

**33 Shepherds Lane
Caversham
Reading
Berkshire
RG4 7JJ**

Daylight Bat Survey

Ref: R1728/a

September 2017



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1 INTRODUCTION

1.1 Background

1.1.1 John Wenman Ecological Consultancy LLP was commissioned by Mr and Mrs Munnings to undertake a survey for the presence of bats within the detached house at 33 Shepherds Lane in Caversham, Berkshire.

1.1.2 The survey was commissioned in connection with a planning application lodged with Reading Borough Council seeking consent for a proposed rear and side extension to the current dwelling (Application Reference 171167).

1.2 Legislative Background

1.2.1 All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010 ('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;
- Deliberately kill, injure or take any bat.

1.2.2 The government's statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species licences 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 53(9)(a)** - there is "no satisfactory alternative" to the derogation, and;
- **Regulation 53(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 53(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”.

1.2.3 Local authorities have a statutory duty under Regulation 9(5) of the Habitat Regulations to have regard to requirements of the Habitats Directive in the exercise of their functions. They must therefore consider and determine whether these three tests are likely to be satisfied by planning proposals affecting European Protected Species before granting planning permission.

1.2.4 If a European Protected Species 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.

1.2.5 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 Class Licence, which would enable consultants registered by Natural England to carry licensable work under the Class Licence 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.

1.2.6 Survey data supporting EPS licence applications or the registration of the site under the Low Impact 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.

1.3 Site Location and Context

1.3.1 The detached house is situated on the southern side of Shepherds Lane in Caversham, Berkshire (OS Grid Reference: SU 69968 76612).

- 1.3.2** The house is bordered by residential properties to the east, west and south and beyond Shepherds Lane to the north. Mapledurham Golf Course is 115 metres to the north and Caversham Heath Golf Course is 275 metres to the west, both providing foraging habitat for bats, such as the rough grassland, woodland parcels and waterbodies, within the local vicinity of the house. Grazed and arable fields are 190 metres to the north east offering some foraging habitat for bats along the hedgerows.

2 SURVEY METHOD

2.1 Building Inspection

2.1.1 A survey of the interior and exterior of the house was undertaken on the 4th September 2017 by an ecologist registered under Natural England Bat Survey Class Licence CL18 supported by an assistant ecologist.

2.1.2 The search was undertaken with the aid of binoculars and a high power (1 million candle power) torch. Signs of occupation by bats and features that could offer potential roosting sites following standard survey guidelines were looked for (Collins 2016; Mitchell-Jones 2004; Mitchell-Jones & McLeish 2004).

2.1.3 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);
- Bats (live or dead).

2.1.4 Residential, pitched roofed buildings may offer potential roosting sites in a number of locations, favoured locations include:

- At the gable ends – access is typically gained at the roof apex via gaps in the soffits or under roof tiles;
- Gaps and cracks in brick or block work, which provide access to a wall cavity or sheltered crevice;
- At the eaves behind barge boards and soffits;
- Under timber cladding, hanging tiles or roof tiles;
- Under lead flashing, roof and ridge tiles;
- Within an enclosed roof space – species such as brown long eared bat for example will typically cluster around the ridge beam or at gable ends.

2.2 Survey Constraints

- 2.2.1** Full access was available around the interior and to the exterior of the house and therefore there were no significant constraints to the survey.

3 SURVEY FINDINGS

3.1 Building Inspection

- 3.1.1** Photographs of the site are shown in **Appendix 1**, the external and internal bat survey findings are detailed on a plan with target notes in **Appendix 2**. There follows a description of the external and internal survey findings:

3.2 External Survey

- 3.2.1** The detached house was of brick construction and rendered with a hipped roof covered in concrete roof tiles (**Photographs 1 & 2**). The roof tiles were all flat and tightly fitted across all of the roof elevations offering no crevice roosting opportunities for bats (**Photograph 3; Target note 1**). The mortar under the ridge and hip tiles was all intact also offering no access opportunities for roosting bats (**Photographs 3 & 4; Target note 2**). The mortar under the verge tiles on the rear gable end was all intact and there were no potential access points visible (**Photograph 5; Target note 3**).
- 3.2.2** The wooden soffit boxes around the eaves of the property were all tight to the rendered walls (**Photograph 6; Target note 4**) apart from narrow gaps on both the half-hipped east and west-facing elevations (**Photographs 7 & 8; Target note 5**). The lead flashing around the two chimneys was tight to the roof tiles (**Target note 6**). The single-storey attached garage had a tight barge board around the eaves and the corrugated roof was tightly fitted to the top of the barge board (**Photograph 9; Target notes 7 & 8**).
- 3.2.3** There was no evidence of bats found during the external inspection of the house.

3.3 Internal Survey

- 3.3.1** The roof space was accessed through a central loft hatch and the void had an estimated floor-to-ridge height of two metres (**Photograph 10**). The roof was lined with tight wooden sarking, which was all intact (**Photograph 11; Target note 9**). The floor was insulated with two layers of fibreglass insulation and this filled the eaves (**Photograph 12; Target note 10**). The eaves at the half hipped ends were open (**Photograph 13; Target note 11**). The ridge beam was cobwebbed (**Target note 12**) and in the front hipped extension, the sarking stopped short of the ridge exposing the underside of the ridge tiles (**Photograph 11; Target note 13**). The rear gable end had a

brick gable end and no daylight was visible around the edges of the brickwork (**Photograph 14; Target note 14**).

- 3.3.2** There were six medium-sized bat droppings scattered under the ridge beyond the loft hatch towards the eastern end of the space and a further three medium-sized bat droppings at the western end of the space (**Photograph 15**); none of the bat droppings had been deposited recently.

4 DISCUSSION AND RECOMMENDATIONS

1.1 Status of Bat Roosts/Potential

4.1.1 The presence of a small number of old bat droppings of a size and shape typical of long-eared bats is indicative of an occasional day roost used by an individual long-eared bat. The bat dropping at the base of the brickwork at the west-facing end of the roof space below the open eaves is indicative of the likely access point used by the bat(s). Externally the house had a very tightly fitted roof and the only visible potential access points were the narrow gaps behind the soffit boxes on the east- and west-facing ends of the house corresponding with the distribution of droppings internally.

4.1.2 There are two species of long-eared bat: the grey long-eared bat has a distribution confined principally to the southern coastal areas of the UK, whereas the brown long-eared bat is widespread and frequent throughout the UK. In the absence of any bats visible within the void it is not possible to confirm the species at this stage, but is considered most likely to be the brown long-eared bat. Roosts supporting brown long-eared bats are considered to be 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).

4.2 Assessment of Impacts and Recommendations

4.2.1 The proposals are for a rear and part side extension to the existing gable end and a side extension above the garage, although not extending up to the eaves where no evidence of roosting bats was found and no potential access points were identified and therefore disturbance to this area of the roof is considered highly unlikely to have an impact on bats or their roosts. The access points and internal space used on occasion by an individual long-eared bat with no signs of recent use will not be directly impacted by the proposals.

4.2.2 If persistent internal works are carried out in the roof space there is the potential for disturbance of any bats present inside the roof space and therefore precautionary measures need to be put in place (refer to Section 4.3). If these precautions are adopted however, the works are unlikely to lead to any disturbance of bats and would not have an impact on bat roosts in the long-term and therefore a European Protected Species (EPS) licence

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or registration of the site under the Low Impact Class Licence (if appropriate) will not be required to allow the planned works to go ahead lawfully.

4.3 Precautionary Measures

- 4.3.1** Work inside the existing roof space should be avoided during the building work but if work within the loft is required, this will be preceded by a repeat inspection of the loft by a licensed ecologist.
- 4.3.2** Bats may have future access to this new extension and therefore the new roof will be lined with bitumen-based roofing felt or wooden sarking and not a breathable roofing membrane, which are harmful to bats because bats have been found to entangle themselves in the fibres.
- 4.3.3** The access points behind the soffit boxes will be retained unaffected in the long-term during any future external decoration/repairs to ensure the roosting site is not blocked and bats can use the roof space in the future.
- 4.3.4** In the unlikely event that bats are encountered during the course of any building work, the work will stop immediately and a licensed ecologist called to site to attend to the bat and provide advice on how to proceed; work will not continue until further written advice has been received. At this point, a European Protected Species licence may be required to permit the work to continue lawfully.

5 REFERENCES

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 house viewed from the north.



2. Rear of the house viewed from the south.



3. Tightly fitted roof tiles and intact mortar under the ridge tiles.



4. Intact mortar under the hip tiles.



5. The intact mortar under the verge tiles on the rear gable end.



6. The tight soffit box.



7. The narrow gap behind the soffit box on the eastern elevation.



8. The narrow gap behind the soffit box on the western elevation.



9. The tight barge board and tightly fitted corrugated roof on the garage.



10. Fibreglass which was fitted between the joists.



11. Part of the uninsulated floor and open eaves.



12. Eaves filled with fibreglass.



13. The open eaves at the half-hipped side elevations.

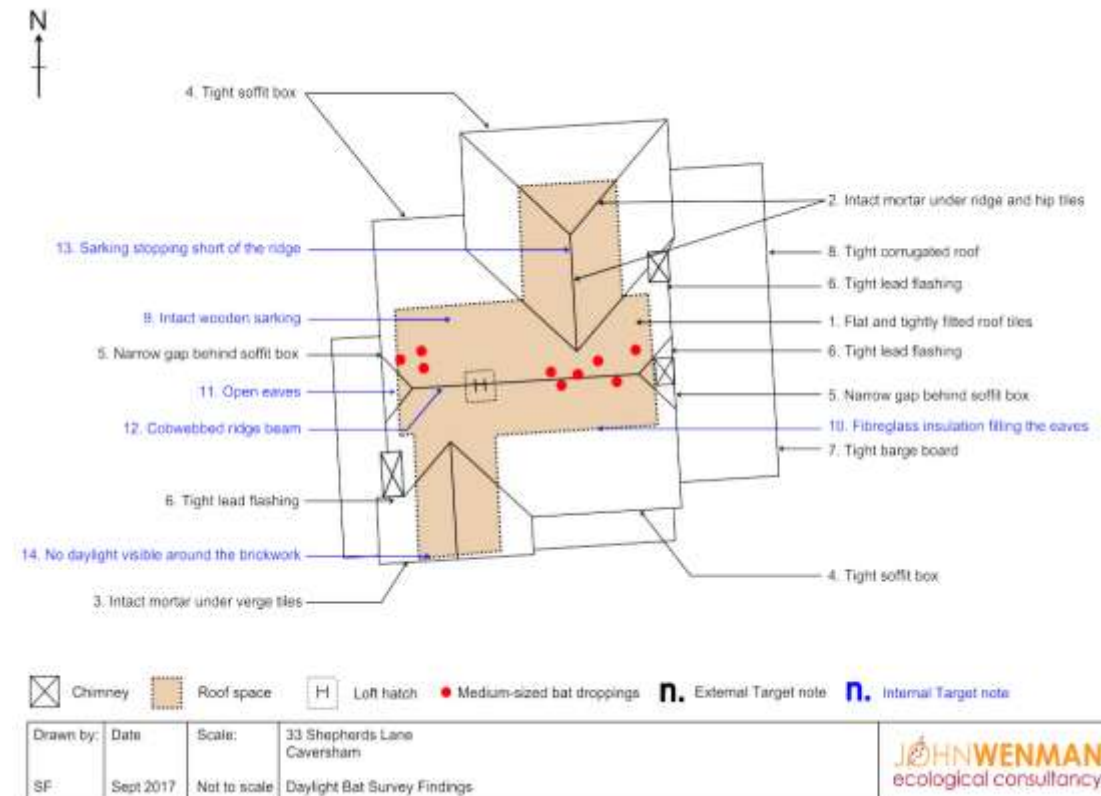


14. The brick gable end at the rear of the property.



15. One of the bat droppings at the western end of the roof space.

APPENDIX 2 - DAYLIGHT BAT SURVEY FINDINGS



APPENDIX 3 – EXISTING AND PROPOSED PLANS FOR 33 SHEPHERDS LANE

Existing elevations



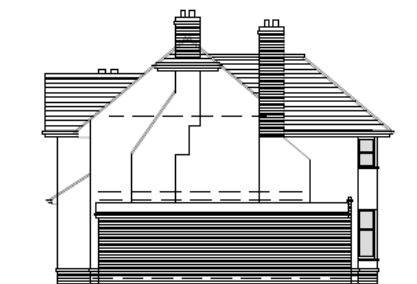
FRONT ELEVATION



SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION

Proposed elevations



FRONT ELEVATION



SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION