

Bat emergence surveys

7-10 Wordland Cross, Cheriton Fitzpaine, Devon

May / June 2023

A report by

Michael Sanders BSc (Hons), Ecologist
(Natural England licence no: 2016-24281-CLS-CLS)

Report details

Site address:	7-10 Wordland Cross, Cheriton Fitzpane, Devon EX17 4JR
Grid reference:	SS 872057
Report date:	22 nd June 2023
Report Author:	Michael Sanders BSc (Hons)
Report checked by:	Colin Hicks BSc (Hons), MCIEEM
Report no:	WOR-3603

Declaration of compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of practice for planning and development.

Code of Professional Conduct

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Validity of survey data and report

The findings of this report are valid for 12 months from the date of survey. If a European Protected Species Licence application has not been made within this period, updated surveys by a suitably qualified ecologist are likely to be required to support a licence application.

Non-technical summary

Western Ecology has been commissioned to complete a preliminary visual assessment for bats and breeding birds of 7-10 Wordland Cross, Cheriton Fitzpane, Devon. The buildings will be the subject of a planning application. The preliminary roost assessment found the buildings to have moderate suitability to support roosting bats.

Bat emergence surveys (supported by three infrared cameras) were carried out in May and June 2023 during which time no bats emerged from the buildings. It is reasonable to conclude that it is extremely unlikely that bats are roosting in association with these structures. Works can proceed with negligible risk to bats and does not require a method statement for bats or a European Protected Species licence.

No mitigation is required for bats. However, it should be noted that in any building individual bats could occasionally roost or move in at any time, and recommendations are made within Section 5 of the report.

Table of contents

1. Introduction	5
1.1. Background.....	5
1.2. Site description	5
1.3. Proposed works	6
1.4. Survey aims	6
2. Methods	7
2.1. Dusk emergence surveys.....	7
2.2. Desktop search	8
3. Results.....	10
3.1. Bat emergence survey	10
3.2. Summary of bat survey results, interpretation and evaluation	10
4. Assessment	11
4.1. Survey constraints.....	11
4.2. Assessment of potential impact on bats	11
4.3. Legislation.....	11
5. Recommendation and mitigation	13
5.1. Bats	13
References	14

1. Introduction

1.1. Background

Western Ecology has been commissioned to complete a preliminary visual assessment for bats and breeding birds of 7-10 Wordland Cross, Cheriton Fitzpane, Devon. The preliminary roost assessment found the following:

“Occasional droppings were found in all roof voids (~40 in no. 7, and ~5-10 in nos. 8-10), with occasional gaps visible in roof, ridge and hip tiles. These structures were assessed as having moderate suitability for bats for crevice-dwelling bats.”

Further surveys were recommended. This report documents this further survey work and provides a full assessment of roosting bats. This report also provides an outline of the required mitigation to allow development associated with this structure to proceed in a lawful manner.

This survey has been prepared in accordance with the Bat Conservation Trust’s “Bat Surveys Good Practice Guidelines” (Collins, 2016).

1.2. Site description

Wordland Cross is situated in a semi-rural location, 390m to the south-east of the village of Cheriton Fitzpane in the Mid Devon district of Devon. The dwellings are in an elevated and relatively exposed location. Immediate surroundings are provided by residential garden planting beyond which is farmland and managed hedgerow, with occasional scattered trees providing connectivity out into the wider countryside. Areas of woodland are situated from 350m to the west, and narrow waterways ~300m to the north and south.

The surrounding landscape is likely to be unlit at night, providing moderate opportunities for foraging and commuting light-averse bats.



Plan 1. The location of the buildings surveyed.



Plan 2. The buildings surveyed at this site (blue line)

1.3. Proposed works

The buildings will be the subject of a planning application.

1.4. Survey aims

The purpose of this survey is to determine, with confidence, if bats are present at the property, and if so, to provide evidence on which to base mitigation.

The survey will also determine if a European Protected Species licence will be required to allow the proposed development to proceed lawfully.

2. Methods

2.1. Dusk emergence surveys

These surveys consist of a sufficient number of experienced bat surveyors monitoring a built structure for bat activity.

The surveyors, including at least one licenced bat ecologist, are stationed around the building in such a way that any bat leaving or entering the structure is likely to be observed (Plan 3a). The survey normally begins 15 minutes before sunset and continues until at least 90 minutes after sunset.

In addition to surveyors, night vision aids (infrared capable camcorders - Sony FDR AX100, HDR-SR12) are used in conjunction with 850nm infrared lighting rigs (Raytec variable beam IR illuminators). Full spectrum, recording bat detectors (Echo Meter Touch 2 Pro or Wildlife Acoustic Song Meter Mini Bat) are time synchronised with camera footage. Heterodyne bat detectors are also used to support full spectrum recordings. Post survey, camera footage is analysed by a suitably experienced bat surveyor.

This survey methodology complies with guidelines produced by the Bat Conservation Trust (Collins, 2016) and Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys. (BCT, 2022).

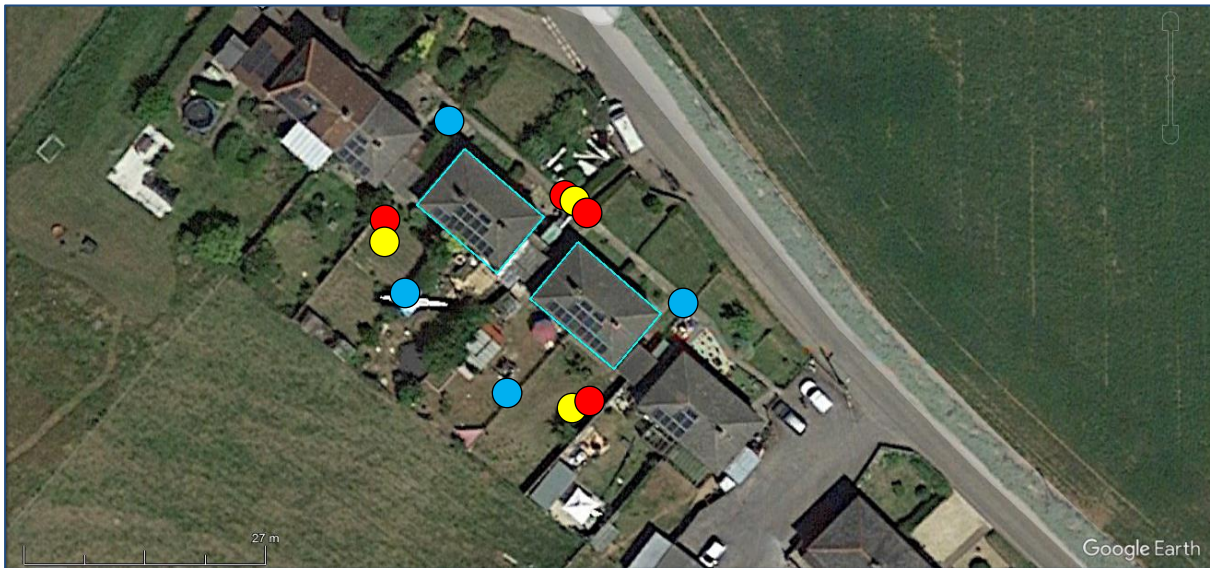
Table 1. Emergence survey details

Date of each survey visit	Start and end times and time of sunset	Structure reference / location	Equipment used (include make of bat detectors and logging equipment)	Weather – (Include start and end temps, precipitation, Beaufort wind scale etc)	Comments (to include # of surveyors used for each visit):
10/05/2023	Sunset 20:49. Survey 20:34 to 22:19	7-10 Wordland Cross	EMT2 Pro, Batbox Duet	Dry, F2 SW wind, 40% cloud, start 11°C finish 10°C	4 Surveyors: Michael Sanders, Yolande Knight John Blackburn Sharon Gedye
12/06/2023	Sunset 21:28. Survey 21:13 to 22:58	7-10 Wordland Cross	EMT2 Pro, Batbox Duet	Dry, calm, 20% cloud, start 15°C finish 15°C	4 Surveyors: Michael Sanders, Kristine Villalba. Alastair Campbell, Roger Gravestock

Table 2. Surveyor details

Michael Sanders, Natural England licence no: 2016-24281-CLS-CLS with 8 years of bat survey experience
 Yolande Knight PhD Natural England licence no: 2020-47431-CLS-CLS with 7 years of bat survey experience
 John Blackburn, BSc, MSc, MCIEEM, Natural England licence no: 2019-39576-CLS-CLS with 11 years of bat survey experience
 Sharon Gedye is a trainee surveyor, and has been assisting in surveys since May 2021
 Alastair Campbell Natural England licence no: 2015-15133-CLS-CLS with 20 years of bat survey experience
 Roger Gravestock has 11 years of bat survey experience
 Kristine Villalba, with 5 years of bat survey experience

Surveyor and Infrared camera locations during emergence surveys are detailed in plans 3a and 3b.



Plan 3a. The location of surveyors for 1st survey (red dots), 2nd survey (blue dots), Infrared cameras (yellow dots).



NE position



SW position



SE position

Plan 3b. Infrared camera coverage

2.2. Desktop search

A biological records search was not considered appropriate due to the highly mobile nature of bats. It is assumed that all species of bat that are present in Devon could be active within the vicinity which includes Barbastelle, Serotine, Noctule, Lesser Horseshoe, Greater Horseshoe, Common Pipistrelle, Soprano Pipistrelle, Nathusius Pipistrelle (very rare), Whiskered, Brandt's, Natterer's, Daubenton's, Brown Long-eared and possibly Grey Long-eared.

It is very unlikely when considering the location and structure being assessed that a data search would provide further meaningful information.

If a full European Protected Species licence is required for this site, a biological records search for bats will be completed with the local records centre to support the licence application.

3. Results

3.1. Bat emergence survey

1st Emergence survey

No bats emerged from the structures.

Weather conditions were good for bat activity and bats were present in the vicinity of the site. The first bat recorded in the area was a common pipistrelle passing to the north of the site at 20:56. Occasional common pipistrelle passes were recorded around the structure until the end of the survey. A single long-eared pass was recorded from the south of the site at 21:28.

2nd Emergence survey

No bats emerged from the structures.

Weather conditions were good for bat activity and bats were present in the vicinity of the site. The first bat recorded in the area was a common pipistrelle at 22:07. Occasional common pipistrelle passes were recorded around the structure until the end of the survey.

3.2. Summary of bat survey results, interpretation and evaluation

No bats emerged from the buildings during the dusk emergence surveys. It is reasonable to conclude that bats are unlikely to be roosting in association with this structure.

4. Assessment

4.1. Survey constraints

The initial assessment and emergence survey were completed at an optimal time for such surveys (Collins, 2016).

All areas of the building could be readily observed during this emergence survey and all equipment functioned correctly for the period of the survey.

Interim guidance (BCT, 2022) prior to the release of the Bat Survey Guidelines 4th edition states:

The 4th edition of the survey guidelines will therefore transition away from the standard use of dawn surveys, particularly as a method for presence/absence surveys, in favour of dusk surveys supported by NVAs.

and:

This guidance supersedes BCT Bat Survey Guidelines 3rd Edition (Collins et al, 2016)

In line with this, infrared cameras (Night Vision Aids - NVAs) were employed during the two emergence surveys as the preferred method for presence/absence surveys. This aligns this report with the most recent guidelines.

It is the professional opinion of the surveying ecologist that the initial bat assessment in combination with the bat emergence survey provides sufficient information in relation to bats to allow the decision-maker to determine the planning permission. Further survey work would not make any material difference to the information provided.

4.2. Assessment of potential impact on bats

It is extremely unlikely that bats are roosting in association with these structures. Works can proceed with negligible risk to bats and does not require a method statement for bats or a European Protected Species licence.

4.3. Legislation

Bats

Bat species and their breeding or resting places (roosts) are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended). They are identified as European Protected Species. Under these laws it is an offence to:

- capture, kill, disturb or injure bats (on purpose or by not taking enough care);
- damage or destroy a breeding or resting place (even accidentally);
- obstruct access to their resting or sheltering places (on purpose or by not taking enough care); or

- possess, sell, control or transport live or dead bats, or parts of them.

Seven species of bat are listed as being of principal importance, in the Secretary of State's opinion, for the purposes of conserving biodiversity. Under section 41 (England) of the NERC Act (2006) there is a need for these species to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity.

These seven bat species are barbastelle, Bechstein's, noctule, Soprano pipistrelle, brown long-eared, greater horseshoe and lesser horseshoe and are the subject of National and Local Biodiversity Action Plans.

Activities that can affect bats (from GOV.UK)

Activities that can affect bats include:

- renovating, converting or demolishing a building
- cutting down or removing branches from a mature tree
- repairing or replacing a roof
- repointing brickwork
- insulating or converting a loft
- installing lighting in a roost, or outside if it lights up the entrance to the roost
- removing commuting habitats such as hedgerows, watercourses or woodland
- changing or removing their foraging areas
- using insecticide
- treating timber

5. Recommendation and mitigation

5.1. Bats

No mitigation is required for bats. Works can proceed with negligible risk to bats and does not require a method statement for bats or a European Protected Species licence.

It should be noted that in any building, individual bats could occasionally roost or move in at any time, and we recommend the following approach:

- Prior to the start of works, all site staff will be briefed that bats can move into a building at any time and may be encountered during works.
- If bats are found unexpectedly during works, work should stop immediately and Natural England (0300 060 3900) or Western Ecology (0800 622 6828) informed.
- Any bats found that are exposed and vulnerable should be protected from the elements and predators (particularly cats). You may need to contain the bat in a shoe box or similar sized container (with holes punched in the lid). You should not handle bats with bare hands.

References

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Survey Trust, London. ISBN-13 978-1-872745-96-1

BCT (2022). Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys. (May 2022). <https://cdn.bats.org.uk/uploads/pdf/Interim-guidance-note-on-NVAs-May-2022-FINAL.pdf?v=1653399882>