AEWC Ltd

Animal Ecology & Wildlife Consultants

Bat Survey Report

Tumbling Bay

Tumbling Bay
50 Church Street
Amesbury
SP4 7EU

Annika Binet

21-072
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AEWC Ltd Birch Walk, Lower Street, Fittleworth, West Sussex, RH20 1JE
Tel:08452 505585, info@aewc.co.uk , www.aewc.co.uk

Registered in England and Wales No. 06527840

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Author	Annika Binet
Authorised by	Brigitte de Coriolis
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Summary

- AEWC Ltd were commissioned by Robin Montgomery to undertake detailed bat survey at Tumbling Bay, 50 Church Street, Amesbury, SP4 7EU at grid reference SU 15166 41362 to help inform the proposed extension to the property.
- This report details the results of the survey, which was carried out between May and August 2022 by Annika Binet and Emily Partridge, Natural England licensed bat ecologists.
- A bat assessment was carried out in August 2021 which identified the presence of bat roosts within the roof voids and wall top of the property. DNA analysis of dropping samples collected confirmed the roosts to be serotine (*Eptesicus serotinus*) and soprano pipistrelle (*Pipistrellus pygmaeus*).
- The roof void in which the serotine roost was identified is not subject to any impacts from the proposed works and will therefore be retained. The soprano pipistrelle roost is within the wall top of the property and will be impacted by the proposed works, therefore further surveys were required.
- Emergence surveys were carried out in 2022 which confirmed the presence of a common pipistrelle bat day roost within the ridge of the property outside of the area of the proposed works.
- Bat roosts are present on site both within and outside of the area of works. The soprano pipistrelle bat day roost identified at the eastern wall top of the property during the original bat assessment will be damaged by the works through the tie-in of the new extension. The serotine and common pipistrelle bat day roosts will not be subject to significant negative impact.
- A lack of any mitigation could result in a negative impact on bats, through potential death, disturbance and loss of roost space.
- Therefore, a Natural England development licence will be required for works to proceed to ensure that an offence will not be committed. This will encompass a Mitigation Strategy to ensure that the development is designed to protect bats during the construction phase and to minimise long-term impacts upon the local bat population.

This report has been prepared by AEWC Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the Professional Guidance and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

1.1 AEWC Ltd were commissioned by Robin Montgomery to undertake detailed bat survey at Tumbling Bay, 50 Church Street, Amesbury, SP4 7EU to help inform the proposed development of the site.

1.2 The bat surveys and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2016).

1.3 A bat assessment was carried out in August 2021 which identified the presence of bat roosts within the roof voids and wall top of the property. DNA analysis of dropping samples collected confirmed the roosts to be serotine and soprano pipistrelle.

1.4 Further surveys were therefore required to ascertain whether bats are present at the site and represent a constraint to the proposed development.

1.5 This report details the results of the bat survey and outlines recommendations in relation to bats and the proposed development of the site.

Aims and objectives

1.6 The objectives of the survey were to:

- Identify the potential of the buildings on the site to support roosting bats;
- Identify whether bats are present using the buildings on site;
- Estimate the size and status of any existing bat roost within the buildings;
- Determine the potential impacts on any bat roost from the proposed development schedule; and
- Provide information for use in the design and development of ecological mitigation and enhancement measures where appropriate.

Site Location

1.7 The proposed development site is located at Tumbling Bay, 50 Church Street, Amesbury, SP4 7EU at central grid reference SU 15166 41362. The site is located on the outskirts of the town of Amesbury approximately 1.5km from the town centre, with Amesbury Bypass located approximately 650m north of site. Habitat around the site comprises residential development to the east with areas of woodland and agricultural land to the north, west and south. See Figure 1.



FIGURE 1: SHOWING THE LOCATION OF THE SITE

1.8 The site comprises a single detached dwelling.



FIGURE 2: SHOWING THE BUILDING SUBJECT TO SURVEY.

Legislation

1.9 All species of bats are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

1.10 A roost is defined as 'any structure or place which a bat uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

1.11 Any disturbance of a bat occupying a roost can lead to prosecution. Disturbance can be caused by noise, vibration and artificial lighting. Penalties for breaking the law can include fines of £5,000 per bat, imprisonment and the seizure of equipment.

1.12 Furthermore, seven bat species (barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Development proposals

1.13 The proposal is for construction of a two-storey extension to the north-east gable of the property, in addition to the creation of a new dormer within the eastern roof pitch.



FIGURE 3: SHOWING THE EXISTING (TOP) AND PROPOSED (BOTTOM) PLANS.

2 Methods

Daytime Assessment

2.1 A detailed bat building inspection was undertaken on the 3rd August 2021 by Annika Binet, a Natural England licensed bat ecologist. Full details can be found within the associated AEWC Ltd Bat Assessment report dated August 2021.

Emergence Surveys

2.2 The evening emergence surveys were conducted on 14th May, 28th June and 17th August 2022, a time of year when bats are active and maternity colonies should be present. Conditions were good for all bat surveys with warm weather, and any bats present were likely to be active. The emergence surveys began approximately 15 minutes before sunset and finished 1 and a half hours after sunset on each survey.

2.3 Batlogger M bat detectors were used for taking time-expanded recordings of any bats when they may emerge from the buildings. These recordings were analysed on Elekon bat analysis software that facilitates species identification.

2.4 Professional Canon XA night vision video cameras were used as night vision aids (NVA's) alongside surveyors to film areas of the buildings with the assistance of external infra-red lamps to ensure suitable lighting to accurately identify if bats emerge from the building. Cameras were deployed on tripod stands to view areas with bat roosting potential. Footage was reviewed at an appropriate speed on a computer after the survey to ensure any bat emergences and bat emergence points were recorded. Where necessary footage was slowed down to ensure the exact emerge point could be identified.

2.5 One surveyor and two professional night vision cameras were used for the first and third emergence surveys (Figure 4). A third night vision camera was added for the second emergence survey (Figure 5). The surveyors and two cameras were positioned to get a good all-round view of the area of the house which will be impacted by the proposed works. The third camera was positioned to focus on the front of the property tile hangings during the second survey to identify whether any serotine bats emerged from that side of the property during the survey.

3 Constraints/Limitations

3.1 Bats are difficult to locate in large structures, with so many potential roosting areas, particularly in inaccessible areas such as large buildings, finding the exact roosting site can be difficult, especially male/single bat roosting sites. It should be noted that it is not always possible to identify bat presence by examining externally around buildings as poor weather conditions may have washed away droppings which were deposited on exposed surfaces.

3.2 Bats can have seasonal use of buildings and being so mobile may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. For this reason, bats may potentially be present but remain undetected, particularly during daytime assessment.

3.3 Un-forecast light rain was noted during two of the emergence surveys, however bat activity was still recorded throughout the surveys, including emergence from the property, therefore these surveys are still considered to be suitable.

4 Results

Daytime Assessment

4.1 The daytime assessment identified the presence of bat roosts within the roof voids and wall top of the property. Full details can be found within the associated AEWC Ltd Bat Assessment report dated August 2021.

4.2 DNA analysis of dropping samples collected confirmed the roosts to be serotine and soprano pipistrelle. The number of droppings present is indicative of day roosts for both species.

Emergence Surveys

4.3 **14th May 2022** – Weather conditions were acceptable for the survey (18°C with partial cloud and a slight breeze at sunset) and any bats present were likely to be active. Un-forecast light rain was recorded from 30 minutes after sunset, but bat activity continued throughout. The survey did not record any bats emerging from the property. A high level of soprano pipistrelle activity was recorded, with the first bat approaching from the north-east 2 minutes prior to sunset. High levels of common pipistrelle (*Pipistrellus pipistrellus*) foraging activity was also recorded over the gardens. Some serotine bat and noctule (*Nyctalus noctula*) commuting activity was also recorded.

4.4 **28th June 2022** – Weather conditions were acceptable for the survey (16°C with partial cloud and a moderate breeze at sunset with a light rain shower noted just before sunset) and any bats present were likely to be active. The survey recorded one pipistrelle bat, which did not echolocate, emerging from the east-west ridge of the house 25 minutes prior to sunset. A high level of common and soprano pipistrelle foraging activity was recorded over the gardens with soprano pipistrelle bats again approaching from the north-east just before sunset. Some brown long-eared bat (*Plecotus auritus*) activity was also recorded later in the survey.

4.5 **17th August 2022** – Weather conditions were good for the survey (25°C and overcast with a slight breeze) and any bats present were likely to be active. The survey recorded three common pipistrelles emerging the east-west ridge of the property, with the first emerging eight minutes prior to sunset. A high level of common and soprano pipistrelle foraging activity was again recorded over the gardens. Some serotine bat foraging activity was also recorded.

4.6 A diagram showing the locations of the surveyors, night vision cameras and emergence points during the evening surveys can be seen in Figures 4 - 5 below.



FIGURE 4: SHOWING POSITIONS OF SURVEYORS, NIGHT VISION CAMERAS AND BAT EMERGENCE DURING THE JUNE AND AUGUST EMERGENCE SURVEYS.



FIGURE 5: SHOWING POSITIONS OF SURVEYORS, NIGHT VISION CAMERAS AND BAT EMERGENCE DURING THE JULY EMERGENCE SURVEY.

5 Evaluation

5.1 Initial observations consider the local area suitable for bats due to the proximity and connectivity to suitable habitat.

5.2 The daytime assessment identified a confirmed roost in the house due to the presence of bat guano within both roof voids. A soprano pipistrelle bat roost was identified within the wall top to be impacted by the works through the presence of droppings which were sent for DNA analysis. A serotine roost was confirmed outside the area of impact due to the presence of bat droppings which were confirmed through DNA analysis.

5.3 The emergence surveys additionally identified common pipistrelle bats roosting within the ridge of the property outside of the area of the proposed works.

6 Conclusions & Recommendations

6.1 Bat roosts are present on site both within and outside of the area of works. The soprano pipistrelle bat day roost identified at the eastern wall top of the property during the original bat assessment will be damaged by the works through the tie-in of the

new extension. The serotine and common pipistrelle bat day roosts will not be subject to significant negative impact.

6.2 A lack of any mitigation could result in a negative impact on bats, through potential death, disturbance and loss of roost space.

6.3 Therefore, a Natural England development licence will be required for works to proceed to ensure that an offence will not be committed. This will encompass a Mitigation Strategy to ensure that the development is designed to protect bats during the construction phase and to minimise long term impacts upon the local bat population.

6.4 There are three tests detailed in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which must be satisfied before a Natural England licence can be issued to permit otherwise prohibited acts:

1 Regulation 53(2)(e) states that licences may be granted for "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment".
2 Regulation 53(9)(a) states that a licence may not be granted unless the licensing authority (Natural England) is satisfied that "there is no satisfactory alternative".
3 Regulation 52(9)(b) states that a licence cannot be issued unless the licensing authority (Natural England) is satisfied that the action proposed "will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range".

6.5 For Natural England to be able to issue such a licence, full planning permission must first be obtained as this will satisfy tests 1 and 2, described above. Test 3 can be satisfied by measures to ensure that minimal disturbance to bats is caused by the works to be carried out on the site and that the site plans include the adequate replacement of any roosts that are lost.

6.6 The site will need to be licenced under a full EPS licence, registered under the Bat Mitigation Class Licence (BMCL) or registered under the Bat Earned Recognition (BER) Class Licence Pilot Scheme under which it fits into Accreditation Level 1. Under this licence a full plan of compensation is required in addition to confirmation of adherence to suitable mitigation strategies, under the BER scheme the licensee and joint licensee are jointly responsible for adherence to the mitigation and compensation requirements for the site. For this site the mitigation would include the following measures:

- Prior to works commencing, the building must be fully inspected by a licensed bat ecologist. All known roost areas and areas with potential for bats will be soft-stripped under direct supervision of the licenced ecologist, able to handle and check any bats found and move them to a safe place. Bat boxes will be erected near the site to act as a safe place to move any bats found into.
- The roof of the building must not be lined with a modern breathable roofing membrane, it must have a traditional Bitumen Type 1F (with a hessian Matrix) roofing felt. Polypropylene filaments used in the manufacture of modern

breathable underlays are known to entangle and kill bats and warranty can be invalidated; therefore, they must not be used in known or potential bat roosts and cannot be used at sites with EPS licences for replacement bat roosts. This applies to existing roof areas to be fitted with a lining, as well as any new roofs over proposed extensions and lining behind cladding such as tile hangings.

- New access points will be created in the roof of the building, to provide access for bats to roost in similar areas and locations to existing providing the same aspect and microclimate.

6.7 A Reasoned Statement (which sets out the planning background to the site and includes a copy of the planning permission) is not required in this instance. The exception in this instance is because Natural England guidance states a reasoned statement is not required where:

- where bats and their roosts will be affected by:
  - repairs and maintenance
  - roof replacements, loft conversions and extensions
  - renovations of existing domestic dwellings and associated structures, such as garages
  - housing developments of less than 1 hectare, including:
  - existing buildings and associated structures that may need to be demolished before redevelopment takes place (whether domestic dwellings or other types of buildings)
  - barn conversions for domestic dwellings (this doesn't include conversions for commercial use, such as holiday lets)

6.8 Natural England licenses are usually completed by an ecological consultant who must be suitably qualified to carry out the mitigation (for example, holds a licence to survey for bats) or by a consultant registered under the Bat Mitigation Class Licence and Bat Earned Recognition Licence schemes.

6.9 The licence application will require surveys in the most recent active season prior to works commencing, therefore if works do not take place before May 2023 top up surveys will be required.

7 References

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