

87 Balmore Drive
Caversham
Reading
RG4 8NN



Dr Stacey Dawn Waring
21-014-BAS
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Signed:



Date: 13/07/2021

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Executive Summary

Eaves Ecology was commissioned by Mr Andrew Pettican to carry out two activity surveys, at 87 Balmore Drive, Caversham, Reading, Berkshire, RG4 8NN. The site is located a grid reference SU 71696 75410. The suite of surveys was conducted to support a planning application submitted to Reading Borough Council.

The bat surveys and report have been conducted and prepared by a qualified licensed bat ecologist Dr Stacey Dawn Waring. This report gives details of the two activity surveys conducted on 23rd May and 11th June 2021. The initial bat assessment was conducted by John Wenman Ecological Consultants and the findings are detailed in a previously submitted report.

Initial observations consider the local area suitable for bats. The proximity of the site to woodland, riparian habitat and water bodies increases the likelihood that the site may support roosting bats. However, the lack of connectivity may it difficult for bats to fully utilise the area.

The results of the initial bat assessment found the building had a moderate potential to support roosting bats and further survey effort was required.

During the bat activity surveys, low levels of commuting and foraging bat activity were recorded. Species included: Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Noctule (*Nyctalus noctule*), observed in the gardens around the house (Table 1).

No bats were recorded emerging from the building during any of the surveys and it is assumed that the building is not currently being used by roosting bats. Consequently an EPS Licence will not be required as no bats will be impacted.

If bats are found on site during works, the works must stop and a licenced ecologist contacted. In this event an EPS licence may need to be applied for.

1 Introduction

Eaves Ecology was commissioned by Mr Andrew Pettican to carry out two activity surveys, at 87 Balmore Drive, Caversham, Reading, Berkshire, RG4 8NN.

The activity surveys and report have been conducted and prepared by a qualified Natural England licensed bat ecologist Dr Stacey Dawn Waring. This report gives details of the two activity surveys (1x dusk emergence and 1x dawn re-entry) conducted on 23rd May and 11th June 2021. The initial bat assessment was conducted by John Wenman Ecological Consultants and the findings are detailed in a previously submitted report.

1.1 Objectives of the Surveys and Report

The initial bat assessment and activity surveys are designed to provide information to:

- Identify the presence/likely absence of bats within the house
- Estimate the size and status of any existing bat roost within the buildings
- Determine the potential impacts on any bat roost from the proposed development schedule
- Establish whether mitigation or an EPS licence is required

The surveys and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2016).

1.2 Surveyor Information

Dr Stacey Dawn Waring has held a Class II Bat Licence (No. 2015-6768-CLS-CLS) for 9 years and is an associate member of CIEEM. She has 10 years' experience of carrying out research for the University of Reading, Reading and Bat Conservation Trust (4 years) and has worked with several ecological consultancies conducting bat surveys for 12 years, prior to establishing Eaves Ecology.

In addition one other surveyor was present on all three of the bat activity surveys:

- Anthony Wells – Is a skilled ecologist with ten years' experience conducting ecological surveys; In particular bat activity surveys. He has a good knowledge of a wide variety of bat species, bat calls and detectors. Anthony has attended several accredited courses on conducting bat surveys and is currently working towards his Class II Bat Licence

2 Legislation

All bats in the UK are protected under law and therefore thought must be given when demolition and/or planning is to be considered. The Wildlife and Countryside Act (WCA) 1981 (as amended), forms the key legislation protecting habitats and species in the UK. All UK bat species are fully protected under the 1981 Act through inclusion on Schedule 5. All bats are also listed under Schedule 2 of the

Conservation of Habitats and Species Regulations 2017, which transcribes the EC Habitats Directive into UK law. In combination, this legislation makes it an offence to:

- Deliberately or recklessly take, injure or kill a bat;
- Deliberately or recklessly damage or destroy a place or structure used by bats for shelter or protection;
- Deliberately or recklessly obstruct access to a bat roost; or
- Deliberately or recklessly disturb bats while occupying a roost.

Bat roosts are protected under these laws whether the animals are present at the time of survey or not. A roost is defined as 'any structure or place which [a bat] uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present at the time of survey. The above is a summary of the relevant legislation and the original Acts and Schedules should be referred to for the precise wording.

Barbastelle Bats *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, Noctule *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros* are also listed as being species of principle importance to the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities Act 2006.

3 Background

3.1 Site Description

87 Balmore Drive is located within Caversham, a suburb of Reading. The property lies at the southern end of Balmore Drive, approx. 600m northeast of Caversham centre and 2km north of Reading town centre (Figure 1). The site is located a grid ref SU 71696 75410.

The site is located within a suburban area to the north of Reading. Immediately surrounding the site are residential properties, gardens and roads. The local area has a high number of trees and vegetation. The site is also within 100m of the Peppard Road (B481), which is a major commuting route in and out of Reading.

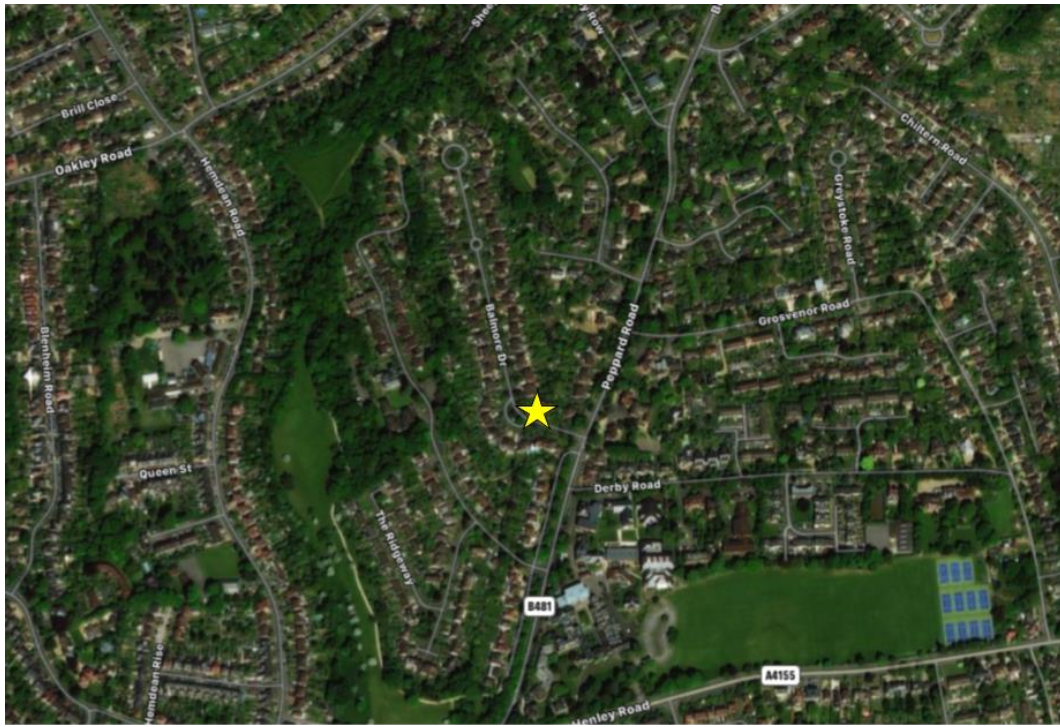


Figure 1 – Showing site location of 87 Balmore Drive (courtesy of Google Earth)

3.1.1 Surrounding Habitats

The site is located within 1.5km (northeast) of Clayfield Copse LNR and lies on the boundaries of two SSSI Risk Zones: Harpsden Wood SSSI (6km northeast) and Sulham and Tidmarsh Woods and Meadows SSSI (7.5km west).

There are several large areas of amenity grassland within 400m of the site location; including Balmore Park (200m to the west); playing fields at Queen Anne's School (300m to the southeast) and Highdown school (400m northwest) and Caversham Park and the cemetery (800m east),

Within 1km of the site, there are also several areas of Deciduous Woodland (Priority Habitat), these include; Balmore Park (200m west), Victoris Road Cemetery (300m west), Beech Wood (500m northwest) and Furzeplat (900m northwest). Further afield there are areas containing both Deciduous Woodland (Priority Habitat) and Woodpasture and Parkland (BAP Priority Habitat) including; Caversham Park (800m northeast) and Hill's Meadow (1km south).. There are also areas containing both Deciduous Woodland (Priority Habitat) and Ancient and Semi-Natural Woodland at Clayfield Copse (1.4km northeast), Black Wood Copse (1.6km northeast) and Cucumber Wood (1.5km north).

There are also numerous waterbodies in the local vicinity, including the River Thames (1km south).

However, despite these habitats, increasing the likelihood of bats and their insect prey; the highly built-up nature of the area results in a high level of fragmentation. This can reduce an areas ability to provide suitable habitats for bats.

The site consists of a 20th Century (1930s), semi-detached, two storey building of brick construction with a pitched roof, consisting of timber rafters resting on the walls and clay tile covering (Figure 2).

The exterior walls on the front and side elevations have hanging tiles around the bay windows, pediment and dormer window (Figures 2, 3 and 4). To the rear of the main house there was also a brick outbuilding and garage, both of which were deemed to have negligible potential for bats and as such are not included in this report.



Figure 2 – Front (southern) elevation of 87 Balmore Drive



Figure 3 – Rear (northern) elevation of 87 Balmore Drive

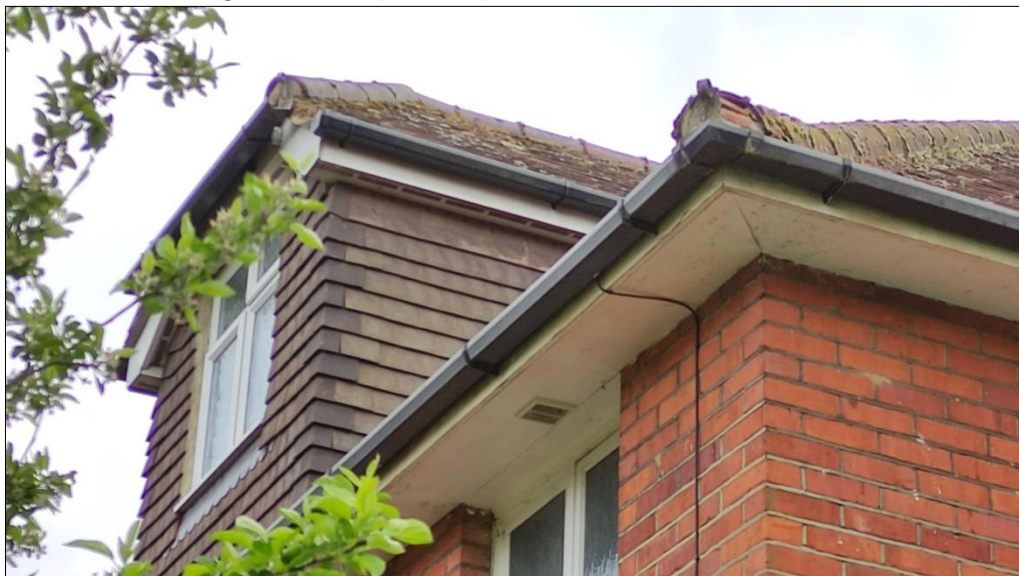


Figure 4 – Close up of the dormer on the side (eastern) elevation of 87 Balmore Drive

3.2 Development proposals

The plans for works to be conducted at 87 Balmore Drive include the demolition of the existing garage and erection of a two storey, side extension with, integral garage, a single storey rear extension, dormer window on the rear elevation and associated works. The plans have been submitted to Reading Borough Council (Planning application ref: 210230).

The initial bat assessment and subsequent activity surveys were required to identify if any bats are present/using the building and how they may be impacted by any proposed development of the building.

4 Methods

4.1 Emergence Surveys

The two activity surveys (1x dusk emergence and 1x dawn re-entry) at 87 Balmore Drive were conducted on the 23rd May and 11th June 2021, a time of year when active bats are most likely to be found and maternity roost/satellite roost should be present. Conditions were good for all bat surveys (specific details in Section 5.1) with warm, dry weather and any bats present are very likely to be active. The emergence survey began a 15 minutes before sunset and finished one and a half hours after sunset. The dawn re-entry survey began two hours before sunrise and finished 15 minutes after sunrise.

Two surveyors were present (locations shown in Figure 5) and Echo Meter Touch 2 Pro (full spectrum) detectors were used during both activity surveys. Recordings were analysed on Kaleidoscope Pro ultrasound analysis software to facilitate species identification.

5 Results

Prior to each activity survey all accessible areas, around the building, were examined for droppings and evidence of bats. No evidence of bats was found during these inspections. However, it should be noted that only ground floor areas could be searched and it is not always possible to identify bat presence through external inspections; as poor weather conditions may have washed away droppings which were deposited on exposed surfaces.

5.1 Emergence Surveys

Two surveyors were used for the two surveys conducted, the positions of which are indicated in Figure 5. The positioning of the surveyors ensured a good view of all elevations was achieved and features with roosting potential were observed. These features were determined from both the initial bat

assessment and professional judgement upon viewing the building during daylight hours, prior to the first survey.



Figure 5 – Surveyor locations during the two activity surveys at 87 Balmore Drive

During both surveys there was a low level of bat activity, primarily using the gardens surrounding the house to commute and forage. Whilst foraging within the garden was recorded, this seemed a secondary function for the flight paths. At least three species, including; Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Noctule (*Nyctalus noctule*), were recorded flying in the gardens surrounding 87 Balmore Drive.

Over the course of the three activity surveys, no bats were seen emerging from or re-entering the property; consequently, no bats were recorded as using 87 Balmore Drive for roosting.

A brief summary of each survey is given below.

1. During the first dawn re-entry survey (23rd May 2021), only one bat was heard. This was a Common Pipistrelle foraging approx.. an hour before sunrise.
2. During the second dusk emergence survey (11th June 2021), the first bat recorded was a Common Pipistrelle, 26mins after sunset. After this, Common Pipistrelles, Sopranos Pipistrelles and Noctules were all recorded commuting, from west to east, in both the front and rear gardens. An hour after sunset a low number of bats were recorded foraging around the gardens, in each case it was a single bat.

The full results of the three activity surveys are detailed in Table 1 and Figure 6, which shows the main flight paths used by bats during the surveys. Below are the date, time and weather details for the two activity surveys conducted -

- **23rd May (Sunrise 05:02)** – Weather conditions were good for the survey (8°C, light breeze and approximately 5% cloud cover at 03:10) and any bats present are likely to be active.
- **11th June (Sunset 21:20)** – Weather conditions were good for the survey (19°C with a light breeze and 60% cloud cover at 21:05) and any bats present are likely to be active.

Table 1 – Full results of the two activity surveys conducted at 87 Balmore Drive

Date	Surveyor Position	Time	Species	Comments
23/5/2021	1	None	None	No bats seen or heard during survey
	2	03:59	S. Pip	Foraging – Heard not seen
11/6/2021	1	21:47	C. Pip	Commuting over front garden (west to east)
		21:52	Noctule	Commuting - Heard not seen
		21:59	S. Pip	Commuting over front garden (west to east)
		22:23	Noctule	Commuting over front garden (west to east)
		22:34	C. Pip	Foraging around the front garden
		22:48	C. Pip	Heard not seen
	2	21:46	Noctule	Very faint – Heard not seen
		21:48	Noctule	Commuting – Heard not seen
		21:49	S. Pip	Commuting over rear garden (west to east)
		21:52	S. Pip	Commuting over rear garden (west to east)
		21:52	C. Pip	Commuting over rear garden (west to east)
		21:52	Noctule	Foraging high above the rear gardens for 3 mins
		21:55	C. Pip	Commuting over rear garden (west to east)
		21:58	S. Pip	Foraging back and forth between the gardens of No.87 and No.85 for 5 mins
		22:23	Noctule	Commuting – Heard not seen
		22:25	C. Pip	Foraging in the garden of No.85
		22:32	C. Pip	Foraging in the garden of No.85



Figure 14 –Main flight paths used by bats observed during the two activity surveys at 87 Baltimore Drive

5.2 Constraints/limitations

Bats are difficult to locate in large structures, with many potential roosting areas, particularly in inaccessible areas such as large buildings, finding the exact roosting site can be difficult, especially male/single bat roosting sites.

Bats can have seasonal use of buildings and being so mobile may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. Prior to the initial bat assessment seasonal weather conditions may have washed away external droppings.

6 Discussion

6.1 Assessment of the Bat Roost

During the initial assessment of 87 Baltimore Drive by John Wenman Ecological Consultants, no evidence of bats was found internally or externally. Some features that could be utilised by bats for roosting were noted and as a result further survey effort was required.

During the two activity surveys recommended for moderate potential, no bats were seen emerging from or entering the building at 87 Baltimore Drive. Consequently, it is deemed that 87 Baltimore Drive does not currently have an active bat roost.

6.1.1 Confirmed Roosting Points for Bats

No current roosting points found

6.1.2 Confirmed Access Points for Bat

No access points were confirmed during the activity surveys.

6.1.3 Potential Hibernation Roosts

It is always possible that a building could be used by crevice-dwelling hibernating bats, but in this case it is considered highly unlikely, due to the following factors:

- The lack of direct evidence of crevice dwelling bats found using the building during the initial roost inspection and subsequent activity surveys;
- The lack of underground or subterranean features;
- The buildings are likely to be subject to human disturbance and environmental variations;

However, any hanging tiles should be removed during the summer months as a precautionary measure.

6.2 Potential Impact of Proposed Works on Bats

The potential impacts are based on the development proposals at the time of writing. This impact assessment may need to be reviewed and amended as necessary, in light of any alterations to the development proposals.

6.2.1 Potential Direct Impacts

Direct impacts on bats and their roosts (breeding sites and resting places) may occur, through direct harm or disturbance as well as loss, damage and obstruction of access.

The planned works include demolition of the current single storey garage/extension and the erection of an extension to the side and rear of the property. During the full suite of surveys conducted, no bats were observed using the building at 87 Balmore Drive for roosting. As such it is my belief that the planned works will not currently lead to, in the absence of mitigation, the obstruction, disruption or permanent loss of the roost.

6.2.2 Potential Indirect Impacts

No indirect impacts are perceived at this time

6.2.3 Lighting

The site is in a suburban area on a well-lit street : with four street lights within 100m of the house. Consequently, the planned works will not increase the level of lighting surrounding the property or flight paths recorded, as such impacts on foraging and commuting bats should be minimal.

6.2.4 Loss of Commuting Habitat

No Commuting habitat is due to be impacted under the current proposals.

6.2.5 Loss of Foraging/Feeding Grounds

No foraging habitat is due to be impacted under the current proposals.

6.3 Mitigation Proposals

The planned works include the erection of side and rear elevation extensions and alterations to the roof. However, the likely absence of bats determined through these surveys, result in no further measures with regards to bats being required, prior to works commencing.

The only precautionary measure that should be taken is to remove hanging tiles that will be disturbed during the works, before October. This will prevent them being used by hibernating bats.

7 Conclusions

Bats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation contravening (Natural Habitats &c.) Regulations 2010, (which make it illegal to intentionally kill, injure or otherwise disturb bats, or to damage, destroy or obstruct access to a bat roost, whether bats are present or not). In some cases, if the proposed work will have a detrimental effect on bats or disturb or damage their roost then an EPS licence from Natural England has to be applied for.

Initial observations consider the local area suitable for bats. The proximity of the site to woodland, riparian habitat and water bodies increases the likelihood that the site may support roosting bats. However, the lack of connectivity may it difficult for bats to fully utilise the area.

The internal inspection is described in a previously submitted report, conducted by John Wenman Ecological Consultants. The results of this assessment found the building had a moderate potential to support roosting bats and further survey effort was required.

During the bat activity surveys, low levels of commuting and foraging bat activity were recorded. Species included: Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Noctule (*Nyctalus noctule*), observed in the gardens around the house (Table 1).

No bats were recorded emerging from the building during any of the surveys and it is assumed that the building is not currently being used by roosting bats. Consequently an EPS Licence will not be required as no bats will be impacted.

If bats are found on site during works, the works must stop and a licenced ecologist contacted. In this event an EPS licence may need to be applied for.

8 References

Bat Surveys Good practice Guidelines – Bat Conservation Trust 2016

Bat Workers Manual – Mitchell-Jones & McLeish 2004

Bat Mitigation Guidelines – Natural England 2006

The Conservation and Habitat Regulations 2010