

Adonis Ecology

Report for Preliminary Roost Assessment at Rushbrooke Farm, Milden to Support a Planning Application

Project Ref: 1505

Prepared on behalf of:

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The findings outlined within this report and the data we have provided are to our knowledge true, and express our bona fide professional opinions. This report has been prepared and provided in accordance with the Chartered Institute for Ecology and Environmental Management (CIEEM) Code of Professional Conduct and the British Standard BS 42020:2013 which provides a code of practice for biodiversity in planning and development (BSI, 2013). This in turn recommends compliance with CIEEM Guidelines for Preliminary Ecological Appraisals (CIEEM, 2013) and Guidelines for Ecological Report Writing (CIEEM, 2017) which includes model formats for Preliminary Ecological Appraisal and Ecological Impact Assessment.

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- to enable greater clarity and reduce repetition (e.g. the report author is listed once on the quality assurance page in this report rather than on the front page, quality assurance page and introduction as in the CIEEM model formats);
- where there are inconsistencies in the guideline documents (e.g. the list of what should be included in the summary of an ecological report highlighted in the CIEEM Guidelines for Ecological Report Writing is different to that shown in the model formats in the same document); and
- to retain a proportionate approach in accordance with BS 42020:2013.

No method of assessment can completely remove the possibility of obtaining partially imprecise or incomplete information. Therefore, we cannot guarantee that this assessment completely defines the degree or extent of the occurrence of various species or habitats on the site, or the effectiveness of recommended actions as described in the report. In addition, as the ecological situation of a site is dynamic, this assessment pertains only to the conditions noted during the site visit. Therefore, to achieve the objectives of assessment as stated in this report, the conclusions are based on the information that was available during the time of the assessment and within the limits prescribed by our client in the agreement.

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0 SUMMARY

- 0.1 Adonis Ecology Ltd. was commissioned by Sarah Offord to undertake a Preliminary Roost Assessment (PRA) of the residence of Rushbrooke Farm, Church Road, Milden, Ipswich, Suffolk, IP7 7AH, Grid Reference TL 955 464. It was understood it was planned to retile the roof.
- 0.2 The preliminary roost assessment was carried out by Adonis Ecology on the 16th August 2021. The assessment included an external and internal check for potential for bats, as well as signs and evidence of bats, in accordance with Natural England (Natural England, 2004) and Bat Conservation Trust (BCT) (Collins, 2016) guidelines.
- 0.3 The assessment found one brown long-eared bat roosting in the western part of the loft space, as well as numerous droppings throughout the loft space. There were several access points at the eaves and there were crevices potentially suitable for bats between roof tiles at the ridge and under some lifted lead flashing by the base of the chimney and around one exhaust pipe.
- 0.4 In accordance with the Bat Conservation Trust Good Practice Guidelines, three nocturnal survey visits of the house, two dusk and one dawn survey, are recommended to confirm the number of bats and bat species using the roof in order to determine the best way forward in compliance with wildlife legislation.

1 INTRODUCTION

1.1 Background

- 1.1.1 Adonis Ecology Ltd. was commissioned by Sarah Offord to undertake a Preliminary Roost Assessment of the main residence of Rushbrooke Farm, Church Road, Milden, Ipswich, Suffolk, IP7 7AH, Grid Reference TL 955 464.
- 1.1.2 The preliminary roost assessment was carried out by Adonis Ecology on the 16th August 2021. It was understood it was planned to retile the roof. A check of the building for bats was required to assess the current potential for impact on bats and provide a strategy to ensure compliance with wildlife legislation and associated planning requirements.

1.2 Aim and Objectives

- 1.2.1 The aim of this report is to determine the likely impact of the proposed works on bats.
- 1.2.2 To achieve this aim, the report has the following objectives:
- to identify and describe any potentially significant impact risks to bats associated with the planned works to the building on site;
 - to identify ways in which any significant risk of deleterious impacts could be avoided, wherever reasonably possible;
 - for any significant bat risks that could not reasonably be avoided, to describe surveys that would be required to confirm presence/absence and severity of impact, and outline likely mitigation options.

1.1 Planning Policy and Legislation

- 1.1.1 Planning policy and guidance considered for this report included:
- National Planning Policy Framework (NPPF);
 - National Planning Practice Guidance (NPPG) – Natural Environment.
- 1.1.2 Legislation considered for this report included:
- Wildlife and Countryside Act 1981, as amended;
 - Countryside and Rights of Way Act 2000;
 - Natural Environment and Rural Communities (NERC) Act 2006;
 - Conservation of Habitat and species Regulations 2017, as amended.
- 1.1.3 Key considerations from the NPPF and NPPG related to ecology and development include that impacts on legally protected species and habitats, as well as NERC Act (2006) Section 41 species and habitats are a material consideration for individual planning consents (MHCLG, 2019).

- 1.1.4 The NPPF also promotes the enhancement of natural and local environments through planning, and encourages a move towards securing measurable net gains for biodiversity (MHCLG, 2019).

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 The surrounding habitat was assessed using a combination of maps (Google Earth and Ordnance Survey) and observations of the surrounding landscape from the site, to enable the site to be put into its local habitat context. These maps were also used to locate key habitats within a 500m radius of the site.
- 2.1.2 In addition, the Multi-Agency Geographic Information for the Countryside (MAGIC) interactive map was accessed to locate statutory designated sites within 2km of the site and to determine whether the site falls within the Impact Risk Zone of any Sites of Special Scientific Interest (SSSI) cited for bats.

2.2 Assessment

- 2.2.1 The site visit was undertaken on the 16th of August 2021 by an ecologist who was covered by a Natural England Level 2 Class licence for bats (2015-11578- CLS-CLS) and an assistant. The survey was undertaken in daylight using high-powered torches to survey the roof both externally and internally.
- 2.2.2 The bat survey methods followed Natural England Bat Mitigation Guidelines (Natural England, 2004) and Bat Conservation Trust (BCT) Good Practice Guidelines (Collins, 2016) and therefore considerations were:
- the availability of access points of a size large enough to allow entry of bats to roosts;
 - the presence and suitability as roosts of cracks, crevices, holes, dense ivy *Hedera helix* covering and other places;
 - signs of bat activity or presence.
- 2.2.3 Definite signs of bat activity were taken to be:
- the bats themselves;
 - droppings;
 - dead bats;
 - audible bat squeaks;
 - scratch marks;
 - urine splatter.

- 2.2.4 Signs of possible bat presence were taken to be:
- grease marks;
 - moth and butterfly wings.
- 2.2.5 The outside of the roof was checked for gaps, cavities, access points and crevices, and any signs of bats, in accordance with Natural England guidelines (Natural England, 2004).
- 2.2.6 The inside of the roof was checked for signs and evidence of bat activity and opportunities for roosts. As many crevices as could be safely accessed were checked for suitability and signs of bats.
- 2.2.7 The suitability of places to roost was assessed based upon potential for access and lack of cobwebs and dirt.
- 2.2.8 Building inspection survey is a suitable method at any time of year for determining presence or absence of bats in buildings, according to Natural England guidelines (Natural England, 2004).

3 RESULTS

3.1 Site Description

- 3.1.1 The house surveyed was a two-storey dwelling with loft space, part of the building was of a newer date. It was surrounded by a large garden with two ponds and mature trees, overlooking arable farmland.

3.2 The Surroundings

- 3.2.1 The site was located in the village of Milden, surrounded by farmland. Immediately to the west were a few houses with large gardens.
- 3.2.2 There were two wooded areas within 500m of the site: a small area approximately 230m to the southwest with a treeline directly linking it to the site, and a very small area approximately 440m southeast of the site with no treeline links (Google Earth, 2021).
- 3.2.3 There were 13 ponds and lakes of various sizes, including one moat, within 500m of the site (Promap, 2021), several with good commuting links for bats. Two of the ponds were in the garden in which the house was located.
- 3.2.4 Key features of the surrounding landscape are summarised as follows:

Table 1: Key Features of the Site Surroundings

Feature	Value
Percentage deciduous tree cover within 500m of site	5%
Percentage non-illuminated tree/tall shrub cover (over 4m) within 50m of the site	8%
Number of non-illuminated tree/tall shrub lines within 50m of the site	3
Distance from nearest medium-large pond, lake, river or open stream to site boundary	3m
Percentage of rough grassland within 500m of the site	8%
Degree to which surrounding 500m is built up (rural, suburban, urban)	Rural

Statutory Designated Wildlife Sites

3.2.5 There were two statutory designated wildlife sites within 2km of the site, both Sites of Special Scientific Interest (SSSI):

- Brent Eleigh Woods SSSI, a group of three ancient woodlands: Spragg's, Langley and Camps Woods. The closest point to the site is approximately 1.5km northwest;
- Milden Thicks SSSI, a group of inter-related ancient woodlands. The closest point to the site is approximately 1.5km southwest (MAGIC, 2021)

3.2.6 There were no ancient woodlands within 500m of the site (MAGIC, 2021).

3.2.7 The site falls within an Impact Risk Zone of Statutory Designated Wildlife Sites, however there was no requirement for the Local Planning Authority (LPA) to consult Natural England on the type of works proposed for this site (MAGIC, 2021).

3.3 Assessment

3.3.1 The house was a two-storey building of which one part was of a newer date. The roof was pitched with pan tiles (see Photograph 1 in Appendix 1). Crevices and gaps that could be suitable for bats were present:

- between tiles just below the ridge;
- at several places where the cement was missing from the corrugations of the bottom row of tiles;
- on the chimney where mortar was missing at places;
- around the chimney base where the lead flashing had lifted (see Photograph 2 in Appendix 1); and
- around an exhaust outlet where the flashing had lifted as well.

3.3.2 The newer part of the building had soffits which looked well sealed. The older part of the building had no soffits and there were clear gaps at the eaves providing plenty of access to the loft space inside (see Photograph 3 in Appendix 1).

- 3.3.3 The inside of the roof space was divided into three sections: a room in the eastern loft space; the western loft space; and the northern loft space of the newer part of the house which came off the western loft space.
- 3.3.4 The room at the eastern part of the loft space was lined with bitumen felt as well as being plastered so there was no visible ridge and only very limited places for bats hang from in the room itself. However, there were large holes in the plastering in several places providing access for bats to roost behind the plastering (see Photograph 4 in Appendix 1). There were no cross beams, leaving an open space for bats to fly around, the room was not very cobwebbed, and there was direct access from the outside at the eaves where the plastering were broken (see Photograph 5 in Appendix 1). Several bat dropping were found in this room, believed to be mainly from brown long-eared bats.
- 3.3.5 The western loft space was lined with bitumen felt throughout and was un-plastered. There were some limited cross beams, still leaving a sizeable clear space for bats to fly around in (see Photograph 6 in Appendix 1). There were clear access points at the eaves in several places and relatively few cobwebs, especially at the ridge. There were a few clusters of bat droppings underneath the roof ridge, approximately 50-150 in each cluster (see Photograph 7 in Appendix 1), though the entire loft space had scattered bat droppings throughout. One brown long-eared bat was found roosting at the ridge (see Photograph 8 in Appendix 1).
- 3.3.6 The northern loft space came off the western loft space with direct access between them. The northern loft space was of a newer date with more cluttered beams and no visible access points at the eaves. The space was largely unwebbed and there were numerous bat droppings as well, with a cluster towards the northern end under the ridge beam especially.

4 LEGISLATION AND IMPACT RISK

4.1 Summary of Relevant Legislation

- 4.1.1 Bats are protected under the Conservation of Habitats and Species Regulations 2017, as well as the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000. Offences likely to be relevant to development are to:
- deliberately capture, injure or kill a bat;
 - deliberately disturb a bat in a way that would affect its ability to survive, breed, rear young, hibernate or migrate or significantly affect the local distribution or abundance of the species;
 - damage or destroy a roost;
 - intentionally or recklessly disturb a bat at a roost;
 - intentionally or recklessly obstruct access to a roost.

4.2 Risk to Roosting Bats

- 4.2.1 Given that one brown long-eared bat was seen roosting in the loft space and droppings were found throughout the loft in all three areas, the risk to roosting bats from the proposed works without precautions or mitigation is very high. Given that several crevices were found in the roof, there is also a high risk of impact to pipistrelles or other crevice-roosting bats.

5 RECOMMENDATIONS

5.1 Further Surveys

- 5.1.1 In accordance with the Bat Conservation Trust Good Practice Guidelines, three nocturnal survey visits of the house, two dusk and one dawn survey, are recommended to confirm the number of bats and bat species using the space in order to determine the best way forward in compliance with wildlife legislation.
- 5.1.2 If harm or disturbance to bats, or obstruction or damage to bat roosts cannot be reasonably avoided in the proposed works, then to allow the works to proceed lawfully, works would need to be undertaken under a Natural England European Protected Species Licence (EPSL) or Bat Mitigation Class Licence (BMCL) for the building. Which licence is required depends on the number and species of bats confirmed to be using the building. No works should be undertaken that could affect bats until the licence has been obtained, and then only in line with any recommendations provided at that time.
- 5.1.3 Depending upon the finding of the surveys, and details of the works, it may be possible to avoid the need for a licence if it is possible for any identified bat roosts and access for bats to those roosts to be retained as is during works and the risk of harm or disturbance to bats minimised. The works would need to be designed and approved by an ecologist as well as being overseen by an ecologist.
- 5.1.4 If the works have not been undertaken within two years of bat survey of the building, the risk of impact to bats should be re-assessed.

5.2 Impact Avoidance Measures and Mitigation

- 5.2.1 It is considered that only a low number of bats are likely to be using the site for roosting. The following is a description of the likely impact avoidance measures and mitigation that would be undertaken if the numbers are confirmed to be low and a Bat Mitigation Class Licence for the site were granted:
- prior to the works commencing on site, a Vivara Pro WoodStone Bat Box would be positioned on a tree within the grounds, at a height of at least 4m above ground level, with a clear flight path available to the box for bats. This box would be retained in perpetuity to provide continued opportunities for roosting bats on the site;

- the removal of roof materials would be undertaken between March and the end of October, when bats are less likely to be vulnerable to disturbance;
- before works commence, the ecologist would provide a toolbox talk to all site workers outlining the potential for bats to be encountered and what workers should do if they see any bats or signs/evidence of bats during the works;
- works would then continue with materials being removed by hand, with the works to areas considered to have significant potential for roosting bats being overseen by a suitably licensed ecologist. Any materials to be removed should be carefully lifted, not slid or knocked off, and all materials should be checked for bats before being discarded;
- if any other roost sites or potential roosting opportunities are uncovered during the works, these will be checked by the ecologist for roosting bats;
- any bats found during works would be moved and placed in a cloth, drawstring bag before being placed in the bat box provided on the site;
- Roof lining would need to be bitumen felt, not breathable membrane that could harm bats (and be damaged by bats) in places to be retained as bat roosts;
- Places for bats to access retained roosts would be retained to prevent obstruction of roosts.

6 CONCLUSION

- 6.1.1 The roof of Rushbrooke Farm, Milden has been confirmed to be a roosting location for bats, given that one roosting brown long-eared bat was found within the loft space. In addition, numerous bat droppings were found throughout the loft space in all three sections, as well as there being several access points at the eaves. Externally there were possible crevices between roof tiles at the ridge and under lifted lead flashing by the base of the chimney and around one exhaust pipe that could support further bat species.
- 6.1.2 It was considered that three nocturnal surveys, two dusk and one dawn, in accordance with the Bat Conservation Trust Good Practice Guidelines, are required to confirm the number of bats and bat species using the space in order to determine the best way forward in compliance with wildlife legislation.

7 REFERENCES

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- Natural England (2004). *Bat Mitigation Guidelines Version 2004*. Natural England, Peterborough.
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8 APPENDICES

8.1 Appendix 1: Photographs

All photographs taken by Marguerite Ravn on 16th August 2021

Photograph 1: Front of house



Photograph 2: Back of house, lifted lead flashing at base of chimney



Photograph 3: Gaps at the eaves, western loft space, providing easy access



Photograph 4: Room at the eastern part of the loft, broken plaster



Photograph 5: Gap in the eaves in the eastern room



Photograph 6: The void in the western loft space



Photograph 7: A cluster of bat droppings, western loft space



Photograph 8: Roosting brown long-eared bat between beams at roof ridge

