



Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

PRELIMINARY ECOLOGICAL APPRAISAL (DBW) AT 98 BROAD HINTON TWYFORD



**Prepared for:
Mr & Mrs Farmery
98 Broad Hinton
Twyford
RG10 0XH**

13 December 2024

Ref: SPH/NP/PEA-24/03.12



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This report is valid for 12 months from the site inspection. The lifespan of this report may be subject to change if the site conditions change due to unspecified works that affect the site.



Executive Summary

Urban Tree Experts was commissioned by Mr & Mrs Farmery to conduct a preliminary ecological appraisal (daytime bat walkover [DBW]) of 98 Broad Hinton, Twyford, RG10 0XH. This is to support a forthcoming planning application to Wokingham Borough Council.

The site visit was carried out on Tuesday 3 December 2024 at 10.10am, during daylight hours. An internal and external inspection of the property took place to look for signs of bats.

The preliminary ecological appraisal consists of a desk top study 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 minimum 2km search radius and it revealed one statutory designated site is located within, and three current European Protected Species Licences (EPSLs) for bats have been granted within 2km of the proposed development site. The immediate surrounding habitat does not provide suitable habitat for roosting, commuting or foraging bats, due to the dense urban environment however, there is good ecological connectivity to woodland and agricultural land via the garden network.

The DBW 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, 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 buildings suitability to support roosting bats was assessed and no potential roost features were identified during the preliminary inspection. When combined, the lack of features, along with the data from the desk top study results in those parts of the property to be affected by the proposed development being characterised as having negligible potential¹ to support roosting bats.

In line with best practice guidelines², no further survey effort is required. Should the proposals change, and the area of hanging tiles be affected by the development, further survey effort will be required in order to establish the presence or absence of roosting bats.

¹ Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats. Bat Surveys for Professional Ecologists Good Practice Guidelines 4th Edition.

² Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists Good Practice Guidelines (4th Edition).



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1. Introduction

1.1 Instruction

Urban Tree Experts was instructed by Mr & Mrs Farmery to conduct a DBW of 98 Broad Hinton, Twyford, RG10 0XH to support a forthcoming planning application to Wokingham Borough Council.

1.2 Aims and Objectives

The DBW is designed to:

- Identify the presence/likely absence of bats within the building.
- Provide information on previous bat ecological surveys/reports.
- 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 4th edition.

1.3 Proposed Works

The survey was commissioned in connection with a forthcoming planning application to Wokingham Borough Council 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 Nick Powell and the report was written by Simon Holmes MSc. CEnv.

Nick commenced surveying bats in 2022 and holds a Class 2 Bat License (CLS-11742) and has received training in bat ecology and surveying, bat detector use, acoustic monitoring/sonogram analysis, architectural terms for bat workers, bats and development, H & S awareness for bat workers, legislation for bat workers, British bats their ecology and conservation, surveying trees for bats, Bat ID and handling, bat biology.

Simon holds Class 3 (CL19) and 4 (CL20) Bat Licenses (Nos. 17637 and 17638) and a Science and Education license (SCI64844). He has 34 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.



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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

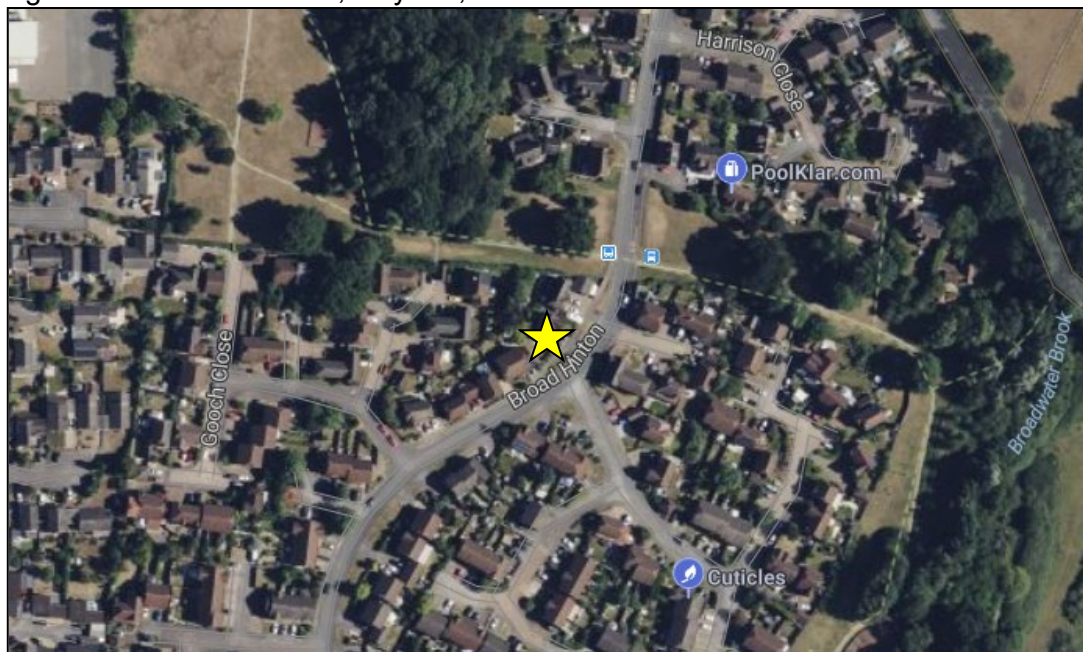
3.1 Site Location

The building is located at Grid Reference SU 7969 7523, see Figure 1 below. An overview of the immediate area is shown on Figure 2, courtesy of Bing Maps.

Figure 1. 98 Broad Hinton, Twyford, highlighted.



Figure 2. 98 Broad Hinton, Twyford, overview of the immediate area.





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3.2 Site Description

The application site comprises a detached, brick-built property. The remainder of the site comprises a paved parking area and lawn with mature hedges (see cover photograph) and a rear garden which is mainly laid to lawn, with patio area and shrubs/mature tree on the boundaries, see Figure 3 below. The site itself offers limited foraging and commuting habitat for bats however there is good ecological connectivity to bat foraging and commuting habitat in the wider landscape.

Figure 3. Rear garden. 98 Broad Hinton, Twyford. 03.12.24



4. Survey Methodology

4.1 Pre-Survey Data Search

The client has advised that, to their knowledge, no previous bat surveys have been undertaken on this site. 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 or EPSLs within 2km of the site. Due to the suburban site, scale of the proposed development, and the very local impact that may occur, no data was sought from the local records centre at this time.

The site is situated in the village of Twyford and is surrounded by properties and gardens of similar styles and sizes. To the east lies Broadwater Brook, an area of woodland and farmland, and to the northwest Broad Hinton Park, all of which are likely to provide good habitat for roosting, foraging and commuting bats and are within commuting distance for bats. To the west lies the River Loddon, Old River, large waterbodies and areas of woodland and farmland, all of which provide good habitat for bats although a housing development and main roads separate these areas from the site. Further afield lie parkland, grassland, woodland and farmland, all of which are likely to provide good habitat for bats although there is limited ecological connectivity from the site.



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Further afield lie areas of woodland, farmland and wetland, which are likely to provide good habitat for bats, and there is good ecological connectivity from the site to these areas.

Lodge Wood & Sandford Mill Site of Special Scientific Interest (SSSI) and Alder Moors Local Nature Reserve (LNR) lie within 2km of the proposed development site although there is limited ecological connectivity from the site to these designated sites. A search of the Magic interactive website revealed three 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
2019-43858-EPS-MIT	02/2025	Soprano pipistrelle
2020-49294-EPS-MIT	08/2025	Common pipistrelle and soprano pipistrelle
2016-25277-EPS-MIT-1	09/2026	Soprano pipistrelle

4.2 Daylight Survey

The DBW of 98 Broad Hinton, Twyford, RG10 0XH was carried out by Nick Powell on Tuesday 3 December 2024 at 10.10am. The weather conditions for the survey were sunny with a temperature of 3 degrees. Equipment used included a high-powered torch, a digital camera on a telescopic pole, endoscope and a ladder.

During the DBW, an internal and external inspection of the property 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 that were not to be affected by the current proposals or with no bat roosting potential were not inspected.



4.3 Constraints

Full access to the site during the visit was made possible by the client. A thorough inspection of the whole loft space was not possible due to the restricted access caused by the framing/trusses but given the excellent condition of the roof tiles externally this was not thought to be a significant constraint to the survey.

5. Survey Findings

5.1 External Inspection

The external features of the property 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 detached, brick-built building that is in a good condition externally. The cross-pitched roof is covered in closely fitted tiles, none of which are missing or broken, see Figure 4 below. The ridge tiles and valleys are all tightly fitted with no gaps which could be used by roosting bats (see Figure 5 on page 9) and the verges are all fully sealed with no gaps in which roosting bats could exploit. The lead flashing around the flue is all tightly fitted to the roof tiles with no lifted sections which crevice dwelling bats could utilise as are the tiles, verges and fascias on the small dormer window on the front elevation, see Figure 6 on page 9. The soffits and fascias are all tightly fitted to the walls and had no cracks or splits in which bats could use to roost and the ventilation holes in the soffits are covered with wire mesh (see Figure 7 on page 10) providing no gaps large enough for bats to access for roosting. There is an area of hanging tiles on the front of the property (see cover photograph) some of which on the corners are lifted/moved leaving gaps which could be utilised by crevice dwelling bats for roosting, see Figure 8 on page 10.

No bats or evidence of bats was recorded during the external inspection of the property although there are small numbers of gaps in the hanging tiles in which bats could use for roosting externally.

Figure 4. Example of roof tiles. 98 Broad Hinton, Twyford. 03.12.24





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Figure 5. Example of ridge tiles. 98 Broad Hinton, Twyford. 03.12.24



Figure 6. Dormer on front elevation. 98 Broad Hinton, Twyford. 03.12.24





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Figure 7. Example of soffits/fascias and ventilation holes. 98 Broad Hinton, Twyford. 03.12.24



Figure 8. Example gaps in hanging tiles. 98 Broad Hinton, Twyford. 03.12.24





5.2 Internal Inspection

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

The loft space was accessed via steps through a hatch and is in a good condition. The loft space is used for storage, is cluttered, partially lit, partially boarded and insulated, see Figure 9 below. The roof tiles were lined with bitumen felt, none of which appeared to be ripped or torn, with no features in which roosting bats could exploit, see Figure 9 below.

No bats or evidence of bats was recorded during the internal inspection of the property and internally there appeared to be no roosting opportunities or access into the building for bats.

Figure 9. Example of loft space and bitumen felt. 98 Broad Hinton, Twyford. 03.12.24





6. Evaluation

The bat roost potential of the features within the site have been assessed with reference to the following criteria and include seasonal variation where increased or decreased probability may arise. Where features are present, they are **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 and historical records of 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 desktop study and the internal and external inspection of the property provides a high level of confidence in support of the opinions set out in this report. Although the majority of the property is in a good condition with no roosting opportunities for bats, there are a number of gaps in the corner hanging tiles at the front of the property, which could provide opportunities for crevice dwelling bats to roost. However, this section of the building will not be affected by the current proposals and therefore 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 licensed bat ecologist.



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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 change and bats may start roosting at the site.

If the current proposals change and the area of hanging tiles will be affected by any new plans, further survey effort will be required in order to establish the presence of absence of roosting bats.

8. References

Collins, J (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

HM Government (2017) Conservation of Habitats and Species Regulations as (amended).

HM Government (1981) The Wildlife and Countryside Act (as amended).

HM Government (2006) Natural Environment and Rural Communities Act.

Mitchell-Jones, A.J. & McLeish, A.P. (2004). Bat Workers' Manual (3rd Edition). Joint Nature Conservation Committee.

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 CP7 of the Wokingham Borough Core Strategy (planning policy relating to the site) states *“Development which may harm habitats or, species of principle importance in England for nature conservation, veteran trees or features of the landscape that are of major importance for wild flora and fauna (including wildlife and river corridors), whether directly or indirectly will be only permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and*

- i) Mitigation measures can be put in place to prevent damaging impacts; or*
- ii) Appropriate compensation measures to offset the scale and kind of losses 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.