

Preliminary bat roost assessment

Site Location	27 Magdalen Road, Oxford, OX4 1RP
Document reference	CE4292
Date of Site visit	27 th June 2023
Report by	Garry Smith – Senior Ecologist

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Validity of data

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

Executive Summary

Chase Ecology undertook a Preliminary Roost Assessment (PRA) at the named site. The aim of the assessment was to consider the value and suitability of the structures for roosting bats & nesting birds as detailed below;

Survey Methodology	An internal & external survey was carried out by Garry Smith for the potential roosting and usage of the structure for bats & nesting birds. See section 3 (Methodology). Additional to the visit further research has been carried out on the Magic.gov database and National Biodiversity Network
Results of Preliminary Bat Roost Inspection	 SEE SECTION 6.0 Following a preliminary bat roost assessment, it has been identified that both the building and surrounding environments offer value to bats. A 2km search of previous Granted European Protected Species Applications revealed five granted European Protected Species applications for Daubenton's, Common Pipistrelle, Soprano Pipistrelle & Brown Long-eared bats. A 2km radius search has demonstrated habitats of value to bats including woodland, parkland, open fields, hedgerows and waterbodies of which support feeding & commuting. The building has evidenced roosting features of low value within the roof coverings which look to offer likely access and availability to both void & crevice dwelling bats and could not be fully ruled out during the Preliminary Roost Assessment without causing disturbance to materials which in effect may cause disturbance to possible bat roosts within. No internal evidence of bats was identified within the roof void areas; however, we are unable to rule out or confirm any roosting evidence within the spaces between the roof coverings/vaulted ceiling coverings where evidence such as droppings wouldn't always be visible within the enclosed habitats,
Evidence of Nesting Birds	No evidence of nesting birds identified

Requirements for Additional Survey	In line with best practice guidelines, a further single emergence or re-entry survey will be required to rule out or confirm activity from bats. This survey should be carried out within the recommended survey season from May to August. If bat are recorded to be using features of the structure where disturbance would be caused a 2 nd & 3 rd emergence survey would be required to support the requirements for a European Protected Species mitigation licence. See Appendix 2: Bat Conservation Trust flow chart
	assess a building or tree's bat roost potential and the survey effort required to determine the likely presence or absence of bats
Legislation	Evidence of these additional survey requirements are placed upon all LPA's by both Part 4 (50) of The Conservation (of Natural Habitats) Regulations 1994 (as amended 2017) and section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 (which places a duty on LPA's, to have regard, so far as is consistent with the proper exercise of its functions, to the purpose of conserving biodiversity).
	Furthermore should an LPA approve a planning application (where Bats presence was deemed a likelihood) prior to Bat usage of the area affected by the development being fully understood (known) then should that development result in either the disturbance (including disturbance to behaviours or migration), injury or death of a Bat then the authority and developer could be considered too have acted recklessly under Part 1 (9) of the Wildlife and Countryside Act 1981 (as amended 2016); and as such be guilty of committing an offence.
	Prior to any planning decision being made, emergence/re- entry surveys must be completed, as stated by Natural England and the Bat Conservation Trust's (BCT) Bat Surveys Good Practice Guidelines.
	This will enable a fuller understanding of bats usage of the building and assess the appropriateness of the level of mitigation.

Predicted Impacts of Development on Bats and Nesting Birds	Further assessment required to confirm or rule out any activity from bats and to assess any disturbance caused during development.
Mitigation and Compensation of Proposed Impacts	Not at this stage
Licensing Requirements for Bats	Not at this stage
Required Actions	See section 6.0 It is advised that no further works take place to the identified areas of value to bats at this stage as this may cause disturbance to bats and their roosts. see section 2.0 of this report

CONTENTS

1.0 Introduction
2.0 Legislation
3.0 Methodology
4.0 Results
5.0 Plans & Photographs
6.0 Conclusion and/or recommendations
7.0 References

Appendix 1: Location plan

Appendix 2: Bat Conservation Trust flow chart

Appendix 3: Description of the categories used to assess a building or tree's bat roost potential and the survey effort required to determine the likely presence or absence of bats

Appendix 4: Emergence Survey Location Points

1.0 Introduction

Brief

1.1 This report will present the findings of a preliminary bat roost assessment and nesting bird survey of the named site and further research of the area online.

Site description

1.2An unoccupied former commercial/dwelling, see section 5.0 images.

2.0 Legislation

2.1.1 All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017, making it an offence to:

Deliberately kill, injure or capture a bat; Deliberately disturb bats; Damage or destroy a breeding site or resting place

- 2.1.2 In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly Obstruct access to any structure or place which any bat uses for shelter or protection; or Disturb any bat while occupying a structure or place which it uses
- 2.1.3 If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.
- 2.1.4 In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2010 (as amended). All wild birds, their nests and eggs are protected it an offence to: kill, injure, or take any wild bird; take, damage or destroy the nest of any such bird whilst it is in use or being built; or take or destroying an egg of any such wild bird.
- **2.1.5** Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

3.0 METHODOLOGY

- 3.1 All reporting undertaken by Mr Garry Smith who is an experienced licensed bat ecologist in England [Class 2 registration 2017-28032-CLS-CLS] with over 10 years' experience practical of professional ecological surveys.
- **3.2** Preliminary roost assessments can be undertaken throughout the year and can provide conclusive results, which can save expense and time for Planning Applicants. The optimum time to investigate for the presence of bats is during their active season when signs of presence can be more easily located.
- **3.3** A thorough interior and exterior inspection of the building for bat roosting and potential roosting features was undertaken. Signs surveyed for included droppings, dead bats, feeding remains (beetle, moth and butterfly remains), urine staining and grease marks around crevices and down walls, and any noises such as scratching and audible bat calls.
- **3.4** During the survey, the surrounding area was assessed in relation to suitable habitat that may be of value to bats.
- 3.5 Surveys were conducted following best practice guidelines (Collins, 2016)
- **3.6** All areas of the building internally were inspected with the aid of a 2 million c/p lamp and inspection camera. External features were also inspected where possible and observations were aided with binoculars where needed.
- **3.7** A desk top survey was also completed to establish the biodiversity of the area along with its habitat structures including statutory and non-statutory designations
- 3.8 Biological records were not obtained for this survey

4.0 Results

Desk Study Environmental record search

4.1 A data search from freely available resources was undertaken to assess the names species for distribution/record within a 2km study area which demonstrated records for;

Brown Long-eared Common Pipistrelle Soprano Pipistrelle Daubenton's

HABITAT	Distance (km)	DIRECTION
DECIDUOUS WOODLAND	0.30	NE
DECIDUOUS WOODLAND	0.50	S
DECIDUOUS WOODLAND	0.65	SW
WOODPASTURE & PARKLAND	0.80	W
DECIDUOUS WOODLAND	1.10	Ν

Priority Habitat Inventory within 2km

None of the above names sites/locations would be effected in any way from the proposed development plan for this site, including both habitats and species.

- **4.2** Aerial photographs of the site were consulted to determine if there are important landscape features surrounding and within vicinity of the site.
- 4.3 A 2km search of previous Granted European Protected Species Applications revealed five granted European Protected Species applications for Daubenton's, Common Pipistrelle, Soprano Pipistrelle & Brown Long-eared bats.

Field study

4.4 The Preliminary Roost Assessment for bats was carried by Garry Smith [Class 2 registration 2017-28032-CLS-CLS] where the dwelling and surrounding areas were assessed for the possible usages of bats & birds.

External	Features of	Notes
	value to bats	
External Stonework	No	The brickworks to the structure have demonstrated a fair level of condition with no observed features of value to bats noted.
Window/door frames	No	No gaps or features of value to bats observed within or surrounding the door/window frames.
Eaves coverings	No	No gaps of adequate proportion to offer access or roosting value was observed throughout.
Roof coverings	Yes	The front three storey section of the building had demonstrated a small number of raised tiles and gaps between the tiles and stonework's to the West gable. In addition the two storey section to the far North of the site has also demonstrated a small gap between the roof tiles and brickworks below. These features would likely provide shelter/access opportunities for bats with potential for daytime roosting within. The central fabricated roof section has demonstrated no suitable features of value to bats.

Internal	Features of	Notes
Membrane coverings	value to bats Unknown	Both the three storey section and two storey section have demonstrated vaulted ceiling coverings with no visual inspection opportunities below the roof tiles. Such coverings would offer further daytime roosting opportunities for crevice dwelling species of bats where external gaps provide access.
Protruding daylight	No	No areas of daylight observed within the roof void spaces.
Evidence from bats	No	No internal evidence of bats was identified within the roof void areas; however, we are unable to rule out or confirm any roosting evidence within the spaces between the roof coverings/vaulted ceiling coverings where evidence such as droppings wouldn't always be visible within the enclosed habitats,
Restrictions	No	Full access available during the survey.

Limitations

4.5 Many species of bat in the UK are crevice dwelling, and signs of bats and bats themselves can be difficult to find within a building or within areas that are inaccessible such as the gaps within roof coverings, eves and cavities within the stonework's.

5.0 Plans & Photographs

Image 1 – South facing elevation of the building where an area of raised tiles looks to provide likely shelter/access opportunities for bats within



Image 2 – As per image one above



Image 3 – West facing elevation of the three storey section where gaps between the roof coverings and stonework's below look to provide further opportunities for bats



Image 4 – As per image three above

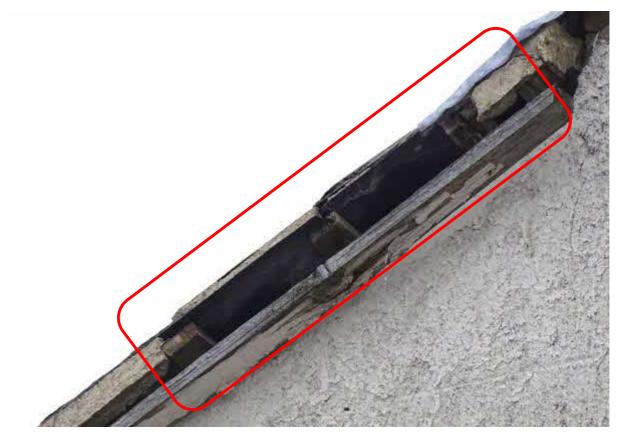


Image 5 – Rear North areas of the two/three storey section of the building



Image 6 – Internal view from within the three storey section of the building where no accessible roof void spaces are provided





Image 7 - View across the flat roof areas of the mid section of the site

Image 8 – Internal view from within the fabricated section of the building to the rear of the three storey building

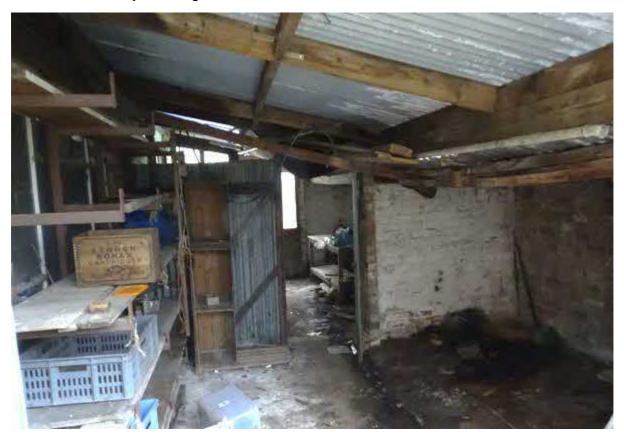


Image 9 – West facing elevation of the two storey structure to the far North of the site where gaps between the roof coverings and brickworks look to provide further shelter/access opportunities for bats



Image 10 – as per image nine above

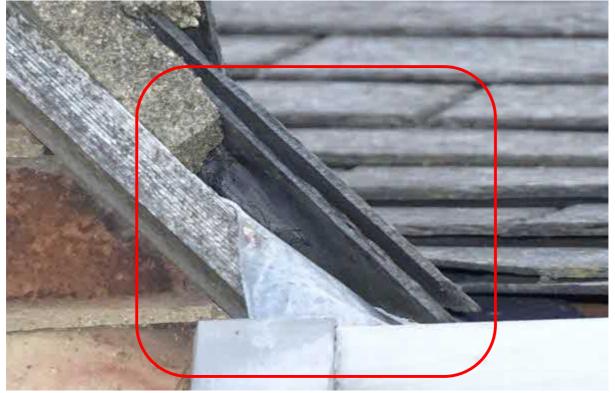


Image 11 – Internal view from below the roof areas as per image nine on the previous page



6.0 Conclusion and recommendations

All recommendations provided in this section shall be on Chase Ecology's current understanding of the site proposals and current planning application, correct at the time the report was compiled. Should any aspect of the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate

- **6.1** Following a preliminary bat roost assessment, it has been identified that both the building and surrounding environments offer value to bats.
- 6.2 A 2km search of previous Granted European Protected Species Applications revealed five granted European Protected Species applications for Daubenton's, Common Pipistrelle, Soprano Pipistrelle & Brown Long-eared bats.
- **6.3** A 2km radius search has demonstrated habitats of value to bats including woodland, parkland, open fields, hedgerows and waterbodies of which support feeding & commuting.
- 6.4 The building has evidenced roosting features of low value within the roof coverings which look to offer likely access and availability to both void & crevice dwelling bats and could not be fully ruled out during the Preliminary Roost Assessment without causing disturbance to materials which in effect may cause disturbance to possible bat roosts within.
- 6.5 No internal evidence of bats was identified within the roof void areas; however, we are unable to rule out or confirm any roosting evidence within the spaces between the roof coverings/vaulted ceiling coverings where evidence such as droppings wouldn't always be visible within the enclosed habitats,
- **6.6** In line with best practice guidelines, a further single emergence or re-entry survey will be required to rule out or confirm activity from bats. This survey should be carried out within the recommended survey season from May to August.
- **6.7** If bat are recorded to be using features of the structure where disturbance would be caused a 2nd & 3rd emergence survey would be required to support the requirements for a European Protected Species mitigation licence.
- **6.8** It is advised that no further works take place to the identified areas of value to bats at this stage as this may cause disturbance to bats and their roosts. see section 2.0 of this report

7.0 References

Bat Conservation Trust. 2012. Bats and Buildings. Bats and the Built Environment Series. London. Bat Conservation Trust. 2018.

http://www.bats.org.uk/pages/bat_boxes.html (Accessed July 2021).

Bat Conservation Trust. 2018.

Bats and Artificial Lighting in the UK.

Bats and the Built Environment Series. London. Collins, J. (ed). 2016.

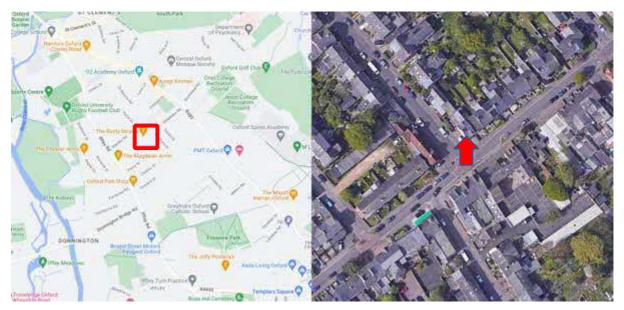
Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition/ Interim Guidelines

Bat Conservation Trust. Multi-Agency Geographical Information for the Countryside web http://magic.defra.gov.uk Mitchell-Jones, A.J. 2004 Bat mitigation guidelines.

English Nature, Peterborough. Mitchell-Jones, A.J. and McLeish, A.P. 1999 (revised 2004).

The Bat Workers Manual. Joint Nature Conservation Committee, Peterborough. Stone, E.L. 2013. Bats and Lighting: Overview of Current Evidence and Mitigation Guidance.

Appendix 1: Location plan



Appendix 2: Below flow chart taken from the Bat Conservation Trust, Good Practice Guidelines used when assessing the suitability of a structure and any additional survey requirements.

Bat Conservation Trust

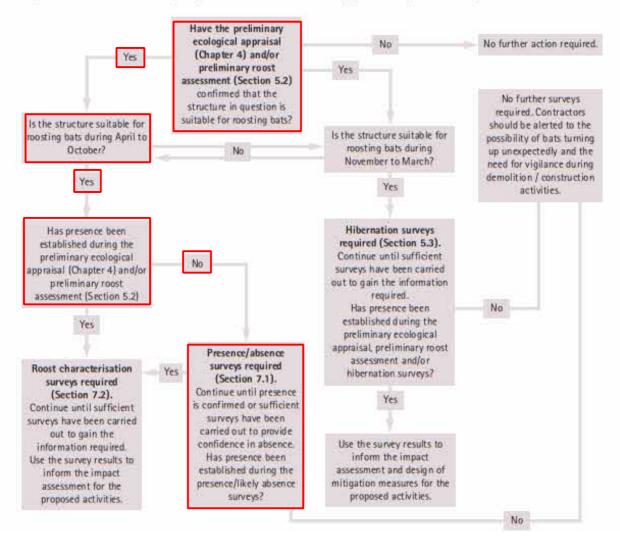


Figure 5.1 Flow chart illustrating the process used to establish which types of surveys are necessary for roosts in structures.

Appendix 3: Description of the categories used to assess a building or tree's bat roost potential and the survey effort required to determine the likely presence or absence of bats

Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further surveys required.
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 features but with none seen from the ground or features seen	One dusk emergence or pre- dawn re-entry surveys between May and August.
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 but unlikely to support a roost of high conservation status (with respect to roost type only i.e. irrespective of species conservation status, which is established after presence is confirmed).	Two surveys, comprising one dusk emergence and a separate pre-dawn re-entry surveys between May and September with at least on between May and August.
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.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey
Confirmed	Bats or evidence of bats found.	Surveys would be required to establish the status of the roost. Generally, three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August (two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey).

Appendix 4: Emergence Survey Location Points

Below site view to show suitable surveyor location points during each emergence survey to maintain visibility of the property.



In line with best practice guidelines, a total of three surveyors will be required to suitably cover all elevations which offer value to bats with support from IR/Thermal imaging cameras to reduce the number of surveyors required.