Daniel Ahern Ecology

Redlynch Barn, Redlynch

Bat Activity Survey Report

Mr Colley

October 2023



Document Control

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Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

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Executive Summary

- **Building 1 – barn; low numbers of brown long-eared, a maximum of 2 during any one survey, were recorded emerging from the south eastern end of the structure. Low numbers of serotine, a maximum of 2 during any one survey, were recorded emerging from the south eastern end of the structure. Soprano pipistrelle, a maximum of 4 during any one survey, were recorded emerging from amongst vegetation on the north western gable end. These results classify the roosts as a summer, day roosts for these three species.**
- **The results of the dusk emergence surveys confirm that bats present an ecological constraint to the proposed building works to Building 1.**
- **Subject to receiving planning approval, it will be necessary to apply for and obtain an European Protected Species Licence (EPSL) from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.**
- In August 2023 Daniel Ahern Ecology Ltd were commissioned by Mr Colley to undertake a Preliminary Roost Assessment (PRA), also known as a bat inspection survey, of a barn at Redlynch House in Redlynch.
- The PRA survey assessed **Building 1 to have MODERATE bat roost potential based on the number of PRF recorded in the external and internal fabric of the building.** The PRA report recommended two activity surveys were completed, during the first survey two species of bats emerged and a third survey was recommended.
- Mitigation and habitat compensation requirements are set out in section 4.2.

Introduction

1.1. Introduction

In August 2023 Daniel Ahern Ecology Ltd were commissioned by Mr Colley to undertake a Preliminary Roost Assessment (PRA), also known as a bat inspection survey, of a detached barn in the village of Redlynch, which is southeast of the city of Salisbury, Wiltshire.

The PRA survey assessed **Building 1 to have MODERATE bat roost potential based on the number of PRF recorded in the external and internal fabric of the building.** The PRA report recommended two activity surveys were completed, during the first survey two species of bats emerged and a third survey was recommended.

1.2. Site Location and Description

The detached brick barn, hereafter referred to as 'the Site', is situated to the west of the village of Redlynch. The site was accessed by driving along the 'Bowers Hill' road and turning off onto a private road, which runs to the west of the site (NGR SU 19922 21220). An aerial photo view of the site can be seen in Figure 1 below.

Figure 1. Red line boundary for the Site.



1.3. Development Proposals

The current proposal has not been finalised, but it will consist of the following:

- Converting Building 1 into self-catered holiday accommodation

1.4. Survey Objectives

The objectives of the bat inspection survey comprise the following:

- Confirm the presence/absence of bats using the buildings;
- Confirm which species of bat and in what number are present; &
- Confirm how bats are using the building.

1.5. Quality Assurance

All ecological surveys are led by Ecologists who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level. By joining the CIEEM staff sign up to a professional code of conduct.

Methodology

2.1. Activity Surveys

2.2. Dusk emergence survey

Three bat activity surveys were undertaken in Summer 2023, see Table 1, below, for details.

Table 1. Dusk Emergence Survey Dates.

Survey date	Building surveyed	Number of surveyors	Start time	Finish time	Temperature ^{0}C
20/08/2023	Building 1	2	19:50	21:50	18
13/09/2023	Building 1	2	19:00	21:00	16
27/09/2023	Building 1	2	18:30	20:30	15

The dusk emergence surveys commenced approximately 30 minutes before sunset and continued for 90 minutes after sunset.

A combination of two surveyors and 2 video cameras with infra-red illuminators were present in order to survey all visible angles of the building. The time, location, number and species were recorded for each bat leaving or returning to a roost. Bat passes by foraging or commuting bats encountered during the survey were also recorded using standardised forms.

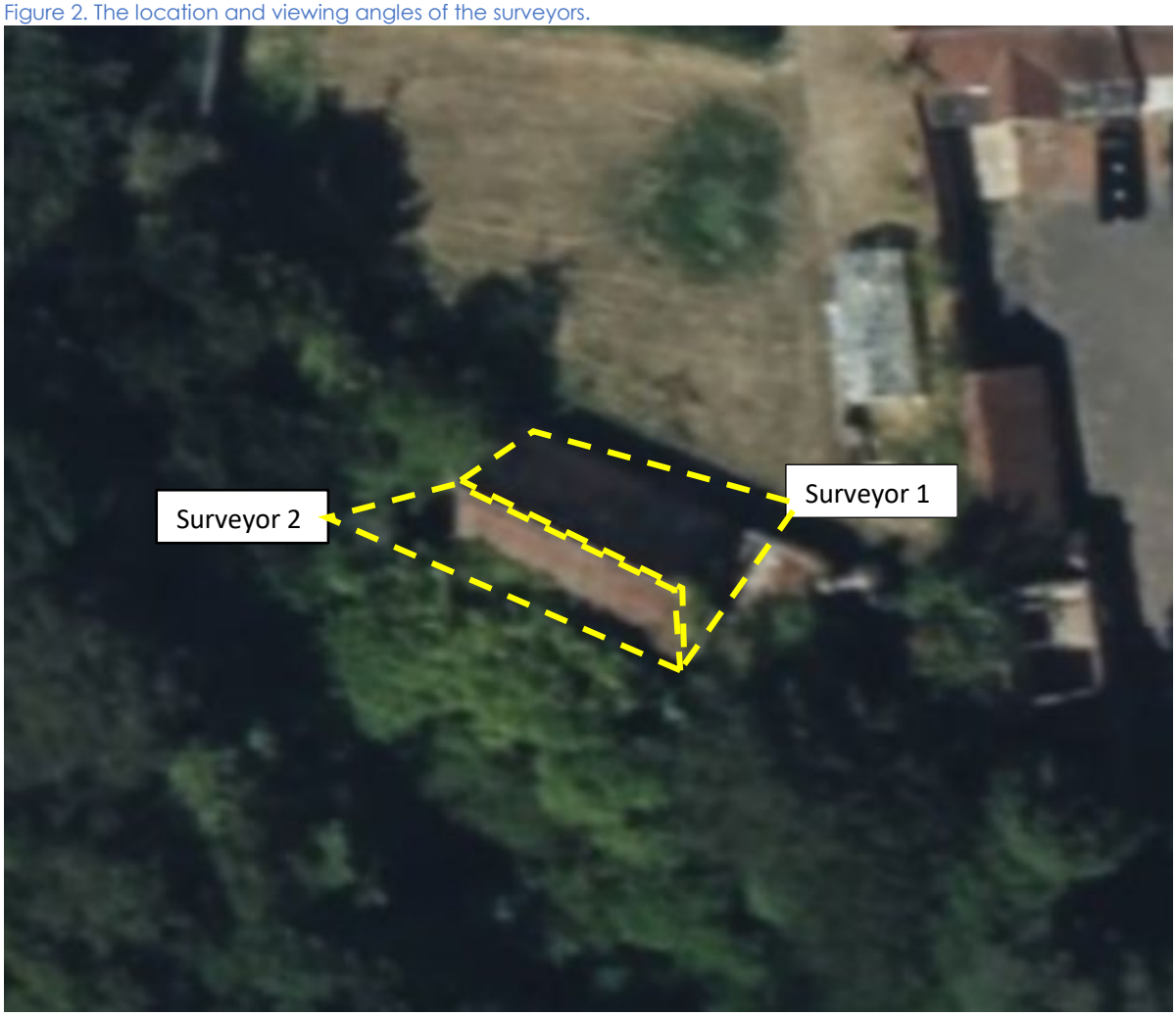
Equipment used:

- Anabat Scout bat detectors;
- Canon XA30 & XA35 camcorders with 850 nm infra red illuminators; &
- Anabat Insight sound analysis software.

Location of the surveyors:

The surveyors were located in such a way as to achieve coverage of all parts of Building 1 during the surveys. See Figure 2, below, for the locations.

Figure 2. The location and viewing angles of the surveyors.



2.3. Limitations

The data provided by the online resources were not exhaustive. It is possible that bat species not included in the data search occur within the vicinity of the proposed development site.

The internal and external inspection survey provides a snapshot of conditions at the time of survey. Bats are mobile creatures that will move into and out of areas.

Surveys were completed during September, technically outside of the optimal bat survey window. Given the diverse data which was recorded and that the weather conditions were equivalent to those during late August it is believed that conditions were not sub-optimal.

The details within this report will remain valid for a period of 12 months; beyond that date it is advised that a review of ecological conditions is undertaken.

Results

3. Activity Survey

There was good weather with a light breeze throughout the surveys.

The results of the dusk activity surveys are set out in Table 3, below.

Table 3. Bat Activity Survey Results – Bat Emergence

Survey date	Site	Survey type	Bats recorded	Number recorded
20/08/2023	Building 1	Dusk Emergence	serotine soprano pipistrelle	2 4
13/09/2023	Building 1	Dusk Emergence	brown long-eared serotine soprano pipistrelle	2 2 3
27/09/2023	Building 1	Dusk Emergence	brown long-eared serotine soprano pipistrelle	2 2 4

See Photos below for the roost/emergence points.

Photo 1 - Building 1, window in south eastern gable end – brown long eared & serotine



Photo 2 - Building 2, window in southern gable end – soprano pipistrelle



Details of bats recorded across the wider site are set out in Table 4, below.

Table 4. Bat Activity Survey Results – Ambient bat activity

Survey date	Site	Survey type	Bats recorded	Number recorded
20/08/2023	Building 1	Dusk Emergence	common pipistrelle Myotis species noctule serotine soprano pipistrelle	32 3 2 4 22
13/09/2023	Building 1	Dusk Emergence	brown long-eared common pipistrelle Myotis species noctule serotine soprano pipistrelle	2 21 2 2 4 16
27/09/2023	Building 1	Dusk Emergence	brown long-eared common pipistrelle	2 24

			Myotis species noctule serotine soprano pipistrelle	2 1 3 21

Discussion and Requirements

4.1. Discussion

4.1.1. Survey results

Building 1 – barn; low numbers of brown long-eared, a maximum of 2 during any one survey, were recorded emerging from the south eastern end of the structure. Low numbers of serotine, a maximum of 2 during any one survey, were recorded emerging from the south eastern end of the structure. Soprano pipistrelle, a maximum of 4 during any one survey, were recorded emerging from amongst vegetation on the north western gable end. These results classify the roosts as a summer, day roosts for these three species.

The results of the dusk emergence surveys confirm that bats present an ecological constraint to the proposed building works to Building 1.

Subject to receiving planning approval, it will be necessary to apply for and obtain an European Protected Species Licence (EPSL) from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.

The findings of this report are valid for 12 months from the issue.

4.2. Requirements

Mitigation measures:

- Prior to any works taking place on site three Harlech woodstone bat boxes will be erected on trees or in open buildings adjacent to the Site at a height at least 3m above the ground.

- The buildings on Site will be inspected by a Natural England C2 licenced ecologist immediately prior to any demolition/roof strip. The ecologist will use a flexible endoscope to assist with this survey. This includes all gaps and cracks in the external brickwork and stonework on Building 5.

- The "demolition" phase of the proposed development will take place between late March and late September.

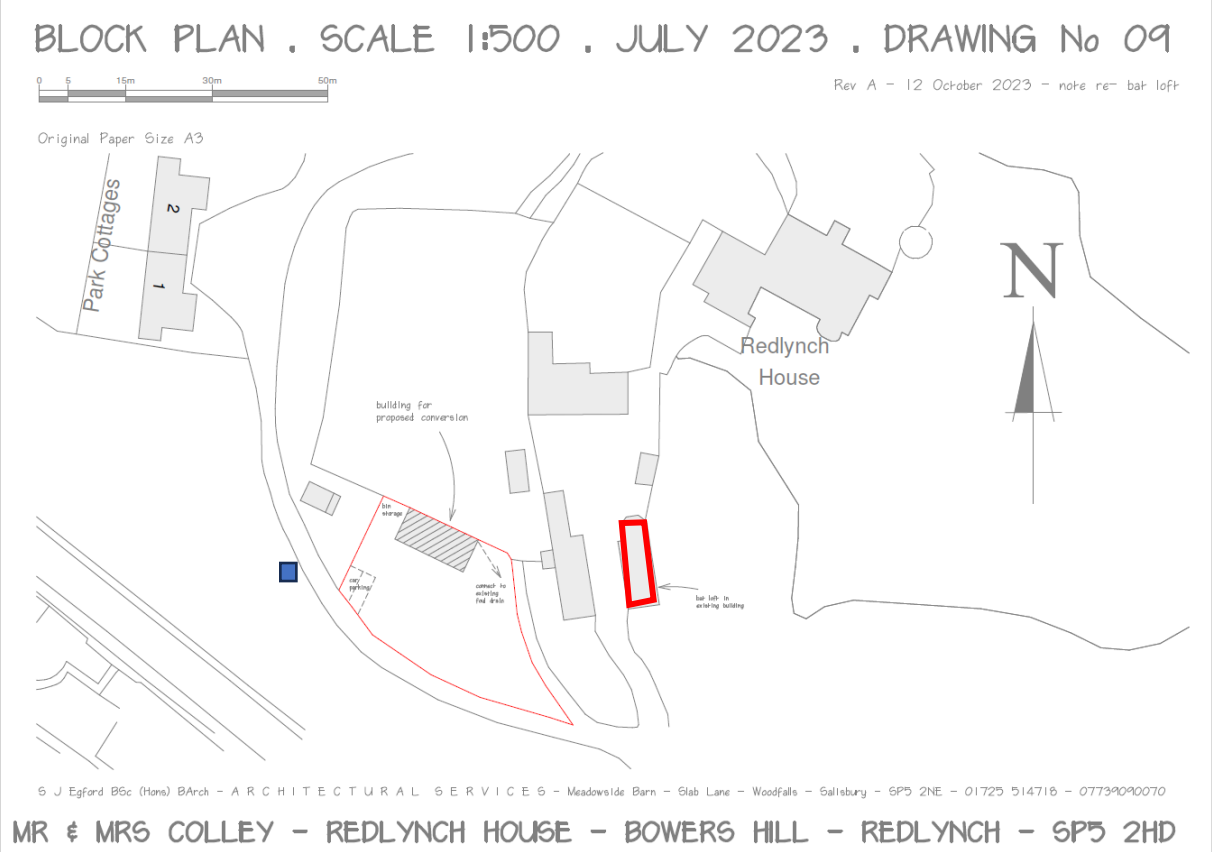
- Should any bats be encountered during the supervised strip of the buildings they will be collected by the Natural England C2 licenced ecologist and moved to the pre-installed bat boxes.

Habitat compensation measures:

- Bat box – install a large, multi-chamber woodstone bat box installed on the southern elevation of an adjacent tree at a height above 3m. https://www.arkwildlife.co.uk/product/large-multi-chamber-woodstone-bat-box/?gclid=EAIaIQobChMIgdvw8pTNgAMVh9XtCh07_gPlEAAYASAAEgIst_D_BwE

- Create a bat loft in Building 2, an existing outbuilding c28m east of building 1. This should be W: 4m, L: 4m, H: 1.8m. Access should be created via the installation of two facia entrances measuring W: 10cm, H: 4cm. See Figure 3, for the location.

Figure 3. location of habitat compensation measures. Bat box ■ bat loft ■



Appendices

Appendix 1 - Legislation

Bats

All species of bat found in the UK are listed under Schedule 5 of *The Wildlife and Countryside Act 1981* (as amended 2018) and are afforded protection under Section 9(1), Section 9(4)(b&c) and Section 9(5) of the Act. Under this legislation, a person is guilty of an offence if he intentionally or recklessly:

- Kills or injures any bat;
- Disturbs any bat while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructs access to any structure or place which any bat uses for shelter or protection.

Bats are afforded additional protection through their inclusion on Schedule 2 of *The Conservation of Species and Habitats Regulations 2017* (as amended). Under Part 3 of this legislation, a person is guilty of an offence if he:

- Deliberately captures, injures or kills a bat;
- Deliberately disturbs a bat; or
- Damages or destroys a bat breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, breed or reproduce, rear or nurture their young, migrate or hibernate. It also includes any disturbance likely to affect significantly the local distribution or abundance of the species. Consequently, attention should be given to dealing with the modification or development of an area if aspects of it are deemed important to bats, such as flight corridors and foraging areas.

Breeding Birds

Wild birds, their nests and eggs, are afforded protection under Section 1(1) of *The Wildlife and Countryside Act 1981* (as amended). Under this legislation, a person is guilty of an offence if he intentionally:

- Kills, injures or takes any wild bird;
- Takes, damages or destroys the nest of a wild bird included in Schedule ZA1;
- Takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- Takes or destroys an egg of any wild bird.