



Bat Roosting Assessment

**Detached Barn
Rectory Farm
Church Lane
Kelshall
Hertfordshire**

April 2025

For and on behalf of:
Ms Janet Ward
Rectory Farm
Church Lane
Kelshall
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Date of Report

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Declaration

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Whilst every effort has been taken to ensure this report accurately identifies potential ecological constraints to development or the likely presence or absence of species and the spatial and temporal use of the site by such species, it must only be viewed as a snap shot in time and reflects the ecological status of the site at the time of survey.

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Quality Assurance

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Executive Summary

This report details the results of a Bat Roosting Assessment of a single modern barn at Rectory Farm, Church Lane, in Kelshall, north Hertfordshire.

The Bat Roost Assessment of this modern, single-storey barn, currently used for equine storage, found the building to contain very low bat roosting potential, and, in line with published guidance and using professional judgement, no further bat surveys are recommended. Whilst the barn was noted as having some sub-optimal PRFs, between the corrugated tin roof and a timber beam, these PRFs are only considered to offer very limited potential for occasional transient use by single or low numbers of bats. Based on these findings, further surveys are not considered proportionate and it is proposed that a precautionary approach to redevelopment is more appropriate.

Should roosting bats or evidence of roosting bats (the presence of bat droppings for example) be discovered during any future redevelopment works, works will cease immediately and the licensed bat Ecologist from ELMAW Consulting consulted as to how to proceed lawfully.

1.0 Introduction

1.1 Background

- 1.1.1 It is proposed to partially change the use of an existing barn to a single self-contained dwelling including a replacement roof, under planning reference 25/00297/FP, at Rectory Farm, Church Lane, Kelshall, Hertfordshire.
- 1.1.2 In order to ensure protected species, roosting bats in this case, are not unlawfully disturbed or injured in the partial redevelopment of the barn, a Preliminary Bat Roosting Assessment (PRA) has been completed by ELMAW Consulting, licensed bat surveyors, in April 2025.
- 1.1.3 This PRA was undertaken by Ms Jasmine Stephenson BSc., Assistant Ecologist and Accredited Agent working under Principal Ecologist Keith Seaman's Natural England Class Level 2 licence. The assessment was carried out in ideal weather conditions, with no restrictions over access and no noted limitations. The building subject to this application is outlined in yellow below.



Plate 1: Aerial photo showing indicative application site boundary

2.0 Methodology

2.1 Preliminary Bat Roosting Assessment

- 2.1.1 The specified and adopted methodology for this survey has been carried out following the guidelines published by The Bat Conservation Trust (Ref. 1).
- 2.1.2 It must be acknowledged however that, whilst we endeavour to follow these guidelines, we reserve the right to adapt the survey methodology, where appropriate, as the aforementioned guidelines state that they do not aim to override expert knowledge and experience and indicate that departure from or adaptation of their guidance based on site-specific conditions and professional judgement is often appropriate.
- 2.1.3 In carrying out the bat roost assessment, equipment used included;
- LEDLENSER P7R LED Torch
- 2.1.4 The building within the application site has been assessed for bat roosting potential based, in part, on the following factors which potentially increase the likelihood of roosting bats; more favourable roosting conditions may include features such as:
- Records of bats in the locality
 - Surrounding bat feeding and foraging habitat
 - The presence of architectural features within the building such as roof voids, lofts/attics, bargeboards, soffits, lead-flashing, hanging tiles, cavity walls, weather boarding, mortice and tenon jointed roof timbers and ridge tiles and beams which may offer Potential Roosting Features (PRFs)
 - Lined clay tile or slate roofs
 - The presence of potential access points such as cracks, voids, crevices and flight openings
 - Complex roofs, orientations and wall elevations
 - Favourable internal environmental conditions and temperatures
- 2.1.5 The building inspection was carried out on the 16th of April 2025. The Bat Roost Assessment was carried out by Ms Jasmine Stephenson BSc, overseen by Mr Keith Seaman, Principal Ecologist, who holds both a Natural England Level 2

Bat Class Licence and a Low Impact Bat Mitigation Class Licence (Licence numbers are available on request).

- 2.1.6 The potential for a building or landscape to support roosting or commuting and foraging bats is based on a number of factors which, when taken accumulatively, will result in a subjectively low, moderate or high bat roosting potential valuation.

Bat Roosting Potential Table

Suitability Potential	Features considered important in the Bat Roosting Assessment
Negligible or very low	No obvious PRFs, often found in areas of negligible or very low bat feeding, foraging and roosting habitat.
Low	One or more PRFs which are more likely to be used by single or low numbers of opportunist or transient bats at any time of the year due to lack of space, shelter or appropriate conditions. Highly unlikely to be suitable for breeding or classic hibernation but may be used by non-classic hibernating individual bats.
Moderate	Numerous PRFs that could be used by bats due to the size, space, shelter and conditions but unlikely to support a roost of high conservation status such as maternity and classic hibernation.
High	Numerous PRFs that support conditions that obviously favour higher numbers of bats, habitual roosting, breeding or classic hibernation of high conservation status, often found in association with high quality surrounding habitat.

Commuting and Foraging Evaluation Table

Suitability Potential	Commuting and Foraging Habitats
Negligible or very low	No obvious habitat features habitat features likely to be used by commuting or foraging bats.
Low	Limited quantity or diversity of habitat such as short or gappy hedgerows or isolated trees which are not well connected to surrounding landscape.
Moderate	Connectivity of habitat within the landscape and wider countryside that may include flight-path features such as linked gardens, lines of trees, scrub and grassland.
High	Continuous, high-quality habitat which maintains connectivity to the wider landscape which may include woodland, tree lined wetlands, parkland and river valleys. Sites that are often close to and connected to known roosts.

2.2 *Limitations of Bat Roost Assessment*

- 2.2.1 It should be acknowledged that the results of the bat roost assessment of the building are based on the presence of features, both physical and environmental, generally considered to increase the likelihood of roosting bats and not necessarily on the finding of roosting bats or direct indicative evidence such as bat droppings. Whilst, in some circumstances, the bat roosting assessment can result in a positive conclusion as to the presence of roosting

bats, further observational activity surveys may be considered necessary, to confirm any presence of roosting bats and to enable roost characterisation with any certainty.

- 2.2.2 With regard to establishing the presence of roosting bats, it must be further acknowledged that surveys carried out in accordance with industry standards endeavour to establish the presence of bat roosts appropriate to the time of year when the surveys have been carried out. Surveys completed within the optimum period, as required by Natural England, endeavour to establish the presence of non-breeding summer roosts or important summer maternity roosts. Surveys carried out at this time of the year cannot, with any certainty, establish the presence of spring/autumn transitory or winter roosts or seasonally occupied opportunist roosts by single or low numbers of bats.
- 2.2.3 The Chartered Institute of Ecology & Environmental Management (CIEEM) advises that where mobile species such as bats are concerned, this PRA is likely to be out of date within 12 - 18 months of reporting and will need updating.

2.3 Desk Study

- 2.3.1 Bat records from a radius of 2km, here forth known as the Zone of Influence (Zol), around the application site have been sourced from the Hertfordshire Environmental Records Centre on the 7th April 2025. The results of the data search request were received on the 7th April 2025. In addition, all international sites of nature conservation importance within a 10km Zol, nationally important sites within a 5km Zol and local sites within a 2km Zol of the application site have been sourced.
- 2.3.2 Only species records from the last ten years have been included as it is considered that records older than this are not sufficiently recent to be relevant to this study.
- 2.3.3 Google earth aerial photographs and DEFRA's Magic Map Application images have been examined of the application site and surrounding landscape as have the relevant Ordnance Survey Explorer Maps at a 1:25,000 scale.

3.0 Resulting Baseline Ecological Conditions

3.1 Designated Sites

- 3.1.1 There are no international designated sites of nature conservation importance within a 10km Zol. There are two national sites of nature conservation importance within a 5km Zol, both of which are Sites of Special Scientific Interest (SSSI); Therfield Heath SSSI, which is located approximately 3km to the north of the site, and Blagrove Common SSSI, located approximately 2.7km to the south of the site.
- 3.1.2 There are no Local Nature Reserves (LNRs) or Herts and Middlesex Wildlife Trust (HMWT) Nature Reserves within a 2km Zol, as well as no Local Wildlife Sites (LWSs) designated for bat roosts within the 2km Zol.
- 3.1.3 There is one bat European Protected Species Mitigation (EPSM) licence within the 2km search zone within the village of Kelshaw, approximately 100m north of the application site.
- 3.1.4 Whilst no roosting bats are recorded roosting within the application site, six species of bat are recorded locally - specifically from Broadfield Hall House and stable block, in Throcking. These species include common pipistrelle (*Pipistrellus pipistrellus*), brown long-eared (*Plecotus auritus*), barbastelle (*Barbastella barbastellus*), Leisler's (*Nyctalus leisleri*), noctule (*N. noctula*) and Natterer's (*Myotis nattereri*). Natterer's bats have been recorded from a barn on an adjacent farm - Manor Farm.

3.2 Bat Roosting Assessment

- 3.2.1 The barn is described as a single-storey modern barn, currently used for equestrian storage. The building is on a north-south orientation with a pitched roof on a western/eastern pitch. It is constructed from timber; unlined weather boarding with the majority of the roof constructed from unlined corrugated tin with a number of solar panels and a section of lined slate roof on the eastern pitch. Internally, the roof and walls are supported with modern flush-jointed timbers and the windows are timber-framed.
- 3.2.2 There is no roof void, attic or loft space and the survey found no voids, recesses or cavities with the potential to support roosting bats. Internally, a few voids were found in the limited number of corrugations of the tin roof, but

these were found to have no indicative evidence to suggest their current or recent use by roosting bats. Externally, no PRFs were found and internally, the barn lacked any PRFs, or indicative evidence of bat presence such as bat droppings, feeding remains, fur-staining or urine spotting. Consequently, a very low bat roosting potential has been concluded for the barn.



Plates 2 - 5: Exterior and interior views of the barn

4.0 Evaluation and Conclusion

4.1 Analysis and Interpretation of Results

- 4.1.1 There are no designated sites of nature conservation importance within a distance that may potentially be adversely affected by the proposed redevelopment. The application site is not reported as supporting roosting bats, at this time.
- 4.1.2 The barn within the application site is a modern single-storey building currently used for storage, constructed from modern materials of unlined weather boarding, flush-jointed roof supporting timbers and a roof of unlined corrugated tin and a section of lined slate roof.
- 4.1.3 Externally, there are no discernable cavities, recesses or gaps which could be considered PRFs.
- 4.1.4 Internally, there is no attic or loft space, the supporting timbers are flush-jointed and the corrugated tin roof and weather boarding walls are unlined; precluding any PRFs. The small section of lined slate roof was also found devoid of any PRFs. A few sub-optimal PRFs were found between some of the corrugations and timber framing which may provide some very limited potential for occasional transient use by single or low numbers of bats. However, it is unlikely that these are used for long periods of time due to the material lack of thermal stability and more suitable roosting opportunities elsewhere within the vicinity. No bats or indicative signs of bat usage of the barn were found and, based on the lack of bat evidence and the absence of any discernable optimal PRFs, the barn is found to have a very low bat roosting potential.

4.2 Further Surveys

- 4.2.1 Based on the conclusion that the barn has very low potential for roosting bats, no further surveys are recommended at this time. Whilst it is acknowledged that the barn has a very low number of sub-optimal PRFs, it is not considered proportionate to recommend further dusk emergence surveys of the building based on the unlikely use by transitional or opportunistic bats which may only ever be present on a single/low number of nights throughout the season. Therefore, a precautionary approach to redevelopment is more appropriate.

Should roosting bats or evidence of roosting bats, (the presence of bat droppings for example), be discovered during any future redevelopment works, works will cease immediately and the licensed bat ecologist from ELMAW Consulting consulted as to how to proceed lawfully.

4.3 Further Considerations

- 4.3.1 All species of bat, to a greater or lesser degree, use their places of shelter in a temporal and spatial way which may affect the status of a site or building at any given time. Roost sites which may appear temporarily vacated or abandoned could be re-occupied at any time in the future.

5.0 References

- Ref.1 Bat Conservation Trust. *2023 Bat Surveys for Professional Ecologists Good Practice Guidelines 4th Edition*, Bat Conservation Trust, London
- Ref. 2 Chartered Institute of Ecology & Environmental Management. *2017 Guidelines for Ecological Report Writing*
- Ref. 3 Altringham, J.D. (2003). *British Bats*. HarperCollins Publishers. London.
- Ref. 4 Reason, PF and Wray, S. (2023), *UK Bat Mitigation Guidelines*, Chartered Institute of Ecology and Environmental Management, Ampfield.
- Ref. 5 Joint Nature Conservation Committee. (2004), *Bat Workers' Manual*, JNCC, Peterborough.

6.0 Appendix 1

6.1 *Legislation Relating to Bats*

- 6.1.1 All bats and their roosts in the UK are protected by the Wildlife & Countryside Act 1981 (as amended), and under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended).
- 6.1.2 In England the legislation makes it illegal to;
- Deliberately capture, injure or kill a bat,
 - Deliberately disturb a bat which is likely to impair their ability to survive, breed or reproduce, rear or nurture their young, hibernate, migrate or affect significantly their local distribution or abundance
 - Damage or destroy a breeding site or resting place of a bat
 - Possess, control, transport, sell, exchange or offer for sale or exchange any live or dead bat or any part of a bat
- 6.1.3 Bats' roosts (including resting places) are protected whether or not bats are present at the time. The Wildlife & Countryside Act 1981 (as amended) additionally makes it an offence to;
- Intentionally or recklessly disturb a bat at a roost
 - Intentionally or recklessly obstruct access to a roost
- 6.1.4 Finally, under the Natural Environment and Rural Communities Act (NERC) 2006, a duty is placed on all public bodies to promote and enhance biodiversity in all its functions. There is a general biodiversity duty in the NERC Act (Section 40) which requires every public body in the exercising of its functions to 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. Section 41 draws up lists of species of principal importance to which special attention must be given and a number of bats are included in this list.