



Bat Survey Report – Preliminary Roost Assessment

78 Tilehurst Road, Reading RG30 2LU

February 2019

Report conditions

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Summary

A preliminary bat roost assessment was carried out at 78 Tilehurst Road, Reading, to assess the possible presence or likely absence of bats and bat roosts in order to support a planning application with Reading Borough Council for a new first floor extension to the rear.

78 Tilehurst Road is a relatively modern detached house set within an extensive mature residential area towards the west of Reading.

The house is of traditional brick and block construction. It has a timber-framed and pitched, trussed roof of concrete pantiles with concrete half-round ridge tiles. Internally, the roof is lined with traditional bitumen felt and has a double layer of modern glass fibre insulation between and over the joists.

The habitat in the immediate area is found to offer generally low-quality bat foraging habitat, although there are areas of higher-quality habitat further afield.

Visual bat survey work at the site finds no direct evidence of bat use, either internally or externally. External inspection identifies no suitable bat access points on either the house or the garage.

Overall, the house is judged to present Negligible roost suitability, and bats are considered likely absent from the site. No further survey work is recommended.

In view of the survey findings, it can be concluded that the development is unlikely to result in a breach of the legislation that protected bats and is likely to accord with relevant planning policy with respect to biodiversity.

1. Introduction

Objectives

- 1.1. The purpose of this assessment is to provide information on the possible presence or likely absence of bats at 78 Tilehurst Road, Reading, to support a planning application with Reading Borough Council. Where bat roosts are identified, or where their presence cannot be confidently ruled out, the report sets out an assessment of the impacts to these and where necessary makes recommendations for measures to avoid, mitigate or compensate for impacts to bats as necessary, dependent on the nature and scale of the impacts.

Site Description

- 1.2. 78 Tilehurst Road is a relatively modern detached house, believed to date from the later part of the 20th Century.
- 1.3. It is set within an extensive mature residential area towards the west of Reading, on the north-facing slope of the valley of the River Thames. The house faces south onto Tilehurst Road, with the main ridge running east-west. See Photo 1 in the photo sheet in Appendix 1.
- 1.4. The house is of traditional brick and block construction. It has a timber-framed and pitched, trussed roof of concrete pantiles and concrete half-round ridge tiles. Internally, the roof is lined with traditional bitumen felt and has a layer of modern glass fibre insulation between the joists. The loft is accessed via a ceiling hatch on the first-floor landing.
- 1.5. There is flat-roofed garage to the rear of the property. The main driveway is to the rear, and there is a small garden laid largely to timber decking with herbaceous beds.

Proposed works

- 1.6. The development is for the extension to the property to create further floors above the existing first floor, and subsequent conversion into flats as shown in Figure 1. This will require the existing roof to be removed.



Figure 1 – Existing and proposed elevations¹

Limitations

- 1.7. All external elevations of the house were fully visible during the survey work. Internally, the loft had small amounts of stored items but access across the loft was good and all areas could be accessed.
- 1.8. There are therefore no identified significant limitations to the survey work.

¹ From plans produced by Woolhampton Design Centre to support the planning application

2. Methods

Desk study

- 2.1. A desk-based assessment was carried out on 17th February 2019. This used a variety of information. Online ecological data (MAGIC²) was used to gain information on designated sites and priority habitats within 1km of the site. Aerial photos and Ordnance Survey mapping (again via MAGIC) were used to gain an understanding of the landscape context of the site. MAGIC was also used to identify if any licenses had been granted by Natural England for developments in the search area affecting European protected species (EPS).
- 2.2. The Reading Borough Council Proposals Map³ was reviewed to identify any locally-important biodiversity areas.
- 2.3. A data request from the Thames Valley Environmental Records Centre (TVERC) or the Berkshire and South Bucks Bat Group (BSBBG) was not carried out at this time. Consideration of the value of seeking additional records on the context of the bat use of the site (if present) was taken after the site survey work.

Field survey

- 2.4. A visual bat survey was carried out on 19th February 2019 by Adam Egglesfield of AE Ecology, who holds a current licence to survey bat roosts (Bat Survey Licence Number 2015-12330-CLS-CLS). Survey methodology used during the work is guided by and consistent with that set out in the Bat Conservation Trust's *'Bat Surveys for Professional Ecologists: Good Practice Guidelines'* 3rd edition, (Collins, J. (ed) 2016).
- 2.5. The house was subject to a detailed internal and external search. The aims of this were to identify evidence of bat activity and/or identify the presence of any features that could potentially support roosting bats or features through which bats could gain access to possible roost locations. External areas were inspected to identify potential bat access points and roosting features. Such

² Multi-Agency Geographic Information for the Countryside - <http://magic.defra.gov.uk/>

³ <http://reading.addresssafe.com/app/exploreit/default.aspx>

features typically include missing, slipped, broken or bowed roof tiles, gaps around fascias and soffits, gaps in brickwork (such as missing mortar or expansion gaps), lifted chimney, roof, or window flashing, and gaps around window and door casements.

- 2.6. The external inspection also aimed to identify any actual direct evidence of bat use such as droppings adhering to walls, floors or window sills below gaps, or staining around possible access gaps.
- 2.7. Features were inspected using Opticron Discovery 10x42 close-focusing binoculars and where necessary and safely possible, a ladder. High-powered torches (Clulite Clubman CB2 and Lenser P7.2) were used to illuminate potential roost and roost access features. A Ridgid Seesnake CA-300 endoscope was used where necessary to investigate any internal cavities where necessary and accessible.
- 2.8. Where present and safely accessible, any internal voids and similar spaces were inspected for evidence of bat presence such as live bats, corpses, droppings, feeding remains and staining. The building was subsequently assessed for its suitability to support roosting bats, from 'negligible' to 'high', in line with the survey guidelines.

Foraging and commuting habitat

- 2.9. An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bats. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland, and open water and watercourses, which are highly attractive to bats as both a foraging resource and as commuting routes. The presence of such habitats, particularly in a mosaic or network with other suitable habitat, typically increases the potential for structures to be exploited by bats where suitable roost and access opportunities are present. The presence of unlit semi-natural vegetation and habitat linkages between the site and the surrounding landscape were also considered.

3. Results

Desk study

- 3.1. Figure 2 below shows the location of the site and its surrounding relevant ecological interest features produced from MAGIC:

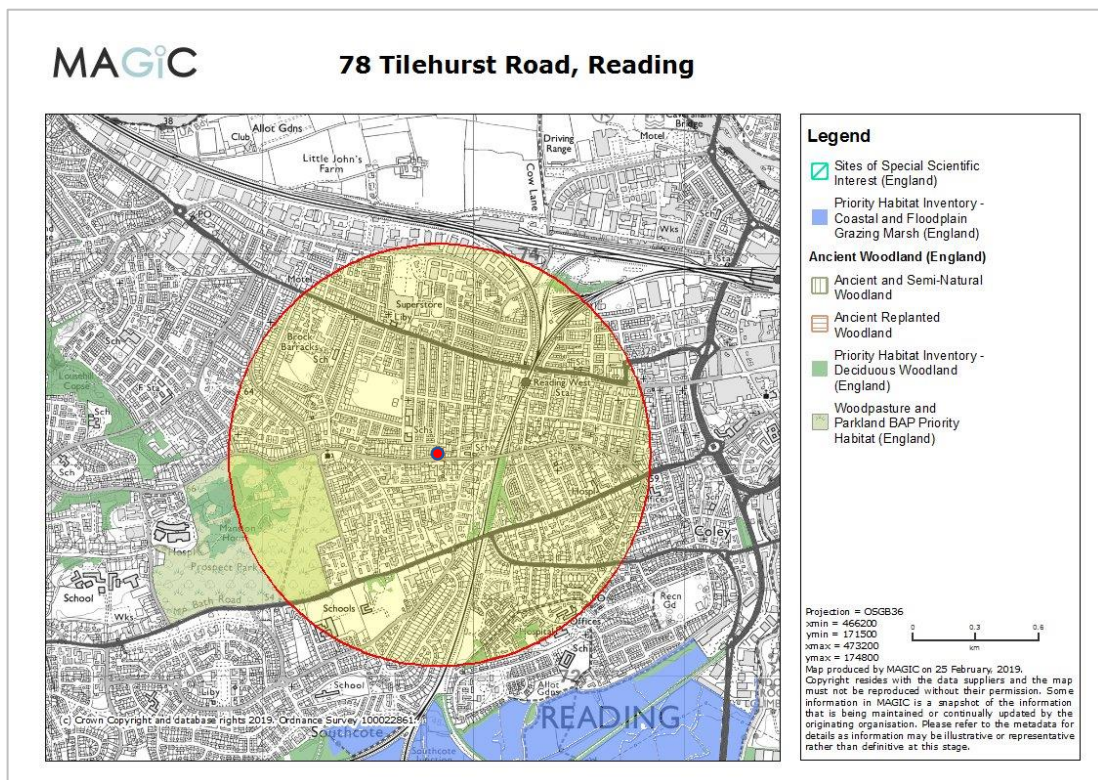


Figure 2 – 1km search area around site showing key habitats

Nationally and locally designated sites and notable habitats

- 3.2. There are no statutory designated sites such as Sites of Special Scientific Interest (SSSI) in the search area. The most notable area of habitat in the search area is the area of woodland and parkland to the west of the site, at Prospect Park, where there is a large area of woodland known as The Rookery. Woodland continues westwards from here along Lousehill Copse. Both these woodlands are locally-designated as Local Wildlife Sites, in recognition of their local value to biodiversity.
- 3.3. Further afield, to the south, lie the broad swathe of floodplain grazing marsh Priority Habitat along the valley of the River Kennet to the south of Reading, which is also a Local Wildlife Site.

- 3.4. Outside of these areas, the land is highly urbanised, with residential development around the site, and commercial development towards the town centre to the east and along the Oxford Road to the north. There are several major roads and railways in the search area. The railway embankments are wooded along part of their route, and these sections will have some biodiversity value.

Protected species

- 3.5. There is one record of a licence being granted for a development affecting bats in the search area. This was for a development approximately 750m to the south, affecting maternity roost for soprano pipistrelle *Pipistrellus pygmaeus* bats.

Preliminary roost assessment

Internals

- 3.6. Internally, the loft was readily accessible. A detailed examination of all surfaces, including internal timbers, floors, insulation, walls, and stored items was carried out. Particular attention was paid to features such as the ridge apex at either end of the loft and joints in the timber work. Photos 3 and 4 show the general internal conditions of the loft.
- 3.7. No droppings were noted on any of the floor areas, either the boarding or the top of the insulation (Photos 5 and 6). There is a deep layer of newer insulation laid over an older layer. Spot checks under both layers of insulation found no recent or historic evidence of bat presence.
- 3.8. The gable apexes were carefully examined, along with the floor areas beneath these. No evidence of bat activity was noted. There is an airbrick to the western end (Photos 7 and 8); the holes in this are too small to allow bat access.
- 3.9. There is a vent pipe to the east end (Photo 9), and no gaps were noted around this and no bat evidence noted. There is also a vent to the ridge towards the eastern end (Photo 10). This is capped with a vented ridge tile (see Photo 12) and the vent itself inside the loft is smooth circular metal. Although there was a small amount of windblown debris and dust on the insulation below this, careful inspection found no bat evidence (Photo 11).

3.10. The roofing felt was in generally good condition with no gaps or tears noted.

Externals

3.11. Externally, the concrete pantiles across the front and rear faces of the roof were found to be in good condition with no areas of slipped, missing, or damaged tiles (Photos 12 and 13). Heavy moss was noted in many areas.

3.12. The ridge tiles were well mortared in and the verge mortar was in good condition with no apparent deterioration that might allow bat access (Photo 14). Soffits were found to be tight to the external walls with no gaps present of sufficient size to allow bat access (Photo 15).

3.13. There is a small open porch to the front of the house. The tiles on this were in good condition, as was the flashing around the top with the external wall. No potential roost locations or roost access points were noted (Photo 16).

3.14. The garage is a simple flat-roofed structure with no internal void. The plastic fascia boards around the edge of the flat roof were tight to the external brickwork. There were no potential roost locations noted to the externals of the garage (Photo 17).

4. Discussion

Legislation and planning policy

4.1. Bats are legally protected under both domestic and international law (the Wildlife and Countryside Act 1981 (as amended)⁴ and the Conservation of Habitats and Species Regulations 2010 (as amended)⁵ respectively). All native bat species are European Protected Species (EPS). This legislation makes it an offence to kill, injure or disturb bats, or to destroy or damage their roosts, even when the bats are not present. In view of the findings of the survey work at 76 Hurst Road, it is concluded that the development is unlikely to result in a breach of the Habitats Regulations.

4.2. Paragraph 175 of the National Planning Policy Framework (NPPF) (MHCLG, 2018) requires that when determining planning applications, if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

4.3. Policy CS36 'Biodiversity and Geology' of the Reading Borough Council Adopted Core Strategy (revised 2015) states that:

"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."

4.4. The supporting text to the policy states that

"Protected species identified by the Species Action Plan of the Reading Biodiversity Action Plan (BAP) and their habitats must also be protected from any direct or indirect harm resulting from development."

⁴ <http://www.legislation.gov.uk/ukpga/1981/69>

⁵ <http://www.legislation.gov.uk/uksi/2010/490/contents/made>

Interpretation of habitat context

- 4.5. The immediate surroundings are characterised by denser residential development, with some larger areas of higher-quality bat foraging habitat further afield. The surrounding buildings range in age, with many older properties. These older properties are likely to offer higher bat roost suitability in view of their age and construction. There is therefore likely to be an established local bat population although this is likely to largely comprise more widespread species better adapted to more urban environments.

Interpretation of roost suitability

- 4.6. Internally, the main loft space does present a suitable roosting location due to the timber beams, brickwork, and other construction features. However, there are no apparent points that would allow bats to gain access into the loft. No evidence of historic or recent bat use was seen in any areas of the loft. It is confidently concluded that the loft does not support roosting bats, nor is there evidence to suggest that there have historically been bats roosting within the loft.
- 4.7. All external features were found to be in good condition with no potential roost access opportunities.
- 4.8. Overall, in view of the lack of bat evidence, good condition of the roof and associated elements, and lack of potential bat access points, it is concluded that 78 Tilehurst Road offers Negligible bat roost suitability.

Recommendations

- 4.9. Bats are considered likely absent from the site. Therefore, it is concluded that the development is unlikely to affect bats, there is no recommendation for any further bat survey work.
- 4.10. The householder is mindful of the need to enhance sites for biodiversity and therefore it is proposed that the development incorporates two Schwegler 1FR bat tubes, one in each new gable end.

5. Conclusions

- 5.1. Visual bat survey work at the site found no direct evidence of bat use, either internally or externally. External inspection identified no suitable bat access points.
- 5.2. Overall, the house was judged to present Negligible roost suitability, and bats are considered likely absent from the site. No further survey work is recommended.
- 5.3. In view of the survey findings, it can be concluded that the development is unlikely to result in a breach of the legislation that protected bats and is likely to accord with relevant planning policy with respect to biodiversity.

References

Chartered Institute of Ecology and Environmental Management (CIEEM). (2013), *Guidelines for Preliminary Ecological Appraisal*. CIEEM; Winchester.

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. Bat Conservation Trust; London.

MHCLG, (2018). *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government; London.

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature; Peterborough.

Appendix 1 – Photos



Photo 1 Front (south) elevation



Photo 2 Rear (north) elevation



Photo 3 General conditions in loft



Photo 4 General conditions in loft



Photo 5 Insulation in loft



Photo 6 Boarding in loft



Photo 7 Airbrick to western gable



Photo 8 Floor beneath gable apex



Photo 9 Vent pipe to eastern gable end



Photo 10 Ridge vent



Photo 11 Insulation beneath ridge vent



Photo 12 Roof tiles, front elevation



Photo 13 Tiles to rear elevation



Photo 14 Verge in good condition

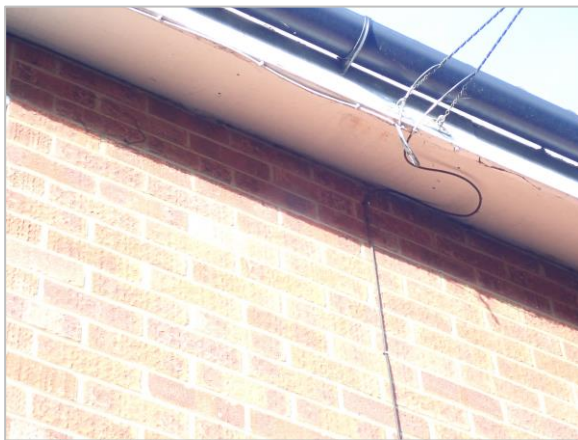


Photo 15 Soffits tight to wall



*Photo 16 Porch roof in good condition;
no gaps to flashing*



Photo 17 Garage