

Sherfield Manor, Sherfield English

Bat Activity Survey Report
Mr M. Croll

October 2022



Document Control

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 Contents

Executive Summary	4
1.1 Executive Summary	4
Introduction.....	5
1.2 Introduction.....	5
1.2 Site Location and Description	5
1.2 Development Proposals.....	6
1.2 Survey Objectives.....	6
1.2 Quality Assurance.....	6
Methodology	6
1.2 Activity Survey.....	6
1.2 Limitations	6
Results.....	7
2.1 Dusk Activity & Dawn Re-entry Surveys.....	7
2.2 Bats.....	7
2.2 Legislation	8
Discussion and Recommendations.....	9
2.2 Discussion	9
2.5 Recommendations.....	9
References.....	11
Appendices.....	12
Appendix 1 – Photographs.....	12

Executive Summary

1.1 Executive Summary

On the 29th June 2020, Daniel Ahern Ecology Ltd completed a preliminary roost assessment (pra) of three outbuildings, Building 1, Building 2 and Building 3 at Sherfield Manor in Sherfield English.

Following the pra assessing the buildings as having low bat roost potential it was recommended that a single emergence survey of the Site was completed.

A desk-based assessment completed in July 2020 recorded Mottisfont Woodlands Special Area of Conservation located c3.7km to the north, north east of the site. The desk based assessment also recorded low numbers of seven species of bats, none of which were Annex II species.

Three activity surveys were completed in July 2020 of Buildings 1, 2 & 3.

A total of seven soprano pipistrelle bats were recorded leaving Building 2 during the three activity surveys. No bats were recorded leaving Building 1 or Building 3.

The emergence of the soprano pipistrelles confirms that Building 2 houses an active bat roost. The roost is characterised as a summer, day roost.

In 2022 the bat activity surveys of Buildings 1, 2 & 3 were repeated to confirm the current status of the roosts recorded in 2020. By agreement with the Test Valley Borough Council Ecologist two activity surveys were completed in June 2022.

A total of five soprano pipistrelle bats were recorded emerging from Building 2. No bats were recorded emerging from Building 1 or 3.

The soprano pipistrelle roost in Building 2 is characterised as a summer, day roost.

Bats constitute an ecological constraint to the proposed development of Building 2 as the proposed development works will require the destruction of the roost.

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.

Mitigation measures and habitat enhancement details are set out in section 4.2.

Introduction

1.2 Introduction

In July 2020 Daniel Ahern Ecology was commissioned by Damen Associates on behalf of Mr M. Croll to undertake a bat inspection survey of Building B at Sherfield Manor in Sherfield English. The purpose of the survey was to provide an assessment of the bat roost potential for the building to inform a planning application.

As part of this assessment the building was characterised as having low bat roost potential and a single activity survey, at dusk, was recommended. Subsequently, following the emergence of soprano pipistrelle from the building during the initial survey a further two activity surveys were completed.

Update – July 2022: By agreement with the Test Valley Borough Council Ecologist two activity surveys were completed in June 2022. These were completed to update the understanding of bat roosts in the three outbuildings.

1.3 Site Location and Description

Sherfield Manor, hereafter referred to as 'the Site', is situated on the outskirts of Sherfield English in Hampshire (approximate OS grid reference: SU 296229, Fig 1 below). The wider Site measures 5.5 Ha in size.

The survey Site comprises a timber built stable.

Figure 1. Red line outline of the survey site.



1.4 Development Proposals

The proposals are to renovate and extend the three outbuildings.

1.5 Survey Objectives

The objectives of the ecological assessment comprise the following:

To determine the presence or absence of bats using the structures.

If recorded to gain a clear understanding of which species of bat and in what numbers they are present.

If recorded to understand how any bats are using the structures.

1.6 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 Survey

Dusk emergence surveys of Buildings 1, 2 & 3 were undertaken on July 20th 2020. Subsequently a dawn re-entry survey of Building 1, 2 & 3 was undertaken on 22nd July 2020 and a second dusk emergence survey was undertaken on 10th August 2020.

Update – July 2022: Two further dusk emergence surveys of buildings 1, 2 & 3 were undertaken on 16th & 28th June 2022.

The dusk emergence survey commenced approximately 30 minutes before sunset and continued for 90 minutes after sunset. The dawn re-entry surveys commenced 90 minutes before sunrise and continued for 30 minutes after sunrise.

The time, location, number, species and direction of flight were recorded for each bat leaving or re-entering the surveyed building. Bat passes by foraging or commuting bats encountered during the survey were also recorded using standardised forms.

Equipment used:

Echo Meter Touch 2 Pro (heterodyne & post recording time expansion) bat detectors;
iPad 4 minis;

Anabat Scout bat detectors (heterodyne, frequency division, auto-tune heterodyne)

Anabat SD2 bat detectors (frequency division)

Anabat Insight sound analysis software.

Sony camcorders with 850nm infra-red illuminators

2.2 Limitations

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.

Bats are highly mobile creatures that will move into and out of areas.

The weather was fine for all three surveys, there was a gusty, warm wind throughout the second dusk emergence survey.

Results

3.1 Dusk Activity & Dawn Re-entry Surveys

There had been no rain for 48 hours prior to any of the surveys. Details are set out in Table 1, below.

Table 1. Dusk & Dawn Bat Activity Survey Details.

Survey date	Weather	Start time	Finish time	Temperature °C
20/07/20	Fine	20.15	22.15	22
22/07/20	Fine	03.15	05.50	16
10/08/20	Fine, gusty breeze	20.15	22.00	26
16/06/22	Fine	20.55	22.55	14
28/06/22	Good	20.55	22.55	15

3.2 Bats

The results of the dusk and dawn activity surveys, relating to bats emerging or re-entering the barns on Site, are set out in Table 2, below.

Table 2. Dusk Bat Activity Survey Results – Emergence from the two buildings on Site.

Survey date	Bat species recorded emerging	Number recorded	Egress/ingress point
20/07/20	Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	4	Various points of the gable end of Building 2
22/07/20	Soprano pipistrelle	2	Various points of the gable end of the Building 2
10/08/20	Soprano pipistrelle	1	The gable end of the Building 2
16/06/22	Soprano pipistrelle	3	The gable end of the Building 2
28/06/22	Soprano pipistrelle	2	The gable end of the Building 2

See Fig 2 below for the exit/entry points from the five surveys (3 in 2020 and 2 in 2022).

Figure 2. Exit & re-entry points at the gable end of Building 2



A total of 412 bats from 4 species were recorded utilising the local area during the activity surveys, details are set out in Table 3 below.

Update – July 2022: A total of 117 bats from 3 species were recorded utilising the local area during the activity surveys, details are set out in Table 3 below.

Table 3. Dusk & Dawn Bat Activity Survey Results – Additional Records

Survey date	Bats recorded	Number recorded
20/07/20	Common pipistrelle <i>Pipistrellus pipistrellus</i> (106), Soprano pipistrelle (92), Natterer's <i>Myotis nattereri</i> (2) Noctule <i>Nyctalus noctula</i> (4)	204
22/07/20	Common pipistrelle (52), Soprano pipistrelle (61), Noctule (2)	115
10/08/20	Common pipistrelle (70), Soprano pipistrelle (22), Noctule (1)	93
16/06/22	Common pipistrelle (48), Soprano pipistrelle (14), Noctule (1)	63
28/06/22	Common pipistrelle (39), Soprano pipistrelle (15)	54

3.3 Legislation

3.3.1 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;
- 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.

3.3.2 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.

Discussion and Recommendations

4.1 Discussion

The preliminary roost assessment (pra) completed in June 2020 by Daniel Ahern Ecology assessed the surveyed building as having low bat roost potential. Based on that a single bat activity survey was undertaken to confirm the presence / absence of bats using Building B to roost. Following the emergence of Soprano pipistrelle bats from the building a further two activity surveys were completed. In total seven Soprano pipistrelle bats were recorded leaving or re-entering Building B.

The weather was fine and provided no constraint to bat activity during the first and second surveys. Though fine the weather was very breezy during the third survey which was a much quieter survey. The weather during the fourth and fifth surveys was optimal for survey work.

The presence of bats roosting in Building 2 was confirmed during each of the five activity surveys.

4.2 Recommendations

4.2.1 Bats

The emergence of Soprano pipistrelles confirms that Building 2 houses an active bat roost. The roost is characterised as a summer, day roost.

The proposed development works will require the destruction of the roost.

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.

Mitigation measures:

Prior to any works taking place on site a Harlech woodstone bat box will be erected on trees 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.

The “demolition” phase of the proposed development will take place between late October and late February to minimise any potential for crevice dwelling bats to be present. Should it take place outside of this window of time then it should be supervised by a Natural England C2 licenced ecologist

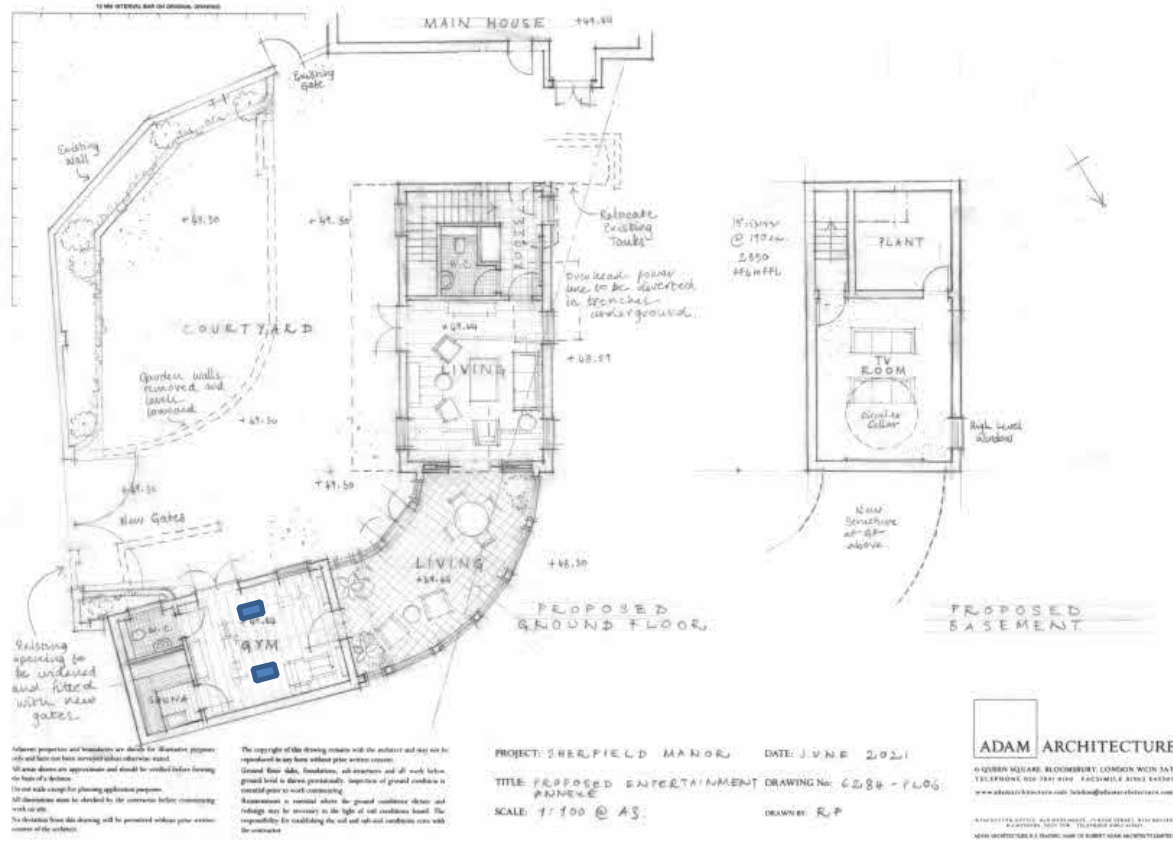
Should any bats be encountered during the supervised strip of the building they will be collected by the Natural England C2 licenced ecologist and moved to the pre-installed bat box on the adjacent tree.

A Natural England C2 licenced ecologist will oversee the building strip, when the fabric in which bats were recorded roosting, is removed ie the roof and vegetation on the western elevation of the house. This will ensure best practice is adhered to by the building contractor.

Habitat enhancement measures:

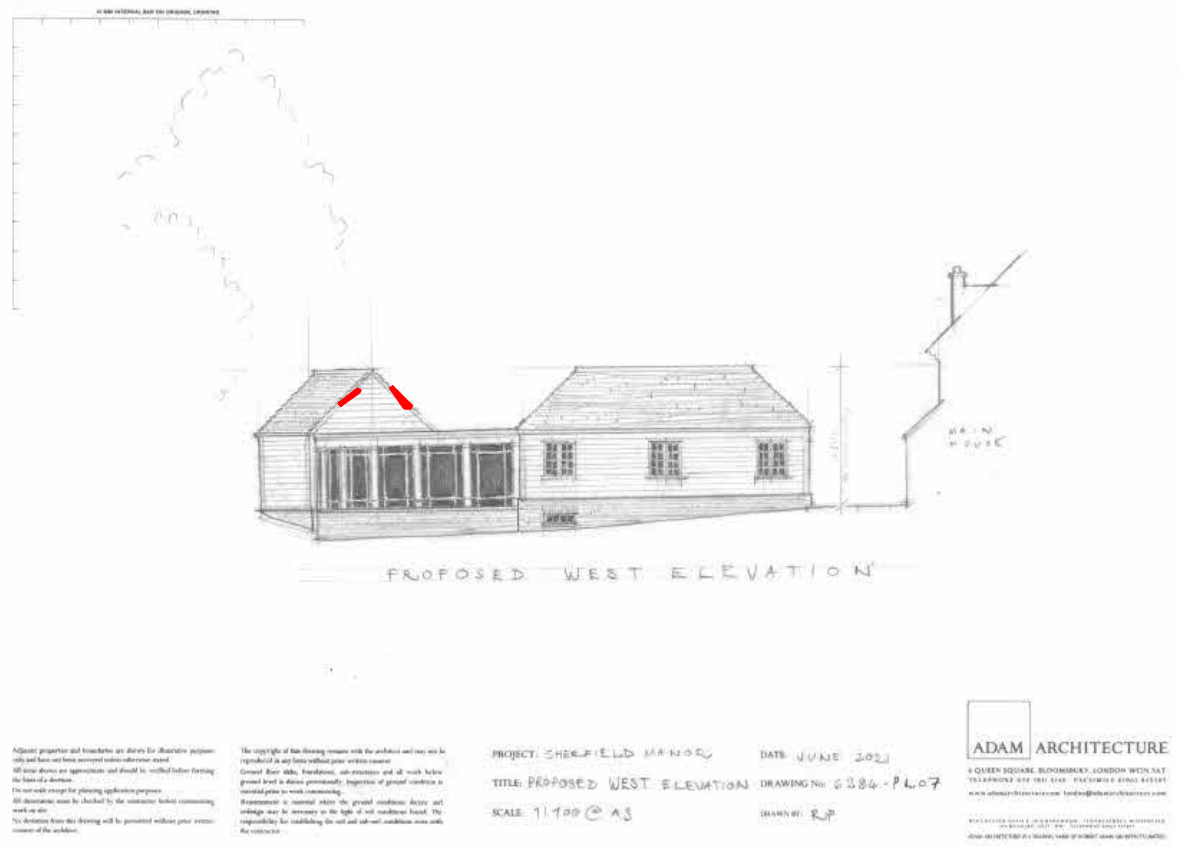
These will include the installation of 2 bat access tiles to the new roof cladding and the use of Type 1 F roofing felt in the structure, see Figure 3 below.

Figure 3 – Location of Habitat Enhancement Measures – Bat Tiles



Two gaps in the soffit on the western gable end will be created. Each will measure 1cm high by 4cm wide, see Figure 4 below.

Figure 4 – Location of Habitat Enhancement Measures – Soffit Gaps



4.2.2 Birds

It is recommended that any demolition takes place out of the bird breeding season ie it should take place between the beginning of November and the end of February.

The buildings should be checked for the presence of active bird nests prior to any work starting.

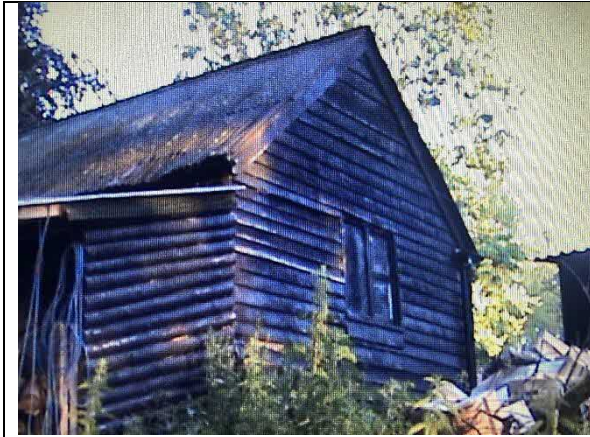
Provision should be made in the project design to achieve biodiversity net gain eg installation of swift and barn swallow nests on each building.

References

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

Appendices

Appendix 1 – Photographs



Photograph 1 – Building 2, the gable end where the confirmed Soprano pipistrelle roost is located



Photograph 2 – Building 2 viewed from the south



Photograph 3 – Building 2, an internal view



Photograph 4 – Building 2 viewed from the north