

Northenden Campus, Sale Road, M23 0DD

DUSK EMERGENCE SURVEY FOR BAT ACTIVITY

June 2021

[ERAP (Consultant Ecologists) Ltd ref: 2020-272b]

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Document Control

Survey Type:	Surveyors	Survey Date(s)
Dusk emergence bat survey	Catie Haworth B.Sc. (Hons) M.Sc. with five assistant surveyors	27 th May 2021
Reporting	Personnel	Date
Author	Catie Haworth B.Sc. (Hons) M.Sc. Graduate Ecologist	17 th June 2021
Signature(s)		
Checked	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM	30 th June 2021
Revised and issued	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM	30 th June 2021
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SUMMARY

- i. ERAP (Consultant Ecologists) Ltd carried out a licensed daylight bat survey and assessment of the buildings and trees at the Northenden Campus, Sale Road M23 0DD in March 2021. The results of the licensed bat survey and assessment are presented at ERAP Ltd. 2020-272 *Northenden Campus, Sale Road, M23 0DD: Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2021).
- ii. No evidence of the current or previous use of the buildings or trees by roosting bats was detected during the daylight inspections.
- iii. The daylight survey and assessment advised that, owing to the presence of potential roost features of suitability for use by crevice roosting bat species around the exterior of the buildings that cannot be comprehensively inspected by a daylight survey alone, buildings B4, B7 and B8 were assessed to be of low suitability for use by roosting bats.
- iv. In accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn) (Collins, J. (ed), 2016), for a building with low suitability for use by roosting bats, at least one bat activity survey is required to confirm the likely absence of roosting bats (or inform a mitigation strategy if a roost is detected).
- v. This report presents the results of one dusk emergence bat activity survey carried out at buildings B4, B7 and B8 on 27th May 2021. No survey limitations were experienced.
- vi. No bat emergence (or re-entry) at the buildings was detected.
- vii. Noctule and common pipistrelle bat activity was detected in the area around the buildings during the survey. Anabat detectors recorded noctule, common pipistrelle and soprano pipistrelle calls; all are common and widespread species in the area.
- viii. There are no constraints on the demolition works in relation to roosting bats. The guidance in relation to actions to be carried out during demolition, the appropriate use of lighting at the developed site, as outlined in the report of the daylight licensed bat survey and assessment, the installation of boxes for roosting bats and nesting birds and the mandatory actions in relation to the protection of nesting birds, refer to **Sections 4.1** and **4.2**, remain applicable.
- ix. As advised at **Section 4.1**, if demolition works have not commenced by May 2022 an updated bat survey and assessment of the relevant buildings is recommended to ensure that the demolition works are informed by the current bat roost status at the site.
- x. In addition, an updated inspection of the two mammal holes in the north-western corner of the site was carried out during the visit on 27th May 2021. It is confirmed that the small sticks that had been placed at the hole entrances during the last survey visit (19th April 2021) were still in place, indicating no signs of current use.

1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd carried out a licensed daylight bat survey and assessment of the buildings and trees at the Northenden Campus, Sale Road, M23 ODD (hereafter referred to as 'the site') in March 2021. The results of the licensed bat survey and assessment are presented at ERAP Ltd. 2020-272 *Northenden Campus, Sale Road, M23 ODD: Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2021).
- 1.1.2 The survey and assessment was requested in connection with a planning application to redevelop the site to residential use. All buildings at the site (with the exception of B8, the sub-station) will be demolished to facilitate the re-development.
- 1.1.3 No evidence of the current or previous use of the buildings by roosting bats was detected during the daylight inspections. The daylight survey and assessment advised that, owing to the presence of potential roost features of suitability for use by crevice roosting bat species around the exterior of the buildings that cannot be comprehensively inspected by a daylight survey alone, buildings B4, B7 and B8 were assessed to be of low suitability for use by roosting bats. The remaining buildings (B1 to B3, B5, B6 and B9 to B12) were assessed to be of negligible suitability for use by roosting bats and no further survey was required.
- 1.1.4 In accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn) (Collins, J. (ed), 2016), for a building with low suitability for use by roosting bats, at least one bat activity survey is required to confirm the likely absence of roosting bats (or inform a mitigation strategy if a roost is detected). The survey should be carried out between May and August inclusive.
- 1.1.5 This report presents the results of one dusk emergence bat activity survey carried out at the buildings on 27th May 2021.

2.0 METHOD OF SURVEY

2.1 Presence / Absence Surveys: Dusk Emergence Survey

- 2.1.1 Prior to the dusk emergence survey the external perimeter of buildings B4, B7 and B8 was searched for bat droppings and other signs to indicate the presence of a roost such as audible noises.
- 2.1.2 Six surveyors, experienced in conducting bat surveys, were positioned at suitable locations to maximise the coverage of the roof and elevation walls of buildings B4, B7 and B8 (including all potential roost features identified during the daylight survey and assessment) to determine any emergence or re-entry into the buildings by roosting bats.
- 2.1.3 Heterodyne detectors were used to determine any bat detected to species or group (for example, *Myotis* species often cannot be reliably separated to species via their echolocation calls). Recording bat detector units¹ were used to record and analyse echolocation calls after the survey using AnalookW and Anabat Insight call analysis software.
- 2.1.4 The dusk emergence survey commenced 15 minutes before sunset, and continued until 1.5 hours after sunset.
- 2.1.5 Surveyor positions are annotated on **Figure 1**. Any bat emergence or re-entry activity was recorded. The date of the survey, surveyors and equipment used and weather conditions present are presented at **Table 2.1**, below.

¹ i.e. Anabat Express and Anabat Scout

Table 2.1: Dusk Emergence Survey Date, Weather Conditions and Surveyors

Date	27 th May 2021
Sunset	21:20
Start time	21:05
End time	22:50
Wind	Calm (Beaufort scale 0)
Precipitation	Dry
Air temperatures	14°C throughout
Surveyor Position	Surveyor and Detector
1	Luke Atherton Anabat Scout
2	Sarah Clementson Batbox III and Anabat Express
3	Fiona Megarrell Batbox Duet and Anabat Express
4	Danielle Rowlands Batbox III ¹
5	Amy Sharples Batbox Duet and Anabat Express
6	Catie Haworth Anabat Scout
¹ No recording detector used at Position 4 owing to the adjacent recording detector at Position 5.	

2.2 Survey Limitations

- 2.2.1 The survey was carried out at an appropriate time of year for the detection of bat activity and during suitable weather conditions. All relevant elevations and roof pitches of the buildings could be observed. No survey limitations were experienced.

3.0 SURVEY RESULTS

3.1 Dusk Emergence Survey: 27th May 2021

- 3.1.1 **Figure 1**, appended, shows all surveyor positions and an illustration of the observed bat activity. Raw data are appended at **Table 7.1**.
- 3.1.2 No bat droppings were found around the external elevations and perimeter of buildings B4, B7 and B8.
- 3.1.3 No bat emergence or re-entry was detected at the surveyed buildings (B4, B7 and B8) during the dusk emergence survey.
- 3.1.4 Three bat species were recorded flying in the vicinity of the buildings between 21:39 and 22:36. The first bat (common pipistrelle) was recorded 19 minutes after sunset and was observed entering the site from the wider area and foraging over building B4.
- 3.1.5 Common pipistrelle (*Pipistrellus pipistrellus*) was the most frequently detected bat. Foraging activity was observed along the vegetation adjacent to buildings B4 and north of B7 between 21:39 and 22:36.
- 3.1.6 Soprano pipistrelle (*Pipistrellus pygmaeus*) passes were recorded occasionally over buildings B4 and north of B7 near Surveyors 1, 2 and 3 between 21:43 and 22:36.
- 3.1.7 One noctule (*Nyctalus noctula*) was heard passing over the site at 21:57 by Surveyors 4, 5 and 6.
- 3.1.8 No other bat species were recorded.

3.2 Updated Inspection of the Mammal Holes

- 3.2.1 In addition, an updated inspection of the two mammal holes in the north-western corner of the site was carried out during the visit on 27th May 2021 (refer to **Figure 1**). It is confirmed that the small sticks that had been placed at the hole entrances during the last survey visit (19th April 2021) were still in place, indicating no signs of current use.

4.0 ASSESSMENT AND RECOMMENDATIONS

4.1 Bat Species

Bat Roost Status

- 4.1.1 An appropriate survey effort in accordance with the relevant survey guidelines has been carried out. No bat emergence (or re-entry) at the buildings was detected.
- 4.1.2 There are no constraints on the demolition works in relation to roosting bats. Demolition works may proceed in accordance with the relevant timings (outlined below) and in accordance with the guidance and mandatory actions in relation to nesting birds, refer to **Section 4.2**.

Demolition

- 4.1.3 During demolition it is advised that the roof tiles at buildings B4 and B7 (B8 is a sub-station and is likely to remain) are lifted, rather than slid, and the underside of the tiles should be checked for bats before the tiles are stacked or discarded.

Discovery of a Bat

- 4.1.4 If at any time during the works a bat is discovered or suspected all contractors must withdraw from the area and ERAP (Consultant Ecologists) Ltd (01772 750502) or the local bat group (0161 8648850) must be contacted for further guidance.

Validity of Bat Surveys

- 4.1.5 The results of the daylight bat survey and assessment (ERAP (Consultant Ecologists) Ltd, 2021) and bat activity survey carried out on 27th May 2021 remain valid until the 2022 bat activity survey season (May onwards). If demolition works have not commenced before May 2022 an updated bat survey and assessment of the site is advised to ensure that the demolition works are informed by the current bat roost status at the site.

Lighting

- 4.1.6 As advised in the *Licensed Bat Survey and Ecological Assessment* (ERAP (Consultant Ecologists) Ltd, 2021), paragraph 180, bullet point 'c' in Chapter 15 (conserving and enhancing the natural environment) of the National Planning Policy Framework (NPPF) states that development should:

'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

- 4.1.7 Any lighting scheme to be implemented at the site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the roosting provisions and any landscape planting, as lighting overspill may deter use by wildlife such as foraging bats.
- 4.1.8 The lighting scheme will be designed with reference to current guidance, namely:
- Guidance Note 08/18. *Bats and Artificial Lighting in the UK*. Bats and Built Environment series. (Bat Conservation Trust and Institution of Lighting Professionals, 2018); and
 - Bats and lighting: Overview of current evidence and mitigation guidance (Stone, 2014).

Provisions for Roosting Bats and Nesting Birds

- 4.1.9 To provide opportunities for roosting bats at the redeveloped site a *Plan to Show Location and Specification of Bird and Bat Boxes* has been prepared based on the current site layout. This is provided as a separate document (ERAP (Consultant Ecologists) Ltd, 2021).

4.2 Birds

Protection

- 4.2.1 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are nesting. It is advised that any works that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive.
- 4.2.2 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

5.0 CONCLUSION

- 5.1 No bat emergence (or re-entry) at buildings B4, B7 or B8 was detected.
- 5.2 There are no constraints on the demolition works in relation to roosting bats. Demolition works should proceed in accordance with the guidance and recommendations at **Section 4.1**. The guidance and mandatory actions in relation to the protection of nesting birds, refer to **Section 4.2**, remains applicable.
- 5.3 If demolition works have not commenced by May 2022 an updated bat survey and assessment is recommended to ensure that the demolition works are informed by the current bat roost status at the site.

6.0 REFERENCES

- Bat Conservation Trust and Institution of Lighting Professionals, 2018. *Guidance Note 08/18. Bats and Artificial Lighting in the UK. Bats and Built Environment series.*, Warwickshire: ILP.
- CIEEM, 2013. *Technical Guidance Series Competencies for Species: Bats*. Winchester: Chartered Institute of Ecology and Environmental Management.
- CIEEM, 2018. *Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*, Winchester: Chartered Institute of Ecology and Environmental Management.
- Collins, J. (ed), 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. London: The Bat Conservation Trust.
- ERAP (Consultant Ecologists) Ltd, 2021. *ERAP Ltd. 2020-272 Northenden Campus, Sale Road, M23 0DD: Ecological Survey and Assessment*, Chorley: ERAP (Consultant Ecologists) Ltd.
- ERAP (Consultant Ecologists) Ltd, 2021. *Land at Northenden Campus, Sale Road, M23 0DD Figure 1: Plan to Show Location and Specification of Bird and Bat Boxes*, Chorley: ERAP (Consultant Ecologists) Ltd.
- Great Britain, 1981. *Wildlife and Countryside Act*. London: H.M.S.O.
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- Mitchell-Jones, A. J. & Mcleish, A. P., 2004. *Bat Workers' Manual, 3rd Edition*. Peterborough: Joint Nature Conservation Committee.
- Ratcliffe, D. A., 1977. *A Nature Conservation Review*. Cambridge: Cambridge University Press.

Stone, E. L., 2014. *Bats and Lighting: Overview of current evidence and mitigation guidance*. Bristol: University of Bristol.

7.0 APPENDIX: TABLES AND FIGURES

Table 7.1: Activity Survey 1, Date: 27th May 2021, Sunset time: 21:20, Start time: 21:05

Surveyor Position 1: Luke Atherton

Time	Species	Notes
21:38 to 21:41	Common pipistrelle	Foraging over scrub north of B4
21:43 to 21:45	Soprano pipistrelle	Foraging over scrub north of B4
21:56 to 22:35	Common pipistrelle	Foraging overhead continuously
22:50	End	
The Anabat Scout made the following recordings: 70 common pipistrelle recordings between 21:39 and 22:35; and 13 soprano pipistrelle recordings between 21:43 and 22:31.		

Surveyor Position 2: Sarah Clementson

Time	Species	Notes
21:45	Soprano pipistrelle	Foraging above trees and scrub adjacent to B4
21:52	Common pipistrelle	Foraging
21:56 to 22:35	Common pipistrelle	Foraging overhead continuously
22:50	End	
The Anabat Express made the following recordings: 127 common pipistrelle recordings between 21:39 and 22:33; and 3 soprano pipistrelle recordings between 21:57 and 21:25.		

Surveyor Position 3: Fiona Megarrell

Time	Species	Notes
21:44	Common pipistrelle	Foraging around scrub
21:47 to 21:58	Common pipistrelle	Foraging
21:58 to 22:25	Common pipistrelle	Circling and foraging above
22:26	Soprano pipistrelle	Foraging
22:50	End	
The Anabat Express made the following recordings: 85 common pipistrelle recordings between 21:47 and 22:36; and 5 soprano pipistrelle recording between 21:12 and 22:36.		

Surveyor Position 4: Danielle Rowlands

Time	Species	Notes
21:57	Noctule	Passing overhead
22:23	Common pipistrelle	Heard not seen
22:50	End	
No recording detector (positioned adjacent to Surveyor Position 5)		

Surveyor Position 5: Amy Sharples

Time	Species	Notes
21:57	Noctule	Passing overhead
22:23	Common pipistrelle	Heard not seen
22:50	End	
The Anabat Express made the following recordings: 1 noctule recordings at 21:57; and 1 common pipistrelle recording at 22:23.		

Surveyor Position 6: Catie Haworth

Time	Species	Notes
21:57	Noctule	Passing overhead
22:23	Common pipistrelle	Heard not seen
22:50	End	
The Anabat Scout made the following recordings: 1 noctule recordings at 21:57; and 2 common pipistrelle recordings, both at 22:23.		

Figure 1: Dusk Emergence Survey 27th May 2021

