Kings Lake House
Holly Bush Ride
Finchampstead
Berkshire
RG40 3QR

Bat Emergence Survey

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Author	*Hannah McEwen*
Reviewers	*Vicky Potts MCIEEM & Conor Watson ACIEEM*
Approver	*Vicky Potts MCIEEM*

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JOHNWENMAN
ecological consultancy

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.

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1 EXECUTIVE SUMMARY

1.1.1 John Wenman Ecological Consultancy LLP was instructed by Mr and Mrs Rich to undertake a Bat Emergence Survey (BES) at Kings Lake House in Finchampstead. The BES was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for the addition of dormer windows and a single-storey rear extension (see planning drawings in **Appendix 5**).

1.1.2 The BES was commissioned following the Preliminary Roost Assessment (PRA) completed on 17th September 2024. Five medium-sized bat droppings resembling those typically deposited by void-dwelling species, such as the long-eared bats (*Plecotus* spp.), were observed within the roof void of the property. Access points are likely under gaps under the timber soffits or around the dormer window junctions with the main roof. Further external features that may offer potential crevice roost sites for regular use by large numbers of crevice-dwelling bat species included a broken roof tile, gaps under corner hanging tiles and around the window frames on the dormer windows. The property was assigned high potential suitability for bats.

1.1.3 Emergence surveys were conducted on the 19th May, 10th June and 2nd July 2025. a peak count of two soprano pipistrelle (*Pipistrellus pygmaeus*), one unidentified pipistrelle bat (*Pipistrellus* sp.) and one common pipistrelle bat (*Pipistrellus pipistrellus*) were observed emerging from the property. The survey findings indicate that the house acts as a day roost for individual male or non-breeding bats.

1.1.4 No brown long-eared bats (*Plecotus auritus*) were observed emerging from the property during the survey indicating that they are not currently roosting in the property and the number of droppings observed suggests that they have only used the void on a couple of occasions as a day roost.

1.1.5 As the crevice roosting sites within the soffits and the roof void will be retained in the long-term for the void dwelling bats, a European Protected Species (EPS) Mitigation Licence will not be required to allow the work to proceed lawfully. The roof void will temporarily be opened up and therefore a non-licensed precautionary approach will be required to avoid harming bats and the 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 and Mrs Rich to undertake a Bat Emergence Survey at Kings Lake House in Finchampstead. The survey was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for the addition of dormer windows and a single-storey rear extension (see planning drawings in **Appendix 5**).

2.1.2 The Bat Emergence Survey was commissioned following a Preliminary Roost Assessment (PRA) completed on 17th September 2024. Five medium-sized bat droppings resembling those typically deposited by void-dwelling species, such as the long-eared bats (*Plecotus* spp.), were observed within the roof void of the property. Access points are likely under gaps under the timber soffits or around the dormer window junctions with the main roof. Further external features that may offer potential crevice roost sites for regular use by large numbers of crevice-dwelling bat species included a broken roof tile, gaps under corner hanging tiles and around the window frames on the dormer windows. The property was assigned high potential suitability for bats.

2.1.3 In accordance with best practice guidance (Collins 2023), three evening emergence surveys were conducted for the property on the 19th May, 10th June and 2nd July 2025.

2.2 Site Location and Context

2.2.1 The property is located on the western side of Hollybush Ride in Finchampstead, Berkshire (central OS grid reference: SU 81421 65080).

2.2.2 The property is located in a wooded residential area with established tree-lines between neighbouring properties and King's Mere Lake borders the western side of property. The lake is surrounded by a mixture of coniferous and broadleaved woodland. Approximately 85 metres to the north, there is an expanse of woodland which includes Gorrick Plantation and Queen' s Mere Lake. The nearby landscape to the south includes the woodland and heathland of Simon's Wood and Finchampstead Ridges, and Heath Pool lake, approximately 915 metres to the south. East Berks Golf Club is less than 450 metres east and comprises a mosaic of woodland, heathland and grassland.

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 Surveys

4.1.1 Dusk emergence surveys were undertaken on the 19th May, 10th June and 2nd July 2025 by experienced bat surveyors: Amy Denness (CL20 2017-30082-CLS-CLS), Meghan Porter – a qualifying member of CIEEM (CL17 2023-11300-CL17-BAT), Jake Morgan – a qualifying member of CIEEM, Vicky Potts MCIEEM (CL18 2016-27162-CLS-CLS), John Wenman MCIEEM (CL18 2016-23859-CLS-CLS) and Hannah McEwen.

4.1.2 The equipment used during surveys included full-spectrum sampling bat detectors (Batlogger M/M2 and Echo Meter Touch 2) and thermal imaging/infrared night vision aids (Nightfox Whisker with infrared torches; Sionyx Aurora Pro with infrared torches; Pulsar Helion XP28, Pixfra Arc and a Canon XA30 with infrared torches). A still shot of the darkest points of the surveys has been included for all night vision aids in **Appendix 1**.

4.1.3 The surveyors were located in the driveway at the north east overlooking the front three dormers (Survey Location 1), south east in the garden viewing the rear of the house (Survey Location 2) and north west in the garden with the lake behind (Survey Location 3). Two unmanned cameras were positioned, one on the north of the house, facing the northern gable (Survey Location 4) and a second on the south gable with the chimney (Survey Location 5) to aid the surveyors in Location 2 and 3 – refer to emergence survey plan in **Appendix 2.**

4.1.4 Each emergence survey started 15 minutes before sunset and continued for 1 hour and 30 minutes after sunset. The bat call recordings were processed and analysed using the BatExplorer and Kaleidoscope Lite computer software packages and the night vision video footage was reviewed in the VLC Media Player.

4.2 Desk Study

4.2.1 The Berkshire and South Buckinghamshire Bat Group were commissioned to provide a record search for bats recorded within a 1km radius of the site. 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 The Bat Emergence Surveys 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).

4.3.2 Please note that the time on the thermal Pixfra camera and Pulsar camera is lagging by 1-2 and the minutes in comparison to the associated Batlogger times so there are minor discrepancies in the survey findings section but this has no impact on the survey validity. In addition the cameras did not pick up all emergences however this did not impact the survey findings as the bats were recorded by sight by the surveyors.

4.3.3 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 Surveys

19th May 2025

5.2.1 One soprano pipistrelle (*Pipistrellus pygmaeus*) was observed and recorded on camera by the surveyor at Survey Location 1 at 21:06 (13 minutes after sunset), returning to roost at the eastern half hip where the chimney and soffit joined. A soprano pipistrelle (*P. pygmaeus*) was then observed emerging from the same location at 21:09 which flew in from the east (16 minutes after sunset) (see **Figure 1** below).

Figure 1. P. pygmaeus emergence & flight path at 21:09 (Surveyor Location 1).

5.2.2 A soprano pipistrelle (*Pipistrellus pygmaeus*) was observed and recorded on camera by the surveyor at Survey Location 2 at 21:06 (13 minutes after sunset) and a pipistrelle bat (*Pipistrellus sp.*) was recorded at 21:23 (30 minutes after sunset) emerging from the eastern half hip where the chimney and soffit joined (see **Figures 2 & 3** below).

Figure 2. Pipistrellus pygmaeus emergence & flight path at 21:06 (Surveyor Location 2).

Figure 3. Pipistrellus sp. emergence & flight path at 21:23 (Surveyor Location 2).

5.2.3 One soprano pipistrelle (*P. pygmaeus*) bat was observed and recorded on camera by the surveyor at Survey Location 3 at 21:29 (36 minutes after sunset), emerging from the western half hip (see **Figure 4** below).

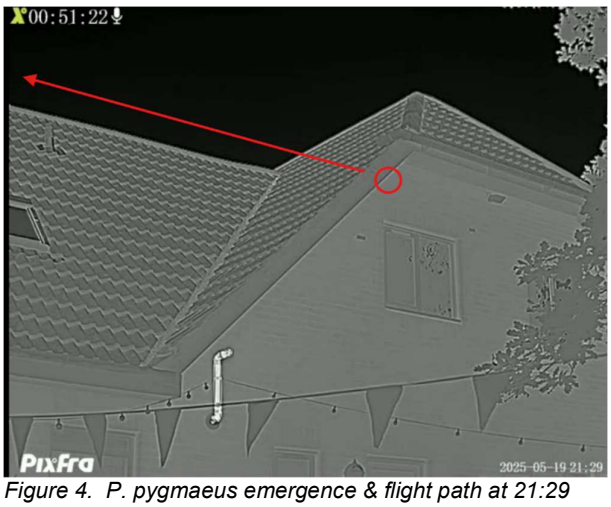

Figure 4. P. pygmaeus emergence & flight path at 21:29 (Surveyor Location 2).

Table 1. Weather conditions and survey timings

	Wind (BF0-12)	Cloud cover (%)	Rain	Temp start (ºC)	Temp end (ºC)
Weather	1-2	0	None	15	13
Start time	20:38	**Sunset time**	20:53	**Finish time**	22:23

Table 2a. Surveyor recordings at Survey Location 1 (AD)

Species	Recordings*	Emergences	Time of first call after sunset
Nyctalus noctula	25	0	20:39 (-14)
Pipistrellus pipistrellus	37	0	20:56 (3)
Pipistrellus pygmaeus	13	1	21:05 (12)

Table 2b. Surveyor recordings at Survey Location 2 (VP)

Species	Recordings*	Emergences	Time of first call after sunset
Eptesicus serotinus	4	0	21:27 (34)
Nyctalus noctula	64	0	21:22 (29)
Pipistrellus pipistrellus	61	0	21:23 (30)
Pipistrellus pygmaeus	37	1	20:56 (3)
Pipistrellus species	N/A	1	21:23 (33)
Social	1	0	22:08 (75)

Table 2c. Surveyor recordings at Survey Location 3 (HM)

Species	Recordings*	Emergences	Time of first call after sunset
Eptesicus serotinus	3	0	21:21 (28)
Myotis spec.	1	0	22:02 (69)
Nyctalus noctula	28	0	21:23 (30)
Pipistrellus pipistrellus	166	0	21:05 (12)
Pipistrellus pygmaeus	315	1	20:56 (3)
Plecotus auritus	5	0	21:27 (34)

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

5.2.4 The first bat recorded was a noctule (*Nyctalus noctula)* that was heard but not seen at 20:39 (14 minutes before sunset) by the surveyor at Survey Location 1 which falls within the typical emergence period for this species, indicating that it likely emerged nearby. Furthermore, soprano pipistrelle (*P. pygmaeus*) were seen and heard at 20:56 (3 minutes after sunset) by surveyors in Location 2 and 3 which is within the typical emergence period for this species.

5.2.5 The level of bat activity was high and primarily comprised soprano pipistrelle (*Pipistrellus pygmaeus*) foraging passes running north to south and south to north along the western side of the house by the lake.

10th June 2025

5.2.6 One soprano pipistrelle (*Pipistrellus pygmaeus*) was observed and recorded on camera by the surveyor at Survey Location 1 at 21:24 (6 minutes after sunset), emerging from the eastern half hip where the chimney and soffit joined, where it then passed north (see **Figure 5** below).

Figure 5. Pipistrellus pygmaeus emergence & flight path at 21:24 (Survey Location 1).

Table 3. Weather conditions and survey timings

	Wind (BF0-12)	Cloud cover (%)	Rain	Temp start (°C)	Temp end (°C)
Weather	0	55	Dry	20	17
Start time	21:03	**Sunset time**	21:18	**Finish time**	22:48

Table 4a. Surveyor recordings at Survey Location 1(AD)

Species	Recordings*	Emergences	Time of first call after sunset
Nyctalus noctula	18	0	21:11 (-7)
Pipistrellus pipistrellus	12	0	21:16 (-2)
Pipistrellus pygmaeus	12	1	21:24 (6)
Eptesicus serotinus	1	0	21:51 (33)

Table 4b. Surveyor recordings at Survey Location 2 (JW)

Species	Recordings*	Emergences	Time of first call after sunset
Nyctalus noctula	2	0	21:45 (27)
Pipistrellus pipistrellus	1	0	21:49 (31)
Pipistrellus pygmaeus	5	0	21:39 (21)
Plecotus auritus	2	0	21:47 (29)

Table 4c. Surveyor recordings at Survey Location 3 (HM)

Species	Recordings*	Emergences	Time of first call after sunset
Nyctalus noctula	8	0	21:46 (28)
Pipistrellus pipistrellus	22	0	21:55 (37)
Pipistrellus pygmaeus	253	0	21:16 (-2)
Plecotus auritus	1	0	21:42 (24)

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

5.2.7 The first bat recorded was a noctule (*N. noctula)* that was heard but not seen at 21:11 (7 minutes before sunset) by the surveyor at Survey Location 1. Soprano pipistrelle (*P. pygmaeus*) was first heard at 21:16 (2 minutes before sunset) by the surveyor at Survey Location 3 and brown long-eared (*Plecotus auritus*) was heard at 21:42 (24 minutes after sunset). These periods fall within the typical emergence periods for these species, indicating that the individuals recorded are likely roosting within the nearby area.

5.2.8 The level of bat activity was moderate in comparison to the first survey surveys with soprano pipistrelle (*P. pygmaeus)* foraging passes running north to south and south to north along the western side of the house by the lake as well as a couple of brown long-eared (*P. auritus*) calls recorded around the rear and side garden along the lake.

2nd July 2025

5.2.9 One common pipistrelle (*Pipistrellus pipistrellus*) bat was observed by the surveyors at Survey Location 1 and 2 and recorded on camera at Survey Location 5 at 21:27 (4 minutes after sunset), emerging from the eastern half hip where the chimney and soffit meet, it passed north (see **Figure 6** below).

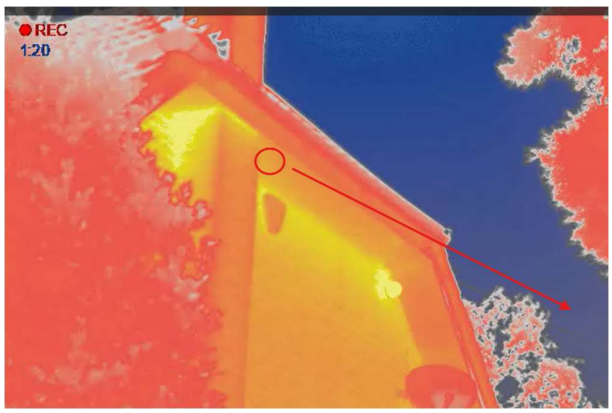

Figure 6. Pipistrellus pipistrellus. emergence & flight path at 21:27 (Survey Location 5).

Table 5. Weather conditions and survey timings

	Wind (BF0-12)	**Cloud cover (%)**	**Rain**	**Temp start (ºC)**	**Temp end (ºC)**
Weather	0	0	Dry	20	16
Start time	21:08	**Sunset time**	21:23	**Finish time**	22:53

Table 6a. Surveyor recordings at Survey Location 1 (JM)

Species	**Recordings***	**Emergences**	**Time of first call after sunset**
Nyctalus noctula	3	0	21:58 (35)
Pipistrellus pipistrellus	33	1	21:27 (4)
Pipistrellus pygmaeus	50	0	21:43 (20)
Eptesicus serotinus	28	0	21:49 (26)
Myotis Species	4	0	22:08 (45)

Table 6b. Surveyor recordings at Survey Location 2 (VP)

Species	**Recordings***	**Emergences**	**Time of first call after sunset**
Nyctalus noctula	138	0	21:08 (-15)
Pipistrellus pipistrellus	30	0	21:39 (16)
Pipistrellus pygmaeus	71	0	21:46 (23)
Eptesicus serotinus	19	0	21:50 (27)
Plecotus auritus	7	0	21:58 (35)
Social	2	N/A	21:57 (34)

Table 6c. Detector recordings at Survey Location 3 (MPS)

Species	**Recordings***	**Emergences**	**Time of first call after sunset**
Nyctalus noctula	59	0	21:59 (36)
Pipistrellus pipistrellus	25	0	21:27 (4)
Pipistrellus pygmaeus	161	0	21:32 (9)
Eptesicus serotinus	4	0	21:58 (35)
Myotis species	11	0	22:12 (49)

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

5.2.10 The first bat to be recorded during the survey was a noctule (*N. noctula*) that was heard but not seen at 21:08 (15 minutes before sunset) at Survey Location 2. After a short period of no calls, several species came in quick succession: common pipistrelle (*Pipistrellus pipistrellus*) were seen and heard by surveyors in location 1 and 3 at 21:27 (4 minutes after sunset); soprano pipistrelle (*P. pygmaeus*) were

was seen and heard by the surveyor at location 3 at 21:32 (9 minutes after sunset) passing across the north end of the house from east to west; and serotine (*Eptesicus serotinus*) which was seen and heard at 21:50 in Survey Location 2. These recordings periods fall within the typical emergence period of these species, indicating that they are likely roosting nearby. Furthermore, brown long-eared bat *(Plecotus auritus*) was seen and heard at 21:58 (35 minutes after sunset) by the surveyor at Survey Location 2 commuting from the south up towards the north west.

5.2.11 The level of bat activity was high throughout the survey, primarily comprising *P. pipistrellus* and *P. pygmaeus* foraging passes over the lake and western side of the house.

5.3 Habitat Features Suitable for Bats

5.3.1 The suburban area surrounding the house with gardens, scattered trees and tree lines provides continuous habitat that could be used as a flight-path connecting it to high-quality foraging habitats, such as the adjacent lakes to the west and parcels of coniferous and broadleaved woodland to the north and south.

5.4 Desk Study Findings

5.4.1 The record search from the Berks and South Bucks Bat Group (BSBBG) returned records for at least ten species including brown long-eared (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), Nathusius' pipistrelle (*Pipistrellus nathusii*), noctule (*Nyctalus noctula*), serotine (*Eptesicus serotinus*), soprano pipistrelle (*Pipistrellus pygmaeus*), barbastelle (*Barbastella barbastellus*), Leisler's bat (*Nyctalus leisleri*), Natterer's bat (*Myotis nattereri*), Daubenton's (*Myotis daubentonii*) and whiskered/Brandt's bat (*Myotis mystacinus/brandtii*). The closest records are for *Plecotus* sp. droppings found in a void approximately 160m to the west in 2015. A brown long eared (*Plecotus auritus*) roost was confirmed in a property 330m to the south west with droppings in void found in 2022.

5.4.2 Eleven bat mitigation licences have been granted within a 2-kilometre radius of the property with one licence issued for the damage of a maternity roost and a second licence for the destruction of a maternity roosts. The closest license granted is for a site situated approximately 206 metres to the east, covering the destruction of a soprano pipistrelle (*Pipistrellus pygmaeus*) resting place between 2017 and 2018 (Ref: 2017-31789-EPS-MIT).

6 DISCUSSION AND RECOMMENDATIONS

6.1 Assessment of Bat Roost Status

6.1.1 During the emergence surveys, a peak count of two soprano pipistrelle (*Pipistrellus pygmaeus*), one unidentified pipistrelle bat (*Pipistrellus* sp.) and one common pipistrelle bat (*Pipistrellus pipistrellus*) were observed emerging from the property. The points of egress for the bats observed was the eastern half hip where the chimney and soffit meet, and from the soffit at the western side of the house. The survey findings indicate that the house acts as a day roost for individual male or non-breeding soprano pipistrelle (*Pipistrellus pygmaeus*) and common pipistrelle (*Pipistrellus pipistrellus)*.

6.1.2 Common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P*. p*ygmaeus*) are a crevice-dwelling species that are one of the most abundant and widespread bat species in Great Britain. These species occur in almost any habitat type an is well adapted to the built environments; it is one of the species most regularly reported roosting in houses and churches (Mathews *et al.* 2018). The summer day roosts used by these species hold site level conservation importance only and the loss of such roosts is not usually significant beyond the scale of the site (Reason & Wray 2023).

6.1.3 No brown long-eared bats (*Plecotus auritus*) were observed emerging from the property during the survey, indicating that they are not currently roosting in the property and the number of droppings observed suggests that they have only used the void on a couple of occasions as a day roost.

6.1.4 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). Day roosts supporting this species are of site level importance only (Reason & Wray 2023).

6.2 Impact Assessment and Recommendations

6.2.1 The survey data shows that the development proposals, which involve the addition of dormer windows and a single-storey rear extension, are unlikely to result in the destruction and/or permanent damage of common pipistrelle (*P. pipistrellus*) and

soprano pipistrelle (*P. pygmaeus*) day roosts. The works are also unlikely to lead to the disturbance and/or injury of pipistrelle bats if present at the time.

6.2.2 A small number of brown long-eared bat droppings were found within the roof void, however no bats were observed emerging from the roof. The findings suggest that the roof void has been used on a couple of occasions by the void dwelling bats as a day roost. The works will involve temporarily opening up a small section of the roof void to add the dormer windows however the majority of the void will be retained and all access points at the eaves will be retained in the long-term. The proposals will not result in impacts that will impair their ability to survive, breed or reproduce, to hibernate or migrate, or significantly affect local disturbance or abundance. The works will also not obstruct access to the roosts for shelter or protection.

6.2.3 As the crevice roosting sites within the soffits and the roof void will be retained in the long-term for the void dwelling bats a European Protected Species (EPS) Mitigation Licence will not be required to allow the work to proceed lawfully. The degree of deliberate disturbance is considered to fall below the threshold for the Habitat Regulations, and therefore no licence under this legislation is necessary. However the disturbance may still be an offence under the WCA, therefore a non-licensed precautionary approach will be required to avoid harming bats and the strategy is set out in **Section 7** below.

7 NON-LICENSED PRECAUTIONARY MEASURES

7.1.1 Following the grant of planning consent, before the work begins Natural England will be notified of the proposed works.

7.1.2 The removal of roof coverings necessary to enable the extension will be carried out by a soft strip i.e. hand removal with handheld tools if necessary. Before the soft strip begins, a suitably qualified ecologist will give a toolbox talk to the contractors on site detailing bats are present, the legislation protecting bats, the location of the roosting site in the buildings, good working practices, the measures that are required to protect bats during the work and what to do if bats are found.

7.1.3 The ecologist will carry out an updated inspection of the loft space for bats immediately before stripping work begins to confirm that bats are not using the void. If bat(s) are discovered during the loft inspection and during course of the work, work will stop immediately, and a licensed ecologist will provide further advice and attend to the bat(s). The licensed ecologist will re-assess the impact of the work and determine if a European Protected Species (EPS) mitigation licence is required to enable the works to continue lawfully. If an EPS licence is required, work will only recommence once a licence is in place.

7.1.4 The soft strip will be undertaken outside of the winter hibernation season (mid-November to February) to minimise the risk of disturbing torpid bats.

7.1.5 In the long-term, roosting opportunities will be retained as existing with access provided at the eaves.

8 REFERENCES

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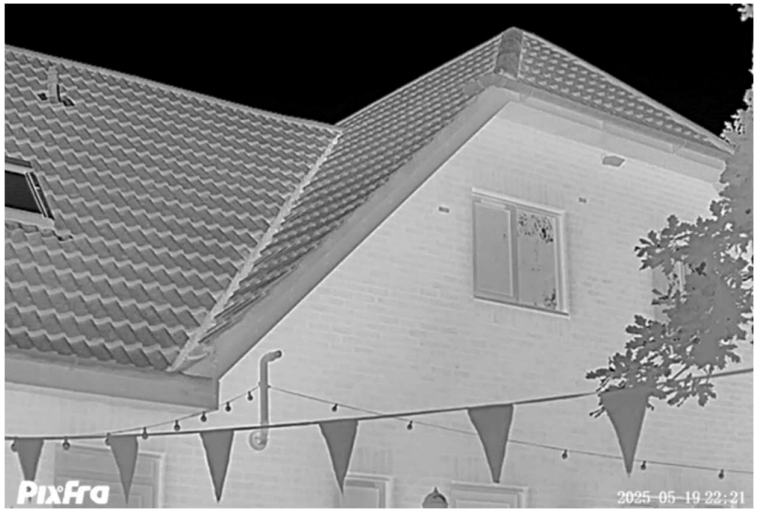
Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3RD Edition)*. JNCC, Peterborough.

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

Canon XA30 at Survey Location 1 (19/05/25).

Nightfox Whisker at Survey Location 2 (19/05/25)

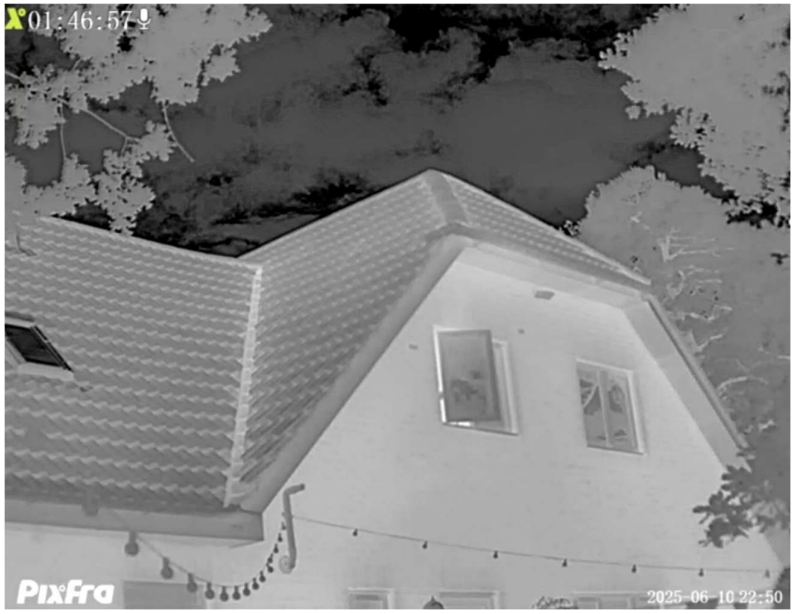


Pixfra Arc at Survey Location 3 (19/05/24).

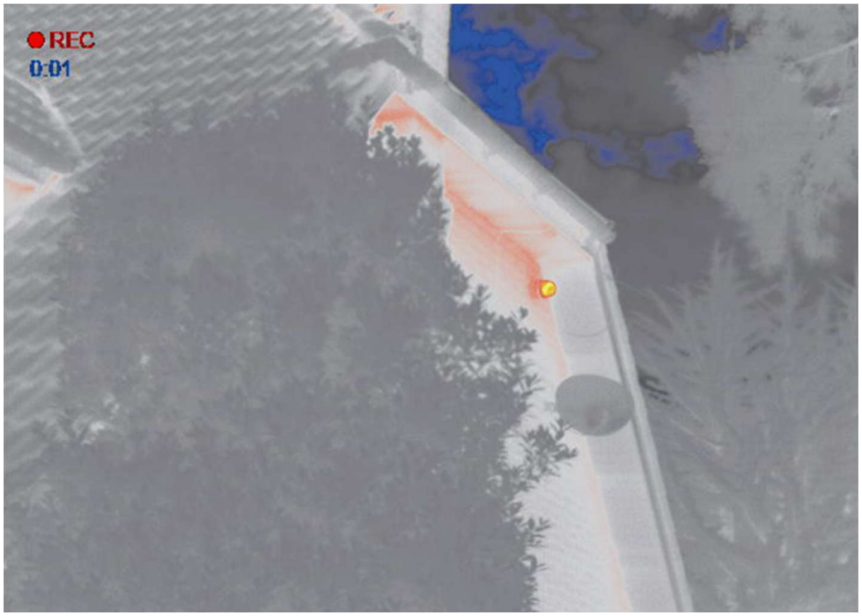
Nightfox Whisker at Survey Location 4 (19/05/25)

Canon XA30 at Survey Location 1 (10/06/25).

Sionyx at Survey Location 2 (10/06/24)



Pixfra Arc at Survey Location 3 (10/06/25).

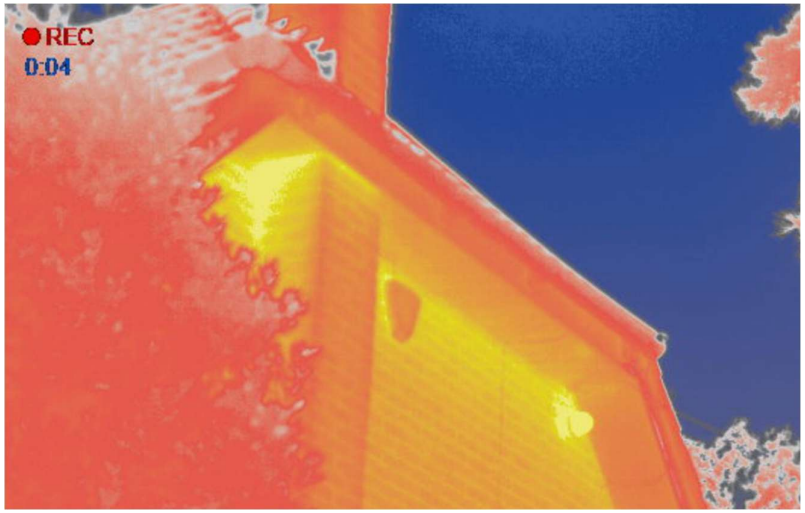


Pulsar at Survey Location 5 (10/06/25).

Sionyx at Survey Location 1 (02/07/25).

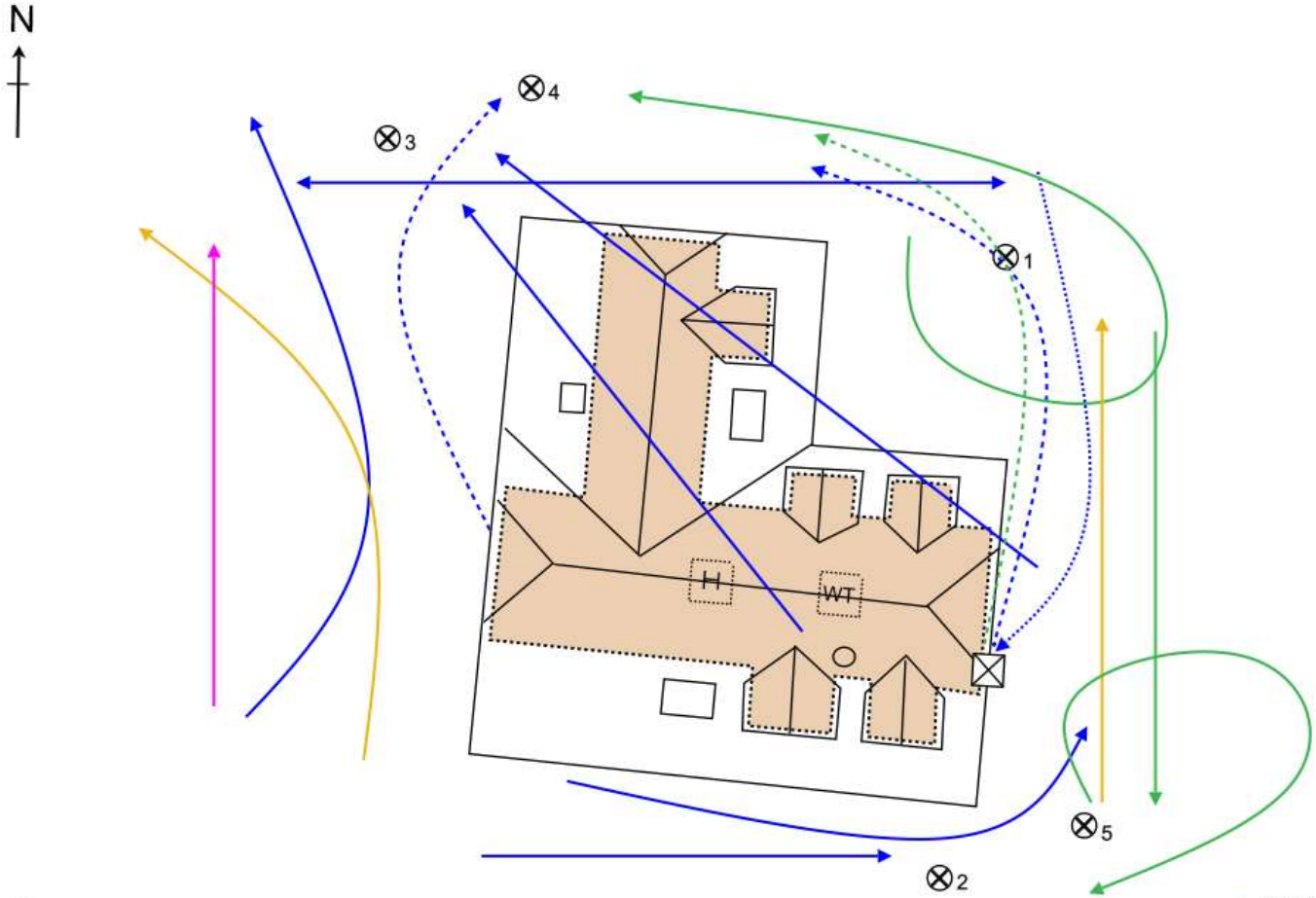
Nightfox Whisker at Survey Location 2 (02/07/25).

Sionyx at Survey Location 3 (02/07/25).



Pulsar at Survey Location 5 (02/07/25).

APPENDIX 2 – BAT EMERGENCE SURVEY FINDINGS



n Surveyor location
Common pipistrelle flight paths
Common pipistrelle emergence
Soprano pipistrelle flight paths
Soprano pipistrelle re-entry
Soprano pipistrelle emergence
Serotine flight paths
Noctule flight paths

Drawn by:	Date	Scale:	Kings Lake House Finchampstead	JOHNWENMAN ecological consultancy
HM	July 2025	Not to scale	Emergence and Re-entry Bat Survey Findings	

APPENDIX 3 – BAT EMERGENCE SURVEY RAW DATA TABLES

19th May 2025 – AD at Location 1 (EMT2)

Time	Species
20:39:13	*Nyctalus noctula*
20:39:26	*Nyctalus noctula*
20:39:53	*Nyctalus noctula*
20:40:25	*Nyctalus noctula*
20:45:14	*Nyctalus noctula*
20:56:49	*Pipistrellus pipistrellus*
21:05:49	*Pipistrellus pygmaeus*
21:14:02	*Pipistrellus pipistrellus*
21:18:31	*Pipistrellus pygmaeus*
21:18:46	*Nyctalus noctula*
21:18:55	*Pipistrellus pygmaeus*
21:19:04	*Pipistrellus pygmaeus*
21:19:08	*Pipistrellus pygmaeus*
21:22:00	*Nyctalus noctula*
21:22:34	*Pipistrellus pygmaeus*
21:24:03	*Nyctalus noctula*
21:27:03	*Pipistrellus pygmaeus*
21:27:20	*Nyctalus noctula*
21:29:26	*Nyctalus noctula*
21:29:52	*Pipistrellus pygmaeus*
21:31:15	*Nyctalus noctula*
21:31:39	*Nyctalus noctula*
21:36:30	*Pipistrellus pygmaeus*
21:37:18	*Nyctalus noctula*
21:37:51	*Nyctalus noctula*
21:39:42	*Pipistrellus pipistrellus*
21:40:17	*Nyctalus noctula*
21:40:42	*Pipistrellus pipistrellus*
21:41:21	*Nyctalus noctula*
21:41:46	*Pipistrellus pygmaeus*
21:41:51	*Pipistrellus pipistrellus*
21:44:38	*Pipistrellus pipistrellus*
21:44:49	*Pipistrellus pipistrellus*
21:45:09	*Nyctalus noctula*
21:45:54	*Nyctalus noctula*
21:46:03	*Pipistrellus pipistrellus*
21:46:14	*Pipistrellus pipistrellus*
21:49:30	*Pipistrellus pipistrellus*
21:50:56	*Pipistrellus pygmaeus*
21:58:50	*Pipistrellus pipistrellus*
21:59:07	*Pipistrellus pipistrellus*
21:59:41	*Pipistrellus pipistrellus*
22:00:26	*Pipistrellus pipistrellus*
22:01:15	*Pipistrellus pipistrellus*
22:01:48	*Pipistrellus pipistrellus*
22:01:54	*Pipistrellus pipistrellus*
22:02:23	*Pipistrellus pipistrellus*
22:03:49	*Pipistrellus pipistrellus*
22:04:10	*Pipistrellus pipistrellus*
22:04:34	*Pipistrellus pipistrellus*
22:05:05	*Pipistrellus pipistrellus*
22:05:15	*Pipistrellus pipistrellus*
22:05:34	*Pipistrellus pipistrellus*
22:05:42	*Pipistrellus pipistrellus*
22:05:58	*Pipistrellus pipistrellus*
22:06:07	*Pipistrellus pipistrellus*
22:06:39	*Pipistrellus pipistrellus*
22:06:56	*Pipistrellus pipistrellus*
22:07:28	*Nyctalus noctula*
22:08:39	*Pipistrellus pipistrellus*
22:08:58	*Pipistrellus pipistrellus*
22:09:28	*Pipistrellus pipistrellus*
22:13:03	*Nyctalus noctula*
22:13:19	*Nyctalus noctula*
22:14:31	*Nyctalus noctula*
22:14:50	*Nyctalus noctula*
22:17:25	*Pipistrellus pipistrellus*
22:17:39	*Pipistrellus pipistrellus*
22:18:16	*Soprano pipistrelle*
22:19:09	*Pipistrellus pipistrellus*
22:19:40	*Pipistrellus pipistrellus*
22:20:00	*Pipistrellus pipistrellus*
22:21:43	*Nyctalus noctula*
22:22:01	*Nyctalus noctula*
22:22:27	*Pipistrellus pygmaeus*
20:39:13	*Nyctalus noctula*
20:39:26	*Nyctalus noctula*
20:39:53	*Nyctalus noctula*
20:40:25	*Nyctalus noctula*
20:45:14	*Nyctalus noctula*
20:56:49	*Pipistrellus pipistrellus*
21:05:49	*Pipistrellus pygmaeus*
21:14:02	*Pipistrellus pipistrellus*
21:18:31	*Pipistrellus pygmaeus*

NB. The number of individual calls are not recorded by the software during the analysis of the data

19th May 2025 – VP at Location 2 (Batlogger)

Time	Species	Number of Calls [#]
20:56	*Pipistrellus pygmaeus*	11
21:05	*Pipistrellus pygmaeus*	5
21:05	*Pipistrellus pygmaeus*	3
21:07	*Pipistrellus pygmaeus*	2
21:08	*Pipistrellus pygmaeus*	2
21:13	*Pipistrellus pygmaeus*	3
21:18	*Pipistrellus pygmaeus*	4
21:18	*Pipistrellus pygmaeus*	7
21:18	*Pipistrellus pygmaeus*	7
21:19	*Pipistrellus pygmaeus*	4
21:21	*Pipistrellus pygmaeus*	20
21:22	*Nyctalus noctula*	5
21:22	*Nyctalus noctula*	1
21:22	*Pipistrellus pygmaeus*	3
21:23	*Pipistrellus pipistrellus*	3
21:24	*Nyctalus noctula*	3
21:24	*Pipistrellus pygmaeus*	0
21:27	*Eptesicus serotinus*	12
21:29	*Pipistrellus pygmaeus*	9
21:30	*Nyctalus noctula*	3
21:30	*Nyctalus noctula*	2
21:30	*Nyctalus noctula*	4
21:31	*Nyctalus noctula*	5
21:31	*Nyctalus noctula*	4
21:31	*Nyctalus noctula*	1
21:32	*Nyctalus noctula*	8
21:32	*Pipistrellus pygmaeus*	6
21:32	*Pipistrellus pipistrellus*	10
21:33	*Nyctalus noctula*	5
21:33	*Nyctalus noctula*	2
21:34	*Nyctalus noctula*	1
21:34	*Nyctalus noctula*	3
21:35	*Nyctalus noctula*	8
21:36	*Pipistrellus pygmaeus*	4
21:36	*Nyctalus noctula*	7
21:36	*Nyctalus noctula*	2
21:37	*Nyctalus noctula*	3
21:38	*Nyctalus noctula*	4
21:39	*Nyctalus noctula*	6
21:39	*Nyctalus noctula*	8
21:40	*Nyctalus noctula*	8
21:40	*Nyctalus noctula*	9
21:40	*Nyctalus noctula*	10
21:41	*Nyctalus noctula*	5
21:41	*Pipistrellus pygmaeus*	9
21:42	*Nyctalus noctula*	4
21:42	*Nyctalus noctula*	8
21:43	*Nyctalus noctula*	7
21:43	*Nyctalus noctula*	5
21:44	*Nyctalus noctula*	13
21:44	*Eptesicus serotinus*	7
21:44	*Nyctalus noctula*	2
21:44	*Nyctalus noctula*	5
21:44	*Pipistrellus pygmaeus*	14
21:45	*Nyctalus noctula*	4
21:45	*Nyctalus noctula*	8
21:45	*Pipistrellus pygmaeus*	5
21:45	*Nyctalus noctula*	4
21:45	*Pipistrellus pygmaeus*	11
21:46	*Pipistrellus pipistrellus*	50
21:46	*Nyctalus noctula*	1
21:46	*Nyctalus noctula*	3
21:46	*Nyctalus noctula*	5
21:46	*Nyctalus noctula*	6
21:47	*Nyctalus noctula*	2
21:47	*Nyctalus noctula*	11
21:47	*Nyctalus noctula*	3
21:47	*Nyctalus noctula*	11
21:47	*Pipistrellus pygmaeus*	19
21:48	*Nyctalus noctula*	8
21:48	*Eptesicus serotinus*	2
21:48	*Nyctalus noctula*	1
21:48	*Pipistrellus pygmaeus*	10
21:48	*Pipistrellus pipistrellus*	1
21:48	*Nyctalus noctula*	5
21:48	*Nyctalus noctula*	5
21:48	*Nyctalus noctula*	1
21:48	*Nyctalus noctula*	6
21:49	*Nyctalus noctula*	5
21:49	*Pipistrellus pipistrellus*	2
21:49	*Pipistrellus pipistrellus*	15
21:50	*Nyctalus noctula*	11
21:50	*Pipistrellus pipistrellus*	18
21:51	*Pipistrellus pipistrellus*	11

21:51	*Pipistrellus pygmaeus*	4
21:52	*Nyctalus noctula*	4
21:53	*Pipistrellus pygmaeus*	15
21:53	*Nyctalus noctula*	11
21:53	*Nyctalus noctula*	7
21:54	*Pipistrellus pipistrellus*	7
21:54	*Pipistrellus pipistrellus*	4
21:54	*Pipistrellus pygmaeus*	4
21:54	*Pipistrellus pygmaeus*	11
21:54	*Nyctalus noctula*	16
21:55	*Pipistrellus pygmaeus*	7
21:55	*Nyctalus noctula*	3
21:56	*Nyctalus noctula*	4
21:56	*Pipistrellus pipistrellus*	12
21:56	*Nyctalus noctula*	8
21:57	*Pipistrellus pipistrellus*	9
21:57	*Nyctalus noctula*	1
21:57	*Nyctalus noctula*	6
21:57	*Pipistrellus pipistrellus*	2
21:57	*Pipistrellus pipistrellus*	27
21:58	*Pipistrellus pipistrellus*	1
21:58	*Pipistrellus pipistrellus*	1
21:59	*Pipistrellus pipistrellus*	35
21:59	*Pipistrellus pipistrellus*	57
21:59	*Pipistrellus pygmaeus*	2
22:00	*Pipistrellus pygmaeus*	10
22:00	*Pipistrellus pipistrellus*	3
22:00	*Pipistrellus pygmaeus*	4
22:00	*Pipistrellus pipistrellus*	35
22:00	*Pipistrellus pipistrellus*	10
22:01	*Pipistrellus pipistrellus*	12
22:01	*Pipistrellus pipistrellus*	9
22:01	*Pipistrellus pipistrellus*	24
22:01	*Pipistrellus pipistrellus*	21
22:02	*Pipistrellus pipistrellus*	8
22:02	*Pipistrellus pipistrellus*	2
22:02	*Pipistrellus pipistrellus*	20
22:02	*Pipistrellus pipistrellus*	39
22:02	*Pipistrellus pipistrellus*	15
22:03	*Pipistrellus pipistrellus*	44
22:03	*Pipistrellus pipistrellus*	108
22:03	*Pipistrellus pipistrellus*	4

22:03	*Pipistrellus pipistrellus*	27
22:04	*Pipistrellus pipistrellus*	11
22:04	*Pipistrellus pipistrellus*	6
22:04	*Pipistrellus pygmaeus*	20
22:04	*Pipistrellus pipistrellus*	10
22:05	*Pipistrellus pipistrellus*	68
22:05	*Pipistrellus pipistrellus*	4
22:05	*Pipistrellus pipistrellus*	12
22:05	*Pipistrellus pipistrellus*	25
22:06	*Pipistrellus pipistrellus*	29
22:07	*Nyctalus noctula*	26
22:08	*Social*	1
22:08	*Pipistrellus pygmaeus*	22
22:08	*Pipistrellus pipistrellus*	6
22:08	*Pipistrellus pipistrellus*	46
22:09	*Pipistrellus pipistrellus*	4
22:09	*Pipistrellus pipistrellus*	21
22:10	*Pipistrellus pipistrellus*	1
22:13	*Eptesicus serotinus*	31
22:13	*Nyctalus noctula*	5
22:13	*Nyctalus noctula*	22
22:14	*Nyctalus noctula*	11
22:14	*Pipistrellus pipistrellus*	5
22:15	*Pipistrellus pipistrellus*	1
22:16	*Pipistrellus pipistrellus*	1
22:17	*Pipistrellus pipistrellus*	8
22:17	*Pipistrellus pipistrellus*	11
22:17	*Pipistrellus pipistrellus*	23
22:17	*Pipistrellus pygmaeus*	11
22:17	*Pipistrellus pipistrellus*	4
22:18	*Pipistrellus pygmaeus*	15
22:18	*Pipistrellus pipistrellus*	2
22:19	*Pipistrellus pipistrellus*	16
22:19	*Pipistrellus pipistrellus*	6
22:19	*Pipistrellus pipistrellus*	2
22:19	*Pipistrellus pipistrellus*	22
22:19	*Pipistrellus pipistrellus*	2
22:19	*Pipistrellus pipistrellus*	29
22:19	*Pipistrellus pygmaeus*	23
22:22	*Pipistrellus pygmaeus*	18
22:22	*Pipistrellus pygmaeus*	16

19th May 2025 – HM at Location 3 (Batlogger M2)

Time	Species	Number of calls [#]
20:56	*Pipistrellus pygmaeus*	13
21:05	*Pipistrellus pygmaeus*	7
21:05	*Pipistrellus pygmaeus*	13
21:05	*Pipistrellus pipistrellus*	2
21:06	*Pipistrellus pipistrellus*	3
21:06	*Pipistrellus pygmaeus*	3
21:07	*Pipistrellus pygmaeus*	2
21:07	*Pipistrellus pygmaeus*	3
21:07	*Pipistrellus pygmaeus*	7
21:07	*Pipistrellus pygmaeus*	2
21:07	*Pipistrellus pygmaeus*	1
21:07	*Pipistrellus pygmaeus*	5
21:07	*Pipistrellus pygmaeus*	4
21:07	*Pipistrellus pygmaeus*	2
21:08	*Pipistrellus pygmaeus*	9
21:08	*Pipistrellus pygmaeus*	4
21:09	*Pipistrellus pygmaeus*	3
21:09	*Pipistrellus pygmaeus*	1
21:09	*Pipistrellus pygmaeus*	8
21:10	*Pipistrellus pygmaeus*	1
21:14	*Pipistrellus pygmaeus*	6
21:14	*Pipistrellus pygmaeus*	6
21:14	*Pipistrellus pipistrellus*	7
21:14	*Pipistrellus pipistrellus*	2
21:15	*Pipistrellus pygmaeus*	5
21:16	*Pipistrellus pygmaeus*	4
21:16	*Pipistrellus pygmaeus*	1
21:16	*Pipistrellus pygmaeus*	2
21:16	*Pipistrellus pygmaeus*	12
21:17	*Pipistrellus pygmaeus*	6
21:17	*Pipistrellus pygmaeus*	3
21:17	*Pipistrellus pygmaeus*	3
21:17	*Pipistrellus pygmaeus*	2
21:17	*Pipistrellus pygmaeus*	3
21:17	*Pipistrellus pygmaeus*	3
21:17	*Pipistrellus pygmaeus*	10
21:17	*Pipistrellus pygmaeus*	3
21:18	*Pipistrellus pygmaeus*	4
21:18	*Pipistrellus pygmaeus*	11
21:18	*Pipistrellus pygmaeus*	10
21:18	*Pipistrellus pygmaeus*	5
21:18	*Pipistrellus pygmaeus*	5
21:19	*Pipistrellus pygmaeus*	12
21:19	*Pipistrellus pygmaeus*	9
21:19	*Pipistrellus pygmaeus*	2
21:19	*Pipistrellus pygmaeus*	12
21:20	*Pipistrellus pygmaeus*	3
21:20	*Pipistrellus pygmaeus*	2
21:20	*Pipistrellus pygmaeus*	11
21:20	*Pipistrellus pygmaeus*	8
21:20	*Pipistrellus pygmaeus*	6
21:20	*Pipistrellus pygmaeus*	5
21:20	*Pipistrellus pygmaeus*	8
21:20	*Pipistrellus pygmaeus*	3
21:20	*Pipistrellus pygmaeus*	7
21:20	*Pipistrellus pygmaeus*	12
21:21	*Pipistrellus pygmaeus*	29
21:21	*Eptesicus serotinus*	3
21:21	*Pipistrellus pygmaeus*	7
21:21	*Pipistrellus pygmaeus*	9
21:21	*Pipistrellus pygmaeus*	5
21:21	*Pipistrellus pygmaeus*	21
21:22	*Pipistrellus pipistrellus*	11
21:22	*Pipistrellus pygmaeus*	11
21:22	*Pipistrellus pygmaeus*	6
21:22	*Pipistrellus pygmaeus*	3
21:23	*Pipistrellus pygmaeus*	18
21:23	*Pipistrellus pygmaeus*	13
21:23	*Nyctalus noctula*	7
21:24	*Pipistrellus pygmaeus*	32
21:24	*Pipistrellus pygmaeus*	48
21:24	*Pipistrellus pygmaeus*	17
21:24	*Pipistrellus pygmaeus*	27
21:24	*Pipistrellus pygmaeus*	32
21:25	*Pipistrellus pygmaeus*	24
21:25	*Pipistrellus pipistrellus*	6
21:25	*Pipistrellus pygmaeus*	10
21:25	*Pipistrellus pygmaeus*	11
21:25	*Pipistrellus pygmaeus*	1
21:25	*Pipistrellus pygmaeus*	4
21:25	*Pipistrellus pygmaeus*	7
21:25	*Pipistrellus pygmaeus*	13
21:26	*Pipistrellus pygmaeus*	3
21:26	*Pipistrellus pygmaeus*	6
21:26	*Pipistrellus pygmaeus*	24
21:26	*Pipistrellus pygmaeus*	5
21:26	*Pipistrellus pygmaeus*	13

21:26	*Pipistrellus pygmaeus*	3
21:26	*Pipistrellus pygmaeus*	10
21:26	*Pipistrellus pygmaeus*	25
21:27	*Pipistrellus pygmaeus*	11
21:27	*Pipistrellus pygmaeus*	12
21:27	*Pipistrellus pygmaeus*	4
21:27	*Pipistrellus pygmaeus*	6
21:27	*Pipistrellus pygmaeus*	1
21:27	*Pipistrellus pygmaeus*	9
21:27	*Pipistrellus pygmaeus*	9
21:27	*Pipistrellus pygmaeus*	3
21:27	*Pipistrellus pygmaeus*	14
21:27	*Pipistrellus pygmaeus*	6
21:27	*Pipistrellus pygmaeus*	1
21:27	*Pipistrellus pygmaeus*	1
21:27	*Pipistrellus pygmaeus*	2
21:27	*Plecotus auritus*	12
21:27	*Pipistrellus pygmaeus*	8
21:27	*Pipistrellus pygmaeus*	6
21:28	*Pipistrellus pygmaeus*	3
21:28	*Pipistrellus pygmaeus*	2
21:28	*Pipistrellus pygmaeus*	5
21:28	*Pipistrellus pygmaeus*	3
21:28	*Pipistrellus pygmaeus*	3
21:28	*Pipistrellus pygmaeus*	2
21:28	*Pipistrellus pygmaeus*	7
21:28	*Pipistrellus pygmaeus*	4
21:29	*Pipistrellus pygmaeus*	5
21:29	*Pipistrellus pygmaeus*	2
21:29	*Pipistrellus pygmaeus*	17
21:29	*Pipistrellus pygmaeus*	13
21:29	*Pipistrellus pygmaeus*	6
21:29	*Pipistrellus pygmaeus*	2
21:29	*Pipistrellus pygmaeus*	7
21:29	*Pipistrellus pygmaeus*	5
21:29	*Pipistrellus pygmaeus*	12
21:29	*Pipistrellus pygmaeus*	1
21:29	*Pipistrellus pygmaeus*	17
21:30	*Pipistrellus pygmaeus*	8
21:30	*Pipistrellus pygmaeus*	8
21:30	*Pipistrellus pygmaeus*	3
21:30	*Pipistrellus pygmaeus*	1
21:30	*Pipistrellus pygmaeus*	9
21:30	*Pipistrellus pygmaeus*	4
21:30	*Pipistrellus pygmaeus*	7

21:30	*Pipistrellus pygmaeus*	11
21:30	*Pipistrellus pygmaeus*	8
21:30	*Pipistrellus pygmaeus*	28
21:30	*Pipistrellus pygmaeus*	5
21:30	*Nyctalus noctula*	3
21:31	*Pipistrellus pygmaeus*	4
21:31	*Pipistrellus pygmaeus*	7
21:31	*Nyctalus noctula*	1
21:31	*Pipistrellus pygmaeus*	1
21:31	*Pipistrellus pygmaeus*	5
21:31	*Pipistrellus pygmaeus*	7
21:31	*Pipistrellus pygmaeus*	10
21:31	*Pipistrellus pygmaeus*	17
21:31	*Pipistrellus pygmaeus*	9
21:32	*Pipistrellus pygmaeus*	2
21:32	*Pipistrellus pygmaeus*	16
21:32	*Pipistrellus pygmaeus*	3
21:32	*Pipistrellus pygmaeus*	7
21:32	*Pipistrellus pipistrellus*	1
21:33	*Pipistrellus pygmaeus*	7
21:33	*Pipistrellus pygmaeus*	4
21:33	*Pipistrellus pygmaeus*	8
21:33	*Pipistrellus pygmaeus*	1
21:33	*Pipistrellus pygmaeus*	14
21:33	*Pipistrellus pygmaeus*	7
21:33	*Nyctalus noctula*	1
21:33	*Pipistrellus pygmaeus*	6
21:33	*Pipistrellus pygmaeus*	5
21:33	*Pipistrellus pygmaeus*	9
21:33	*Nyctalus noctula*	2
21:33	*Nyctalus noctula*	5
21:33	*Pipistrellus pygmaeus*	4
21:33	*Pipistrellus pygmaeus*	9
21:34	*Pipistrellus pygmaeus*	8
21:34	*Nyctalus noctula*	5
21:34	*Pipistrellus pygmaeus*	18
21:34	*Pipistrellus pygmaeus*	13
21:34	*Nyctalus noctula*	4
21:34	*Pipistrellus pygmaeus*	1
21:35	*Pipistrellus pygmaeus*	4
21:35	*Pipistrellus pipistrellus*	11
21:35	*Pipistrellus pygmaeus*	3
21:35	*Pipistrellus pygmaeus*	8
21:35	*Pipistrellus pipistrellus*	4
21:35	*Pipistrellus pygmaeus*	2

21:36	*Pipistrellus pygmaeus*	15
21:36	*Pipistrellus pipistrellus*	1
21:36	*Pipistrellus pygmaeus*	33
21:36	*Pipistrellus pygmaeus*	15
21:36	*Pipistrellus pygmaeus*	5
21:36	*Pipistrellus pygmaeus*	1
21:36	*Pipistrellus pygmaeus*	32
21:36	*Nyctalus noctula*	5
21:37	*Pipistrellus pygmaeus*	10
21:37	*Pipistrellus pygmaeus*	1
21:37	*Pipistrellus pygmaeus*	20
21:37	*Nyctalus noctula*	2
21:37	*Pipistrellus pygmaeus*	6
21:37	*Nyctalus noctula*	2
21:37	*Pipistrellus pygmaeus*	2
21:37	*Pipistrellus pygmaeus*	7
21:37	*Pipistrellus pygmaeus*	11
21:37	*Pipistrellus pygmaeus*	14
21:37	*Pipistrellus pygmaeus*	45
21:37	*Nyctalus noctula*	1
21:37	*Pipistrellus pygmaeus*	20
21:38	*Pipistrellus pygmaeus*	6
21:38	*Pipistrellus pygmaeus*	4
21:38	*Pipistrellus pygmaeus*	3
21:38	*Pipistrellus pygmaeus*	10
21:38	*Pipistrellus pygmaeus*	6
21:38	*Pipistrellus pygmaeus*	5
21:38	*Pipistrellus pygmaeus*	11
21:38	*Pipistrellus pygmaeus*	11
21:38	*Pipistrellus pygmaeus*	7
21:38	*Pipistrellus pygmaeus*	7
21:39	*Pipistrellus pygmaeus*	13
21:39	*Pipistrellus pygmaeus*	8
21:39	*Pipistrellus pygmaeus*	9
21:39	*Pipistrellus pygmaeus*	2
21:39	*Pipistrellus pygmaeus*	14
21:39	*Pipistrellus pipistrellus*	11
21:39	*Pipistrellus pygmaeus*	12
21:39	*Plecotus auritus*	1
21:39	*Pipistrellus pygmaeus*	12
21:39	*Pipistrellus pipistrellus*	7
21:39	*Pipistrellus pygmaeus*	4
21:39	*Pipistrellus pygmaeus*	14
21:40	*Pipistrellus pygmaeus*	9
21:40	*Pipistrellus pygmaeus*	23

21:40	*Pipistrellus pipistrellus*	2
21:40	*Pipistrellus pygmaeus*	11
21:40	*Nyctalus noctula*	1
21:40	*Pipistrellus pygmaeus*	9
21:40	*Pipistrellus pygmaeus*	6
21:40	*Nyctalus noctula*	1
21:40	*Pipistrellus pipistrellus*	4
21:40	*Pipistrellus pipistrellus*	15
21:40	*Pipistrellus pipistrellus*	2
21:40	*Pipistrellus pipistrellus*	4
21:40	*Pipistrellus pipistrellus*	8
21:40	*Nyctalus noctula*	1
21:40	*Pipistrellus pygmaeus*	2
21:41	*Pipistrellus pygmaeus*	6
21:41	*Pipistrellus pygmaeus*	4
21:41	*Pipistrellus pipistrellus*	9
21:41	*Nyctalus noctula*	2
21:41	*Pipistrellus pygmaeus*	1
21:41	*Pipistrellus pipistrellus*	11
21:41	*Pipistrellus pygmaeus*	2
21:41	*Pipistrellus pipistrellus*	9
21:41	*Nyctalus noctula*	1
21:41	*Pipistrellus pygmaeus*	15
21:41	*Pipistrellus pygmaeus*	16
21:41	*Plecotus auritus*	1
21:42	*Pipistrellus pygmaeus*	7
21:42	*Pipistrellus pygmaeus*	4
21:42	*Plecotus auritus*	1
21:42	*Pipistrellus pygmaeus*	3
21:42	*Pipistrellus pygmaeus*	4
21:42	*Pipistrellus pygmaeus*	20
21:42	*Plecotus auritus*	1
21:42	*Pipistrellus pygmaeus*	18
21:43	*Pipistrellus pygmaeus*	5
21:43	*Pipistrellus pygmaeus*	17
21:43	*Pipistrellus pygmaeus*	18
21:43	*Pipistrellus pygmaeus*	11
21:43	*Pipistrellus pygmaeus*	2
21:43	*Pipistrellus pygmaeus*	14
21:43	*Pipistrellus pygmaeus*	8
21:43	*Pipistrellus pygmaeus*	17
21:43	*Pipistrellus pygmaeus*	4
21:44	*Pipistrellus pygmaeus*	1
21:44	*Pipistrellus pygmaeus*	19
21:44	*Pipistrellus pygmaeus*	10

21:44	*Pipistrellus pygmaeus*	6
21:44	*Pipistrellus pygmaeus*	7
21:44	*Pipistrellus pygmaeus*	4
21:44	*Pipistrellus pygmaeus*	10
21:44	*Pipistrellus pipistrellus*	22
21:44	*Pipistrellus pipistrellus*	44
21:45	*Pipistrellus pygmaeus*	11
21:45	*Pipistrellus pygmaeus*	10
21:45	*Pipistrellus pygmaeus*	5
21:45	*Pipistrellus pygmaeus*	43
21:46	*Pipistrellus pygmaeus*	20
21:46	*Pipistrellus pygmaeus*	34
21:46	*Pipistrellus pygmaeus*	3
21:46	*Pipistrellus pygmaeus*	1
21:46	*Pipistrellus pygmaeus*	4
21:47	*Pipistrellus pygmaeus*	2
21:47	*Pipistrellus pygmaeus*	2
21:47	*Pipistrellus pygmaeus*	1
21:47	*Pipistrellus pygmaeus*	8
21:48	*Pipistrellus pygmaeus*	69
21:48	*Pipistrellus pygmaeus*	45
21:48	*Nyctalus noctula*	9
21:48	*Pipistrellus pygmaeus*	39
21:48	*Nyctalus noctula*	7
21:48	*Pipistrellus pipistrellus*	16
21:48	*Pipistrellus pipistrellus*	1
21:48	*Pipistrellus pipistrellus*	1
21:48	*Pipistrellus pygmaeus*	17
21:49	*Pipistrellus pygmaeus*	40
21:49	*Pipistrellus pygmaeus*	7
21:49	*Pipistrellus pygmaeus*	6
21:49	*Pipistrellus pygmaeus*	3
21:49	*Pipistrellus pygmaeus*	23
21:49	*Pipistrellus pipistrellus*	11
21:49	*Pipistrellus pygmaeus*	9
21:49	*Pipistrellus pygmaeus*	23
21:49	*Pipistrellus pygmaeus*	32
21:49	*Pipistrellus pygmaeus*	15
21:49	*Pipistrellus pipistrellus*	2
21:50	*Pipistrellus pygmaeus*	11
21:50	*Pipistrellus pygmaeus*	36
21:50	*Pipistrellus pygmaeus*	5
21:50	*Pipistrellus pygmaeus*	1
21:50	*Pipistrellus pygmaeus*	7
21:50	*Pipistrellus pygmaeus*	11

21:50	*Pipistrellus pygmaeus*	17
21:50	*Pipistrellus pygmaeus*	7
21:50	*Pipistrellus pygmaeus*	5
21:50	*Pipistrellus pygmaeus*	8
21:50	*Pipistrellus pygmaeus*	4
21:50	*Pipistrellus pygmaeus*	11
21:50	*Pipistrellus pygmaeus*	1
21:50	*Pipistrellus pygmaeus*	7
21:50	*Pipistrellus pygmaeus*	34
21:51	*Pipistrellus pipistrellus*	8
21:51	*Pipistrellus pipistrellus*	12
21:51	*Pipistrellus pygmaeus*	4
21:51	*Pipistrellus pipistrellus*	12
21:51	*Pipistrellus pygmaeus*	12
21:51	*Pipistrellus pygmaeus*	9
21:51	*Pipistrellus pygmaeus*	4
21:51	*Nyctalus noctula*	1
21:51	*Pipistrellus pygmaeus*	10
21:51	*Pipistrellus pygmaeus*	12
21:51	*Pipistrellus pygmaeus*	7
21:51	*Pipistrellus pygmaeus*	5
21:52	*Pipistrellus pygmaeus*	8
21:52	*Pipistrellus pipistrellus*	1
21:52	*Pipistrellus pygmaeus*	13
21:52	*Pipistrellus pipistrellus*	7
21:52	*Pipistrellus pygmaeus*	16
21:52	*Pipistrellus pygmaeus*	11
21:52	*Pipistrellus pygmaeus*	11
21:52	*Pipistrellus pipistrellus*	18
21:52	*Pipistrellus pygmaeus*	12
21:52	*Pipistrellus pipistrellus*	6
21:52	*Pipistrellus pygmaeus*	2
21:52	*Pipistrellus pygmaeus*	42
21:52	*Nyctalus noctula*	4
21:53	*Pipistrellus pipistrellus*	2
21:53	*Pipistrellus pipistrellus*	13
21:53	*Pipistrellus pipistrellus*	13
21:53	*Pipistrellus pygmaeus*	19
21:53	*Nyctalus noctula*	2
21:53	*Pipistrellus pygmaeus*	9
21:53	*Pipistrellus pygmaeus*	2
21:53	*Pipistrellus pipistrellus*	1
21:53	*Pipistrellus pygmaeus*	4
21:53	*Pipistrellus pygmaeus*	2
21:53	*Pipistrellus pygmaeus*	5

21:53	*Pipistrellus pygmaeus*	10
21:53	*Pipistrellus pygmaeus*	10
21:53	*Nyctalus noctula*	3
21:53	*Pipistrellus pygmaeus*	7
21:53	*Pipistrellus pipistrellus*	1
21:53	*Pipistrellus pygmaeus*	8
21:53	*Nyctalus noctula*	2
21:53	*Pipistrellus pipistrellus*	2
21:53	*Pipistrellus pipistrellus*	11
21:53	*Pipistrellus pygmaeus*	4
21:54	*Pipistrellus pygmaeus*	10
21:54	*Pipistrellus pygmaeus*	3
21:54	*Pipistrellus pipistrellus*	1
21:54	*Pipistrellus pygmaeus*	9
21:54	*Pipistrellus pipistrellus*	4
21:54	*Pipistrellus pygmaeus*	4
21:54	*Pipistrellus pygmaeus*	1
21:54	*Pipistrellus pipistrellus*	16
21:54	*Pipistrellus pipistrellus*	22
21:54	*Pipistrellus pygmaeus*	3
21:54	*Pipistrellus pipistrellus*	7
21:54	*Pipistrellus pygmaeus*	30
21:54	*Nyctalus noctula*	2
21:55	*Pipistrellus pipistrellus*	4
21:55	*Pipistrellus pygmaeus*	7
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pipistrellus*	6
21:55	*Pipistrellus pygmaeus*	6
21:55	*Pipistrellus pipistrellus*	11
21:56	*Pipistrellus pipistrellus*	5
21:56	*Pipistrellus pipistrellus*	27
21:56	*Pipistrellus pipistrellus*	15
21:56	*Pipistrellus pipistrellus*	6
21:56	*Pipistrellus pipistrellus*	5
21:56	*Pipistrellus pipistrellus*	13
21:56	*Pipistrellus pipistrellus*	3
21:56	*Pipistrellus pipistrellus*	17
21:56	*Pipistrellus pipistrellus*	1
21:56	*Pipistrellus pipistrellus*	3
21:57	*Pipistrellus pygmaeus*	17
21:57	*Pipistrellus pygmaeus*	7
21:57	*Pipistrellus pipistrellus*	9
21:57	*Pipistrellus pipistrellus*	21
21:58	*Pipistrellus pipistrellus*	19
21:58	*Pipistrellus pipistrellus*	17

21:58	*Pipistrellus pipistrellus*	4
21:58	*Pipistrellus pipistrellus*	9
21:58	*Pipistrellus pipistrellus*	24
21:58	*Pipistrellus pipistrellus*	17
21:58	*Pipistrellus pipistrellus*	6
21:58	*Pipistrellus pipistrellus*	14
21:58	*Pipistrellus pygmaeus*	1
21:58	*Pipistrellus pipistrellus*	12
21:58	*Pipistrellus pipistrellus*	5
21:59	*Pipistrellus pipistrellus*	28
21:59	*Pipistrellus pipistrellus*	9
21:59	*Pipistrellus pipistrellus*	22
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21:59	*Pipistrellus pipistrellus*	19
21:59	*Pipistrellus pipistrellus*	26
21:59	*Pipistrellus pipistrellus*	18
21:59	*Pipistrellus pipistrellus*	3
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22:00	*Pipistrellus pipistrellus*	8
22:00	*Pipistrellus pipistrellus*	25
22:00	*Pipistrellus pipistrellus*	14
22:00	*Pipistrellus pipistrellus*	17
22:00	*Pipistrellus pipistrellus*	24
22:00	*Pipistrellus pipistrellus*	3
22:00	*Pipistrellus pipistrellus*	3
22:01	*Pipistrellus pipistrellus*	13
22:01	*Pipistrellus pipistrellus*	34
22:01	*Pipistrellus pipistrellus*	24
22:01	*Pipistrellus pipistrellus*	5
22:01	*Pipistrellus pipistrellus*	27
22:01	*Pipistrellus pipistrellus*	14
22:01	*Pipistrellus pipistrellus*	26
22:01	*Pipistrellus pygmaeus*	1
22:02	*Myotis spec.*	12
22:02	*Pipistrellus pipistrellus*	29
22:02	*Pipistrellus pipistrellus*	21
22:02	*Pipistrellus pipistrellus*	18
22:02	*Pipistrellus pipistrellus*	25
22:03	*Pipistrellus pipistrellus*	7
22:03	*Pipistrellus pipistrellus*	8
22:03	*Pipistrellus pipistrellus*	21
22:04	*Pipistrellus pipistrellus*	4
22:05	*Pipistrellus pipistrellus*	24
22:05	*Pipistrellus pipistrellus*	4
22:05	*Pipistrellus pipistrellus*	8

22:05	*Pipistrellus pipistrellus*	6
22:05	*Pipistrellus pipistrellus*	30
22:05	*Pipistrellus pipistrellus*	8
22:06	*Pipistrellus pipistrellus*	51
22:06	*Pipistrellus pipistrellus*	23
22:06	*Pipistrellus pipistrellus*	9
22:06	*Pipistrellus pipistrellus*	20
22:06	*Pipistrellus pipistrellus*	9
22:07	*Pipistrellus pipistrellus*	12
22:07	*Pipistrellus pipistrellus*	19
22:07	*Pipistrellus pipistrellus*	5
22:07	*Nyctalus noctula*	4
22:07	*Eptesicus serotinus*	11
22:07	*Nyctalus noctula*	3
22:07	*Pipistrellus pipistrellus*	1
22:07	*Pipistrellus pipistrellus*	5
22:07	*Pipistrellus pygmaeus*	1
22:07	*Pipistrellus pipistrellus*	21
22:08	*Pipistrellus pipistrellus*	10
22:08	*Pipistrellus pipistrellus*	15
22:08	*Pipistrellus pipistrellus*	6
22:08	*Pipistrellus pipistrellus*	10
22:08	*Pipistrellus pipistrellus*	12
22:08	*Pipistrellus pipistrellus*	13
22:08	*Pipistrellus pipistrellus*	25
22:08	*Pipistrellus pipistrellus*	17
22:08	*Pipistrellus pipistrellus*	15
22:09	*Pipistrellus pipistrellus*	5
22:09	*Pipistrellus pipistrellus*	11
22:09	*Pipistrellus pipistrellus*	11
22:09	*Pipistrellus pipistrellus*	9
22:09	*Pipistrellus pipistrellus*	10
22:09	*Pipistrellus pipistrellus*	13
22:09	*Pipistrellus pipistrellus*	19
22:09	*Pipistrellus pipistrellus*	19
22:10	*Pipistrellus pipistrellus*	16

22:10	*Pipistrellus pipistrellus*	12
22:10	*Pipistrellus pipistrellus*	10
22:10	*Pipistrellus pipistrellus*	15
22:13	*Eptesicus serotinus*	17
22:13	*Nyctalus noctula*	7
22:16	*Pipistrellus pipistrellus*	12
22:17	*Pipistrellus pipistrellus*	11
22:17	*Pipistrellus pipistrellus*	6
22:18	*Pipistrellus pygmaeus*	10
22:18	*Pipistrellus pygmaeus*	3
22:18	*Pipistrellus pipistrellus*	12
22:18	*Pipistrellus pipistrellus*	26
22:19	*Pipistrellus pipistrellus*	4
22:19	*Pipistrellus pipistrellus*	27
22:19	*Pipistrellus pipistrellus*	13
22:19	*Pipistrellus pipistrellus*	14
22:19	*Pipistrellus pipistrellus*	6
22:19	*Pipistrellus pipistrellus*	34
22:19	*Pipistrellus pipistrellus*	32
22:20	*Pipistrellus pipistrellus*	30
22:20	*Pipistrellus pipistrellus*	5
22:20	*Pipistrellus pygmaeus*	11
22:20	*Pipistrellus pipistrellus*	11
22:20	*Pipistrellus pipistrellus*	11
22:20	*Pipistrellus pipistrellus*	11
22:21	*Pipistrellus pipistrellus*	6
22:21	*Pipistrellus pipistrellus*	7
22:21	*Pipistrellus pygmaeus*	1
22:21	*Pipistrellus pygmaeus*	11
22:21	*Pipistrellus pipistrellus*	13
22:21	*Pipistrellus pipistrellus*	26
22:21	*Pipistrellus pipistrellus*	35
22:21	*Pipistrellus pipistrellus*	29
22:22	*Pipistrellus pipistrellus*	25
22:22	*Pipistrellus pipistrellus*	15

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.*

10th June 2025 – AD at Location 1 (EMT2)

Time	Species
21:11:19	*Nyctalus noctula*
21:16:53	*Pipistrellus pipistrellus*
21:17:21	*Pipistrellus pipistrellus*
21:24:46	*Pipistrellus pygmaeus*
21:27:45	*Pipistrellus pygmaeus*
21:31:31	*Pipistrellus pygmaeus*
21:37:03	*Pipistrellus pygmaeus*
21:43:21	*Pipistrellus pygmaeus*
21:44:18	*Pipistrellus pipistrellus*
21:45:27	*Nyctalus noctule*
21:45:44	*Nyctalus noctule*
21:46:07	*Pipistrellus pygmaeus*
21:46:46	*Pipistrellus pygmaeus*
21:47:09	*Nyctalus noctule*
21:50:01	*Nyctalus noctule*
21:51:04	*Eptesicus serotinus*
21:51:13	*Pipistrellus pipistrellus*
21:58:46	*Pipistrellus pipistrellus*
21:59:48	*Pipistrellus pipistrellus*
22:01:06	*Pipistrellus pipistrellus*
22:02:16	*Pipistrellus pygmaeus*
22:02:35	*Pipistrellus pygmaeus*
22:02:52	*Pipistrellus pygmaeus*
22:05:05	*Pipistrellus pipistrellus*
22:05:19	*Pipistrellus pygmaeus*
22:05:29	*Nyctalus noctule*
22:05:38	*Pipistrellus pipistrellus*
22:05:38	*Nyctalus noctule*
22:06:00	*Pipistrellus pygmaeus*
22:12:06	*Pipistrellus pipistrellus*
22:15:32	*Pipistrellus pipistrellus*
22:16:30	*Pipistrellus pipistrellus*
22:17:36	*Nyctalus noctule*
22:17:47	*Nyctalus noctule*
22:18:04	*Nyctalus noctule*
22:26:37	*Nyctalus noctule*
22:33:16	*Nyctalus noctule*
22:37:49	*Nyctalus noctule*
22:37:56	*Nyctalus noctule*
22:38:24	*Nyctalus noctule*
22:38:40	*Nyctalus noctule*
22:48:26	*Nyctalus noctule*
22:48:35	*Nyctalus noctule*

10th June 2024 –JW at Location 2 (Batlogger M)

Time	Species	Number of calls [#]
21:45	*Pipistrellus pygmaeus*	2
21:39	*Pipistrellus pygmaeus*	8
21:43	*Pipistrellus pygmaeus*	15
21:45	*Nyctalus noctule*	7
21:45	*Nyctalus noctule*	6
21:45	*Pipistrellus pygmaeus*	11
21:46	*Pipistrellus pygmaeus*	4
21:47	*Plecotus spec.*	2
21:47	*Plecotus spec.*	4
21:49	*Pipistrellus pipistrellus*	4

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.*

10th June 2025 – HM at Location 3 (Batlogger M2)

Time	Species	Number of calls [#]
22:05	*Pipistrellus pygmaeus*	17
21:16	*Pipistrellus pygmaeus*	5
21:17	*Pipistrellus pygmaeus*	13
21:24	*Pipistrellus pygmaeus*	10

21:27	*Pipistrellus pygmaeus*	3
21:29	*Pipistrellus pygmaeus*	2
21:31	*Pipistrellus pygmaeus*	5
21:31	*Pipistrellus pygmaeus*	6
21:31	*Pipistrellus pygmaeus*	5
21:31	*Pipistrellus pygmaeus*	7
21:31	*Pipistrellus pygmaeus*	7
21:31	*Pipistrellus pygmaeus*	7
21:32	*Pipistrellus pygmaeus*	6
21:32	*Pipistrellus pygmaeus*	6
21:33	*Pipistrellus pygmaeus*	8
21:36	*Pipistrellus pygmaeus*	11
21:36	*Pipistrellus pygmaeus*	7
21:36	*Pipistrellus pygmaeus*	3
21:36	*Pipistrellus pygmaeus*	28
21:36	*Pipistrellus pygmaeus*	9
21:36	*Pipistrellus pygmaeus*	18
21:37	*Pipistrellus pygmaeus*	6
21:37	*Pipistrellus pygmaeus*	11
21:37	*Pipistrellus pygmaeus*	14
21:37	*Pipistrellus pygmaeus*	11
21:37	*Pipistrellus pygmaeus*	9
21:37	*Pipistrellus pygmaeus*	8
21:37	*Pipistrellus pygmaeus*	9
21:37	*Pipistrellus pygmaeus*	22
21:38	*Pipistrellus pygmaeus*	22
21:38	*Pipistrellus pygmaeus*	19
21:38	*Pipistrellus pygmaeus*	7
21:38	*Pipistrellus pygmaeus*	8
21:38	*Pipistrellus pygmaeus*	8
21:38	*Pipistrellus pygmaeus*	2
21:39	*Pipistrellus pygmaeus*	2
21:39	*Pipistrellus pygmaeus*	9
21:39	*Pipistrellus pygmaeus*	2
21:40	*Pipistrellus pygmaeus*	8
21:40	*Pipistrellus pygmaeus*	6
21:41	*Pipistrellus pygmaeus*	6
21:41	*Pipistrellus pygmaeus*	5
21:41	*Pipistrellus pygmaeus*	3
21:41	*Pipistrellus pygmaeus*	13
21:41	*Pipistrellus pygmaeus*	8
21:42	*Pipistrellus pygmaeus*	7
21:42	*Pipistrellus pygmaeus*	2
21:42	*Pipistrellus pygmaeus*	21
21:42	*Pipistrellus pygmaeus*	11

21:42	*Pipistrellus pygmaeus*	12
21:42	*Plecotus auritus*	1
21:42	*Pipistrellus pygmaeus*	8
21:43	*Pipistrellus pygmaeus*	11
21:43	*Pipistrellus pygmaeus*	5
21:43	*Pipistrellus pygmaeus*	21
21:43	*Pipistrellus pygmaeus*	3
21:43	*Pipistrellus pygmaeus*	11
21:43	*Pipistrellus pygmaeus*	10
21:43	*Pipistrellus pygmaeus*	16
21:44	*Pipistrellus pygmaeus*	10
21:44	*Pipistrellus pygmaeus*	12
21:44	*Pipistrellus pygmaeus*	1
21:44	*Pipistrellus pygmaeus*	19
21:46	*Pipistrellus pygmaeus*	20
21:46	*Pipistrellus pygmaeus*	9
21:46	*Nyctalus noctule*	3
21:46	*Pipistrellus pygmaeus*	9
21:47	*Pipistrellus pygmaeus*	13
21:47	*Pipistrellus pygmaeus*	3
21:48	*Pipistrellus pygmaeus*	7
21:48	*Pipistrellus pygmaeus*	8
21:48	*Pipistrellus pygmaeus*	13
21:49	*Pipistrellus pygmaeus*	4
21:49	*Pipistrellus pygmaeus*	7
21:49	*Pipistrellus pygmaeus*	13
21:49	*Pipistrellus pygmaeus*	1
21:49	*Pipistrellus pygmaeus*	9
21:50	*Pipistrellus pygmaeus*	5
21:50	*Pipistrellus pygmaeus*	3
21:50	*Pipistrellus pygmaeus*	11
21:50	*Pipistrellus pygmaeus*	3
21:50	*Pipistrellus pygmaeus*	2
21:51	*Pipistrellus pygmaeus*	21
21:51	*Pipistrellus pygmaeus*	6
21:51	*Pipistrellus pygmaeus*	10
21:51	*Pipistrellus pygmaeus*	11
21:51	*Pipistrellus pygmaeus*	9
21:51	*Pipistrellus pygmaeus*	14
21:51	*Pipistrellus pygmaeus*	13
21:51	*Pipistrellus pygmaeus*	3
21:51	*Pipistrellus pygmaeus*	3
21:51	*Pipistrellus pygmaeus*	7
21:51	*Pipistrellus pygmaeus*	14
21:52	*Pipistrellus pygmaeus*	6

21:52	*Pipistrellus pygmaeus*	12
21:52	*Pipistrellus pygmaeus*	27
21:52	*Pipistrellus pygmaeus*	1
21:52	*Pipistrellus pygmaeus*	9
21:52	*Pipistrellus pygmaeus*	4
21:53	*Pipistrellus pygmaeus*	13
21:53	*Nyctalus noctule*	1
21:53	*Pipistrellus pygmaeus*	5
21:53	*Pipistrellus pygmaeus*	4
21:53	*Pipistrellus pygmaeus*	3
21:53	*Pipistrellus pygmaeus*	13
21:53	*Pipistrellus pygmaeus*	5
21:54	*Pipistrellus pygmaeus*	13
21:54	*Nyctalus noctula*	1
21:54	*Pipistrellus pygmaeus*	5
21:54	*Pipistrellus pygmaeus*	10
21:54	*Pipistrellus pygmaeus*	12
21:55	*Pipistrellus pygmaeus*	7
21:55	*Pipistrellus pygmaeus*	30
21:55	*Pipistrellus pygmaeus*	9
21:55	*Pipistrellus pipistrellus*	12
21:55	*Pipistrellus pipistrellus*	3
21:55	*Pipistrellus pipistrellus*	12
21:55	*Pipistrellus pygmaeus*	5
21:56	*Pipistrellus pygmaeus*	7
21:56	*Pipistrellus pygmaeus*	6
21:56	*Pipistrellus pygmaeus*	4
21:56	*Pipistrellus pygmaeus*	24
21:56	*Pipistrellus pygmaeus*	9
21:56	*Pipistrellus pygmaeus*	24
21:57	*Pipistrellus pygmaeus*	8
21:57	*Nyctalus noctula*	1
21:57	*Pipistrellus pygmaeus*	3
21:57	*Pipistrellus pygmaeus*	5
21:57	*Pipistrellus pygmaeus*	28
21:57	*Pipistrellus pygmaeus*	12
21:58	*Pipistrellus pipistrellus*	21
21:58	*Pipistrellus pygmaeus*	16
21:58	*Pipistrellus pygmaeus*	9
21:58	*Pipistrellus pygmaeus*	9
21:58	*Pipistrellus pipistrellus*	1
21:59	*Pipistrellus pygmaeus*	13
21:59	*Pipistrellus pygmaeus*	13
21:59	*Pipistrellus pygmaeus*	16
21:59	*Pipistrellus pygmaeus*	2

21:59	*Pipistrellus pygmaeus*	22
22:00	*Pipistrellus pygmaeus*	12
22:00	*Pipistrellus pygmaeus*	6
22:00	*Pipistrellus pygmaeus*	19
22:00	*Pipistrellus pygmaeus*	5
22:00	*Pipistrellus pygmaeus*	12
22:00	*Pipistrellus pygmaeus*	5
22:01	*Pipistrellus pipistrellus*	8
22:01	*Pipistrellus pygmaeus*	16
22:01	*Pipistrellus pygmaeus*	8
22:01	*Nyctalus noctule*	1
22:01	*Pipistrellus pygmaeus*	14
22:01	*Pipistrellus pygmaeus*	4
22:01	*Pipistrellus pygmaeus*	17
22:01	*Pipistrellus pygmaeus*	3
22:01	*Pipistrellus pygmaeus*	5
22:01	*Pipistrellus pygmaeus*	3
22:01	*Pipistrellus pygmaeus*	5
22:01	*Pipistrellus pygmaeus*	4
22:01	*Pipistrellus pygmaeus*	3
22:02	*Pipistrellus pygmaeus*	17
22:02	*Pipistrellus pygmaeus*	16
22:02	*Pipistrellus pygmaeus*	20
22:02	*Pipistrellus pygmaeus*	9
22:02	*Pipistrellus pygmaeus*	21
22:03	*Pipistrellus pygmaeus*	9
22:03	*Pipistrellus pygmaeus*	11
22:04	*Pipistrellus pygmaeus*	4
22:04	*Pipistrellus pygmaeus*	13
22:04	*Pipistrellus pygmaeus*	12
22:04	*Pipistrellus pygmaeus*	2
22:04	*Pipistrellus pygmaeus*	14
22:04	*Pipistrellus pygmaeus*	6
22:05	*Pipistrellus pygmaeus*	36
22:05	*Pipistrellus pygmaeus*	3
22:05	*Pipistrellus pygmaeus*	2
22:05	*Pipistrellus pygmaeus*	9
22:05	*Pipistrellus pygmaeus*	11
22:05	*Pipistrellus pygmaeus*	13
22:05	*Nyctalus noctula*	1
22:05	*Pipistrellus pygmaeus*	13
22:05	*Pipistrellus pygmaeus*	29
22:05	*Pipistrellus pygmaeus*	6
22:05	*Pipistrellus pygmaeus*	28
22:06	*Pipistrellus pygmaeus*	6

22:06	*Pipistrellus pygmaeus*	7
22:06	*Pipistrellus pygmaeus*	14
22:06	*Pipistrellus pygmaeus*	5
22:06	*Pipistrellus pygmaeus*	14
22:06	*Pipistrellus pygmaeus*	6
22:06	*Pipistrellus pipistrellus*	1
22:06	*Pipistrellus pygmaeus*	2
22:06	*Pipistrellus pygmaeus*	1
22:06	*Pipistrellus pygmaeus*	1
22:06	*Pipistrellus pygmaeus*	30
22:06	*Pipistrellus pygmaeus*	8
22:06	*Pipistrellus pygmaeus*	8
22:07	*Pipistrellus pygmaeus*	11
22:07	*Pipistrellus pygmaeus*	7
22:07	*Pipistrellus pygmaeus*	6
22:07	*Pipistrellus pygmaeus*	6
22:07	*Pipistrellus pipistrellus*	1
22:07	*Pipistrellus pygmaeus*	5
22:07	*Pipistrellus pipistrellus*	9
22:07	*Pipistrellus pygmaeus*	8
22:08	*Pipistrellus pygmaeus*	8
22:08	*Pipistrellus pygmaeus*	15
22:09	*Pipistrellus pygmaeus*	18
22:09	*Pipistrellus pygmaeus*	8
22:09	*Pipistrellus pipistrellus*	14
22:09	*Pipistrellus pygmaeus*	18
22:09	*Pipistrellus pygmaeus*	10
22:09	*Pipistrellus pygmaeus*	33
22:09	*Pipistrellus pipistrellus*	8
22:09	*Pipistrellus pygmaeus*	19
22:10	*Pipistrellus pygmaeus*	14
22:10	*Pipistrellus pygmaeus*	7
22:10	*Pipistrellus pygmaeus*	16
22:10	*Pipistrellus pygmaeus*	11
22:10	*Pipistrellus pygmaeus*	19
22:10	*Pipistrellus pygmaeus*	21
22:10	*Pipistrellus pygmaeus*	2
22:10	*Pipistrellus pygmaeus*	30
22:10	*Pipistrellus pipistrellus*	8
22:10	*Pipistrellus pygmaeus*	11
22:10	*Pipistrellus pygmaeus*	20
22:10	*Pipistrellus pygmaeus*	11
22:10	*Pipistrellus pygmaeus*	8
22:10	*Pipistrellus pipistrellus*	1
22:10	*Pipistrellus pygmaeus*	1

22:10	*Pipistrellus pygmaeus*	11
22:11	*Pipistrellus pipistrellus*	9
22:11	*Pipistrellus pipistrellus*	16
22:11	*Pipistrellus pipistrellus*	16
22:11	*Pipistrellus pygmaeus*	11
22:11	*Pipistrellus pipistrellus*	18
22:11	*Pipistrellus pipistrellus*	11
22:11	*Pipistrellus pipistrellus*	14
22:11	*Pipistrellus pygmaeus*	21
22:11	*Pipistrellus pygmaeus*	1
22:11	*Pipistrellus pygmaeus*	15
22:11	*Pipistrellus pygmaeus*	10
22:12	*Pipistrellus pygmaeus*	12
22:12	*Pipistrellus pygmaeus*	15
22:12	*Pipistrellus pipistrellus*	14
22:12	*Pipistrellus pygmaeus*	16
22:12	*Pipistrellus pygmaeus*	9
22:12	*Pipistrellus pipistrellus*	16
22:12	*Pipistrellus pygmaeus*	16
22:12	*Pipistrellus pygmaeus*	12
22:12	*Pipistrellus pygmaeus*	18
22:12	*Pipistrellus pygmaeus*	44
22:13	*Pipistrellus pipistrellus*	6
22:13	*Pipistrellus pygmaeus*	10
22:14	*Pipistrellus pygmaeus*	8
22:15	*Pipistrellus pygmaeus*	4
22:15	*Pipistrellus pygmaeus*	7
22:15	*Pipistrellus pygmaeus*	8
22:16	*Pipistrellus pygmaeus*	14
22:17	*Pipistrellus pygmaeus*	7
22:17	*Pipistrellus pygmaeus*	2
22:17	*Pipistrellus pygmaeus*	6
22:17	*Pipistrellus pygmaeus*	11
22:17	*Pipistrellus pygmaeus*	6
22:18	*Pipistrellus pygmaeus*	2
22:18	*Pipistrellus pygmaeus*	26
22:18	*Pipistrellus pygmaeus*	6
22:19	*Pipistrellus pygmaeus*	22
22:20	*Pipistrellus pygmaeus*	4
22:20	*Pipistrellus pygmaeus*	7
22:20	*Pipistrellus pygmaeus*	7
22:20	*Pipistrellus pygmaeus*	8
22:22	*Pipistrellus pygmaeus*	19
22:22	*Pipistrellus pygmaeus*	6
22:24	*Pipistrellus pygmaeus*	14

22:24	*Pipistrellus pygmaeus*	1
22:24	*Pipistrellus pygmaeus*	3
22:24	*Pipistrellus pygmaeus*	1
22:25	*Pipistrellus pygmaeus*	6
22:25	*Pipistrellus pygmaeus*	10
22:25	*Pipistrellus pygmaeus*	5
22:26	*Nyctalus noctula*	4
22:27	*Pipistrellus pygmaeus*	1
22:38	*Nyctalus noctula*	2
22:43	*Pipistrellus pygmaeus*	1

2nd July 2025 – JM at Location 1 (Batlogger M2)

Time	Species	Number of calls [#]
21:32	*Pipistrellus pipistrellus*	9
21:27	*Pipistrellus pipistrellus*	9
21:38	*Pipistrellus pipistrellus*	5
21:43	*Pipistrellus pygmaeus*	7
21:46	*Pipistrellus pipistrellus*	10
21:48	*Pipistrellus pygmaeus*	9
21:49	*Eptesicus serotinus*	9
21:49	*Eptesicus serotinus*	1
21:53	*Eptesicus serotinus*	5
21:53	*Eptesicus serotinus*	7
21:53	*Eptesicus serotinus*	6
21:53	*Eptesicus serotinus*	13
21:53	*Eptesicus serotinus*	4
21:54	*Eptesicus serotinus*	4
21:54	*Eptesicus serotinus*	6
21:58	*Nyctalus noctula*	3
21:58	*Eptesicus serotinus*	29
21:59	*Pipistrellus pygmaeus*	25
22:00	*Nyctalus noctula*	9
22:00	*Nyctalus noctula*	3
22:01	*Eptesicus serotinus*	10
22:02	*Eptesicus serotinus*	15
22:03	*Pipistrellus pygmaeus*	7
22:03	*Pipistrellus pygmaeus*	1
22:04	*Pipistrellus pygmaeus*	13
22:05	*Pipistrellus pygmaeus*	4
22:06	*Pipistrellus pygmaeus*	2
22:06	*Pipistrellus pygmaeus*	3
22:08	*Myotis spec.*	9
22:08	*Eptesicus serotinus*	4
22:08	*Eptesicus serotinus*	6
22:08	*Eptesicus serotinus*	3
22:09	*Eptesicus serotinus*	10
22:09	*Eptesicus serotinus*	8
22:09	*Pipistrellus pipistrellus*	7
22:09	*Pipistrellus pipistrellus*	13
22:10	*Eptesicus serotinus*	13
22:10	*Eptesicus serotinus*	1
22:10	*Myotis spec.*	4
22:12	*Eptesicus serotinus*	6
22:12	*Myotis spec.*	16
22:14	*Eptesicus serotinus*	5
22:14	*Eptesicus serotinus*	10
22:14	*Eptesicus serotinus*	1
22:14	*Pipistrellus pygmaeus*	7
22:14	*Pipistrellus pygmaeus*	5
22:14	*Eptesicus serotinus*	12
22:15	*Eptesicus serotinus*	8
22:15	*Myotis spec.*	8
22:21	*Pipistrellus pygmaeus*	1
22:25	*Pipistrellus pygmaeus*	12
22:25	*Pipistrellus pygmaeus*	1
22:25	*Pipistrellus pipistrellus*	6
22:25	*Pipistrellus pipistrellus*	18
22:27	*Pipistrellus pipistrellus*	17
22:27	*Pipistrellus pipistrellus*	17
22:27	*Pipistrellus pygmaeus*	10
22:28	*Pipistrellus pygmaeus*	4
22:30	*Pipistrellus pygmaeus*	4
22:32	*Pipistrellus pipistrellus*	16
22:32	*Pipistrellus pygmaeus*	2
22:33	*Pipistrellus pygmaeus*	9
22:33	*Pipistrellus pygmaeus*	2
22:33	*Pipistrellus pygmaeus*	6
22:34	*Pipistrellus pygmaeus*	4
22:34	*Pipistrellus pygmaeus*	20
22:34	*Eptesicus serotinus*	7
22:34	*Pipistrellus pygmaeus*	1
22:34	*Eptesicus serotinus*	6
22:34	*Eptesicus serotinus*	13
22:35	*Pipistrellus pipistrellus*	4
22:35	*Pipistrellus pipistrellus*	10
22:35	*Pipistrellus pipistrellus*	3
22:35	*Pipistrellus pygmaeus*	0

22:35	*Pipistrellus pipistrellus*	10
22:36	*Pipistrellus pygmaeus*	11
22:36	*Pipistrellus pygmaeus*	19
22:36	*Pipistrellus pygmaeus*	1
22:36	*Pipistrellus pipistrellus*	12
22:36	*Pipistrellus pipistrellus*	10
22:36	*Pipistrellus pipistrellus*	13
22:37	*Pipistrellus pygmaeus*	3
22:37	*Pipistrellus pipistrellus*	17
22:37	*Pipistrellus pipistrellus*	23
22:37	*Pipistrellus pygmaeus*	4
22:37	*Pipistrellus pygmaeus*	4
22:37	*Pipistrellus pipistrellus*	16
22:38	*Pipistrellus pipistrellus*	1
22:39	*Pipistrellus pygmaeus*	0
22:39	*Pipistrellus pipistrellus*	13
22:40	*Pipistrellus pygmaeus*	3
22:40	*Pipistrellus pygmaeus*	9
22:40	*Pipistrellus pygmaeus*	10
22:41	*Pipistrellus pipistrellus*	12
22:41	*Pipistrellus pygmaeus*	0
22:41	*Pipistrellus pygmaeus*	1

22:42	*Pipistrellus pygmaeus*	2
22:43	*Pipistrellus pygmaeus*	7
22:44	*Pipistrellus pygmaeus*	3
22:44	*Pipistrellus pygmaeus*	5
22:45	*Pipistrellus pipistrellus*	6
22:45	*Pipistrellus pygmaeus*	15
22:45	*Pipistrellus pipistrellus*	18
22:45	*Pipistrellus pipistrellus*	3
22:46	*Pipistrellus pygmaeus*	2
22:46	*Pipistrellus pygmaeus*	2
22:47	*Pipistrellus pygmaeus*	2
22:47	*Pipistrellus pipistrellus*	2
22:48	*Pipistrellus pygmaeus*	5
22:48	*Pipistrellus pygmaeus*	5
22:49	*Pipistrellus pygmaeus*	5
22:49	*Pipistrellus pygmaeus*	5
22:49	*Pipistrellus pipistrellus*	7
22:49	*Pipistrellus pipistrellus*	6
22:49	*Pipistrellus pipistrellus*	5
22:50	*Pipistrellus pygmaeus*	3
22:51	*Pipistrellus pipistrellus*	20
22:52	*Pipistrellus pipistrellus*	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.*

2nd July 2025 – VP at Location 2 (Batlogger)

Time	Species	Number of calls [#]
21:50	*Eptesicus serotinus*	2
21:08	*Nyctalus noctula*	1
21:39	*Pipistrellus pipistrellus*	3
21:40	*Pipistrellus pipistrellus*	5
21:46	*Pipistrellus pygmaeus*	19
21:47	*Pipistrellus pipistrellus*	3
21:47	*Pipistrellus pygmaeus*	4
21:47	*Pipistrellus pygmaeus*	7
21:51	*Pipistrellus pygmaeus*	15
21:52	*Nyctalus noctula*	6
21:52	*Eptesicus serotinus*	5
21:53	*Eptesicus serotinus*	3
21:56	*Nyctalus noctula*	5
21:56	*Nyctalus noctula*	15
21:56	*Nyctalus noctula*	6

21:56	*Nyctalus noctula*	6
21:57	*Nyctalus noctula*	8
21:57	*Social*	1
21:57	*Eptesicus serotinus*	3
21:58	*Pipistrellus pipistrellus*	12
21:58	*Nyctalus noctula*	6
21:58	*Nyctalus noctula*	6
21:58	*Nyctalus noctula*	6
21:58	*Nyctalus noctula*	2
21:58	*Nyctalus noctula*	4
21:58	*Nyctalus noctula*	21
21:58	*Plecotus auritus*	8
21:58	*Nyctalus noctula*	15
21:59	*Nyctalus noctula*	2
21:59	*Nyctalus noctula*	1
21:59	*Eptesicus serotinus*	3
21:59	*Pipistrellus pygmaeus*	16

21:59	*Pipistrellus pygmaeus*	8
22:00	*Nyctalus noctula*	2
22:00	*Nyctalus noctula*	2
22:00	*Nyctalus noctula*	24
22:00	*Nyctalus noctula*	1
22:00	*Nyctalus noctula*	7
22:00	*Nyctalus noctula*	9
22:00	*Nyctalus noctula*	3
22:01	*Nyctalus noctula*	5
22:01	*Nyctalus noctula*	8
22:01	*Nyctalus noctula*	14
22:01	*Nyctalus noctula*	12
22:01	*Nyctalus noctula*	3
22:01	*Nyctalus noctula*	2
22:02	*Plecotus auritus*	5
22:02	*Eptesicus serotinus*	16
22:02	*Nyctalus noctula*	13
22:02	*Nyctalus noctula*	4
22:02	*Nyctalus noctula*	4
22:03	*Nyctalus noctula*	9
22:03	*Nyctalus noctula*	2
22:03	*Pipistrellus pygmaeus*	1
22:03	*Nyctalus noctula*	10
22:03	*Eptesicus serotinus*	5
22:03	*Nyctalus noctula*	4
22:04	*Nyctalus noctula*	7
22:04	*Nyctalus noctula*	5
22:04	*Eptesicus serotinus*	14
22:04	*Pipistrellus pygmaeus*	19
22:04	*Nyctalus noctula*	4
22:05	*Pipistrellus pygmaeus*	9
22:05	*Nyctalus noctula*	18
22:05	*Nyctalus noctula*	1
22:05	*Nyctalus noctula*	7
22:05	*Nyctalus noctula*	11
22:05	*Nyctalus noctula*	2
22:06	*Nyctalus noctula*	7
22:06	*Nyctalus noctula*	7
22:06	*Nyctalus noctula*	10
22:06	*Pipistrellus pygmaeus*	30
22:06	*Nyctalus noctula*	3
22:06	*Pipistrellus pygmaeus*	117
22:06	*Pipistrellus pygmaeus*	122
22:06	*Nyctalus noctula*	1
22:07	*Pipistrellus pygmaeus*	63

22:07	*Nyctalus noctula*	1
22:07	*Nyctalus noctula*	3
22:07	*Eptesicus serotinus*	12
22:07	*Nyctalus noctula*	2
22:07	*Nyctalus noctula*	4
22:07	*Nyctalus noctula*	4
22:07	*Nyctalus noctula*	3
22:07	*Nyctalus noctula*	7
22:08	*Nyctalus noctula*	6
22:08	*Nyctalus noctula*	3
22:08	*Nyctalus noctula*	9
22:09	*Nyctalus noctula*	3
22:09	*Nyctalus noctula*	6
22:09	*Nyctalus noctula*	21
22:09	*Pipistrellus pygmaeus*	7
22:09	*Nyctalus noctula*	1
22:09	*Nyctalus noctula*	11
22:09	*Nyctalus noctula*	12
22:10	*Nyctalus noctula*	6
22:10	*Nyctalus noctula*	5
22:10	*Nyctalus noctula*	13
22:10	*Nyctalus noctula*	22
22:10	*Nyctalus noctula*	5
22:10	*Nyctalus noctula*	3
22:10	*Nyctalus noctula*	7
22:10	*Eptesicus serotinus*	2
22:10	*Nyctalus noctula*	1
22:11	*Nyctalus noctula*	2
22:11	*Nyctalus noctula*	14
22:11	*Nyctalus noctula*	4
22:11	*Nyctalus noctula*	5
22:11	*Nyctalus noctula*	8
22:11	*Eptesicus serotinus*	2
22:11	*Nyctalus noctula*	1
22:11	*Nyctalus noctula*	17
22:12	*Nyctalus noctula*	17
22:12	*Nyctalus noctula*	10
22:12	*Nyctalus noctula*	5
22:12	*Nyctalus noctula*	2
22:12	*Nyctalus noctula*	6
22:12	*Nyctalus noctula*	10
22:12	*Eptesicus serotinus*	5
22:12	*Nyctalus noctula*	4
22:12	*Nyctalus noctula*	4
22:12	*Nyctalus noctula*	1

22:12	*Nyctalus noctula*	7
22:12	*Plecotus auritus*	2
22:12	*Nyctalus noctula*	8
22:12	*Nyctalus noctula*	6
22:12	*Plecotus auritus*	1
22:12	*Plecotus auritus*	9
22:12	*Plecotus auritus*	9
22:12	*Nyctalus noctula*	2
22:13	*Plecotus auritus*	32
22:13	*Eptesicus serotinus*	9
22:13	*Nyctalus noctula*	5
22:13	*Eptesicus serotinus*	1
22:13	*Nyctalus noctula*	3
22:13	*Eptesicus serotinus*	2
22:13	*Nyctalus noctula*	5
22:13	*Eptesicus serotinus*	5
22:13	*Nyctalus noctula*	5
22:14	*Nyctalus noctula*	3
22:14	*Nyctalus noctula*	2
22:14	*Nyctalus noctula*	2
22:14	*Nyctalus noctula*	2
22:14	*Nyctalus noctula*	1
22:15	*Nyctalus noctula*	2
22:17	*Pipistrellus pygmaeus*	2
22:17	*Pipistrellus pipistrellus*	15
22:17	*Nyctalus noctula*	10
22:17	*Nyctalus noctula*	3
22:17	*Nyctalus noctula*	2
22:18	*Nyctalus noctula*	10
22:18	*Eptesicus serotinus*	3
22:18	*Nyctalus noctula*	2
22:18	*Pipistrellus pygmaeus*	1
22:18	*Nyctalus noctula*	3
22:18	*Nyctalus noctula*	3
22:18	*Nyctalus noctula*	1
22:19	*Pipistrellus pygmaeus*	3
22:19	*Pipistrellus pygmaeus*	4
22:19	*Nyctalus noctula*	1
22:19	*Nyctalus noctula*	3
22:19	*Nyctalus noctula*	1
22:19	*Nyctalus noctula*	1
22:19	*Nyctalus noctula*	7
22:19	*Pipistrellus pipistrellus*	8
22:19	*Nyctalus noctula*	4
22:20	*Nyctalus noctula*	2

22:20	*Nyctalus noctula*	5
22:20	*Nyctalus noctula*	3
22:20	*Nyctalus noctula*	1
22:20	*Pipistrellus pygmaeus*	9
22:20	*Nyctalus noctula*	1
22:20	*Nyctalus noctula*	1
22:20	*Pipistrellus pygmaeus*	10
22:21	*Pipistrellus pygmaeus*	7
22:21	*Pipistrellus pygmaeus*	2
22:21	*Nyctalus noctula*	11
22:22	*Pipistrellus pygmaeus*	2
22:22	*Nyctalus noctula*	2
22:22	*Nyctalus noctula*	5
22:22	*Pipistrellus pygmaeus*	12
22:22	*Nyctalus noctula*	10
22:22	*Nyctalus noctula*	4
22:23	*Nyctalus noctula*	22
22:23	*Nyctalus noctula*	4
22:23	*Eptesicus serotinus*	4
22:23	*Nyctalus noctula*	4
22:24	*Nyctalus noctula*	3
22:25	*Nyctalus noctula*	1
22:25	*Pipistrellus pipistrellus*	3
22:25	*Pipistrellus pipistrellus*	5
22:27	*Nyctalus noctula*	2
22:27	*Nyctalus noctula*	2
22:28	*Pipistrellus pipistrellus*	27
22:28	*Nyctalus noctula*	10
22:31	*Pipistrellus pipistrellus*	2
22:31	*Nyctalus noctula*	3
22:32	*Nyctalus noctula*	2
22:32	*Pipistrellus pipistrellus*	20
22:32	*Pipistrellus pygmaeus*	13
22:32	*Pipistrellus pygmaeus*	148
22:33	*Pipistrellus pygmaeus*	129
22:33	*Pipistrellus pygmaeus*	129
22:33	*Pipistrellus pygmaeus*	50
22:33	*Pipistrellus pygmaeus*	120
22:34	*Pipistrellus pygmaeus*	48
22:34	*Eptesicus serotinus*	9
22:34	*Pipistrellus pipistrellus*	7
22:35	*Pipistrellus pygmaeus*	7
22:36	*Pipistrellus pygmaeus*	20
22:36	*Pipistrellus pipistrellus*	5
22:36	*Pipistrellus pipistrellus*	13

22:36	*Pipistrellus pygmaeus*	2
22:36	*Pipistrellus pygmaeus*	20
22:36	*Social*	2
22:36	*Pipistrellus pipistrellus*	1
22:36	*Pipistrellus pipistrellus*	16
22:37	*Pipistrellus pygmaeus*	7
22:37	*Pipistrellus pygmaeus*	6
22:37	*Pipistrellus pygmaeus*	8
22:37	*Pipistrellus pipistrellus*	46
22:37	*Pipistrellus pipistrellus*	44
22:38	*Pipistrellus pipistrellus*	12
22:39	*Pipistrellus pipistrellus*	35
22:40	*Pipistrellus pygmaeus*	13
22:40	*Pipistrellus pygmaeus*	11
22:40	*Pipistrellus pygmaeus*	16
22:41	*Pipistrellus pygmaeus*	16
22:41	*Pipistrellus pipistrellus*	1
22:41	*Pipistrellus pipistrellus*	2
22:41	*Pipistrellus pygmaeus*	3
22:42	*Pipistrellus pipistrellus*	20
22:42	*Pipistrellus pygmaeus*	6
22:42	*Pipistrellus pygmaeus*	3
22:42	*Pipistrellus pygmaeus*	5
22:43	*Pipistrellus pygmaeus*	41
22:43	*Pipistrellus pygmaeus*	4
22:44	*Pipistrellus pygmaeus*	8
22:44	*Pipistrellus pygmaeus*	27
22:44	*Pipistrellus pygmaeus*	5

22:44	*Pipistrellus pygmaeus*	34
22:45	*Pipistrellus pipistrellus*	4
22:45	*Pipistrellus pygmaeus*	7
22:45	*Pipistrellus pygmaeus*	30
22:46	*Pipistrellus pygmaeus*	12
22:46	*Pipistrellus pygmaeus*	4
22:46	*Pipistrellus pygmaeus*	28
22:47	*Pipistrellus pygmaeus*	19
22:47	*Pipistrellus pygmaeus*	14
22:47	*Pipistrellus pygmaeus*	2
22:47	*Pipistrellus pygmaeus*	11
22:47	*Pipistrellus pipistrellus*	1
22:48	*Pipistrellus pipistrellus*	9
22:48	*Pipistrellus pipistrellus*	6
22:48	*Pipistrellus pygmaeus*	19
22:49	*Pipistrellus pygmaeus*	1
22:49	*Pipistrellus pipistrellus*	10
22:49	*Pipistrellus pipistrellus*	4
22:50	*Pipistrellus pygmaeus*	25
22:50	*Pipistrellus pygmaeus*	3
22:51	*Pipistrellus pygmaeus*	18
22:51	*Pipistrellus pygmaeus*	10
22:52	*Pipistrellus pygmaeus*	1
22:52	*Pipistrellus pygmaeus*	5
22:53	*Pipistrellus pygmaeus*	1
22:53	*Pipistrellus pygmaeus*	3
22:53	*Pipistrellus pipistrellus*	5

2nd July 2025 – MPS at Location 3 (Batlogger M2)

Time	Species	Number of calls [#]
21:34	*Pipistrellus pipistrellus*	2
21:27	*Pipistrellus pipistrellus*	14
21:29	*Noise*	1
21:32	*Pipistrellus pygmaeus*	7
21:34	*Pipistrellus pygmaeus*	7
21:34	*Pipistrellus pygmaeus*	3
21:35	*Pipistrellus pygmaeus*	1
21:37	*Pipistrellus pygmaeus*	6
21:39	*Pipistrellus pygmaeus*	7
21:43	*Pipistrellus pygmaeus*	14
21:43	*Pipistrellus pygmaeus*	7

21:43	*Pipistrellus pygmaeus*	11
21:44	*Pipistrellus pygmaeus*	4
21:44	*Pipistrellus pygmaeus*	4
21:44	*Pipistrellus pygmaeus*	2
21:45	*Pipistrellus pygmaeus*	4
21:45	*Pipistrellus pygmaeus*	2
21:46	*Pipistrellus pygmaeus*	8
21:46	*Pipistrellus pygmaeus*	4
21:46	*Pipistrellus pygmaeus*	4
21:47	*Pipistrellus pygmaeus*	6
21:47	*Pipistrellus pygmaeus*	2
21:47	*Pipistrellus pygmaeus*	13
21:47	*Pipistrellus pygmaeus*	14
21:47	*Pipistrellus pygmaeus*	5

21:47	*Pipistrellus pygmaeus*	9
21:47	*Pipistrellus pygmaeus*	2
21:48	*Pipistrellus pygmaeus*	4
21:48	*Pipistrellus pygmaeus*	7
21:49	*Pipistrellus pygmaeus*	7
21:50	*Pipistrellus pygmaeus*	0
21:50	*Pipistrellus pygmaeus*	3
21:51	*Pipistrellus pygmaeus*	4
21:53	*Pipistrellus pygmaeus*	1
21:53	*Pipistrellus pygmaeus*	2
21:57	*Pipistrellus pygmaeus*	4
21:58	*Pipistrellus pygmaeus*	5
21:58	*Pipistrellus pygmaeus*	3
21:58	*Eptesicus serotinus*	9
21:58	*Eptesicus serotinus*	11
21:59	*Pipistrellus pygmaeus*	9
21:59	*Nyctalus noctula*	7
21:59	*Pipistrellus pygmaeus*	1
21:59	*Pipistrellus pygmaeus*	9
21:59	*Pipistrellus pygmaeus*	8
21:59	*Pipistrellus pygmaeus*	5
21:59	*Pipistrellus pygmaeus*	13
21:59	*Pipistrellus pygmaeus*	4
22:00	*Nyctalus noctula*	6
22:00	*Nyctalus noctula*	12
22:00	*Nyctalus noctula*	1
22:01	*Nyctalus noctula*	4
22:02	*Pipistrellus pygmaeus*	5
22:02	*Pipistrellus pygmaeus*	2
22:03	*Nyctalus noctula*	4
22:03	*Pipistrellus pygmaeus*	11
22:03	*Pipistrellus pygmaeus*	13
22:03	*Pipistrellus pygmaeus*	7
22:03	*Pipistrellus pygmaeus*	12
22:03	*Pipistrellus pygmaeus*	15
22:03	*Pipistrellus pygmaeus*	8
22:04	*Nyctalus noctula*	3
22:04	*Pipistrellus pygmaeus*	7
22:04	*Pipistrellus pygmaeus*	10
22:04	*Pipistrellus pygmaeus*	15
22:04	*Nyctalus noctula*	8
22:04	*Pipistrellus pygmaeus*	31
22:04	*Noise*	5
22:04	*Nyctalus noctula*	8
22:04	*Nyctalus noctula*	10

22:04	*Pipistrellus pygmaeus*	10
22:05	*Pipistrellus pygmaeus*	7
22:05	*Noise*	2
22:05	*Pipistrellus pygmaeus*	10
22:05	*Nyctalus noctula*	6
22:05	*Pipistrellus pygmaeus*	8
22:05	*Nyctalus noctula*	11
22:05	*Noise*	1
22:05	*Pipistrellus pygmaeus*	9
22:05	*Nyctalus noctula*	34
22:05	*Eptesicus serotinus*	10
22:06	*Pipistrellus pygmaeus*	17
22:06	*Nyctalus noctula*	17
22:06	*Pipistrellus pygmaeus*	19
22:06	*Pipistrellus pygmaeus*	6
22:06	*Pipistrellus pygmaeus*	3
22:06	*Pipistrellus pygmaeus*	12
22:06	*Nyctalus noctula*	9
22:06	*Nyctalus noctula*	4
22:06	*Nyctalus noctula*	6
22:06	*Pipistrellus pygmaeus*	15
22:06	*Noise*	0
22:07	*Nyctalus noctula*	1
22:07	*Pipistrellus pygmaeus*	4
22:07	*Pipistrellus pygmaeus*	4
22:07	*Nyctalus noctula*	4
22:07	*Pipistrellus pygmaeus*	5
22:07	*Pipistrellus pygmaeus*	6
22:07	*Eptesicus serotinus*	1
22:07	*Pipistrellus pygmaeus*	4
22:07	*Pipistrellus pygmaeus*	3
22:07	*Pipistrellus pygmaeus*	3
22:08	*Nyctalus noctula*	3
22:08	*Pipistrellus pygmaeus*	3
22:08	*Pipistrellus pygmaeus*	6
22:08	*Pipistrellus pygmaeus*	4
22:08	*Pipistrellus pygmaeus*	3
22:08	*Pipistrellus pygmaeus*	6
22:08	*Pipistrellus pygmaeus*	4
22:09	*Pipistrellus pygmaeus*	9
22:09	*Pipistrellus pygmaeus*	4
22:09	*Nyctalus noctula*	4
22:09	*Pipistrellus pygmaeus*	2
22:09	*Nyctalus noctula*	5
22:09	*Pipistrellus pygmaeus*	5

22:09	*Nyctalus noctula*	8
22:09	*Pipistrellus pygmaeus*	0
22:09	*Nyctalus noctula*	4
22:09	*Pipistrellus pygmaeus*	6
22:10	*Nyctalus noctula*	4
22:10	*Noise*	1
22:10	*Noise*	1
22:11	*Nyctalus noctula*	11
22:11	*Nyctalus noctula*	5
22:11	*Nyctalus noctula*	5
22:12	*Nyctalus noctula*	4
22:12	*Nyctalus noctula*	5
22:12	*Nyctalus noctula*	9
22:12	*Myotis spec.*	11
22:13	*Pipistrellus pygmaeus*	10
22:13	*Pipistrellus pygmaeus*	12
22:14	*Nyctalus noctula*	7
22:14	*Pipistrellus pygmaeus*	11
22:15	*Pipistrellus pygmaeus*	17
22:15	*Pipistrellus pygmaeus*	11
22:15	*Nyctalus noctula*	4
22:15	*Nyctalus noctula*	9
22:16	*Pipistrellus pygmaeus*	18
22:16	*Pipistrellus pygmaeus*	14
22:16	*Pipistrellus pygmaeus*	22
22:16	*Pipistrellus pygmaeus*	17
22:17	*Pipistrellus pygmaeus*	19
22:17	*Nyctalus noctula*	20
22:17	*Nyctalus noctula*	5
22:17	*Pipistrellus pygmaeus*	1
22:17	*Pipistrellus pygmaeus*	26
22:18	*Pipistrellus pygmaeus*	13
22:18	*Pipistrellus pygmaeus*	9
22:18	*Nyctalus noctula*	7
22:18	*Nyctalus noctula*	11
22:18	*Pipistrellus pygmaeus*	13
22:18	*Pipistrellus pygmaeus*	9
22:19	*Nyctalus noctula*	21
22:19	*Pipistrellus pygmaeus*	18
22:19	*Nyctalus noctula*	13
22:19	*Nyctalus noctula*	10
22:19	*Nyctalus noctula*	7
22:19	*Nyctalus noctula*	7
22:19	*Nyctalus noctula*	5
22:19	*Pipistrellus pygmaeus*	15

22:19	*Nyctalus noctula*	11
22:19	*Nyctalus noctula*	9
22:19	*Pipistrellus pygmaeus*	12
22:20	*Pipistrellus pygmaeus*	11
22:20	*Pipistrellus pygmaeus*	11
22:20	*Pipistrellus pygmaeus*	11
22:20	*Pipistrellus pygmaeus*	29
22:20	*Pipistrellus pygmaeus*	12
22:20	*Pipistrellus pygmaeus*	10
22:21	*Pipistrellus pygmaeus*	8
22:21	*Pipistrellus pygmaeus*	5
22:21	*Pipistrellus pygmaeus*	11
22:21	*Pipistrellus pygmaeus*	4
22:21	*Pipistrellus pygmaeus*	10
22:21	*Nyctalus noctula*	4
22:21	*Pipistrellus pygmaeus*	5
22:21	*Pipistrellus pygmaeus*	22
22:22	*Nyctalus noctula*	7
22:22	*Nyctalus noctula*	10
22:22	*Pipistrellus pygmaeus*	17
22:22	*Pipistrellus pygmaeus*	24
22:22	*Pipistrellus pygmaeus*	8
22:22	*Pipistrellus pygmaeus*	4
22:22	*Nyctalus noctula*	9
22:23	*Nyctalus noctula*	6
22:23	*Pipistrellus pygmaeus*	1
22:23	*Nyctalus noctula*	13
22:23	*Pipistrellus pygmaeus*	6
22:23	*Nyctalus noctula*	6
22:24	*Nyctalus noctula*	5
22:24	*Pipistrellus pygmaeus*	7
22:24	*Pipistrellus pygmaeus*	10
22:24	*Pipistrellus pygmaeus*	21
22:24	*Pipistrellus pygmaeus*	5
22:25	*Pipistrellus pygmaeus*	14
22:25	*Pipistrellus pygmaeus*	8
22:25	*Pipistrellus pipistrellus*	14
22:25	*Pipistrellus pygmaeus*	7
22:27	*Pipistrellus pygmaeus*	4
22:27	*Pipistrellus pygmaeus*	7
22:27	*Pipistrellus pipistrellus*	15
22:27	*Pipistrellus pipistrellus*	7
22:27	*Nyctalus noctula*	1
22:27	*Pipistrellus pygmaeus*	9
22:28	*Pipistrellus pygmaeus*	7

22:29	*Pipistrellus pygmaeus*	10
22:30	*Pipistrellus pygmaeus*	3
22:30	*Pipistrellus pygmaeus*	5
22:31	*Nyctalus noctula*	8
22:32	*Nyctalus noctula*	5
22:32	*Pipistrellus pipistrellus*	12
22:33	*Pipistrellus pygmaeus*	7
22:34	*Pipistrellus pygmaeus*	3
22:34	*Pipistrellus pygmaeus*	4
22:34	*Pipistrellus pygmaeus*	12
22:34	*Nyctalus noctula*	4
22:35	*Pipistrellus pipistrellus*	3
22:35	*Pipistrellus pipistrellus*	17
22:35	*Pipistrellus pipistrellus*	13
22:35	*Pipistrellus pipistrellus*	32
22:36	*Pipistrellus pygmaeus*	4
22:36	*Pipistrellus pipistrellus*	27
22:37	*Pipistrellus pipistrellus*	28
22:37	*Pipistrellus pipistrellus*	22
22:38	*Pipistrellus pygmaeus*	1
22:38	*Pipistrellus pygmaeus*	7
22:39	*Pipistrellus pygmaeus*	17
22:39	*Nyctalus noctula*	15
22:40	*Pipistrellus pygmaeus*	6
22:40	*Pipistrellus pygmaeus*	9
22:40	*Pipistrellus pygmaeus*	12

22:41	*Pipistrellus pipistrellus*	8
22:41	*Pipistrellus pygmaeus*	29
22:42	*Pipistrellus pygmaeus*	7
22:42	*Pipistrellus pygmaeus*	5
22:42	*Pipistrellus pygmaeus*	2
22:44	*Pipistrellus pygmaeus*	6
22:45	*Pipistrellus pipistrellus*	7
22:45	*Pipistrellus pygmaeus*	9
22:45	*Pipistrellus pipistrellus*	8
22:45	*Pipistrellus pygmaeus*	4
22:47	*Pipistrellus pygmaeus*	13
22:47	*Pipistrellus pipistrellus*	4
22:47	*Pipistrellus pipistrellus*	12
22:48	*Pipistrellus pipistrellus*	12
22:48	*Pipistrellus pipistrellus*	5
22:48	*Pipistrellus pygmaeus*	18
22:49	*Pipistrellus pygmaeus*	6
22:49	*Pipistrellus pipistrellus*	31
22:50	*Pipistrellus pipistrellus*	8
22:51	*Pipistrellus pipistrellus*	22
22:52	*Pipistrellus pipistrellus*	3
22:52	*Pipistrellus pygmaeus*	7
22:52	*Pipistrellus pipistrellus*	11
22:52	*Pipistrellus pygmaeus*	29
22:52	*Pipistrellus pygmaeus*	11
22:53	*Pipistrellus pygmaeus*	12

APPENDIX 5 – PLANNING DRAWINGS