



Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

PRELIMINARY BAT SURVEY AT 140 KIDMORE END ROAD EMMER GREEN



**Prepared for:
Mr T Edwards
140 Kidmore End Road
Emmer Green
Berkshire
RG4 8SP**

6th October 2016

Ref: SPH/PBS-01/06.10



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The validity of this report ceases at the prescribed time limit or after two years 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 Mr T Edwards to carry out a preliminary bat survey at 140 Kidmore End Road, Emmer Green, Berkshire, RG4 8SP. This is to support a current planning application to Reading Borough Council for an extension to the existing property to provide additional bedrooms.

The site visit was carried out on Thursday 6th October 2016 at 11am, during daylight hours. An internal and external inspection of the premises took place to look for signs of bats.

The preliminary bat survey comprised a detailed search of the interior and exterior of the building 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 building was in a satisfactory condition however there were numerous gaps externally within the roof and hanging tiles in which bats could roost. Internally, a number of bat droppings were recorded within the loft space, indicating that bats are using the building for roosting.

In line with best practice guidelines, three further dusk emergence or return to roost surveys are recommended to assess the current status of roosting bats within the building in order to inform appropriate mitigation for the proposed works.



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1. Introduction

1.1 Instruction

Urban Tree Experts was instructed by Mr T Edwards to conduct a preliminary bat survey of 140 Kidmore End Road, Emmer Green, Berkshire, RG4 8SP, to support a current planning application to Reading Borough Council (planning reference: 161803).

1.2 Aims and Objectives

The preliminary bat survey is designed 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 survey effort is required; mitigation or a European Protected Species (EPS) licence is required.

The survey 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 seeks to extend the existing property to provide four bedrooms. It is proposed to extend the bungalow both upwards and outwards, with the existing roof to be raised to provide the additional accommodation. It is also proposed to increase insulation levels of the existing property.

1.4 Surveyor Background and Experience

The preliminary bat survey and report was completed by Simon Holmes CEnv. He holds Class 2, 3 and 4 Bat Licenses (No. C137073). He has 26 years' experience of carrying out bat surveys and bat conservation work and has attended training courses on bat surveys and mitigation, bat call analysis, bat identification and others 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 Wildlife and Countryside Act 1981, as amended, and also receive additional protection via The Conservation of Species and Habitats Regulations (2010). 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 7177 7613, see Ordnance Survey (OS) extract on Figure 1 below. An overview of the immediate area is shown on Figure 2 below.

Figure 1. 140 Kidmore End Road, Emmer Green highlighted.



Figure 2. 140 Kidmore End Road, Emmer Green, overview of immediate area.





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3.2 Site Description

The application site comprises a single storey detached brick built bungalow, with an attached brick built garage to one side. The property is set on a modest plot, with a mature garden which is tiered to the rear and is mainly laid to grass and mature shrubs, see Figure 3 below.

Figure 3. Rear of property, 140 Kidmore End Road, Emmer Green. 06.10.16.



4. Survey Methodology

4.1 Pre-Survey Data Search

Due to the urbanised area, the small size of the proposed development and the very local impact that may occur, no data was sought from local records centres. Google Earth and magic maps were used prior to the survey to determine the suitability of the surrounding habitat to support roosting bats.

The building is situated within a suburban area of Emmer Green surrounded by houses. Reading golf club and a football ground lie to the east and west of the site, providing large expanses of grassland suitable for foraging bats. Clayfield Copse Local Nature Reserve and several small areas of woodland lie further afield, although no ecological corridors connect these areas to the site.

There is a record of a brown-long eared bat roost within 300m of the proposed development which was destroyed under a European Protected Species License in 2013 (Reference: EPSM 2013-6025), increasing the likelihood of bat roosts being in the local area.



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4.2 Daylight Survey

A preliminary bat survey of 140 Kidmore End Road was carried out by Simon Holmes on Thursday 6th October 2016 at 11am. Equipment used included a high powered torch, a digital camera and binoculars.

During this survey, 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 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 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, fascias and walls were inspected for any evidence of bat droppings or staining.

The main property has a traditional pitched roof with clay tiles, see Figure 4 on page 8. The roof covering is in a satisfactory condition across the main pitched areas, with slight gaps around the chimney tiles suitable for crevice dwelling bat species to roost, see Figure 5 on page 8. The ridge is in a fair condition, with the verges containing some gaps suitable for crevice dwelling bats. There are numerous missing and broken hanging tiles on the front gable end of the building and gaps within the hanging tiles on the canopy over the front door which could be utilised by crevice dwelling bat species, see Figure 6 on page 9. The soffits require some paint work but are otherwise in a good condition with no gaps, see Figure 7 on page 9.

No bats or evidence of bats was recorded during the external inspection of the building.



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Figure 4. Example of roof structure, 140 Kidmore End Road, Emmer Green. 06.10.16.



Figure 5. Gaps around chimney, 140 Kidmore End Road, Emmer Green. 06.10.16.





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Figure 6. Hanging tiles, 140 Kidmore End Road, Emmer Green. 06.10.16.



Figure 7. Example of soffits, 140 Kidmore End Road, Emmer Green. 06.10.16.



5.2 Internal Inspection

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

The loft was accessed via a hatch in the garage. It was well lit, insulated and partially boarded, see Figure 8 below. Light was found to spill into the loft through gaps within the roof when the hatch was closed. The tar lined paper was in poor condition and torn in numerous places especially at the front gable end of the property, see Figure 9 on page 11.

Large, individual bat droppings were found scattered across the loft from the chimney stack near the hatch to the opposite end of the loft, see Figure 10 on page 11. Some droppings were also found under the newly laid insulation, indicating occupation of bats over a prolonged period. The accumulations of droppings suggest only low numbers of bats are using the loft for roosting.

Figure 8. Example of loft space, 140 Kidmore End Road, Emmer Green. 06.10.16.





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Figure 9. Example of torn lining, 140 Kidmore End Road, Emmer Green. 06.10.16.



Figure 10. Example of bat droppings, 140 Kidmore End Road, Emmer Green. 06.10.16





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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 page 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

The building was found to be in a satisfactory condition, however there were numerous gaps within the tiles on the roof and hanging tiles on the gable end which could provide potential roosting opportunities for bats. A number of bat droppings were recorded within the loft during the internal inspection, suggesting bats are using the loft for roosting.

Based on the above, it is recommended that three further dusk emergence and/or return to roost surveys are undertaken between May and August inclusive, to assess the current status of roosting bats within the building in order to inform appropriate mitigation for the proposed works.

7.2 Contingency Plan

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 re-done.



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8. References

Collins, J (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust (BCT), London.

HM Government (2010) The Conservation and Habitat Regulations.

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

Mitchell-Jones, A. J. (2004) Bat Mitigation Guidelines. English Nature (now Natural England), Peterborough.

Reading Borough Local Development Framework, Core Strategy, 2008.

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 Species and Habitats Regulations (2010) 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.