Field Place Farmhouse
Templecombe
Henley-on-Thames
South Oxfordshire
RG9 3HR

Bat Emergence Survey

Report ref.: R2021_BES_b

Report Quality Control Information	
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1 EXECUTIVE SUMMARY

1.1.1 John Wenman Ecological Consultancy LLP was instructed by Mr John Henderson to undertake a Bat Emergence Survey (BES) at Field Place Farmhouse in Henley-on-Thames. The survey was commissioned to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for the construction of additional dormers to the rear and front elevations and changes to existing dormers.

1.1.2 The BES follows a Preliminary Roost Assessment for bats (PRA) conducted by John Wenman Ecological Consultancy in March 2025 (Report ref.: R2021_PRA_a). During the PRA survey, at least 100 medium-sized bat droppings (likely brown long-eared bat (*Plecotus auritus*)) were scattered throughout the roof void of the farmhouse, with notable accumulations under the ridge beam and stuck to the chimney. Based on the number of droppings and the scale of the void, the farmhouse is considered likely to support regular use by individual or small numbers of brown long-eared bats, i.e. a confirmed roost.

1.1.3 Externally, there were potential roost features observed on the farmhouse including uneven and missing hanging tiles on the dormers, and behind the timber soffits, providing potential roosting opportunities for small crevice-dwellings bats such as the locally recorded common pipistrelle and soprano pipistrelle. The property was assigned high suitability for roosting bats.

1.1.4 Evening emergence surveys were carried out on the 16th June, 7th July and 28th July 2025 as per good practice survey guidelines (Collins 2023). During the emergence surveys, a peak count of two soprano pipistrelle bats (*Pipistrellus pygmaeus*) and one common pipistrelle (*Pipistrellus pipistrellus*) bat emerged from the farmhouse. Roost locations/egress points included gaps beneath hanging tiles on the most easterly dormer window on the front and rear elevations of the property and the eaves by the chimney on the northern elevation. The survey findings indicate that the farmhouse acts as a day roost for individual males or non-breeding female common pipistrelle (*P. pipistrellus*) and soprano pipistrelles (*P. pygmaeus*) bats.

1.1.5 Despite no brown long-eared bats (*P. auritus*) recorded emerging from the property, the presence of long-eared bat droppings concentrated around the central chimney and scattered under the ridge in the northern, older roof void indicates the presence of an occasionally used transitional or day roost by low numbers of non-breeding bats, i.e. a – roost of low conservation importance. DNA analysis of droppings confirmed it to be

brown long-eared (*P. auritus*).

1.1.6 The survey data demonstrates that the proposals will result in the loss and disturbance of a common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) day roost and damage and disturbance of a brown long-eared (*Plecotus auritus*) transitional or day roost – roosts of low conservation significance.

1.1.7 A European Protected Species (EPS) Mitigation Licence will be required to allow the work to proceed lawfully, and the survey findings establish that the site would qualify for Bat Mitigation Class Licence (Low Impact) (BMCL) WML-CL21 registration. Under the terms of a full EPS or BMCL, mitigation for the impacts of the work will be required to avoid harming bats and the mitigation strategy is set out in **Section 7**.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Mr John Henderson to undertake a Bat Emergence Survey (BES) at Field Place Farmhouse in Henley-on-Thames, Berkshire.

2.1.2 The survey was commissioned to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for the construction of additional dormers on the front and rear elevations and changes to existing dormers.

2.1.3 The BES follows a Preliminary Roost Assessment for bats (PRA) conducted by John Wenman Ecological Consultancy in March 2025 (Report ref.: R2021_PRA_a). The PRA report states the following:

2.1.4 '*During the internal inspection of the roof void, at least 150 medium-sized bat droppings – resembling those typically deposited by the locally recorded brown long-eared bat (P. auritus) – were scattered throughout the roof voids with a couple of notable accumulations. Due to the number of droppings and the scale of void, the house is considered likely to support regular use by individual or small numbers of brown long-eared bats (P. auritus). The potential access points inside the roof void include gaps in the roof liners, gaps around the chimneys and gaps at the eaves.*

Externally, the potential access points for these bats comprise gaps under lifted or missing tiles throughout, especially around the dormers and chimneys. These external features, in addition to gaps behind the hanging tiles and cladding on the dormers, provide potential roosting opportunities for small crevice-dwellings bats such as the locally recorded common pipistrelle (P. pipistrellus) and soprano pipistrelle (P. pygmaeus). Due to the scale of the potential roost sites in conjunction with the surrounding habitat, the house is considered to have the potential to support large numbers of small crevice-dwelling bats, although evidence to date does not indicate a maternity roost.

Taking into account the reasoning set out in the assessment above, the house has been assigned <u>confirmed roost – high suitability</u>.'

2.1.5 The PRA report recommended the following:

2.1.6 *'Three dusk emergence survey visits should be undertaken in the period of April to*

September (dependent on weather conditions), with at least two of the visits between May and August (i.e. optimal survey season); the survey visits should be spaced at least three weeks apart. These survey visits form part of the roost characterisation necessary to inform an impact assessment and mitigation strategy; the roost characterisation may involve other methods, such as DNA analysis of bat droppings.'

2.2 Site Location and Context

2.2.1 The property is a detached brick and flint residential dwelling at Field Place Farm, set amongst extensive parkland countryside in the valley of the River Thames, near Henley-on-Thames in Berkshire (OS grid reference: SU 78156 81881).

2.2.2 The site is in a rural setting with a large wooded rear garden and connecting deciduous woodland, a priority habitat. The River Thames runs approximately 690m to the south west. Both woodland and the River Thames offer high quality foraging habitat for bat species within close proximity to the property.

2.3 Report Objectives

2.3.1 The aim of the bat emergence survey is to determine the presence or likely absence of roosting bats and to characterise the bat roost(/s) in cases where presence is confirmed. The emergence survey findings inform an impact assessment and mitigation strategy for the development proposals and ascertain whether a European Protected Species (EPS) mitigation licence would be required to allow the works to proceed lawfully.

3 LEGISLATIVE AND POLICY BACKGROUND

3.1 Relevant Legislation

3.1.1 In England and Wales, all bat species found in the wild are fully protected under the Wildlife & Countryside Act 1981 (as amended) (WCA) and Conservation of Habitats and Species Regulations 2017 (as amended); the regulations are commonly referred to as the Habitat Regulations and hereafter referred to as such. The Habitat Regulations refer to European Protected Species (EPS) and all species of bats in the United Kingdom (UK) are EPS. Although the UK left the European Union on the 31st January 2020 and is therefore no longer tied to European legislation, the Habitat Regulations have been retained in their current format.

3.1.2 The legal framework underpinned by the WCA and Habitat Regulations makes these specific actions an offence as follows:

- Deliberately kill, injure, capture or take a wild bat;
- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or to significantly affect local distribution or abundance;
- Damage or destroy a place used by a bat for breeding or resting; and
- Intentionally or recklessly obstruct access to any place used by a bat for shelter or protection.

3.2 Planning Policy

3.2.1 The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England. Government planning policy, such as the ODPM Circular 06/2005, requires LPAs to account for the conservation of protected species when considering and determining planning applications.

3.2.2 The ODPM Circular 06/2005 states that '*the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat*.' This policy means that in instances where there is a reasonable likelihood of bats being present and affected by a development, surveys must be undertaken to inform a mitigation strategy to be agreed prior to granting planning permission.

3.3 Mitigation Licensing

3.3.1 The government's statutory nature conservation body, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (2)(e) – the derogation is for the purposes of '*preserving public health or public safety or other imperative reasons of overriding public interest, including those of a Pipistrellus social call or economic nature and beneficial consequences of primary importance for the environment.*'
- (9)(a) – there is '*no satisfactory alternative*' to the derogation; and
- (9)(b) – '*the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*.'

3.3.2 LPAs have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations to consider and determine whether these three tests are likely to be satisfied by planning proposals affecting EPS before granting planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

3.3.3 The Bat Mitigation Class Licence (BMCL) scheme allows ecologists to apply to become Registered Consultants to use this licence for low conservation status roosts, i.e. roosts comprising small numbers of seven commonly occurring species. A site registration form must be completed as a condition of the licence and submitted to Natural England at least three weeks before the licensable activities are due to start; Natural England aims to register sites within two weeks of submission.

3.3.4 Baseline survey information supporting EPS mitigation licence applications or BMCL site registrations must be up-to-date and have been completed within the current or most recent optimal season. A suitably experienced ecologist will be required to undertake a site walkover/check within three months prior to application/registration submission to confirm that conditions have not changed since the most recent survey.

4 SURVEY METHODOLOGY

4.1 Background Data Search

4.1.1 The Berkshire & South Buckinghamshire Bat Group (BSBBG) were commissioned to undertake a search of their records within a 2 kilometre radius of the property and MAGIC was examined to locate granted European Protected Species licences within a 2km radius.

4.2 DNA Analysis

4.2.1 The two samples of droppings collected in the roof void of the property during the PRA were analysed by Swift Ecology.

4.3 Emergence Survey

4.3.1 In line with good practice guidelines (Collins 2023), three dusk emergence survey visits, each separated by three weeks, were undertaken on the farmhouse on the 16th June, 7th July and 28th July 2025, and each survey was carried out by four bat surveyors; Emma Turnbull (2022-10825-CL20-BAT), Vicky Potts (CL18 2016-27162-CLS-CLS), Conor Watson (CL18 2024-11877-CL18-BAT), Meghan Porter (CL17: 2023-11300-CL17-BAT), Verity West – qualifying member of CIEEM, Andy Cruse and Lauren Hayward – qualifying member of CIEEM. The four surveyors covered all aspects of the farmhouse during the surveys – refer to the locations in the emergence survey plans in **Section 5 – Figures 1 and 2**.

4.3.2 The equipment used during the surveys included full-spectrum sampling bat detectors (Batlogger M/M2, EM3 and EMT 2 Pro) and infrared/thermal imaging night vision aids (Nightfox Whisker binoculars, Pixfra A316, Sionyx Pro, Pulsar Helion XP28 and Canon XA30 cameras with infrared floodlights/torches). A still shot of the darkest point/viewpoint of the surveys has been included for all night vision aids used in **Appendix 1**.

4.3.3 The emergence surveys started 15 minutes before sunset and the first and third survey continued for 1 hour and 30 minutes after sunset. Within a five-day period after the survey, the bat call recordings were processed and analysed using the BatExplorer and Kaleidoscope computer software packages. The night vision video footage was reviewed in VLC media player.

4.4 Survey Limitations and Report Validity

4.4.1 There were no significant constraints to the bat emergence surveys, which were undertaken during the optimal survey season, i.e. May to August, and the first and third surveys were carried out in conditions suitable for bat activity, i.e. dry and calm with air temperatures 10°C or above at sunset (Collins 2023). During the third survey, a few intermittent light showers were experienced at the start of the survey, however emerging bats were still observed and foraging activity was slightly reduced compared with previous surveys but the showers did not cause significant constraints to the survey findings.

4.4.2 This report contains information regarding a mobile species so it will likely be valid for up to 12 months only (CIEEM 2019b).

5 SURVEY RESULTS

5.1 Overview

5.1.1 The results from the background data search and DNA analysis are detailed below. The bat emergence survey findings for the farmhouse are summarised in **Section 5.3**, detailed within **Tables 1-6**, **Photographs 1-5**, and illustrated in **Figures 1 & 2** below; the DNA analysis results are supplied in **Appendix 2** and the raw detector data is supplied in **Appendix 3**.

5.2 Background Data Search

5.2.1 John Wenman Ecological Consultancy completed a suite of surveys of a detached outbuilding on the wider residential plot. A day roost with a peak count of three soprano pipistrelle bats was identified and conversion of the workshop into living accommodation was carried out under a mitigation licence in 2021. A bat box is fixed to the southern gable end of the newly converted building as compensation for the loss of the roost.

5.2.2 The BSBBG data search revealed that at least eight species have been recorded locally within the last 10 years: Serotine (*Eptesicus serotinus*), noctule (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Natterer's bat (*Myotis nattereri*), Bechstein's bat (*Myotis bechsteinii*), Daubenton's bat (*Myotis daubentonii*) and brown long-eared (*Plecotus auritus*). The nearest records are for *N. noctula, P. pipistrellus* and a *Myotis sp.* recorded during flight using a bat detector, and *P. pygmaeus* were recorded emerging from and re-entering the roost during the same survey in July 2021. A peak count of three *P. pygmaeus* bats emerged from the gable end of a detached outbuilding, approximately 890 m south west of the property.

5.2.3 A search on MAGIC for granted EPS Licences within 2km of the site returned six licences for three species: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared (*Plecotus auritus*) roosts. The closest licence to the site was granted for the damaging of a resting place used by common pipistrelle, for a property along White Hill Road, approximately 880m to the north east of the site (Reference number: 2020-48008-EPS-MIT, Licensable period: 06/08/2020 – 30/11/2020). John Wenman Ecological Consultancy registered the adjacent building, ancillary to the farmhouse, for the permanent loss of a soprano pipistrelle day roost in 2021. All licensable activities were completed in 2021 and

mitigation incorporated into the converted building in the form of a building-mounted external bat box.

5.3 DNA Analysis

5.3.1 Swift Ecology confirmed the dropping sample to be from the brown long-eared (*Plecotus auritus*) bat (refer to **Appendix 2**).

5.4 Emergence Survey

16th June 2025

5.4.1 One common pipistrelle (*P. pipistrellus*) bat was observed emerging from the hanging tiles on the rear southern dormer by the surveyor at Surveyor Location 4 at 21:38 (video footage places emergence at 21:40 due to 2 minute time delay on camera) (**Photograph 1**). One soprano pipistrelle (*P. pygmaeus*) bat was recorded by the surveyor at Surveyor Location 1, emerging from beneath hanging tiles on the most easternly dormer located on the front of the farmhouse (eastern elevation) at 22:02 (**Photographs 2**). A plan showing the emergence flight paths is presented in **Figure 1** and all other recorded flight paths are presented in **Figure 2**.

Photograph 1. Common pipistrelle emergence at 21:38 (NightFox Whisker at Survey Location 4).

Photograph 2. Soprano pipistrelle emergence at 22:02 (Pixfra A316 at Survey Location 1).

Table 1. Weather conditions and survey timings

Weather	**Wind (BF0-12)**	**Cloud cover (%)**	**Rain**	**Temperature (°C)** **Start**	**Finish**
	1	0	None	21	17
Start	21:08	**Sunset**	21:23	**Finish**	22:53

Table 2a. Surveyor recordings at location 1

Species	**Recordings***	**Emergences†**	**Time of first call (minutes after sunset)**
Common pipistrelle (*Pipistrellus pipistrellus*)	1	0	22:48 (85 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	30	1 – at 22:02	21:56 (33 minutes after sunset)

Serotine (*Eptesicus serotinus*)	1	0	22:15 (52 minutes after sunset)

Table 2b. Surveyor recordings at location 2

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	2	0	22:00 (37 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	76	0	21:32 (9 minutes after sunset)
Myotis species	1	0	22:12 (49 minutes after sunset)
Serotine (*Eptesicus serotinus*)	2	0	22:13 (50 minutes after sunset)
Noctule (*Nyctalus noctula*)	1	0	22:19 (56 minutes after sunset)

Table 2c. Surveyor recordings at location 3

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	1	0	22:22 (59 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	37	0	21:56 (33 minutes after sunset)
Myotis species	1	0	22:10 (47 minutes after sunset)

Table 2d. Surveyor recordings at location 4

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	2	1 - at 21:38	21:38 (15 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	133	0	21:26 (3 minutes after sunset)
Social calls	11	0	21:59 (36 minutes after sunset)
Myotis species	2	0	22:12 (49 minutes after sunset)
Serotine (*Eptesicus serotinus*)	2	0	22:12 (49 minutes after sunset)

**recordings are the number of times that the detector was triggered when bat calls were detected.*
†confirmed by direct observation and/or night vision aid.

5.4.2 The first bat recorded during the survey was a distant soprano pipistrelle (*P.pygmaeus*) at 21:26 (3 minutes after sunset) which was detected at Surveyor Location 4. The second bat recorded was another soprano pipistrelle (*P. pygmaeus*) bat, heard not seen at 21:32 (9 minutes after sunset) at Surveyor Location 2 indicating roosts in the woodland to the south/east. Soprano pipistrelle activity was high throughout the survey.

5.4.3 There were occasional common pipistrelle (*P. pipistrellus*) passes recorded at all Survey Locations across the site, with a moderate level of foraging activity recorded around the large garden and large mature trees to the north and east of the farmhouse. A *Myotis* species was recorded by three surveyors between 22:10 and 22:12 at

Surveyor Locations 2, 3 and 4.

7th July 2025

5.4.4 Two soprano pipistrelle (*P. pygmaeus*) bats and one common pipistrelle (*P. pipistrellus*) were observed emerging from the hanging tiles located on the mostly easterly dormer located at the rear (southern elevation) of the farmhouse at Surveyor Location 4 (**Photograph 3 and 4**). The first emergence of a soprano pipistrelle at 21:30 was also observed at Surveyor Location 3. A plan showing the emergence flight paths is presented in **Figure 1** and all other recorded flight paths are presented in **Figure 2**.

Photograph 3. Soprano pipistrelles emergence points from rear domer (Guide TK61 surveyor location 4).

Photograph 4. Common pipistrelle emergence point from rear domer (Guide TK61 surveyor location 4).

Table 3. Weather conditions and survey timings

Weather	Wind (BF0-12)	Cloud cover (%)	Rain	Temperature (°C)	
				Start	Finish
	2	10	None	17	13
Start	21:06	**Sunset**	21:21	**Finish**	22:51

Table 4a. Surveyor recordings at location 1

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	1	0	21:34 (13 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	176	0	21:49 (28 minutes after sunset)
Brown long-eared (*Plecotus auritus*)	1	0	22:17 (56 minutes after sunset)
Serotine (*Eptesicus serotinus*)	1	0	22:50 (89 minutes after sunset)
Noctule (*Nyctalus noctula*)	3	0	22:36 (75 minutes after sunset)

Table 4b. Surveyor recordings at location 2

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	3	0	21:34 (13 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	116	0	21:43 (22 minutes after sunset)

Myotis species	2	0	22:25 (64 minutes after sunset)
Brown long-eared (*Plecotus auritus*)	2	0	22:06 (56 minutes after sunset)
Serotine (*Eptesicus serotinus*)	1	0	22:50 (89 minutes after sunset)
Noctule (*Nyctalus noctula*)	7	0	21:48 (27 minutes after sunset)

Table 4c. Surveyor recordings at location 3

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	314	1 – at 21:30 based on recorded calls from near surveyor locations (Location 4)	21:40 (19 minutes after sunset)
Myotis species	4	0	22:05 (55 minutes after sunset)
Noctule bat (*Nyctalus noctula*)	7	0	22:36 (75 minutes after sunset)

Table 4d. Surveyor recordings at location 4

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	4	0	21:49 (28 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	120	3 – at 21:30, 21:48 and 21:51	21:31 (10 minutes after sunset)
Myotis species	1	0	22:15 (54 minutes after sunset)
Brown long-eared (*Plecotus auritus*)	2	0	22:18 (57 minutes after sunset)
Serotine (*Eptesicus serotinus*)	8	0	21:58 (37 minutes after sunset)
Noctule (*Nyctalus noctula*)	5	0	21:59 (28 minutes after sunset)

**recordings are the number of times that the detector was triggered when bat calls were detected.*
†*confirmed by direct observation and/or night vision aid.*

5.4.5 The first bat recorded during the survey was a soprano pipistrelle (*P. pygmaeus*) at 21:31 (10 minutes after sunset), which was recorded by both surveyors at Location 3 and 4 emerging from the dormers at the rear of the farmhouse (southern elevation).

5.4.6 High levels of soprano pipistrelle (*P. pygmaeus*) foraging activity was recorded by all surveyors, with infrequent passes by common pipistrelle (*P. pipistrellus*) bats. Brown long-eared (*P. auritus*) bats were recorded by 3 surveyors at Surveyor Locations 1, 2 and 4 just within the typical emergence period of this species, suggesting there is a roost nearby. Serotine (*Eptesicus serotinus*) and noctule (*Nyctalus noctula*) bats were also recorded by surveyors foraging around the rear garden (south and southwest elevation) and mature trees at the front of the farmhouse (northeast elevation).

5.4.7 One soprano pipistrelle (*P. pygmaeus)* was recorded emerging from the eaves below the chimney on the north western side of the farmhouse at 20:54 at Surveyor Location 3 (**Photograph 5**). A plan showing the emergence flight paths is presented in **Figure 1** and all other recorded flight paths are presented in **Figure 2** below.

Photograph 5. Soprono pipistrelle emerging from eaves at 20:54 (Sionyx Pro surveyor at location 3)

Table 5. Weather conditions and survey timings

	Wind (BF0-12)	**Cloud cover (%)**	**Rain**	**Temperature (°C)**	
				Start	**Finish**
Weather	1	90	Light shower at beginning of survey	20	17
Start	20:42	**Sunset**	20:57	**Finish**	22:27

Table 6a. Surveyor recordings at location 1

Species	**Recordings***	**Emergences†**	**Time of first call (minutes after sunset)**
Common pipistrelle (*Pipistrellus pipistrellus*)	10	0	21:10 (13 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	27	0	21:10 (13 minutes after sunset)
Myotis species	3	0	21:49 (52 minutes after sunset)
Brown long-eared(*Plecotus auritus*)	1	0	22:21 (84 minutes after sunset)
Noctule (*Nyctalus noctula*)	5	0	21:24 (27 minutes after sunset)

Table 6b. Surveyor recordings at location 2

Species	**Recordings***	**Emergences†**	**Time of first call (minutes after sunset)**
Common pipistrelle (*Pipistrellus pipistrellus*)	8	0	21:10 (13 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	48	1 – at 20:54	21:14 (17 minutes after sunset)
Brown long-eared (*Plecotus auritus*)	1	0	22:22 (85 minutes after sunset)
Noctule bat (*Nyctalus noctula*)	5	0	21:24 (27 minutes after sunset)

Table 6c. Surveyor recordings at location 3

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	11	0	21:47 (50 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	19	0	21:13 (16 minutes after sunset)
Social calls	1	0	22:20 (83 minutes after sunset)
Myotis species	1	0	21:49 (52 minutes after sunset)
Brown long-eared (*Plecotus auritus*)	1	0	22:23 (86 minutes after sunset)
Serotine (*Eptesicus serotinus*)	2	0	21:46 (49 minutes after sunset)
Noctule (*Nyctalus noctula*)	1	0	21:34 (27 minutes after sunset)

Table 6d. Surveyor recordings at location 4

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle (*Pipistrellus pipistrellus*)	8	0	21:47 (50 minutes after sunset)
Soprano pipistrelle (*Pipistrellus pygmaeus*)	64	0	21:02 (5 minutes after sunset)
Brown long-eared (*Plecotus auritus*)	1	0	22:23 (86 minutes after sunset)
Serotine (*Eptesicus serotinus*)	1	0	21:46 (49 minutes after sunset)
Noctule (*Nyctalus noctula*)	4	0	21:24 (27 minutes after sunset)

**recordings are the number of times that the detector was triggered when bat calls were detected.*
†*confirmed by direct observation and/or night vision aid.*

5.4.8 The first bat recorded during the survey was a soprano pipistrelle (*P. pygmaeus)* at 20:43 (14 minutes before sunset), which was observed commuting from the mature trees at the front of the farmhouse (northeast elevation) and was recorded at Surveyor Locations 1 and 2 indicating a nearby roost in the woodland to the east. Soprano pipistrelle (*P. pygmaeus)* foraging activity was high across the site, with a concentration of foraging over the rear garden and the woodland at the front of the farmhouse. There was infrequent passes recorded by all surveyors of noctule (*N. noctula*) bats around 21:24.

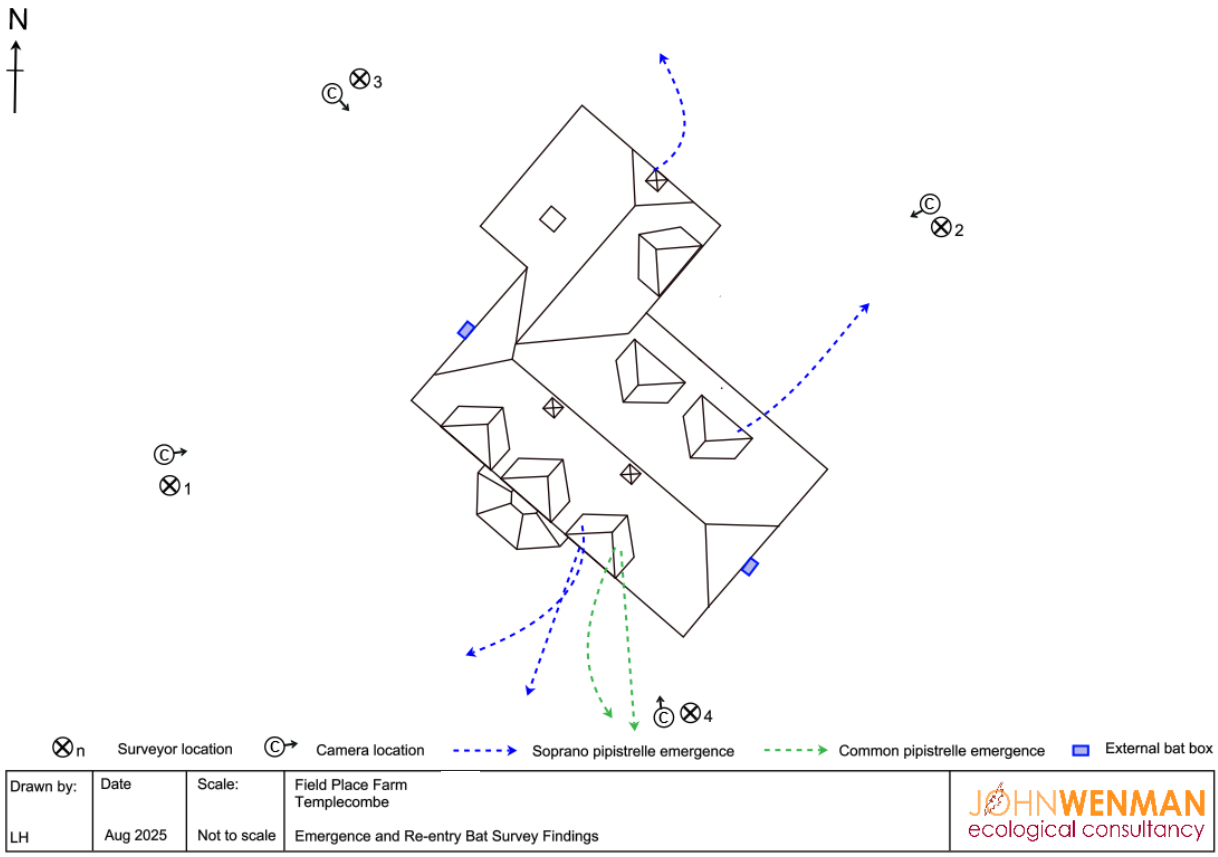

Figure 1. Bat Emergence Survey – Field Place Farm, Templecombe – Bat Emergence Flight Paths.

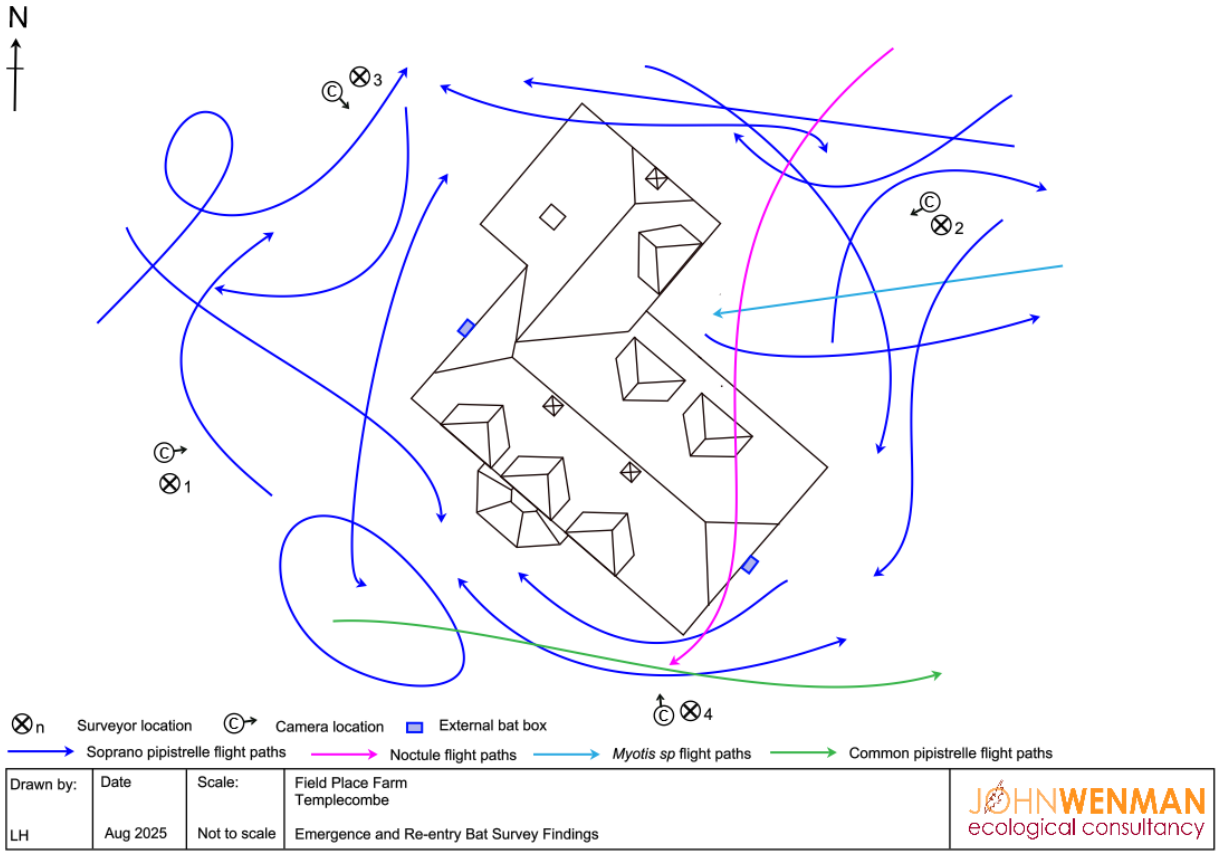

Figure 2. Bat Emergence Survey – Field Place Farm, Templecombe - All Bat Fight Paths

6 DISCUSSION AND RECOMMENDATIONS

6.1 Assessment of Bat Roost Status

6.1.1 During the first emergence survey, one common pipistrelle (*P. pipistrellus*) bat emerged from below the hanging tiles on the most eastern rear dormer (southern elevation) and one soprano pipistrelle (*P. pygmaeus*) bat emerged from below the hanging tiles on the most eastern dormer at the front of the farmhouse (eastern elevation). During the second survey, two soprano pipistrelle (*P. pygmaeus*) bats and one common pipistrelle (*P. pipistrellus*) bat emerged from below the hanging tiles on the most eastern rear dormer of the farmhouse (southern elevation). Finally, during the third emergence survey, a soprano pipistrelle (*P. pygmaeus*) bat emerged from the eaves below the chimney on the front of the farmhouse (northern elevation). The activity level was high during all surveys, mostly consisting of soprano pipistrelles (*P. pygmaeus*), with activity concentrated around the mature trees and area of woodland at the front of the farmhouse (north east elevation) and the rear garden to the south of the farmhouse. Recorded emergences and activity levels across the surveys does not indicate the site is used as a maternity roost. The survey findings during the optimal season for identifying breeding roosts, are consistent in confirming a common pipistrelle and soprano pipistrelle day roost with a peak count of two soprano pipistrelles and one common pipistrelle.

6.1.2 These survey findings indicate that the farmhouse supports up to two day roosts for low numbers of male or non-breeding female common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) bats. Common pipistrelle and soprano pipistrelle bats are widespread and commonly occurring throughout the UK and frequently found in residential dwellings (Matthews *et. al.* 2018). Day roosts used by common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) bats are considered to be of low conservation significance (Mitchell-Jones 2004).

6.1.3 Although no brown long-eared (*Plecotus auritus*) bats were observed emerging from the farmhouse, during the PRA droppings were distributed under the ridge in the older loft space and around the central chimney typical of those deposited by brown long-eared bats. Furthermore, individual brown long-eared (*P. auritus*) bats were recorded foraging in close vicinity of the farmhouse during the survey on two occasions. DNA analysis of the droppings collected confirmed the species to be brown long-eared (*P. auritus*). This suggests that this farmhouse is used as an occasional transitional or day roost for brown long-eared (*P. auritus*) bats. The activity and number of droppings do not

indicate the presence of a maternity roost.

6.1.4 The brown long-eared bat (*P. auritus*) is a widespread species in Great Britain, commonly associated with broadleaved and mixed woodland habitats. This species will roost in trees, bat boxes and buildings but maternity roosts are predominantly located in barns, churches and houses with large internal flight spaces (Mathews *et al*. 2018). Roosts supporting this species hold site to county level importance subject to the status of roost present, i.e. non-breeding roosts supporting individual or small numbers of bats through to maternity roosts supporting large numbers of female bats (Reason & Wray 2023).

6.1.5 Two bat boxes had been fixed to the exterior of the property previous to all surveys on site as a general enhancement for roosting bats (refer to **Figures 1** & **2** for locations); no bats were recorded roosting in the bat boxes.

6.2 Impact of Proposals and Recommendations

6.2.1 The survey data demonstrates that the proposed alteration to the existing dormer windows and new dormers will result in the permanent loss of a common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) day roosts and damage to an occasional transitional or day roost of a brown long-eared bat roost (to be confirmed by DNA analysis). Furthermore, in the absence of mitigation, the works could lead to the disturbance and/or injury of bats if present at the time.

6.2.2 A European Protected Species Mitigation Licence (EPSML) will be required to allow the work to proceed lawfully, and the survey findings establish that the site would qualify for registration under the ‘low impact’ Bat Mitigation Class Licence (BMCL) WML-CL21. Under the terms of a full EPSML or BMCL, mitigation for the impacts of the work will be required in order to avoid harming bats and the mitigation proposals detailing the strategy to be adopted are set out in **Section 7** below.

7 MITIGATION AND COMPENSATION PROPOSALS

7.1.1 Before the licensable work commences i.e. removal of roof coverings associated with the roost, a European Protected Species Mitigation Licence (EPSML) or confirmation of the registration of the site under the Bat Mitigation Class Licence (BMCL) (Low Impact) WML-CL21 will be obtained. The presence of common pipistrelle, soprano pipistrelle and brown long-eared day roosts falls under the criteria for the BMCL.

7.1.2 Before the soft strip begins, the licensed ecologist or 'Registered Consultant' if working under the BMCL, will give a toolbox talk to the contractors on site detailing bats are present, the legislation protecting bats, the location of the roost sites in the property, good working practices, the measures that are required to protect bats during the work and what to do if bats are found. A copy of the licence will be available for inspection on site during all licensable works.

7.1.3 The soft strip will be undertaken outside of the winter hibernation season (mid-November to February) to minimise the risk of disturbing torpid bats. The northern externally fitted bat box needs to be moved to allow for the extension to the property. The bat box will be removed following an inspection by a licensed ecologist to confirm a continued absence of roosting bats and can be fixed to a mature tree in the wider wooded garden. This box will act as an undisturbed roosting site for bats during construction and will be in place for a minimum of five years (boxes can only be removed after the five years if no evidence of use has been found at this stage). In the unlikely event a bat is found roosting in the box, it will be left undisturbed until the bat has left of its own accord.

7.1.4 The roof and hanging tiles will be carefully removed by gloved hands under the supervision of a licensed ecologist, or Registered Consultant if working under the BMCL. If bat(s) are discovered during the work, the licensed ecologist or Registered Consultant would capture the bat(s) and transfer it/them directly to the bat box previously moved to a mature tree.

7.1.5 In the long-term, further roosting opportunities will be created with the addition of purpose made access gaps underneath hanging tiles on the newly constructed dormers located on the front (eastern elevation) and rear (southern elevation). Therefore the property will continue to provide roosting opportunities for common pipistrelle and soprano pipistrelle bats (refer to **Appendix 4**). The access point likely used by brown long-eared bats based on the dropping distribution around the central chimney and northern eaves around the chimney will be retained unaffected by the proposals.

7.1.6 Any insulation/lining to be used under the new hanging tile cladding and on the new roof will either be a bituminous 1F felt or a bat safe roofing membrane with a certificate that proves that it has passed Natural England's 'snagging propensity test'.

8 REFERENCES

CIEEM (2019b). *Advice Note on the Lifespan of Ecological Reports and Surveys.* CIEEM, Winchester.

Collins, J (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust, London.

Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd edition)*. JNCC, Peterborough.

Reason, P.F. and Wray, S. (2025). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. *Version 1.2* CIEEM, Ampfield.

APPENDIX 1 – DARKEST POINT/VIEWPOINT OF SURVEY FOR NIGHT VISION AIDS

16th June 2025

Pixfra A316 at Surveyor Location 1.

Sionyx Aurora Pro at Surveyor Location 2.

Sionyx Aurora Pro at Surveyor Location 3.

Nightfox Whisker at Surveyor Location 4.

7th July 2025

Pixfra A613 at Surveyor Location 1

Canon XA60 at Surveyor Location 2.

Sionyx Aurora Pro at Surveyor Location 3.

Guide TK61 at Surveyor Location 4.

28th July 2025

Pixfra A613 at Surveyor Location 1.

Sionyx Aurora Pro at Surveyor Location 2.

Pixfra A613 at Surveyor Location 3.

Guide TK61 at Surveyor Location 4.

APPENDIX 2 – DNA ANALYSIS RESULTS

Order Number: 3801

verity@wenman-ecology.co.uk

Samples submitted

Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/ post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-3801-1	Yes	Faecal	26/02/2025	C. Bats	RG9 3HR	Field Place Farm	

Analysis Results

Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match
SEL-3801-1	EG-2025-2198	Plecotus auritus (Brown long-eared bat) Note: All UK bat species tested for - only a single species detected in this sample.	qPCR	23	

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APPENDIX 3 – BAT EMERGENCE SURVEY RAW DATA TABLES

16th June 2025

Surveyor location 1 – Batlogger M

Time	Species	Number of calls [#]
21:56	*Pipistrellus pygmaeus*	0*
22:01	*Pipistrellus pygmaeus*	10
22:01	*Pipistrellus pygmaeus*	10
22:02	*Pipistrellus pygmaeus*	2
22:03	*Pipistrellus pygmaeus*	8
22:03	*Pipistrellus pygmaeus*	12
22:04	*Pipistrellus pygmaeus*	10
22:04	*Pipistrellus pygmaeus*	11
22:04	*Pipistrellus pygmaeus*	24
22:04	*Pipistrellus pygmaeus*	2
22:06	*Pipistrellus pygmaeus*	0*
22:06	*Pipistrellus pygmaeus*	12
22:06	*Pipistrellus pygmaeus*	2
22:14	*Pipistrellus pygmaeus*	13
22:15	*Pipistrellus pygmaeus*	4
22:15	*Eptesicus serotinus*	1
22:15	*Pipistrellus pygmaeus*	48
22:15	*Pipistrellus pygmaeus*	29
22:16	*Pipistrellus pygmaeus*	14
22:17	*Pipistrellus pygmaeus*	13
22:19	*Pipistrellus pygmaeus*	11
22:19	*Pipistrellus pygmaeus*	19
22:21	*Pipistrellus pygmaeus*	12
22:21	*Pipistrellus pygmaeus*	1
22:21	*Pipistrellus pygmaeus*	13
22:23	*Pipistrellus pygmaeus*	1
22:25	*Pipistrellus pygmaeus*	4
22:25	*Pipistrellus pygmaeus*	11
22:25	*Pipistrellus pygmaeus*	14
22:31	*Pipistrellus pygmaeus*	15
22:32	*Pipistrellus pygmaeus*	13
22:48	*Pipistrellus pipistrellus*	4

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data. ^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.saa.*

Surveyor location 2 – Batlogger M

Time	Species	Number of calls [#]
21:32	*Pipistrellus pygmaeus*	0*
21:56	*Pipistrellus pygmaeus*	6

21:56	*Pipistrellus pygmaeus*	6
21:56	*Pipistrellus pygmaeus*	3
21:56	*Pipistrellus pygmaeus*	4
22:00	*Pipistrellus pygmaeus*	22
22:00	*Pipistrellus pygmaeus*	2
22:00	*Pipistrellus pygmaeus*	14
22:00	*Pipistrellus pygmaeus*	26
22:00	*Pipistrellus pipistrellus*	2
22:01	*Pipistrellus pygmaeus*	9
22:01	*Pipistrellus pygmaeus*	9
22:01	*Pipistrellus pygmaeus*	13
22:01	*Pipistrellus pygmaeus*	18
22:01	*Pipistrellus pygmaeus*	20
22:01	*Pipistrellus pygmaeus*	17
22:02	*Pipistrellus pygmaeus*	13
22:02	*Pipistrellus pygmaeus*	3
22:05	*Pipistrellus pygmaeus*	11
22:05	*Pipistrellus pygmaeus*	4
22:05	*Pipistrellus pygmaeus*	3
22:07	*Pipistrellus pygmaeus*	8
22:07	*Pipistrellus pygmaeus*	6
22:07	*Pipistrellus pygmaeus*	1
22:07	*Pipistrellus pygmaeus*	3
22:07	*Pipistrellus pygmaeus*	8
22:09	*Pipistrellus pygmaeus*	4
22:09	*Pipistrellus pygmaeus*	1
22:10	*Pipistrellus pygmaeus*	20
22:11	*Pipistrellus pygmaeus*	20
22:12	*Pipistrellus pygmaeus*	23
22:12	*Myotis spec.*	21
22:13	*Pipistrellus pygmaeus*	12
22:13	*Pipistrellus pygmaeus*	80
22:13	*Eptesicus serotinus*	2
22:13	*Pipistrellus pygmaeus*	18
22:14	*Pipistrellus pygmaeus*	28
22:14	*Pipistrellus pygmaeus*	2
22:14	*Pipistrellus pygmaeus*	48
22:14	*Pipistrellus pygmaeus*	7
22:14	*Pipistrellus pygmaeus*	1
22:14	*Pipistrellus pygmaeus*	35
22:15	*Pipistrellus pygmaeus*	16
22:15	*Pipistrellus pygmaeus*	5
22:15	*Pipistrellus pygmaeus*	13
22:15	*Pipistrellus pygmaeus*	7
22:15	*Pipistrellus pygmaeus*	16
22:15	*Pipistrellus pygmaeus*	4
22:16	*Pipistrellus pygmaeus*	16

22:16	*Pipistrellus pygmaeus*	19
22:17	*Pipistrellus pygmaeus*	5
22:17	*Pipistrellus pygmaeus*	18
22:17	*Pipistrellus pygmaeus*	5
22:18	*Pipistrellus pygmaeus*	6
22:18	*Pipistrellus pygmaeus*	31
22:18	*Pipistrellus pygmaeus*	2
22:19	*Pipistrellus pygmaeus*	67
22:19	*Pipistrellus pygmaeus*	21
22:19	*Pipistrellus pygmaeus*	29
22:19	*Nyctalus noctula*	2
22:20	*Pipistrellus pygmaeus*	17
22:20	*Pipistrellus pygmaeus*	15
22:20	*Pipistrellus pygmaeus*	5
22:20	*Pipistrellus pygmaeus*	12
22:21	*Pipistrellus pygmaeus*	66
22:21	*Eptesicus serotinus*	1
22:21	*Pipistrellus pygmaeus*	17
22:22	*Pipistrellus pygmaeus*	18
22:22	*Pipistrellus pipistrellus*	4
22:24	*Pipistrellus pygmaeus*	18
22:24	*Pipistrellus pygmaeus*	17
22:25	*Pipistrellus pygmaeus*	20
22:25	*Pipistrellus pygmaeus*	6
22:25	*Pipistrellus pygmaeus*	11
22:25	*Pipistrellus pygmaeus*	46
22:26	*Pipistrellus pygmaeus*	17
22:27	*Pipistrellus pygmaeus*	18
22:28	*Pipistrellus pygmaeus*	4
22:31	*Pipistrellus pygmaeus*	16
22:31	*Pipistrellus pygmaeus*	19
22:32	*Pipistrellus pygmaeus*	5
22:32	*Pipistrellus pygmaeus*	5

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*
^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.

Surveyor location 3 – Batlogger M2

Time	**Species**	**Number of calls [#]**
21:56	*Pipistrellus pygmaeus*	7
21:59	*Pipistrellus pygmaeus*	8
22:00	*Pipistrellus pygmaeus*	8
22:00	*Pipistrellus pygmaeus*	11
22:05	*Pipistrellus pygmaeus*	13
22:05	*Pipistrellus pygmaeus*	11
22:06	*Pipistrellus pygmaeus*	7
22:07	*Pipistrellus pygmaeus*	9

22:07	*Pipistrellus pygmaeus*	6
22:07	*Pipistrellus pygmaeus*	2
22:10	*Myotis spec.*	7
22:10	*Pipistrellus pygmaeus*	14
22:11	*Pipistrellus pygmaeus*	11
22:11	*Pipistrellus pygmaeus*	11
22:12	*Pipistrellus pygmaeus*	13
22:12	*Pipistrellus pygmaeus*	10
22:12	*Pipistrellus pygmaeus*	7
22:13	*Pipistrellus pygmaeus*	4
22:13	*Pipistrellus pygmaeus*	8
22:14	*Pipistrellus pygmaeus*	15
22:14	*Pipistrellus pygmaeus*	16
22:15	*Pipistrellus pygmaeus*	11
22:15	*Pipistrellus pygmaeus*	13
22:15	*Pipistrellus pygmaeus*	8
22:15	*Pipistrellus pygmaeus*	9
22:16	*Pipistrellus pygmaeus*	19
22:17	*Pipistrellus pygmaeus*	14
22:18	*Pipistrellus pygmaeus*	20
22:22	*Pipistrellus pipistrellus*	14
22:23	*Pipistrellus pygmaeus*	12
22:24	*Pipistrellus pygmaeus*	21
22:24	*Pipistrellus pygmaeus*	20
22:25	*Pipistrellus pygmaeus*	27
22:25	*Pipistrellus pygmaeus*	19
22:30	*Pipistrellus pygmaeus*	11
22:31	*Pipistrellus pygmaeus*	12
22:31	*Pipistrellus pygmaeus*	5
22:31	*Pipistrellus pygmaeus*	15
22:31	*Pipistrellus pygmaeus*	6

Surveyor location 4 – Batlogger M

Time	**Species**	**Number of calls [#]**
21:26	*Pipistrellus pygmaeus*	2
21:37	*Pipistrellus pygmaeus*	2
21:38	*Pipistrellus pipistrellus*	18
21:54	*Pipistrellus pygmaeus*	16
21:54	*Pipistrellus pygmaeus*	6
21:54	*Pipistrellus pygmaeus*	3
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	3
21:56	*Pipistrellus pygmaeus*	19
21:56	*Pipistrellus pygmaeus*	3
21:57	*Pipistrellus pygmaeus*	8
21:57	*Pipistrellus pygmaeus*	2

21:58	*Pipistrellus pygmaeus*	2
21:59	*Social*	1
21:59	*Pipistrellus pygmaeus*	12
22:00	*Pipistrellus pygmaeus*	3
22:00	*Pipistrellus pygmaeus*	5
22:00	*Pipistrellus pygmaeus*	11
22:00	*Pipistrellus pygmaeus*	26
22:00	*Social*	2
22:00	*Pipistrellus pygmaeus*	1
22:00	*Pipistrellus pygmaeus*	2
22:00	*Pipistrellus pygmaeus*	14
22:01	*Pipistrellus pygmaeus*	1
22:01	*Pipistrellus pygmaeus*	3
22:01	*Pipistrellus pygmaeus*	11
22:01	*Pipistrellus pygmaeus*	3
22:01	*Pipistrellus pygmaeus*	2
22:02	*Pipistrellus pygmaeus*	2
22:02	*Pipistrellus pygmaeus*	15
22:02	*Pipistrellus pygmaeus*	10
22:02	*Pipistrellus pygmaeus*	5
22:02	*Pipistrellus pygmaeus*	11
22:02	*Pipistrellus pygmaeus*	1
22:02	*Social*	0*
22:02	*Pipistrellus pygmaeus*	2
22:02	*Pipistrellus pygmaeus*	5
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	10
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	5
22:04	*Social*	1
22:04	*Pipistrellus pygmaeus*	2
22:04	*Pipistrellus pygmaeus*	6
22:04	*Pipistrellus pygmaeus*	8
22:04	*Pipistrellus pygmaeus*	14
22:04	*Social*	1
22:05	*Pipistrellus pygmaeus*	5
22:05	*Pipistrellus pygmaeus*	5
22:05	*Pipistrellus pygmaeus*	7
22:05	*Pipistrellus pygmaeus*	10
22:05	*Social*	1
22:05	*Pipistrellus pygmaeus*	5
22:05	*Pipistrellus pygmaeus*	5
22:06	*Pipistrellus pygmaeus*	1
22:06	*Pipistrellus pygmaeus*	5

22:06	*Pipistrellus pygmaeus*	7
22:06	*Pipistrellus pygmaeus*	7
22:06	*Pipistrellus pygmaeus*	9
22:06	*Pipistrellus pygmaeus*	8
22:06	*Pipistrellus pygmaeus*	5
22:06	*Pipistrellus pygmaeus*	7
22:07	*Pipistrellus pygmaeus*	1
22:07	*Pipistrellus pygmaeus*	5
22:07	*Pipistrellus pygmaeus*	10
22:07	*Pipistrellus pygmaeus*	2
22:07	*Pipistrellus pygmaeus*	4
22:07	*Pipistrellus pygmaeus*	4
22:08	*Pipistrellus pygmaeus*	6
22:08	*Pipistrellus pygmaeus*	2
22:08	*Pipistrellus pygmaeus*	7
22:08	*Pipistrellus pygmaeus*	4
22:08	*Pipistrellus pygmaeus*	10
22:08	*Pipistrellus pygmaeus*	6
22:08	*Pipistrellus pygmaeus*	6
22:09	*Pipistrellus pygmaeus*	5
22:09	*Pipistrellus pygmaeus*	9
22:09	*Pipistrellus pygmaeus*	2
22:09	*Pipistrellus pygmaeus*	12
22:09	*Pipistrellus pygmaeus*	9
22:09	*Pipistrellus pygmaeus*	6
22:09	*Pipistrellus pygmaeus*	2
22:09	*Pipistrellus pygmaeus*	6
22:09	*Pipistrellus pygmaeus*	6
22:09	*Pipistrellus pygmaeus*	3
22:09	*Pipistrellus pygmaeus*	2
22:10	*Pipistrellus pygmaeus*	6
22:10	*Pipistrellus pygmaeus*	6
22:10	*Pipistrellus pygmaeus*	5
22:10	*Pipistrellus pygmaeus*	5
22:10	*Pipistrellus pygmaeus*	8
22:10	*Pipistrellus pygmaeus*	10
22:10	*Pipistrellus pygmaeus*	11
22:11	*Pipistrellus pygmaeus*	3
22:11	*Pipistrellus pygmaeus*	5
22:11	*Pipistrellus pygmaeus*	3
22:11	*Pipistrellus pygmaeus*	3
22:11	*Pipistrellus pygmaeus*	3
22:11	*Pipistrellus pygmaeus*	4
22:11	*Pipistrellus pygmaeus*	0*
22:12	*Eptesicus serotinus*	2
22:12	*Myotis spec.*	2
22:12	*Social*	1

22:12	*Pipistrellus pygmaeus*	5
22:12	*Social*	1
22:12	*Pipistrellus pygmaeus*	12
22:12	*Social*	1
22:12	*Myotis spec.*	1
22:12	*Pipistrellus pygmaeus*	6
22:12	*Social*	1
22:12	*Pipistrellus pygmaeus*	8
22:12	*Pipistrellus pygmaeus*	1
22:12	*Pipistrellus pygmaeus*	1
22:12	*Pipistrellus pygmaeus*	3
22:12	*Social*	1
22:13	*Pipistrellus pygmaeus*	2
22:13	*Pipistrellus pygmaeus*	33
22:13	*Pipistrellus pygmaeus*	4
22:13	*Pipistrellus pygmaeus*	20
22:15	*Pipistrellus pygmaeus*	21
22:15	*Pipistrellus pygmaeus*	1
22:15	*Pipistrellus pygmaeus*	4
22:15	*Pipistrellus pygmaeus*	3
22:15	*Pipistrellus pygmaeus*	6
22:15	*Pipistrellus pygmaeus*	3
22:15	*Pipistrellus pygmaeus*	9
22:15	*Eptesicus serotinus*	2
22:16	*Pipistrellus pygmaeus*	5
22:16	*Pipistrellus pygmaeus*	13
22:16	*Pipistrellus pygmaeus*	7
22:17	*Pipistrellus pygmaeus*	8
22:17	*Pipistrellus pygmaeus*	6
22:19	*Pipistrellus pygmaeus*	1
22:20	*Pipistrellus pygmaeus*	2
22:20	*Pipistrellus pygmaeus*	10
22:20	*Pipistrellus pygmaeus*	3
22:20	*Pipistrellus pygmaeus*	14
22:20	*Pipistrellus pygmaeus*	6
22:20	*Pipistrellus pygmaeus*	2
22:20	*Pipistrellus pygmaeus*	5
22:21	*Pipistrellus pygmaeus*	5
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	1
22:25	*Pipistrellus pygmaeus*	9
22:28	*Pipistrellus pygmaeus*	8
22:31	*Pipistrellus pygmaeus*	6
22:48	*Pipistrellus pipistrellus*	13

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*
^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data

7th July 2025

Surveyor location 1 – Batlogger M1

Time	Species	Number of calls [#]
21:34	*Pipistrellus pipistrellus*	15
21:49	*Pipistrellus pygmaeus*	1
21:50	*Pipistrellus pygmaeus*	2
21:52	*Pipistrellus pygmaeus*	1
21:55	*Pipistrellus pygmaeus*	2
21:55	*Pipistrellus pygmaeus*	1
21:59	*Pipistrellus pygmaeus*	3
21:59	*Pipistrellus pygmaeus*	6
21:59	*Pipistrellus pygmaeus*	5
22:00	*Pipistrellus pygmaeus*	11
22:04	*Pipistrellus pygmaeus*	2
22:04	*Pipistrellus pygmaeus*	2
22:04	*Pipistrellus pygmaeus*	4
22:04	*Pipistrellus pygmaeus*	1
22:04	*Pipistrellus pygmaeus*	1
22:04	*Pipistrellus pygmaeus*	8
22:04	*Pipistrellus pygmaeus*	1
22:04	*Pipistrellus pygmaeus*	2
22:05	*Pipistrellus pygmaeus*	0*
22:05	*Pipistrellus pygmaeus*	0*
22:05	*Pipistrellus pygmaeus*	5
22:05	*Pipistrellus pygmaeus*	14
22:05	*Pipistrellus pygmaeus*	3
22:06	*Pipistrellus pygmaeus*	8
22:06	*Pipistrellus pygmaeus*	0*
22:06	*Pipistrellus pygmaeus*	2
22:06	*Pipistrellus pygmaeus*	3
22:08	*Pipistrellus pygmaeus*	0*
22:09	*Pipistrellus pygmaeus*	4
22:09	*Pipistrellus pygmaeus*	2
22:09	*Pipistrellus pygmaeus*	4
22:10	*Pipistrellus pygmaeus*	0*
22:10	*Pipistrellus pygmaeus*	2
22:10	*Pipistrellus pygmaeus*	1
22:10	*Pipistrellus pygmaeus*	0*
22:12	*Pipistrellus pygmaeus*	2
22:12	*Pipistrellus pygmaeus*	20
22:14	*Pipistrellus pygmaeus*	7
22:15	*Pipistrellus pygmaeus*	1
22:15	*Pipistrellus pygmaeus*	0*
22:15	*Pipistrellus pygmaeus*	10

22:16	*Pipistrellus pygmaeus*	21
22:17	*Plecotus auritus*	7
22:17	*Pipistrellus pygmaeus*	3
22:17	*Pipistrellus pygmaeus*	10
22:18	*Pipistrellus pygmaeus*	2
22:18	*Pipistrellus pygmaeus*	2
22:18	*Pipistrellus pygmaeus*	6
22:18	*Pipistrellus pygmaeus*	1
22:19	*Pipistrellus pygmaeus*	1
22:19	*Pipistrellus pygmaeus*	2
22:19	*Pipistrellus pygmaeus*	2
22:19	*Pipistrellus pygmaeus*	4
22:19	*Pipistrellus pygmaeus*	1
22:19	*Pipistrellus pygmaeus*	1
22:19	*Pipistrellus pygmaeus*	1
22:19	*Pipistrellus pygmaeus*	2
22:19	*Pipistrellus pygmaeus*	1
22:20	*Pipistrellus pygmaeus*	3
22:20	*Pipistrellus pygmaeus*	2
22:20	*Pipistrellus pygmaeus*	1
22:20	*Pipistrellus pygmaeus*	14
22:20	*Pipistrellus pygmaeus*	2
22:20	*Pipistrellus pygmaeus*	3
22:20	*Pipistrellus pygmaeus*	4
22:20	*Pipistrellus pygmaeus*	2
22:20	*Pipistrellus pygmaeus*	7
22:21	*Pipistrellus pygmaeus*	1
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	1
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	3
22:21	*Pipistrellus pygmaeus*	2
22:21	*Pipistrellus pygmaeus*	5
22:22	*Pipistrellus pygmaeus*	2
22:22	*Pipistrellus pygmaeus*	0*
22:22	*Pipistrellus pygmaeus*	1
22:22	*Pipistrellus pygmaeus*	3
22:24	*Pipistrellus pygmaeus*	1
22:24	*Pipistrellus pygmaeus*	9
22:26	*Pipistrellus pygmaeus*	4
22:27	*Pipistrellus pygmaeus*	2
22:27	*Pipistrellus pygmaeus*	0*
22:27	*Pipistrellus pygmaeus*	0*
22:27	*Pipistrellus pygmaeus*	2

22:27	*Pipistrellus pygmaeus*	3
22:27	*Pipistrellus pygmaeus*	2
22:28	*Pipistrellus pygmaeus*	11
22:28	*Pipistrellus pygmaeus*	7
22:28	*Pipistrellus pygmaeus*	5
22:28	*Pipistrellus pygmaeus*	1
22:28	*Pipistrellus pygmaeus*	27
22:28	*Pipistrellus pygmaeus*	8
22:28	*Pipistrellus pygmaeus*	12
22:28	*Pipistrellus pygmaeus*	1
22:29	*Pipistrellus pygmaeus*	4
22:29	*Pipistrellus pygmaeus*	4
22:29	*Pipistrellus pygmaeus*	2
22:29	*Pipistrellus pygmaeus*	1
22:29	*Pipistrellus pygmaeus*	1
22:29	*Pipistrellus pygmaeus*	1
22:29	*Pipistrellus pygmaeus*	4
22:29	*Pipistrellus pygmaeus*	8
22:29	*Pipistrellus pygmaeus*	12
22:29	*Pipistrellus pygmaeus*	1
22:29	*Pipistrellus pygmaeus*	2
22:30	*Pipistrellus pygmaeus*	3
22:30	*Pipistrellus pygmaeus*	10
22:30	*Pipistrellus pygmaeus*	9
22:30	*Pipistrellus pygmaeus*	3
22:30	*Pipistrellus pygmaeus*	10
22:30	*Pipistrellus pygmaeus*	4
22:30	*Pipistrellus pygmaeus*	3
22:30	*Pipistrellus pygmaeus*	1
22:30	*Pipistrellus pygmaeus*	1
22:30	*Pipistrellus pygmaeus*	3
22:30	*Pipistrellus pygmaeus*	8
22:30	*Pipistrellus pygmaeus*	8
22:30	*Pipistrellus pygmaeus*	8
22:30	*Pipistrellus pygmaeus*	10
22:30	*Pipistrellus pygmaeus*	14
22:30	*Pipistrellus pygmaeus*	12
22:31	*Pipistrellus pygmaeus*	5
22:31	*Pipistrellus pygmaeus*	2
22:31	*Pipistrellus pygmaeus*	4
22:31	*Pipistrellus pygmaeus*	2
22:31	*Pipistrellus pygmaeus*	1
22:31	*Pipistrellus pygmaeus*	4
22:31	*Pipistrellus pygmaeus*	4
22:31	*Pipistrellus pygmaeus*	2
22:31	*Pipistrellus pygmaeus*	2
22:31	*Pipistrellus pygmaeus*	1

22:31	*Pipistrellus pygmaeus*	1
22:31	*Pipistrellus pygmaeus*	2
22:31	*Pipistrellus pygmaeus*	1
22:32	*Pipistrellus pygmaeus*	12
22:32	*Pipistrellus pygmaeus*	3
22:32	*Pipistrellus pygmaeus*	4
22:32	*Pipistrellus pygmaeus*	0*
22:32	*Pipistrellus pygmaeus*	9
22:32	*Pipistrellus pygmaeus*	1
22:32	*Pipistrellus pygmaeus*	3
22:32	*Pipistrellus pygmaeus*	1
22:32	*Pipistrellus pygmaeus*	1
22:32	*Pipistrellus pygmaeus*	0*
22:32	*Pipistrellus pygmaeus*	0*
22:33	*Pipistrellus pygmaeus*	6
22:33	*Pipistrellus pygmaeus*	2
22:34	*Pipistrellus pygmaeus*	1
22:34	*Pipistrellus pygmaeus*	1
22:34	*Pipistrellus pygmaeus*	2
22:34	*Pipistrellus pygmaeus*	4
22:34	*Pipistrellus pygmaeus*	2
22:35	*Pipistrellus pygmaeus*	3
22:35	*Pipistrellus pygmaeus*	4
22:36	*Nyctalus noctula*	1
22:36	*Pipistrellus pygmaeus*	5
22:36	*Pipistrellus pygmaeus*	13
22:37	*Pipistrellus pygmaeus*	3
22:37	*Pipistrellus pygmaeus*	0*
22:37	*Pipistrellus pygmaeus*	4
22:37	*Pipistrellus pygmaeus*	7
22:37	*Pipistrellus pygmaeus*	2
22:37	*Pipistrellus pygmaeus*	5
22:37	*Pipistrellus pygmaeus*	7
22:37	*Pipistrellus pygmaeus*	0*
22:37	*Pipistrellus pygmaeus*	7
22:38	*Pipistrellus pygmaeus*	26
22:38	*Pipistrellus pygmaeus*	5
22:38	*Pipistrellus pygmaeus*	2
22:38	*Pipistrellus pygmaeus*	13
22:38	*Pipistrellus pygmaeus*	9
22:39	*Pipistrellus pygmaeus*	2
22:40	*Pipistrellus pygmaeus*	5
22:40	*Pipistrellus pygmaeus*	12
22:41	*Pipistrellus pygmaeus*	25
22:48	*Nyctalus noctula*	16
22:49	*Nyctalus noctula*	15
22:50	*Eptesicus serotinus*	16

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*
^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.

Surveyor location 2 – Echo Meter Touch 2 Pro Android

Time	Species
21:34:49	*Pipistrellus pipistrellus*
21:43:22	*Pipistrellus pygmaeus*
21:43:56	*Pipistrellus pygmaeus*
21:47:49	*Pipistrellus pygmaeus*
21:48:16	*Nyctalus noctula*
21:52:22	*Pipistrellus pygmaeus*
21:51:19	*Pipistrellus pygmaeus*
21:51:33	*Pipistrellus pygmaeus*
21:53:08	*Pipistrellus pygmaeus*
21:52:11	*Pipistrellus pygmaeus*
22:04:17	*Pipistrellus pygmaeus*
22:05:12	*Pipistrellus pygmaeus*
22:05:31	*Pipistrellus pygmaeus*
22:05:19	*Pipistrellus pygmaeus*
22:07:37	*Pipistrellus pygmaeus*
22:06:22	*Plecotus auritus*
22:08:33	*Pipistrellus pygmaeus*
22:06:15	*Pipistrellus pygmaeus*
22:06:04	*Pipistrellus pygmaeus*
22:07:45	*Pipistrellus pygmaeus*
22:08:45	*Pipistrellus pygmaeus*
22:09:20	*Pipistrellus pygmaeus*
22:09:29	*Pipistrellus pygmaeus*
22:09:45	*Pipistrellus pygmaeus*
22:09:35	*Pipistrellus pygmaeus*
22:11:44	*Pipistrellus pygmaeus*
22:11:35	*Pipistrellus pygmaeus*
22:10:07	*Pipistrellus pygmaeus*
22:12:07	*Pipistrellus pygmaeus*
22:12:30	*Pipistrellus pygmaeus*
22:12:15	*Pipistrellus pygmaeus*
22:13:06	*Pipistrellus pygmaeus*
22:13:53	*Pipistrellus pygmaeus*
22:13:48	*Pipistrellus pygmaeus*
22:12:41	*Pipistrellus pygmaeus*
22:14:15	*Pipistrellus pygmaeus*
22:15:10	*Pipistrellus pygmaeus*
22:14:58	*Pipistrellus pygmaeus*
22:15:04	*Pipistrellus pygmaeus*
22:15:53	*Pipistrellus pygmaeus*
22:16:28	*Pipistrellus pygmaeus*
22:18:47	*Pipistrellus pygmaeus*
22:15:43	*Pipistrellus pygmaeus*

22:18:01	*Pipistrellus pygmaeus*
22:18:14	*Pipistrellus pygmaeus*
22:19:20	*Pipistrellus pygmaeus*
22:18:36	*Pipistrellus pygmaeus*
22:19:32	*Pipistrellus pygmaeus*
22:19:39	*Pipistrellus pygmaeus*
22:18:54	*Pipistrellus pygmaeus*
22:20:50	*Pipistrellus pygmaeus*
22:22:02	*Pipistrellus pygmaeus*
22:20:58	*Pipistrellus pygmaeus*
22:23:17	*Pipistrellus pygmaeus*
22:24:50	*Pipistrellus pygmaeus*
22:24:33	*Pipistrellus pygmaeus*
22:25:34	*Pipistrellus pygmaeus*
22:25:22	*Myotis sp.*
22:25:12	*Pipistrellus pygmaeus*
22:25:50	*Pipistrellus pygmaeus*
22:25:02	*Pipistrellus pygmaeus*
22:26:53	*Pipistrellus pygmaeus*
22:26:30	*Pipistrellus pygmaeus*
22:25:57	*Pipistrellus pygmaeus*
22:27:28	*Pipistrellus pygmaeus*
22:27:46	*Pipistrellus pygmaeus*
22:27:55	*Pipistrellus pygmaeus*
22:28:01	*Pipistrellus pygmaeus*
22:28:20	*Pipistrellus pygmaeus*
22:28:57	*Pipistrellus pygmaeus*
22:29:20	*Pipistrellus pygmaeus*
22:28:35	*Pipistrellus pygmaeus*
22:28:10	*Pipistrellus pygmaeus*
22:28:47	*Pipistrellus pygmaeus*
22:29:30	*Pipistrellus pygmaeus*
22:29:38	*Plecotus auritus*
22:30:15	*Pipistrellus pipistrellus*
22:31:22	*Pipistrellus pygmaeus*
22:30:28	*Pipistrellus pygmaeus*
22:31:36	*Pipistrellus pygmaeus*
22:31:53	*Pipistrellus pygmaeus*
22:32:26	*Pipistrellus pygmaeus*
22:32:48	*Pipistrellus pygmaeus*
22:33:19	*Pipistrellus pygmaeus*
22:33:06	*Pipistrellus pygmaeus*
22:33:25	*Pipistrellus pygmaeus*
22:33:34	*Pipistrellus pygmaeus*
22:33:40	*Pipistrellus pygmaeus*
22:34:14	*Pipistrellus pygmaeus*
22:33:55	*Pipistrellus pygmaeus*

22:34:39	*Pipistrellus pygmaeus*
22:34:32	*Pipistrellus pygmaeus*
22:34:44	*Pipistrellus pygmaeus*
22:35:10	*Pipistrellus pygmaeus*
22:34:56	*Pipistrellus pygmaeus*
22:35:24	*Pipistrellus pygmaeus*
22:35:14	*Pipistrellus pygmaeus*
22:36:19	*Nyctalus noctula*
22:36:07	*Nyctalus noctula*
22:37:01	*Pipistrellus pygmaeus*
22:36:46	*Pipistrellus pygmaeus*
22:37:27	*Pipistrellus pygmaeus*
22:37:37	*Pipistrellus pygmaeus*
22:37:46	*Pipistrellus pygmaeus*
22:37:56	*Pipistrellus pygmaeus*
22:38:18	*Pipistrellus pygmaeus*
22:38:29	*Pipistrellus pygmaeus*
22:38:39	*Pipistrellus pygmaeus*
22:38:49	*Pipistrellus pygmaeus*
22:39:04	*Pipistrellus pygmaeus*
22:39:32	*Pipistrellus pygmaeus*
22:39:48	*Pipistrellus pygmaeus*
22:40:19	*Pipistrellus pygmaeus*
22:40:09	*Pipistrellus pygmaeus*
22:40:34	*Pipistrellus pygmaeus*
22:40:44	*Pipistrellus pygmaeus*
22:41:26	*Pipistrellus pygmaeus*
22:41:18	*Pipistrellus pygmaeus*
22:42:36	*Pipistrellus pygmaeus*
22:41:32	*Pipistrellus pygmaeus*
22:42:47	*Pipistrellus pygmaeus*
22:44:44	*Pipistrellus pipistrellus*
22:42:56	*Pipistrellus pygmaeus*
22:45:03	*Pipistrellus pygmaeus*
22:46:58	*Pipistrellus pygmaeus*
22:48:17	*Nyctalus noctula*
22:48:28	*Nyctalus noctula*
22:50:02	*Nyctalus noctula*
22:51:22	*Myotis sp.*
22:50:06	*Nyctalus noctula*

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*
^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.

Surveyor location 3 – Batlogger M2

Time	Species	Number of calls [#]
21:40	*Pipistrellus pygmaeus*	8
21:40	*Pipistrellus pygmaeus*	18
21:41	*Pipistrellus pygmaeus*	12
21:43	*Pipistrellus pygmaeus*	10
21:47	*Pipistrellus pygmaeus*	5
21:48	*Pipistrellus pygmaeus*	5
21:50	*Pipistrellus pygmaeus*	2
21:50	*Pipistrellus pygmaeus*	6
21:50	*Pipistrellus pygmaeus*	6
21:50	*Pipistrellus pygmaeus*	5
21:50	*Pipistrellus pygmaeus*	15
21:51	*Pipistrellus pygmaeus*	16
21:51	*Pipistrellus pygmaeus*	21
21:51	*Pipistrellus pygmaeus*	8
21:51	*Pipistrellus pygmaeus*	7
21:51	*Pipistrellus pygmaeus*	18
21:51	*Pipistrellus pygmaeus*	16
21:51	*Pipistrellus pygmaeus*	14
21:52	*Pipistrellus pygmaeus*	15
21:52	*Pipistrellus pygmaeus*	17
21:52	*Pipistrellus pygmaeus*	8
21:52	*Pipistrellus pygmaeus*	14
21:52	*Pipistrellus pygmaeus*	10
21:52	*Pipistrellus pygmaeus*	30
21:52	*Pipistrellus pygmaeus*	14
21:52	*Pipistrellus pygmaeus*	18
21:53	*Pipistrellus pygmaeus*	16
21:5.	*Pipistrellus pygmaeus*	10
21:53	*Pipistrellus pygmaeus*	5
21:53	*Pipistrellus pygmaeus*	18
21:54	*Pipistrellus pygmaeus*	1
21:54	*Pipistrellus pygmaeus*	4
21:54	*Pipistrellus pygmaeus*	0*
21:54	*Pipistrellus pygmaeus*	3
21:54	*Pipistrellus pygmaeus*	0*
21:55	*Pipistrellus pygmaeus*	7
21:55	*Pipistrellus pygmaeus*	7
21:55	*Pipistrellus pygmaeus*	2
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	2
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	4
21:55	*Pipistrellus pygmaeus*	5
21:55	*Pipistrellus pygmaeus*	6

21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	7
21:55	*Pipistrellus pygmaeus*	8
21:55	*Pipistrellus pygmaeus*	10
21:56	*Pipistrellus pygmaeus*	5
21:56	*Pipistrellus pygmaeus*	8
21:56	*Pipistrellus pygmaeus*	2
21:56	*Pipistrellus pygmaeus*	3
21:56	*Pipistrellus pygmaeus*	8
21:56	*Pipistrellus pygmaeus*	11
21:56	*Pipistrellus pygmaeus*	7
21:56	*Pipistrellus pygmaeus*	1
21:56	*Pipistrellus pygmaeus*	5
21:56	*Pipistrellus pygmaeus*	4
21:56	*Pipistrellus pygmaeus*	11
21:56	*Pipistrellus pygmaeus*	41
21:56	*Pipistrellus pygmaeus*	14
21:56	*Pipistrellus pygmaeus*	11
21:57	*Pipistrellus pygmaeus*	5
21:57	*Pipistrellus pygmaeus*	2
21:57	*Pipistrellus pygmaeus*	6
21:57	*Pipistrellus pygmaeus*	6
21:57	*Pipistrellus pygmaeus*	7
21:57	*Pipistrellus pygmaeus*	0*
21:57	*Pipistrellus pygmaeus*	4
21:57	*Pipistrellus pygmaeus*	25
21:57	*Pipistrellus pygmaeus*	23
21:57	*Pipistrellus pygmaeus*	10
21:57	*Pipistrellus pygmaeus*	30
21:58	*Pipistrellus pygmaeus*	4
21:58	*Pipistrellus pygmaeus*	1
21:58	*Pipistrellus pygmaeus*	0*
21:58	*Pipistrellus pygmaeus*	5
21:58	*Pipistrellus pygmaeus*	5
21:58	*Pipistrellus pygmaeus*	11
21:58	*Pipistrellus pygmaeus*	5
21:59	*Pipistrellus pygmaeus*	12
21:59	*Pipistrellus pygmaeus*	14
21:59	*Pipistrellus pygmaeus*	7
21:59	*Pipistrellus pygmaeus*	6
21:59	*Pipistrellus pygmaeus*	8
21:59	*Pipistrellus pygmaeus*	7
21:59	*Pipistrellus pygmaeus*	7
21:59	*Pipistrellus pygmaeus*	22
21:59	*Pipistrellus pygmaeus*	2
22:00	*Pipistrellus pygmaeus*	0*
22:00	*Pipistrellus pygmaeus*	3

22:00	*Pipistrellus pygmaeus*	40
22:00	*Pipistrellus pygmaeus*	4
22:00	*Pipistrellus pygmaeus*	8
22:00	*Pipistrellus pygmaeus*	4
22:00	*Pipistrellus pygmaeus*	5
22:00	*Pipistrellus pygmaeus*	7
22:01	*Pipistrellus pygmaeus*	8
22:01	*Pipistrellus pygmaeus*	4
22:01	*Pipistrellus pygmaeus*	8
22:01	*Pipistrellus pygmaeus*	7
22:01	*Pipistrellus pygmaeus*	8
22:01	*Pipistrellus pygmaeus*	6
22:02	*Pipistrellus pygmaeus*	2
22:02	*Pipistrellus pygmaeus*	1
22:02	*Pipistrellus pygmaeus*	1
22:02	*Pipistrellus pygmaeus*	11
22:02	*Pipistrellus pygmaeus*	19
22:02	*Pipistrellus pygmaeus*	32
22:02	*Pipistrellus pygmaeus*	12
22:02	*Pipistrellus pygmaeus*	8
22:02	*Pipistrellus pygmaeus*	2
22:03	*Pipistrellus pygmaeus*	10
22:03	*Pipistrellus pygmaeus*	7
22:03	*Pipistrellus pygmaeus*	6
22:03	*Pipistrellus pygmaeus*	9
22:03	*Pipistrellus pygmaeus*	5
22:03	*Pipistrellus pygmaeus*	19
22:04	*Pipistrellus pygmaeus*	6
22:04	*Pipistrellus pygmaeus*	35
22:04	*Pipistrellus pygmaeus*	10
22:04	*Pipistrellus pygmaeus*	13
22:04	*Pipistrellus pygmaeus*	5
22:04	*Pipistrellus pygmaeus*	26
22:05	*Pipistrellus pygmaeus*	12
22:05	*Myotis spec.*	8
22:05	*Myotis spec.*	4
22:05	*Pipistrellus pygmaeus*	1
22:05	*Pipistrellus pygmaeus*	8
22:05	*Pipistrellus pygmaeus*	10
22:05	*Pipistrellus pygmaeus*	10
22:05	*Pipistrellus pygmaeus*	2
22:05	*Pipistrellus pygmaeus*	19
22:06	*Pipistrellus pygmaeus*	4
22:06	*Pipistrellus pygmaeus*	9
22:07	*Pipistrellus pygmaeus*	5
22:07	*Pipistrellus pygmaeus*	7
22:07	*Pipistrellus pygmaeus*	11

22:07	*Pipistrellus pygmaeus*	9
22:07	*Pipistrellus pygmaeus*	11
22:07	*Pipistrellus pygmaeus*	5
22:07	*Pipistrellus pygmaeus*	6
22:07	*Pipistrellus pygmaeus*	1
22:07	*Pipistrellus pygmaeus*	32
22:08	*Pipistrellus pygmaeus*	20
22:08	*Pipistrellus pygmaeus*	3
22:08	*Pipistrellus pygmaeus*	7
22:08	*Pipistrellus pygmaeus*	15
22:08	*Pipistrellus pygmaeus*	2
22:08	*Pipistrellus pygmaeus*	4
22:08	*Pipistrellus pygmaeus*	7
22:08	*Pipistrellus pygmaeus*	2
22:08	*Pipistrellus pygmaeus*	2
22:08	*Pipistrellus pygmaeus*	4
22:09	*Pipistrellus pygmaeus*	5
22:09	*Pipistrellus pygmaeus*	8
22:09	*Pipistrellus pygmaeus*	6
22:09	*Pipistrellus pygmaeus*	4
22:09	*Pipistrellus pygmaeus*	8
22:09	*Pipistrellus pygmaeus*	5
22:09	*Pipistrellus pygmaeus*	3
22:09	*Pipistrellus pygmaeus*	8
22:09	*Pipistrellus pygmaeus*	16
22:09	*Pipistrellus pygmaeus*	2
22:09	*Pipistrellus pygmaeus*	12
22:09	*Pipistrellus pygmaeus*	5
22:10	*Pipistrellus pygmaeus*	5
22:10	*Pipistrellus pygmaeus*	3
22:10	*Pipistrellus pygmaeus*	8
22:11	*Pipistrellus pygmaeus*	6
22:11	*Pipistrellus pygmaeus*	11
22:11	*Pipistrellus pygmaeus*	2
22:11	*Pipistrellus pygmaeus*	21
22:11	*Pipistrellus pygmaeus*	5
22:11	*Pipistrellus pygmaeus*	22
22:11	*Pipistrellus pygmaeus*	17
22:11	*Pipistrellus pygmaeus*	4
22:12	*Pipistrellus pygmaeus*	3
22:12	*Pipistrellus pygmaeus*	8
22:12	*Pipistrellus pygmaeus*	2
22:12	*Pipistrellus pygmaeus*	4
22:12	*Pipistrellus pygmaeus*	5
22:12	*Pipistrellus pygmaeus*	3
22:12	*Pipistrellus pygmaeus*	14
22:13	*Pipistrellus pygmaeus*	20

22:13	*Pipistrellus pygmaeus*	46
22:13	*Pipistrellus pygmaeus*	19
22:13	*Pipistrellus pygmaeus*	6
22:13	*Pipistrellus pygmaeus*	2
22:13	*Pipistrellus pygmaeus*	6
22:13	*Pipistrellus pygmaeus*	4
22:13	*Pipistrellus pygmaeus*	6
22:14	*Pipistrellus pygmaeus*	10
22:14	*Myotis spec.*	20
22:14	*Pipistrellus pygmaeus*	20
22:14	*Pipistrellus pygmaeus*	7
22:14	*Pipistrellus pygmaeus*	17
22:14	*Pipistrellus pygmaeus*	8
22:14	*Pipistrellus pygmaeus*	15
22:14	*Pipistrellus pygmaeus*	1
22:15	*Pipistrellus pygmaeus*	5
22:15	*Pipistrellus pygmaeus*	5
22:15	*Pipistrellus pygmaeus*	12
22:15	*Pipistrellus pygmaeus*	4
22:15	*Pipistrellus pygmaeus*	5
22:16	*Pipistrellus pygmaeus*	12
22:16	*Pipistrellus pygmaeus*	4
22:16	*Pipistrellus pygmaeus*	3
22:16	*Pipistrellus pygmaeus*	7
22:16	*Pipistrellus pygmaeus*	9
22:16	*Pipistrellus pygmaeus*	11
22:17	*Pipistrellus pygmaeus*	22
22:17	*Pipistrellus pygmaeus*	41
22:17	*Pipistrellus pygmaeus*	14
22:18	*Pipistrellus pygmaeus*	18
22:18	*Pipistrellus pygmaeus*	3
22:18	*Pipistrellus pygmaeus*	17
22:18	*Pipistrellus pygmaeus*	6
22:18	*Pipistrellus pygmaeus*	7
22:18	*Pipistrellus pygmaeus*	14
22:18	*Pipistrellus pygmaeus*	3
22:18	*Pipistrellus pygmaeus*	2
22:19	*Pipistrellus pygmaeus*	2
22:19	*Pipistrellus pygmaeus*	12
22:19	*Pipistrellus pygmaeus*	4
22:20	*Pipistrellus pygmaeus*	4
22:22	*Pipistrellus pygmaeus*	11
22:22	*Pipistrellus pygmaeus*	7
22:22	*Pipistrellus pygmaeus*	7
22:23	*Pipistrellus pygmaeus*	5
22:23	*Pipistrellus pygmaeus*	5
22:23	*Pipistrellus pygmaeus*	17

22:23	*Pipistrellus pygmaeus*	7
22:23	*Pipistrellus pygmaeus*	7
22:23	*Pipistrellus pygmaeus*	0*
22:23	*Pipistrellus pygmaeus*	5
22:23	*Pipistrellus pygmaeus*	18
22:24	*Myotis spec.*	6
22:24	*Pipistrellus pygmaeus*	6
22:24	*Pipistrellus pygmaeus*	12
22:24	*Pipistrellus pygmaeus*	37
22:24	*Pipistrellus pygmaeus*	8
22:24	*Pipistrellus pygmaeus*	7
22:25	*Pipistrellus pygmaeus*	8
22:25	*Pipistrellus pygmaeus*	2
22:25	*Pipistrellus pygmaeus*	10
22:25	*Pipistrellus pygmaeus*	8
22:25	*Pipistrellus pygmaeus*	8
22:25	*Pipistrellus pygmaeus*	13
22:25	*Pipistrellus pygmaeus*	19
22:25	*Pipistrellus pygmaeus*	3
22:25	*Pipistrellus pygmaeus*	8
22:26	*Pipistrellus pygmaeus*	4
22:26	*Pipistrellus pygmaeus*	3
22:26	*Pipistrellus pygmaeus*	8
22:26	*Pipistrellus pygmaeus*	3
22:26	*Pipistrellus pygmaeus*	1
22:26	*Pipistrellus pygmaeus*	7
22:26	*Pipistrellus pygmaeus*	12
22:26	*Pipistrellus pygmaeus*	2
22:27	*Pipistrellus pygmaeus*	5
22:27	*Pipistrellus pygmaeus*	3
22:28	*Pipistrellus pygmaeus*	3
22:28	*Pipistrellus pygmaeus*	16
22:28	*Pipistrellus pygmaeus*	2
22:28	*Pipistrellus pygmaeus*	9
22:28	*Pipistrellus pygmaeus*	1
22:28	*Pipistrellus pygmaeus*	5
22:28	*Pipistrellus pygmaeus*	26
22:28	*Pipistrellus pygmaeus*	4
22:28	*Pipistrellus pygmaeus*	11
22:28	*Pipistrellus pygmaeus*	5
22:28	*Pipistrellus pygmaeus*	16
22:29	*Pipistrellus pygmaeus*	12
22:29	*Pipistrellus pygmaeus*	6
22:31	*Pipistrellus pygmaeus*	8
22:31	*Pipistrellus pygmaeus*	9
22:31	*Pipistrellus pygmaeus*	8
22:33	*Pipistrellus pygmaeus*	10

22:33	*Pipistrellus pygmaeus*	12
22:33	*Pipistrellus pygmaeus*	9
22:34	*Pipistrellus pygmaeus*	1
22:34	*Pipistrellus pygmaeus*	21
22:34	*Pipistrellus pygmaeus*	8
22:34	*Pipistrellus pygmaeus*	7
22:35	*Pipistrellus pygmaeus*	7
22:35	*Pipistrellus pygmaeus*	2
22:35	*Pipistrellus pygmaeus*	11
22:35	*Pipistrellus pygmaeus*	8
22:36	*Nyctalus noctula*	3
22:36	*Nyctalus noctula*	4
22:36	*Pipistrellus pygmaeus*	4
22:36	*Pipistrellus pygmaeus*	9
22:36	*Pipistrellus pygmaeus*	9
22:36	*Pipistrellus pygmaeus*	5
22:36	*Pipistrellus pygmaeus*	29
22:36	*Pipistrellus pygmaeus*	16
22:37	*Pipistrellus pygmaeus*	7
22:37	*Pipistrellus pygmaeus*	3
22:37	*Pipistrellus pygmaeus*	4
22:37	*Pipistrellus pygmaeus*	7
22:37	*Pipistrellus pygmaeus*	13
22:37	*Pipistrellus pygmaeus*	5
22:37	*Pipistrellus pygmaeus*	10
22:37	*Pipistrellus pygmaeus*	17
22:38	*Pipistrellus pygmaeus*	9
22:38	*Pipistrellus pygmaeus*	15
22:40	*Pipistrellus pygmaeus*	8
22:40	*Pipistrellus pygmaeus*	17
22:40	*Pipistrellus pygmaeus*	4
22:40	*Pipistrellus pygmaeus*	20
22:40	*Pipistrellus pygmaeus*	8
22:41	*Pipistrellus pygmaeus*	9
22:41	*Pipistrellus pygmaeus*	20
22:41	*Pipistrellus pygmaeus*	17
22:41	*Pipistrellus pygmaeus*	3
22:42	*Pipistrellus pygmaeus*	3
22:42	*Pipistrellus pygmaeus*	20
22:42	*Pipistrellus pygmaeus*	6
22:44	*Pipistrellus pygmaeus*	4
22:48	*Nyctalus noctula*	6
22:48	*Nyctalus noctula*	5
22:48	*Nyctalus noctula*	6
22:50	*Nyctalus noctula*	19
22:50	*Nyctalus noctula*	22

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*

^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.

Surveyor location 4 – Batlogger M2

Time	Species	Number of calls [#]
21:31	*Pipistrellus pygmaeus*	9
21:41	*Pipistrellus pygmaeus*	6
21:41	*Pipistrellus pygmaeus*	5
21:44	*Pipistrellus pygmaeus*	7
21:48	*Pipistrellus pygmaeus*	4
21:48	*Pipistrellus pygmaeus*	5
21:49	*Pipistrellus pipistrellus*	14
21:51	*Pipistrellus pygmaeus*	3
21:51	*Pipistrellus pygmaeus*	4
21:51	*Pipistrellus pygmaeus*	15
21:52	*Pipistrellus pygmaeus*	12
21:52	*Pipistrellus pygmaeus*	5
21:52	*Pipistrellus pygmaeus*	7
21:52	*Pipistrellus pygmaeus*	8
21:52	*Pipistrellus pygmaeus*	5
21:53	*Pipistrellus pygmaeus*	0*
21:53	*Pipistrellus pygmaeus*	7
21:54	*Pipistrellus pygmaeus*	7
21:54	*Pipistrellus pygmaeus*	4
21:54	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	5
21:55	*Pipistrellus pygmaeus*	5
21:55	*Pipistrellus pygmaeus*	3
21:55	*Pipistrellus pygmaeus*	5
21:55	*Pipistrellus pygmaeus*	9
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	9
21:55	*Pipistrellus pygmaeus*	3
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	4
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pygmaeus*	9
21:55	*Pipistrellus pygmaeus*	4
21:56	*Pipistrellus pygmaeus*	6
21:56	*Pipistrellus pygmaeus*	3
21:56	*Pipistrellus pygmaeus*	3
21:56	*Pipistrellus pygmaeus*	4
21:57	*Pipistrellus pygmaeus*	2
21:57	*Pipistrellus pygmaeus*	3
21:57	*Pipistrellus pygmaeus*	6
21:57	*Pipistrellus pygmaeus*	4
21:58	*Eptesicus serotinus*	8
21:59	*Pipistrellus pygmaeus*	5

21:59	*Nyctalus noctula*	1
22:01	*Pipistrellus pygmaeus*	1
22:01	*Pipistrellus pygmaeus*	3
22:01	*Pipistrellus pygmaeus*	3
22:01	*Pipistrellus pygmaeus*	2
22:01	*Pipistrellus pygmaeus*	3
22:02	*Pipistrellus pygmaeus*	3
22:03	*Pipistrellus pygmaeus*	2
22:03	*Pipistrellus pygmaeus*	3
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	3
22:03	*Pipistrellus pygmaeus*	3
22:03	*Pipistrellus pygmaeus*	4
22:03	*Pipistrellus pygmaeus*	15
22:03	*Pipistrellus pygmaeus*	5
22:04	*Pipistrellus pygmaeus*	15
22:04	*Pipistrellus pygmaeus*	5
22:04	*Pipistrellus pygmaeus*	19
22:05	*Pipistrellus pygmaeus*	1
22:05	*Pipistrellus pygmaeus*	7
22:05	*Pipistrellus pygmaeus*	5
22:05	*Nyctalus noctula*	1
22:05	*Pipistrellus pygmaeus*	9
22:05	*Nyctalus noctula*	1
22:06	*Pipistrellus pipistrellus*	10
22:06	*Pipistrellus pygmaeus*	2
22:06	*Pipistrellus pygmaeus*	8
22:07	*Pipistrellus pygmaeus*	3
22:07	*Pipistrellus pygmaeus*	2
22:08	*Pipistrellus pygmaeus*	15
22:08	*Pipistrellus pygmaeus*	2
22:08	*Pipistrellus pygmaeus*	2
22:09	*Pipistrellus pygmaeus*	2
22:09	*Pipistrellus pygmaeus*	2
22:10	*Pipistrellus pygmaeus*	15
22:10	*Nyctalus noctula*	2
22:10	*Pipistrellus pygmaeus*	2
22:11	*Pipistrellus pygmaeus*	5
22:14	*Pipistrellus pygmaeus*	5
22:14	*Pipistrellus pygmaeus*	5
22:15	*Myotis spec.*	5
22:16	*Pipistrellus pygmaeus*	0*
22:16	*Pipistrellus pygmaeus*	3
22:16	*Pipistrellus pygmaeus*	2
22:16	*Pipistrellus pygmaeus*	3
22:16	*Pipistrellus pygmaeus*	2
22:16	*Pipistrellus pygmaeus*	6

22:16	*Pipistrellus pygmaeus*	4
22:16	*Pipistrellus pygmaeus*	4
22:16	*Pipistrellus pygmaeus*	10
22:16	*Pipistrellus pygmaeus*	11
22:16	*Nyctalus noctula*	3
22:17	*Pipistrellus pygmaeus*	2
22:17	*Pipistrellus pygmaeus*	3
22:17	*Pipistrellus pygmaeus*	5
22:18	*Plecotus auritus*	15
22:18	*Pipistrellus pygmaeus*	16
22:18	*Pipistrellus pygmaeus*	23
22:18	*Pipistrellus pygmaeus*	28
22:20	*Pipistrellus pygmaeus*	18
22:21	*Pipistrellus pygmaeus*	13
22:21	*Pipistrellus pygmaeus*	22
22:22	*Pipistrellus pygmaeus*	15
22:24	*Pipistrellus pygmaeus*	10
22:24	*Pipistrellus pygmaeus*	2
22:24	*Pipistrellus pygmaeus*	5
22:26	*Pipistrellus pipistrellus*	19
22:26	*Pipistrellus pygmaeus*	13
22:26	*Pipistrellus pygmaeus*	22
22:29	*Pipistrellus pygmaeus*	4
22:30	*Pipistrellus pygmaeus*	1
22:31	*Pipistrellus pygmaeus*	1
22:31	*Pipistrellus pygmaeus*	2
22:31	*Pipistrellus pygmaeus*	5
22:32	*Pipistrellus pygmaeus*	5
22:33	*Pipistrellus pipistrellus*	11
22:33	*Pipistrellus pygmaeus*	21
22:36	*Pipistrellus pygmaeus*	28
22:36	*Pipistrellus pygmaeus*	9
22:37	*Pipistrellus pygmaeus*	2
22:37	*Pipistrellus pygmaeus*	6
22:37	*Pipistrellus pygmaeus*	2
22:37	*Pipistrellus pygmaeus*	30
22:37	*Pipistrellus pygmaeus*	3
22:40	*Pipistrellus pygmaeus*	22
22:40	*Pipistrellus pygmaeus*	8
22:42	*Pipistrellus pygmaeus*	23
22:43	*Pipistrellus pygmaeus*	25
22:43	*Pipistrellus pygmaeus*	4
22:45	*Plecotus auritus*	11
22:48	*Eptesicus serotinus*	9
22:49	*Eptesicus serotinus*	7
22:50	*Eptesicus serotinus*	10
22:50	*Eptesicus serotinus*	21

22:50	*Eptesicus serotinus*	21
22:50	*Eptesicus serotinus*	6
22:50	*Eptesicus serotinus*	8

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*
^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.

28th July 2025

Surveyor location 1 – Batlogger M1

Time	Species	Number of calls [#]
20:43	*Pipistrellus pygmaeus*	2
20:53	*Pipistrellus pygmaeus*	9
21:10	*Pipistrellus pipistrellus*	3
21:12	*Pipistrellus pygmaeus*	9
21:13	*Pipistrellus pygmaeus*	9
21:14	*Pipistrellus pygmaeus*	2
21:17	*Pipistrellus pipistrellus*	8
21:21	*Pipistrellus pipistrellus*	5
21:21	*Pipistrellus pipistrellus*	7
21:24	*Nyctalus noctula*	11
21:24	*Nyctalus noctula*	3
21:24	*Nyctalus noctula*	8
21:24	*Nyctalus noctula*	4
21:24	*Nyctalus noctula*	1
21:31	*Pipistrellus pygmaeus*	3
21:32	*Pipistrellus pygmaeus*	15
21:35	*Pipistrellus pygmaeus*	1
21:35	*Pipistrellus pygmaeus*	13
21:35	*Pipistrellus pygmaeus*	2
21:40	*Pipistrellus pygmaeus*	23
21:44	*Pipistrellus pygmaeus*	12
21:44	*Pipistrellus pygmaeus*	13
21:49	*Pipistrellus pygmaeus*	2
21:49	*Myotis spec.*	10
21:49	*Myotis spec.*	6
21:49	*Myotis spec.*	2
21:52	*Pipistrellus pygmaeus*	14
21:52	*Pipistrellus pygmaeus*	4
21:52	*Pipistrellus pipistrellus*	12
21:53	*Pipistrellus pipistrellus*	14
21:53	*Pipistrellus pipistrellus*	14
21:58	*Pipistrellus pygmaeus*	13
21:58	*Pipistrellus pygmaeus*	6
22:08	*Pipistrellus pipistrellus*	5
22:08	*Pipistrellus pipistrellus*	21

22:10	*Pipistrellus pygmaeus*	9
22:10	*Pipistrellus pygmaeus*	5
22:11	*Pipistrellus pygmaeus*	12
22:14	*Pipistrellus pygmaeus*	2
22:16	*Pipistrellus pygmaeus*	8
22:17	*Pipistrellus pygmaeus*	10
22:17	*Pipistrellus pygmaeus*	15
22:18	*Pipistrellus pygmaeus*	1
22:20	*Pipistrellus pygmaeus*	1
22:21	*Plecotus auritus*	1
22:22	*Pipistrellus pipistrellus*	28

Surveyor location 2 – Batlogger M2

Time	**Species**	**Number of calls [#]**
20:43	*Pipistrellus pygmaeus*	9
20:54	*Pipistrellus pygmaeus*	14
21:10	*Pipistrellus pipistrellus*	0*
21:14	*Pipistrellus pygmaeus*	14
21:18	*Pipistrellus pygmaeus*	7
21:19	*Pipistrellus pygmaeus*	7
21:19	*Pipistrellus pygmaeus*	10
21:19	*Pipistrellus pygmaeus*	7
21:24	*Pipistrellus pygmaeus*	5
21:24	*Pipistrellus pygmaeus*	7
21:24	*Nyctalus noctula*	8
21:24	*Nyctalus noctula*	10
21:24	*Nyctalus noctula*	5
21:24	*Nyctalus noctula*	3
21:24	*Nyctalus noctula*	5
21:24	*Pipistrellus pygmaeus*	12
21:25	*Pipistrellus pygmaeus*	14
21:26	*Pipistrellus pygmaeus*	10
21:27	*Pipistrellus pygmaeus*	1
21:27	*Pipistrellus pygmaeus*	4
21:29	*Pipistrellus pygmaeus*	23
21:29	*Pipistrellus pygmaeus*	14
21:31	*Pipistrellus pygmaeus*	14
21:31	*Pipistrellus pygmaeus*	9
21:32	*Pipistrellus pygmaeus*	6
21:32	*Pipistrellus pygmaeus*	24
21:32	*Pipistrellus pipistrellus*	10
21:32	*Pipistrellus pygmaeus*	11
21:32	*Pipistrellus pygmaeus*	12
21:39	*Pipistrellus pygmaeus*	7
21:40	*Pipistrellus pygmaeus*	23
21:40	*Pipistrellus pygmaeus*	2

21:42	*Pipistrellus pygmaeus*	10
21:44	*Pipistrellus pygmaeus*	9
21:45	*Pipistrellus pygmaeus*	9
21:46	*Pipistrellus pygmaeus*	30
21:49	*Pipistrellus pygmaeus*	6
21:49	*Pipistrellus pygmaeus*	8
21:51	*Pipistrellus pygmaeus*	4
21:52	*Pipistrellus pygmaeus*	11
21:56	*Pipistrellus pygmaeus*	16
22:07	*Pipistrellus pipistrellus*	8
22:07	*Pipistrellus pipistrellus*	21
22:08	*Pipistrellus pipistrellus*	7
22:09	*Pipistrellus pipistrellus*	8
22:10	*Pipistrellus pygmaeus*	9
22:10	*Pipistrellus pygmaeus*	15
22:10	*Pipistrellus pygmaeus*	11
22:13	*Pipistrellus pygmaeus*	29
22:14	*Pipistrellus pygmaeus*	3
22:16	*Pipistrellus pygmaeus*	6
22:17	*Pipistrellus pygmaeus*	10
22:20	*Pipistrellus pygmaeus*	20
22:20	*Pipistrellus pygmaeus*	25
22:22	*Pipistrellus pygmaeus*	3
22:22	*Pipistrellus pipistrellus*	9
22:22	*Plecotus auritus*	11
22:25	*Pipistrellus pygmaeus*	3
22:25	*Pipistrellus pygmaeus*	19
22:25	*Pipistrellus pygmaeus*	18
22:26	*Pipistrellus pipistrellus*	9
22:26	*Pipistrellus pygmaeus*	2

**NB. The number of calls per recording that are calculated by the BatExplorer Software during analysis of the data.*
^NB. 0 calls were registered by BatExplorer Software but calls were confirmed by manual ID during analysis of data.

Surveyor location 3 – Batlogger M2

Time	**Species**	**Number of calls [#]**
21:13	*Pipistrellus pygmaeus*	3
21:16	*Pipistrellus pygmaeus*	8
21:26	*Pipistrellus pygmaeus*	15
21:28	*Pipistrellus pygmaeus*	8
21:31	*Pipistrellus pygmaeus*	15
21:31	*Pipistrellus pygmaeus*	18
21:33	*Pipistrellus pygmaeus*	22
21:34	*Nyctalus noctula*	1
21:35	*Pipistrellus pygmaeus*	7
21:44	*Pipistrellus pygmaeus*	6
21:44	*Pipistrellus pygmaeus*	21
21:46	*Eptesicus serotinus*	15

21:46	*Eptesicus serotinus*	18
21:47	*Pipistrellus pipistrellus*	19
21:47	*Pipistrellus pipistrellus*	15
21:48	*Pipistrellus pipistrellus*	4
21:49	*Myotis spec.*	3
21:51	*Pipistrellus pipistrellus*	12
21:52	*Pipistrellus pipistrellus*	37
21:52	*Pipistrellus pipistrellus*	19
21:52	*Pipistrellus pipistrellus*	24
21:53	*Pipistrellus pipistrellus*	30
21:54	*Pipistrellus pygmaeus*	11
21:58	*Pipistrellus pygmaeus*	19
22:05	*Pipistrellus pygmaeus*	6
22:07	*Pipistrellus pipistrellus*	12
22:12	*Pipistrellus pygmaeus*	6
22:16	*Pipistrellus pygmaeus*	20
22:17	*Pipistrellus pipistrellus*	8
22:18	*Pipistrellus pygmaeus*	13
22:19	*Pipistrellus pipistrellus*	6
22:20	*Social*	2
22:20	*Pipistrellus pygmaeus*	10
22:20	*Pipistrellus pygmaeus*	5
22:23	*Plecotus auritus*	9
22:25	*Pipistrellus pygmaeus*	14

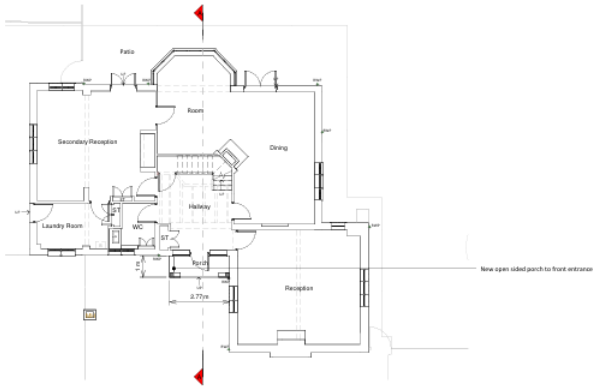
Surveyor location 4 – Batlogger M2

Time	**Species**	**Number of calls [#]**
20:53	*Pipistrellus pygmaeus*	20
21:02	*Pipistrellus pygmaeus*	21
21:13	*Pipistrellus pygmaeus*	8
21:17	*Pipistrellus pygmaeus*	6
21:17	*Pipistrellus pygmaeus*	27
21:18	*Pipistrellus pygmaeus*	15
21:24	*Nyctalus noctula*	5
21:24	*Nyctalus noctula*	10
21:24	*Nyctalus noctula*	6
21:26	*Pipistrellus pygmaeus*	13
21:29	*Pipistrellus pygmaeus*	5
21:31	*Pipistrellus pygmaeus*	3
21:31	*Pipistrellus pygmaeus*	13
21:32	*Pipistrellus pygmaeus*	13
21:32	*Nyctalus noctula*	1
21:32	*Pipistrellus pygmaeus*	5
21:33	*Pipistrellus pygmaeus*	1
21:33	*Pipistrellus pygmaeus*	24
21:33	*Pipistrellus pygmaeus*	7
21:33	*Pipistrellus pygmaeus*	14

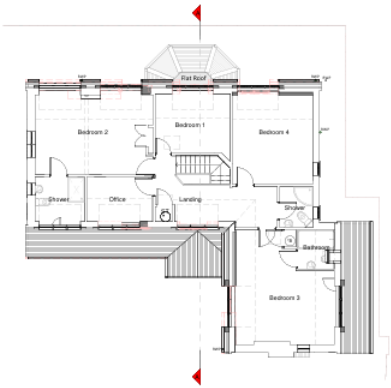
21:33	*Pipistrellus pygmaeus*	7
21:34	*Pipistrellus pygmaeus*	3
21:34	*Pipistrellus pygmaeus*	4
21:35	*Pipistrellus pygmaeus*	6
21:35	*Pipistrellus pygmaeus*	5
21:36	*Pipistrellus pygmaeus*	3
21:36	*Pipistrellus pygmaeus*	5
21:38	*Pipistrellus pygmaeus*	9
21:38	*Pipistrellus pygmaeus*	2
21:39	*Pipistrellus pygmaeus*	12
21:39	*Pipistrellus pygmaeus*	4
21:39	*Pipistrellus pygmaeus*	3
21:40	*Pipistrellus pygmaeus*	14
21:40	*Pipistrellus pygmaeus*	4
21:41	*Pipistrellus pygmaeus*	12
21:41	*Pipistrellus pygmaeus*	6
21:41	*Pipistrellus pygmaeus*	7
21:42	*Pipistrellus pygmaeus*	12
21:42	*Pipistrellus pygmaeus*	5
21:43	*Pipistrellus pygmaeus*	7
21:43	*Pipistrellus pygmaeus*	1
21:43	*Pipistrellus pygmaeus*	4
21:43	*Pipistrellus pygmaeus*	5
21:43	*Pipistrellus pygmaeus*	2
21:43	*Pipistrellus pygmaeus*	21
21:43	*Pipistrellus pygmaeus*	8
21:44	*Pipistrellus pygmaeus*	4
21:44	*Pipistrellus pygmaeus*	5
21:44	*Pipistrellus pygmaeus*	5
21:44	*Pipistrellus pygmaeus*	1
21:44	*Pipistrellus pygmaeus*	40
21:45	*Pipistrellus pygmaeus*	12
21:45	*Pipistrellus pygmaeus*	12
21:46	*Pipistrellus pygmaeus*	5
21:46	*Pipistrellus pygmaeus*	6
21:46	*Eptesicus serotinus*	1
21:47	*Pipistrellus pygmaeus*	6
21:47	*Pipistrellus pipistrellus*	3
21:48	*Pipistrellus pygmaeus*	7
21:48	*Pipistrellus pygmaeus*	4
21:49	*Pipistrellus pygmaeus*	6
21:52	*Pipistrellus pygmaeus*	3
21:52	*Pipistrellus pipistrellus*	13
21:53	*Pipistrellus pipistrellus*	2
21:53	*Pipistrellus pipistrellus*	50
21:53	*Pipistrellus pipistrellus*	11
21:53	*Pipistrellus pipistrellus*	27

21:54	*Pipistrellus pygmaeus*	19
21:58	*Pipistrellus pygmaeus*	34
21:59	*Pipistrellus pygmaeus*	26
22:00	*Pipistrellus pipistrellus*	7
22:11	*Pipistrellus pipistrellus*	10
22:13	*Pipistrellus pygmaeus*	34
22:18	*Pipistrellus pygmaeus*	20
22:20	*Pipistrellus pygmaeus*	11
22:21	*Pipistrellus pygmaeus*	3
22:23	*Plecotus auritus*	8
22:25	*Pipistrellus pygmaeus*	20

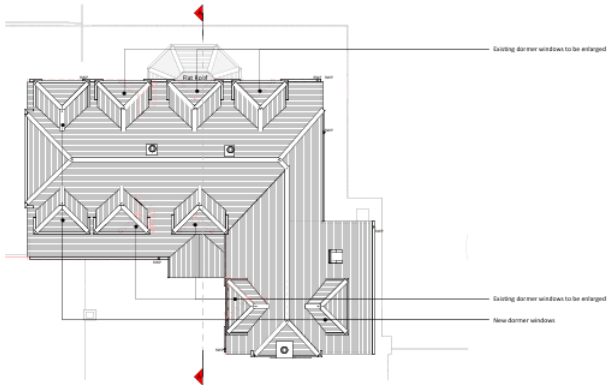
APPENDIX 4 – PROPOSED FLOOR AND ROOF PLANS



Ground Floor Plan



First Floor



Roof Plan