

21 Bayliss Road
Wargrave
Reading
Berkshire
RG10 8DR

Preliminary Roost Assessment

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CONTENTS PAGE

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	4
2.1	Project Background	4
2.2	Site Location and Context	4
2.3	Report Objectives	4
3	LEGISLATIVE AND POLICY BACKGROUND	5
3.1	Relevant Legislation	5
3.2	Planning Policy	5
3.3	Mitigation Licensing	6
4	SURVEY METHODOLOGY	8
4.1	Desk Study	8
4.2	Building Inspection	8
5	SURVEY RESULTS	11
5.1	Desk Study	11
5.2	Building Inspection	12
6	DISCUSSION	17
6.1	Assessment of Potential Roost Suitability	17
7	IMPACT ASSESSMENT	18
7.1	Potential Impacts	18
7.2	Recommendations	18
8	REFERENCES	19
	APPENDIX 1 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS	20
	APPENDIX 2 – DEFINITION OF BAT ROOST TYPES	21
	APPENDIX 3 – FURTHER SURVEY RATIONALE	22

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Mrs Angela Sharma to undertake a Preliminary Roost Assessment (PRA) for bats at 21 Bayliss Road, in Wargrave, Berkshire. The PRA was commissioned to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for the construction of single storey front and side extensions, with a dormer extension above the garage.
- 1.1.2** The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities.
- 1.1.3** No evidence of bats were found internally, so the presence of void-dwelling bats is considered highly unlikely. Externally there were some features, including gaps between the soffit and brickwork on the western gable and crumbling verge mortar along the garage that could provide access opportunities and support crevice roosting bats. The crumbling mortar was closely inspected and deemed to lead to gaps of limited extent so were considered unlikely to support roosting bats. Overall the house was deemed to be of low bat roost potential.
- 1.1.4** The proposals include single storey extensions and dormer extension above the garage will that will not impact on the low potential roost features at the western gable. Therefore, the development proposals are unlikely to lead to the loss of bat roosts of the disturbance, injury and/or death of bats.
- 1.1.5** In the unlikely event that bats are encountered during the course of the work, the work must stop immediately and a licensed ecologist should be called to site to attend to the bat(s) and provide further advice on how to proceed.
- 1.1.6** This report contains information regarding a mobile species so it will likely be valid for less than 12 months (CIEEM 2019).

2 INTRODUCTION

2.1 Project Background

- 2.1.1** John Wenman Ecological Consultancy LLP was instructed by Mrs Angela Sharma to undertake a Preliminary Roost Assessment (PRA) for bats at 21 Bayliss Road, in Wargrave, Berkshire.
- 2.1.2** The PRA was commissioned to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for the construction of single storey front and side extensions, with a dormer extension above the garage – See proposed plans in **Appendix 4**.

2.2 Site Location and Context

- 2.2.1** The detached residential dwelling is located on the northern side of Bayliss Road cul-de-sac in Wargrave, Berkshire (central OS grid reference: SU 78652 78444).
- 2.2.2** The site is surrounded by further residential houses and their respective gardens. The surrounding landscape includes a parcel of deciduous woodland adjacent to Sheeplands Farm approximately 175m to the south of the site. Further woodland parcels were present 270m to the west of the site and the River Thames is present 355m to the north-west of the site, with open grassland along the bank.

2.3 Report Objectives

- 2.3.1** The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities.

3 LEGISLATIVE AND POLICY BACKGROUND

3.1 Relevant Legislation

3.1.1 In England and Wales, all bat species found in the wild are fully protected under the Wildlife & Countryside Act 1981 (as amended) (WCA) and Conservation of Habitats and Species Regulations 2017 (as amended); the regulations are commonly referred to as the Habitat Regulations and hereafter referred to as such. The Habitat Regulations refer to European Protected Species (EPS) and all species of bats in the United Kingdom (UK) are EPS. Although the UK left the European Union on the 31st January 2020 and is therefore no longer tied to European legislation, the Habitat Regulations have been retained in their current format.

3.1.2 The legal framework underpinned by the WCA and Habitat Regulations makes these specific actions an offence as follows:

- Deliberately kill, injure, capture or take a wild bat;
- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or to significantly affect local distribution or abundance;
- Damage or destroy a place used by a bat for breeding or resting; and
- Intentionally or recklessly obstruct access to any place used by a bat for shelter or protection.

3.2 Planning Policy

3.2.1 The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England. Government planning policy, such as the ODPM Circular 06/2005, requires LPAs to account for the conservation of protected species when considering and determining planning applications.

3.2.2 The ODPM Circular 06/2005 states that *'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'* This policy means that in instances where there is a reasonable likelihood of bats being

present and affected by a development, surveys must be undertaken to inform a mitigation strategy to be agreed prior to granting planning permission.

3.3 Mitigation Licensing

3.3.1 The government's statutory nature conservation body, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (2)(e) – the derogation is for the purposes of '*preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.*'
- (9)(a) – there is '*no satisfactory alternative*' to the derogation; and
- (9)(b) – '*the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*'

3.3.2 LPAs have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations to consider and determine whether these three tests are likely to be satisfied by planning proposals affecting EPS before granting planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

3.3.3 The Bat Mitigation Class Licence (BMCL) scheme allows ecologists to apply to become Registered Consultants to use this licence for low conservation status roosts, i.e. roosts comprising small numbers of seven commonly occurring species. A site registration form must be completed as a condition of the licence and submitted to Natural England at least three weeks before the licensable activities are due to start; Natural England aims to register sites within two weeks of submission.

3.3.4 Baseline survey information supporting EPS mitigation licence applications or BMCL site registrations must be up-to-date and have been completed within the current or most recent optimal season. A suitably experienced ecologist will be required to

undertake a site walkover/check within three months prior to application/registration submission to confirm that conditions have not changed since the most recent survey.

4 SURVEY METHODOLOGY

4.1 Desk Study

4.1.1 A desk-based study for bats was undertaken to collate and review existing information about the site and the surrounding land. The study utilised the following open access resources:

- OS maps and Google Earth – maps and satellite imagery were used to identify potential flight paths and foraging habitats for bats;
- MAGIC – examined to locate granted European Protected Species licences; and
- Pre-existing bat survey reports – any available reports were obtained from the client or relevant planning portal to provide background information for the site.

4.2 Building Inspection

Survey Details

4.2.1 A detailed inspection of the exterior and interior of the property was undertaken on the 5th December 2024 by Meghan Porter - registered under Natural England Bat Survey Class Licence CL17 (Registration no.: 2023-11300-CL17-BAT) and assisted by Hannah McEwen – in accordance with good practice guidelines (Collins 2023). The equipment used during the inspection comprised binoculars, a high-power (1 million candlepower) LED torch, a headtorch, ladder and PPE (facemask, gloves etc.). The inspection involved a systematic search of the exterior and interior of the structure during daylight hours to compile information on potential and actual bat access points; potential and actual bat roost sites; and any evidence of bat presence.

External Survey

4.2.2 Frequently used bat access points and/or roost sites include (but are not limited to) spaces:

- behind hanging tiles, weatherboarding, soffit boxes and barge boards;
- under lead flashing (particularly around chimneys) and roof tiles/slates; and
- in existing bat boxes.

4.2.3 It is important to note that the two most abundant and widespread bat species, common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), typically only require gaps measuring 15mm by 20mm to gain access to a roost inside a building.

4.2.4 The external survey involved a systematic search for evidence of bats including:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining; and
- squeaking noises.

4.2.5 It should be noted that bats can be present in a building while leaving no visible signs externally and wet weather has the potential to wash any evidence away. The search for evidence was focused on (but was not limited to) the ground, windowsills, windowpanes and walls (including cladding and hanging tiles); particularly in places near to potential bat access points and/or roost sites.

Internal Survey

4.2.6 The internal survey comprised a systematic search for evidence of bats on the upper floors of the building (i.e. checking the exterior from windows) and inside the roof and eave spaces. Evidence of bats found during an internal inspection can include:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining;
- feeding remains (i.e. moth wings);
- squeaking noises;
- bat-fly (Nycteribiid) pupal cases; and
- odour.

4.2.7 It should be noted that only specimens or droppings can be relied upon in isolation to confirm the presence of a bat roost.

4.2.8 Frequently used roosting locations within the roof include (but are not limited to):

- the apex of the gable end or dividing walls;
- the top of chimney breasts;

- ridge and hip beams;
- mortise and tenon joints;
- behind purlins; and
- between tiles and roof lining.

Survey Limitations and Validity

- 4.2.9** There were no significant survey limitations because PRAs can be carried out at any time of year under any weather conditions and the building was fully accessible.
- 4.2.10** It should be noted that it is not always possible to inspect all potential roost sites during a survey, particularly for bat species which typically roost in hidden crevices. Therefore, an absence of bat evidence found during a survey does not necessarily equate to evidence of bat absence in a building.
- 4.2.11** This report contains information regarding a mobile species so it will likely be valid for less than 12 months (CIEEM 2019).

5 SURVEY RESULTS

5.1 Desk Study

5.1.1 The surrounding habitats include residential properties and includes gardens and tree lines that resembles continuous habitat providing flight paths to the nearby woodland and riverine habitats that offer high-quality foraging opportunities for bats.

5.1.2 Bat mitigation licences that have been granted within the last 10 years inside a 2-kilometre radius of the property are detailed in **Table 1** below.

Table 1. Bat mitigation licences granted within a 2km radius of the property (Source: MAGIC).

Case Reference of Granted Licence	Species on the Licence	Licensable Period	Licensable Works	Distance (m)
2015-7819-EPS-MIT	Soprano pipistrelle & Common pipistrelle	24/04/2015 – 30/04/2020	Destruction of a resting place	1380 NW
2020-44644-EPS-MIT	Brown long-eared & Soprano pipistrelle	05/02/2020 – 31/08/2020	Destruction of a resting place	1675 S
2017-29718-EPS-MIT	Brown long-eared & Soprano pipistrelle	12/06/2017 – 08/06/2022	Destruction of a resting place	1680 NW
2015-7768-EPS-MIT- 1	Soprano pipistrelle	19/02/2016 – 30/04/2020	Destruction of a resting place	1735 NW
2018-35667-EPS- MIT-1	Common pipistrelle	01/01/2019 – 31/12/2019	Destruction of a resting place	1780 E
2015-7300-EPS-MIT- 2	Brown long-eared, Soprano pipistrelle & Common pipistrelle	19/11/2015 – 30/04/2020	Destruction of a resting place	1820 N
2019-43232-EPS-MIT	Soprano pipistrelle	01/11/2019 – 30/06/2025	Destruction of a resting place	1840 NW

5.1.3 The homeowner had no existing bat survey reports in their possession and none had been published on the Local Planning Authority's (LPA) online planning portal.

5.2 Building Inspection

Overview

- 5.2.1** The findings from the external and internal inspections carried out for the building are described with photographs and annotated in a plan, as follows:

External Survey

- 5.2.2** The house was a detached dwelling of brick cavity-wall construction with a pitched roof covered in interlocking roof tiles, and a catslide roof on the front elevation over the attached garage (**Photographs 1 & 2**).



Photograph 1. Front elevation of the house, viewed from the south.



Photograph 2. Rear elevation of the house, viewed from the north.

- 5.2.3** The roof was covered with interlocking, machine-made concrete tiles that were in place and flat, and mossy on the front and rear elevations (**Photograph 3**). The ridge tiles were intact across the roof (**Photograph 4**).



Photograph 3. Tight, mossy interlocking roof tiles (front elevation).



Photograph 4. Intact ridge tiles (rear elevation).

- 5.2.4** The verge mortar was intact along the western and eastern gables, with crumbling sections of verge mortar along the eastern and western sides of the garage (**Photograph 5; Target note 1**) On closer inspection the gaps were of limited extent

and no evidence of the presence of bats was found. The timber soffit boxes were fitted tightly to the UPVC cladding on the front and rear elevations, with a gap between the soffit and the brickwork on the western gable (**Photograph 6; Target note 2**).



Photograph 5. Crumbling verge mortar above garage (western elevation).



Photograph 6. Gap under uPVC soffit on western gable.

- 5.2.5** The uPVC cladding was tight on the front and rear elevations of the house, with lifted sections of uPVC trim on the front elevation, which had cobwebbed gaps of limited extent underneath the vertical section and intact mortar beneath the section above the porch roof (**Photograph 7; Target note 3**)



Photograph 7. Lifted uPVC trim above porch roof (front elevation).

Internal Survey

- 5.2.6** There was one loft void that covered the building's second-story footprint, and was accessible via a loft hatch on the first floor. The roof was of pre-trussed rafters that were cobwebbed throughout, with no ridge beam present (**Photograph 8**). The roof was lined with bituminous reinforced bitumen that was intact throughout but had one section of loose overlapping felt on the rear elevation (**Photograph 9; Target note 4**).



Photograph 8. Cobwebbed rafters with no ridge beam (roof void).



Photograph 9. Loose overlapping section of felt on the rear elevation (roof void).

5.2.7 The floor had a small section of wooden boarding below two empty water tanks to the right of the loft hatch. The rest of the void was covered in fibreglass insulation throughout that went up to the eaves, with the top of the wall plate visible in places (**Photograph 10; Target note 5**). There were scattered mouse and rat droppings present on top of the fibreglass insulation throughout the void (**Photograph 11**).



Photograph 10. Fibreglass insulation up to open eaves (roof void).



Photograph 11. Rat droppings on fibreglass insulation (roof void).

5.2.8 The gable ends were of blockwork construction, which were tight to the roofing felt, and cobwebbed between the rafters and the blockwork (**Photographs 12 & 13**).



Photograph 12. Cobwebbed blockwork gable (roof void).



Photograph 13. Blockwork tight to roof felt (roof void).

- 5.2.9** The garage was open to the roof internally, with intact bitumen felt throughout. The rafters were cobwebbed and tight to the blockwork wall.
- 5.2.10** No evidence of roosting bats was observed during the external or internal survey of the property.

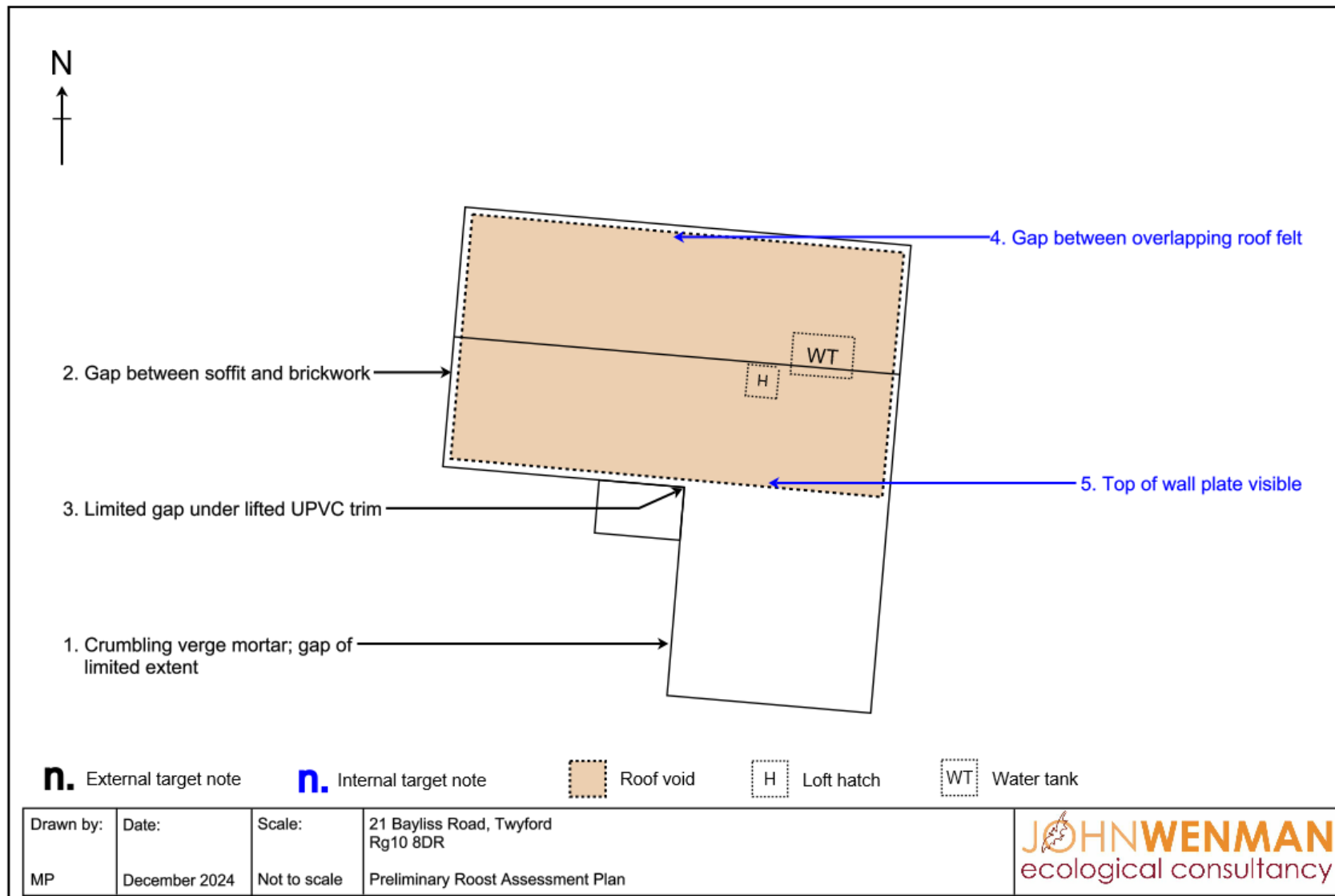


Figure 1. Preliminary Roost Assessment survey plan.

6 DISCUSSION

6.1 Assessment of Potential Roost Suitability

6.1.1 The surrounding area has continuous habitat providing flight paths and high-quality foraging opportunities for any bat(s) potentially roosting in the property. Furthermore, the search of granted bat mitigation licences identified at least three species roosting within a 2km radius of the outbuilding: soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared bat (*Plecotus auritus*).

6.1.1 The house had the following suitable/potential bat access points:

- Crumbling verge mortar (**Photograph 5; Target note 1**);
- Gap between soffit and brickwork (**Photographs 6; Target note 2**); and
- Lifted uPVC trim (**Photograph 7; Target note 3**).

6.1.2 There was an enclosed roof void offering sufficient space for internal flight and suitable conditions for regular use by individual or small non-breeding groups of void-dwelling bats, such as the locally recorded brown long-eared bat (*P. auritus*). However, there was no evidence of use by bats within the void, so it is therefore considered unlikely that brown long-eared bats (*P. auritus*) or other principally void-dwelling species are present.

6.1.3 The gap behind the soffit offers a feature of low suitability for use as bat access and crevice roosting site i.e. only with sufficient space, shelter, protection and conditions for use by individual crevice-dwelling bats, such as the locally recorded common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) (see **Appendix 1** for potential suitability categories). The lifted uPVC trim on the front had mortar and blockwork visible underneath and was cobwebbed, showing no evidence of use by bats, and the crumbling mortar was closely inspected and shown to be of limited extent; both features were deemed to be of negligible bat roost potential.

7 IMPACT ASSESSMENT

7.1 Potential Impacts

Overview

- 7.1.1** The proposals are for single storey front and side extensions and a dormer extension above the garage. The impacts of the proposals have been assessed in accordance with the mitigation hierarchy during construction and post development, as follows:

Construction Phase

- 7.1.2** The proposals, which will involve internal and external alterations, will not affect the soffit box feature of low suitability for bats at the western gable and therefore are unlikely to lead to the damage/destruction of bat roosts, or to the disturbance, injury and/or death of bats.

Post Development

- 7.1.3** The proposals are unlikely to result in the permanent loss or damage of a bat roost and therefore are unlikely to affect the local distribution or abundance of local bat species. The proposals present an opportunity to enhance roosting opportunities for bats e.g. through the installation of bat roost features.

7.2 Recommendations

- 7.2.1** The development proposals are unlikely to have adverse effects on bats and/or their roosts. Therefore, a European Protected Species (EPS) mitigation licence would not be required for the planned works to go ahead lawfully.
- 7.2.2** In the unlikely event that bats are encountered during the course of the work, the work must stop immediately and a licensed ecologist should be called to site to attend to the bat(s) and provide further advice on how to proceed.
- 7.2.3** The integration of a bat tube in the brickwork on the eastern elevation of the proposed dormer will enhance the property for roosting bats.
- 7.2.4** This report contains information regarding a mobile species so it will likely be valid for less than 12 months (CIEEM 2019).

8 REFERENCES

CIEEM (2019). *Advice Note on the Lifespan of Ecological Reports and Surveys*. CIEEM, Winchester.

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

Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd edition)*. JNCC, Peterborough.

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. CIEEM, Ampfield.

APPENDIX 1 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS

The categories detailed in **Table 2** below are derived from the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) and provide guidance for assessing the potential suitability of buildings (and other structures) for roosting bats. These categories are applied using professional judgement and irrespective of whether the presence of a bat roost has been confirmed during a survey, as additional bat roosts could be present which have not yet been discovered.

Table 2. Categories for potential suitability of buildings (and other structures) for roosting bats.

Potential Suitability	Category Justification
None	A building (or structure) that has no features likely to be used by any roosting bats at any time of the year (i.e. a complete absence of cracks, crevices or voids that could provide suitable shelter).
Negligible	A building (or structure) that has no obvious features likely to be used by roosting bats, but in this case a small element of uncertainty remains as bats will occasionally use small and apparently unsuitable features. This category may also be used where a bat could potentially roost due to one attribute, but it is considered unlikely due to another attribute (e.g. a feature that is subject to constant illumination from artificial lighting).
Low	A building (or structure) that has one or more potential roost sites suitable for opportunistic use by individual bats at any time of the year. However, these potential roost sites for bats do not provide sufficient space, shelter, protection, conditions and/or surrounding suitable habitat to be used regularly or by large numbers (i.e. unlikely to be suitable for a maternity colony and not a classic hibernation site).
Moderate	A building (or structure) that has one or more potential roost sites suitable for regular use by individual bats, or small non-breeding groups, due to sufficient space, shelter, protection, conditions and surrounding habitat. However, these potential roost sites for bats are unlikely to support a roost of high conservation status with regards to the type of roost only (i.e. maternity colonies and classic hibernation sites).
High	A building (or structure) that has one or more potential roost sites suitable for use by large numbers of bats more regularly and for longer periods of time due to sufficient space, shelter, protection, conditions and surrounding habitat. These potential roost sites for bats are capable of supporting high conservation status roosts (i.e. maternity colonies and classic hibernation sites).

APPENDIX 2 – DEFINITION OF BAT ROOST TYPES

The potential suitability of a building in conjunction with any evidence of bat presence is used to provide an initial assessment of likely roost type and importance. The types of roost considered are based on the following Natural England definitions:

- Day roost – a summer resting place used by individual bats, or small non-breeding groups, during the day;
- Night roost – a resting place used by individual bats on occasion, or by a whole colony regularly, during the night;
- Feeding perch – a resting place used by individual bats, or a few individuals, primarily for short periods of feeding during the night;
- Transitional roost – a place used by a few individual bats, or occasionally small groups, for a short period of time upon waking from hibernation or in the period prior to hibernation;
- Maternity roost – a place used by small to large groups of female bats to give birth and raise their young to independence;
- Hibernation roost – a place used by individual bats, or in groups, during winter where there is a constant cool temperature and high humidity; and
- Satellite roost – a place used by a few individuals to small groups of breeding female bats found in close proximity to the main nursery colony throughout the breeding season.

The importance of a bat roost is underpinned by the conservation status of the suspected species (i.e. the distribution/rarity of a species in a specific geographic location) and the type of roost (i.e. not all roosts have the same level of importance in supporting the local bat population). Further roost characterisation surveys may be required to fully determine the importance of a confirmed roost to allow for a robust impact assessment.

APPENDIX 3 – FURTHER SURVEY RATIONALE

In cases where no evidence of use by bats is found during a building inspection but the possibility of their presence cannot be ruled out, further presence/likely absence survey is likely to be required if the development proposals will impact potential roost sites.

Emergence surveys are carried out to establish the presence or likely absence of roosting bats in buildings (and other structures) and these are designed in accordance with the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) detailed in **Table 3** below.

Table 3. Recommended further survey for establishing presence/likely absence of roosting bats in buildings (and other structures).

Potential Suitability	Further Survey
None	No further surveys are required.
Negligible	No further surveys are required.
Low	A minimum of one dusk emergence survey visit should be undertaken in the period of May to August. However, if all areas (including cracks, crevices and voids) can be thoroughly inspected and no evidence of use by bats is found, then emergence surveys may not be required. In cases where a complete inspection cannot be carried out, professional judgement and proportionality should be applied when assessing the impacts of the development proposals.
Moderate	A minimum of two dusk emergence survey visits should be undertaken in the period of May to September, with at least one of the surveys between May and August; the survey visits should be spaced at least three weeks apart.
High	A minimum of three separate dusk emergence survey visits should be undertaken in the period of May to September (inclusive), with at least two of the surveys between May and August; the survey visits should be spaced at least three weeks apart.

In cases where the PRA and/or further survey establishes the presence of roosting bats in a building (or structure), this will likely trigger the need for roost characterisation to collect sufficient information to inform the impact assessment and mitigation strategy. The roost characterisation comprises information collected during the PRA, emergence surveys and by other methods, such as DNA analysis of bat droppings, and ultimately aims to determine the bat species roosting; the number of bats the roosts support; the roost access points; the locations of the roosts and the types of roost present. This information is crucial when applying for planning permission and/or a European Protected Species mitigation licence.

APPENDIX 4 – EXISITNG AND PROPOSED LAYOUT

