

61 Wilderness Road
Reading
Berkshire
RG6 7RR

Bat Emergence Survey

R2551_BES_a

Report Quality Control Information	
Author	Verity West (Qualifying member of CIEEM)
Reviewer	Sarah Foot MCIEEM

July 2024



1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL
Telephone: 0118 3271810 Mobile: 07979 403099 E-mail: info@wenman-ecology.co.uk
www.wenman-ecology.co.uk

John Wenman Ecological Consultancy LLP is a limited liability partnership registered in England and Wales with registered number OC339057.
Registered office: 100 New Wokingham Road, Crowthorne, RG45 6JP where you may look at a list of members' names.

CONTENTS PAGE

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION.....	4
2.1	Project Background.....	4
2.2	Site Location and Context.....	4
2.3	Report Objectives	5
3	LEGISLATIVE AND POLICY BACKGROUND.....	6
3.1	Relevant Legislation.....	6
3.2	Planning Policy	6
3.3	Mitigation Licensing	7
4	SURVEY METHODOLOGY.....	9
4.1	Emergence Survey	9
4.2	Desk Study.....	9
4.3	Survey Constraints.....	9
5	SURVEY FINDINGS	11
5.1	Overview	11
5.2	Emergence Survey	11
5.3	Habitat Features Suitable for Bats	12
5.4	Desk Study Findings.....	13
6	DISCUSSION AND RECOMMENDATIONS	14
6.1	Assessment of Bat Roost Status.....	14
6.2	Impact of Proposals and Recommendations.....	14
7	REFERENCES.....	15
	APPENDIX 1 – DARKEST POINT OF SURVEY FOR NIGHT VISION AIDS	16
	APPENDIX 2 – BAT EMERGENCE SURVEY FINDINGS	17
	APPENDIX 3 – BAT EMERGENCE SURVEY RAW DATA TABLES	18
	APPENDIX 4 – PROPOSED PLAN	21

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Mr and Mrs Hammett to undertake a Preliminary Roost Assessment of the house at 61 Wilderness Road in Wokingham, Berkshire (OS grid reference: SU 74285 71514). The survey was commissioned to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for part two storey and part single storey extensions. The proposals include the infilling of the existing undercroft porch, the alteration of a flat roof to a pitched roof to the front of the house and the creation of a tiled roof to replace the existing conservatory to the rear of the house.
- 1.1.2** The survey was commissioned following a Preliminary Roost Assessment (PRA) completed by John Wenman Ecological Consultancy LLP on the 5th September 2023. The PRA found no evidence of roosting bats but identified potential external features suitable for crevice-dwelling bats. The property was assigned moderate suitability for roosting bats.
- 1.1.3** Emergence surveys of the property were conducted on the 17th June and 9th July 2024. No bats were observed emerging from the property during the surveys. The emergence survey findings, combined with the PRA findings, demonstrate that it is highly unlikely that the property supports roosting bats.
- 1.1.4** The survey data shows that the proposals are highly unlikely to result in bat roosts being damaged or destroyed, or lead to bats being disturbed. As such, a European Protected Species (EPS) mitigation licence is not required for the planned works to go ahead lawfully.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Mr and Mrs Hammett to undertake a Preliminary Roost Assessment (PRA) of the house at 61 Wilderness Road in Wokingham, Berkshire (OS grid reference: SU 74285 71514).

2.1.2 The survey was commissioned to accompany a planning application to be submitted to Wokingham Borough Council seeking consent for part two storey and part single storey extensions. The proposals include the infilling of the existing undercroft porch, the alteration of a flat roof to a pitched roof to the front of the house and the creation of a tiled roof to replace the existing conservatory to the rear of the house (refer to plans in **Appendix 4**).

2.1.3 The bat emergence survey was commissioned following a Preliminary Roost Assessment (PRA) completed by John Wenman Ecological Consultancy LLP on the 5th September 2023 (Report ref.: R3547b). The PRA found no evidence of roosting bats but identified potential external features resembling potential roosting sites suitable for crevice-dwelling bats: gaps under lifted roof tiles, in particular around the roof lights on the front and rear elevations, and around the chimney and below the hip tiles to the rear of the house, and behind hanging tiles cladding the bay window to the front of the house, and the rear and side of the house. The property was assigned moderate suitability for roosting bats.

2.1.4 In accordance with best practice guidance (Collins 2023), two evening emergence surveys were conducted for the property on the 17th June and 9th July 2024.

2.2 Site Location and Context

2.2.1 The detached house is situated on the eastern side of Wilderness Road in Reading, Berkshire (OS grid reference: SU 74285 71514). The house is in a residential setting with further properties to the north, south and east. The woodland which is part of the Whiteknights Park parkland with a large lake at the University of Reading is situated on the western boundary across the road.

2.2.2 In the wider area, Maiden Erlegh Park is situated approximately 540 metres to the southeast, a patch of woodland at Redhatch Copse is situated approximately 670

metres to the south and High Wood and South Lake is situated approximately 1.2 kilometres to the northeast.

- 2.2.3** These nearby habitats provide commuting and foraging opportunities of moderate suitability for bats adapted to the built environment.

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 social 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 Emergence Survey

- 4.1.1** Dusk emergence surveys were undertaken on the 17th June and 9th July 2024 by experienced bat surveyors Vicky Potts - registered under Natural England Bat Survey Class Licence CL18 (Registration no.: 2016-27162-CLS-CLS), with assistant ecologists Verity West and Sam Wenman .
- 4.1.2** The equipment used during the survey included full-spectrum sampling bat detectors (Elekon Batlogger M/M2 and Echo Meter Touch Pro) and infrared night vision aids (Nightfox Whisker binoculars and Sionyx Aurora Pro camera with infrared torch). A still shot of the darkest points of the survey has been included for all night vision aids in **Appendix 1**.
- 4.1.3** The surveyors were located within the front garden on the northwest elevation of the property (Survey Location 1) and the rear garden on the southeast elevation of the property (Survey Location 2) – refer to emergence survey plan in **Appendix 2**.
- 4.1.4** The emergence survey started 15 minutes before sunset and continued for 1 hour and 30 minutes after sunset. The Echo Meter Touch recordings were analysed using the Kaleidoscope Lite software package whilst the Batlogger recordings were analysed using the BatExplorer software. The video footage was examined using the VLC Media Player.

4.2 Desk Study

- 4.2.1** The MAGIC website was used to search for previous European Protected Species (EPS) licenses granted within a 2km radius.

4.3 Survey Constraints

- 4.3.1** There were no significant constraints to the bat emergence surveys, which were undertaken during the optimal survey season, i.e. May to August, and in conditions suitable for bat activity, i.e. dry and calm with air temperatures 10°C or above at sunset (Collins 2023). There was a technical issue with the Sionyx Aurora Pro camera on 9th July and it recorded for the first 30 minutes only; no bats were observed emerging or potentially emerging during the

surveys and therefore there were no significant constraints to the survey findings.

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

5 SURVEY FINDINGS

5.1 Overview

- 5.1.1 The bat emergence survey findings are described below, summarised in the **Tables 1-6** below and illustrated in the survey plan in **Appendix 2**; the raw detector data is supplied in **Appendix 3**.

5.2 Emergence Survey

17th June 2024

- 5.2.1 No bats were seen emerging from the property during the survey.

Table 1. Weather conditions and survey timings.

Weather	Wind (BF0-12)	Cloud cover (%)	Precipitation	Temperature (°C)	
				Start	Finish
	1-2	75	Dry	18	15
Start time	21:08	Sunset time	21:23	Finish time	22:53

Table 2. Surveyor Location 1 (VW) recordings.

Species	Recordings*	Emergences	First recording (minutes after sunset)
<i>Nyctalus noctula</i>	5	None	21:35 (12)
<i>Pipistrellus pipistrellus</i>	14	None	21:34 (11)
<i>Pipistrellus pygmaeus</i>	5	None	22:20 (57)

*Recordings are the number of times that the detector was triggered when bat calls were detected.

Table 3. Surveyor Location 2 (VP) recordings.

Species	Recordings*	Emergences	First recording (minutes after sunset)
<i>Pipistrellus pipistrellus</i>	18	None	21:34 (11)
<i>Pipistrellus pygmaeus</i>	31	None	21:40 (17)

*Recordings are the number of times that the detector was triggered when bat calls were detected.

- 5.2.2 The first bats recorded during the survey were common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) bats at both survey locations, from 21:34 (11 minutes after sunset) and 21:40 (17 minutes after sunset) respectively. A noctule (*Nyctalus noctula*) bat was also heard at 21:35 (12 minutes after sunset) from Survey Location 1. These timings fall within the typical emergence period for these species, indicating nearby roosts.

9th July 2024

5.2.3 No bats were seen emerging from the property during the survey.

Table 4. Weather conditions and survey timings.

Weather	Wind (BF0-12)	Cloud cover (%)	Precipitation	Temperature (°C)	
				Start	Finish
	0-1	98	Dry	16	16
Start time	21:04	Sunset time	21:19	Finish time	22:49

Table 5. Surveyor Location 1 (SW) recordings.

Species	Recordings*	Emergences	First recording (minutes after sunset)
<i>Nyctalus noctula</i>	16	None	21:50 (31)
<i>Pipistrellus pipistrellus</i>	6	None	21:23 (4)
<i>Pipistrellus pygmaeus</i>	5	None	21:15 (-4)
<i>Plecotus</i> sp.	1	None	22:17 (58)

*Recordings are the number of times that the detector was triggered when bat calls were detected.

Table 6. Surveyor Location 2 (VP) recordings.

Species	Recordings*	Emergences	First recording (minutes after sunset)
<i>Nyctalus noctula</i>	5	None	22:25 (66)
<i>Pipistrellus pipistrellus</i>	3	None	21:18 (-1)
<i>Pipistrellus pygmaeus</i>	11	None	21:18 (-1)

*Recordings are the number of times that the detector was triggered when bat calls were detected.

5.2.4 The first bats recorded during the survey were common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) bats at both survey locations, from 21:18 (1 minute before sunset) from Survey Location 2 initially, commuting to Survey Location 1 for foraging soon after. A noctule (*Nyctalus noctula*) bat was also heard at 21:50 (31 minutes after sunset) from Survey Location 1. A long-eared bat was recorded at 22:17 (58 minutes after sunset) and seen flying to the northeast from Survey Location 1. These timings fall within the typical emergence period for these species, indicating nearby roosts.

5.3 Habitat Features Suitable for Bats

5.3.1 The habitats on site consisted of typical residential garden habitats with closely-mown lawns at the rear, a front driveway, scattered trees and ornamental hedgerows along the boundaries.

5.3.2 The local landscape comprises suburban housing and associated gardens in all immediate directions with a network of scattered trees, hedgerows and gardens providing connectivity through the suburban landscape.

5.4 Desk Study Findings

5.4.1 Six bat mitigation licences have been granted within a 2-kilometre radius of the property, covering the destruction of resting places for common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared (*Plecotus auritus*) bats.

6 DISCUSSION AND RECOMMENDATIONS

6.1 Assessment of Bat Roost Status

- 6.1.1** During the emergence survey, whilst common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and long-eared (*Plecotus* sp.) bats were recorded within their typical emergence period, no bats were observed emerging from the property. The emergence survey findings, combined with the PRA findings, demonstrate that it is highly unlikely that the property supports roosting bats.

6.2 Impact of Proposals and Recommendations

- 6.2.1** The survey data shows that the development proposals are highly unlikely to result in the damage or destruction of any bat roosts, or to the disturbance of bats occupying roosts. As such, a European Protected Species (EPS) mitigation licence will not be required for the planned works to go ahead lawfully.
- 6.2.2** Bats are highly mobile and therefore it is possible that bats could be present in the future. In the unlikely event that bat(s) are discovered during the course of the work, work must stop immediately, and a licensed ecologist must be called to site to provide further advice and attend to the bat(s).

7 REFERENCES

Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists – Good Practice Guidelines 4th Edition*. 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. ISBN 978-1-78354-494-3.

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

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

APPENDIX 1 – DARKEST POINT OF SURVEY FOR NIGHT VISION AIDS



Nightfox Whisker at Survey Location 1 on 17th June 2024.



Nightfox Whisker at Survey Location 2 on 17th June 2024.

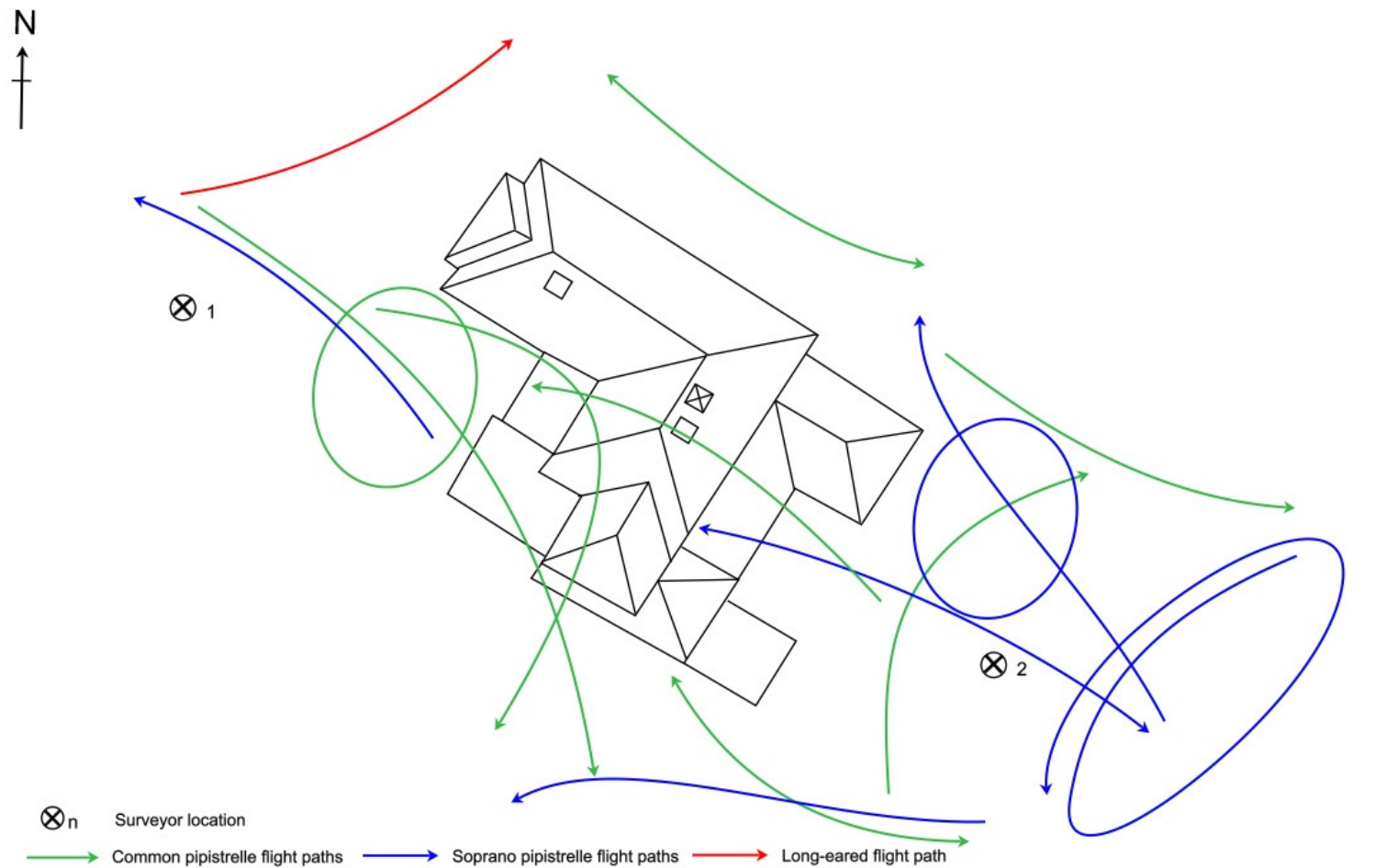


Sionyx Aurora Pro at Survey Location 1 on 9th July 2024



Nightfox Whisker at Survey Location 2 on 9th July 2024.

APPENDIX 2 – BAT EMERGENCE SURVEY FINDINGS



Drawn by:	Date	Scale:	61 Wilderness Road Reading	
VP	July 2024	Not to scale	Bat Emergence Survey Findings	

APPENDIX 3 – BAT EMERGENCE SURVEY RAW DATA TABLES

17th June 2024 – Verity West at Location 1 (Batlogger M2)

Time	Species	Number of calls [#]
21:34:47	<i>Pipistrellus pipistrellus</i>	21
21:35:51	<i>Nyctalus noctula</i>	2
21:35:53	<i>Nyctalus noctula</i>	2
21:35:55	<i>Nyctalus noctula</i>	10
21:40:04	<i>Pipistrellus pipistrellus</i>	12
21:46:39	<i>Nyctalus noctula</i>	12
21:55:16	<i>Pipistrellus pipistrellus</i>	1
22:01:32	<i>Pipistrellus pipistrellus</i>	35
22:01:55	<i>Pipistrellus pipistrellus</i>	1
22:03:09	<i>Pipistrellus pipistrellus</i>	0*
22:04:07	<i>Pipistrellus pipistrellus</i>	1
22:08:56	<i>Pipistrellus pipistrellus</i>	5
22:16:40	<i>Pipistrellus pipistrellus</i>	13
22:20:48	<i>Pipistrellus pygmaeus</i>	7
22:20:51	<i>Pipistrellus pygmaeus</i>	15
22:22:31	<i>Pipistrellus pipistrellus</i>	7
22:22:37	<i>Pipistrellus pipistrellus</i>	6
22:23:04	<i>Pipistrellus pygmaeus</i>	1
22:25:40	<i>Pipistrellus pygmaeus</i>	22
22:25:58	<i>Pipistrellus pipistrellus</i>	18
22:27:48	<i>Pipistrellus pygmaeus</i>	5
22:30:17	<i>Pipistrellus pipistrellus</i>	5
22:40:38	<i>Nyctalus noctula</i>	2
22:42:56	<i>Pipistrellus pipistrellus</i>	7

17th June 2024 – Vicky Potts at Location 2 (Batlogger M)

Time	Species	Number of calls [#]
21:34:50	<i>Pipistrellus pipistrellus</i>	7
21:40:06	<i>Pipistrellus pipistrellus</i>	13
21:40:46	<i>Pipistrellus pygmaeus</i>	2
21:43:06	<i>Pipistrellus pygmaeus</i>	7
21:43:10	<i>Pipistrellus pygmaeus</i>	7
21:43:14	<i>Pipistrellus pygmaeus</i>	8
21:43:20	<i>Pipistrellus pygmaeus</i>	4
21:43:23	<i>Pipistrellus pygmaeus</i>	7
21:43:28	<i>Pipistrellus pygmaeus</i>	1
21:43:31	<i>Pipistrellus pygmaeus</i>	3
21:43:35	<i>Pipistrellus pygmaeus</i>	1
21:43:38	<i>Pipistrellus pygmaeus</i>	2
21:47:38	<i>Pipistrellus pipistrellus</i>	11

21:48:12	<i>Pipistrellus pygmaeus</i>	2
21:48:21	<i>Pipistrellus pygmaeus</i>	0*
21:48:23	<i>Pipistrellus pygmaeus</i>	14
21:48:35	<i>Pipistrellus pygmaeus</i>	14
21:48:47	<i>Pipistrellus pygmaeus</i>	3
21:48:50	<i>Pipistrellus pygmaeus</i>	11
21:48:50	<i>Pipistrellus pygmaeus</i>	1
21:48:58	<i>Pipistrellus pygmaeus</i>	3
21:49:04	<i>Pipistrellus pygmaeus</i>	4
21:49:07	<i>Pipistrellus pygmaeus</i>	11
21:49:15	<i>Pipistrellus pygmaeus</i>	21
21:49:27	<i>Pipistrellus pygmaeus</i>	5
21:49:34	<i>Pipistrellus pygmaeus</i>	4
21:50:40	<i>Pipistrellus pipistrellus</i>	11
21:54:07	<i>Pipistrellus pipistrellus</i>	11
21:55:05	<i>Pipistrellus pipistrellus</i>	35
21:58:35	<i>Pipistrellus pipistrellus</i>	11
22:01:27	<i>Pipistrellus pipistrellus</i>	30
22:01:57	<i>Pipistrellus pipistrellus</i>	9
22:03:49	<i>Pipistrellus pipistrellus</i>	13
22:04:07	<i>Pipistrellus pipistrellus</i>	19
22:04:26	<i>Pipistrellus pipistrellus</i>	17
22:04:52	<i>Pipistrellus pipistrellus</i>	18
22:06:52	<i>Pipistrellus pipistrellus</i>	23
22:13:16	<i>Pipistrellus pygmaeus</i>	10
22:17:33	<i>Pipistrellus pygmaeus</i>	14
22:20:58	<i>Pipistrellus pygmaeus</i>	2
22:22:27	<i>Pipistrellus pipistrellus</i>	14
22:23:18	<i>Pipistrellus pygmaeus</i>	18
22:25:35	<i>Pipistrellus pygmaeus</i>	17
22:26:00	<i>Pipistrellus pipistrellus</i>	25
22:27:50	<i>Pipistrellus pygmaeus</i>	13
22:29:36	<i>Pipistrellus pygmaeus</i>	15
22:30:21	<i>Pipistrellus pygmaeus</i>	3
22:30:24	<i>Pipistrellus pipistrellus</i>	7
22:42:55	<i>Pipistrellus pipistrellus</i>	10

9th July 2024 – Sam Wenman at Location 1 (EMT Pro)

Time	Species	Number of calls [#]
21:15	<i>Pipistrellus pygmaeus</i>	1
21:23	<i>Pipistrellus pipistrellus</i>	1
21:24	<i>Pipistrellus pygmaeus</i>	1
21:26	<i>Pipistrellus pygmaeus</i>	1
21:28	<i>Pipistrellus pygmaeus</i>	1
21:42	<i>Pipistrellus pygmaeus</i>	1

21:50	<i>Nyctalus noctula</i>	1
22:13	<i>Nyctalus noctula</i>	1
22:15	<i>Nyctalus noctula</i>	1
22:17	<i>Plecotus auritus</i>	1
22:21	<i>Nyctalus noctula</i>	2
22:25	<i>Nyctalus noctula</i>	2
22:27	<i>Nyctalus noctula</i>	1
22:30	<i>Nyctalus noctula</i>	2
22:31	<i>Nyctalus noctula</i>	1
22:34	<i>Nyctalus noctula</i>	1
22:36	<i>Nyctalus noctula</i>	1
22:37	<i>Nyctalus noctula</i>	2
22:39	<i>Pipistrellus pipistrellus</i>	1
22:40	<i>Pipistrellus pipistrellus</i>	1
22:41	<i>Nyctalus noctula</i>	1
22:42	<i>Pipistrellus pipistrellus</i>	1
22:45	<i>Pipistrellus pipistrellus</i>	1
22:46	<i>Pipistrellus pipistrellus</i>	1

9th July 2024 – Vicky Potts at Location 2 (Batlogger M)

Time	Species	Number of calls [#]
21:18:16	<i>Pipistrellus pygmaeus</i>	6
21:18:31	<i>Pipistrellus pipistrellus</i>	1
21:23:51	<i>Pipistrellus pygmaeus</i>	12
21:23:56	<i>Pipistrellus pygmaeus</i>	26
21:28:18	<i>Pipistrellus pygmaeus</i>	9
21:31:27	<i>Pipistrellus pygmaeus</i>	27
21:31:38	<i>Pipistrellus pygmaeus</i>	20
21:31:38	<i>Pipistrellus pygmaeus</i>	1
21:31:49	<i>Pipistrellus pygmaeus</i>	11
21:52:16	<i>Pipistrellus pygmaeus</i>	14
22:01:52	<i>Pipistrellus pygmaeus</i>	12
22:25:10	<i>Nyctalus noctula</i>	2
22:26:02	<i>Pipistrellus pygmaeus</i>	15
22:31:31	<i>Nyctalus noctula</i>	3
22:32:10	<i>Nyctalus noctula</i>	4
22:37:46	<i>Nyctalus noctula</i>	4
22:37:50	<i>Nyctalus noctula</i>	6
22:39:19	<i>Pipistrellus pipistrellus</i>	5
22:45:17	<i>Pipistrellus pipistrellus</i>	3

NB. The number of calls are calculated by the BatExplorer Software during analysis of the data
 * 0 calls is when the software has not been able to recognise individual calls (it being distant) and therefore cannot calculate the number of calls within the recording.

APPENDIX 4 – PROPOSED PLAN

