

Riverside Park
Woosehill
Wokingham
Berkshire
RG41 3DA

Bat Emergence & Re-Entry Survey

Ref: R2818/a

July 2021

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	4
2.1	Background.....	4
2.2	Legislative Background.....	4
2.3	Site Location and Context.....	6
2.4	Report Format.....	6
3	SURVEY METHOD.....	7
3.1	Emergence and Re-entry Surveys.....	7
3.2	Survey Constraints.....	7
4	SURVEY FINDINGS	8
4.1	Emergence Survey – 17 th May 2021.....	8
4.2	Re-entry Survey – 11 th June 2021	8
5	DISCUSSION AND RECOMMENDATIONS	9
5.1	Assessment of Bat Roost Status.....	9
5.2	Impact of Proposals and Recommendations	9
6	MITIGATION AND COMPENSATION PROPOSALS.....	10
7	REFERENCES	11
	APPENDIX 1 – PLAN OF EMERGENCE AND RE-ENTRY SURVEY FINDINGS	12
	APPENDIX 2 – RAW EMERGENCE AND RE-ENTRY SURVEY DATA.....	13

1 EXECUTIVE SUMMARY

- 1.1.1 John Wenman Ecological Consultancy LLP was commissioned by the South East Rivers Trust (SERT) to undertake a bat survey for a tree at Riverside Park in Woosehill, Wokingham. A mature alder tree (*Alnus glutinosa*) – **T6** (OS grid reference: SU 79929 69061) – graded as moderate bat roost potential requires removal to enable work to reconnect the paleo channel. Therefore, further bat emergence and re-entry survey was conducted to determine the presence or likely absence of roosting bats.
- 1.1.2 All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 ('Habitat Regulations'). An evening emergence survey of **T6** was undertaken on the 17th May 2021 and a dawn re-entry survey on the 11th June 2021.
- 1.1.3 During the emergence survey, one soprano pipistrelle bat (*Pipistrellus pygmaeus*) was observed flying low towards the surveyor at Location 2 and was considered likely to have emerged from **T6**. During the re-entry survey, one common pipistrelle (*Pipistrellus pipistrellus*) circled above the surveyor at Location 1 from 04:23 before flying low towards, and likely returning to roost in, **T39** – an adjacent tree.
- 1.1.4 The removal of **T6**, and **T39** if necessary, would likely result in the permanent loss of soprano pipistrelle (*P. pygmaeus*) and common pipistrelle (*P. pipistrellus*) day roosts, and in the absence of mitigation the arboricultural work could result in any bats present being disturbed and potentially injured or killed. Therefore, a European Protected Species Mitigation Licence (EPSML) will be required to allow the work to proceed lawfully.
- 1.1.5 A tree-mounted Schwegler 2F-DFP (or functionally equivalent woodcrete box) will provide long-term replacement opportunities for day roosting bats.

2 INTRODUCTION

2.1 Background

2.1.1 John Wenman Ecological Consultancy LLP was commissioned by the South East Rivers Trust (SERT) to undertake a bat survey for a tree at Riverside Park in Woosehill, Wokingham.

2.1.2 The survey was commissioned in relation to the Restoration of the Emm Brook project led by SERT and co-funded by the European Regional Development Fund (under its European Structural & Investment Fund) and the Environment Agency. The aim of the project is to improve the health of the Emm Brook by reconnecting 230 metres of paleo channel to by-pass the weir and restore fish passage.

2.1.3 The following reports by John Wenman Ecological Consultancy LLP have been completed for the project: Extended Phase 1 Habitat Survey in April 2019 (R2207/c); Phase 2 Ecological Surveys in May 2019 (R2220/b); Bat Emergence & Re-entry Survey in September 2019 (R2332/a) and Phase 2 Ecological Surveys ADDENDUM (R2708/a).

2.1.4 A mature alder tree (*Alnus glutinosa*) – **T6** – graded as moderate bat roost potential requires removal to enable work to reconnect the paleo channel. Therefore, further bat emergence and re-entry survey was conducted to determine the presence or likely absence of roosting bats. The results of this further survey and the subsequent recommendations are detailed within this report.

2.2 Legislative Background

2.2.1 All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 ('Habitat Regulations') (as amended). In summary, the legislation combined makes it an offence to:

- Damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat;

- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair the ability of bats to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species;
- Deliberately kill, injure or take any bat.

2.2.2 The government’s statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species Mitigation Licences (EPSML) that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. A licence can be issued if the following three tests have been met:

- **Regulation 55(9)(a)** - there is “no satisfactory alternative” to the derogation, and;
- **Regulation 55(9)(b)** - the derogation “will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range” and;
- **Regulation 55(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”.

2.2.3 Local authorities have a statutory duty under Regulation 7(3e) of the Habitat Regulations to have regard to requirements of the Habitats Directive in the exercise of their functions. The Council must therefore consider and determine whether these three tests are likely to be satisfied by applications where survey findings show that EPSML is necessary before granting planning permission.

2.2.4 EPSML applications can be submitted once all necessary planning consents have been granted and Natural England aim to issue a licence decision within 30 working days.

2.2.5 Survey data supporting EPSML applications must be up to date i.e., have been conducted within the current or most recent optimal survey season i.e., May to August. Therefore, if surveys show bats are present and licensable work is delayed until during or after the next survey season, updated surveys will be required to support an application.

2.3 Site Location and Context

2.3.1 The site is part of the amenity parkland known as Riverside Park (or 'Woosehill Meadows') to the east of Morrisons supermarket in Woosehill, Wokingham. The mature alder tree (*A. glutinosa*) – **T6** – sits next to a culvert in the paleo channel (OS grid reference: SU 79929 69061).

2.3.2 The Emm Brook river runs through Riverside Park in the centre of the Wokingham suburb of Woosehill. The wider extent of Woosehill Meadows includes open fields and woodland to the south of the site. The Woosehill Spine Road borders the northwest of the site and the Reading Road (A329) is to the north. A railway line bordered by established woodland lies approximately 210 metres to the northeast and connects to Holt Copse and Joel Park Local Nature Reserve (LNR) approximately 400 metres to the east of the site. Approximately 235 metres to the west, lies a small lake with wooded banks called Windmill Pond.

2.4 Report Format

2.4.1 The report is set out as follows: **Section 3** presents a description of the survey methods; **Section 4** summarises the findings of the emergence and re-entry surveys; and **Section 5** presents a discussion of the survey findings. **Appendix 1** presents a plan showing the emergence and re-entry survey findings and **Appendix 2** presents the raw survey data.

3 SURVEY METHOD

3.1 Emergence and Re-entry Surveys

3.1.1 An evening emergence survey of **T6** was undertaken on the 17th May 2021 and a dawn re-entry survey on the 11th June 2021. Each survey was carried out by two surveyors experienced in conducting bat detector surveys. During the surveys, one surveyor was situated to the south of **T6** (Location 1) and the second was positioned to the northeast (Location 2).

3.1.2 The emergence survey was conducted with EchoMeter Touch 2 Pro detectors and a Batbox Duet detector; the re-entry survey used an Elekon Batlogger M detector and an EchoMeter Touch 2 Pro detector. The EchoMeter recording were converted to ZC files in Kaleidoscope before being analysed in the AnalookW computer software package. The Batlogger data was analysed using the BatExplorer computer software.

3.1.3 The emergence survey started 15 minutes before sunset and continued until 1.5 hours after sunset. The re-entry survey started 1.5 hours before sunrise and ended at sunrise.

3.2 Survey Constraints

3.2.1 There were no significant constraints to the surveys, which were undertaken at a suitable time of year for undertaking emergence and re-entry surveys i.e., May to September (Collins 2016) and in conditions suitable for bat activity i.e., mostly dry with air temperatures above 10°C.

4 SURVEY FINDINGS

4.1 Emergence Survey – 17th May 2021

4.1.1 A soprano pipistrelle bat (*Pipistrellus pygmaeus*) was observed at 21:05 flying low towards the surveyor at Location 2 and was considered likely to have emerged from **T6**.

4.1.2 The amount of bat activity was low and only two species were recorded during the survey: common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*P. pygmaeus*). Both surveyors observed common pipistrelle bats (*P. pipistrellus*) flying low through the woodland on three occasions; the rest of the recordings were unseen.

4.2 Re-entry Survey – 11th June 2021

4.2.1 A common pipistrelle bat (*P. pipistrellus*) was observed foraging around the surveyor at Location 1 from 04:23 before flying towards, and likely returning to roost in, **T39** (adjacent to **T6**).

4.2.2 The level of bat activity was moderate but only three species were recorded during the survey: common pipistrelle (*P. pipistrellus*), soprano pipistrelle (*P. pygmaeus*) and noctule (*Nyctalus noctula*). From 04:00 onwards, except for one passing soprano pipistrelle (*P. pygmaeus*), common pipistrelle bats (*P. pipistrellus*) were observed foraging in and around the woodland. A noctule was heard only at 04:24.

5 DISCUSSION AND RECOMMENDATIONS

5.1 Assessment of Bat Roost Status

5.1.1 During the emergence survey, one soprano pipistrelle bat (*Pipistrellus pygmaeus*) was observed flying low towards the surveyor at Location 2 and was considered likely to have emerged from **T6**. During the re-entry survey, one common pipistrelle (*Pipistrellus pipistrellus*) circled above the surveyor at Location 1 from 04:23 before flying low towards, and likely returning to roost in, **T39** – an adjacent tree. These observations indicate that the thick ivy (*Hedera helix*) cover on the trunks of **T6** and **T39** is being used for day roosts by individual male or non-breeding female bats. Day roosts in trees can be highly changeable and the proximity of these trees means that the species recorded could be utilising either tree.

5.1.2 Soprano pipistrelle (*P. pygmaeus*) and common pipistrelle bats (*P. pipistrellus*) are widespread and common throughout the UK (Richardson 2000); with roosts supporting small numbers of non-breeding adults considered to be of low conservation importance (Mitchell-Jones 2004).

5.2 Impact of Proposals and Recommendations

5.2.1 The removal of **T6**, and **T39** if necessary, would likely result in the permanent loss of soprano pipistrelle (*P. pygmaeus*) and common pipistrelle (*P. pipistrellus*) day roosts, and in the absence of mitigation the arboricultural work could result in any bats present being disturbed and potentially injured or killed.

5.2.2 A European Protected Species Mitigation Licence (EPSML) will be required to allow the work to proceed lawfully and can be issued by Natural England if the three licensing tests (detailed in Paragraph 2.2.2) have been met by the proposed work.

5.2.3 To meet one of the licensing tests, it would be necessary to demonstrate that the 'favourable conservation status' of bats using **T6** and **T39** would be maintained during and after their removal by providing compensatory roosts in the short-term and ensuring that roosting sites are retained on site in the long-term. Mitigation and compensation proposals detailed in **Chapter 6** below would ensure the 'favourable conservation status' of bats roosting on site.

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6 MITIGATION AND COMPENSATION PROPOSALS

- 6.1.1** Prior to the removal of either T6 or T39, a European Protected Species Mitigation Licence (EPSML) will be obtained from Natural England.
- 6.1.2** The arboricultural work will be undertaken outside of the winter hibernation season (mid-November to February) to minimise the risk of disturbing torpid bats. Before the work begins, one Schwegler 2F-DFP bat box (or functionally equivalent woodcrete box) will be fixed to a suitable mature tree on site and will be in place for a minimum of five years (boxes can only be removed after the five years if no evidence of use has been found at this stage).
- 6.1.3** Before the arboricultural work commences, the licensed ecologist will give a toolbox talk detailing that: roosting bats may be present, legislation protecting bats and their roosts, the location of the bat roosts, good working practices, measures required to protect bats during the work and what to do if bats are found. A copy of the EPSML will be available for inspection on site during the arboricultural work.
- 6.1.4** The thick ivy (*Hedera helix*) cover will be removed carefully and a 'soft fell' approach to tree removal will be adopted under the direct supervision of a licensed ecologist; if feasible, severing of the ivy stems at the base of the tree to allow for ivy dieback before felling would be beneficial. This approach will involve a close-up inspection of potential roost features by a tree climber before cutting and carefully lowering each section to the ground using ropes. The cut sections will be left on the ground in situ for at least 24 hours to allow any roosting bats to disperse overnight. If bat(s) are discovered during the work, the licensed ecologist will capture the bat(s) and transfer it/them directly to the bat box erected in advance.
- 6.1.5** The tree-mounted Schwegler 2F-DFP (or functionally equivalent woodcrete box) will provide long-term replacement opportunities for day roosting soprano pipistrelle (*Pipistrellus pygmaeus*) and common pipistrelle bats (*Pipistrellus pipistrellus*).

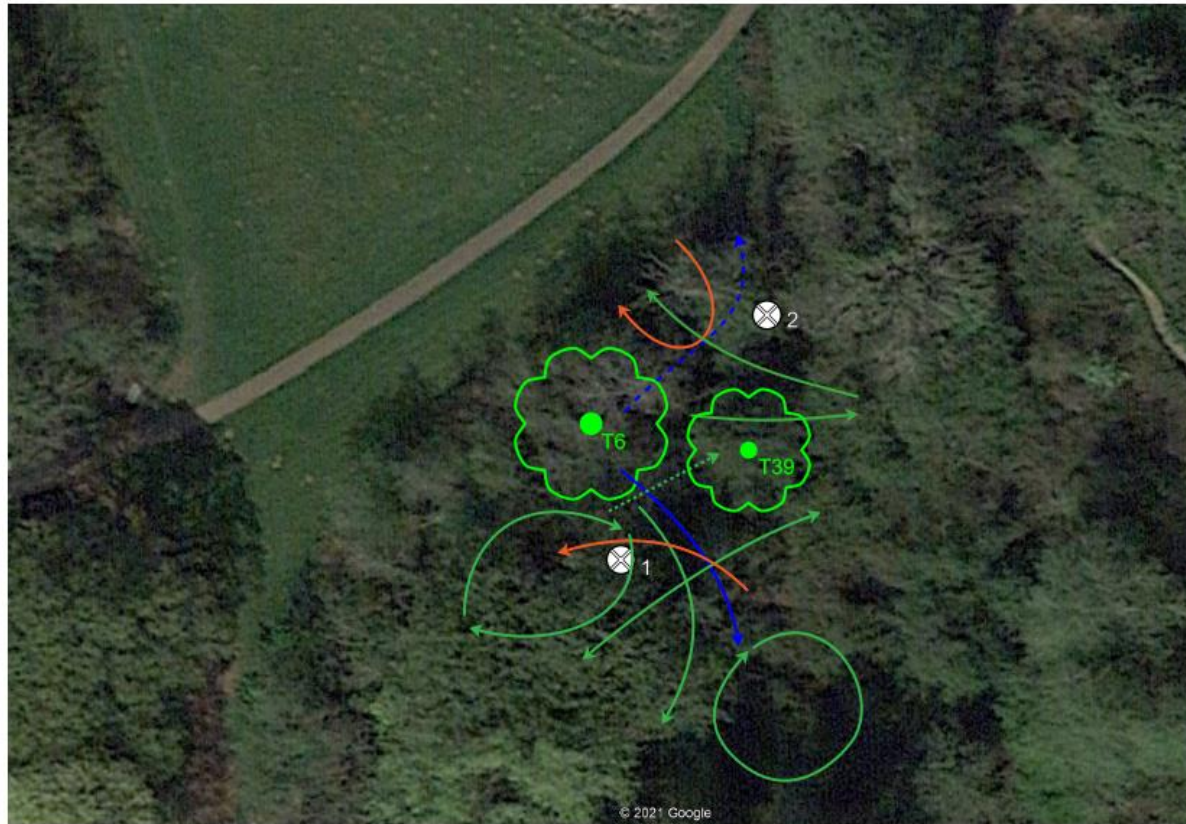
7 REFERENCES

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition*. Bat Conservation Trust, London.

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

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

APPENDIX 1 – PLAN OF EMERGENCE AND RE-ENTRY SURVEY FINDINGS



- ⊗ n Surveyor location ☁ n ———▶ *Pipistrellus* sp. flight path
- ⋯▶ Common pipistrelle re-entry - - - -▶ Soprano pipistrelle emergence —▶ Soprano pipistrelle flight path —▶ Common pipistrelle flight path

Drawn by:	Date	Scale:	T6 at Riverside Park, Woosehill Wokingham	
CW	June 2021	Not to scale	Bat Emergence & Re-entry Survey Findings	

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