

Initial Bat Assessment

20 Shinfield Road

Reading
Berkshire
RG2 7BW



Dr Stacey Dawn Waring
21-006-IBA
March 2021

Signed:



Date: 24/03/2021

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Contents

Executive Summary	3
1 Introduction	4
1.1 Objectives of the Survey and Report	4
1.2 Surveyor Information	4
2 Legislation	4
3 Background	5
3.1 Site Description	5
3.1.1 Surrounding Habitats	6
3.1.2 Property Description	6
3.2 Development proposals	7
4 Methods	7
4.1 Daytime assessment	7
5 Results	9
5.1 Daytime assessment	9
5.1.1 Internal inspection	9
5.1.2 External Inspection	10
5.2 Constraints/limitations	12
6 Conclusions	12
6.1 References	12

Executive Summary

Eaves Ecology was commissioned by Mr Simran Luthra to carry out an initial bat assessment, at 20 Shinfield Road, Reading, Berkshire, RG2 7BW. The site is located a grid reference SU 72819 71911. This was to support a planning application to be submitted to Reading Borough Council.

The bat survey and report have been conducted and prepared by a qualified licensed bat ecologist Dr Stacey Dawn Waring. This report provides results of an initial bat assessment conducted on 13th March 2021 during daylight hours.

An inspection of the property took place to look for signs of bats. There was no evidence of bats (internally or externally). The condition of the building results in almost no areas by which bats could access the roof void or batten space. Consequently, the potential for roosting bats is deemed to be very low (based on the Bat Surveys Good Practice Guidelines). As a result no further survey effort is recommend and an EPS Licence will not be required for works to proceed.

1 Introduction

Eaves Ecology was commissioned by Mr Simran Luthra to carry out an initial bat assessment, at 20 Shinfield Road, Reading, Berkshire, RG2 7BW.

The initial bat assessment 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 day time assessment survey conducted on the 13th March 2021.

1.1 Objectives of the Survey and Report

The initial bat assessment is designed to provide information to:

- Identify the presence/likely absence of bats within the house
- Provide information on the status of bats using the building (currently or previously)
- Establish whether further surveys, mitigation or an EPS licence is required.

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

1.2 Surveyor Information

The initial bat assessment survey and report were completed by Dr Stacey Dawn Waring who 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 Berkshire and Bat Conservation Trust (4 years) and has worked with several ecological consultancies conducting bat surveys for 12 years, prior to establishing Eaves Ecology.

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

The property at 20 Shinfield Road is located in a highly urbanised area, opposite the main entrance of the University of Reading (Whiteknights Campus). The site lies approximately 1.5km to the southeast of Reading town centre and 3km north of the M4 Motorway (Figure 1). The site is located a grid reference SU 72819 71911.

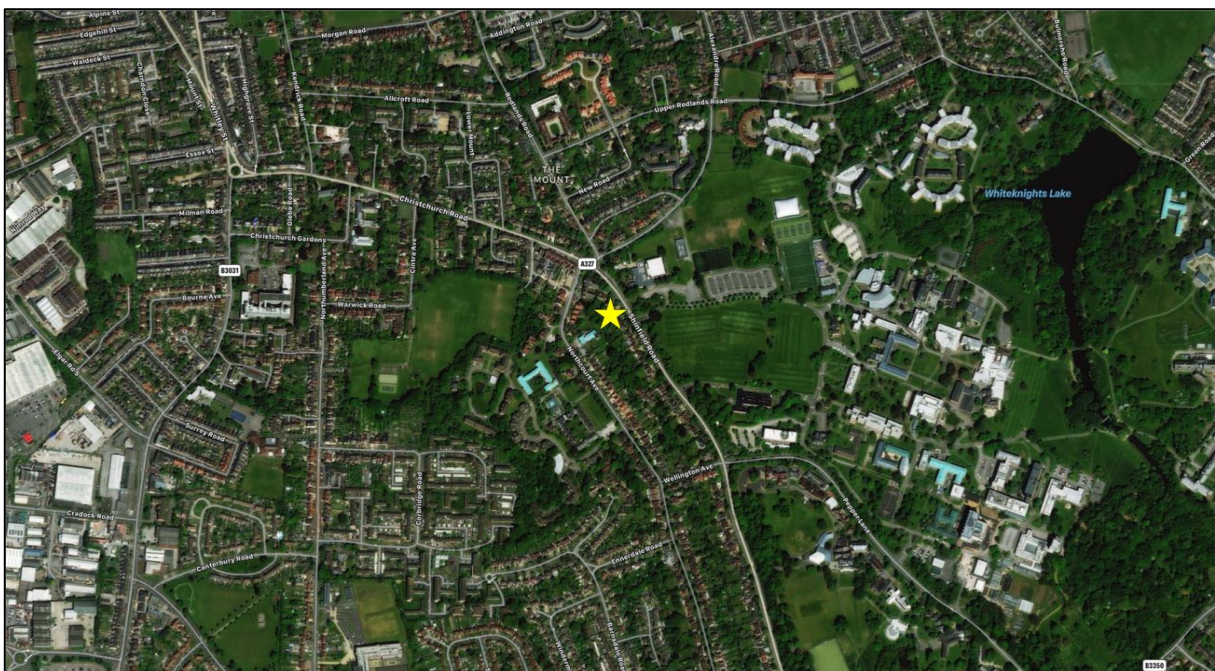


Figure 1 – Showing site location of 20 Shinfield Road (courtesy of Google Earth)

The site is in a highly urbanised area and is directly surrounded by residential dwellings, gardens, businesses, Reading University Campus and roads (Figure 1). There is the A327 (Shinfield Road), a busy commuter road, directly in front of the property (10m to the east), along with several bus stops and high traffic student areas. The site also has a shopping area and flood lit sports pitches within 200m.

3.1.1 Surrounding Habitats

The site falls within the SSSI risk zones for Lodge Wood and Sandford Mill (SSSI) which lies 5km to the east, Sulham and Tidmarsh Woods and Meadows (SSSI) which are 9km to the northwest and Longmoor Bog (SSSI and LNR) which are 8km to the southeast.

There are numerous large areas of green space within close vicinity of the site. These include areas of woodland and parkland including; Whiteknights University Campus (200m east), Maiden Erlegh Park (2km southeast) and The Cowsey (2km south), which contain areas of Deciduous Woodland (Priority Habitat) and Woodpasture and Parkland (BAP Priority Habitats). There are also areas containing both Deciduous Woodland (Priority Habitat) and Ancient and Semi-Natural Woodland at Redhatch Copse (1.5km southeast) and High Wood (2km northeast).

There are numerous waterbodies including Whiteknights Lake within the University of Reading Campus and a large pond within Leighton Park School Grounds (all within 1km). The River Kennet also lies 1.5km west of the site. All of these habitat types combined increase the areas ability to support bats and their insect prey. However, connectivity between foraging habitats in the local vicinity is highly fragmented due to the built-up nature of the area. Not only are local foraging sites not interconnected, there is no connectivity with the wider landscape. As such the area surrounding the site is deemed to be poor for foraging bats.

3.1.2 Property Description

The site consists of an early 20th century (1920s), detached, two storey building of cavity wall, brick construction (Figure 2 and 3) with a pitched (hipped and gabled) roof, consisting of timber rafters resting on the walls and a machine-made, clay tile covering. There is a single storey, brick walled, flat-roofed garage/workshop to either side of the building and two single storey extensions to the rear of the same construction (Figures 2 and 3). The property is in good condition and is currently occupied.



Figure 2 - Front (eastern) elevation of 20 Shinfield Road



Figure 3 – Rear (western) elevation of 20 Shinfield Road

3.2 Development proposals

The plans for works to be conducted have been submitted to Reading Borough Council (Application 201879) and include the demolition of the existing house and erection of a new, detached building to provide 4 x 3 bedroom apartments, together with associated car parking, bin and cycle storage, access/servicing arrangements and landscaping improvement. The survey was required to identify if any bats are present and using the building and how they may be impacted by any proposed development of the building.

4 Methods

4.1 Daytime assessment

The buildings' suitability for roosting bats was assessed by examining structural features. Structural features that may influence the suitability of a building to support roosting bats include the presence of a roof void, the presence of access points into the building (including gaps beneath barge boards, weatherboarding, soffits and fascias, gaps under lead flashing, gaps within masonry and under loose roof coverings, gaps between tenon and mortise joints), the complexity and size of any roof void and daytime light levels in the roof void.

The buildings' suitability for roosting bats was also assessed by examining the surrounding habitat. Important habitat features surrounding the structure which may influence roost potential include whether the structure is in a semi-rural or parkland location, its proximity to a significant linear habitat features such as a watercourse, mature hedgerow, wooded lane or an area of woodland.

Taking account of these architectural and habitat features, the buildings were then assigned a level of roost suitability based the criteria given in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Hundt, 2016) and professional judgement. The primary objective of this exercise was to identify the need for further detailed bat surveys later in the year, or alternatively to obtain sufficient information that would dismiss the need for further assessment.

A detailed initial bat assessment was undertaken by Dr Stacey Dawn Waring (NE licensed ecologist) on the 13th March 2021. A systematic internal inspection of the building was conducted using a high-powered torch to illuminate all areas thought to be suitable for roosting bats. All surfaces were also surveyed for signs of bat presence. An external search around the perimeter of the buildings was conducted and any possible access points i.e. gaps and crevices were noted and surveyed with the high powered torch and ladder as required.

Features of potential value to bats surveyed for included:

- Construction of the Building – Soffits, loft space, tiles/slates, lead flashings etc;
- Building Condition – structure of roof and walls;
- Internal conditions – Microclimate stability, drafts etc;
- Access points – potential entry and exit points for bats;
- Roosting points – cracks and crevices, between underlay and roofing tiles/slates;

Field signs that would indicate the presence of bats were also searched for. These included:

- Bat droppings that are dry and do not putrefy, but can crumble away to dust;
- Feeding remains (particularly butterfly and moth wings);
- Evidence of urine and/or oily staining around possible roost entrances;
- Presence of areas cleared of cobwebs;
- Where a breathable roofing membrane has been fitted staining on the membrane may suggest use by bats;
- Odour can sometimes suggest the present of bats;
- Squeaking and chattering can reveal bats roosting between the tiles and roofing underlay.

5 Results

All accessible areas were examined around the building for droppings and evidence of bats. It should be noted however that it is not always possible to identify bat presence by examining externally around buildings as poor weather conditions may have washed away droppings which were deposited on exposed surfaces.

5.1 Daytime assessment

5.1.1 Internal inspection

The property had a single roof void accessible through a loft hatch in the ceiling. The roof void was of moderate size, H-shaped in design and approx. 1.75m high at the ridge in the central section (Figure 4) and along the northern elevation. The section that ran along the southern elevation was smaller and approximately 1.2m high at the ridge. The underlay beneath the primary roof covering (Figures 4, 5 & 6), consisted of a non-woven breathable roofing membrane; which was in good condition throughout, with no tears or sagging. There was no evidence of 'fluffing' on the breathable roofing membrane, which can occur if bats roost against the product. The presence of the breathable roofing membrane, lines up with information suggesting the property has been re-roofed within the last 10 years.

On each of the gable ends the walls were in good condition (Figure 5) with no gaps in the mortar, brickwork or visible access points from outside. Timber battens had been fitted where the roof meets the wall plate, further reducing the chance of gaps.

There was a moderate level of cobwebbing throughout the roof void suggesting bats had not been flying around recently and no staining/clean areas were visible on the timbers. There was no light visible entering through the eaves, which were sealed and no other access points could be seen. There was no evidence of bats found during the internal inspection



Figure 4 – showing central section of the roof void with access to other areas



Figure 5 – showing excellent condition of breathable membrane and gable end brickwork



Figure 6 – showing the section of roof running along the northern elevation

5.1.2 External Inspection

The external features of 20 Shinfield Road were also examined for signs described in section 4.1. The roof, windowsills, exposed features around the windows and walls were inspected for any evidence of bat droppings or staining.

The primary roof covering consisted of machine-made, clay tiles over the entirety of the house (Figures 2, 3 and 7). The primary roof covering was in good condition and had been maintained over the years. The tiles were tightly fitting (Figure 7) and there were no missing or broken tiles, which could provide access to roosting bats. The ridge consisted of universal half round tiles (Figures 2, 3 and 8) which were all present and the mortar along the ridge and verges (Figure 8) was in good condition with no missing sections that could be utilised by bats. The eaves were sealed with boxed soffits (Figure 7), these were in good condition with no areas open to the interior (Figure 9). The lead flashing on the chimneys and in the valleys was in good condition and tightly fitting.

The flat-roofed garage/extensions to the sides and rear of the property all had bitumen felt roofs (Figure 9), which were in good condition. There were no areas of lifted felt, that could be used by roosting bats and the weatherboarding was tightly fitted against the wall (Figure 9) with no gaps or potential roosting areas.

During the internal and external inspections of 20 Shinfield Road, no evidence of bats was found. The potential for roosting bats to utilise the site is deemed to be very low for the reasons specified in this report.



Figure 7 – roof showing tightly fitting machine-made clay tiles and sealed soffits

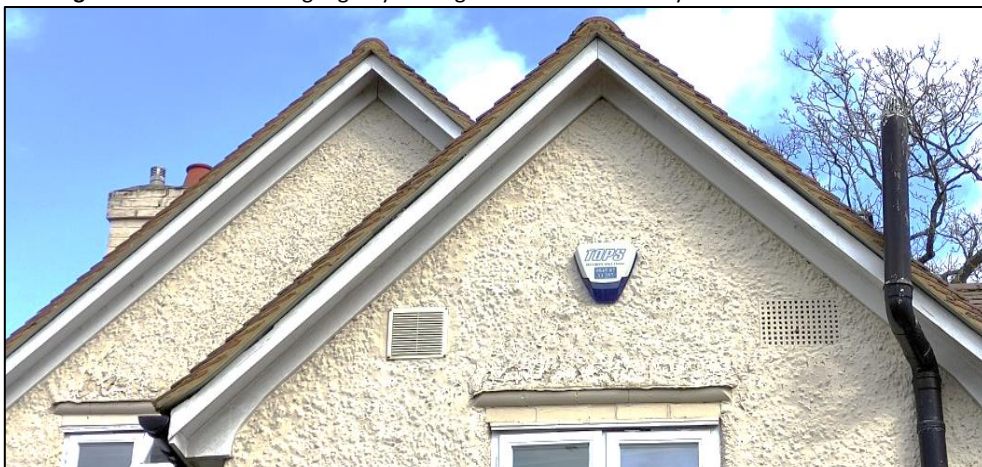


Figure 8 – image showing mortar on verges in good condition



Figure 9– showing flat roofs on extensions in good condition, with tightly fitting weatherboarding

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 Conclusions

Bats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation contravening (Natural Habitats &c.) Regulations 2017, (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 to be poor for bats and their insect prey. The proximity of the site to woodland, parkland, waterbodies and gardens increases the likelihood that the site may support roosting bats; however, the highly urbanised area reduces connectivity within the direct vicinity of the property making local features much less suitable.

The initial bat assessment at 20 Shinfield Road found no evidence of bats during the internal and external inspections. The condition of the building results in very few areas that have potential to be utilised by bats for roosting. There are no gaps present which would allow access to the roof void. The conditions of the roof further reduce its suitability as a roost for crevice dwelling species.

Consequently, the potential for roosting bats is deemed to be very low (based on the Bat Surveys Good Practice Guidelines). As a result, no further survey effort is recommended and an EPS Licence will not be required for works to proceed.

6.1 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 2017