Nocturnal Bat Survey Report

Henthorn Road, Clitheroe
Reference: 82-168-R4-2
Date: December 25

e3p

E3P

Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

+ 44 (0) 161 707 9612
https://e3p.co.uk

Registered in England
CRN: 08725262

QUALITY ASSURANCE

Report reference	**82-168-R4-2**

REV REF:	DESCRIPTION	AUTHOR	CHECKED	AUTHORISED	DATE
R4-1	First issue	DS	HM	CK	21/08/25
R4-2	First issue	DS	HM	CK	12/12/25

This report has been prepared for the sole benefit, use, and information of the client. The liability of Environmental Engineering Partnership Limited T/A E3P with respect to the information contained in the report will not extend to any third party. This report has been prepared by the qualified persons as listed below.

WRITTEN BY	QUALIFICATIONS	POSITION
Daniel Syddall	BSc (Hons)	Graduate Ecologist

REVIEWED BY	QUALIFICATIONS	POSITION
Huw Morgan	BSc (Hons), MIEnvSc, CEnv, MCIEEM	Principal Ecologist

AUTHORISED BY	QUALIFICATIONS	POSITION
Celia Kenyon	BSc (Hons), MSc, MIEnvSc, CEnv, MCIEEM	Associate Director

EXECUTIVE SUMMARY

Site Address	Land north and south of Henthorn Road, Clitheroe, Ribble Valley, BB7 2SN
Coordinates	E 372958, N 440590
Site Area	Approximately 7.21 ha
Current Site Use	The site comprised two modified grassland fields separated by Henthorn Road. Hedgerows and scattered trees were present surrounding the fields. A small area of lowland mixed deciduous woodland was present in the northwest of the site. An unnamed watercourse ran through the southern grassland field and Pendleton Brook formed the site's southern boundary.
Proposed Development	Development proposals comprise the construction of residential units with associated gardens, access roads, and hard and soft landscaping.
Results	High levels of activity from common pipistrelle (*Pipistrellus pipistrellus*) were recorded across all vantage points. Levels of soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*) activity varied across the site. A single Daubenton's bat (*Myotis daubentonii*) was detected during the third survey, on the 24th of July. No bats were observed emerging from the trees within the site.
Conclusions and Recommendations	No bat roosts were identified; therefore, no further assessment, mitigation or Natural England Bat licensing is required for the works to proceed. In the unlikely event that a bat is found during the works, all work is to cease immediately. Following this, a suitably qualified ecologist should be contacted, and further advice sought from Natural England.

Table of Contents

1. INTRODUCTION

1.1. BACKGROUND

E3P has been instructed by Gladman Developments Limited to undertake Nocturnal Bat Surveys at Henthorn Road, Clitheroe, hereafter referred to as "the site". The current report outlines surveys undertaken on Trees 5, 14 and 19 (T5, T14, T19).

The report was produced by Daniel Syddall, BSc (Hons), Graduate Ecologist at E3P, who has experience in completing nocturnal bat surveys at many sites across the UK.

1.2. PROPOSED DEVELOPMENT

Development proposals comprise an outline application for the construction of residential units with associated gardens, access roads, and hard and soft landscaping.

1.3. SITE DESCRIPTION

The site comprises two parcels of land located to the north and south of Henthorn Road. The site is located at the southwestern edge of Clitheroe. Pendleton Brook defines the site's southern boundary. The River Ribble is located 110 m northwest of the site at its closest point. An active railway line is located 180 m east of the site, and a sewage treatment works is located 120 m south of the site. Please refer to **Figure 1** for the approximate site location.

Figure 1 Approximate Site Location

1.4. PREVIOUS SURVEYS

E3P conducted a Preliminary Ecological Appraisal (PEA) in December 2025 (Report Reference: 82-168-R1). No buildings or structures were located on site, and all onsite trees were assessed for their suitability to support roosting bats, following guidance set out in Collins (2023).

A number of individual trees were present throughout the site, the majority of which were associated with the southeastern boundary of the site. One individual tree (T7) was assessed as having PRF-I bat roosting potential, while seven trees (T5, T9, T12, T14, T16, T19 and T20) were assessed as having PRF-M bat roosting potential. Table 1 details the findings of the Preliminary Roost Assessment (PRA) undertaken during the PEA.

Following the PRA, three Nocturnal Bat Surveys were recommended on T5, T9, T12, T14, T16, T19 and T20, if being removed or impacted by the development, to confirm the presence or absence of roosting bats and to inform relevant mitigation. T9, T12, T16, and T20 are being retained in line with development proposals and therefore were discounted from further surveys.

Table 1 Tree Details

BAT ROOST POTENTIAL	BUILDING REFERENCES
PRF-I	T7
PRF-M	T5, T9, T12, T14, T16, T19, T20

1.5. OBJECTIVES

The objectives of the Nocturnal Bat Surveys were to identify:

- Any existing roosts within the site
- Potential impacts of the proposed development on bats.
- The need for mitigation.

The survey findings are detailed in this report, along with any recommendations.

2. METHODOLOGY

2.1. NOCTURNAL SURVEYS

Three Bat Emergence surveys were undertaken on T5, T14 and T19, following the guidance set out in Collins (2023). These surveys were conducted using Canon XA60 4K Camcorders, appropriate handheld bat detectors suitable for commercial use, Echo Meter Touch 2's, Magenta 4's and a Batbox Duet. The surveys were undertaken by competent and suitably trained bat surveyors, Daniel Syddall, Carlin Jones BSc (Hons), Project Manager at E3P (Licence Reference: 2023-11074-CL17-BAT), Mia Forte BSc (Hons), Seasonal Ecologist at E3P, David Broome, Lucy Cooke and Jonathan Wood. Please see **Table 2** and **Table 3** for details of the surveys.

Table 2 Emergence Survey Details

SURVEY	DATE	SUNSET	SURVEY TIMINGS	WEATHER CONDITIONS
DUSK SURVEY 1 (T5, T14, T19)	12/06/2025	21:41	21:26-23:11	Overcast, warm, 17°C, 95% cloud cover, light breeze and very light and occasional rain
DUSK SURVEY 2 (T5, T14, T19)	03/07/2025	21:43	21:28-23:13	Overcast, 15°C, 95% cloud cover, light breeze and heavy rain for ~ 10 minutes (22:24 – 22:32)
DUSK SURVEY 3 (T5, T14, T19)	24/07/2025	21:20	21:05-22:50	Overcast, 16°C, 95% cloud cover, still

Table 3 Survey Vantage Point Details

VANTAGE POINT	DATE	DETECTOR	SURVEYOR
V1 (T5)	12/06/2025	Echo Meter Touch 2	Carlin Jones
	03/07/2025	Echo Meter Touch 2	Camera
	24/07/2025	Echo Meter Touch 2	Camera
V2 (T5)	12/06/2025	Echo Meter Touch 2	Camera
	03/07/2025	Magenta 4	Lucy Cooke
	24/07/2025	Magenta 4	Jonathan Wood
V5 (T14)	12/06/2025	Echo Meter Touch 2	Daniel Syddall
	03/07/2025	Echo Meter Touch 2	Daniel Syddall
	24/07/2025	Echo Meter Touch 2	Daniel Syddall
V6 (T14)	12/06/2025	Echo Meter Touch 2	Camera
	03/07/2025	Echo Meter Touch 2	Camera
	24/07/2025	Echo Meter Touch 2	Camera
V3 (T19)	12/06/2025	Batbox Duet	David Broome
	03/07/2025	Magenta 4	Jonathan Wood
	24/07/2025	Echo Meter Touch 2	Mia Forte
V4 (T19)	12/06/2025	Echo Meter Touch 2	Camera
	03/07/2025	Echo Meter Touch 2	Camera
	24/07/2025	Echo Meter Touch 2	Camera

Please refer to **Figure 2 and Figure 3** for the approximate location of the surveyors.

Figure 2 **Approximate Vantage Point Locations**

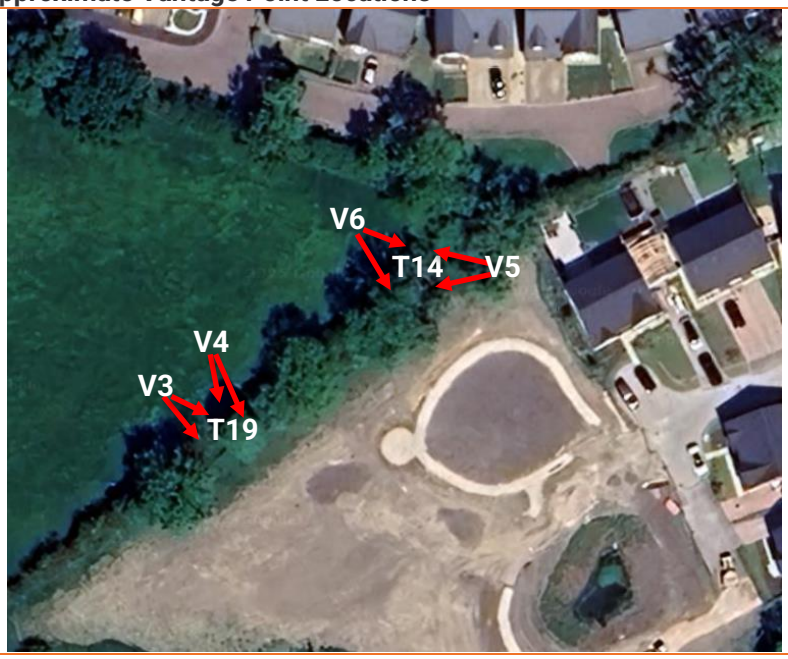

Figure 3 **Approximate Vantage Point Locations**

2.2. DATA ANALYSIS

Footage from the Canon XA 60 4K camcorders was reviewed by Mia Forte BSc (Hons), seasonal ecologist at E3P, on the 29th of July for any bats interacting with any roosting features. Recordings from the Echo Meter Touch 2 were reviewed during the survey to establish species.

2.3. SURVEY LIMITATIONS

Nocturnal Bat Surveys were completed following guidance set out in Collins (2023) and are carried out by competent and trained surveyors. No surveyors were visually constrained during the survey, other than that of low light conditions, which were aided by the camcorders, and all potential roosting features were observed throughout the survey time period. The trees were surveyed during suitable weather conditions and at an appropriate time of year.

During the second survey on the 03rd of July, the camcorder footage from V4 was corrupted, only playing up until the 48-minute mark, and the camcorder set up at V3 did not record any footage. This is not thought to be a major constraint as a surveyor was located at V3, observing the roost feature for the duration of the survey, and no emergences or re-entries were detected during any of the other surveys.

During the first dusk survey on the 12th of June, there was several periods of light rain, for a few minutes at a time, from approximately 21:40 to 22:00. During the second dusk survey on the 03rd of July, there was a period of heavy rain from around 22:24 to 22:32. These periods of rainfall are not thought to be a major constraint as they were very brief and did not appear to impact the level of bat activity observed.

Each tree had two vantage points but only one surveyor, this is not though to be a major constraint as camcorders were set up at all vantage points, covering all roost features, and footage was reviewed for any bats interacting with the roosting features.

3. SURVEY RESULTS

The following subsections provide a summary of bat activity noted on the Dusk Emergence Surveys. Please refer to **Appendix I** for the full survey forms, and **Appendix II** for the stills of the camcorders during the darkest part of the survey.

TREE	SURVEY 1 (12/06/25)	SURVEY 2 (03/07/25)	SURVEY 3 (24/07/25)
T5	During the first dusk emergence survey on T5, there was a moderate amount of common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*) activity observed. Common pipistrelles were observed commuting and foraging, soprano pipistrelles were observed foraging, and noctules were detected by the Echo Meter Touch 2 (EMT2) at V1. The first bat detected was a noctule, at 21:54, 13 minutes after sunset, at V1, this bat was heard but not seen. The first soprano pipistrelle detected was at 21:59, 18 minutes after sunset, at V1, this bat was also heard but not seen. The first common pipistrelle was detected at 22:07, 26 minutes after sunset, at V1, and was also heard but not seen. The timing of these activities indicates that these species may be roosting near the site. **No bats were observed emerging from T5**	During the second dusk emergence survey on T5, there was a high amount of common pipistrelle activity recorded. The first common pipistrelle was observed commuting at 22:12, 29 minutes after sunset at V2. The timing of this activity indicates that this species may be roosting near the site. **No bats were observed emerging from T5.**	During the third dusk emergence survey on T5, there was a moderate amount of common pipistrelle and soprano pipistrelle activity recorded. The first common pipistrelle was detected at 22:04, 44 minutes after sunset, at V2, this bat was heard but not seen. The first soprano pipistrelle was detected at 22:18, 58 minutes after sunset, at V2, this bat was also heard but not seen. **No bats were observed emerging from T5.**

TREE	SURVEY 1 (12/06/25)	SURVEY 2 (03/07/25)	SURVEY 3 (24/07/25)
T14	During the first dusk emergence survey on T14, there was a high amount of common pipistrelle activity and a low amount of soprano pipistrelle and noctule activity recorded. Common pipistrelles were observed commuting and foraging, whilst soprano pipistrelles and noctules were detected by the Echo Meter Touch 2 (EMT2) at V5. The first bat recorded was a common pipistrelle commuting from north to south at 21:39, two minutes before sunset, at V5. The first soprano pipistrelle was detected at 22:37, 56 minutes after sunset, at V5, and was heard but not seen. The first noctule was detected at 22:21, 40 minutes after sunset, at V5, and was also heard but not seen. The timing of these activities indicates that both common pipistrelles and noctules may be roosting near the site. **No bats were observed emerging from T14.**	During the second dusk emergence survey on T14, there was a high amount of common pipistrelle and soprano pipistrelle activity and a low amount of noctule activity recorded. Common pipistrelles were observed commuting and foraging, soprano pipistrelles were observed foraging, and noctules were detected by the Echo Meter Touch 2 (EMT2) at V5. The first bat recorded was a common pipistrelle, which was seen commuting from south to north past T14 at 22:01, 18 minutes after sunset, at V5. The first soprano pipistrelle was detected at 22:05, 22 minutes after sunset, at V5, this bat was heard but not seen. The first noctule was detected at 22:53, 70 minutes after sunset, at V5, and was also heard but not seen. The timing of these activities indicates that both common pipistrelles and soprano pipistrelles may be roosting near the site. **No bats were observed emerging from T14.**	During the third dusk emergence survey on T14, there was a high amount of common pipistrelle and soprano pipistrelle activity and a low amount of noctule and Daubenton's bat (*Myotis daubentonii*) activity recorded. Common pipistrelles and soprano pipistrelles were observed commuting and foraging, noctules and Daubenton's bat were detected by the Echo Meter Touch 2 (EMT2) at V5. The first bat recorded was a soprano pipistrelle, which was seen foraging to the south of T14 at 21:44, 24 minutes after sunset, at V5. The first common pipistrelle was seen foraging to the east of T14 at 21:46, 26 minutes after sunset, at V5. The first noctule was detected at 21:51, 31 minutes after sunset, at V5, and was heard but not seen. The only Daubenton's bat recorded was detected at 22:40, 80 minutes after sunset, at V5, and was also heard but not seen. The timing of these activities indicates that common pipistrelles, soprano pipistrelles and noctules may be roosting near the site. **No bats were observed emerging from T14.**

TREE	SURVEY 1 (12/06/25)	SURVEY 2 (03/07/25)	SURVEY 3 (24/07/25)
T19	During the first dusk emergence survey on T19, there was a high amount of common pipistrelle activity, and a low amount of soprano pipistrelle activity. Common pipistrelles were observed commuting and foraging, and soprano pipistrelles were observed foraging. The first bat recorded was a commuting common pipistrelle at 21:40, one minute before sunset, at V3. The first soprano pipistrelle was recorded foraging at 23:08, 87 minutes after sunset, at V3. The timing of these activities indicates that common pipistrelles may be roosting near the site. **No bats were observed emerging from T19.**	During the second dusk emergence survey on T19, there was a high amount of common pipistrelle activity recorded. The first common pipistrelle was observed commuting at 22:03, 20 minutes after sunset, at V3. The timing of this activity indicates that this species may be roosting near the site. **No bats were observed emerging from T19.**	During the third dusk emergence survey on T19, there was a high amount of common pipistrelle activity and a low amount of noctule activity recorded. The first common pipistrelle was observed commuting northwest to northeast from the treeline at 21:49, 29 minutes after sunset, at V3. The only noctule recorded was detected at 22:44, 84 minutes after sunset, at V3, and was heard but not seen. The timing of this activity indicates that common pipistrelles may be roosting near the site. **No bats were observed emerging from T19.**

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. CONCLUSIONS

During the dusk emergence surveys, high levels of activity from common pipistrelle were recorded across all vantage points. Levels of soprano pipistrelle and noctule activity varied across the site, and the only recorded Daubenton's bat was detected at V5 on the 24th of July. The earliest activity comprised a common pipistrelle observed at 21:39 on the 12th of June 2025, commuting from north to south, 2 minutes before sunset at V5. The earliest soprano pipistrelle recorded was foraging to the south of T14, 24 minutes after sunset, at V5. The earliest noctule recorded was heard but not seen, 31 minutes after sunset, at V5. The timing of the activity recorded indicates that common pipistrelles, soprano pipistrelles and noctules may be roosting in a nearby location, but no emergences from T5, T14 or T19 were observed during the surveys.

Three survey visits were undertaken between June and July 2025, each spaced three weeks apart. It is therefore considered that a sufficient amount of data has been gathered. Furthermore, the surveys were carried out during the bat maternity season. No evidence of maternity roosts was identified; as such, it is apparent that no maternity roosts are present within the site.

As no bats were observed emerging from the surveyed trees, it can be concluded that no bats are roosting within the trees. Therefore, no further assessment, mitigation or Natural England Bat licensing is required for works to proceed.

4.2. RECOMMENDATIONS

In the unlikely event that a bat is found during works, all works is to cease immediately. Following this, a suitably qualified ecologist should be contacted, and further advice sought from Natural England.

5. REFERENCES

- Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition. The Bat Conservation Trust, London.
- E3P (2025) Preliminary Ecological Appraisal – Henthorn Road, Clitheroe (Report Reference: 82-168-R1).

END OF REPORT

APPENDIX I
SURVEY FORMS

SURVEY FORMS

12TH JUNE 2025

Date: 12/06/2025
Sunset: 21:41
Start time: 21:26
End time: 23:11

Weather conditions: Overcast, 17°C, 95% cloud cover, very light and occasional rain

T5

Surveyor: Carlin Jones (V1)

TIME	SPECIES	ACTIVITY
21:54	Noctule	Heard Not Seen (HNS)
21:59	Soprano Pipistrelle	HNS
22:02 - 22:57	Soprano Pipistrelle	Continuous Foraging around the tree
22:07	Common Pipistrelle	HNS
22:11 – 22:57	Common Pipistrelle	Continuous Foraging under the tree canopy
22:14	Common Pipistrelle	Commuting – chasing each other
22:50	Noctule	HNS
22:54	Noctule	HNS
22:58	Soprano Pipistrelle	HNS
22:58	Noctule	HNS
23:01	Noctule	HNS
23:02	Noctule	HNS
23:03	Common Pipistrelle	HNS
23:04	Noctule	HNS
23:08	Noctule	HNS
23:08	Common Pipistrelle	HNS
23:10	Soprano Pipistrelle	HNS

T14

Surveyor: Daniel Syddall (V5)

TIME	SPECIES	ACTIVITY
21:39	Common Pipistrelle	Commuting north to south
21:43	Common Pipistrelle	HNS
21:45	Common Pipistrelle	Continuous Foraging around trees – at least two individuals
21:50	Common Pipistrelle	Continuous Foraging around the tree, very close to the roost feature
21:58	Common Pipistrelle	Continuous Foraging north of the tree – five/six individuals
22:03	Common Pipistrelle	HNS
22:04	Common Pipistrelle	Flying close to tree
22:08	Common Pipistrelle	Foraging near the roost feature
22:15	Common Pipistrelle	HNS – Continuous Foraging
22:18	Common Pipistrelle	Passed very close to the roost feature - east to west
22:21	Noctule	HNS
22:23	Noctule	HNS

T14

Surveyor: Daniel Syddall (V5)

TIME	SPECIES	ACTIVITY
22:24	Common Pipistrelle	Continuous Foraging at the top of trees
22:25	Common Pipistrelle	Continuous Foraging around trees
22:30	Common Pipistrelle	HNS
22:32	Common Pipistrelle	HNS
22:35	Noctule	HNS
22:37	Soprano Pipistrelle	HNS
22:38	Noctule	HNS
22:40	Soprano Pipistrelle	HNS – Continuous Foraging
22:42	Common Pipistrelle	Continuous Foraging at the top of trees – several individuals
22:43	Soprano Pipistrelle	HNS
22:44	Common Pipistrelle	Continuous Foraging around the roost feature – two individuals
22:47	Common Pipistrelle	Flying close to the roost feature
22:49	Common Pipistrelle	Continuous Foraging around the top of trees
22:49	Noctule	HNS
22:51	Common Pipistrelle	HNS – Continuous Foraging
22:52	Common Pipistrelle	Continuous Foraging along the treeline
22:53	Common Pipistrelle	Continuous Foraging around the top of trees
22:55	Common Pipistrelle	Continuous Foraging in the treeline
22:58	Common Pipistrelle	Continuous Foraging
23:00	Common Pipistrelle	HNS
23:03	Common Pipistrelle	HNS
23:05	Soprano Pipistrelle	HNS
23:05	Noctule	HNS
23:09	Common Pipistrelle	HNS
23:10	Common Pipistrelle	HNS
23:10	Common Pipistrelle	HNS – Continuous Foraging

T19

Surveyor: David Broome (V3)

TIME	SPECIES	ACTIVITY
21:40	Common Pipistrelle	Commuting –three individuals
21:42	Common Pipistrelle	Foraging
21:45 – 21:50	Common Pipistrelle	Continuous Foraging – nine individuals
21:52 – 22:12	Common Pipistrelle	Continuous Foraging – up to five individuals
22:14 – 22:19	Common Pipistrelle	Continuous Foraging – up to three individuals
22:20 – 22:21	Common Pipistrelle	Continuous Foraging
22:22 – 22:31	Common Pipistrelle	Continuous Foraging – up to four individuals
22:32 – 22:35	Common Pipistrelle	Continuous Foraging – up to three individuals
22:36 – 22:41	Common Pipistrelle	Continuous Foraging – two individuals

T19
Surveyor: David Broome (V3)

TIME	SPECIES	ACTIVITY
22:42 – 22:50	Common Pipistrelle	Continuous Foraging – up to four individuals
22:52 – 22:54	Common Pipistrelle	Continuous Foraging
22:55	Common Pipistrelle	Foraging
22:56 – 23:01	Common Pipistrelle	Continuous Foraging
23:03	Common Pipistrelle	Foraging
23:08	Soprano Pipistrelle	Foraging
23:11	Common Pipistrelle	Foraging

03RD JULY 2025

Date: 03/07/2025
Sunset: 21:43
Start time: 21:28
End time: 23:13

Weather conditions: Overcast, 15°C, 95% cloud cover, light breeze, heavy rain for ~ 10 minutes (22:24 – 22:32)

T5
Surveyor: Lucy Cooke (V1)

TIME	SPECIES	ACTIVITY
22:12	Common Pipistrelle	Commuting
22:14	Common Pipistrelle	HNS
22:16	Common Pipistrelle	Commuting
22:17	Common Pipistrelle	Continuous Foraging
22:19	Common Pipistrelle	Commuting
22:21	Common Pipistrelle	Foraging
22:33	Common Pipistrelle	HNS
22:37	Common Pipistrelle	HNS
22:38	Common Pipistrelle	Commuting
22:39	Common Pipistrelle	Foraging
22:45	Common Pipistrelle	Commuting
22:51	Common Pipistrelle	HNS
22:54	Common Pipistrelle	HNS
23:03	Common Pipistrelle	HNS
23:06	Common Pipistrelle	HNS
23:08	Common Pipistrelle	HNS

T14
Surveyor: Daniel Syddall (V5)

TIME	SPECIES	ACTIVITY
22:01	Common Pipistrelle	Commuting south to north past the tree into the field
22:05	Soprano Pipistrelle	HNS
22:06	Common Pipistrelle	HNS
22:07	Common Pipistrelle	HNS/Foraging around the tree
22:08	Common Pipistrelle	HNS/Foraging along the treeline
22:09	Common Pipistrelle	Foraging around the tree
22:10	Common Pipistrelle	Foraging under the tree canopy

T14
Surveyor: Daniel Syddall (V5)

TIME	SPECIES	ACTIVITY
22:11	Common Pipistrelle	Foraging around tree – multiple bats
22:13	Common Pipistrelle	HNS
22:14	Common Pipistrelle	Foraging along treeline
22:15	Common Pipistrelle	Continuous Foraging around tree – multiple bats
22:16	Common Pipistrelle	Foraging above trees
22:17	Soprano Pipistrelle	HNS/Foraging around the tree
22:18	Soprano Pipistrelle	HNS
22:19	Common Pipistrelle	Foraging under the tree canopy
22:19	Soprano Pipistrelle	HNS
22:20	Common Pipistrelle	Foraging along treeline and above the trees
22:21	Common Pipistrelle	Foraging around the tree
22:32	Soprano Pipistrelle/Common Pipistrelle	Foraging around the tree
22:35	Soprano Pipistrelle	HNS
22:36	Common Pipistrelle	HNS
22:37	Soprano Pipistrelle	HNS
22:38	Soprano Pipistrelle	Foraging around the tree
22:39	Common Pipistrelle	Commuting west to east
22:40	Common Pipistrelle	HNS/Foraging along treeline
22:41	Common Pipistrelle	Commuting east to west along treeline
22:41	Soprano Pipistrelle/Common Pipistrelle	HNS
22:43	Common Pipistrelle	Foraging around the tree
22:44	Common Pipistrelle	Foraging around the tree
22:45	Common Pipistrelle	Foraging above the tree
22:48	Soprano Pipistrelle	HNS
22:50	Common Pipistrelle	HNS
22:51	Common Pipistrelle	Foraging around the tree
22:52	Common Pipistrelle	Foraging in top of trees
22:53	Noctule/Common Pipistrelle	HNS
22:56	Soprano Pipistrelle/Common Pipistrelle	HNS
22:58	Common Pipistrelle	Foraging in top of trees
23:00	Common Pipistrelle	HNS
23:03	Common Pipistrelle	HNS
23:05	Noctule	HNS
23:07	Common Pipistrelle	HNS
23:08	Common Pipistrelle	HNS
23:09	Common Pipistrelle	HNS
23:10	Common Pipistrelle	HNS
23:11	Common Pipistrelle	HNS
23:12	Common Pipistrelle	HNS

T19

Surveyor: Jonathan Wood (V3)

TIME	SPECIES	ACTIVITY
22:03	Common Pipistrelle	Commuting
22:04	Common Pipistrelle	HNS
22:06	Common Pipistrelle	HNS
22:06	Common Pipistrelle	HNS
22:07	Common Pipistrelle	Commuting
22:08	Common Pipistrelle	Foraging
22:10	Common Pipistrelle	Foraging
22:10	Common Pipistrelle	Commuting
22:11	Common Pipistrelle	Foraging
22:14 – 22:20	Common Pipistrelle	Continuous Foraging
22:20 – 22:22	Common Pipistrelle	Continuous Foraging
22:27	Common Pipistrelle	HNS
22:29	Common Pipistrelle	Commuting
22:31	Common Pipistrelle	Commuting
22:32	Common Pipistrelle	Foraging
22:33	Common Pipistrelle	Continuous Foraging
22:36	Common Pipistrelle	Commuting
22:39	Common Pipistrelle	Continuous Foraging
22:43	Common Pipistrelle	Commuting
22:44	Common Pipistrelle	Commuting
22:46	Common Pipistrelle	Commuting
22:48	Common Pipistrelle	Commuting
22:51	Common Pipistrelle	Commuting
22:52	Common Pipistrelle	HNS
22:55	Common Pipistrelle	Commuting
23:00	Common Pipistrelle	HNS
23:03	Common Pipistrelle	HNS
23:12	Common Pipistrelle	HNS

24TH JULY 2025

Date: 24/07/2025
Sunset: 21:20
Start time: 21:05
End time: 22:50

Weather conditions: Overcast, 16°C, 95% cloud cover, still

T5

Surveyor: Jonathan Wood (V1)

TIME	SPECIES	ACTIVITY
22:04	Common Pipistrelle	HNS
22:12	Common Pipistrelle	Commuting
22:12	Common Pipistrelle	HNS
22:18	Soprano Pipistrelle	HNS
22:25	Soprano Pipistrelle	HNS
22:26	Common Pipistrelle	HNS
22:26	Soprano Pipistrelle	HNS
22:27	Soprano Pipistrelle	HNS

T5

Surveyor: Jonathan Wood (V1)

TIME	SPECIES	ACTIVITY
22:28	Soprano Pipistrelle	HNS
22:28	Soprano Pipistrelle	HNS
22:29	Soprano Pipistrelle	Continuous Foraging
22:32	Common Pipistrelle	HNS
22:39	Common Pipistrelle	HNS

T14

Surveyor: Daniel Syddall (V5)

TIME	SPECIES	ACTIVITY
21:44	Soprano Pipistrelle	Foraging to the south of T14
21:46	Common Pipistrelle	Foraging to the east of T14
21:47	Soprano Pipistrelle	Commuting east to west along treeline
21:48	Common Pipistrelle	HNS
21:50	Soprano Pipistrelle	Foraging around T14
21:51	Noctule	HNS
21:51	Common Pipistrelle	Foraging around T14
21:54	Common Pipistrelle	Commuting east to west along treeline (2 individuals)
21:54	Soprano Pipistrelle	HNS
21:54	Common Pipistrelle	Foraging along treeline
21:55	Soprano Pipistrelle	Commuting east to west along treeline
21:57	Common Pipistrelle	HNS
21:59	Common Pipistrelle	HNS
22:01	Soprano Pipistrelle	HNS
22:03	Common Pipistrelle	Commuting east to west along treeline
22:04	Common Pipistrelle	Foraging around T14
22:08	Common Pipistrelle	HNS
22:09	Common Pipistrelle	Foraging around T14
22:09	Soprano Pipistrelle	HNS
22:10	Soprano Pipistrelle	Commuting east to west along treeline
22:12	Common Pipistrelle	Foraging around the top of T14 (2 individuals)
22:13	Soprano Pipistrelle	HNS
22:13	Common Pipistrelle	HNS
22:14	Soprano Pipistrelle	HNS
22:14	Soprano Pipistrelle	Commuting east to west along treeline
22:15	Soprano Pipistrelle	HNS
22:16	Soprano Pipistrelle	HNS
22:16	Common Pipistrelle	HNS
22:17	Soprano Pipistrelle	HNS
22:18	Soprano Pipistrelle	Foraging around T14
22:18	Common Pipistrelle	HNS
22:19	Soprano Pipistrelle	HNS
22:20	Common Pipistrelle	Commuting south to north over T14
22:20	Common Pipistrelle	Foraging around T14

T14

Surveyor: Daniel Syddall (V5)

TIME	SPECIES	ACTIVITY
22:21	Common Pipistrelle	Commuting south to north past T14
22:21	Common Pipistrelle	Continuous Foraging around T14
22:23	Common Pipistrelle	Commuting south to north past T14
22:23	Common Pipistrelle	Commuting north to south past T14
22:33	Common Pipistrelle	Foraging above T14
22:33	Common Pipistrelle	HNS
22:34	Noctule	HNS
22:40	Daubenton's bat	HNS
22:40	Soprano Pipistrelle	HNS
22:44	Noctule	HNS
22:44	Soprano Pipistrelle	HNS
22:45	Noctule	HNS
22:46	Soprano Pipistrelle	HNS

T19

Surveyor: Mia Forte (V3)

TIME	SPECIES	ACTIVITY
21:49	Common Pipistrelle	Commuting northwest to northeast from treeline
21:50	Common Pipistrelle	Commuting northeast to southwest along treeline
21:50	Common Pipistrelle	HNS
21:52	Common Pipistrelle	Commuting southwest to northeast
21:54	Common Pipistrelle	Foraging
21:54	Common Pipistrelle	Commuting southwest to northeast along treeline
21:55	Common Pipistrelle	Foraging around trees to northwest
21:57	Common Pipistrelle	HNS
21:59	Common Pipistrelle	Commuting southwest to northeast
22:03	Common Pipistrelle	Commuting southwest to northeast along treeline
22:04	Common Pipistrelle	Social Call, Commuting southwest to northeast along treeline
22:06	Common Pipistrelle	HNS
22:09	Common Pipistrelle	Foraging in the field
22:13	Common Pipistrelle	Commuting south to north
22:18	Common Pipistrelle	Foraging along treeline
22:19	Common Pipistrelle	Foraging along treeline
22:20	Common Pipistrelle	Commuting southwest to northeast
22:20	Common Pipistrelle	Continuous Foraging along treeline
22:21-22:22	Common Pipistrelle	HNS – Continuous Foraging
22:22	Common Pipistrelle	Commuting southwest to northeast
22:24	Common Pipistrelle	Continuously foraging in the field to the southwest
22:27	Common Pipistrelle	Commuting southwest to northeast
22:29	Common Pipistrelle	HNS
22:39	Common Pipistrelle	HNS
22:44	Noctule	HNS

APPENDIX II
VANTAGE POINT LOCATIONS

12TH JUNE 2025

Vantage Point 1

Vantage Point 2

Vantage Point 3

Vantage Point 4

Vantage Point 5

Vantage Point 6

03RD JULY 2025

Vantage Point 1

Vantage Point 2

Vantage Point 5

Vantage Point 6

24TH JULY 2025

Vantage Point 1

Vantage Point 2

Vantage Point 3

Vantage Point 4

Vantage Point 5

Vantage Point 6