Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

PRELIMINARY ECOLOGICAL APPRAISAL (BATS) AT 27 ROTHERFIELD WAY READING

Prepared for:
Mr R Morgan
27 Rotherfield Way
Emmer Green
Reading
RG4 8PJ

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The validity of this report ceases at the prescribed time limit or after 12 months from the site inspection, or if the site conditions change due to unspecified works that affect the site whichever is the sooner.

Executive Summary

Urban Tree Experts was commissioned by Mr R Morgan to conduct a preliminary ecological appraisal (bats) of 27 Rotherfield Way, Emmer Green, Reading, RG4 8PJ. This is to support a current planning application to Reading Borough Council (reference: 210599).

The site visit was carried out on Thursday 24 June 2021 at 12 noon, during daylight hours. An internal and external inspection of the property and garage took place, to look for signs of bats.

The preliminary ecological appraisal (bats) comprised a detailed search of the interior and exterior of the buildings for bats, signs of bats and features suitable for use by roosting bats. This includes droppings, internally or externally, scratch marks, rubbing and staining at exit holes, live or dead bats and other features such as missing tiles, this list is not exhaustive.

A desk top study was conducted prior to the survey to review existing information about the site and its surroundings and to inform the design of subsequent bat surveys, if required. The desk top study was conducted based upon a 2km search radius, it revealed that one statutory designated site lies within, and two current European Protected Species Licences (EPSLs) for bats have been granted within a 2km search radius of the proposed development site.

Externally and internally, there was no evidence of bats (current or historically) in the property or garage. Both buildings are in a good condition and there were no visible roosting opportunities or access points into the either building which could be utilised by bats.

Due to the absence of roosting potential and the lack of evidence of bats found during the detailed inspection, it is concluded that there is negligible potential for roosting bats to be present within the property or any opportunities for bats on the exterior of the property where the proposed works will impact. Based on the recommendations in the Bat Workers Manual and the Bat Surveys Good Practice Guidelines prior to works, no further survey effort is required.

1. Introduction

1.1 Instruction

Urban Tree Experts was instructed by Mr R Morgan to conduct a preliminary ecological appraisal of 27 Rotherfield Way, Emmer Green, Reading, RG4 8PJ to support a current planning application to Reading Borough Council.

1.2 Aims and Objectives

The preliminary ecological appraisal (bats) is designed to:

- Identify the presence/likely absence of bats within the buildings.
- Provide information on the status of bats using the buildings (currently or previously).
- To add confidence where no bats are found, or to categorise the nature of a roost where evidence of bats are found.
- To establish whether further surveys, mitigation or an EPSL is required.

The preliminary ecological appraisal (bats) and report writing were carried out in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition, Bat Conservation Trust, 2016).

1.3 Proposed Works

The survey was commissioned in connection with a current planning application to Reading Borough Council (reference: 21059) that will seek to construct a two storey side extension.

1.4 Surveyor Background and Experience

The preliminary ecological appraisal for bats was completed by Emma Turnbull and the report was written by Simon Holmes MSc. Emma holds a Class 2 Bat Licence (CLS-41628) and has been surveying bats for four years. She has received training in surveying techniques, bat detector use, echolocation analysis and bat biology and identification.

Simon holds Class 3 (CL19) and 4 Bat (CL20) Licenses (Nos. 17637 and 17638) and a Science and Education license (SCI29096). He has 31 years' experience of carrying out bat surveys and bat conservation work.

2. Legislation and Planning Policy

2.1 Legislative Background

All species of British bat are protected under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981, as amended. Under this legislation it is an offence to kill or injure a bat or interfere with any roosting or resting site. A bat roost is interpreted as "*any structure or place used for shelter or protection*" whether or not bats are present at the time. A summary of the main legislation and planning considerations are included at Appendix 1.

Seven species of bat are also Species of Principal Importance for nature conservation in England under Section 41 of the Natural Environment and Rural Communities Act 2006. This places a duty on all government departments to have regard for the conservation of these species and on the Secretary of State to further, or promote others to further, the conservation of these species.

3. Site Location and Description

3.1 Site Location

The building is located at Grid Reference SU 7141 7584, see Figure 1 below. An overview of the immediate area is shown on Figure 2, courtesy of Bing Maps.

Figure 1. 27 Rotherfield Way, Reading, highlighted.

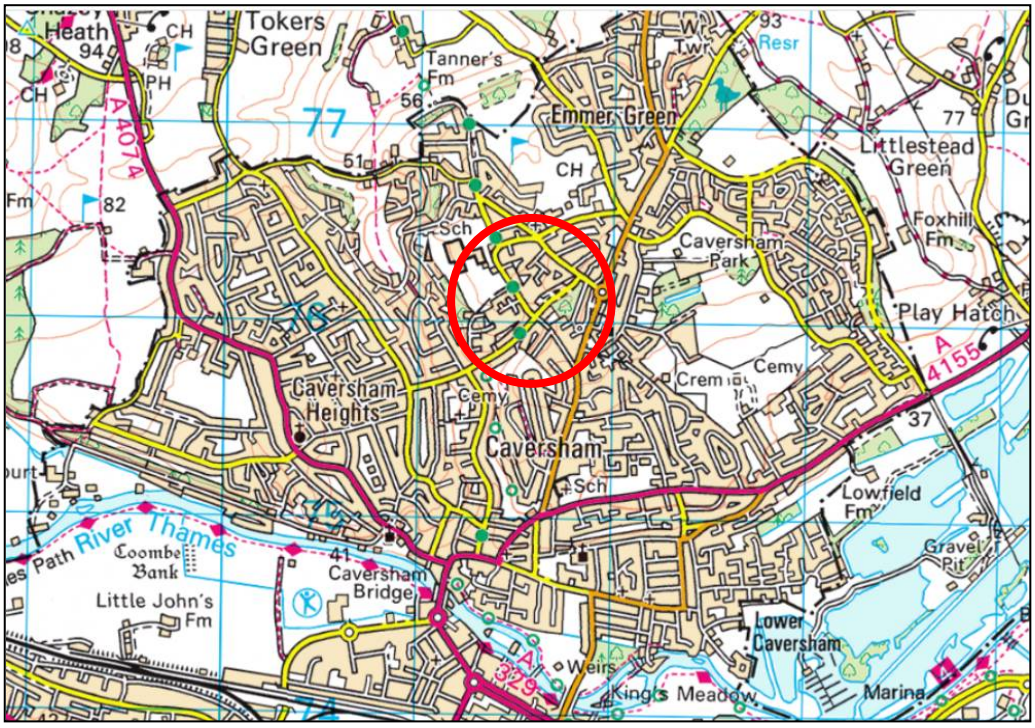

Figure 2. 27 Rotherfield Way, Reading, overview of the immediate area.

3.2 Site Description

The application site comprises a semi-detached, brick-built dwelling with attached garage. The remainder of the site comprises a driveway and front and rear garden both of which are mainly laid to lawn with some shrubs, hedgerows and trees around the rear boundary, see Figure 3 below. The site itself offers some foraging and commuting habitat for bats.

Figure 3. Rear garden. 27 Rotherfield Way, Reading. 24.06.21

4. Survey Methodology

4.1 Pre-Survey Data Search

Google Earth and MAGIC maps (magic.defra.gov.uk) websites were used prior to the survey to determine the suitability of the surrounding habitat to support roosting bats and to identify any statutory designated sites within 2km of the site. Due to the urbanised area, scale of the proposed development, and the very local impact that may occur, no data was sought from local records center at this time.

The site is situated in Emmer Green, a suburb of Reading, and is surrounded by properties and gardens of similar sizes and styles. There are small pockets of woodland in close proximity to the site which are known to provide good habitat for roosting and foraging bats and are within travelling distance for bats. Further afield lie areas of parkland, woodland, wetlands and golf courses, which are likely to provide good habitat for bats, although there is limited ecological connectivity from the site to these areas as there are main roads and housing developments separating them from the site.

Clayfield Copse Local Nature Reserve (LNR) lies within 2km of the site, although there is no ecological connectivity from the site to the LNR. A search of the Magic interactive website revealed that two current EPSLs for bats have been granted within 2km of the site, the details of which are provided in Table 1 below.

Table 1. Current EPSLs for bats within 2km of the site

EPSL reference	Licence end date	Species on licence
2017-28045-EPS-MIT	2022	Daubenton
2017-29064-EPS-MIT	2027	Soprano pipistrelle

4.2 Daylight Survey

The preliminary ecological appraisal (bats) of 27 Rotherfield Way, Emmer Green, Reading, RG4 8PJ was carried out by Emma Turnbull on Thursday 25 June 2021 at 12 noon. The weather conditions for the survey were overcast with a temperature of 19 degrees. Equipment used included a high-powered torch, a digital camera on a telescopic pole and a ladder.

During the preliminary ecological appraisal (bats), an internal and external inspection of the property and garage was carried out to identify any signs of occupation by bats and features that could offer potential roosting sites following standard survey guidelines. Features investigated included:

- Construction of the buildings – soffits, loft space, tiles/slates, lead flashings etc.
- Building condition – structure of roof and walls.
- Internal conditions – microclimate stability, draughts 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 searched for. These included:

- Bat droppings on the floor and walls of the buildings.
- 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.

Buildings or structures with no bat roosting potential and that were unsuitable for roosting bats were not inspected in detail.

4.3 Constraints

Full access to the site during the visit was made possible by the occupant and there were no constraints to the survey.

5. Survey Findings

5.1 External Inspection

The external features of the property and garage were examined for signs described in section 4.2. Windowsills, exposed features around the windows, fascias and walls were inspected for any evidence of bat droppings or staining.

The property is a semi-detached, brick-built building, with cavity walls which is in a good condition externally. The hipped roof of the property is covered in close fitting composite, none of which are missing or broken, see Figure 4 below. The ridge and hip tiles and verges are all in a good condition with no gaps (see Figure 5 on page 9), and the uPVC soffits and fascias are all tightly fitted to the wall with no gaps in which roosting bats could exploit, see Figure 6 on page 9. The uPVC windows and doors are all well-fitting with no gaps, as is the lead flashing around the chimney stack.

The flat roof of the attached garage and utility is covered in well fitted bitumen felt with lead at the overhang, with no rips or tears, and the bitumen felt attached it to the property is also well sealed, see Figure 7 on page 10. The wooden fascias are tight with no gaps, see Figure 8 on page 10.

No bats or evidence of bats was recorded during the external inspection of the property or garage and externally there are no obvious visible features on the buildings which could be utilised by roosting bats.

Figure 4. Example of roof tiles. 27 Rotherfield Way, Reading. 24.06.21

Figure 5. Example of sealed verges. 27 Rotherfield Way, Reading. 24.06.21

Figure 6. Example sealed uPVC soffits and fascias. 27 Rotherfield Way, Reading. 24.06.21

Figure 7. Bitumen felt on garage/utility. 27 Rotherfield Way, Reading. 24.06.21

Figure 8. Example of sealed fascias on garage/utility. 27 Rotherfield Way, Reading. 24.06.21

5.2 Internal Inspection

An internal inspection of the property and garage was undertaken and examined for any signs of bats (as described in section 4.2).

The loft space of the property was accessed via a ladder from the first floor and is in a good condition. The loft is being used for personal storage but this did not hinder the inspection. The loft was not illuminated, insulated and partially boarded, see Figure 9 below. The roof tiles are lined with bitumen roofing felt, all of which was in a good condition, there were no rips or tears in which roosting bats could enter the loft space, see Figure 10 on page 12.

The garage has no loft with the flat roof being constructed of concrete (see Figure 11 on page 12), it offers no roosting opportunities.

No bats or evidence of bats was recorded during the internal inspection of the loft space or garage and internally there appeared to be no roosting opportunities for bats.

Figure 9. Example of the loft space. 27 Rotherfield Way, Reading. 24.06.21

Figure 10. Example of bitumen lining. 27 Rotherfield Way, Reading. 24.06.21

Figure 11. Concrete roof to garage. 27 Rotherfield Way, Reading. 24.06.21

6. Evaluation

The bat roost potential of the features within the site has been assessed with reference to the criteria laid out in the Bat Mitigation Guidelines (Mitchell-Jones, 2004). These criteria are listed below with the features **highlighted in bold**.

The likelihood of bat roosts being present will be higher where structures:

- are of a pre-20th Century construction;
- are in a lowland rural setting;
- **have woodland, mature trees, species-rich grassland and/or water nearby;**
- have large dimension roof timbers with cracks, joints and holes;
- have numerous crevices in stonework and structures;
- **have an uneven roof covering with gaps, though not too draughty;**
- have hanging tiles or roof cladding, especially on south-facing walls;
- **have a roof warmed by the sun;**
- are disused or little used; largely undisturbed;
- provide appropriate hibernation conditions, such as abandoned mines, tunnels, kilns, or fortifications; or
- **Recent or historical records of** bats on the site, or **bat roosts in the general area.**

The likelihood of bat roosts being present will be lower where structures:

- **are in an urban setting with little green space;**
- are subject to heavy disturbance (constant movement due to draughts and noise, also unstable microclimate);
- **have a small, cluttered roof void (particularly for brown long-eared);**
- are of a modern construction with few gaps or crevices that bats can fly or crawl through (though pipistrelle bats may still be present);
- are comprised of prefabricated steel or sheet materials; (some sections);
- are active industrial premises.

Please note that the above list provides generic screening criteria only and there are exceptions to consider.

7. Conclusions

7.1 Interpretation

The combined evidence from the external and internal inspection of the property and garage provides a high level of confidence in support of the opinions as set out in this report. There are no visible features on the property or garage in which bats could roost or access the building to roost. Informed by the results of the survey and the factors highlighted in Section 6, it is concluded that there is negligible potential for roosting bats within the buildings. Based on recommendations in the Bat Workers Manual and the Bat Surveys Good Practice Guidelines, no further survey effort is required.

7.2 Contingency Plan

In the unlikely event that bats are found during the works to the property, all work must stop, and advice sought from Urban Tree Experts or another licenced bat ecologist.

If, for whatever reason, there is a time delay of greater than 12 months between this survey and the commencement of work, then the survey should be repeated as the condition of the buildings may have changed and bats may start roosting at the site.

8. References

Collins, J (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust (BCT), London.
HM Government (2017) Conservation of Habitats and Species Regulations.
HM Government (1981) The Wildlife and Countryside Act.
HM Government (2006) Natural Environment and Rural Communities Act.
Mitchell-Jones, A.J. & McLeish, A.P. (1999). Bat Workers' Manual (2nd Edition). Joint Nature Conservancy Committee, Peterborough.

9. Queries

Any queries regarding this report should be addressed, in the first instance, to Urban Tree Experts:

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Natural England Licence CLS-CLS-17637, CLS-CLS-17638

APPENDIX 1

In summary, the legislation combined makes it an offence to:

- Intentionally or recklessly damage, destroy or obstruct access to a structure or place used for shelter by a bat.
- 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.
- Intentionally or deliberately kill, injure or take any bat.

Planning Considerations:
Government guidance to Local Planning Authorities stipulates the need to consider biodiversity and protected species during the consideration of planning applications. The NPPF makes clear that the planning system should help minimise the impacts that development can have on biodiversity and provide net gains in biodiversity where possible. In addition, the ODPM Circular 04/2005 states "*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision".*

Policy CS36 of the Reading Borough Core Strategy states *"Development should retain, protect and incorporate features of biodiversity or geological interest (including protected species and their habitats) found within the application site into their schemes. On sites with recognised biodiversity or geological value, development will not be permitted where there would be a direct or indirect adverse impact on the site, unless it can be clearly demonstrated that: -*

i. The need for development clearly outweighs the need to protect the value of the site; and
ii. Appropriate compensation, impact minimisation, mitigation and compensation are provided".

Developments that compromise the protection afforded to bats or roosts under the provisions of the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 will require a European Protected Species (EPS) licence from Natural England (NE).

NE, the government's statutory conservation advisory organisation, is responsible for issuing EPS licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations.

Three tests must be satisfied before this licence (to permit otherwise prohibited acts) can be issued:

- Reg 44(2)(e) – the derogation is "in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".
- Reg 44(3)(a) – there is "no satisfactory alternative" to the derogation.
- Reg 44(3)(b) –the derogation is "not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range".

Tests (a) and (e) can be met with the issue of planning permission for the proposed works. Test (b) is determined by NE's ecology department that requires the development of a suitable mitigation strategy that would ensure that any bats present on site, are retained at the same population level or better.