

Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

PRELIMINARY ECOLOGICAL APPRAISAL (BATS) AT 6 MAPLE GARDENS READING



**Prepared for:
Mrs J del Rio
6 Maple Gardens
Reading
RG2 7NB**

30th May 2018

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



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Executive Summary

Urban Tree Experts was commissioned by Mrs J del Rio to conduct a preliminary ecological appraisal (bats) of 6 Maple Gardens, Reading, RG2 7NB. This is to support a current planning application to Reading Borough Council.

The site visit was carried out on Tuesday 29th May 2018, 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 property 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 eight European Protected Species Licenses (EPSL) within a 2Km search radius including pipistrelle bats (*Pipistrellus sp*).

Internally and externally, there was no evidence of bats (current or historically) within the property. Externally the building is in a good condition and has no roosting opportunities or access points which could be utilised by bats. Internally the house is also in a good condition with no roosting opportunities for bats.

Due to the absence of roosting potential and lack of evidence of bats found during the detailed external and internal inspection of the building, it is concluded that there is very low potential for roosting bats to be present at the site. 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 future works should proceed.



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1. Introduction

1.1 Instruction

Urban Tree Experts was instructed by Mrs J del Rio to conduct a preliminary ecological appraisal (bats) of 6 Maple Gardens, Reading, RG2 7NB. This is 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 building.
- Provide information on the status of bats using the building (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, number 180677, for the construction of a two-storey extension to provide a ground floor open plan living area and a first-floor bedroom to the rear of the existing property.

1.4 Surveyor Background and Experience

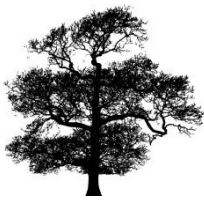
The preliminary ecological appraisal for bats and report was completed by Simon Holmes CEnv. He holds Class 3 (CL19) and 4 Bat (CL20) Licenses (Nos. 17637 and 17638) and a Science and Education license (SCI29096). He has 27 years' experience of carrying out bat surveys and bat conservation work and has attended training courses on bat surveys, bat call analysis and bat identification run by the Bat Conservation Trust, Wildwood Ecology and local bat groups.

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 property is located at Grid Reference SU 73024 70903, see Figure 1 below. An overview of the immediate area is shown on Figure 2, courtesy of Google Maps.

Figure 1. 6 Maple Gardens, Reading, highlighted.

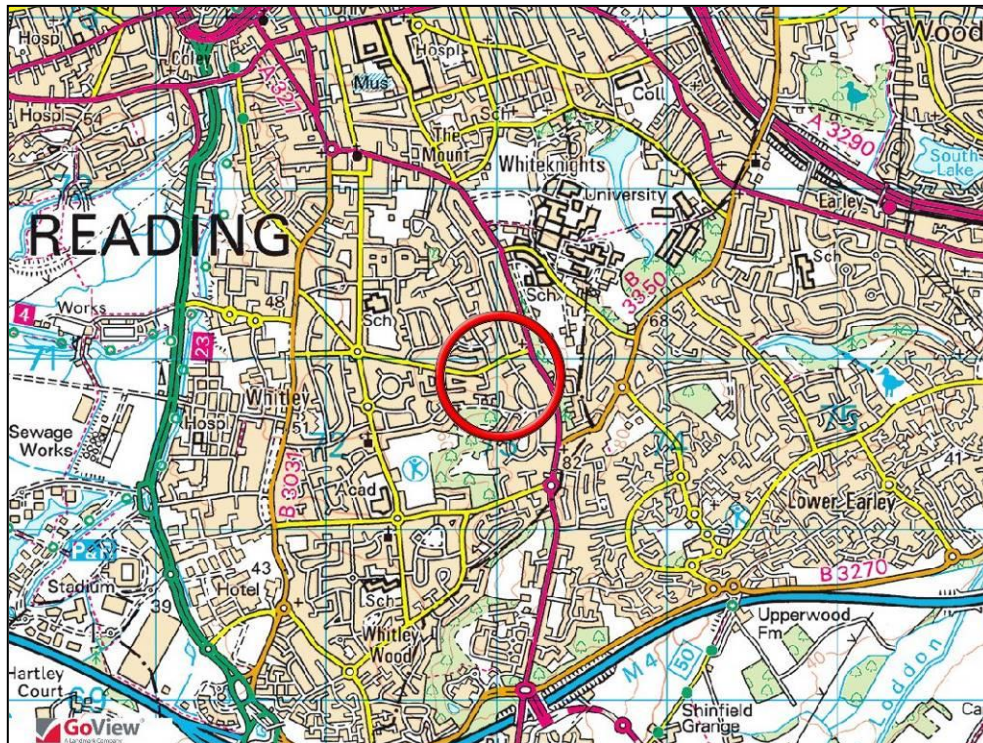
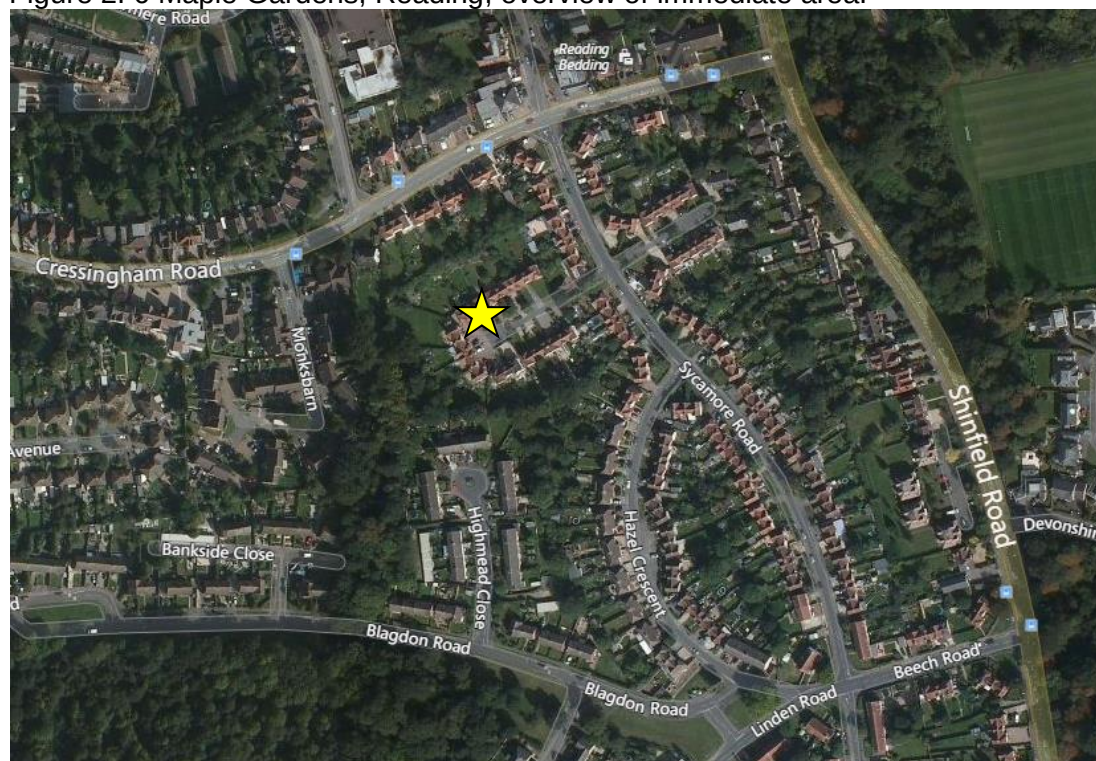


Figure 2. 6 Maple Gardens, Reading, overview of immediate area.





3.2 Site Description

The application site, which is set in an urban area of Reading, comprises a semi-detached, two-storey property. The rest of the application site comprises a paved front driveway and a large rear garden, which is laid mainly to lawn with some trees and shrubs within and forming the boundary of the garden, see Figure 3 below. The site itself offers some foraging and commuting habitat for bats.

Figure 3. Example of rear garden, 6 Maple Gardens, Reading. 29.05.18



4. Survey Methodology

4.1 Pre-Survey Data Search

Google Earth and MAGIC maps (magic.defra.gov.uk) website 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 on the outskirts of Reading town on a small cul-de-sac and is surrounded by properties of similar sizes and styles. There is a small area of deciduous woodland connected to the site via hedgerows and tree lines, which is likely to provide good roosting and commuting habitat for bats. There are a number of recreational areas surrounded by trees in close proximity to the site, which are associated with various schools. Although these areas are likely to provide good habitat for bats, none of these areas are connected to the site by wildlife corridors. Further afield are a number of areas of grassland and woodland that provide good roosting, foraging and commuting habitat for bats. However, these areas are again not connected to the site via ecological corridors

Pearman's Copse Local Nature Reserve (LNR) and Maiden Erleigh Park LNR lie within 2km of the proposed development (Magic Maps 2017) although there is no connectivity from the LNR's to the site.



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A search of the Magic interactive website indicated that eight EPSL's for bats were granted within 2km of the proposed development site, the details of which are provided in Table 1 below.

Table 1. EPSL's for bats within 2km of the site

EPSL reference	Licence start date	Species on licence
EPSM2009-1119	2009	Common pipistrelle bat
EPSM2010-2266	2010	Common pipistrelle and brown long-eared bat
EPSM2010-2126	2010	Common pipistrelle bat
EPSM2012-4478	2012	Common and soprano pipistrelle bat
2014-500-EPS-MIT	2014	Common and soprano pipistrelle bat
2014-3941-EPS-MIT	2014	Common and soprano pipistrelle bat
2014-3941-EPS-MIT-1	2014	Common and soprano pipistrelle bat
2014-3941-EPS-MIT-2	2015	Common and soprano pipistrelle bat

4.2 Daylight Survey

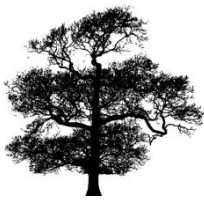
A preliminary ecological appraisal (bats) of 6 Maple Gardens, Reading, RG2 7NB was carried out by Simon Holmes on Tuesday 29th May 2018 at 1pm. The weather conditions for the survey were dry and overcast, with a humidity of 76% and a temperature of 13.7 degrees. Equipment used included a high-powered torch, a digital and pole camera and a ladder.

During the preliminary ecological appraisal (bats), an internal and external inspection of the building 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 building – 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 building.
- 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 client.

5. Survey Findings

5.1 External Inspection

The external features of the building 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 house with cavity walls. The majority of the roof is pitched with a small area of flat roof over an existing extension to the rear, see Figure 4 below. The pitched roof is covered in close fitting, clay tiles none of which are missing or broken, see Figure 5 on page 9. The verges and ridge tiles are all well sealed with no visible gaps for bats to exploit, see Figure 6 on page 9. The lead flashing around the chimney is tightly fitted with no gaps (Figure 7 on page 10) and the fascia's and soffits are all well sealed with no holes or gaps, see Figure 8 on page 10.

No bats or evidence of bats was recorded during the external survey of the main house.

Figure 4. Example of roof structure, 6 Maple Gardens, Reading. 29.05.18





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Figure 5. Example of roof tiles, 6 Maple Gardens, Reading. 29.05.18



Figure 6. Verges and ridge tiles, 6 Maple Gardens, Reading. 29.05.18





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Figure 7. Example of the lead flashing, 6 Maple Gardens, Reading. 29.05.18



Figure 8. Fascia's and soffits, 6 Maple Gardens, Reading. 29.05.18





5.2 Internal Inspection

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

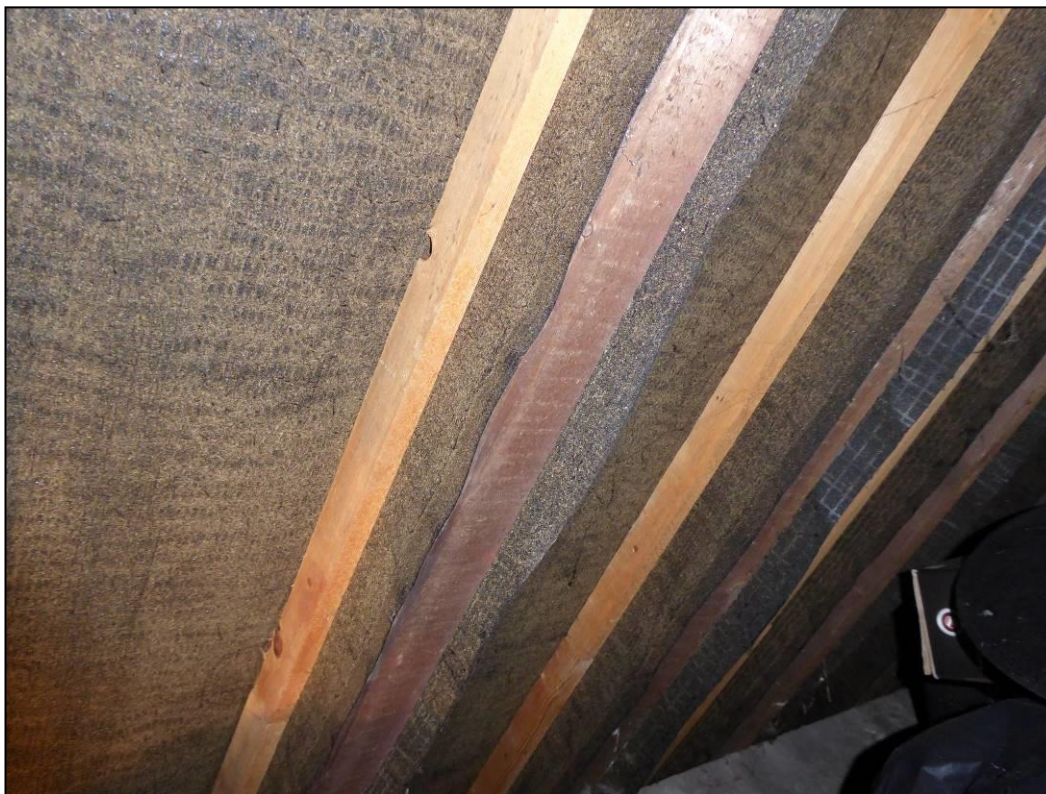
The roof void was accessed via a loft hatch on the first floor via steps. The loft space was cluttered, illuminated, fully insulated and partially boarded, see Figure 9 below. Although cluttered, a full inspection of the loft space was possible and all belongings searched for signs of bats. The loft was lined with bitumen felt which was in a good condition, with no tears, see Figure 10 on page 11. No bats or evidence of bats was recorded during the internal survey of the loft space.

Figure 9. Example of loft space. 6 Maple Gardens, Reading. 29.05.18





Figure 10. Bitumen lining. 6 Maple Gardens, Reading. 29.05.18



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**.



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

From the internal and external inspections, it can be concluded that there is no evidence of current or prior use of the property by bats. Informed by the results of the preliminary bat survey and the factors highlighted in Section 6, it is concluded that there is a very low potential for roosting bats at this site. Based on recommendations in the Bat Workers Manual and the Bat Surveys Good Practice Guidelines, no further survey effort is required and the plans to extend the property should proceed.

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 24 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 may return to the building to roost.

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.



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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.