

Initial Bat Assessment

1 Jesse Terrace

Reading
Berkshire
RG1 7RS



Dr Stacey Dawn Waring
18-035-IBA
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Signed:



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Executive Summary

Eaves Ecology was commissioned by Mr M. Gould to carry out an initial bat assessment, at 1 Jesse Terrace, Reading, RG1 7RS. The assessment was conducted on the 25th September 2018. The site is located a grid reference SU 70913 73166. This was to support a planning application submitted to Reading Borough Council.

Initial observations consider the local area to be poor for bats and their insect prey. The lack of woodland, parkland, waterbodies and gardens within 1km to the building decreases the likelihood that the site may support roosting bats. Connectivity is also severely affected by the urban nature of the local area.

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 very few areas that are suitable for bat habitation. Whilst there are few gaps that could be utilised by crevice dwelling species and/or allow bats access to the roof; the draughty and damp environment of the roof (which is susceptible to the external environment), further reduces its suitability as a roost. Consequently, the potential for roosting bats is deemed to be very low (based on the Bat Surveys Good Practice Guidelines 2016). 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 M. Gould to carry out an initial bat assessment, at 1 Jesse Terrace, Reading, RG1 7RS. 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 25th September 2018.

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 6 years and is an associate member of CIEEM. She has 8 years' experience of carrying out research for the University of Reading and Bat Conservation Trust (4 years) and has worked with several ecological consultancies conducting bat surveys for over a decade, 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 1 Jesse Terrace is located in Reading, approximately 200m west of Reading town centre (Figure 1). The site is located a grid reference SU 70913 73166.

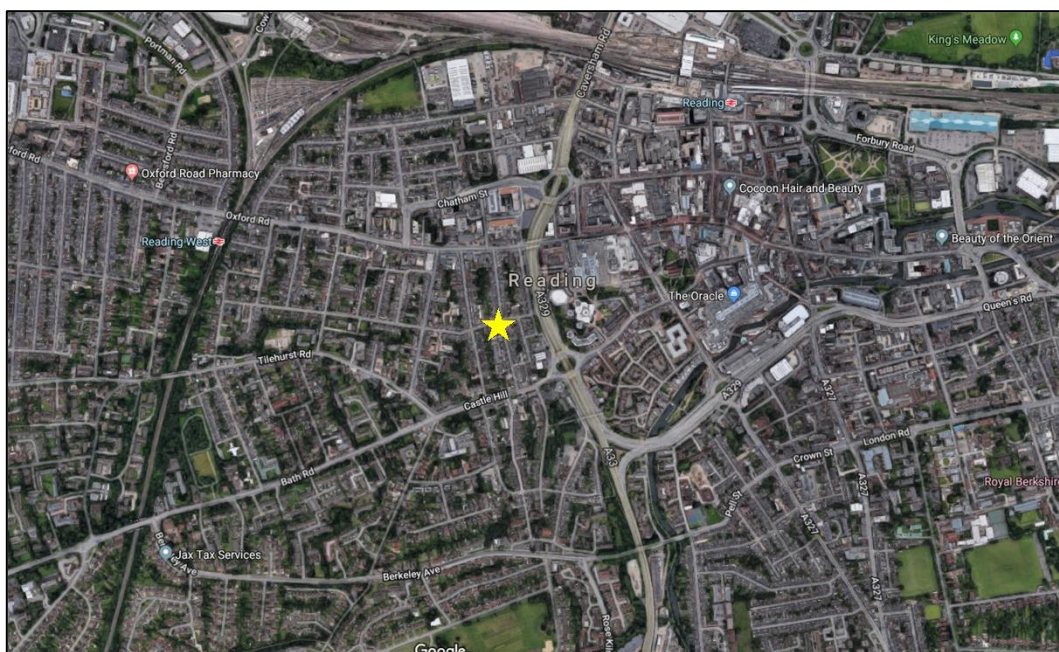


Figure 1 – Showing site location of 1 Jesse Terrace (courtesy of Google Earth)

The site is in an urban area and is directly surrounded by residential dwellings, commercial properties, small gardens/yards and roads (Figure 1). The property is surrounded by main routes and busy commuter roads, including; 100m to the east (A329 – Reading Ringroad), North (Oxford Road) and south (A4) of the property. Due to the highly urbanised nature of the area, there are very few areas of green space within close vicinity of the site. The closest is Coley Recreation ground (800m) south which has amenity grassland but no priority habitats.

There are also very few waterbodies in the local area. The River Kennet is 500m to the southeast, however, there is no connectivity between the habitats and the property at 1 Jesse Terrace.

The lack of suitable habitats, urbanisation and lack of connectivity between greenspaces, severely reduces the local areas ability to support bats and their insect prey.

3.2 Building Description

The site consists of an early 20th Century (1900s), semi-detached, two storey building of solid wall, brick construction (Figure 2 and 3) with a pitched (hipped) roof, consisting of timber rafters resting on the walls and a concrete, interlocking tile covering. The property is in good condition and is currently occupied.



Figure 2 - Front (western) elevation of 1 Jesse Terrace



Figure 3 – Rear (eastern) elevation of 1 Jesse Terrace

3.3 Development proposals

The plans for works to be conducted can be found in an application to be submitted to Reading Borough Council. They currently include converting the loft space into an additional useable area. 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 25th September 2018. 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 simple in design and was approx. 3m high at the ridge throughout (Figure 4). Underlay, in the form of bitumen felt, was present beneath the concrete tiles. The bitumen felt was in poor condition with numerous rips, tears and gaps (Figure 4). In some sections, the underlay was missing, and the underside of the interlocking tiles could be seen from within the void (Figure 5). These sections of missing underlay, increase draughts and the fluctuation of microclimate changes within the roof void, which reduces the suitability for void dwelling bats. Further gaps were present at the ridge where the underlay overlapped. Here there were signs of water ingress (Figure 6), suggesting the conditions would not be suitable for hibernating bats.

There was a high level of cobwebbing throughout the void, suggesting nothing had been using the void for flight in recent times. The chimney stack was in fair condition (Figure 7) with no gaps in the brickwork, although numerous damp patches on the brick work would suggest some external repairs are needed. Internally the brickwork on the wall plates, was taller than the lowest part of the roof (Figure 8). Here the eaves had been sealed off with sections of timber, to form sealed soffits. This would make accessing the roof via the eaves more difficult. The building has solid wall construction, thus there

is no wall cavity for bats to utilise. There was no light visible entering through the eaves, which had been sealed. No evidence of bats found during the internal inspection



Figure 4 – showing lack of underlay and slates with light entering though gaps (bottom left)



Figure 5 – showing damaged slates, gaps at ridge and signs of damp



Figure 6 – showing overlaps, dampness and high level of cobwebbing at ridge



Figure 7 – showing good condition of brickwork on chimney, but signs of staining through damp



Figure 8 – showing the wall-plate extending into the roof void, separating roof and eaves

5.1.2 External Inspection

The external features of 1 Jesse Terrace 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 concrete, inter-locking tiles over the entirety of the house (Figures 2, 3 and 8). The primary roof covering was in good condition and with no missing or broken tiles, which could provide access to roosting bats. The ridge consisted of half-round tiles (Figure 8) which were all present and had no areas of mortar missing. The eaves were sealed with boxed soffits, these were in good condition with no areas that had rotted or broken (Figure 9). On the rear elevation there was a gap, approx. 15mm wide, running the entire length of the wall. Whilst bats could use this as an access point, it would only lead into the soffit box, due to the height of the internal walls (Figure 9), that separate the two spaces. The lead flashing around the two chimneys, and the neighbouring property (Figure 11) was in good condition with no sections missing or lifted. On the front elevation of the property, the windows have a decorative lintel trim (Figure 12). Whilst there is a crevice between the lintel and the window frame, it would leave bats exposed to the external environment.

During the internal and external inspections of 1 Jesse Terrace 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 9 – roof showing good condition of main and ridge tiles



Figure 10 – Image showing boxed eaves, with gap between wall and timber on rear elevation



Figure 11– roof tiles, boxed eaves and flashing between the two buildings



Figure 12– showing crevices between wall and window lintel on front elevation

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.

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 suitable for bats and their insect prey. The proximity of the site to a woodland, parkland, waterbodies and gardens increases the likelihood that the site may support roosting bats. However, the urban area severely reduces connectivity within the direct vicinity of the property making local features less suitable.

The initial bat assessment at 1 Jesse Terrace found no evidence of bats during the internal and external inspections. The condition of the building results in very few areas that are suitable for bat habitation. Whilst there are numerous gaps that could allow bats access to the roof, the draughty and damp environment of the roof (which is susceptible to the external environment) reduces its suitability as a roost. 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.

6 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