chimneys (**Photograph 6; Target note 5**). The gables' verge mortar was generally intact but for a potential bat access point noted at the apex of the rear gable (**Photograph 7; Target note 6**). Large gaps were present behind timber soffit boxes at the eaves; the flat roof extension had a bituminous roof with slight gaps behind its timber fascias (**Photographs 8 & 9; Target notes 7 & 8**). There were large gaps behind the timber fascias at the southeast gable, while narrow gaps were present at the front and rear gables (**Photographs 10, 11 & 12, Target notes 9, 10 & 11**). Lead flashing was tightly fitted where the conservatory roof joins to house brickwork (**Photograph 13; Target note 12**).
- 4.2.3** A small pitched roof was present at the front of garage with roof tiles that were slightly lifted in places; the rest of the garage to the rear had a bituminous flat roof (**Photograph 14; Target note 13**).
- 4.2.4** No evidence of roosting bats was found on the exterior of the house but multiple potential bat access points were identified.

4.3 Internal Survey

- 4.3.1** The house had one main roof space which was accessible via a loft hatch. The space had an estimated floor-to-ridge height of 1.5 metres and the roof was of 'cut and pitch' construction. One covered water tank was present towards at the

John Wenman Ecological Consultancy
29/08/2023

southeast gable end (**Photograph 15**). The roof was lined with spray foam insulation up to the brickwork gable ends and down to the eaves (**Photograph 16; Target note 14**). The floor was centrally boarded with fibreglass insulation beneath, which extended as far as the eaves in places (**Photograph 17; Target notes 15 & 16**). Timber associated with the chimneys was visible in the eaves along the north-western side of the space (**Photograph 18; Target note 17**). The ridge beam was covered with spray foam and heavily cobwebbed in places, indicating an absence of recent void-dwelling bat activity (**Photograph 19; Target note 18**). The gable ends were of brick construction with spray foam sealed against the wall (**Photograph 20; Target note 19**). A large wasp nest was present at the rear gable end and several smaller wasp nests were present elsewhere in the eaves (**Photographs 21 & 22; Target notes 20 & 21**).

4.3.2 No evidence of roosting bats was found during the internal inspection of the property.

5 DISCUSSION AND RECOMMENDATIONS

5.1 Assessment of Bat Roost Potential

- 5.1.1** No evidence of roosting bats was found inside the roof space, which was a sub-optimal size for uninterrupted internal slight exhibited by primarily void-dwelling bats such as the brown long-eared (*Plecotus auritus*), so it is considered highly unlikely that the property supports such species.
- 5.1.2** The application of spray foam insulation inside the roof space is likely to have reduced the number of suitable roosting sites available to small crevice-dwelling bats beneath occasionally lifted roof tiles. However, the house did have a low number of features that could potentially support typically crevice-dwelling species, such as pipistrelle (*Pipistrellus* spp.) and/or small *Myotis* species. The features comprise: a gap at the apex of the rear gable; large gaps behind timber soffit boxes at the eaves; slight gaps behind timber fascias on the flat roof extension; large gaps behind timber fascias at the southeast gable and narrow gaps at the front and rear gables.
- 5.1.3** The common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) are the most abundant and widespread bats in Great Britain. Both pipistrelle species occur in almost any habitat type and are well adapted to the built environments; they are the species most regularly reported roosting in houses and churches. The whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*) are small bats that are similar in morphology, flight pattern and habitat, despite only being distantly related. These myotids are widespread in Great Britain but less abundant than the pipistrelles; they tend to avoid urban and arable environments and their maternity roosts are usually located in buildings (Mathews *et al.* 2018). Roosts supporting these pipistrelle and *Myotis* species are of low to moderate conservation significance subject to the status of roost present, i.e. non-breeding roosts supporting individual or small numbers of bats through to maternity roosts supporting large numbers of female bats (Mitchell-Jones 2004).
- 5.1.4** Based on these survey findings (i.e. an absence of evidence of bat occupation, a low number of potential roosting sites for crevice-dwelling bats and a suburban setting), the property is considered to have low bat roost potential.

5.2 Impact of Proposals and Recommendations

- 5.2.1** The planning proposals involve the construction of two storey side and front extensions and a single storey rear extension to replace the existing conservatory

John Wenman Ecological Consultancy
29/08/2023

(refer to plans in **Appendix 3**). The survey findings demonstrate that these proposals will directly impact potential roosting sites suitable for crevice-dwelling bats, specifically the slight gaps behind timber fascias on the flat roof extension and large gaps behind timber fascias at the southeast gable. Therefore, the proposals could result in the damage or destruction of bat roosts if present and in the absence of mitigation, may lead to bats being disturbed and/or harmed at the time of works.

5.2.2 Further survey is required to determine if bats are present or absent and if present, to characterise the status of the bat roost(s). The surveys should comprise at least one evening emergence or dawn re-entry survey completed in the period between May and August (Collins 2016).

5.2.3 If bats are shown to be present, additional survey would be required and a European Protected Species (EPS) mitigation licence or if applicable, the registration of the site under the Bat Mitigation Class Licence (BMCL) may be required to permit the lawful damage/destruction of a bat roost(s), and to permit the disturbance of any bats present at the time of the work. An EPS licence or BMCL can be issued by Natural England if the three licensing tests (detailed in **Paragraph 2.2.2**) have been met by the proposals.

5.2.4 To meet one of the licensing tests, it is necessary to demonstrate that the 'favourable conservation status' of bats using the property is maintained throughout and after the completion of the work by employing mitigation measures during the work, by providing compensatory roosts in the short-term and ensuring that roosting sites are retained on site in the long-term. Indicative and provisional mitigation proposals are summarised in **Section 5.3** below. **N.B. the preparation of a detailed mitigation strategy necessary for the submission of an EPS mitigation licence should be based on the findings of further survey.**

5.3 Indicative and Provisional Mitigation Proposals

5.3.1 If further survey demonstrates that an EPS mitigation licence is required, under the terms of the full licence or BMCL (if applicable), the commencement of work affecting bat roost(s) would be timed to avoid the periods when bats are most susceptible to disturbance, i.e. winter hibernation season where there is potential for hibernating bats (mid-November to February) to avoid disturbing torpid bats, and to take place outside of the peak summer breeding season (May to mid-September) where evidence of a maternity roost is recorded. **N.B. the current survey information does not indicate that a maternity roost is present.**

- 5.3.2** Replacement roosting opportunities would be provided so that they are available to bats in the short-term, i.e. before and during the work by erecting at least one woodcrete bat box suitable for the roost/species present on a mature tree or a purpose-built pole before the work starts.
- 5.3.3** Before the licensable work commences, a licensed ecologist or Registered Consultant under the BMCL would provide a toolbox talk to contactors on site detailing that bats are present, the legislation protecting bats, the location of the roosting site, good working practices, the measures that are required to protect bats during the work and what to do if bats are found.
- 5.3.4** A 'soft strip' approach to the work affecting identified roosts would be adopted, i.e. the careful removal of roof coverings associated with the roost(s), by gloved hands and with hand-held tools under the supervision of a licensed ecologist or the Registered Consultant if working under the BMCL. In the event that bats are discovered during the course of the work, the licensed ecologist or Registered Consultant would capture the bat(s) and transfer it/them directly to a bat box erected in advance of the works.
- 5.3.5** In the long-term, replacement access and/or roosting opportunities may need to be created and/or reinstated in the house as part of an EPS mitigation licence or BMCL (if applicable). Access and roosting opportunities should be created corresponding to the positioning of access points/roosting sites identified during the further survey.

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.

APPENDIX 1 – SITE PHOTOGRAPHS



1. Front of house viewed from northeast.



2. Rear of house viewed from southwest.



3. Occasionally lifted tiles near front gable (southeast elevation).



4. Occasionally lifted tiles (rear elevation).



5. Ridge and hip tiles securely mortared (rear elevation).



6. Tight lead flashing around chimney at southeast gable (front elevation).



7. Gap in verge mortar at rear gable apex (rear elevation).



8. Large gap behind soffit box (northwest elevation).



9. Slight gaps behind fascias on flat roof extension (southeast elevation).



10. Large gaps behind gable fascias (southeast elevation).



11. Narrow gaps behind gable fascias (front elevation).



12. Narrow gaps behind gable barge boards (rear elevation).



13. Lead flashing along conservatory (rear elevation).



14. Slightly lifted roof tiles on garage (front elevation).



15. Covered water tank (roof space).



16. Roof lined with spray foam insulation (roof space).



17. Fibreglass floor insulation (roof space).



18. Timber associated with chimneys visible in eaves (roof space).



19. Ridge beam covered in spray foam insulation (roof space).



20. Spray foam sealed against gable wall (roof space).

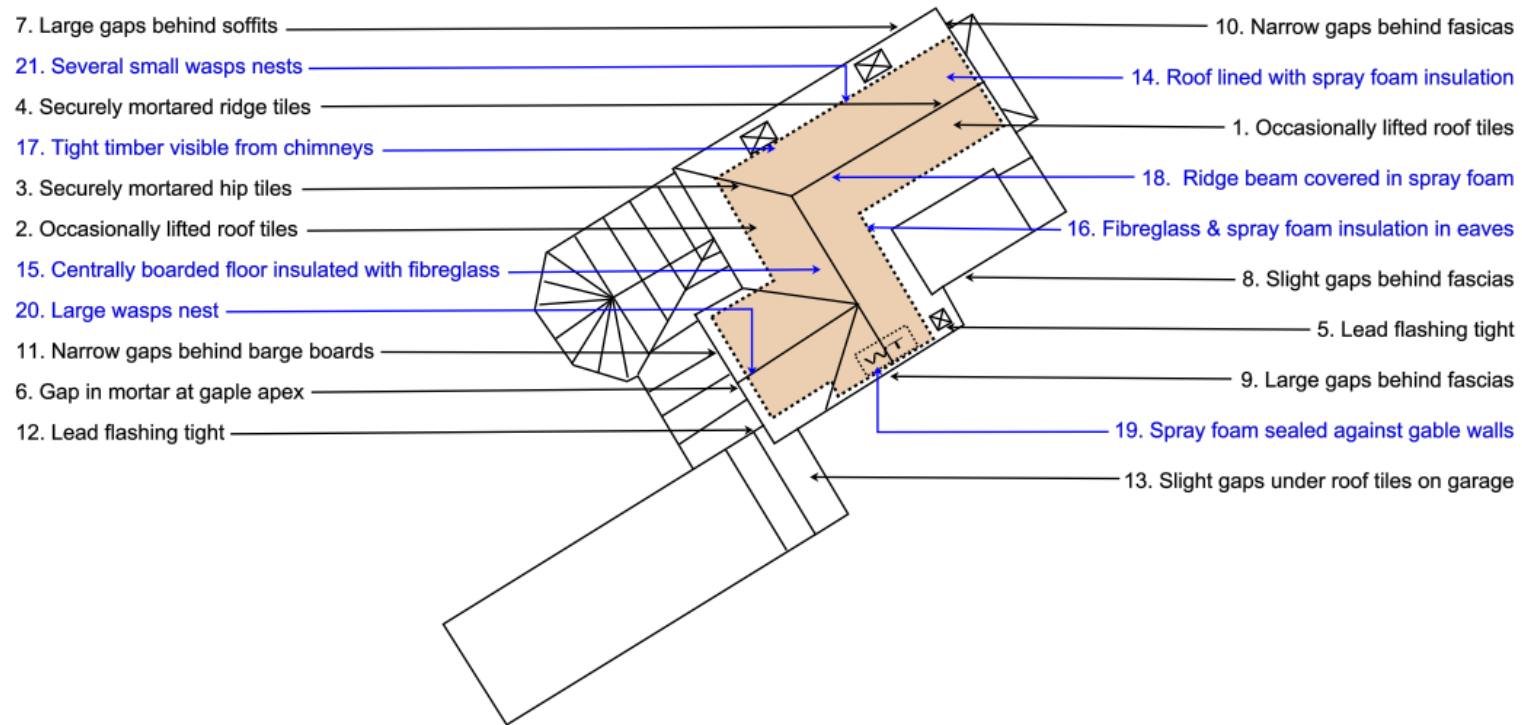


21. Large wasp nest at rear gable end (roof space).



22. Small wasp nests present in eaves (roof space).

APPENDIX 2 – PRELIMINARY ROOST ASSESSMENT PLAN



Chimney



Roof space



Water Tank



External Target note



Internal Target note

Drawn by:	Date	Scale:	14 Buxton Avenue Caversham	
VP/CW	July 2023	Not to scale	Preliminary Roost Assessment Plan	

John Wenman Ecological Consultancy
29/08/2023

APPENDIX 3 – PROPOSED PLANS



