

**Emm Brook  
Woosehill  
Wokingham  
Berkshire  
RG41 3DA**

**Bat Emergence & Re-Entry Survey**  
Ref: R2332/a

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|----------|--|-----------|
| <b>1</b> | <b>INTRODUCTION .....</b>  | <b>3</b>  |
| 1.1      | Background.....  | 3         |
| 1.2      | Legislative Background.....  | 3         |
| 1.3      | Site Location and Context.....   | 5         |
| 1.4      | Report Format.....   | 5         |
| <b>2</b> | <b>SURVEY METHOD.....</b>  | <b>6</b>  |
| 2.1      | Emergence and Re-entry Surveys.....                                      | 6         |
| 2.2      | Survey Constraints.....  | 6         |
| <b>3</b> | <b>SURVEY FINDINGS .....</b>   | <b>7</b>  |
| 3.1      | Emergence Survey – 7 <sup>th</sup> August 2019 .....                     | 7         |
| 3.2      | Re-entry Survey – 23 <sup>rd</sup> August 2019.....                      | 7         |
| <b>4</b> | <b>DISCUSSION AND RECOMMENDATIONS .....</b>                              | <b>8</b>  |
| <b>5</b> | <b>REFERENCES .....</b>  | <b>9</b>  |
|          | <b>APPENDIX 1 – PLAN OF EMERGENCE AND RE-ENTRY SURVEY FINDINGS .....</b> | <b>10</b> |
|          | <b>APPENDIX 2 – RAW EMERGENCE AND RE-ENTRY SURVEY DATA .....</b>         | <b>11</b> |

# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 John Wenman Ecological Consultancy LLP was commissioned by the South East Rivers Trust (SERT) to undertake bat emergence and re-entry surveys of three trees on the Emm Brook at Woosehill Meadows in Wokingham. The survey was commissioned in relation to the Woosehill Fish Passage Improvements project led by SERT with the support of the Environment Agency (EA). The main aim of the project is to reconnect the Emm Brook paleo channel in order to by-pass the weir and restore fish passage; the modified channel would act as a flood relief channel.
- 1.1.2 A ground-level inspection of trees bordering the paleo channel of the Emm Brook was undertaken on 18<sup>th</sup> April 2019. Features suitable for roosting bats or evidence of the presence of bats were looked for during the survey. Tree 12 (T12) and tree 14 (T14) are both mature alder trees (*Alnus glutinosa*) with multiple stems and ivy (*Hedera helix*) cover and tree 13 (T14) is a hawthorn (*Crataegus monogyna*) with ivy cover. The survey found that these trees also had at least one single bat roost feature (i.e. knot hole, woodpecker hole or rot hole) and were considered to be of low bat roost potential. An emergence survey was recommended to determine the presence or likely absence of roosting bats and an additional dawn survey was carried out following the uncertainty of survey findings during the dusk survey to provide further survey information.

## 1.2 Legislative Background

- 1.2.1 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'). 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.

**1.2.2** The government’s statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species licences 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”.

**1.2.3** 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 European Protected Species licensing is necessary before granting planning permission.

**1.2.4** European Protected Species mitigation licence 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 of a full mitigation licence application.

**1.2.5** Licensable projects affecting small numbers of seven commonly occurring bat species may fall under the remit of the Bat Mitigation Class Licence (WML-CL21). The Class Licence permits ‘Registered Consultants’ to carry out licensable operations on site on behalf of clients following the registration of

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13/09/2019

sites with Natural England at least 15 working days before the work is due to start.

- 1.2.6** Survey data supporting EPS licence applications or the registration of the site under the Bat Mitigation Class Licence (WML-CL21) 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 or site registration.

### **1.3 Site Location and Context**

- 1.3.1** The site is part of the amenity parkland known as 'Woosehill Meadows' to the east of Morrisons supermarket in Woosehill, Wokingham (*OS grid reference: SU 79824 69269*). The three trees are situated in the middle of the site, where a path passes over the brook with T12 and T13 on the eastern side and T14 on the western side of the path.

- 1.3.2** The Emm Brook river runs through Woosehill Meadows 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.

### **1.4 Report Format**

- 1.4.1** The report is set out as follows: Section 2 presents a description of the survey methods; Section 3 summarises the findings of the emergence and re-entry surveys; and Section 4 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.

## **2 SURVEY METHOD**

### **2.1 Emergence and Re-entry Surveys**

**2.1.1** An emergence survey of T12, T13 and T14 was undertaken on the 7<sup>th</sup> August 2019 by two bat surveyors and a re-entry survey was undertaken on the 23<sup>rd</sup> August 2019: one surveyor was situated to the south of the brook, facing T12 and T13 (Location 1); and the second surveyor was situated north of the brook, facing T14 (Location 2).

**2.1.2** The surveys were carried out with Elekon Batlogger M, Echo Meter 3, Echo Meter Touch 2 Pro and Anabat SD2 detectors and the recordings were later analysed using the BatExplorer and Analook computer software. 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.

### **2.2 Survey Constraints**

**2.2.1** 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. dry with air temperatures above 10°C.

### 3 SURVEY FINDINGS

#### 3.1 Emergence Survey – 7<sup>th</sup> August 2019

3.1.1 A common pipistrelle (*Pipistrellus pipistrellus*) bat was seen by surveyor 1 to pass through the canopy of T12 and then seen by surveyor 2 to pass through the multiple stems of T14 but the flight path and behaviour was not typical of an emerging bat and was highly likely to have emerged from a tree further to the southeast. The pass was recorded 15 minutes after sunset and was the first bat of the survey, suggesting it emerged from somewhere close by (refer to plan and raw data in **Appendices 1 & 2**).

3.1.2 The level of bat activity was moderate with four different bat species recorded. Common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*), and long-eared (*Plecotus* sp.) bats were recorded on site. Some of the bats were recorded passing through the site whilst others were foraging around the trees and brook.

#### 3.2 Re-entry Survey – 23<sup>rd</sup> August 2019

3.2.1 No bats were recorded re-entering T12, T13 or T14 during the survey (refer to plan and raw data in **Appendices 1 & 2**). The level of bat activity was much lower in comparison with the levels recorded during the first survey visit. Two common pipistrelle bat passes were recorded by each surveyor.

## **4 DISCUSSION AND RECOMMENDATIONS**

- 4.1.1** A common pipistrelle bat was seen passing through the canopy of T12 and T14 at the start of the emergence survey but did not look to emerge from either tree with a high chance that it emerged from a tree to the southeast. No bats were recorded returning to roost in suitable conditions for bat activity. Due to the presence of a common pipistrelle bat in the canopy at typical emergence time, there is a small risk that bats could be roosting in one of the trees in the future and at the time of the tree felling.
- 4.1.2** A 'soft felling' approach is recommended for the two trees, under the supervision of a licensed ecologist. A detailed toolbox talk will be carried out by a licensed and experienced ecologist to brief the tree climbers on: UK bat species, typical roosting sites/features in trees to look for using photographic examples, the legislation protecting bats and their roosts, signs indicating the presence of bats, and what to do in the unlikely event that bats are found during the course of the work. The soft-felling will involve section cutting the trees following a close-up inspection of the limbs by a tree climber. Each section will be carefully lowered to the ground and inspected by the licensed ecologist on site. If bats or evidence of roosting bats are found during the removal of these trees, a European Protected Species mitigation licence or confirmation of the site's registration under the Bat Mitigation Class Licence CL21 (if applicable) may be required to permit the work to continue lawfully.
- 4.1.3** In order to maintain roosting opportunities for bats in this area of the site, a woodcrete bat box will be installed on a retained tree immediately to the southeast of the felled trees.



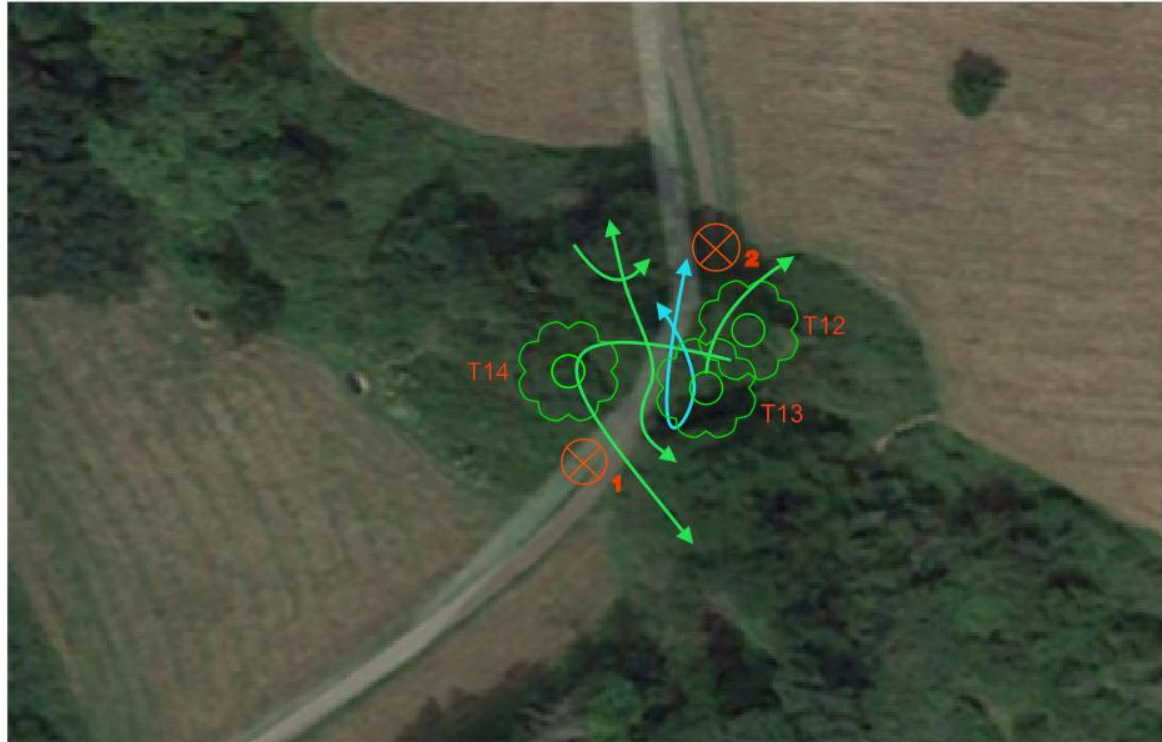
## 5 REFERENCES

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


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



 Surveyor location (n)  
  Surveyed tree  
  Common pipistrelle flight paths  
  *Myotis* sp. flight paths

|           |          |              |  |   |
|-----------|----------|--------------|--|---|
| Drawn by: | Date     | Scale:       | Emm Brook,<br>Woosehill  |  |
| JS        | Aug 2019 | Not to scale | Bat Emergence and Re-entry Survey Findings - 7th August and 23rd August 2019 |   |

214

## APPENDIX 2 – RAW EMERGENCE AND RE-ENTRY SURVEY DATA

### Evening Emergence Survey of Emm Brook Trees , Woosehill – 7<sup>th</sup> August 2019

| <b>Survey date: 07/08/2019</b>                                     |   |  |
|--|---|--|
| <b>Location 1: Facing T12 and T13</b>                              |   |  |
| <b>Surveyor: Conor Watson</b>                                      |   |  |
| <b>Weather conditions: 19c, 5/8 cloud cover, light breeze, dry</b> |   |  |
| <b>Start time: 20:26</b>   | <b>Sunset: 20:41</b>                          | <b>Finish time: 22:11</b>                                      |
| <b>Time</b>  | <b>Species</b>                                | <b>Survey notes</b>  |
| 20:56  | Common pipistrelle                            | Seen passing through T12, faint call                           |
| 20:59  | Common pipistrelle                            | Quiet pass heard not seen                                      |
| 21:02  | Common pipistrelle                            | Foraging   |
| 21:03 –<br>21:15   | Soprano pipistrelle                           | Intermittent but constant foraging until 21:15, heard not seen |
| 21:15  | Common pipistrelle                            | Distant pass heard not seen                                    |
| 21:16  | Common pipistrelle                            | Foraging over the path and between the trees                   |
| 21:17  | Soprano pipistrelle and<br>common pipistrelle | Foraging over the path and between the trees                   |
| 21:18  | Common pipistrelle                            | Foraging heard not seen  |
| 21:22  | Common pipistrelle                            | Pass along path north to south                                 |
| 21:25  | Common pipistrelle                            | Pass heard not seen  |
| 21:31  | Common pipistrelle                            | Pass heard not seen and social calls                           |
| 21:33  | Common pipistrelle                            | Pass along path north to south                                 |
| 21:34  | Common pipistrelle                            | Foraged south to north   |
| 21:34  | Common pipistrelle                            | Low flying pass  |
| 21:36  | Common pipistrelle                            | Pass heard not seen  |
| 21:40  | Common pipistrelle                            | Pass heard not seen  |
| 21:42  | Noctule and common<br>pipistrelle             | Pass heard not seen  |
| 21:43  | Common pipistrelle                            | Foraging near T12  |
| 21:45  | Common pipistrelle                            | Pass heard not seen  |
| 21:46  | Common pipistrelle                            | Pass heard not seen  |
| 21:50  | Common pipistrelle                            | Pass heard not seen  |

| <b>Survey date: 07/08/2019</b>                                     |                          |                                  |
|--|--------------------------|----------------------------------|
| <b>Location 2: Facing T14</b>                                      |                          |                                  |
| <b>Surveyor: Jess Smith</b>  |                          |                                  |
| <b>Weather conditions: 19c, 5/8 cloud cover, light breeze, dry</b> |                          |                                  |
| <b>Start time: 20:26</b>   | <b>Start time: 20:26</b> | <b>Start time: 20:26</b>         |
| <b>Time</b>  | <b>Species</b>           | <b>Survey notes</b>              |
| 20:56  | Common pipistrelle       | Seen foraging in canopy near T14 |
| 20:59  | Common pipistrelle       | Pass heard not seen              |
| 21:02  | Common pipistrelle       | Pass heard not seen              |
| 21:05  | Soprano pipistrelle      | Brief pass heard not seen        |
| 21:17  | Common pipistrelle       | Close foraging heard not seen    |
| 21:23  | Common pipistrelle       | Foraging under canopy            |
| 21:28  | Long-eared               | Foraging under canopy            |
| 21:33  | Common pipistrelle       | Foraging heard not seen          |
| 21:34  | Common pipistrelle       | Foraging heard not seen          |
| 21:36  | Common pipistrelle       | Foraging heard not seen          |
| 21:38  | Common pipistrelle       | Frequent foraging heard not seen |
| 21:42  | Noctule                  | Pass heard not seen              |
| 21:43  | Common pipistrelle       | Foraging heard not seen          |
| 21:45  | Common pipistrelle       | Frequent foraging heard not seen |
| 21:50  | Common pipistrelle       | Pass heard not seen              |
| 22:10  | Common pipistrelle       | Foraging heard not seen          |

**Dawn Re-entry Survey of Emm Brook Trees , Woosehill – 23<sup>rd</sup> August 2019**

| <b>Survey date: 23/08/2019</b>                             |                      |                           |
|--|----------------------|---------------------------|
| <b>Location 1: Facing T12 and T13</b>                      |                      |                           |
| <b>Surveyor: Conor Watson</b>                              |                      |                           |
| <b>Weather conditions: 13c, 0/8 cloud cover, calm, dry</b> |                      |                           |
| <b>Start time: 04:31</b>                                   | <b>Sunrise: 6:01</b> | <b>Finish time: 6:01</b>  |
| <b>Time</b>  | <b>Species</b>       | <b>Survey notes</b>       |
| 4:43   | Soprano pipistrelle  | Brief pass heard not seen |
| 4:45   | Soprano pipistrelle  | Pass heard not seen       |

| <b>Survey date: 23/08/2019</b>                             |                      |                                |
|--|----------------------|--------------------------------|
| <b>Location 2: Facing T14</b>                              |                      |                                |
| <b>Surveyor: Sarah Foot</b>                                |                      |                                |
| <b>Weather conditions: 13c, 0/8 cloud cover, calm, dry</b> |                      |                                |
| <b>Start time: 04:31</b>                                   | <b>Sunrise: 6:01</b> | <b>Finish time: 6:01</b>       |
| <b>Time</b>  | <b>Species</b>       | <b>Survey notes</b>            |
| 04:44  | Soprano pipistrelle  | Very brief pass heard not seen |
| 04:48  | Soprano pipistrelle  | Brief pass heard not seen      |