

Preliminary Bat Roost Assessment

at 34 High Street, Aylburton, GL15 6DE



12th August 2023 (REV 1)

Dr Pippa Wood CEcol, MCIEEM

Wheal Cottage

Bowson Square

Bream

GL15 6LB

01594560565

wood_pippa@hotmail.com

Professional Qualifications and Experience

Dr Pippa Wood is a Chartered Ecologist (CEcol) with the Chartered Institute of Ecology and Environmental Management (CIEEM) and as well as being a full member. She holds a First Bachelor of Science with Honours degree in Zoology and a Doctor of Philosophy in Ecology, both of which were obtained from the Southampton University.

She has over 16 years' experience in professional ecological survey and assessment work including bat surveys and reporting.

She is currently an Associate Ecologist at Arup and is the operations manager of the West ecology team of 19 ecologists split between Bristol and Cardiff.

Pippa authored this Preliminary Bat Roost Assessment and conducted the survey.

Introduction

This report documents the findings from a Preliminary Bat Roost Assessment to identify Potential Roost Features (PRFs) and the potential for roosting bats at 34 High Street, Aylburton, GL15 6DE. Any further work required to avoid and minimise any potential impacts to bats are provided.

Methods

Desk-based

A desk-based study was also conducted within 2km of the property to determine whether any statutory conservation sites for bats are located within the vicinity and whether any records exist within 500m of the property through NBN Atlas.

A previous search conducted in August 2020 with records from Gloucestershire Centre for Environmental Records (GCER), from a location approximately 4km north of this property location was also used for further information.

Preliminary Roost Assessment

The building was assessed on 9th August 2023 for bat roosting habitats (potential roost features – PRFs) depending on the construction of the building and the presence of potential bat access points ascertained by external inspections, such as:

- Gaps in gable end, flashing and fascia
- Cracks in brickwork
- Loose tiles/slates
- Soffit boxes

An internal inspection was also undertaken, where bats and signs of bats in the form of droppings, staining, and scratches were also searched for.

Features and signs of bats were assessed in accordance with the Bat Conservation Trust (BCT) guidance (Collins, 2016)¹ which allows for the categorisation of the building as to its suitability to support roosting bats as shown in Table 1 below.

¹ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust.

Table 1. Categorising suitability of buildings and trees to support roosting bats (Collins, 2016)

Suitability	Criteria
Negligible	Negligible habitat features likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and /or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features (PRFs) but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites, that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Confirmed	Bat(s) found sheltering in a feature of the structure/tree. Or droppings or other obvious signs of bats found in/near a feature of the structure/tree.

Buildings with features of low, moderate or high suitability to support roosting bats, or with confirmed roosts, require further surveys if impacts on the PRF or bats using them are predicted. These further surveys may involve further building inspections or dusk emergence and/or dawn re-entry surveys.

However, the BCT guidance states, that if the structure has been classified as having low suitability for bats, an ecologists should make a professional judgement on how to proceed based on all of the evidence available.

The house at 34 High Steet was determined to be of **low** suitability for roosting bats (details as below). As further detailed below, a further survey was determined unnecessary for this building and that a Precautionary Method of Working should be produced and followed during the removal of the tiles on the roof.

Limitations

The findings presented in this report represent those at the time of survey(s) and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of plants and animals, such as the time of year, migration patterns and behaviour.

The Preliminary Bat Roost Assessment was conducted within the optimal survey periods for bats, being in May to September as per the BCT guidance (Collins, 2016¹).

Results

Desk Study

The desk study identified that part of the Wye Valley & Forest of Dean Bat Sites Special Area of Conservation (SAC) lies approximately 2km north of the property. This SAC is designated for lesser horseshoe *Rhinolophus hipposideros* and greater horseshoe bats *Rhinolophus ferrumequinum*. This site is one of the complex of sites on the border between England and Wales which contains by far the greatest concentration of lesser horseshoe bat in the UK, totalling about 26% of the national population, and represents greater horseshoe bat in the northern part of its range, with about 6% of the UK population. It has been selected on the grounds of the exceptional breeding population, and the majority of sites within the complex are maternity roosts. The bats are believed to hibernate in the many disused mines in the area.

The Devil's Chapel Scowles Site of Special Scientific Interest (SSSI) is consistent with this part of the SAC boundary, being approximately 2km north of the property. This site is one of a series of SSSIs within the Forest of Dean and Wye Valley (Gloucestershire and Monmouthshire) notified for the lesser and greater horseshoe bat populations. This suite of sites includes both breeding and hibernation roosts and contributes to the conservation of bat populations of European importance. Other sites which form part of this series in Gloucestershire include:

Breeding sites: Caerwood & Ashberry Goose House SSSI, Blaisdon Hall SSSI, Sylvan House Barn SSSI and Dean Hall Coach House and Cellar SSSI

Hibernation sites: Buckshraft Mine & Bradley Hill Railway Tunnel SSSI, Old Bow & Old Ham Mines SSSI, Wigpool Ironstone Mine SSSI and Westbury Brook Ironstone Mine SSSI.

There are also further parts of the Wye Valley & Forest of Dean Bat Sites SAC and parts of the Wye Valley Woodlands SAC which are also designated in part for the presence of lesser and greater horseshoe bats approximately 7.2km north of the site.

The NBN Atlas picked up records within Alyburton and within 500m of the property, including lesser noctule *Nyctalus leisleri* and Whiskered/Brandt's bat *Myotis mystacinus/brandtii*,

A search conducted in 2020 approximately 4km north of this property (with a 2km radius) provides evidence of the number and species of bats present within the wider Forest of Dean area, within 251 records of bats records were returned from GCER from the last 30 years. These included predominantly greater and lesser horseshoe bats, and also between one to 20 records of brown long-eared bat *Plecotus auratus*, long-eared bat species *Plecotus* sp., Barbastelle *Barbastella barbastellus*, *Myotis* sp., Bechstein's bat *Myotis bechsteinii*, Brandt's bat *Myotis brandtii*, Whiskered/Brandt's bat, Whiskered bat *Myotis mystacinus*, Daubenton's bat *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, common pipistrelle *Pipistrellus pipistrellus*, soprano Pipistrelle *Pipistrellus pygmaeus*, serotine *Eptesicus serotinus*, noctule *Nyctalus noctule* and lesser noctule.

Preliminary Roost Assessment

External Inspection

The external ground-level preliminary roost assessment showed there to be bat roost potential with PRFs located under loose tiles on the roof to be replaced (see Photo 1, 2, 3 & 4), and potentially under the weathered wooden fascia board located at the front of the property (see Photo 1). Although these PRFs are considered to be of **low suitability**, as they only offer potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and /or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).

No signs of bats using the roof or wooden fascia boards were found during the ground-based assessment. As such, the property of 34 High Street was assess as having **low bat potential**.



Photo 1 & 2: View of the front of the house (location of the proposed tile replacement) from the street.



Photo 3: View of the side of the house / roof from the unnamed lane.



Photo 4: View of the back of the house / roof from the garden.

Internal Inspection

The majority of the roof has no cavity space and the tiles are completely sealed on the underside, as the previous owners of the property had spray foamed the underside of the tiles (see Photo 5 below, photo provided by the owner), and the current owner has plastered up to this to increase the area within the loft bedrooms of the cottage (see Photo 6 below for comparison see location of beams identified in red).

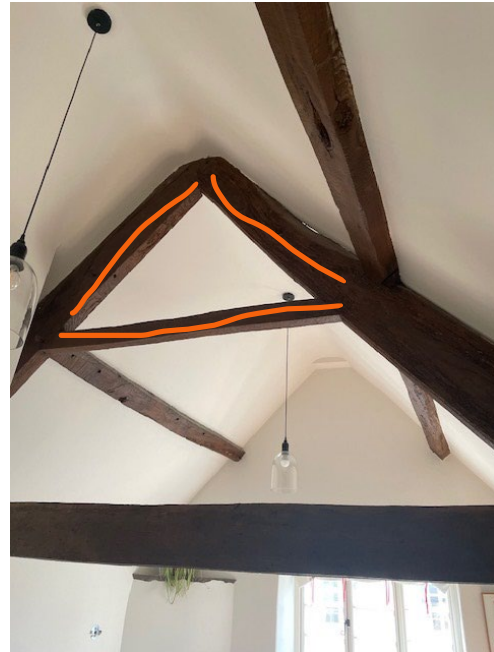


Photo 5 & 6: Evidence of spray foam sealing the underside of the tiles before renovation and plastering up to tiles within current room. The red triangles locate the beams for reference, the blue cross locates the larger of the remain roof cavity spaces (Photos 7 – 9 below), and the green cross locates the smaller space used for storage (Photo 10 below).

There are two small roof cavity spaces remaining, the largest of which is evident in Photo 5 above, mark with blue cross. The entrance and shape of this space is also shown in Photo 7 below, with Photo 8 & 9 showing the internal space above the cupboard which is lined with various types of insulation. Although this is the larger of the spaces this is approximately 2m in length, and no more than 1m wide and 1m in height. No evidence of bats was recorded within this space and due to the spray foam insulation sealing the tiles from underneath, this part of the roof is considered to have **negligible suitability** for roosting bats.



Photo 7: Entrance the larger roof cavity space above cupboard.



Photo 8 & 9: Internal space above cupboard.

The second cavity space remaining in the roof, is a well-used storage cupboard. As shown in Photo 10 below this is a cupboard rather than a roof space and you can see the plastering up to the spray foam covered tiles within the cupboard. The approximate location of this cupboard is shown as a green cross in Photo 5 above. No evidence of bats was recorded within this space and due to the spray foam insulation sealing the tiles from underneath, this part of the roof is considered to have **negligible suitability** for roosting bats.



Photo 10: Second smaller cavity space being a well-used storage cupboard.

Conclusions and Recommendations

The Preliminary Bat Roost Assessment showed that 34 High Street has **low potential** to support individual roosting bats under loose tiles and possibly under wooded fascia boards. However, due to the spray foam insulation that has previously been applied to the underneath of the tile roof, with plastering up to this spray foam, there is limited to no opportunities for roosting bats in the two remaining cavity spaces within the roof.

Based on the low and limited potential to support individual and opportunistic roosting bats under loose tiles, further surveys are not recommended, which is in accordance with the professional judgement as outlined with the Guidance (Collins, 2016¹).

However, it is suggested that the removal of the tiles is conducted under a Precautionary Method Working, which should detail the slow and ecologically sensitive removal of the tiles, preferably by hand, as far as reasonably possible in light that the tiles are sealed together by the spray foam underneath. If a bat is found during the works, all works should cease immediately until a licenced bat worker is contacted for further advice.

Ideally the work should be conducted post the summer period (post mid-September as a minimum) as the individual and opportunistic roosting under tiles is more likely within the summer months. However, due to the potential being recorded as low and the Precautionary Method Working as proposed being adhered to, works in September would be acceptable.

It is also recommended that bat boxes for crevice dwelling species are placed on the side of the house, to provide enhanced roost opportunities for bats in the local area. The location of these bat boxes should be agreed with an experience bat worker / ecologist.