

1 Further Ecological Surveys

1.1 Introduction

1.1.1 Further to consultation responses from Surrey Wildlife Trust, the following further ecological surveys have been undertaken at the site in 2023.

- Bat emergence surveys of tree T10;
- Bat activity surveys extending around the eastern edge of the site;
- Dormouse surveys of hedges around the eastern edge of the site.

1.2 Bat Emergence Surveys

1.2.1 Tree T10 (a fallen dead tree) was identified during the Phase 1 survey as having 'moderate' potential to support bats. Accordingly, prior to works commencing, emergence surveys would be carried out of this tree to ensure that if roosting bats were present, appropriate mitigation was put in place. Three emergence surveys were undertaken, two at dusk and one at dawn, in accordance with standard survey guidance. These surveys are complete at the time of writing.

1.2.2 Two surveyors were positioned on opposite sides of the fallen tree so as to ensure that all potential roost features were observable during the surveys. Conditions during the emergence surveys were as follows:

Table 1 -Emergence survey details

Date	Type	Start & end times & time of sunset/sunrise	No. of Surveyors	Equipment used	Weather
26/06/2023	Dusk	Start time: 21.06 End time: 23.21 Sunset: 21.21	2	Anabat Scout	Dry, 25% cloud, BF1, 16-13°C
27/06/2023	Dawn	Start time: 02.49 End time: 05.04 Sunrise: 04.49	2	Anabat Scout	Dry, 85% cloud, BF1, 14-13°C
10/07/2023	Dusk	Start time: 21.00 End time: 23.15 Sunset: 21.15	2	Anabat Scout	Dry, 95% cloud, BF2-3, 19-18°C

BF0 = calm, BF12 = hurricane force

1.2.3 **Survey Results and Evaluation.** No bats were detected or observed emerging from or returning to potential roost features within tree T10. Conditions on each survey occasion were appropriate for detecting emerging bats based on the presence of pipistrelle bats detected foraging in the wider area around the site on each occasion. It is concluded that tree T10 does not support roosting bats.

1.3 Bat Activity Surveys

1.3.1 A full suite of bat activity surveys was undertaken at the site in 2021. However, these surveys did not extend to include parts of the eastern area of the site. The transect route used during the surveys was therefore extended to include these areas and update surveys are in progress. These surveys follow the same methodology as those used previously and include the previous transect so that their results are directly comparable. At the time of writing two activity surveys have been undertaken. One further survey is planned for August.

1.3.2 Extension of the transect meant that an additional five listening points were added to the end of the transect surveyed in 2021.

1.3.3 Conditions during the surveys that have been completed to date are shown below:

Table 2 - Walked transect survey details

Date	Type	Start & end times & time of sunset	Transect direction; No. of surveyors	Equipment used	Weather
26/06/2023	Dusk	Start time: 21.19 End time: 23.22 Sunset: 21.19	Clockwise; 2 surveyors	Anabat Scout; SM3 static detectors	Dry, 10% cloud, BF1, 19-15°C
18/07/2023	Dusk	Start time: 21.08 End time: 23.18 Sunset: 21.08	Clockwise; 2 surveyors	Anabat Scout; SM3 static detectors	Dry becoming light rain, 50% cloud, BF2, 18- 15°C

BF0 = calm, BF12 = hurricane force

1.3.4 **Results.** The activity survey results to date are summarised in the tables below. Figures in parentheses indicate the number of bat passes recorded that occurred within the extended transect area (listening points 13-17).

Table 3 - Results of the dusk walked transect on 26 June 2023

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	42 (10)	84 (20)
Soprano Pipistrelle	8 (1)	16 (2)
Total	50 (11)	100

Table 4 - Results of the dusk walked transect on 18 July 2023

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	30 (4)	88 (12)
Soprano Pipistrelle	3 (1)	9 (3)
Pipistrelle sp.	1 (0)	3 (0)
Total	34 (5)	100

1.3.5 **Evaluation.** Surveys to date have shown that bats are active around the boundaries of the site. Numbers of bats are similar to those found during the 2021 surveys. Bats detected were predominately Common Pipistrelle with lower numbers of Soprano Pipistrelle. No other species of bat have been detected. Data from static bat detectors has yet to be analysed.

1.3.6 Results to date show that bat activity during the 2023 surveys is very similar to that detected in the surveys during 2021. The area covered by the extended transect that was not previously surveyed is used by low numbers of the same species that use the remaining parts of the site. No rare species of bat are present. The data gathered indicates that those parts of the site that were not surveyed in 2021 are not of elevated importance for foraging and commuting bats and are of similar or lower value to other areas of the site.

1.4 Dormouse

1.4.1 Hedges in the east of the site that were previously omitted from the Dormouse surveys undertaken in 2021 as sub-optimal to support this species were subject to further surveys in 2023. Given that no records of Dormouse are known from within the 2km study area,

habitat is sub-optimal, and no evidence of Dormouse was found during the 2021 surveys it is considered highly unlikely that this species will be encountered in sub-optimal habitat within the site. Currently these surveys are still in progress, with two monthly survey visits undertaken to date.

1.4.2 **Surveys** followed the same method as the 2021 surveys, whereby nesting tubes are attached to branches of trees and shrubs and checked on a monthly basis for indications of the presence of Dormouse.

1.4.3 A total of 24 Dormouse nest tubes were deployed within hedgerows in the site so as to include those that were not included in surveys undertaken in 2021. Nest tubes will be checked monthly between June and November.

1.4.4 **Results and Evaluation:** At the time of writing, two monthly surveys have been undertaken. No evidence of Dormouse has been found during any survey. These findings support the conclusion made in 2021 that Dormouse is absent from the site.

1.5 Conclusion

1.5.1 The additional surveys undertaken to date do not alter the overall conclusions of the Ecology Report lodged with the application. The further information provided by the additional surveys reinforces the previous conclusion that the proposals will not result in harm to protected species and that the mitigation and enhancement measures previously proposed remain appropriate and valid.