Providing Ecological Solutions

Bolton Upon Dearne STW, Bolton Upon Dearne

Ground Level Bat Scoping Assessment of Trees

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1.1	Draft	J. Emerson	A. Macaulay	N.Wilkinson	17/03/2023

Declaration of Compliance

This Bat Scoping Assessment has been undertaken in accordance with the Bat Conservation Trust *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (3rd Edition, 2016). The information has been prepared and provided in compliance with the CIEEM's Code of Professional Conduct (2013a), British Standard 42020:2013: *Biodiversity: Code of Practice for planning and development*, and CIEEM *Guidelines for Ecological Report Writing* (2017).

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1. INTRODUCTION

1.1. TERMS OF REFERENCE

PBA Applied Ecology Ltd was commissioned by Yorkshire Water Services (YWS) to undertake a Ground Level Bat Scoping Assessment of Trees, at Bolton Upon Dearne STW, Barnsley, South Yorkshire (Figure 1).

Of the UK's 17 resident bat species, many will utilise features within the fabric of trees at some point during their life cycle. Some species such as common and soprano pipistrelle *Pipistrellus pipistrellus* and *P. pygmaeus* roost in crevices; others such as noctules *Nyctalus noctula* prefer larger trunk cavities. Bats are most likely to be present and seen during summer but may be present within trees throughout the year.

All bat species are protected under Section 39 of Conservation of Habitats and Species Regulations 2017 (as amended), which are commonly referred to as the 'Habitats Regulations'. Importantly, the most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019) takes account of the UK's departure from the EU. Bats also receive protection under the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act. Consequently, it is a criminal offence to capture or kill a bat; disturb a bat whilst it is in a place of shelter or rest; or damage or destroy a bat's breeding site or resting place. The breeding sites and resting places of bats are usually known as 'roosts and resting places', where 'resting places' includes, for example, feeding perches where a bat consumes its prey. Bat roosts are protected even when bats are not present. Prosecution could result in imprisonment, unlimited fines, and confiscation of vehicles and equipment used.

Unless stated otherwise, the information provided within this report is valid for a maximum period of 24 months from the date of survey. If works at the site have not progressed by this time another site visit may be required in order to determine any changes in site composition and ecological constraints.

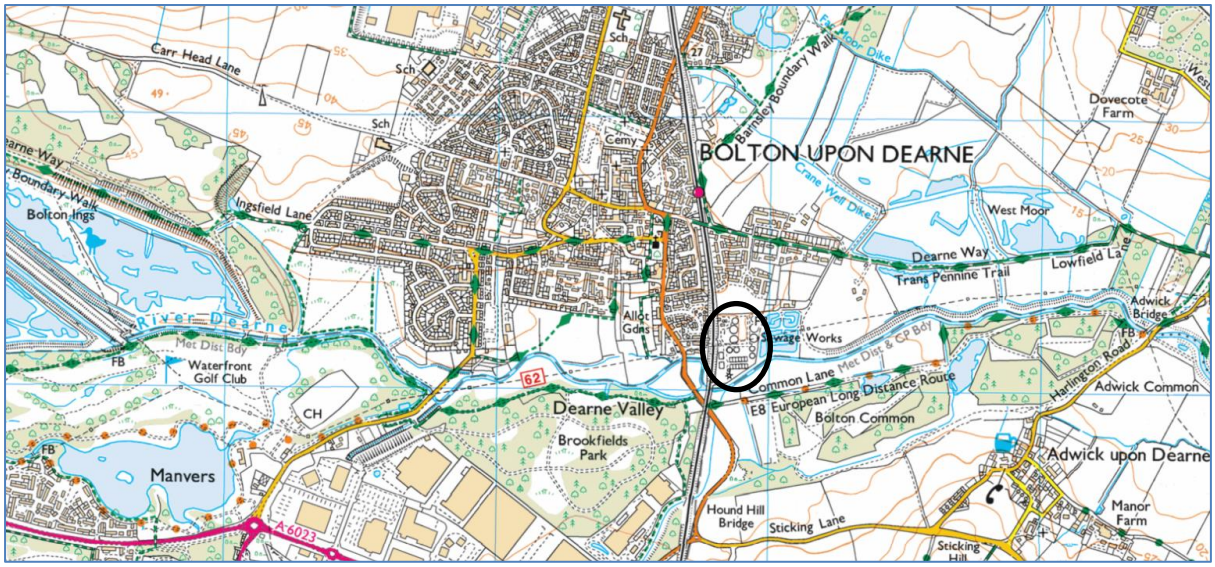

Figure 1: *Site location (Bing Maps, 2023)*

1.2. SITE DESCRIPTION AND CONTEXT

The survey site is located southeast of Bolton Upon Dearne and adjacent to the River Dearne (SE 45889 02224, Figures 1 & 2). The site comprises a sewage treatment works and associated infrastructure.

The wider landscape is dominated by arable farmland, nearby settlements, and nature reserves along the River Dearne corridor. (Figures 1 & 2).

Figure 2: *Site context (Google Maps, 2023)*

1.3. DESCRIPTION OF WORKS

The proposed development is expected to include the installation of two new kiosks (Appendix E).

1.4. PREVIOUS SURVEYS

A Preliminary Ecological Appraisal (PEA) was undertaken on 7th March 2023 (PBA Ecology, 2023).

2. APPROACH

Ground level bat scoping assessments of individual trees located within the STW site (Appendix B) were undertaken to identify features on or within the trees with potential to accommodate roosting bats. The approach adopted follows current Bat Conservation Trust Guidelines (BCT, 2016). The assessments were completed by Joel Emerson BSc (Natural England Class Licence 2022-10966-CL17-BAT).

The exterior of each tree was inspected from ground level to look for features that could be used by bats for roosting. Tree Potential Roost Features (PRFs) include:

- Knotholes or cavities formed from naturally shed branches,
- Woodpecker holes,
- Cracks/splits in stems and branches,
- Hollow cores,
- Partially detached flaking bark,
- Cankers in which cavities have developed,
- Intersecting stems or branches with suitably sized space in between,
- Ivy stems with diameters of over 50 mm concealing suitable roosting space,
- Bird and bat boxes on trees.

Field signs of bat presence such as staining or smoothing around potential entry points, droppings, or accumulated prey debris were also looked for.

The inspection was carried out systematically and consistently all around each tree. All trees were viewed from the ground using binoculars and torches and classified according to their potential to support roosting bats. A standardised scale is used for this purpose as detailed in Table 1 (adopted from BCT Guidelines).

Table 1: *Potential tree roost assessment classifications*

Roost Potential	Description
Negligible/No Potential	Trees with no PRFs
Low Potential	Trees of sufficient size and age to contain bat roosts but with no obvious PRFs seen during the scoping, or features seen with limited roosting potential only.
Moderate Potential	Tree with definite bat potential, though few suitable features, or with potential for use by single bats. For example, trees with few small cracks/crevices, low ivy cover or some deadwood.
High Potential	Trees with significant PRFs. Multiple, highly suitable features capable of supporting several bats or larger roosts.

2.1. PERSONNEL AND SCHEDULE

Table 2: *Ground level bat scoping assessment of trees details*

Date	Start	Finish	Type of Survey	Personnel	Conditions	Equipment
07/03/23	n/a	n/a	Tree inspections	Joel Emerson (Natural England Class Licence 2022-10966-CL17-BAT)	Dry, clear, ~6ºC	Maglite torch, digital camera, binoculars

2.2. SURVEY CONDITIONS AND CONSTRAINTS

Weather conditions at the time of survey were clear and dry with low wind and an ambient temperature of ~6 ºC. There was sufficient access to view all aspects of the trees, and the time of year (autumn/winter) is optimal for surveying through the relative lack of foliage, allowing a clear view of the trees' structural features.

2.1. QUALITY STANDARDS

The survey and reporting process is consistent with: The Bat Conservation Trust Good Practice Guidelines for Bat Surveys, Third Edition (BCT, 2016); Natural England Standing Advice: Bats (NE, 2013); English Nature (now Natural England) Bat Mitigation Guidelines (Mitchell-Jones, 2004); and, The Chartered Institute of Ecology and Environmental Management (CIEEM) Professional Competency Framework: Competencies for Species Surveys: Bats (CIEEM, 2013b).

3. SURVEY RESULTS

3.1. GROUND LEVEL BAT SCOPING ASSESSMENT

Table 3 shows the results for individual and groups of trees. The tree ID reference, species, a description of the potential roost features and an overall assessment of the potential of the tree to support bats are given.

Five trees were surveyed in total, all of which were classed as having negligible bat roost potential.

Table 3: *Tree survey results*

Tree Ref.	Species	Potential Roost Features			Roosting potential (whole tree)
		Description	Approx. height (m)	Aspect	
T1	Ash *Fraxinus excelsior*	No roost features present	5	N/A	Negligible
T2	Ash	No roost features present	7	N/A	Negligible
G1	Three small Ash trees	No roost features present	4	N/A	Negligible

4. Advice and Recommendations

This assessment identified five trees as having negligible potential. Works to the trees with **negligible** bat roost potential may proceed without the need for further survey or a European Protected Species Mitigation Licence.

It is recommended that any vegetation clearance works are undertaken outside of the nesting bird season (March to August inclusive) to avoid disturbing nesting birds. All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), as such it is a criminal offence to intentionally or recklessly kill or injure any wild bird, damage, or destroy the nest of any wild bird while it is in use or under construction, or take or destroy the egg of any wild bird. If any clearance works within the nesting bird season (March to August inclusive) need to be undertaken then a nesting bird check will be required within the 24 hours of undertaking the works.

References

Bat Conservation Trust (BCT). 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines. Bat Conservation Trust, London.

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CIEEM. 2013a. Code of Professional Conduct. Chartered Institute of Ecology and Environmental Management, Winchester.

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

Natural England. 2013. Standing Advice Species Sheet: Bats.

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APPENDICES

Appendix A – Policy and Legislation

Statutory measures are in place to protect habitats and wildlife; these measures range from the global to the local, and variously give protection to whole ecosystems or single species. Included is a summary of legislation and planning policy relating to bat species. The original texts of the relevant legislation should be consulted for further details.

All bat species are protected under Section 39 of Conservation of Habitats and Species Regulations 2017 (as amended), which are commonly referred to as the 'Habitats Regulations'. Importantly, the most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019) take account of the UKs departure from the EU. Bats also receive protection under the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act.

Annex IV of the *Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (EC Habitats Directive) lists animal and plant species of Community interest in need of strict protection; this includes all bat species.

In the UK, the EC Habitats Directive has been transposed into national laws by means of Conservation of Habitats and Species Regulations 2010 (as amended). These are commonly and collectively known as the 'Habitats Regulations' and they give bats, their breeding sites and resting places a high level of protection.

In summary, it is a **criminal offence** to:

⇒ capture or kill a bat;

⇒ disturb a bat whilst in a place of shelter or rest; or

⇒ damage or destroy a bat's breeding site or resting place.

The breeding sites and resting places of bats are usually known as 'roosts and resting places may also include feeding perches where a bat consumes its prey. **Bat roosts are protected even when bats are not present.**

Prosecution could result in imprisonment, unlimited fines and confiscation of vehicles and equipment used.

Article 12 of the Habitats Directive prohibits certain activities in relation to European Protected Species (EPS). Article 16 of the Habitats Directive contains derogations from Article 12. Article 16 is transposed into English law by regulation 53 of the Habitats Regulations which allows licences to be issued under certain circumstances. The effect of these licences is to make an activity that would otherwise be an offence, lawful if carried out in accordance with the provisions of the licence.

An EPS licence may be required for any activity which: (i) is likely to result in the deliberate capture, injury or killing of a bat; (ii) will result in the deliberate disturbance of bats; or (iii) will damage or destroy a breeding site or resting place used by bats. Disturbance of bats includes any disturbance that is likely to: (i) impair their ability to survive, breed, reproduce, nurture their young, or to hibernate; or (ii) significantly affect the local distribution or abundance of the species to which they belong.

A licence can be granted only if the following tests can be met:

1) the consented operation must be for '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) there must be 'no satisfactory alternative'; and,

3) the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their range'.

Local authorities, when exercising their functions, must have regard to the requirements of the Habitats Directive. Planning Authorities are competent authorities and exercise a function in deciding whether to grant planning permission.

The judgement in the case of Morge (FC) (Appellant) v Hampshire County Council [2011] UKSC 2 considered the application of this duty. In that case the Supreme Court concluded that, if the Planning Authority concludes that the carrying out of the development for which permission has been applied for even if it were to be conditioned, would be likely to offend Article 12(1), by for example causing the disturbance of a species with which that Article is concerned, then it must consider the likelihood of a licence being granted.

The licensing authority is Natural England. When considering the likelihood of a licence being granted it may be helpful to view guidance on how Natural England applies the tests listed above when considering planning applications which affect European Protected Species http://publications.naturalengland.org.uk/publication/113030?category=12002 .