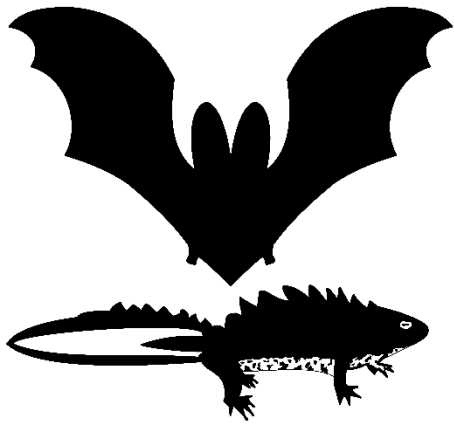




AEWC Ltd

Animal Ecology & Wildlife Consultants

Bat Survey Report

12 Nile Street

**Emsworth
Hampshire
PO10 7EE**

Brigitte de Coriolis

**22-195
August 2023**

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Summary

- AEWCLtd were commissioned by Daniel Burdfield on behalf of their client to undertake a detailed bat survey at 12 Nile Street, Emsworth, Hampshire, PO10 7EE at grid reference SU 74883 05710 to help inform the proposed development of the site.
- This report details the results of the survey, which was carried out between 8th February and 2nd July 2023 by Emily Partridge, a Natural England licensed bat ecologist.
- The building subject to survey is a brick-built structure with a two-storey southern section and single-storey northern section, both supporting gabled roofs.
- The proposed plans are not yet finalised but will involve the conversion of the workshop into living accommodation, removal of the existing single-storey section of building and construction of a new smaller single-storey section of building on the same elevation.
- The daytime assessment identified low potential for roosting bats within the north single-storey roof due to a small number of gaps under raised tiles and missing mortar which could allow access into the batten spaces. The south two-storey roof was assessed to hold high potential for roosting bats due to numerous gaps under raised roof tiles suitable for bat access into the roof batten spaces.
- The emergence survey did not record any bats emerging from the northern single-storey section of the property to be impacted by the proposed works, and additionally recorded very limited bat activity, and it is considered that no notable roosts are likely to be present within the immediately surrounding buildings.
- **The northern single-storey section of the building proposed for demolition was considered to have low potential to support roosting bats, however bats were not found during the emergence survey and, as such, there are no known constraints regarding these species and the proposed development.**
- **Bats are highly mobile species and therefore may turn up on sites at any time. Should bats, or evidence of bats, be identified during the works the procedure in section 7 of this report must be followed.**

This report has been prepared by AEWCLtd, 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 AEWCLtd were commissioned by Daniel Burdfield on behalf of their client to undertake a detailed bat survey at 12 Nile Street, Emsworth, Hampshire, PO10 7EE 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 carried out by Emily Partridge on 8th February 2023 assessed the single-storey northern roof of the building as having low potential to support roosting bats due to a low number of gaps beneath lifted tiles and missing mortar providing access into the batten space, and the southern two-storey section to have high potential to support bats due to numerous gaps under raised roof tiles providing access into the batten space.
- 1.4 Further surveys were therefore required to ascertain whether bats are present at the site and determine whether bats 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 building on the site to support roosting bats;
 - Identify whether bats are present using the building on site;
 - Estimate the size and status of any existing bat roost within the building;
 - 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 12 Nile Street, Emsworth, Hampshire, PO10 7EE at central grid reference SU 74883 05710. The site is located in the town of Emsworth and is immediately surrounded by a carpark to the south with residential properties to the north, east and west. Slipper Mill Pond lies approximately 70m west of the site. The wider landscape comprises Emsworth estuary to the south with commercial and residential development to the north, east and west. Beyond the town of Emsworth the landscape largely comprises agricultural farmland and woodland with the closest area of woodland being a parcel of deciduous woodland approximately 250m northeast of the site. See Figures 1 and 2.



FIGURE 1: SHOWING THE LOCATION OF THE SITE

1.8 The building subject to survey is a brick-built structure used as a garage and workshop.



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 proposed plans are not yet finalised but will involve the conversion of the workshop into living accommodation, removal of the existing single-storey section of building and construction of a new smaller single-storey section of building on the same elevation.



FIGURE 3: SHOWING THE PROPOSED PLANS.

2 Methods

Daytime Assessment

- 2.1 A detailed bat building inspection was undertaken on the 8th February 2023 by Emily Partridge, a Natural England licensed bat ecologist. Full details can be found within the associated AEWC Ltd Bat Assessment Report dated February 2023.

Emergence Surveys

- 2.2 The evening emergence survey was conducted on 2nd July 2023, a time of year when bats are active and maternity colonies should be present. Conditions were good for the bat survey with warm weather, and any bats present were likely to be active. The emergence survey began a minimum of 15 minutes before sunset and finished a minimum of 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 using VLC player software which does not skip frames at any review speed, 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 emergence survey (Figure 4). The surveyor and cameras were positioned to get a good all-round view of the northern extension of the building with a particular focus on the areas of impact and where potential roost features were identified present.

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.

4 Results

Daytime Assessment

- 4.1 The building subject to survey is a brick-built structure with a two-storey southern section and single-storey northern section, both supporting gabled roofs. The northern single-storey roof supports interlocking clay roof tiles which were recorded to be largely tight fitting with a small number of gaps suitable for bat access recorded under raised tiles and where mortar was missing from the bottom row of tiles.
- 4.2 The two-storey southern roof supports clay roof tiles which were recorded to contain numerous gaps suitable for bat access under raised tiles. A gap which allows direct access into the workshop on the second floor is also present on the western elevation.
- 4.3 The building is open to the apex within all sections of the building and bitumen felt can be seen below the tiles. A section of bitumen felt has fallen away within the two-storey roof and modern non-bitumen-coated roofing membrane can be seen underneath. The internal space is bright due to the presence of windows which allow light into all rooms of the building. No evidence of bats was recorded internally.



Photograph 1: The north and west elevations.



Photograph 2: Raised tiles on the single-storey roof.



Photograph 3: Gaps within the bottom row of tiles on the single-storey roof.



Photograph 4: Raised roof tiles on the two-storey roof.



Photograph 5: Gap allowing direct access into the workshop.



Photograph 6: The first floor workshop.

Emergence Surveys

- 4.4 Only the single-storey northern section of the building will be impacted by the current proposals and therefore only this section was subject to further emergence survey.

- 4.5 **2nd July 2023** – Weather conditions were good for the survey (17.2°C and calm with 70% cloud cover) and any bats present were likely to be active. The survey recorded only a single common pipistrelle (*Pipistrellus pipistrellus*) pass approximately an hour after sunset. No bats were identified to emerge from the building and no other bat activity was recorded by the surveyor.
- 4.6 A diagram showing the locations of the surveyor and night vision cameras during the evening survey can be seen in Figure 4 below.



FIGURE 4: SHOWING POSITIONS OF SURVEYOR AND NIGHT VISION CAMERAS DURING THE JULY EMERGENCE SURVEY.

5 Evaluation

- 5.1 Initial observations consider the local area suitable for bats. Small woodland blocks, pasture, open fresh water and coastal habitats within the surrounding area provide good foraging habitat for a range of species, with scattered and woodland trees buildings within the local area additionally offer potential roosting opportunities.
- 5.2 The daytime assessment identified low potential for roosting bats within the northern section of the building to be demolished, due to a low number of gaps beneath lifted tiles and missing mortar and high potential for bats within the southern two-storey section due to numerous gaps under raised roof tiles providing access into the batten space.

- 5.3 The emergence survey did not record any bats emerging from the northern single-storey section of the property to be impacted by the proposed works, and additionally recorded very limited bat activity. Only a single bat pass was recorded, this was an early-emerging species yet was recorded almost an hour after sunset. The site is immediately surrounded by buildings and hard standing and the lack of activity during the first hour following sunset suggests that no notable roosts are likely to be present within the immediately surrounding buildings.

6 Conclusions & Recommendations

- 6.1 The northern single-storey section of the building proposed for demolition was considered to have low potential to support roosting bats, however bats were not found during the emergence survey and, as such, there are no known constraints regarding these species and the proposed development.
- 6.2 Bats are highly mobile species and therefore may turn up on sites at any time. Should bats, or evidence of bats, be identified during the works the procedure in section 7 of this report must be followed.
- 6.3 Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance in these areas. Additional external lighting should be avoided or kept to the minimum necessary, and preferably on a motion sensor to reduce lighting time. **Lighting should be designed in accordance with the Institute of Lighting Professionals Guidance note 8: ‘Bats and Artificial lighting in the UK’ which can be downloaded for free from the ILP website.**
- 6.4 Additional work lighting which may be required must be positioned to ensure that it shines onto the area of works with minimal spread into the wider area.

7 Procedure to follow in the event a bat is found on site.

- 7.1 Bats are present within the vicinity of the site and may be found at any location on, in or around the buildings. Bats are protected species, and these procedures must be followed to avoid committing an offence.
- 7.2 If a bat is found at any location around the site DO NOT TOUCH unless necessary for the safety of the bat.
- 7.3 If the bat was uncovered in a roosting location carefully replace covering ensuring the bat is not crushed or harmed. If this is not possible cover the animal with a loose covering.

- 7.4 Stop all work at that area and the immediate vicinity. Work may continue at other areas around the site.
- 7.5 Call the AEWC Ltd bat licensed project ecologist Brigitte de Coriolis 07545130203, call the office on 08452 505585, or licensed ecologists Daniel Whitby 07764813002 or Annika Binet 07528 956486.

8 References

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