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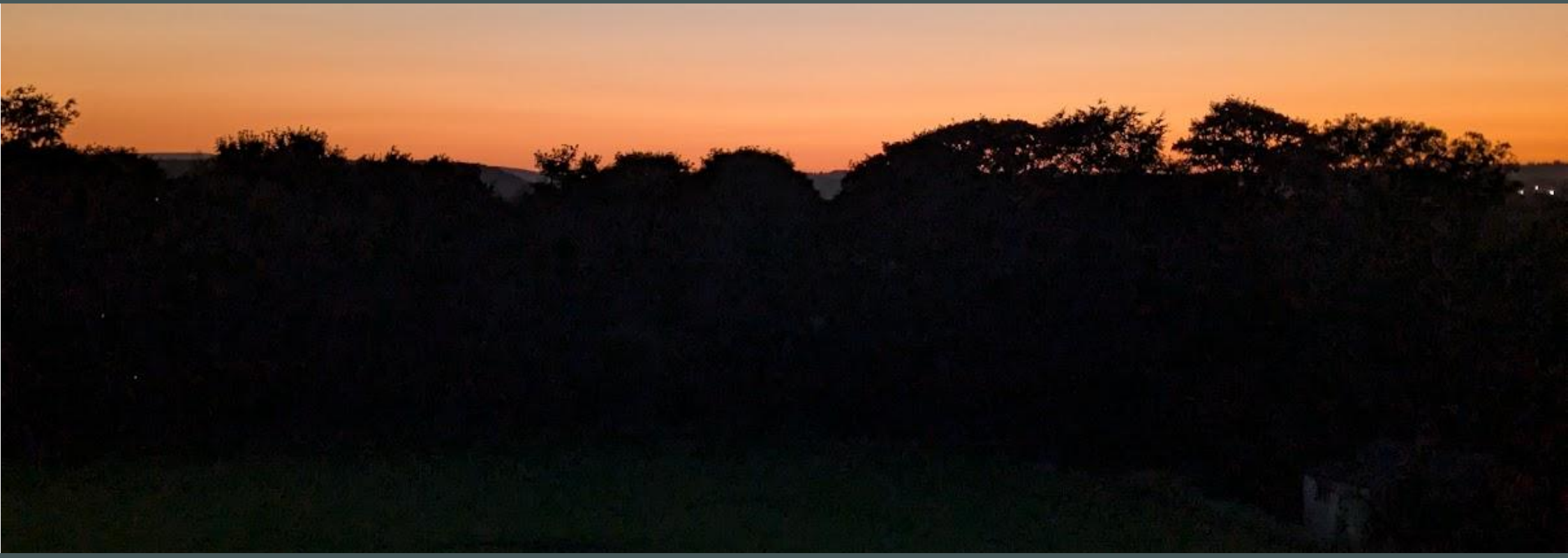
Gynn Lane Honley



Bat Activity Survey

Report Ref: ER-7732-05

16/04/2026

Yorkshire Country Properties

Report reference	**ER-7732-05**
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Technical Review	Christopher Shaw BSc (Hons), CEcol, MCIEEM Associate Director
QA	Joseph Egan BSc (Hons) Graduate Ecologist
Project Manager	Courtney Halstead BSc (Hons) Ecologist
Date	16/04/2026
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.
Records	As good practise Brooks Ecological may submit records of bats found during this survey effort to the Local Ecological Record Centre, at/or after the time of planning application.

Amendment	Date	Author	QA	Summary of changes
ER-7732-05A	23/04/2026	CH	CS	Updates regarding report lifespan

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Summary

Bat activity survey, comprising seasonal walked transects and monthly remote monitoring over the 2024 and 2025 active seasons, found low levels of use by common bats species at Gynn Ln, Honley.

The Site's limited value to this group suggests proposals would not significantly impact local bat populations.

Recommendations have been made to minimise impact further, and to enhance the Site's value for bats.

Contents

Introduction

1. Brooks Ecological was commissioned by Yorkshire Country Properties to carry out detailed Bat Activity Survey and Monthly Remote Monitoring at the proposed development Site at Gynn Lane Honley
2. These surveys are required to provide evidence of the baseline use of the Site by the local bat population, which will enable mitigation and enhancement strategies to be devised to support a planning application.
3. The objective of the survey was to collect up to date information on the Site's use by local bat populations, so that an accurate assessment of the potential impacts of development could be made. A transect and remote monitoring survey were determined to be the most appropriate survey methods to collect the following data (Collins, 2023 (The Bat Conservation Trust)):
    - The assemblage of bat species using the site;
    - The relative frequency with which the site is used by different species;
    - The nature of activity for different bat species, for example foraging, commuting and roosting.
4. The scope of the survey has been devised based on an assessment of the habitats present, the results of previous activity surveys and in accordance with current best practice guidelines (Bat Conservation Trust, 2023).
5. An analysis of the Site Context and Desk Study regarding records of Local bat populations has been carried out and is detailed within Brooks Ecological PEA Report ER-7732-01.

Figure 1 Site location plan

Methods

6. Surveys were directed by Christopher Shaw BSc (Hons) MCIEEM. Chris has over 15 years' experience of carrying out bat surveys in a professional capacity and is registered to use the Class Survey Licence WML CL18 (Bat Survey Level 2) and Bat Mitigation Class Licence WML CL21 Annex B.

7. Activity Survey and Remote Monitoring were informed by findings of Brooks Ecological Preliminary Ecological Appraisal, detailed in our separate report ER-7732-01. This appraisal determined the woodland and watercourse to the north of the Site, and to a lesser extent the adjacent rail line are likely to be of most value to local bat populations and therefore transect survey and monitoring were focused along this area of the site, as well as taking in all other areas that could reasonably be used by bats.

Survey Conditions

8. Walked transects were undertaken during optimal survey conditions, summarised below.

Table 1 Survey Conditions (recorded from Met Office at time of survey).

Survey	Date	Sunset	Ambient Conditions	Invert. Activity
Summer	11/07/2024	21:27	14˚C, 80% humidity, dry, B0 wind.	Low
Autumn	18/09/2024	19:15	14 - 13˚C, 80% humidity, dry, B0 wind.	Low
Spring	24/04/2025	20:25	10 - 9˚C, 70% humidity, dry, B1 wind.	Low

Equipment

9. Brooks Ecological makes use of the most appropriate combination of the following equipment during transects surveys. Where applicable the equipment has been last calibrated in February of 2024.

    - Heterodyne detector: Magenta Bat 4
    - Full spectrum detector: Titley Scientific Anabat Scout or EM Touch 2 Pro
    - Night vision aids: FLIR A65 FOV 45, Nightfox, Thermal Eye T2Pro and/or FlirOne for iOS
    - Remote detector: Wildlife Acoustic Song Meter SM4 Bat FS

Transects

10. Transects began around sunset and continued up to two hours after when all bats were thought to have emerged and thus were actively foraging and commuting.

11. Surveyors positioned themselves initially to take in observations along potential flight lines or roost sources and remained in these locations for at least 30mins after sunset, before two surveyors continued along the pre-determined transect route.

Remote Monitoring

12. To supplement data collected during the walked transect, a static monitoring device was deployed in a strategic location on-site prior to the start of the walked transect, and left to record for a minimum period of 5 nights (sunset-30 min to sunrise +30 min).

13. Data collected during the period of remote monitoring has been run through Kaleidoscope Pro software (v.5.6.8), which can identify bat calls down to species level. Wildlife Acoustics has published a classifier performance table to show the accuracy of identification of different species using auto-id. To ensure accurate data analysis any species with a lower positive predictor value than 80% are checked by hand. A sample 10% of all remaining registrations for each species, unidentified species and noise registrations are checked by hand to test the accuracy of any given dataset and if many errors are found the data set is more rigorously checked.

14. Bat calls can be defined for the purpose of analysis in different ways. In this report we have considered 'registrations' – the presence of any given species within each sound file.

15. A single registration can account for up to 15 seconds of continuous bat call. Large batches of registrations can be interpreted in several different ways, i.e. a single bat foraging continuously for only an hour can result in many hundreds of registrations being logged; similarly, many hundreds of bats commuting quickly past the detector can result in the same number of registrations. Interpretation of such data is aided by the results of walked transects and the judgement and experience of the ecologist making the assessment.

16. The frequency of calls recorded can, to some extent, suggest whether activity on site is low, moderate or high, by comparing data collected with that of similar sites that have been surveyed.

Limitations

17. Static monitoring can only reliably provide information on what species of bat are regularly making use of a Site. More detailed information on bat activity, such as frequency of bats, nature of activity (foraging, commuting, flight path), etc. can only be gleaned through walked transects.

18. Proportionate effort is made to split up *Myotis* calls down to species level. This is usually done by analysing calls on Analook software and looking at parameters such as inter-pulse interval, call duration, slope and maximum / minimum / peak call frequency. However, this can often be difficult when registrations are short in duration, faint or distorted by cluttered environments. Where splitting to species level is not possible, practical or useful, results are grouped by genus as *Myotis sp*.

19. Automated identification software can sometimes mis-assign species which have similar or overlapping call types. This can be the case with Myotis calls, but also with the cross-over between Leisler's bats and noctules, and between Nathusius' and common pipistrelles. Where the rarer bat is assigned automatically, we will usually check these registrations manually and re-assign if the rarer species call pattern is not conclusive and/or appears to be due to variation in the call pattern of the common species.

Results – Walkover Transects

Summer 2024

20. The transect commenced at 21:32, and followed the same route as the Spring survey, but in reverse, seen in the figure opposite.

Table 2 Summary of bat Activity recorded during Summer walked survey.

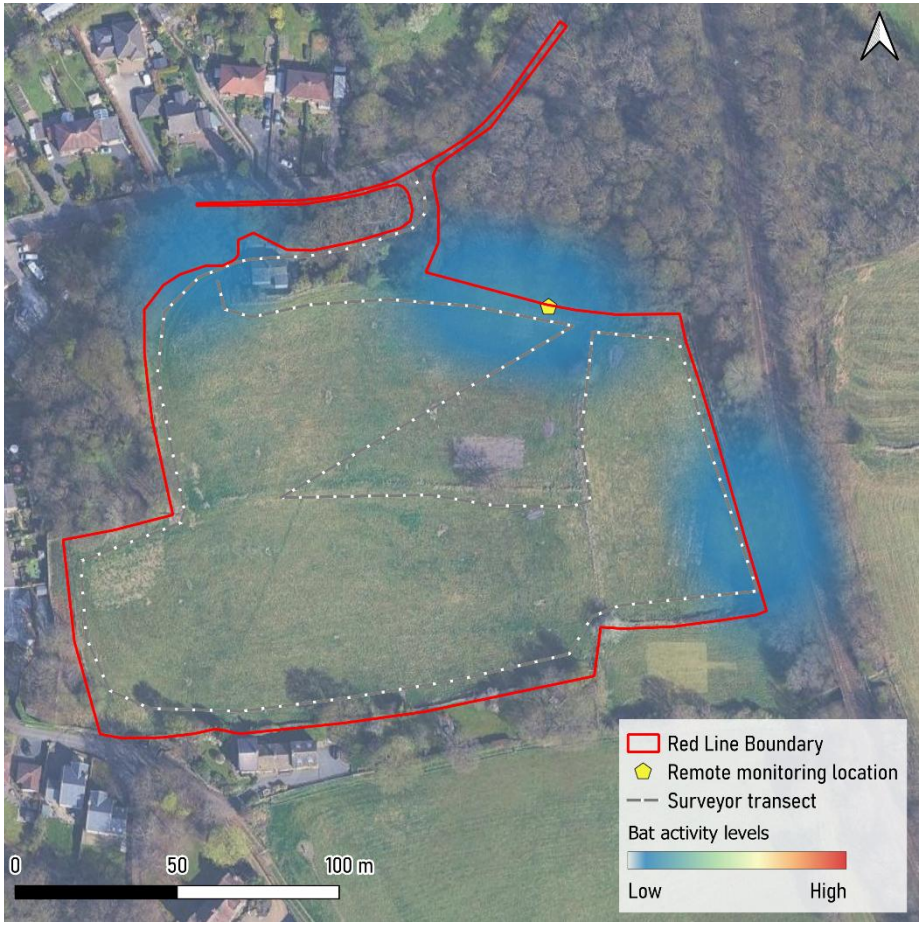
Time	Species	Location	Behaviour/notes
22:00	Common pipistrelle	Northwestern corner	Foraging
22:15	Common pipistrelle	Northern boundary treeline	Commuting west to east
22:30	Common pipistrelle	Eastern boundary vegetation line	Foraging

21. The transect was concluded when patterns of activity around the Site had been discerned.

22. Overall activity during this transect is considered to be low with only a handful of registrations from a single common species. This suggests that bats are using the Site only for ad-hoc foraging, or commuting through Site to other foraging habitat.

23. No notable commuting lines for local bat populations have been discerned from this survey.

Figure 2 Summary of bat activity observed during walked transect



Autumn 2024

24. The transect commenced at 19:15 and followed the same route as described above and can be seen in the figure opposite.

Table 3 Summary of bat Activity recorded during Autumn walked survey.

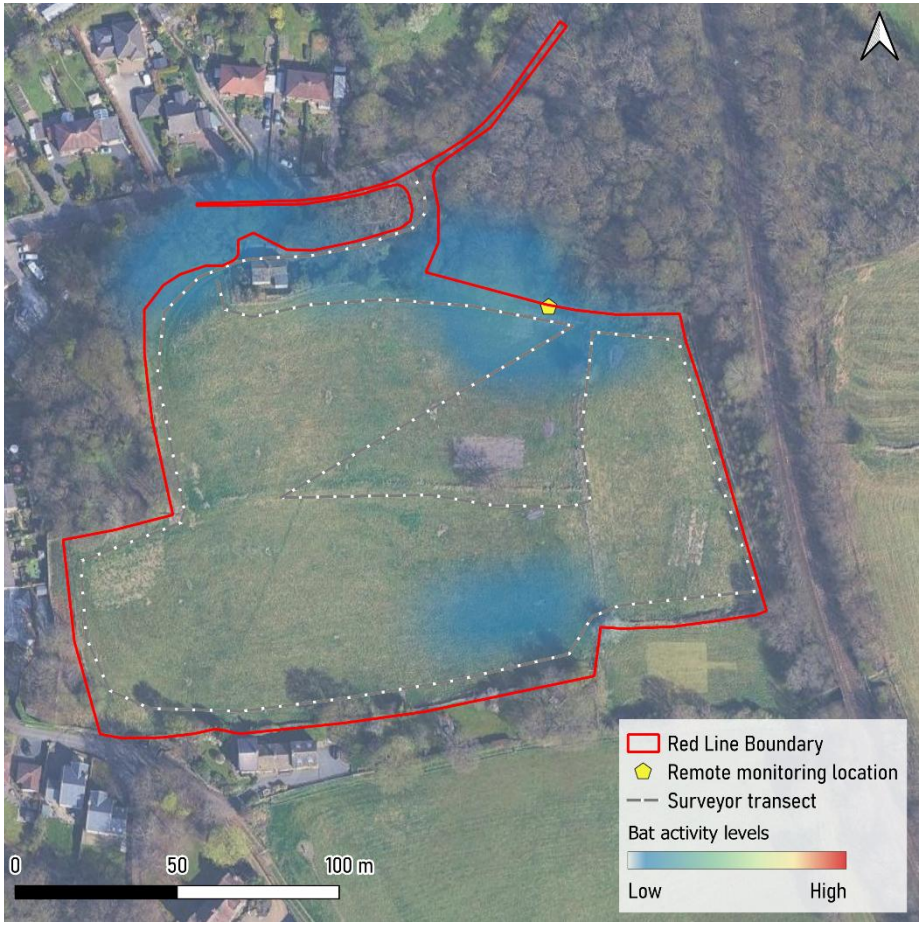
Time	Species	Location	Behaviour/notes
19:45 – 19:54	Common pipistrelle	Northern boundary	Commuting north to east
19:59	Common pipistrelle	Southern boundary	Commuting east to west
20:16	*Myotis sp.*[1]	Northern boundary	Foraging
20:34 – 20:49	Common pipistrelle	Northwestern corner	Foraging
20:45-20:49	*Myotis sp.**	Northwestern cornder	Heard not seen
20:52	Common pipistrelle	Northern boundary	Foraging

25. The transect was concluded when patterns of activity around the Site had been discerned.

26. Overall activity during this transect is considered to be low with only a handful of registrations from common bat species, of only one bat at any one time. This suggests that bats are using the Site only for ad-hoc foraging or commuting through Site to other foraging habitat.

27. No commuting lines of significant value to local bat populations have been discerned from this survey.

Figure 3 Summary of bat activity observed during walked transect



[1]See paragraph 19

Spring 2025

28. The transect commenced 20:21 and followed the route as shown in the figure opposite. The route began at the northwest corner of the house, south of the house, followed the tree line east, around the field. And ended back at the northwestern corner.

Table 4 Summary of bat Activity recorded during Spring walked survey.

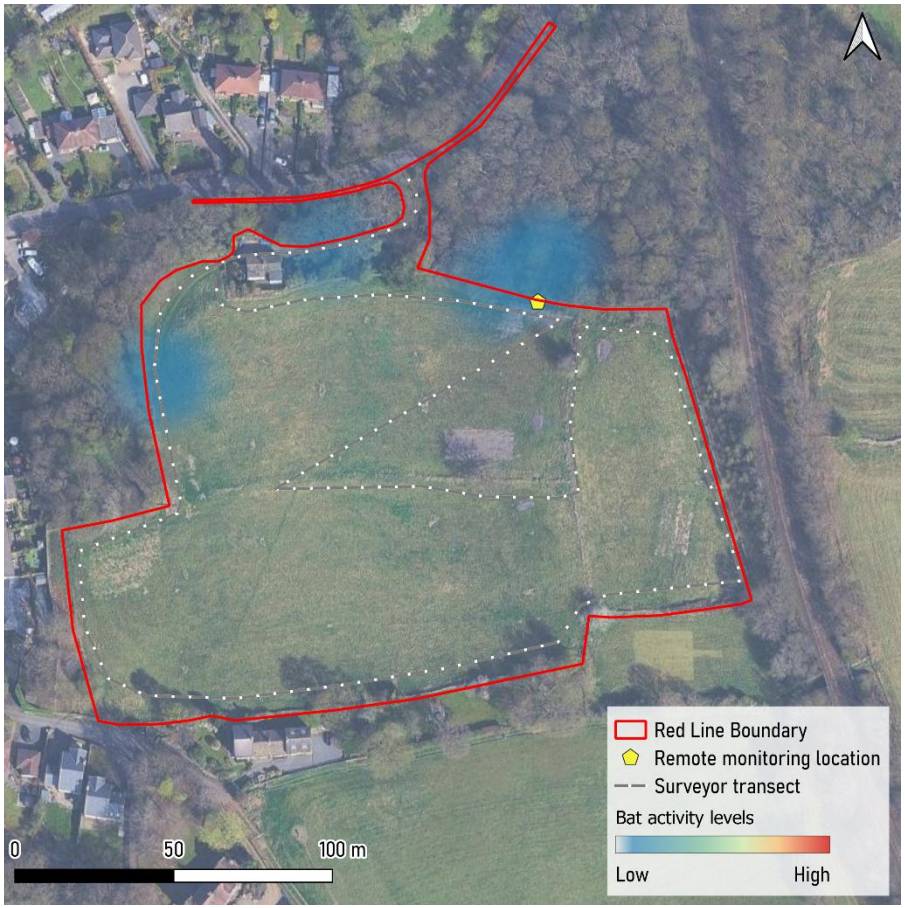
Time	Species	Location	Behaviour/notes
20:55-20:57	x2 Common pipistrelle	Northern boundary	Foraging above trees.
21:00	*Myotis sp.** [2]	Northern boundary	Heard not seen
21:10	Common pipistrelle	Northwest boundary	Heard not seen
21:47	Common pipistrelle	Northern boundary	Foraging

29. The transect was concluded when patterns of activity around the Site had been discerned.

30. Overall activity during this transect is considered to be low with only a handful of registrations from common bat species, of only two bats at any one time. This suggests that bats are using the Site only for ad-hoc foraging or commuting through Site to other foraging habitat.

31. No commuting lines of importance to local bat populations have been discerned from this survey.

Figure 4 Summary of bat activity observed during walked transect



[2] See paragraph 19

Results – Remote Monitoring

32. The PEA assessed the Site as supporting moderate/high suitability habitat for bats and therefore monthly remote monitoring was undertaken.

33. A single remote detector was deployed the location is shown in Figure 2. This was left to run for 5 consecutive nights during each monitoring period. Only one remote detector was deployed each month due to the monitoring taking place in 2024 before new guidance was published.

34. The detector was placed at a height of 1-2m and within 25m proximity of a linear feature within the Site that may be favoured by bats.

July 2024

35. Remote monitoring was left to run from the 3rd of July to 7th July 2024.

36. The table opposite shows the number of registrations for each species per night.

37. Six species of bat were recorded during this period, comprising common and soprano pipistrelle, noctule, Leisler's and up to two myotis species[3], most likely Brandt's and Daubenton's.

38. Common pipistrelle accounted for most of the activity recorded, making up 91% of the total registrations.

39. Activity peaks just after sunset and decreases throughout the night. This suggests that bats use the Site for a short time soon after emergence before moving off to other foraging locations.

[3] See paragraph 19

Table 5 Total number of registrations logged for each bat species, per day across the July period.

Species	3rd	4th	5th	6th	7th	Average
Common pipistrelle	17	5	21	39	18	20
Soprano pipistrelle	0	0	1	0	0	<1
Noctule	1	0	0	0	0	<1
Leisler's	0	0	0	0	3	1
Myotis spp.	0	1	2	1	1	1

Figure 5 Total of registrations logged for species across the July monitoring period.

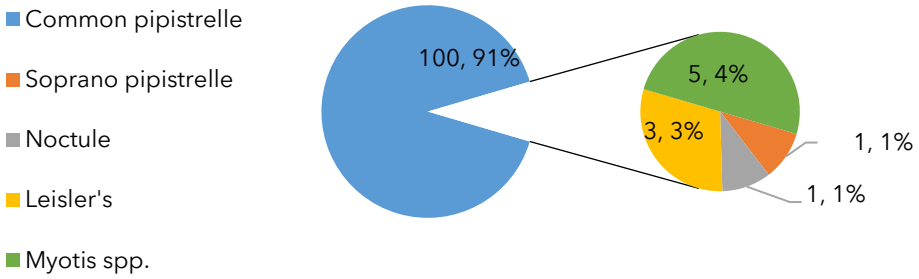
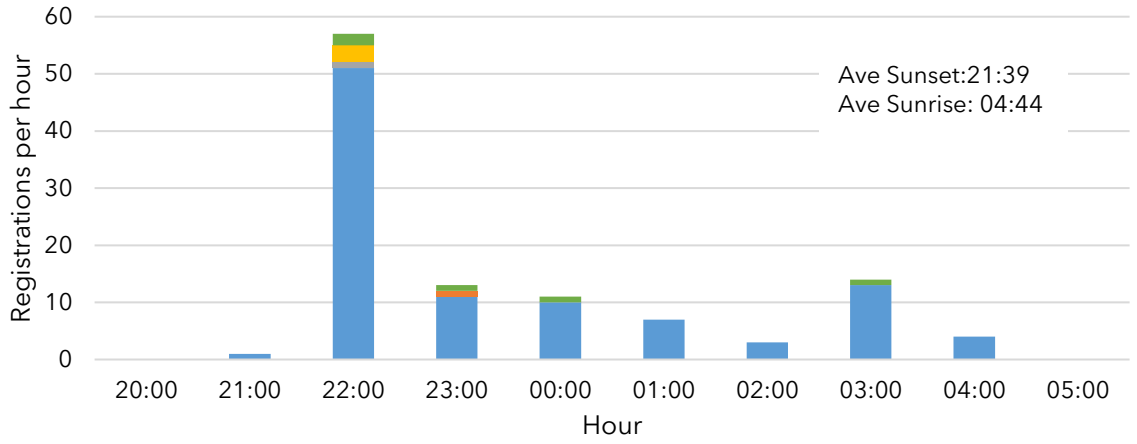


Figure 6 Total registrations logged per hour for each species across the July monitoring period.



August 2024

40. Remote monitoring was left to run from the 1st to the 5th August 2024.

41. The table opposite shows the number of registrations for each species per night.

42. Six species of bat were recorded during this period, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's and one myotis species[4], most likely Daubenton's.

43. All species were recorded at very low levels.

44. Common pipistrelle accounted for most of the activity recorded, making up 88% of the total registrations.

45. Activity starts and peaks just after sunset and decreases throughout the night, with a second smaller peak around sunrise. This indicates that bats use the Site for a short time soon after emergence before moving off to other foraging locations, and then again just before returning to their roost.

Table 6 Total number of registrations logged for each bat species, per day across the August period.

Species	1st	2nd	3rd	4th	5th	Average
Common pipistrelle	19	34	26	26	19	24
Soprano pipistrelle	0	0	1	0	0	<1
Noctule	0	3	0	2	0	1
Leisler's	1	1	0	0	0	<1
Brown long-eared	1	1	0	2	2	1
Myotis sp.	1	0	2	0	0	<1

Figure 7 Total of registrations logged for species across the August monitoring period.

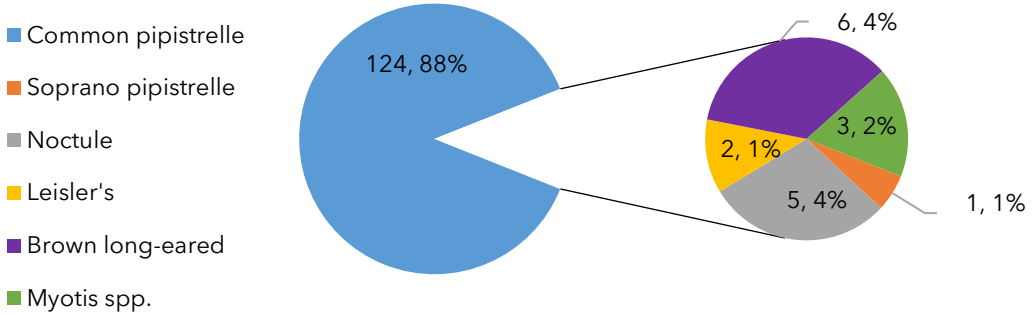
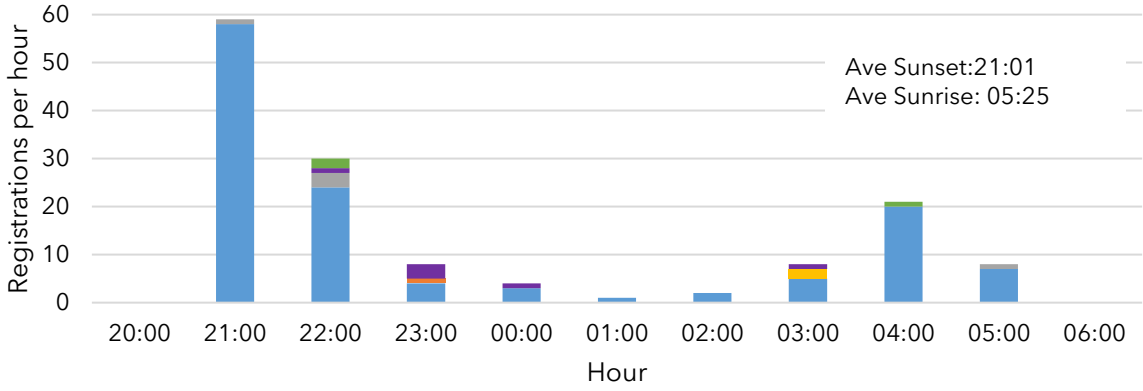


Figure 8 Total registrations logged per hour for each species across the August monitoring period.



[4] See paragraph 19

September 2024

46. Remote monitoring was left to run from the 13th to the 17th September 2024.

47. The table opposite shows the number of registrations for each species per night.

48. Seven species of bat were recorded during this period, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's, brown long-eared and up to two myotis species[5], most likely Brandt's and Daubenton's.

49. All bats species were recorded at very low levels.

50. Common pipistrelle accounted for most of the activity recorded, making up 70% of the total registrations which is slightly less than previous months.

51. Activity starts just after sunset and peaks at 20:00 before decreasing throughout the night. This suggests that bats use the Site for a short time soon after emergence before moving off to other foraging locations.

Table 7 Total number of registrations logged for each bat species, per day across the September period.

Species	13th	14th	15th	16th	17th	Average
Common pipistrelle	70	18	55	29	18	38
Soprano pipistrelle	0	0	3	2	0	1
Noctule	1	0	14	0	3	4
Leisler's	1	6	3	1	5	3
Brown long-eared	3	2	3	2	4	3
Myotis spp.	3	8	7	6	3	5

Figure 9 Total of registrations logged for species across the September monitoring period.

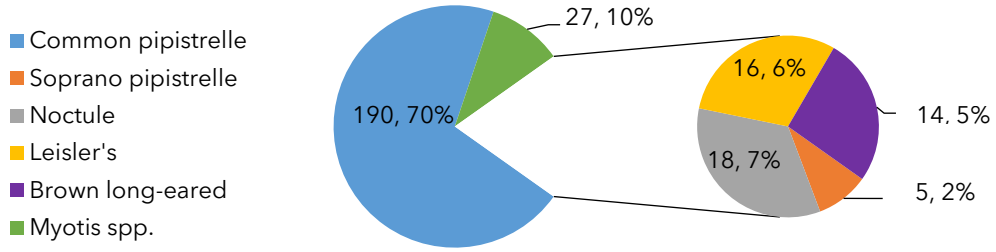
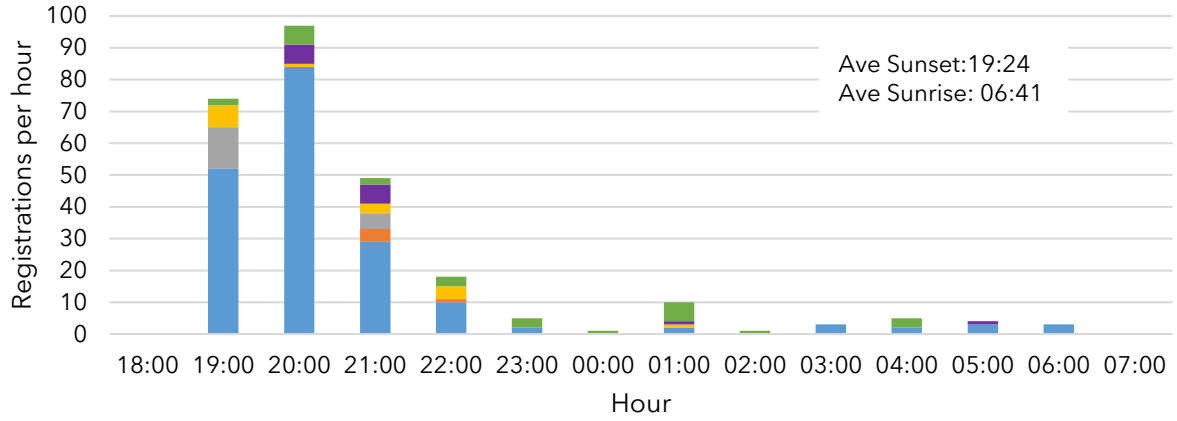


Figure 10 Total registrations logged per hour for each species across the September monitoring period.



[5] See paragraph 19

October 2024

52. Remote monitoring was left to run from the 14th to the 18th October 2024.

53. The table opposite shows the number of registrations for each species per night.

54. Five species of bat were recorded during this period, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's and one myotis species[6], most likely whiskered.

55. Common pipistrelle accounted for most of the activity recorded, making up 71% of the total registrations.

56. Activity starts and peaks at sunset and decreases throughout the night. This may indicate that bats use the Site for a short time soon after emergence before moving off to other foraging locations.

Table 8 Total number of registrations logged for each bat species, per day across the October period.

Species	14th	15th	16th	17th	18th	Average
Common pipistrelle	2	36	9	9	12	14
Soprano pipistrelle	0	2	0	0	0	<1
Noctule	0	1	0	0	0	<1
Leisler's	0	16	1	4	0	4
Myotis sp.	1	1	1	1	0	1

Figure 11 Total of registrations logged for species across the October monitoring period.

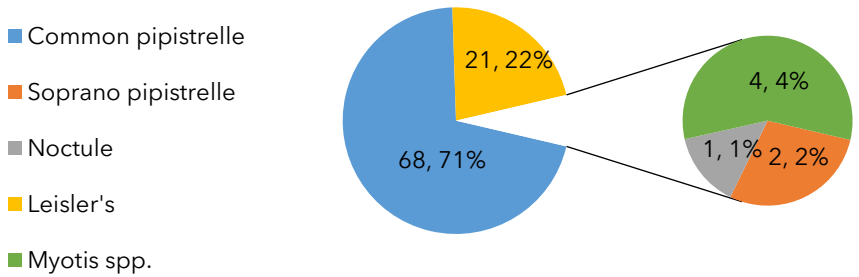
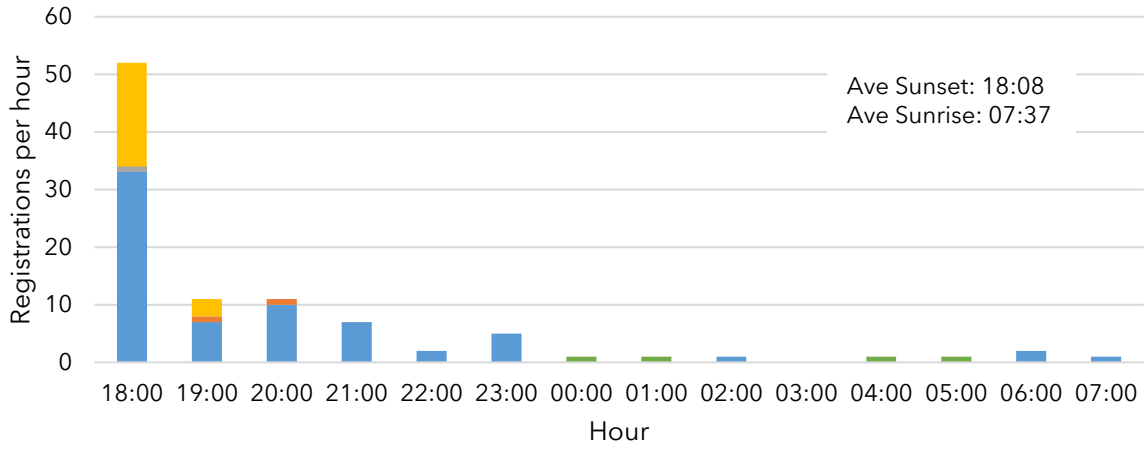


Figure 12 Total registrations logged per hour for each species across the October monitoring period.



[6] See paragraph 19

May 2025

57. Remote monitoring was left to run from the 12th to the 16th May 2025.

58. The table opposite shows the number of registrations for each species per night.

59. Six species of bat were recorded during this period, comprising common pipistrelle, noctule, Leisler's and up to three myotis [7]species, most likely Daubenton's, Brandt's and whiskered.

60. Common pipistrelle accounted for most of the activity recorded, making up 89% of the total registrations.

61. Activity starts and peaks at sunset and decreases throughout the night, with a smaller spike of activity near sunrise. This may suggest that bats use the Site for a short time soon after emergence, then moving off to other foraging locations, before returning to nearby roosts.

[7] See paragraph 19

Table 9 Total number of registrations logged for each bat species, per day across the May period.

Species	12th	13th	14th	15th	16th	Average
Common pipistrelle	30	38	118	90	76	70
Noctule	1	1	2	1	13	4
Leisler's	0	0	0	2	0	<1
Myotis spp.	3	2	3	10	5	5

Figure 13 Total of registrations logged for species across the May monitoring period.

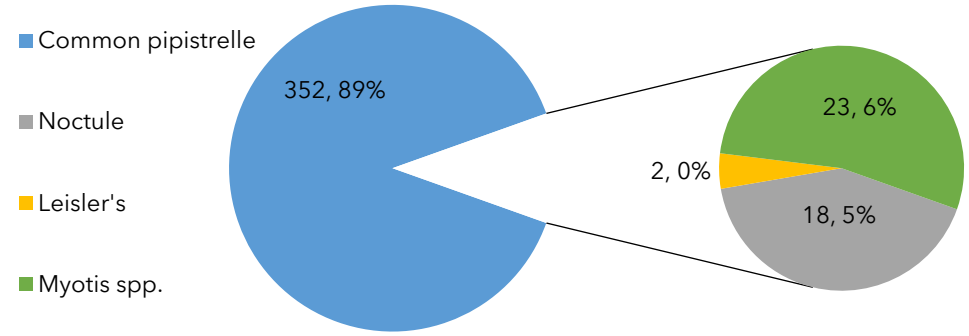
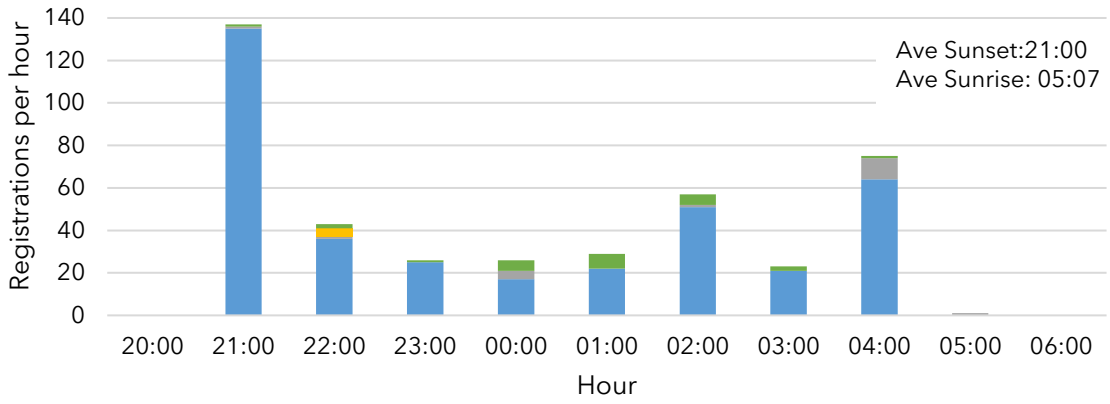


Figure 14 Total registrations logged per hour for each species across the May monitoring period.



June 2025

62. Remote monitoring was left to run from the 18th to the 22nd of June 2025.

63. The table opposite shows the number of registrations for each species per night.

64. Six species of bat were recorded during this period, comprising common pipistrelle, noctule, Leisler's and up to three myotis species[8], most likely Daubenton's, Brandt's and whiskered.

65. Noctule accounted for most of the activity recorded, making up 50% of the total registrations, with common pipistrelle making up 45% of the total registrations.

66. Activity starts and just after sunset and increases throughout the night, peaking at 03:00. This may indicate that bats use the Site for a short time soon after emergence, move onto other foraging locations and return before sunrise.

Table 10 Total number of registrations logged for each bat species, per day across the June period.

Species	18th	19th	20th	21st	22nd	Average
Common pipistrelle	38	37	51	37	16	36
Noctule	4	6	3	182	6	40
Leisler's	0	5	1	4	3	3
Myotis spp.	1	2	1	3	2	2

Figure 15 Total of registrations logged for species across the June monitoring period.

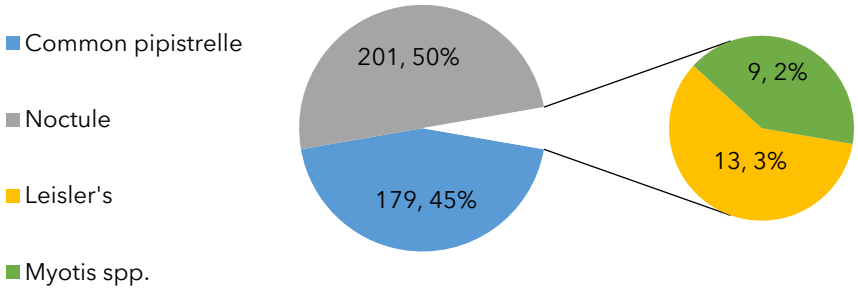
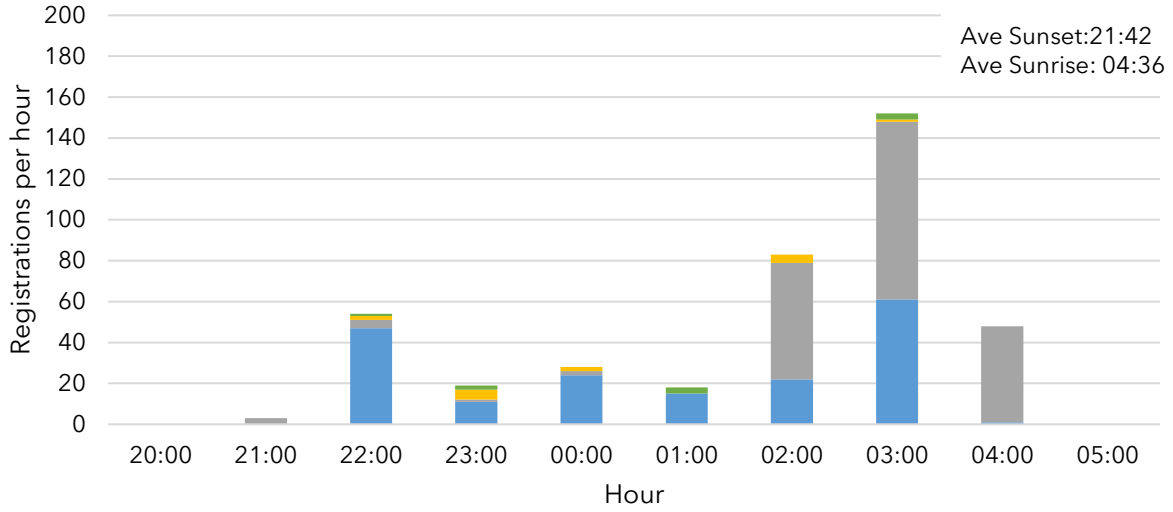


Figure 16 Total registrations logged per hour for each species across the June monitoring period.



[8] See paragraph 19

Evaluation

Foraging and Commuting

67. The importance of on-Site foraging and commuting habitat to the above assemblage has been assessed by considering the following:

    - Bat activity indicative of reliance on specific on-Site habitats/features
    - Landscape context
    - The range and habitat preferences of present species
    - Proximity/connectivity to known roosts, hibernation sites and swarming sites
    - Levels of recorded foraging and commuting behaviour referenced against other sites of a similar context, by a suitably experienced ecologist.

68. The Site is of relatively low importance to local bat populations in terms of foraging and commuting, with low levels of activity recorded during both walked transect and remote monitoring, and no significant commuting routes observed.

Conclusions

69. Seasonal bat activity surveys and monthly remote monitoring, spanning the 2024 and 2025 active bat seasons, found low levels of use by bats.

70. The data collected during this, and previous survey effort, does not point to the Site being of any significant importance to any particular local bat populations.

Report Lifespan

71. In line with CIEEM's advice note on report lifespan (CIEEM, 2019), a Site walkover was undertaken in January 2026 which found no significant changes to on-Site habitats.

72. Therefore, our assessment is that the results of these surveys carried out in 2024-2025 will remain valid for the upcoming application in 2026.

Recommendations

73. Proposals show that development will be largely confined to field interiors, with structured vegetation to the Site's boundary being mostly retained.

74. While this development is unlikely to impact significantly on local bat populations, the following actions can minimise that impact further, as well as any that on other groups.

    - A sensitive lighting plan should be designed to protect the surrounding woodland habitat.
    - Structured vegetation to the boundaries should be retained as far as possible
    - Integral bat boxes should be installed on strategically selected elevations of new buildings to enhance the Site's value to bat populations.

References

British Standards Institution (BSI). 2013. *BS42020 Biodiversity – Code of practice for planning and development.* London: BSI Standards Limited.

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys.* Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/

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

Government Circular 06/05: Office of the Deputy Prime Minister (ODPM) 2005. *Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System.* London: Her Majesty's Government. [Online]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

Institute of Lighting Professionals (ILP) and Bat Conservation Trust (BCT). 2018. Guidance Note GN08/23: Bats and Artificial Lighting At Night. Rugby: Institute of Lighting Professionals. [Online]. Available from: https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

Mitchell-Jones, A.J. and McLeish, A.P. 2004. *Bat Workers Manual (3rd Edition).* Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: https://hub.jncc.gov.uk/assets/e5888ae1-3306-4f17-9441-51a5f4dc416a

Reason, P.F. and Wray, S. 2023. *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Version 1.1. Ampfield: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf

The Conservation of Habitats and Species Regulations 2010. (No. 490). London: Her Majesty's Government. [Online]. Available from: https://www.legislation.gov.uk/uksi/2010/490/contents/made

The Royal Society for the Protection of Birds (RSPB). *Magenta Bat 4 (heterodyne) detector.* [Online]. [Accessed 4th January 2024]. Available from: https://shopping.rspb.org.uk/wildlife-friendly-garden/wildlife-garden-cameras-detectors/bat-detectors/magenta-bat-4-bat-detector.html

Titley Scientific. 2024. *Anabat Scout Active Bat Detector.* [Online]. [Accessed 4th January 2024]. Available from: https://www.titley-scientific.com/uk/anabat-scout.html

Titley Scientific. 2024. *Firmware and Software (AnalookW).* [Online]. [Accessed 4th January 2024]. Available from: https://www.titley-scientific.com/uk/downloads/firmware-software?SID=davovmgogm00ojjq49ucmn2384