

Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

PRELIMINARY ECOLOGICAL APPRAISAL (BATS) AT 12 MILL GREEN CAVERSHAM



**Prepared for:
Mr N Richards
12 Mill Green
Caversham
Reading
RG4 8EX**

26th May 2020

Ref: SPH/ET/PEA-20/18.05



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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 N Richards to conduct a preliminary ecological appraisal (bats) of 12 Mill Green, Caversham, Reading, RG4 8EX. This is to support a current planning application to Reading Borough Council (reference: 200472).

The site visit was carried out on Monday 18th May 2020 at 10.30hrs, during daylight hours. An internal and external inspection of the property and attached 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.

The desk top study revealed that two current European Protected Species Licences (EPSLs) for bats have been granted within 2km of the proposed development site.

Externally, there was no evidence of bats (current or historically) within the property or attached garage. The buildings are in a good condition externally and internally and there were no visible roosting opportunities or access points into the buildings 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 attached garage. Based on the recommendations in the Bat Workers Manual and the Bat Surveys Good Practice Guidelines prior to works, no further surveys are required and the proposed works should proceed.



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1. Introduction

1.1 Instruction

Urban Tree Experts was instructed by Mr N Richards to conduct a preliminary ecological appraisal of 12 Mill Green, Caversham, Reading, RG4 8EX 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 that will seek to construct a two-storey side extension and single-storey front extension, following the demolition of the existing garage and storeroom.

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 CEnv. Emma holds a Class 2 Bat Licence (CLS-41628) and has been surveying bats for three 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.



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3. Site Location and Description

3.1 Site Location

The building is located at Grid Reference SU 7226 7437, see Figure 1 below. An overview of the immediate area is shown on Figure 2, courtesy of Bing Maps.

Figure 1. 12 Mill Green, Caversham, highlighted.

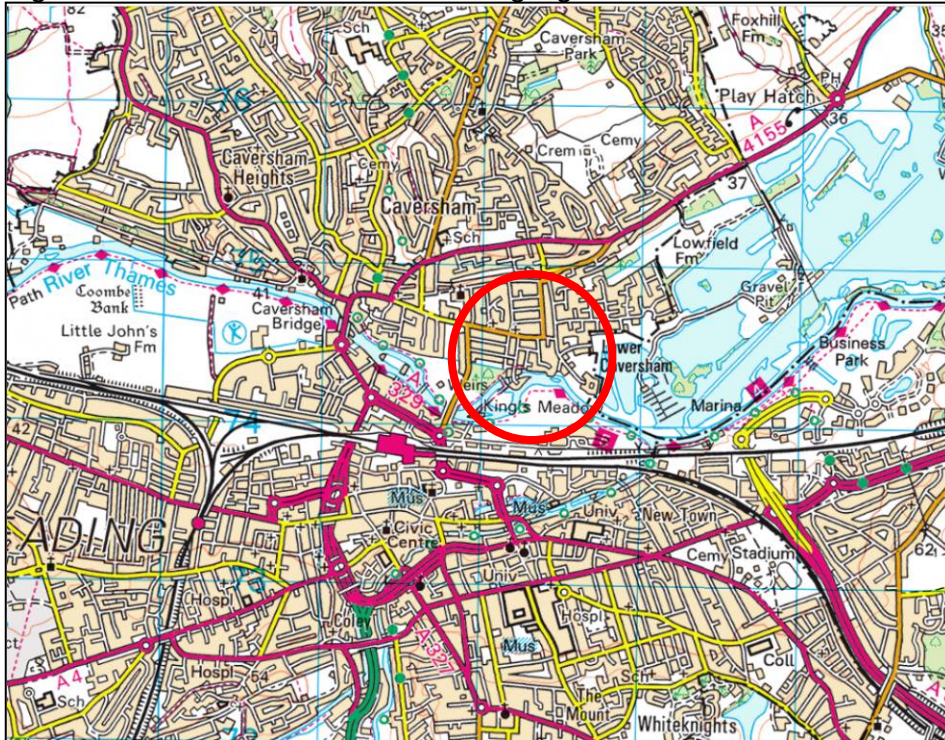
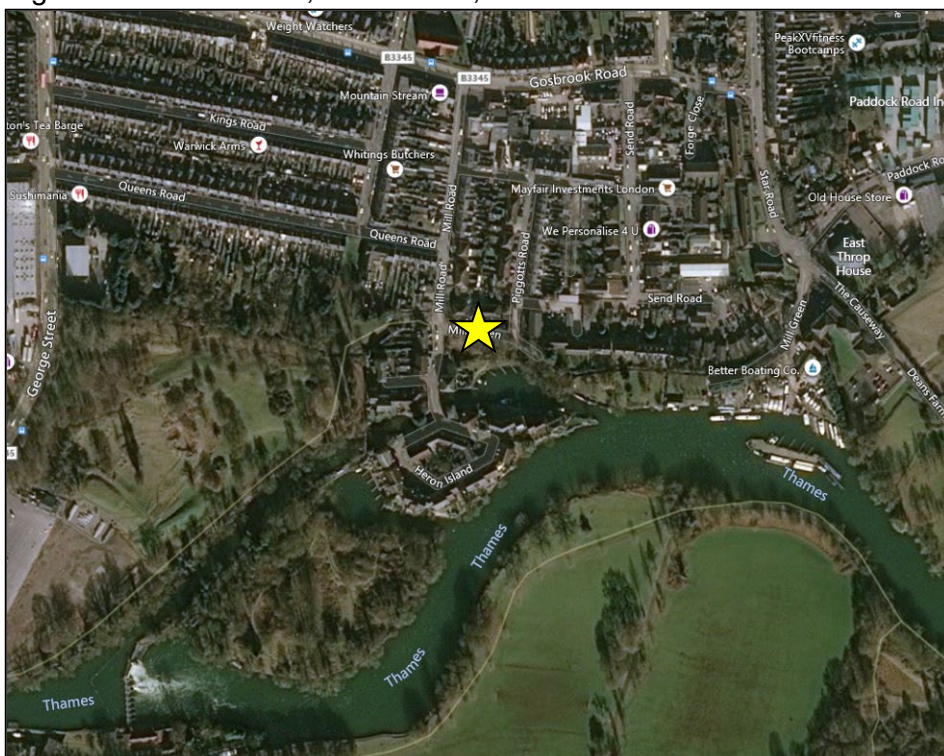


Figure 2. 12 Mill Green, Caversham, overview of the immediate area.





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3.2 Site Description

The application site comprises a semi-detached, brick-built property with an attached garage. The remainder of the site comprises a concrete drive, a small front garden and a rear garden which is mainly laid to lawn with some small shrubs, see Figure 3 below. The site itself offers limited foraging and commuting habitat for bats.

Figure 3. Rear garden. 12 Mill Green, Caversham. 18.05.20



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.

The site is situated in a suburban area of Caversham, a suburb of Reading, Berkshire and is surrounded by properties and gardens of differing sizes and styles. Immediately to the south lies the River Thames, which provides good habitat for bats and is within travelling distance for bats. To the west lies Christchurch Meadows and to the east the Thames and Kennet Marina, both of which provide good roosting, commuting and foraging habitat for bats and have ecological connectivity to the site via tree lines and hedgerows. Further afield lie areas of farmland and woodland, and although they are likely to provide good habitat to support roosting bats, there is no direct ecological connectivity from the site to these areas.



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There are no designated sites within 2km of the proposed development site. A search of the Magic interactive website revealed 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	Daubentons
2016-22301-EPS-MIT	2021	Common pipistrelle

4.2 Daylight Survey

The preliminary ecological appraisal (bats) of 12 Mill Green, Caversham, Reading, RG4 8EX was carried out by Emma Turnbull on Monday 18th May 2020 at 10.30hrs. The weather conditions for the survey were sunny with a temperature of 18 degrees. Equipment used included a high-powered torch, endoscope, a digital camera on a telescopic pole and a ladder.

During the preliminary ecological appraisal (bats), an internal and external inspection of the main property and attached 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. The loft of the main house was inaccessible due to the size of the loft hatch however, as the exterior of the building was in a good condition, with no visible access points for bats, it was not thought to be a significant limitation.



5. Survey Findings

5.1 External Inspection

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

The main property is a semi-detached, brick-built building, with cavity walls, which is in a good condition externally. The roof of the property is pitched and covered in close fitting tiles, none of which are missing or broken, see Figure 4 below. The ridge and hip tiles are all close fitting with no gaps in which roosting bats could exploit (see Figure 5 on page 9) and the verges are all well cemented in with no gaps in which roosting bats could utilise. The soffits and fascias are tight to the wall and there are no splits or cracks which could be used by roosting bats, see Figure 6 on page 9. The lead flashing around the chimney stack is tightly fitted with no gaps in which roosting bats could exploit.

The attached garage was brick and concrete built and was also in a good condition externally, see Figure 7 on page 10. The roof was flat and covered in felt (see Figure 8 on page 10), which was tightly fitted, with no gaps in which roosting bats could use.

No bats or evidence of bats was recorded during the external inspection of the property or attached 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. 12 Mill Green, Caversham. 18.05.20





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Figure 5. Example of hip tiles. 12 Mill Green, Caversham. 18.05.20



Figure 6. Example of soffits. 12 Mill Green, Caversham. 18.05.20





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Figure 7. Exterior of garage. 12 Mill Green, Caversham. 18.05.20



Figure 8. Example of garage roof. 12 Mill Green, Caversham. 18.05.20





5.2 Internal Inspection

An internal inspection of the loft and garage was undertaken and examined for any signs of bats (as described in section 4.2). Although the surveyor could not access the loft space fully, she was able to view the internal condition and surfaces. The loft was uncluttered, was not boarded but was illuminated and insulated, see Figure 9 below and the roof tiles are unlined, see Figure 10 on page 12.

The garage was cluttered and in a fair condition internally, see Figure 11 on page 12. The floor comprised concreted and the ceiling was boarded, see Figure 12 on page 13.

No bats or evidence of bats was recorded during the internal inspection of the main loft and garage, and the garage was found to be in a good condition internally.

Figure 9. Loft space. 12 Mill Green Caversham. 18.05.20





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Figure 10. Unlined roof tiles. 12 Mill Green Caversham. 18.05.20



Figure 11. Example of garage interior. 12 Mill Green Caversham. 18.05.20





Figure 12. Example of garage ceiling. 12 Mill Green Caversham. 18.05.20



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 on pages 12 and 13 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.**



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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 internal and external inspection of the property and attached garage provides a high level of confidence in support of the opinions as set out in this report. There are no visible external features on the buildings in which bats could roost or access the buildings to roost. Informed by the results of the survey and the factors highlighted in Section 6, we conclude 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 proposed works, 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 building may have changed and bats could 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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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.