

BAT ACTIVITY SURVEY REPORT
AT
BLenheim ORCHARD, UPPER ODDINGTON



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Client	Robin Williams
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The material and data in this report were prepared under the supervision and direction of the undersigned.

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VALIDITY

Due to the dynamic nature of ecological conditions the results of the survey(s) and related conclusions and recommendations as contained within this report should only be considered valid for up to 1 year from the date the last survey was undertaken.

Any alterations to the site proposals may invalidate the recommendations contained within this report.

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Non-Technical Summary

Abricon Ltd. was commissioned by Robin Williams to undertake a preliminary roost assessment in order to establish the likely impacts of the proposed development at Blenheim Orchard, Upper Oddington, Morton-in-Marsh, GL56 0XG.

No proposed plans were available at the time of writing, however it is understood that the proposed plans for the site involve the right-wing of the house to be demolished and re-built. The garage is proposed to undergo re-modelling and installation of dormer windows.

A building inspection was undertaken in order to determine the presence (or evidence) of bats and nesting birds on site and provide recommendations for any further surveys that may be required if it is deemed that bats may be affected by the proposed development.

The building inspection of the house found no bats or evidence of bats; however, features were identified within the building that had the potential to support roosting bats. Evidence of bats (older-looking bat droppings) was found within the garage. Therefore, emergence surveys were recommended to be carried out on both structures. During the recommended further surveys, it was established that a common pipistrelle day roost is present in the house.

Due to the presence of a bat roost on site to be affected by the development, a Natural England Bat Mitigation License (BML) will be required, or site will need to be registered under Bat Mitigation Class License (BMCL) - Low Impact to allow for the proposed development on site to continue. A BML can only be compiled once full planning permission has been achieved. An outline mitigation plan that will form the basis for the method statement which will be put forward to Natural England in the BML application can be found in Appendix D of this report.

No other protected species or habitats were considered to be a constraint to the proposed development.

1 Introduction

1.1 Survey Aims & Objectives

Building Inspection

- 1.1.1 Abricon Ltd. was commissioned by Robin Williams to undertake a preliminary roost assessment in order to establish the likely impacts of the proposed development at “the site” at Blenheim Orchard, Upper Oddington, Morton-in-Marsh, GL56 0XG.
- 1.1.2 The aim of the survey was to identify whether the site has evidence of, or potential for, bats and/or nesting birds to be present. The survey results will inform recommendations for mitigation, and/or further survey work, as appropriate.

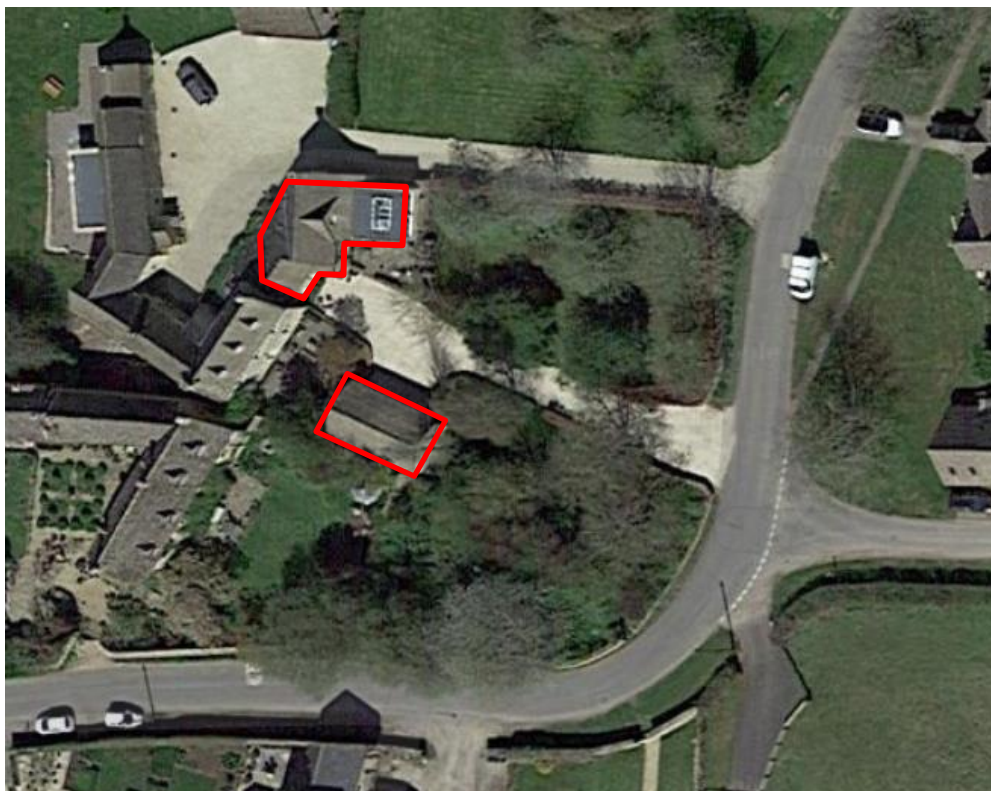
Bat Activity Surveys

- 1.1.3 Abricon was then commissioned by Robin Williams to undertake three further emergence surveys in respect of bats at Blenheim Orchard, Upper Oddington, Morton-in-Marsh, GL56 0XG.
- 1.1.4 The aim of the activity surveys was to identify whether bats are using the building, for what purpose, and in what numbers. This allows for an accurate assessment of the likely impacts of the proposed development on bats and to make recommendations for any further actions which may be required, including mitigation and/or licensing as appropriate.

1.2 Site Location & Description

- 1.2.1 The site is located in Blenheim Orchard, Upper Oddington, Morton-in-Marsh (National Grid Reference: SP 22582 25756). The site consists of a main house and garage with an area of semi-improved grassland, mature trees and areas of hard-standing.
- 1.2.2 The wider landscape is rural, consists of agricultural fields and buildings. The site is located in the village of Oddington therefore surrounded by roads and areas of hardstanding. The town Stow-on-the-wold is located approximately 2.5km to the west of the site. The site is well-connected to linear hedgerows and areas of woodlands, and a small stream runs 30m north to the site.

Figure 1 Location of main house and garage (highlighted) - accessed 06/09/2022



1.3 Proposed Development

- 1.3.1 No proposed plans were available at the time of writing; however it is understood that the proposed plans for the site involve the right-wing of the house to be demolished and re-built. The garage is proposed to undergo re-modelling and installation of dormer windows.

2 Methodology

2.1 Building Inspection

2.1.1 The building on the site was inspected internally and externally on the 26th May 2022 by Dan Flew (Natural England bat class 2 licenced surveyor) and Lara Moore in order to identify any evidence of use by bats and nesting birds.

2.1.2 To assist in a thorough search for bats the following equipment was used;

- Binoculars;
- Million candle power spotlight (Clulight CB2);
- Head torch;
- Digital camera.

Bats

2.1.3 Signs of bats looked for include;

- Bats (alive or dead);
- Droppings;
- Staining;
- Feeding signs;
- Smell; and
- Social calling.

2.1.4 An assessment of the suitability of the buildings to support roosting bats was subsequently completed, in accordance with BCT survey guidelines.

2.1.5 The buildings were inspected for its suitability to be used by roosting bats, with any potential features which could be used by roosting bats being recorded.

Nesting Birds

2.1.6 Evidence of nesting birds searched for during the building inspection included:

- Birds (alive or dead)
- Nests (current or disused)
- Droppings
- Feeding signs
- Eggs

Bat Emergence/Re-Entry Surveys

2.1.7 Bat Emergence/Re-Entry Surveys can aid a preliminary roost assessment by positive confirmation of access and egress points into and out of a structure. This method also allows recordings of bat echolocation calls for species identification to help determine the use and importance of a roost. This survey may also identify new roost areas where no evidence of bats was found during inspection.

2.1.8 The buildings were subject to three dusk/dawn emergence/re-entry surveys. The surveys were undertaken by surveyors observing bats and their activity in the field using non-invasive and non-disturbing techniques. Activity surveys are based on the Bat Conservation Trust's (BCT) 'Bat Survey for Professional Ecologists - Good Practice Guidelines' (Collins, 2016).

2.1.9 Five surveyors were used to survey the right-wing and garage during the emergence/re-entry surveys on 27th July, 08th August and 23rd August 2022. The surveyors were situated at key locations to ensure that all aspects of the building were observed at all times,

particularly those areas that had the highest potential to be used by bats and/or where evidence of bat use was found (see Appendix B for surveyor locations). The dusk activity surveys commenced approximately 15 minutes prior to sunset and continued at least 1.5 hours after sunset. The dawn activity surveys commenced 1.5 hours before sunrise and continued at least 15 minutes after sunrise.

2.1.10 Any bats observed were recorded. Information included;

- Time;
- Emergence or entry points;
- Direction of flight;
- Use of landscape;
- Flight characteristics;
- Size;
- Height above ground and;
- Behaviour.

2.1.11 The bat detectors used were Anabat Express paired with Elekon Batscanner, and an Echo Meter Touch 2 Pro paired with an Android Tablet. Analysis of calls was subsequently undertaken using AnaloookW and Kaleidoscope software.

Table 1 – Weather Conditions for Bat Emergence Surveys

Date	Sunset/Sunrise	Survey Time		Weather
22/07/2022	21:14	Start	20:59	19°C, Rain: 0/5, Cloud Cover:8/8, Wind 0/12
		Finish	22:44	17°C, Rain: 0/5, Cloud Cover: 0/8, Wind: 0/12
08/08/2022	20:44	Start	20:29	23°C, Rain: 0/5, Cloud Cover:0/8, Wind 0/12
		Finish	22:14	20°C, Rain: 0/5, Cloud Cover: 0/8, Wind: 0/12
23/08/2022	06:04	Start	04:34	17°C, Rain: 1/5, Cloud Cover:8/8, Wind 1/12
		Finish	06:16	16°C, Rain: 0/5, Cloud Cover: 7/8, Wind: 1/12

2.2 Personnel

2.2.1 Dan Flew has worked in the consultancy sector since 2011 with a focus on protected species, particularly bats. Dan holds Natural England and Natural Resources Wales Class 2 licence for bats as well as a NE Class 1 licence for great crested newts and a NE barn owl survey licence, and he holds an MSc in related subjects.

2.2.2 Lara Moore BSc QualCIEEM has been working in ecological consultancy since 2019. Her primary experience comprises technical report writing, the completion of bat emergence/re-entry surveys and analysis of bat sound files.

2.2.3 Jana Prapotnikova has worked in consultancy sector since 2006 with a focus on mammalian ecology, particularly bats and badgers. Jana runs Abricon's Ecology Department as well as being involved in project delivery. She has managed various ecological projects and has expertise in a range of ecological survey techniques including Phase 1 habitat assessments and a variety of protected species surveys (e.g. the aforementioned mammal species as well as reptiles and great crested newts). Jana also devises ecological mitigation schemes for a variety of protected species. She is well versed in producing preliminary ecological appraisals, BREEAM/CSH Ecology Assessments, protected species licences, Ecological Impact Assessments (EclA), Construction Environmental Management plans, Biodiversity Enhancement Schemes and Ecological Design Strategies. Jana holds Natural England and Natural Resources Wales Class 2 licence for bats as well as Natural England Class and

Natural Resources Wales Class 1 licence for great crested newts. She is also a Registered Consultant of the Bat Low Impact Class Licence (BLIC) and holds a CSCS card. Jana is a full member of Chartered Institute of Ecology and Environmental Management (MCIEEM).

- 2.2.4 Stewart Rowden is an experienced bat worker and holds NE/NRW Class 2 licence for bats.
- 2.2.5 Lloyd Price, Josie Emmerson, Lucy Goreham, Alec Elsdon, Tim Woods, work as a Field Surveyor for Abricon Ltd. Their experience comprises the completion of bat surveys.

2.3 Limitations

General Ecological Constraints

- 2.3.1 This survey only offers a “snapshot” of the site conditions and takes no account of seasonal differences, or of any species which may take up residence subsequently.

Site Specific Constraints

- 2.3.2 Western elevation of the west wind wasn't covered during the surveys due to refused access permission (yard in different ownership to the right-wing).

3 Field Survey Results and Evaluation

- 3.1.1 See Appendix C for site photographs and Appendix B for bat surveys results plan and surveyor locations.

3.2 Preliminary Roost Assessment

House

- 3.2.1 The house is a two-storey building comprising stone walls and stone or slate roofs. The roof is a pitched roof with a gable end comprising ventilation slits on the south and east facing aspect.
- 3.2.2 Attached to the northerly elevation of the main house is a lower section of the house (right wing) with separate roofs and on the eastern elevation of the right wing is a single storey flat roof extension with a triangular rooflight.
- 3.2.3 There are wooden fascia boards around the perimeter of the house which display several gaps.
- 3.2.4 No roof voids are present internally as the second floor takes up the entirety of the roof space.

Garage

- 3.2.5 The garage is a two-storey stone gabled building with a stone tiled pitched roof. Ivy Hedera sp. covers both eastern and western elevations of the building. No gaps are displayed in the stonework and the eaves are sealed.
- 3.2.6 The lower-storey of the garage is designated to car parking and has open fronted northern elevation and the second-storey contains a roof space.
- 3.2.7 The interior of the roof space (H1.5m x L10m x W6m) contains a breathable membrane roof lining. A window on the western elevation of the garage lets light in.

Preliminary Roost Assessment

Right-wing

- 3.2.8 No roof voids are present in the right wing. No evidence of bats was found externally. The right wing was assessed as 'high' suitability for roosting bats, in accordance with the BCT guidelines due to large number of potential roosting features within the roof, the type of features and the site's location.
- 3.2.9 No suitable roosting features were noted on the walls, however the roof of the right wing contained large number of potential roosting features like lifting stone tiles, gaps under ridge tiles, lifting lead flashing and gaps underneath fascia boards.

Garage

- 3.2.10 Evidence of bat was found in the garage in the eastern end of the roof void in the form of a patch of old-looking bat droppings (<10 droppings) and feeding remains (discarded moth wings) (Appendix C, Photograph 5 -7).
- 3.2.11 No suitable roosting features were noted on the walls, however the roof, the interior and the roof void of the garage contained large number of potential roosting features like lifting stone tiles, gaps under ridge tiles and gaps underneath fascia boards.

3.3 Activity Surveys

- 3.3.1 The following section describes the results of the emergence carried out. See the following Appendices for additional information:
- Appendix A – Legislation
 - Appendix B – Bat Surveys Results Plan and Surveyor Locations
 - Appendix C – Site Photographs

Summary

- 3.3.2 The right wing and garage were subject to two emergence surveys and one re-entry, which is in line with the BCT survey guidelines for buildings with 'high' suitability for roosting bats or buildings where evidence of bats is found during PRA.
- 3.3.3 Four common pipistrelle bats were recorded emerging during the survey on the 22nd July 2022, two were seen emerging from the house and two from the garage.
- 3.3.4 Two common pipistrelle bats were recorded emerging from the structures during the survey on the 08th August 2022. One emerged from the garage and another from the right wing.
- 3.3.5 No re-entries were recorded during the dawn survey carried out on the 23rd August 2022.
- 3.3.6 Over the course of the surveys eight bat species were heard passing through, and/or commuting on/near the site. These were: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, noctule *Nyctalus noctule*, Leisler's *N. leisleri*, myotis *myotis* sp., long-eared *Plecotus* sp., serotine *Eptesicus serotinus* and lesser horseshoe *Rhinolophus hipposideros*.

Dusk Emergence Survey - 22nd July 2022

- 3.3.7 During the survey, common pipistrelle bats were seen foraging and commuting near the house and in the amenity grassland/garden area. Two common pipistrelle emerged from the garage (EM1, Appendix B) on the northern elevation from underneath a roof tile at 21:50 and 22:05 (36 minutes and 51 minutes after sunset).
- 3.3.8 A common pipistrelle emergence (EM2, Appendix B) was seen from the house at 21:44 (30 minutes after sunset), it emerged from the intersection on the gable roof facing south-east. Another common pipistrelle (EM3, Appendix B) was seen emerging at 21:58 (43 minutes after sunset) from the north elevation of the house underneath a lifted tile near the gable end.
- 3.3.9 Brown long-eared bats were active in the garden area, foraging and commuting near the garage and along the driveway.
- 3.3.10 During the survey, six species of bat were incidentally recorded. The number of calls recorded were as follows: common pipistrelle – 99 calls, noctule – 23 calls, myotis sp. – 13 calls, serotine – 12 calls, soprano pipistrelle – 6 calls and long eared – 4 calls.

Dusk Emergence Survey – 8th August 2022

- 3.3.11 One common pipistrelle (EM4, Appendix B) was seen emerging from underneath the verge tiles on the northern elevation on the garage at 21:11 (27 minutes after sunset) and flew towards the trees on the eastern boundary of the property.
- 3.3.12 Furthermore, one common pipistrelle (EM5, Appendix B) was seen emerging from underneath the fascia boarding on the east facing elevation of the house at 21:01 (17 minutes after sunset).
- 3.3.13 Two horseshoe passes were recorded during the survey, they were heard not seen, however the passes were recorded by surveyors who were positioned in the courtyard and driveway to the east of the house.
- 3.3.14 During the emergence survey, five species of bat were recorded. The number of calls recorded were as follows: common pipistrelle – 174 calls, long-eared – 27 calls, myotis sp. – 19 calls, soprano pipistrelle – 4 calls and lesser horseshoe – 2 calls.

Dawn Re-entry Survey – 23rd August 2022

- 3.3.15 Common pipistrelle passes were recorded the most with a total of 125 of passes throughout the survey. The majority of the common pipistrelles recorded that were seen foraging above the amenity grassland to the east of the house and garage. The remaining bat recordings were heard and not seen.
- 3.3.16 On the northern elevation of the house five myotis passes were heard but not seen, most likely foraging along the stream that runs 30m north of the property.

3.3.17 During the survey, seven species of bat were incidentally recorded. The number of calls recorded were as follows: common pipistrelle – 125 calls, myotis – 15 calls, long-eared – 4 calls, soprano pipistrelle – 2 calls, serotine – 2 calls, lesser noctule – 3 calls, and noctule – 1 call.

Evaluation

Roosting Bats

3.3.18 The surveys have identified that the house and garage are being used by common pipistrelle bats. Evidence of this comes in the form of a peak count of two bats emerging from the right-wing and two bats from the garage during emergence surveys.

3.3.19 The surveys have identified that the number of bats using the right-wing or the garage is low; peak count of 2 bats from each structure was observed during the course of the 3 surveys. Due to the low number of bats found using the right wing or the garage to roost, it is considered that it is likely to be small number of males or non-breeding females.

3.3.20 It is therefore considered that the right wing and garage are being used as day roosts by common pipistrelle bats.

3.3.21 Taking into account the species present, and the low number of bats observed emerging, it is considered that the building is generally of **low conservation importance** for common pipistrelle bats (Mitchell-Jones, 2004).

Foraging/Commuting Bats

3.3.22 The vegetation on the property is formed of well managed amenity grassland and scattered mature trees which were considered to be of moderate value for foraging and commuting bats. Predominantly light tolerant species were recorded foraging/commuting across the amenity areas near the house and garage, those areas are of limited value to and for bats. However, light-sensitive bats such as myotis sp., long-eared and lesser horseshoe were recorded utilising the site. They were also recorded foraging/commuting over the amenity grassland/driveway to the north of the site and near the stream approximately 30m north of the house.

3.4 Nesting Birds

3.4.1 The site provides suitable bird nesting and foraging habitat within the shrubs and scattered trees within the site.

3.4.2 No evidence of nesting birds was recorded within the structures during the building inspection.

Evaluation

3.4.3 It is considered that the site is unlikely to be of more than low local value to birds, as there is habitat readily available for nesting birds nearby within adjacent residential gardens, scattered trees, and hedgerows in the area.

3.5 Other Protected Species

3.5.1 There were no indications during the survey that any other protected species may be utilising the site and subsequently be impacted by the development works. As a result, no specific mitigation measures relating to the protected species listed above are believed required, and these species are not considered further within this assessment.

4 Assessment of Impacts

4.1 Bats

4.1.1 All bat species are protected by UK and EU legislation (see Appendix A).

Roosting Bats

4.1.2 Small common pipistrelle day roosts were found to be present in the right wing and the garage.

4.1.3 The proposed development will involve demolition of the right wing and re-modelling of the garage including inclusion of dormer windows.

4.1.4 In the absence of mitigation, it is considered that proposed works will result in the loss of bat roosts, and potentially the disturbance and accidental killing and / or injury of bats during the construction phase. This would be considered a **significant adverse impact** at a site/local level.

4.1.5 With mitigation, it is considered that after an initial short-term adverse impact, a long-term positive impact could be achieved by enhancing and securing the number of bat roosting features and spaces available on the site.

Habitat Losses

4.1.6 The development will not directly affect any further habitats within the area as it is focused on the house and garage.

Fragmentation and Increases in Artificial Lighting

4.1.7 Although no proposed plans were available at the time of writing, it is possible that there will be increase in artificial light spill when the new right-wing is re-built and the garage undergoes re-modelling. Majority of the habitats surrounding the house and garage are of limited value to bats, however the scattered trees to the east of the buildings are used by light sensitive bats like long-eared and lesser horseshoe bats. Additionally, the amenity grassland to the north of the site that runs adjacent to the stream are utilized by myotis and long-eared sp.

4.1.8 Increased lighting resulting from any additional external lighting (if proposed) and glazing on the south and eastern elevation of the house may result in the disturbance and possible avoidance of these features by bats, particularly for light sensitive species such as long-eared and lesser horseshoe bats. This would constitute a **permanent adverse impact** on bat species.

4.1.9 With mitigation (i.e sensitive lighting), the impacts on the foraging and commuting bats can be minimised.

4.2 Nesting Birds

4.2.1 As birds are very mobile species and can establish nests before the works on site commence, without mitigation, the anticipated works may result in the destruction of nests and possible killing, injury, and disturbance of birds and/or dependent young. This would therefore constitute a certain adverse impact on nesting birds.

4.2.2 With mitigation, it is anticipated that there can be **no impact** on nesting birds.

5 Recommendations

5.1.1 The building inspection highlighted the need for further actions with regards to some species. Table 2 below provides a summary of the works required, whilst details are provided in the following paragraphs.

Table 2: Table of Further Actions

Species/Groups	Phase	Action(s) Required
Bats	Prior to construction	A BML or BMCL will be required from NE, in order to allow works which would otherwise be illegal.
Birds	Construction	Development work following timings and methods outlined in 5.3.
Ecological Enhancements	Design and Construction	Inclusion of bat and bird boxes as outlined in summary of ecological constraints.

5.2 Bats

Roosting Bats

- 5.2.1 The surveys identified that the house and garage are both being used by a small number of common pipistrelle bats as day roosts.
- 5.2.2 Bat Mitigation Licence (BML) or registration under the Bat Mitigation Class License (BMCL) will be required from Natural England, in order to allow works which would otherwise be illegal. The licence must be in place prior to any works being undertaken which could impact on bat roosts.
- 5.2.3 Mitigation will be required and an outline mitigation strategy for bats is included in Appendix D of this report. A detailed mitigation statement will be formulated concurrently with drawing up the final work plan and schedule and will be included within the Natural England licence application.
- 5.2.4 Natural England take a minimum of 30 working days to assess a licence application, or 10 working days for BMCL site registrations.

External Lighting

- 5.2.5 External lighting plan for the site was not drafted at the time of writing this report. Any lighting plans should ensure that exterior lighting is kept to a minimum. The amenity grassland/driveway (off-site) present to the northern elevation of the right-wing and the area with mature trees present east of the house and garage should not be subject to any light spill and be kept as dark zones where light levels cannot exceed 0.5lux/existing light levels.
- 5.2.6 However, some security lighting for doorways is likely to be required. In the event that new/additional external lighting is necessary it should utilise a number of key design points to limit any impact;
 - Low level lighting pointed towards the ground;
 - Use of light shields and hoods to direct the light downwards and prevent vertical and horizontal light spill;

- Use of passive infrared (PIR) motion sensors and/or timers to ensure lights only come on or stay on when necessary.

Glazing

- 5.2.7 The area of garden with mature trees in the eastern part of the site and grassland area (off-site) present north from the right-wing should be kept as dark zones where light levels cannot exceed 0.5lux/existing light levels as light sensitive species (lesser horseshoe bats and long-eared sp.) were recorded on site.
- 5.2.8 No landscape plans or extent of any future boundaries like hedgerows or fences were available at the time of writing.
- 5.2.9 Close board fencing or min. 2m high hedgerows could act as a barrier to light spill coming from the ground level glazing.
- 5.2.10 No proposed elevation plans were available at the time of writing, so the amount or locations of glazing is unknown.
- 5.2.11 Low transmission glazing treatments may be a suitable option in achieving reduced illuminance targets from the glazing on upper levels. Products available include retrofit window films and factory tinted glazing. "Smart glass", which can be set to automatically obscure on a timer during the hours of darkness, an automatic blind can also be used but their longevity depends on regular maintenance and successful routine operation by the occupant and should not be solely relied upon.

5.3 Nesting Birds

- 5.3.1 It is recommended that the demolition works, should take place outside of the nesting bird season (March - August inclusive but seasonally variable). If this is not possible, and in order to ensure that birds are not injured or killed, and their nests are not disturbed/damaged during construction works, a check to confirm the absence of nesting birds within the working area should be carried out by a suitably experienced ecologist no more than 48 hours prior to demolition work commencing. This check would identify any nests present, as well as the life stages of the occupants (if present). Any active nests would need to be appropriately protected until eggs have hatched and young fledged. Until the young have fledged, the nest should be subjected to regular monitoring to ensure that a second brood is not raised once the first brood has fledged.

5.4 Enhancements and Planning Policy

- 5.4.1 Enhancement features for wildlife should be included in developments to meet the recommendations contained within the National Planning Policy Framework 2021.
- 5.4.2 It is recommended that one bat box (e.g., Beaumaris Box or similar) is installed on a suitable mature tree on site (this bat box will also be used if bats are discovered during the demolition works – see Appendix D). Furthermore, one built-in bird box (e.g., Vivara Pro WoodStone House Sparrow Nest Box or similar) is installed on the external walls of the replacement right-wing or the garage. Bat boxes should ideally be placed facing between south-east and south-west and installed 5/6m above ground, whilst bird boxes should ideally face between north-east and north-west as high as possible and away from windows.

References

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* 3rd edition. The Bat Conservation Trust, London.

Mitchell-Jones A. J. & McLeish, (2004) *Bat Worker's Manual*. Joint Nature Conservation Committee, Peterborough.

Mitchell-Jones A. J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough.

Appendix A – Wildlife Legislation & Policy

The Conservation of Habitats and Species Regulations 2017

- 5.4.3 Certain species are known as European Protected Species (EPS) and these are fully protected under The Conservation of Habitats and Species Regulations (2017). The Conservation of Habitats and Species Regulations (2017) is the transposition of the European Habitats Directive (1992) to UK legislation. Species protected under this legislation include (but is not limited to) bats, dormice *Muscardinus avellanarius*, great crested newts *Triturus cristatus*, otter *Lutra lutra*, sand lizard *Lacerta agilis*, and smooth snake *Coronella austriaca*.
- 5.4.4 For European Protected Species, it is a criminal offence to:
- Deliberately capture, injure or kill any such species;
 - Deliberately disturb wild animals of any such animal;
 - Deliberately take or destroy their eggs;
 - Damage, destroy, or obstruct access to a breeding site or resting place, whether the animal is present or not;
 - Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European Protected Species, or any part of, or anything derived from, such an animal.
- 5.4.5 Operations which will affect European Protected Species may require a development licence from the relevant national statutory body for nature conservation, which provides a derogation for an otherwise unlawful activity.

Wildlife and Countryside Act 1981 (as amended)

- 5.4.6 The Wildlife and Countryside Act 1981 (as amended) makes it a criminal offence to:
- Kill, injure, or take any wild bird (with exceptions to species listed in Schedule 2);
 - Take, damage or destroy the nest of any wild bird while in use or being built;
 - Take or destroy an egg of any wild bird;
 - Intentionally kill, injure or take any wild animal listed on Schedule 5;
 - Interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places.
- 5.4.7 Water voles *Arvicola amphibious* are protected under Section 5 of the Wildlife and Countryside Act, 1981 (as amended) against killing, injuring, taking, or selling a water vole; damaging or destroying a place of shelter (burrow), obstructing access to a place used for shelter, or disturbing a water vole whilst it is occupying a place of shelter or protection.
- 5.4.8 Operations which may affect water voles may require a licence from the relevant national statutory body for nature conservation, which provides derogation for an otherwise unlawful activity.
- 5.4.9 Certain non-native, invasive plant species have become established in Great Britain and pose a threat to native flora. Some species of cotoneaster are listed under Schedule 9, which makes it an offence to plant or allow this species to spread in the wild.

Protected Sites

- 5.4.10 Within the UK, certain sites are afforded protection measures based on their level of importance to wildlife. They fall into two categories; statutory designated sites and non-statutory designated sites.

- 5.4.11 Statutory designated sites are typically of national or international importance and as such are afforded the greatest levels of protection under various pieces of legislation. Statutory sites include Special Areas of Conservation (SAC), Special Protection Areas (SPA), National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and RAMSAR sites.
- 5.4.12 Non-statutory designated sites are normally designated by local authorities or nature organisations and are typically of local or county wide importance for their conservation interest. Non-statutory sites include Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), Sites of Importance for Nature Conservation (SINC), Sites of Nature Conservation Importance (SNCI).
- 5.4.13 Properties of non-governmental organisations such as Wildlife Trusts may also be managed for their importance to biodiversity. These areas often have no statutory basis, but often comprise part of a designated site.

National Planning Policy Framework (2021)

- 5.4.14 National Planning Policy Framework (NPPF) (2021) sets out Government Policy on Biodiversity and Nature Conservation and places a duty on planners to make material consideration to the effect of a development on legally protected species when considering planning applications. NPPF also promotes sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

Wild Mammals (Protection) Act 1996

- 5.4.15 The Wild Mammals (Protection) Act 1996 makes it an offence to inflict unnecessary suffering upon any wild mammal.

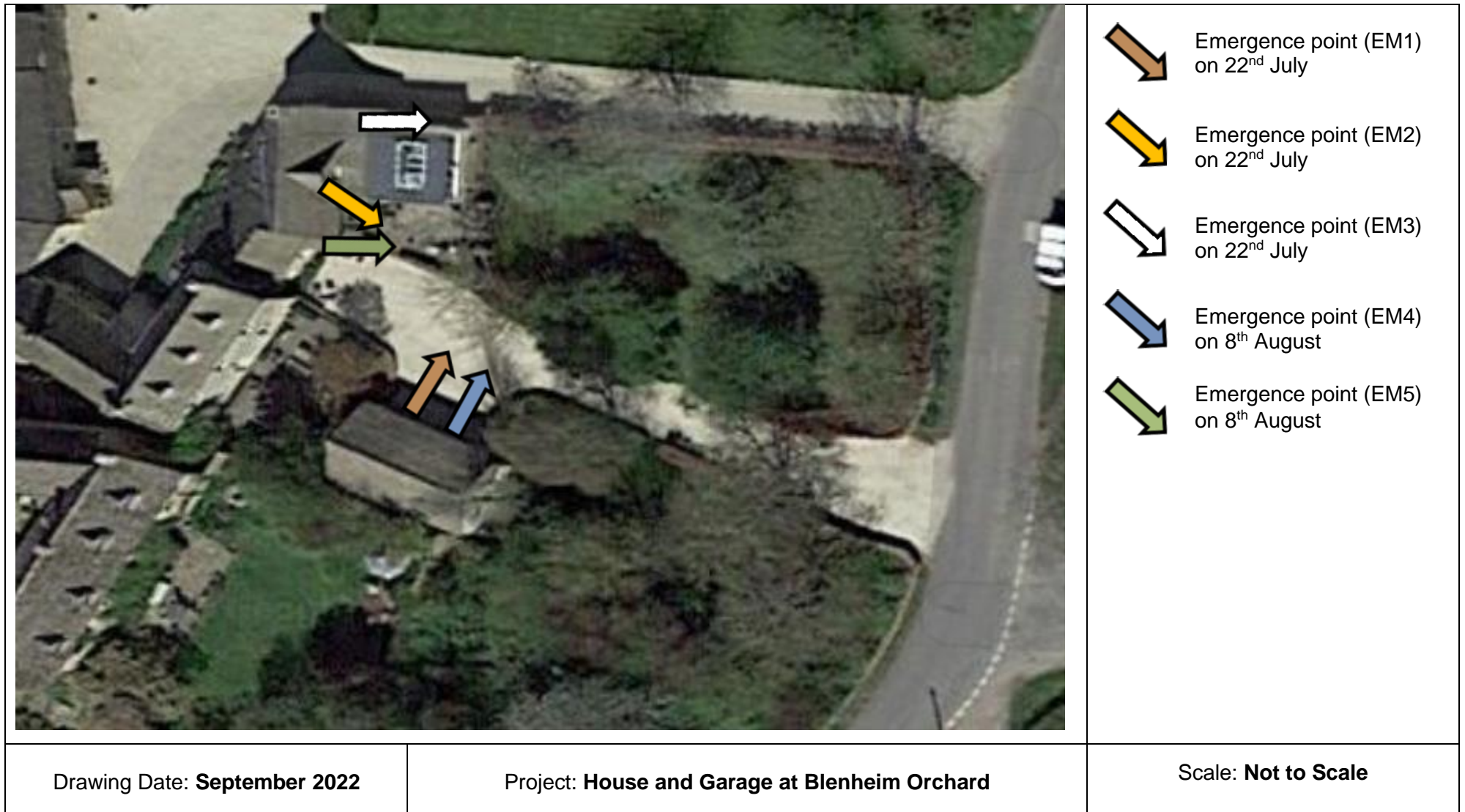
The Natural Environment and Rural Communities Act (2006)

- 5.4.16 Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) sets out a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) drawn up in consultation with Natural England, provides a guide to local and regional authorities when implementing their duty as defined in Section 40 of the NERC Act 2006;
- “Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.” - Section 40(1).
 - “Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat”. - Section 40(3).

Appendix B – Bat Surveys Results Plan and Surveyor Locations



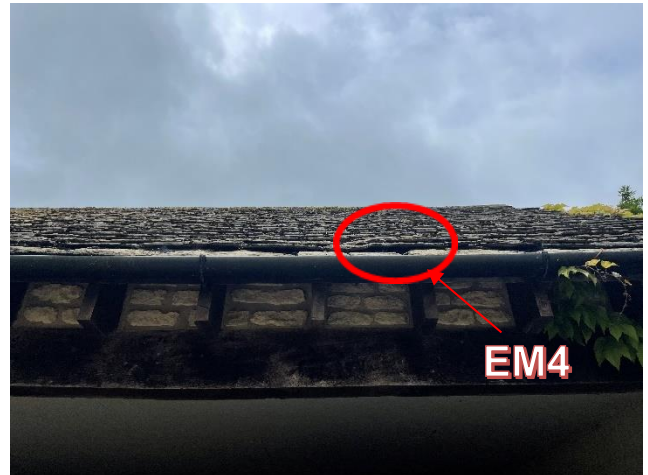
★ Surveyor Location



Appendix C – Site Photographs



Photograph 1: North elevation of the garage.



Photograph 2: View of north elevation of garage.



Photograph 3: View of northern and eastern elevation of garage.



Photograph 4: Western elevation of garage.



Photograph 5: Bar droppings inside eastern end of garage.



Photograph 6: Discarded moth wings indicative of bat presence.



Photograph 7: View of bat dropping.



Photograph 8: South and eastern elevation of the right-wing.



Photograph 9: Southern view of extension on right-wing.



Photograph 10: Eastern view of right-wing and extension.



Photograph 11: Northern elevation of right-wing and extension.



Photograph 12: Northern view of tight-wing.

Appendix D – Outline Bat Mitigation Plan

Introduction

Below is an outline mitigation plan that will form the basis for the method statement which will be put forward to Natural England in the upcoming Bat Mitigation Licence (BML) application.

Please note that this Method Statement is subject to approval by the Local Planning Authority and Natural England.

Proposed Works

It is understood the proposed plans for the site comprise demolition and re-development of the cottage.

Order of Mitigation Works

The order of mitigation works are as follows:

- The tree bat box and BML/BMCL must be in place prior to the commencement of development activities (including building demolition);
- Works can begin under ecological supervision (i.e. removal of roof tiles);
- Unsupervised works can continue once signed off by supervising ecologist;
- Permanent mitigation features will be installed;
- Compliance check of permanent mitigation features once works completed.

Timings of Works

The tree bat box and the BML / BMCL must be in place prior to the start of development works. Natural England take a minimum of 30 working days to assess a licence application, or 10 working days for BMCL site registrations.

As the buildings are used as a day roost by low numbers of common pipistrelle bats, there are therefore no specific timing constraints to the proposed works.

Supervised Works

Certain aspects of the works will be supervised by a suitably licensed and experienced ecologist, to ensure that no harm comes to any bats that may be present.

A tool-box talk will be given to contractors at the onset of the works, covering how to recognise a bat, where they might be found and what to do in the event of finding one.

Strip of Roof Tiles

Existing roof tiles will have to be removed prior to demolition works. Removal of the roof tiles on the building will be supervised by a licensed bat ecologist. Tiles will be removed individually by hand, and the underside will be inspected before discarding.

If bats are found during the roof strip process, they will be captured by the licensed bat ecologist supervising the works and assessed for their potential for release.

Captured Bats

Any bats captured during the works will be moved by the licensed bat ecologist to the new bat box installed on a retained suitably mature tree within the site, and released on the same day.

If bats are considered unsuitable for release (i.e. injured), they will receive veterinary care as required and be kept in care until they are suitable for release at an appropriate time of year.

Soft Demolition of Potential Bat Roosting Features

Any crevices and cracks within the building potentially suitable for use by roosting bats will be inspected and assessed by a licensed ecologist prior to demolition to establish whether bats are roosting in any of the crevices.

Where the crevices/cracks can be fully inspected via endoscope, and no bats are found, they will be filled with newspaper (or another easily removable filler) to prevent bats entering prior to the demolition.

If bats are discovered to be roosting in any features at the time of inspection, a decision on how to deal with them will be made on site by the supervising ecologist in light of the conditions on site at the time and the state of the animals themselves. There are a number of options for dealing with them:

- A one-way exclusion device will be installed on the opening/s by the ecologist. Each device will remain in position for a period of at least 5 days/nights in suitable weather conditions (i.e. temperatures above 8°C) or will remain longer until these conditions prevail. After this point the crevice will be re-inspected by the supervising ecologist;
- The bat(s) will be carefully removed and placed in the permanent mitigation roost or taken in to care;
- The gap/crevice will be left undisturbed and re-checked a few days later.

Where it is possible to capture bats which are found, this will be undertaken by the licensed bat ecologist supervising the works.

Unsupervised Works

After the above procedures, once the structure affected by the development works is deemed clear of bats by the licenced ecologist, unsupervised works can take place; however, an ecologist will be on call in the event that bats are found during the demolition phase. If bats are discovered when the licensed ecologist is not present, then contractors must stop work immediately and telephone Abricon on 01275 391297. NE will be informed where necessary.

Mitigation

As a receptor site for any bats found during the roof strip/demolition works one Beaumaris Woodstone Bat Box (or similar) should be installed onto one of the mature trees within the site. This bat box will be retained post-development as an ecological enhancement feature.

As a permanent mitigation for the loss of common pipistrelle bat roost, a raised bat access tile allowing access to the crevice between the roof tiles and the lining will be installed on south-eastern elevation of the garage and one on the new right-wing.

Compliance Check

A compliance check will be completed by a licensed bat ecologist following the completion of all the mitigation works.