Bat Activity Survey Report

Wombwell Doveside

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Bats/002

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Contents

1 Introduction

1.1 Background

1.1.1 A bat activity survey was undertaken on the evening of 27 September 2016 at Doveside, near Wombwell on the banks of the River Dove (centred on OS Grid Ref: SE 41212 03893).

1.1.2 The overall aim of the survey was to provide ecological information ahead of a proposal to develop the site for nature conservation purposes. The proposed works will be undertaken by a combination of partners including the Environment Agency, Barnsley Council and the Yorkshire Wildlife Trust (YWT).

1.1.3 These proposed works will extend an area of wetland within the site (from here on known as 'the Site') Dove (for location see **Appendix 2: Figures 1** and **2).**

1.2 Scope of the survey

1.2.1 To provide baseline knowledge of how bats were currently using the Site. In this way future surveys could be undertaken, post completion of works. These could then inform if the ongoing management of the Site was of benefit to bat species.

1.3 Legal Status of Bats

1.3.1 All British bats are protected under the Wildlife & Countryside Act, 1981 (as amended). They are also listed in Schedule 2 of the Conservation (Natural Habitats & c.) Regulations 1994, the domestic implementation of the EU Habitats Directive.

1.3.2 It is therefore an offence to intentionally kill, injure or capture (take) bats. Under the Countryside and Rights of Way Act (2000) it is also an offence to intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.

1.3.3 The implications of the above with relation to the proposals are that where it is necessary during the development of the area to remove trees, buildings or structures in which bats roost, it must first be determined that this work is necessary and permissible, and if so that any necessary licenses are subsequently obtained from Natural England. Licenses will only normally be issued in such cases if Natural England is satisfied that the works are permissible and that appropriate measures are being put into place to mitigate adverse effects.

2 Methodology

2.1 Activity Surveys

2.1.1 The survey undertaken followed standard methodology as recommended in the Bat Conservation Trust *"Bat Surveys for Professional Ecologists - Good Practice Guidelines"* (BCT 2016). The survey began at 30 minutes before sunset (which was at 18.49 hours) and continued until 21.00 hours.

2.1.2 See **Figures 1** and **2** for the location of both surveys.

2.1.3 A transect line covering all areas of interest was agreed prior to the survey. During the activity survey stops were made at three pre-determined points. Here, surveyors waited for twenty minutes and recorded all bat activity, including the direction of movement, the number and type of species identified and the behaviour of the bat (i.e. was it foraging or commuting).

2.1.4 The survey was undertaken by Biodiversity Officers at the Environment Agency. It was led by Andrew Virtue, an experienced bat surveyor with over ten years' experience of undertaking bat emergence and activity surveys (Natural England license number **2015-11167-CLS-CLS).** He was assisted by Erica Adamson, who is registered to use the Environment Agency Organisational Licence for surveying bats. Hand-held *Batbox Duet* Bat Detectors were used for identified bat calls.

3 Results

3.1 Activity Survey

3.1.1 The activity of bats is largely dependant upon the availability of their prey (flying insects). On warm evenings with no rain or wind insects are always active in large numbers, and therefore bat activity is at its highest. Clear, still evenings also allow for excellent visibility, increasing the potential to identify bat movements during a survey. Conditions were considered ideal for survey. There was excellent visibility, with a cloudless sky, no rain and little or no wind. The evening temperature was 14 degrees Celsius.

3.1.2 During the early part of the survey a number of bats were seen travelling south across the Site towards the river. The Phase I habitat survey did not identify any bat roost features from within any of the trees contained within the Site. It is therefore assumed that these bats originated from roosts within buildings to the north of the Site.

3.1.3 At least five Common *pipistrelle* and two Soprano *pipistrelle* bats were either detected or observed foraging, feeding and commuting in the general area of the tree line. Bat activity was highest on the river itself, and lowest within the main body of the Site where only a single Common *pipistrelle* was noted feeding occasionally on the main water body to the west. Bats were also noted within the woodland area to the east of the Site.

3.1.4 The results from both surveys showing all bat activity can be found in the appendices **(Table 1 and Figures 1-2).**

4 Conclusions/Recommendations

4.1 Conclusions

4.1.1 No bat roosts were identified from the survey. No rare or unusual species of bat were encountered during the survey. A number of Common *pipistrelle* and Soprano *pipistrelle* bats were either detected or observed foraging, feeding and commuting in the general area of the tree line.

4.2 Recommendations

4.2.1 A number of *Schwegler* bat boxes should be erected on trees within the Site in order to provide additional bat roosting opportunities in the local area.

4.3 Constraints to the Survey

4.3.1 The survey was undertaken late in the survey year for bats. However, it was still within the acceptable guidelines. In addition, weather conditions were very good for the time of year. It was therefore considered to be a reasonably representative survey for assessing bat use of the Site. No other limitations that would significantly affect the results of the activity survey were encountered.

Appendices

Appendix 1 – Survey Results

Table 1: Summary of Bat Activity Survey

Time	Species/Frequency (kHz)	Activity
19.16	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* observed foraging along tree line at SW corner of Site. Bat was then picked up at SE corner of Site
19.17	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* observed flying south across main body of Site to river
19.18	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* observed foraging along tree line at SW corner of Site. Bat was then picked up at SE corner of Site
19.20	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* observed flying south across main body of Site to river
19.28	Common Pipistrelle 45 (KHz)	1 common pipistrelle detected not seen in SW corner of Site
19.30	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* detected not seen foraging along central tree line
19.40	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* detected not seen foraging along central tree line
19.45	Common Pipistrelle 45 (KHz)	1 common *pipistrelle* detected not seen foraging along general tree line
19.50 – 20.00	Common Pipistrelle 45 (KHz)	1 common pipistrelle detected not seen foraging across water body to west of Site
20.10 – 20.15	Common Pipistrelle 45 (KHz) Soprano Pipistrelle 55 (KHz)	A total of 5 common and soprano pipistrelle bats observed / detected along the River Dove corridor
20.20 – 20.25	Common Pipistrelle 45 (KHz)	Two common pipistrelle observed foraging repeatedly between tree line and water body to east of Site
20.30 – 20.35	Common Pipistrelle 45 (KHz)	Two common pipistrelle detected not seen foraging repeatedly within trees to far east of Site

Appendix 2 – Maps

Figure 1 – Summary of Bat Activity

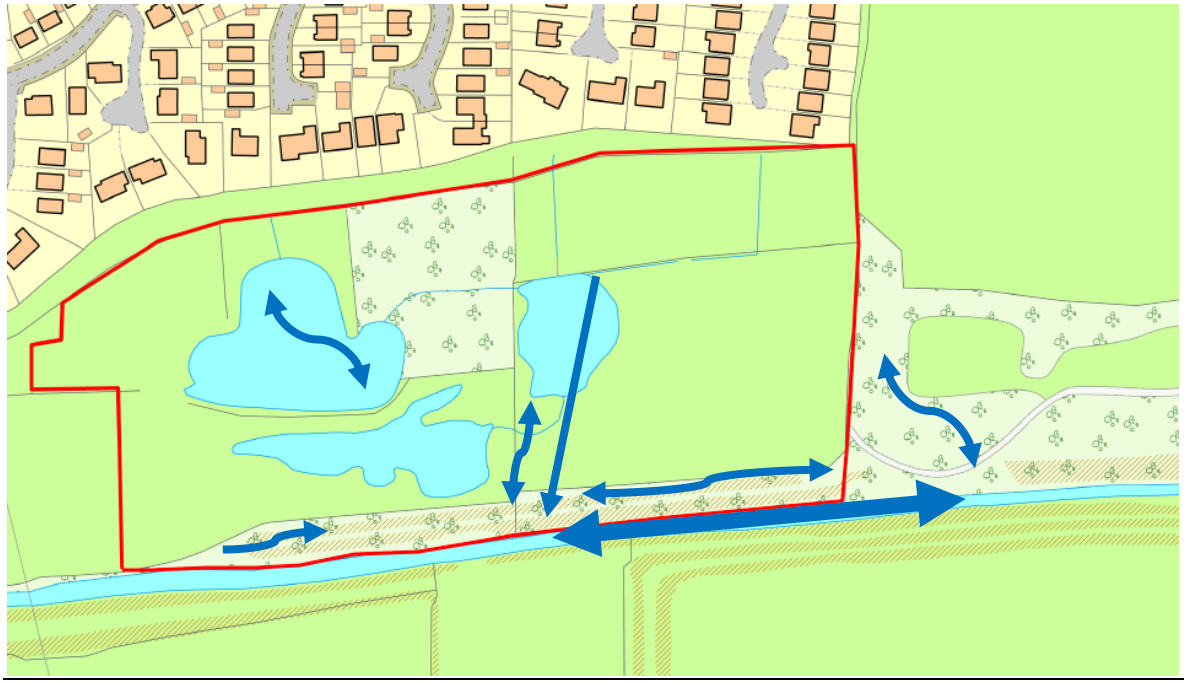
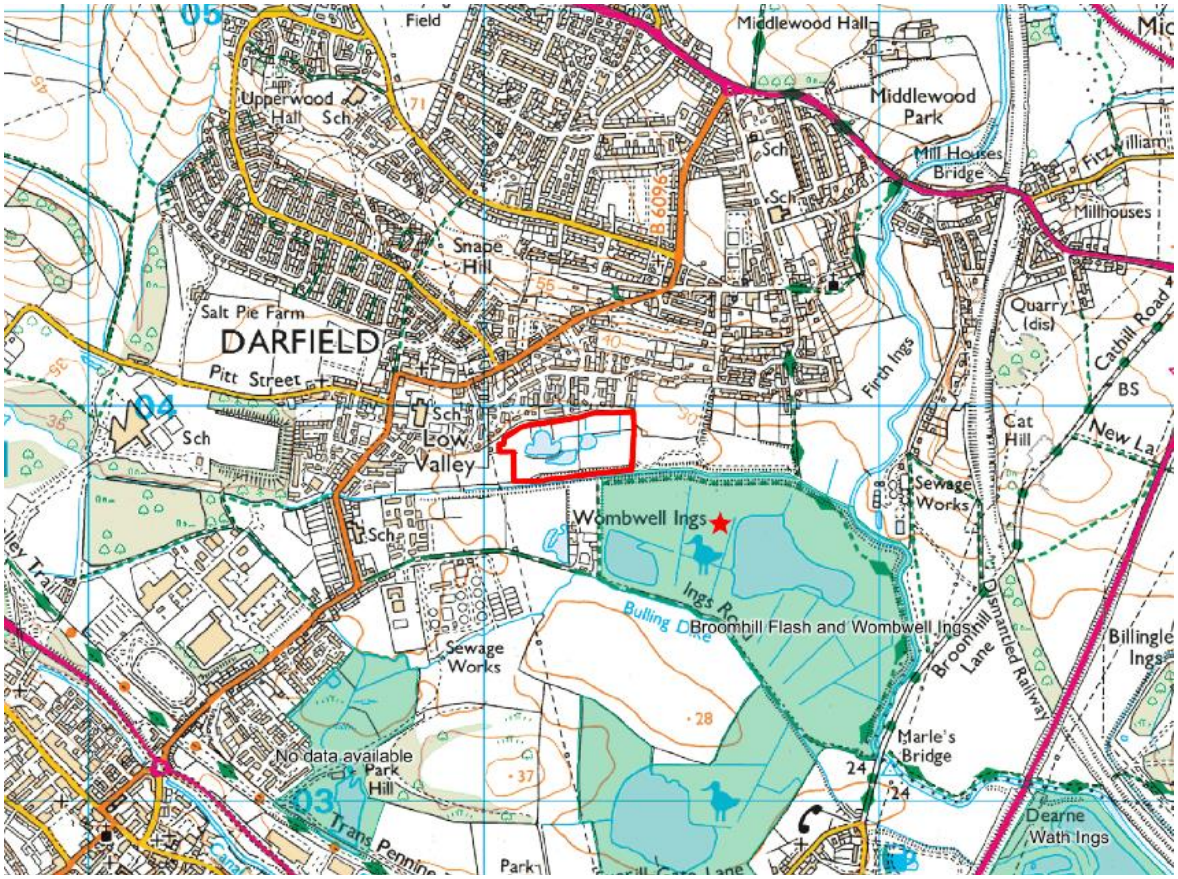


Figure 2 – Aerial Map (1:2,000)

Figure 3 – Wider Landscape & Proximity to LWS (1:14,000)



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