



18 Church Road, Caversham RG4 7AD

Preliminary Bat Roost Assessment

Sundance Construction Limited

Report prepared by:
Ecus Ltd
Unit 4
Prisma Park
Berrington Way
Basingstoke
RG24 8GT

+44 (0)125 622 4588

October 2024

Ecus Ltd

Report to: Sundance Construction Ltd
Report Title: 18 Church Road, Caversham RG4 7AD Preliminary Bat Roost Assessment
Version: V1.0
Issue Date: October 2024
Report Ref.: 24226
Originated by:



Jess Sams

Graduate Ecologist

Date: 16/10/2024

Reviewed by:



Joseph Allsopp

Senior Ecologist

Date: 21/10/2024

Approved by:



Alex Hellyar

Senior Ecologist

Date: 25/10/2024

Version	Author	Description	Date
0.1	JS	Initial draft	16/10/2024
0.2	JA	Technical review	21/10/2024
0.3	JS	Edits	22/10/2024
0.4	AH	Approver review	25/10/2024
1.0		Issued to client	28/10/2024

The report and the site assessments carried out by Ecus on behalf of the client in accordance with the agreed terms of contract and/or written agreement form the agreed Services. The Services were performed by Ecus with the skill and care ordinarily exercised by a reasonable Environmental Consultant at the time the Services were performed. Further, and in particular, the Services were performed by Ecus taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between Ecus and the client.

Other than that expressly contained in the paragraph above, Ecus provides no other representation or warranty whether express or implied, in relation to the services.

This report is produced exclusively for the purposes of the client. Ecus is not aware of any interest of or reliance by any party other than the client in or on the services. Unless expressly provided in writing, Ecus does not authorise, consent or condone any party other than the client relying upon the services provided. Any reliance on the services or any part of the services by any party other than the client is made wholly at that party's own and sole risk and Ecus disclaims any liability to such parties.

This report is based on site conditions, regulatory or other legal provisions, technology or economic conditions at the time of the Service provision. These conditions can change with time and reliance on the findings of the Services under changing conditions should be reviewed.

Ecus accepts no responsibility for the accuracy of third party data used in this report.

Contents

SUMMARY.....	5
1. INTRODUCTION.....	6
1.1 BACKGROUND.....	6
1.2 DEVELOPMENT PROPOSALS.....	6
1.3 SURVEY OBJECTIVES	6
1.4 QUALITY ASSURANCE	6
2. LEGISLATION	7
3. METHODOLOGY.....	8
3.1 PRELIMINARY BAT ROOST ASSESSMENT	8
3.2 LIMITATIONS.....	9
4. RESULTS	10
4.1 DESK STUDY	10
4.2 BAT INSPECTION.....	10
5. DISCUSSION AND RECOMMENDATIONS.....	14
5.1 DISCUSSION.....	14
5.2 RECOMMENDATIONS.....	14
6. REFERENCES	15
APPENDIX 1 GRANTED EUROPEAN PROTECTED SPECIES MITIGATION LICENSES FOR BATS.....	16
APPENDIX 2 RECOMMENDED BAT BOX EXAMPLES.....	18

Summary

Ecus Ltd were commissioned in August 2024 by Sundance Construction Limited to undertake a Preliminary Bat Roost Assessment (PBRA) for a building at 18 Church Road, Caversham. The survey area comprised a two storey red brick construction, with a hipped roof, and several dormer windows. There is a single storey extension, at the south-east corner of the building. The proposals are to extend the house by constructing an additional level on top of an existing extension.

Ecus Ltd completed the Preliminary Bat Roost Assessment (PRBA) on 26th September 2024. The survey was carried out by Joseph Allsopp MCIEEM, who holds a Natural England bat survey licence (2019-43906-CLS-CLS).

Limitations include the presence of an active wasp's nest in the loft void which limited the time spent surveying there, however it was still possible to view all sections of the loft void so it did not prevent making an adequate assessment.

Due to the number and type of Potential Roost Features (PRFs), within the property, the potential overall for roosting bats was assessed as High. However, it is only likely to be able to support maternity roosts for crevice-dwelling bats between the roof tiles and the lining with the loft void being less suitable for bats.

No evidence of roosting bats was recorded during the external and internal building inspection. Two nocturnal surveys are recommended.

If at any time during the proposed roofing works any bats or signs of bats are discovered, then all works must cease and advice sought from an experienced, bat licenced ecologist. If bats are then confirmed as being present, a mitigation licence approved by Natural England must be sought and in place before the works can legally proceed.

As the roofing works are likely to remove potential roost features from the Site, it is recommended that a suitable bat box (as shown in Appendix 2) be installed as enhancement for potential future roosting bats.

1. Introduction

1.1 Background

1.1.1 Ecus Ltd were commissioned in August 2024 to undertake a Preliminary Bat Roost Assessment (PBRA) for a building at 18 Church Road, Caversham, RG4 7AD. The building is a residential house located at Ordnance Survey (OS) National Grid Reference (NGR) SU 71030 74788, hereafter referred to as “the Site”. The main objective of the assessment was to determine the suitability of the Site to support bats (and other protected species) and to check for any evidence of their presence, as well as the presence of any protected or notable habitats. A previous bat survey report had been done on this property in 2022 by Naturally Wild Ltd (Naturally Wild, 2022).

1.2 Development Proposals

1.2.1 The proposed works are to extend the house by constructing an additional level on top of an existing extension. The proposed works will affect the existing roof of the house.

1.3 Survey Objectives

1.3.1 The objectives of the PBRA were to:

- Identify, where possible, if bats are currently using the building as a roost;
- Identify potential roosting features;
- Advise on any further survey work if necessary, and;
- Assess the potential constraints and implications of the survey findings with regards to the proposed works.

1.4 Quality assurance

1.4.1 The PBRA report was completed by Graduate Ecologist Jess Sams.

1.4.2 Senior Ecologist Joseph Allsopp has reviewed this report in accordance with Ecus' Quality Assurance policy.

1.4.3 The report was approved by Senior Ecologist Alex Hellyar.

2. Legislation

- 2.1.1 All species of bat within the UK are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded protection under Section 9(1), Section 9(4)(b&c) and Section 9(5) of the Act. Under this legislation, a person is guilty of an offence if they intentionally or recklessly:
- Kills or injure a bat;
 - Disturb a bat whilst it is occupying a structure or place it uses for shelter or protection, and;
 - Obstruct access to any structure or place which any bat uses for shelter or protection.
- 2.1.2 Bats are afforded protection through their inclusion on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under Part 3 of this legislation, a person is guilty of an offence if they:
- Deliberately capture, injure or kill a bat;
 - Deliberately disturb a bat, and;
 - Damage or destroy a bats breeding or resting place.
- 2.1.3 Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, breed or reproduce, rear or nurture their young, migrate or hibernate. It also includes any disturbance likely to affect significantly the local distribution or abundance of the species.

3. Methodology

3.1 Preliminary Bat Roost Assessment

- 3.1.1 The assessment of the Site comprised a desk-based study to collate any publicly accessible records of bats and a site visit to complete an inspection of the building. The site visit was undertaken on 26th September 2024 by Joseph Allsopp MCIEEM, who holds a Natural England bat survey licence (2019-43906-CLS-CLS).
- 3.1.2 The weather conditions on the day were as follows: 16 °C, wind 3 (Beaufort scale), no precipitation and 80% cloud cover, and were considered suitable for completing the assessment.
- 3.1.3 The building was visually inspected in accordance with the best practice survey guidelines (Collins, 2023). An individual building may have several features of potential interest to roosting bats associated with it. It is not always possible to confirm usage of a feature by bats, as often the animals may be present on one day and no evidence of occupation found on the next. Consequently, it is customary when undertaking such surveys to assign each feature to a defined category of roosting potential, as follows: None, Negligible, Low, Moderate or High (Collins, 2023). The visual inspection comprised an external and internal daytime inspection using the following methods.

External Inspection

- 3.1.4 The exterior walls and roof of the extension building were viewed using close-focusing (8 x 24) binoculars from ground-level and features providing potential bat access or roosting places were noted. Potential Roost Features (PRFs) searched for included (but not limited to):
- Gaps between roof tiles and ridge tiles;
 - Gaps under eaves or within soffit box;
 - Cracks or holes in the brick work, and;
 - Gaps under lead flashing seals.
- 3.1.5 Areas where bat droppings may accumulate, such as on the ground, ledges, window sills and walls, were also inspected. Any features that may potentially be used by bats were identified and any evidence of bat activity as listed below were noted.

Internal Inspection

- 3.1.6 The internal inspection comprised a search of the loft void and cellar using a high-powered torch and endoscope for evidence indicative of past or present use by roosting bats. Direct evidence of bat presence includes:
- Live bats or bat corpses;
 - Droppings;
 - Feeding remains in the form of butterfly wings;
 - Bat sounds;
 - Scratch marks;
 - Urine stains, and;
 - Clean, cobweb free gaps around potential entrance points.

3.1.7 Potential access points and roosting sites were also noted.

3.1.8 The results of the external and internal inspection are presented in **Section 4.2**.

3.2 Limitations

3.2.1 The data provided by publicly accessible online sources is not exhaustive. It is possible that bat species not included in the desk study occur within the vicinity of the extension building.

3.2.2 During the interior survey, there was an active wasp nest in the loft void which reduced the amount of time that could be spend surveying. However, it was still possible to view all sections of the loft void, so this did not prevent an adequate assessment being made.

3.2.3 The details within this report will remain valid for a period of 12 months; beyond that date it is advised that a review of ecological conditions is undertaken.

4. Results

4.1 Desk Study

European Protected Species (EPS) Mitigation Licences

- 4.1.1 A search of MAGIC maps (magic.defra.gov.uk) was undertaken and 14 EPS Mitigation Licences for bats had been granted within 2 km of the Site. The closest licence pertains to a licence for soprano pipistrelle *Pipistrellus pygmaeus* 381m east of the Site in 2014. Details of these licences are provided in **Appendix 1**.

4.2 Bat Inspection

External Inspection

- 4.2.1 The building was a two-storey, red brick extension construction with a hipped roof and several dormer windows. There is a single storey extension, at the south-east corner of the building.
- 4.2.2 The brick work and pointing is in very good condition with no PRFs visible. The timber rafters protrude out from the wall at the eaves, and there are a few small crevices around these on both the front and rear elevations which could allow access for bats, but the majority of the rafters do not have any gaps of a suitable size.
- 4.2.3 The roof has clay tiles, with gaps on all pitches. The lead flashing is in good condition with no gaps recorded.
- 4.2.4 Artificial lighting comprises a streetlight approximately 10 metres from the northwest corner of the house, and also small lights mounted to the walls on both the north and south elevations.
- 4.2.5 No evidence of roosting bats was recorded during the external inspection. **Table 1** provides details of the features identified. A reference number was allocated to each feature.
- 4.2.6 The rear garden contains a range of ornamental tree and shrub species, and the River Thames is immediately adjacent south of the garden. The surrounding habitats therefore provide some suitable foraging opportunities for bats.

Table 1: External Building Inspection Results

Reference Number	Feature Description	Photograph	Roosting Potential
PRF 1	Examples of gaps between clay tiles on roof		High

Reference Number	Feature Description	Photograph	Roosting Potential
			
PRF 2	Gaps around protruding rafter at eaves		Low
PRF 3	Gap under tile		Low

Bat Internal Inspection

- 4.2.7 In the loft, the surveyor torch was turned off and the only place daylight could be seen was where electrical cables were running into the loft from outside, however these gaps were not wide enough for bats to get through. It is possible there were other gaps leading outside which were out of sight.
- 4.2.8 A gap was found leading outside when the property was surveyed previously by Naturally Wild in 2022, however this may have now been blocked.

- 4.2.9 The roof has wooden sarking in good condition with very few gaps. It is not possible to determine if there is another lining such as bitumen between the sarking and the roof tiles. No bat droppings or other evidence of bats was recorded. The loft is partially used for storage and appears to receive regular human disturbance.
- 4.2.10 The cellar is underneath the extension wing and is used for storage, it appears to receive high levels of human disturbance. No access points were observed where bats could access inside. The cellar is deemed negligible for bat roost potential.
- 4.2.11 **Table 2** outlines the details of the internal inspection with photographs.

Table 2: Internal Building Inspection Results

Feature Description	Photograph of Feature
Images of the loft void, which has limited suitability for bats due to a lack of outside access, and likely high levels of human disturbance.	 The photographs show the interior of a loft void. The top photo shows a view looking up at the wooden roof structure with several beams. The middle photo shows a closer view of the wooden beams and insulation. The bottom photo shows a view looking down at the insulation and wooden beams.
The cellar, considered negligible for bat roost potential.	 The photograph shows the interior of a cellar, which is cluttered with various items, including boxes, equipment, and storage containers. The walls are made of brick and the floor is concrete.

4.2.12 No evidence of roosting bats was recorded during the external and internal building inspection. However, due to the number of PRFs within the property, and the surrounding habitats, the potential overall for roosting bats has been assessed as **High**.

5. Discussion and Recommendations

5.1 Discussion

- 5.1.1 During the PBRA of the building undertaken by Ecus Ltd in September 2024, no direct evidence of bats was recorded.
- 5.1.2 Due to the number of PRFs observed during the external and internal inspection the building has been assessed as offering **High** potential for roosting bats.
- 5.1.3 The building is likely to be able to support crevice-dwelling bats between the roof tiles and the lining, although the loft void is less suitable for bats.

5.2 Recommendations

- 5.2.1 The current bat survey guidelines recommend three nocturnal surveys are carried out to determine the presence of roosting bats for structures with high bat roost potential (Collins, 2023). However, as an internal inspection was carried out by a licensed bat worker during the 2024 PBRA, and also because low levels of bat activity were recorded during the last nocturnal survey of the Site (Naturally Wild, 2022), two nocturnal surveys will be proportionate to update the previous bat surveys.
- 5.2.2 The two nocturnal surveys should be carried out between May and August, spaced at least three weeks apart. Due to the size of the property, it is recommended that at least four surveyors (with night vision aids / infra-red recording equipment) will be required to adequately cover all elevations.
- 5.2.3 No works should take place until these surveys have been completed. Depending on the result of these surveys and the extent of the works, an EPS licence may be required prior to the commencement of works.
- 5.2.4 This assessment is considered valid for 12 months or when the building changes (e.g. through weather damage or human intervention), whichever is sooner.
- 5.2.5 If at any time during the proposed roofing works any bats or signs of bats are discovered, then all works must cease and advice sought from an experienced, bat licenced ecologist. If bats are then confirmed as being present, and impacts cannot be avoided, a mitigation licence approved by Natural England must be sought and in place before the works can legally proceed.
- 5.2.6 As the roofing works are likely to remove potential roost features from the Site, it is also recommended that a suitable bat box be installed as enhancement for potential future roosting bats. Example specifications are provided in **Appendix 2**.

6. References

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

Defra's MAGIC Map - <https://magic.defra.gov.uk/MagicMap> [accessed on 16/10/2024]

Naturally Wild (2022) Bat Survey Report 18 Church Road Caversham RAL-22-01, Stockton-on-Tees [unpublished report on behalf of Robin Akers Ltd]

Appendix 1 Granted European Protected Species Mitigation Licences for Bats

Table 3. Granted EPS Mitigation Licences for Bats within 2km of the Site.

Licence reference number	Licence dates	Licence details	Proximity to the Site
2018-35917-EPS-MIT	27/06/2018-30/11/2018	Licence to destroy a resting place for common pipistrelle <i>Pipistrellus pipistrellus</i>	1.93km north
2015-18560-EPS-MIT	25/01/2016-31/01/2021	Licence to destroy a resting place for brown long-eared bat <i>Plecotus auritus</i> and soprano pipistrelle	1.87km north-west
2014-3600-EPS-MIT	29/09/2014-01/10/2019	Licence to damage and destroy a resting place for common pipistrelle	1.73km north-west
2015-14137-EPS-MIT	16/09/2015-15/09/2020	Licence to destroy a resting place for common and soprano pipistrelle	1.73km north-west
2017-29064-EPS-MIT	01/09/2017-01/09/2027	Licence to destroy a breeding site for soprano pipistrelle	1.37km north-west
2014-2980-EPS-MIT	12/09/2014-01/10/2015	Licence to destroy a resting place for common pipistrelle and soprano pipistrelle	1.19km north-west
2015-13539-EPS-MIT	02/09/2015-01/09/2016	Licence to destroy a resting place for common pipistrelle	1.30km north-west
2016-27061-EPS-MIT	03/01/2017-03/01/2017	Licence to destroy a resting place for common pipistrelle and brown long-eared bat	397m north-west
2018-33476-EPS-MIT	07/03/2018-21/02/2023	Licence to destroy a resting place for serotines <i>Eptesicus serotinus</i> .	1.73km north-east
EPSM2011-3175	10/07/2011-31/08/2012	Licence for common pipistrelle	939m north-east
2014-1343-EPS-BDX	01/10/2014-30/10/2014	Licence for soprano pipistrelle	381m east
2017-28045-EPS-MIT	08/03/2017-08/03/2022	Licence for Daubenton's bat <i>Myotis daubentonii</i>	1.16km south-east
EPSM2013-6155	19/09/2013-31/08/2015	Licence to destroy a resting place for common pipistrelle	1.39km south-east

Licence reference number	Licence dates	Licence details	Proximity to the Site
2019-44194-EPS-MIT	01/02/2020-31/03/2020	Licence to destroy a resting place for common pipistrelle and soprano pipistrelle	1.67km south-east

Appendix 2 Recommended Bat Box Examples

Table 4. Recommended bat boxes.

Name	Photograph	Cost	Website
Double Chamber Hardwood Bat Box		£18.31	https://www.wildcare.co.uk/hardwood-bat-box.html
Convex Bat Box		£42	https://www.wildcare.co.uk/convex-bat-box.html
Vivara Pro WoodStone Bat Box		£20.99	https://www.nhbs.com/vivara-pro-woodstone-bat-box

