

Elmfield House, Salisbury

Bat Activity Survey

Elmfield Spinney Development Ltd



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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 work

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Executive Summary

Executive Summary

- **Building 1- Elmfield House;** 27 bats were recorded emerging across the three surveys. There was a maximum of nine brown long eared, five soprano pipistrelle, two common pipistrelle, two serotine and a single myotis sp. recorded emerging from across the whole roof. Though primarily the gables (from the apex and beneath the wooden fascia) and from under the lead flashing around chimneys. The locations of emergences can be seen in Figure 4. **The building is confirmed to be a maternity roost for brown long eared bats and a summer day roost for common pipistrelle, Myotis sp., serotine and soprano pipistrelle.**
- **Building 2 – Yew Tree Cottage.** Six bats were recorded emerging across the three surveys. A maximum of two brown long eared, one common pipistrelle, one serotine and one soprano pipistrelle were recorded emerging. The locations of emergences can be seen in Figure 4. **The building is confirmed to be a summer day roost for brown long eared, common pipistrelle and soprano pipistrelle.**
- **Building 3 – Stable.** No bats were recorded emerging from this building during the two surveys. **Bats do not constitute an ecological constraint the proposed works.**
- **Building 4 – Barn.** A single brown long eared bat was recorded entering and re-emerging the barn after a short period. No feeding remains were found at the end of the activity survey. It's believed that the single bat was exploring the building but not roosting in it in any way. **Bats do not constitute an ecological constraint the proposed works.**
- **The results of the initial inspection and subsequent activity surveys confirm that bats present an ecological constraint to the proposed works to Building 1 & 2.**
- **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 May 2023, Daniel Ahern Ecology Ltd was commissioned by Elmfield Spinney Development Ltd to undertake an ecological appraisal of a property and its surrounding land on the outskirts of Salisbury City.
- The PRA determined that the Elmfield House (Building 1) had HIGH bat roost potential based on the number of external PRA. Internal Access was not granted. It was recommended that three activity surveys should take place between 1st May and 31st August.
- Internal access was granted for Yew Tree Cottage (Building 2). It was assessed as a CONFIRMED roost, based on the number of bat droppings present within the attic space. The analysis of the droppings through eDNA confirmed they belonged to common pipistrelle *Pipistrellus pipistrellus* and serotine *Eptesicus serotinus*. It was recommended that three activity surveys should take place between 1st May and 31st August.
- Building 3 - the outbuildings, consisted of a stable and barn. It was assessed as having MODERATE bat roost potential, due to the number of PRF's within the structures. It was recommended that two activity surveys should take place between 1st May and 31st August.

Introduction

1.1. Introduction

In May 2023, Daniel Ahern Ecology Ltd was commissioned by Elmfield Spinney Development Ltd to undertake an ecological appraisal of a property and its surrounding land on the outskirts of Salisbury City. The purpose of the survey was to provide an assessment of the current ecological conditions and to evaluate the ecological constraints in order to inform development proposals.

The PRA determined that Building 1 - Elmfield House had HIGH bat roost potential based on the number of external PRA. Internal Access was not granted. It was recommended that three activity surveys should take place between 1st May and 31st August.

Internal access was granted for Building 2 - Yew Tree Cottage. It was CONFIRMED to house a bat roost, based on the number of bat droppings present within the attic space. The analysis of the droppings through eDNA confirmed they belonged to common pipistrelle *Pipistrellus pipistrellus* and serotine *Eptesicus serotinus*. It was recommended that three activity surveys should take place between 1st May and 31st August.

Buildings 3 & 4 - a stable and a barn. Both were assessed as having MODERATE bat roost potential, due to the number of PRF's within the structures. It was recommended that two activity surveys should take place between 1st May and 31st August.

1.2. Site Location and Description

Elmfield House and its surrounding land, hereafter referred to as 'the Site', measures approximately 1.0 Ha and is situated between the A36 and Petersfinger Road, on the outskirts of Salisbury in Wiltshire (OS grid reference: SU 16298 29207).

Figure 1. Red line boundary for the two outbuildings surveyed on Site.



Figure 2. Satellite photo of the survey area with buildings numbered; Building 1 – Elmfield House, Building 2 – Yew Tree Cottage, Building 3 – stable & Building 4 - barn.



1.3. Development Proposals

The proposals are:

- Modernisation and conversion of Buildings 1, 2, 3 & 4.
- Construction of over 10 new properties on the garden and land to the south.
- Landscaping and associated ground works.

1.4. Survey Objectives

The objectives of the ecological assessment 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 activity surveys of each building 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 °C
16/05/2023	Building 1 – Elmfield House	4	20:12	21:51	14
07/06/2023	Building 1 – Elmfield House	4	20:50	22:20	19
22/06/2023	Building 1 – Elmfield House	4	20:55	22:30	19
16/05/2023	Building 2 – Yew Tree Cottage	3	20:12	21:51	14
07/06/2023	Building 2 – Yew Tree Cottage	3	20:50	22:20	19
22/06/2023	Building 2 – Yew Tree Cottage	3	20:55	22:30	19
09/05/2023	Building 3 – Stable	3	20:10	21:35	13
07/06/2023	Building 3 – Stable	3	20:50	22:20	19
09/05/2023	Building 4 – Barn	3	20:10	21:35	13
07/06/2023	Building 4 – Barn	3	20:50	22:20	19

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

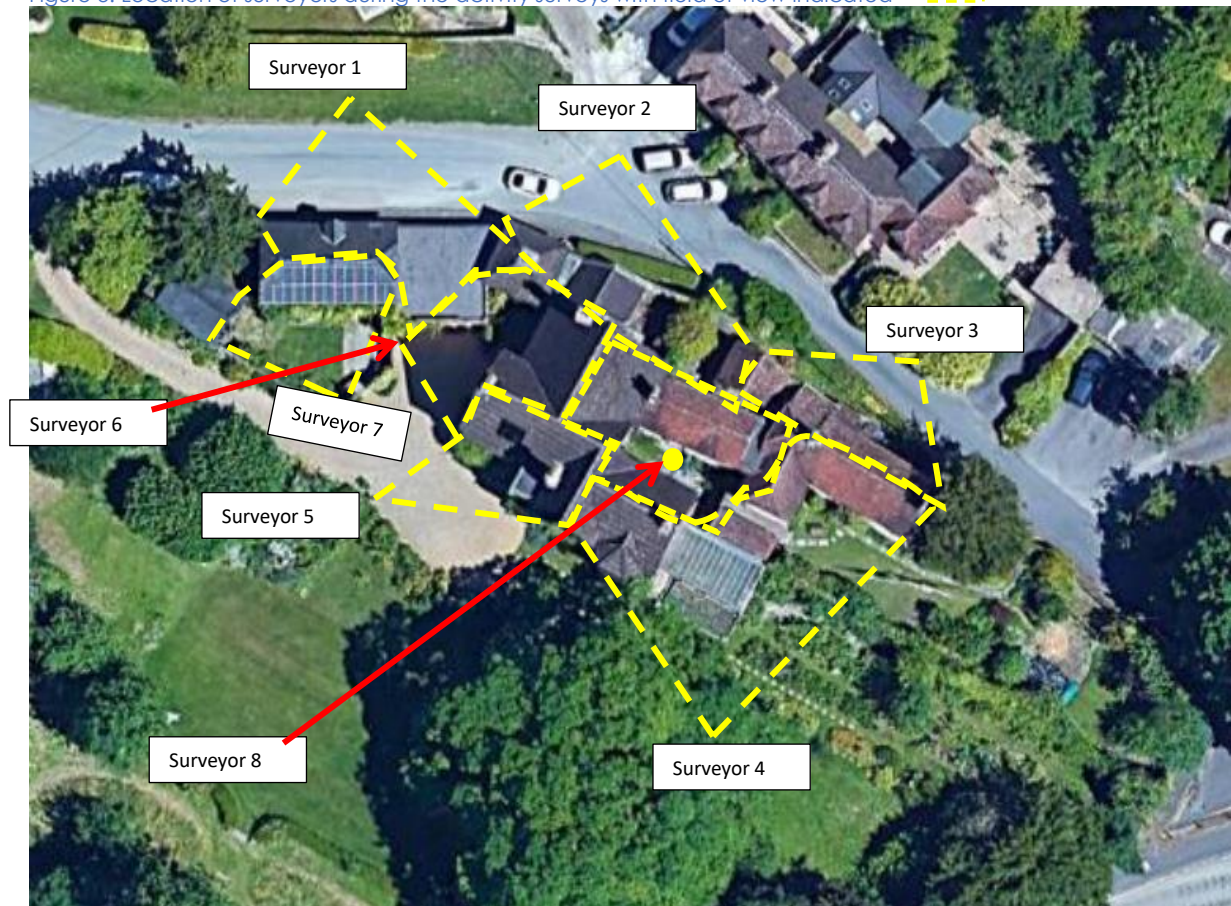
A combination of eight surveyors and 3 video cameras with infra-red illuminators were present in order to survey all visible angles of the buildings. The time, location, number and species were recorded for each bat leaving or returning to a roost. Bat passes by foraging or commuting bats encountered during the survey were also recorded using standardised forms. Equipment used:

- Anabat Scout bat detectors;
- Anabat Swift bat detectors;
- Canon XA30 & XA35 camcorders with 850 nm infra red illuminators;
- Anabat Insight sound analysis software.
- Thermal imaging camera and connected viewing screen

2.3. Location of the surveyors:

The surveyors were located in such a way as to achieve coverage of all parts of buildings 1 & 2 during the surveys. See Figure 3, below, for the locations.

Figure 3. Location of surveyors during the activity surveys with field of view indicated -



2.4. 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.

The Buildings were heavily obscured by vegetation in some places. Due to the complex layout of the property, it was not possible to see all aspects of the buildings.

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 survey are set out in Table 3, below.

Table 3. Bat Activity Survey Results – Bat Emergence

Survey date	Site	Survey type	Bats recorded	Number recorded
16/05/2023	Building 1 – Elmfield House	Dusk Emergence	soprano pip	1
07/06/2023	Building 1 – Elmfield House	Dusk Emergence	brown long eared common pipistrelle serotine soprano pipistrelle	9 3 2 3
22/06/2023	Building 1 – Elmfield House	Dusk Emergence	brown long eared Myotis sp. serotine soprano pipistrelle	1 1 2 5
16/05/2023	Building 2 – Yew Tree Cottage	Dusk Emergence	common pip soprano pip	1 1
07/06/2023	Building 2 – Yew Tree Cottage	Dusk Emergence	serotine	1
22/06/2023	Building 2 – Yew Tree Cottage	Dusk Emergence	brown long eared soprano pipistrelle	2 1
09/05/2023	Building 3 – Stable	Dusk Emergence	none	n/a
07/06/2023	Building 3 – Stable	Dusk Emergence	none	n/a
09/05/2023	Building 4 – Barn	Dusk Emergence	brown long eared**	1
07/06/2023	Building 4 – Barn	Dusk Emergence	none	n/a

*(From yew tree next to Yew Tree Cottage)

** Brown long-eared flew in and re-emerged within minutes.

Details of the bats recorded in the local area during the surveys are set out in Table 4, below.

Table 4. Bat Activity Survey Results – Local bat activity during the survey

Survey date	Site	Survey type	Bats recorded	Number recorded
16/05/2023	Building 1 – Elmfield House	Dusk Emergence	common pipistrelle	5
07/06/2023	Building 1 – Elmfield House	Dusk Emergence	brown long eared serotine soprano pipistrelle	2 2 5
22/06/2023	Building 1 – Elmfield House	Dusk Emergence	common pipistrelle serotine soprano pipistrelle	1 1 5
16/05/2023	Building 2 – Yew Tree Cottage	Dusk Emergence	serotine soprano pipistrelle	2 4
07/06/2023	Building 2 – Yew Tree Cottage	Dusk Emergence	brown long eared noctule serotine soprano pipistrelle	2 1 2 2
22/06/2023	Building 2 – Yew Tree Cottage	Dusk Emergence	common pipistrelle noctule serotine soprano pipistrelle	1 2 1 4
09/05/2023	Building 3 – Stable and Barn	Dusk Emergence	brown long eared common pipistrelle serotine soprano pipistrelle	3 4 2 6
07/06/2023	Building 3 – Stable and Barn	Dusk Emergence	common pipistrelle noctule soprano pipistrelle	3 1 6

Discussion and Recommendations

4. Discussion

4.1. Survey results

Building 1- Elmfield House; 27 bats were recorded emerging across the three surveys. There was a maximum of nine brown long eared, five soprano pipistrelle, two common pipistrelle, two serotine and a single myotis sp. recorded emerging from across the whole roof. Though primarily the gables (from the apex and beneath the wooden fascia) and from under the lead flashing around chimneys. The locations of emergences can be seen in Figure 4. **The building is confirmed to be a maternity roost for brown long eared bats and a summer day roost for, common pipistrelle, Myotis sp., serotine and soprano pipistrelle.**

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Building 3 – Stable. No bats were recorded emerging from this building during the two surveys. **Bats do not constitute an ecological constraint the proposed works.**

Building 4 – Barn. A single brown long eared bat was recorded entering and re-emerging the barn after a short period. No feeding remains were found at the end of the activity survey. It's

believed that the single bat was exploring the building but not roosting in it in any way. **Bats do not constitute an ecological constraint the proposed works.**

The results of the initial inspection and subsequent activity surveys confirm that bats present an ecological constraint to the proposed works to Building 1 & 2. Once planning permission has been granted the proposed development works will require an EPSL from Natural England.

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

Figure 4. Location emergence points for brown long eared – ● common pipistrelle – ● myotis sp. – ● serotine – ● soprano pipistrelle – ●



4.2. Recommendations

Mitigation measures:

- Prior to any works taking place on site four Harlech woodstone bat boxes will be erected on trees adjacent to the site at a height at least 3m above the ground. One box for each species recorded roosting on site.
- The buildings on site will be inspected by a Natural England C2 licenced ecologist immediately prior to any demolition. The ecologist will use a flexible endoscope to assist with this survey.
- The “demolition” phase eg roof strip, 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:

- Details of habitat enhancement will be added to the project design.
- These will include construction of a bat loft within one of the buildings on site. This should measure H: 1.8M, W: 4M, L: 4M.
- Access to the bat loft will be via two bat tiles. The roof will be lined with type 1F felt.
- Roost enhancement for crevice dwelling species will be provided by the installation of bat boxes and bat tiles within the roof cladding of the building where the bat loft is located.
- A lighting plan will be incorporated into the project design, this will ensure dark corridors within the site to facilitate bat commuting.

Legislation and Policy

5.1. Legislation

5.1.1. 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; 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.

5.1.2. 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.