

**23 Conisboro Avenue
Caversham
Reading
RG4 7JB**

Preliminary Bat Roost Assessment

Ref: R3057/b

Report prepared by Meghan Porter; reviewed by John Wenman

April 2022



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	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	Weather Conditions	8
3.3	Survey Constraints.....	7
4	SURVEY FINDINGS	8
4.1	Introduction	8
4.2	External Survey.....	8
4.3	Internal Survey.....	8
5	DISCUSSION AND RECOMMENDATIONS	10
5.1	Assessment of Bat Roost Potential/Status.....	10
5.2	Impact of Proposals and Recommendations	11
6	INDICATIVE MITIGATION AND COMPENSATION REQUIREMENTS.....	12
7	REFERENCES	13
	APPENDIX 1 - SITE PHOTOGRAPHS.....	14
	APPENDIX 2 – PRELIMINARY BAT ROOST ASSESSMENT PLAN	18

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Mr McDowell to undertake a preliminary bat roost assessment at 23 Conisboro Avenue in Caversham, Berkshire (OS grid reference: SU 70294 76159). The assessment was commissioned to accompany a planning application to be submitted to Reading Borough Council seeking consent for a loft conversion within the central part of the property's roof.
- 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 interior and exterior of the house was conducted on the 18th March 2022 by an ecologist registered under the Natural England Bat Survey Class Licence CL18.
- 1.1.3** Approximately 150 medium-sized bat droppings, of a size, shape and distribution most typical of those deposited by a long-eared bat species (*Plecotus* sp.), were scattered throughout the roof void. The house had external features suitable for crevice-dwelling bat species, in the form of gaps between roof and hip tiles, missing hip mortar, uneven lead flashing and lifted roof tiles.
- 1.1.4** The proposed works will lead to the permanent damage of a confirmed bat roost (likely used by a long eared bat species) and may have an impact on crevice dwelling bat species that may occupy external roost features. Additionally, the work may disturb and/or harm any bats present at the time of works. Further survey is required to characterise the existing roost, identify all access points and to determine the presence or absence of any other bat roosts within the bungalow.
- 1.1.5** A European Protected Species Mitigation Licence (EPSML) or if applicable, registration of the site under the Bat Mitigation Class Licence (BMCL) will be required to allow the planned works to go ahead lawfully. Avoidance, mitigation and compensation measures should be adhered to from the pre-construction stage through to the post-construction stage.

2 INTRODUCTION

2.1 Background

2.1.1 John Wenman Ecological Consultancy LLP was commissioned by Mr McDowell to undertake a preliminary bat roost assessment at 23 Conisboro Avenue in Caversham, Berkshire.

2.1.2 The bat roost assessment was commissioned to accompany a planning application to be submitted to Reading Borough Council seeking consent for a loft conversion within the central part of the bungalow's roof.

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 significantly affect 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 Mitigation Licences (EPSML) that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. A 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 authorities 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 Council must therefore consider and determine whether these three tests are likely to be satisfied by applications where survey findings show that an EPSML is necessary before granting planning permission.
- 2.2.4** EPSML 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 Bat Mitigation Class Licence (WML-CL21). The Class Licence 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 licence applications or the registration of the site under the Bat Mitigation Class Licence (WML-CL21) 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 bungalow is located on the western side of Conisboro Avenue in Caversham, Reading, Berkshire (OS grid reference: SU 70294 76159).
- 2.3.1** The bungalow is in an urban setting, with neighbouring residential properties and their respective gardens in the immediate surrounds. An area of woodland is present approximately 350 metres to the east, which connected to Bugs Bottom - a tree-lined, open area of grassland. Approximately 650 metres to the west of the bungalow is the extensive grounds of Caversham Heath Golf Course, with areas of woodland, shrubs and grassland.

2.3.2 The nearby woodland and open grassland offer high quality commuting and foraging opportunities to bats adapted to living in a sub-urban environment.

3 SURVEY METHODOLOGY

3.1 Building Inspection

3.1.1 A survey of the interior and exterior of the bungalow was conducted on the 18th March 2022 by John Wenman - an ecologist registered under the Natural England Bat Survey Class Licences CL18 (registration 2016-23859-CLS-CLS).

3.1.2 The survey was undertaken with the aid of binoculars and a high power (1 million candle power) torch, searching for 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 window sills, 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 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 hanging tiles;
- At the eaves – gaining access via gaps between the soffits and wall; and
- Within an enclosed roof space – long-eared bats (*Plecotus* spp.) for example, will often cluster at the ridge beam.

3.2 Survey Constraints

3.2.1 There were no significant survey constraints because full internal and external access was available throughout the survey, which was carried out in good weather conditions; however, due to the roosting behaviour of bats it is possible that not all of the evidence of bats was visible during the survey.

4 SURVEY FINDINGS

4.1 Introduction

4.1.1 Photographs of the bungalow 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 bungalow are described as follows:

4.2 Weather Conditions

4.2.1 The weather conditions during the survey were dry, sunny (0/8 cloud cover), calm with a temperature of 15°C.

4.3 External Survey

4.3.1 The detached bungalow was of brick, cavity wall construction with a hipped roof, an attached garage on the front elevation and a glass-roofed conservatory on the rear elevation (**Photographs 1 & 2**). The clay roof tiles were occasionally lifted on the southern and eastern elevations, offering potential roosting and access opportunities to bats (**Photographs 3 & 4; Target notes 1 & 2**). There were occasional gaps under the ridge on the southern and eastern elevations, with gaps below multiple hip tiles where the mortar was missing (**Photographs 5 & 6; Target notes 3 & 4**). There were gaps below lifted lead flashing around both the flue pipe and chimney on the front elevation of the house (**Photographs 7 & 8; Target notes 5 & 6**). There was a missing tile on the hip on the front elevation of the roof (**Target note 7**). The timber soffit was flush to the brickwork on all elevations of the bungalow (**Photograph 9; Target note 8**).

4.4 Internal Survey

4.4.1 The roof void covered the bungalow's foot print and was accessible via a loft hatch on the ground floor. The ridge was lightly cobwebbed in places, with a lack of cobwebs in others (**Photograph 10**). The roof was lined with bitumen-and-hessian felt, which had occasional gaps around the flue pipe and along the ridge at the southern end of the void (**Photographs 11 & 12; Target note 9**). The floor was partly boarded around the loft hatch, with fibreglass insulation present throughout the rest of the void and up to the open eaves (**Photograph 13; Target note 10**). There were two brickwork chimneys within the void, which were cobwebbed and had tight roofing felt around the tops of both (**Photographs 14 & 15; Target notes 11 & 12**). The north-eastern end of the void had a plasterboard gable, which was

tight to the roof line (**Photograph 16; Target note 13**). There was daylight visible through a gap in the corner of the gable above the eaves (**Photograph 17; Target note 14**). There were approximately 100-150 medium-sized bat droppings throughout the roof void (**Photographs 18 – 20**); no bats were visible at the time of the survey.

5 DISCUSSION AND RECOMMENDATIONS

5.1 Assessment of Bat Roost Potential/Status

- 5.1.1** The observation of approximately 100-150 medium-sized bat droppings – resembling those typically deposited by long-eared bats (*Plecotus* spp.) – scattered throughout the roof void, along with a lightly cobwebbed ridge indicates the void is likely used by an individual or small numbers of non-breeding long eared bats as a day and/or transitional/occasional roost.
- 5.1.2** Two long-eared bat species are found within the UK: brown long-eared (*Plecotus auritus*) and grey long-eared (*Plecotus austriacus*). Brown long-eared bats (*P. auritus*) are a widespread species found throughout the UK and roosts occupied by small numbers of non-breeding individuals are considered to be of low conservation importance; however, they are a species of principal importance for conservation (as defined within Section 41 of the NERC Act 2006) and any loss of roosts may have an adverse impact on the status of local populations (Mitchell-Jones 2004). The grey long-eared bat (*P. austriacus*) has a restricted distribution confined to the far south of England (Richardson 2000) and therefore it is possible, although very unlikely, that this rarer species is present.
- 5.1.3** The bungalow had numerous potential roost features suitable for crevice-dwelling bats, such as the pipistrelles (*Pipistrellus* spp.) and small *Myotis* species, in the form of gaps under lifted roof tiles, missing hip mortar and uneven lead flashing.
- 5.1.4** Two species of pipistrelle bat: common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), are widespread and abundant throughout the UK (Richardson 2000). Small *Myotis* species such as the Whiskered bat (*Myotis mystacinus*) and/or Brandt's bat (*Myotis brandtii*) are widespread and common but less abundant than the pipistrelle species. Roosts supporting pipistrelle (*Pipistrellus* spp.) and/or small *Myotis* bat species are of low to moderate conservation importance (subject to the type 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).
- 5.1.5** Overall, considering the evidence of the presence of bats, features suitable for bats and the setting, the bungalow is considered to be a confirmed roost with features of moderate value to crevice dwelling bat species.

5.2 Impact of Proposals and Recommendations

- 5.2.1** The proposals are to involve the conversion of the central part of the bungalow's roof void into living space with the associated installation of dormers or sky lights. These proposals will lead to the removal of part of the existing roof void and changes to the central roof tiles necessary for the addition of dormer windows and/or sky lights. The changes will result in the permanent damage of a confirmed bat roost (likely supporting a long-eared bat species) and will have an impact on potential external roost features, which may disturb and/or harm any bats present at the time of works. Further survey work is required to categorise the status of the roost within the roof void and to determine if any other bat roosts are present within crevice roosting features.
- 5.2.2** Further survey of the bungalow should comprise of three evening emergence and/or dawn re-entry surveys with at least two weeks separating each survey. The surveys should be undertaken in the period between May and September inclusive with at least two of the surveys carried out in the peak season for recording maternity roosts i.e., May to August (Collins 2016).
- 5.2.3** A European Protected Species Mitigation Licence (ESPML) or if applicable, the registration of the site under the Bat Mitigation Class Licence (BMCL) will be required to permit the lawful damage of the confirmed bat roost and any other roosts shown to be present and unavoidably affected, and to permit the disturbance of any bats present at the time of the work. A licence 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 bungalow 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, as indicatively summarised in **Section 6** below (**please note that the preparation of a full mitigation strategy should be based on the findings of full survey data as set out in 5.2.2 above**).

6 INDICATIVE MITIGATION AND COMPENSATION REQUIREMENTS

- 6.1.1** Under the terms of the EPSML 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 for all roosts (mid-November to February) to avoid disturbing torpid bats, and outside of the peak summer breeding season (May to mid-September) where evidence of a maternity roost is recorded. **N.B. Current survey information does not indicate that a maternity roost is present.**
- 6.1.2** Replacement roosting opportunities would be provided so that they are available to bats in the short-term, i.e. prior to and during the work by erecting at least one woodcrete bat box on a mature tree or pole in the rear garden before the work starts.
- 6.1.3** A 'soft strip' approach to the work affecting identified roosts would be adopted, i.e. the careful removal of tiles and 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 one of the bat boxes erected in advance of the works.
- 6.1.4** In the long-term, roosting locations dedicated to bats would be retained within the enclosed roof void to mitigate the impacts of conversion. Existing bitumen and hessian (Type 1F) roofing felt will be retained and as necessary, bat access will be retained or recreated to enable bats to access the void and any crevice roosting sites.

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

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.

Richardson, P. (2000). *Distribution Atlas of Bats in Britain and Ireland 1980 – 1999*. Bat Conservation Trust, London.

APPENDIX 1 - SITE PHOTOGRAPHS



1. Front of the bungalow viewed from the east.



2. Rear of the bungalow viewed from the west.



3. Uneven clay roof tiles (eastern elevation).



4. Uneven clay roof tiles (southern elevation).



5. Gap below ridge tile (rear elevation).



6. Gaps under hip tiles (rear elevation).



7. Lifted lead flashing around flue pipe (front elevation).



8. Lifted lead flashing around base of chimney (front elevation).



9. Flush soffit to brickwork (rear elevation).



10. Lightly cobwebbed ridge.



11. Gap in roofing felt beside the ridge at the southern end of the void.



12. Loose roofing felt around flue pipe.



13. Fibreglass insulation along the sides of the void, up to the open eaves.



14. Roofing felt tight to brickwork chimney.



15. Roofing felt tight to cobwebbed brickwork chimney.



16. Plasterboard gable at the north-eastern corner of the void.



17. Daylight visible at the eaves adjacent to the gable.



18. Medium-sized bat dropping on fibreglass adjacent to the loft hatch.

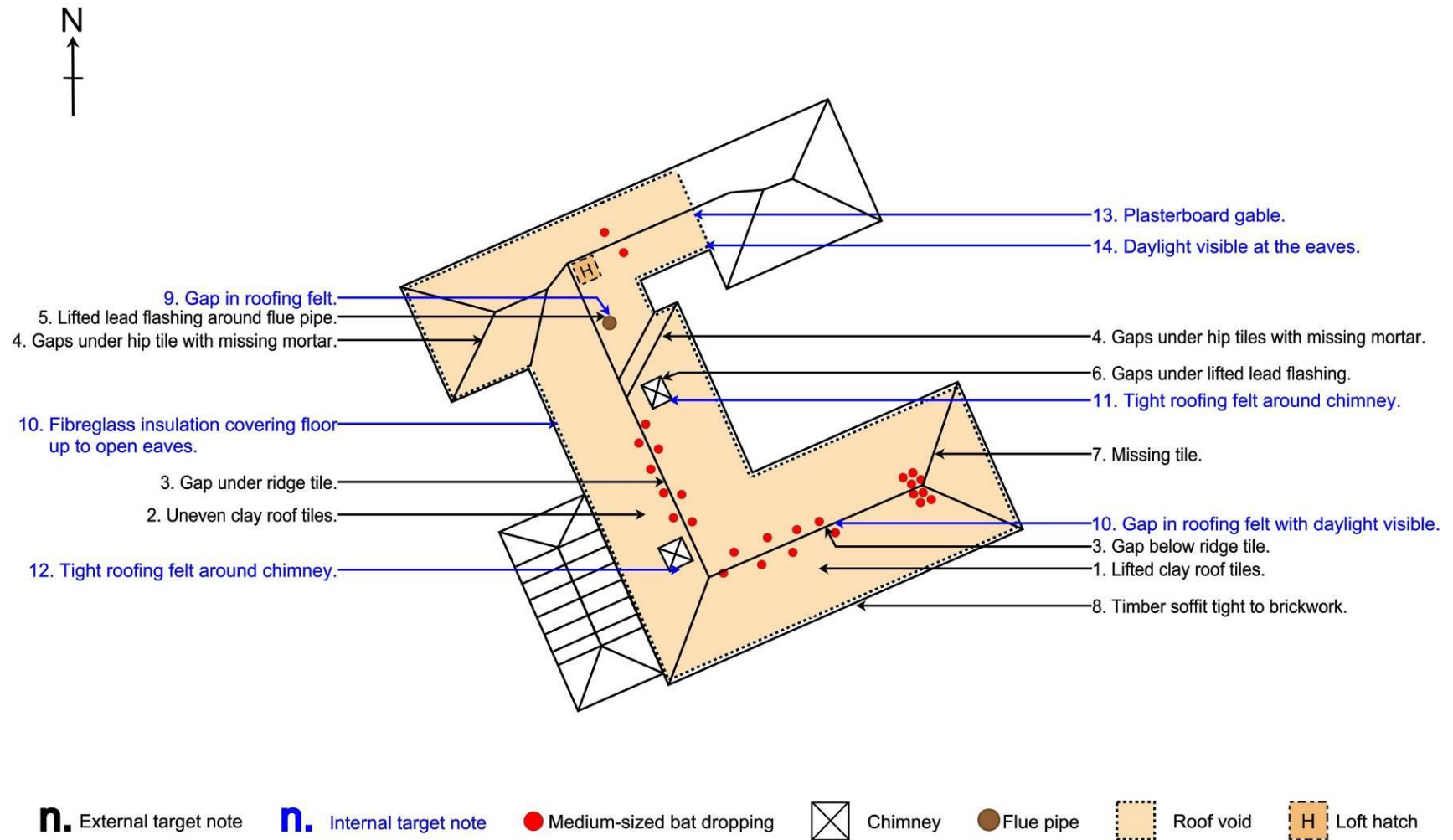


19. Pile of medium-sized bat droppings below ridge at the southern end of the void .



20. Scattered medium-sized bat droppings in the central part of the void.

APPENDIX 2 – PRELIMINARY BAT ROOST ASSESSMENT PLAN



Drawn by: MP	Date March 2022	Scale: Not to scale	23 Conisboro Avenue, Caversham, Berkshire, RG4 7JB Preliminary Bat Roost Assessment Findings	
-----------------	--------------------	------------------------	---	---