



**HILL END ROAD FORMER PUMPING
STATION.**

OS REF: SE 334 093.

BAT SURVEY.

Ref No: 220177.

Date: 24th January 2022.

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1. INTRODUCTION.

1.1. There are plans to submit an application to convert a former pumping station building on Hill End Road, Mapplewell into a dwelling.

1.2. Whitcher Wildlife Ltd was therefore commissioned to carry out a bat survey of the site to establish whether there are any issues that may affect the proposed works.

1.3. This survey was carried out on 24th January 2022 and this report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendix I of this report provides additional information on bats and the protection afforded to them and is designed to assist the reader in understanding the contents of this report.

2. SURVEY METHODOLOGY.

2.1. The buildings were thoroughly checked internally and externally for potential bat roosting sites by looking for the following signs: -

- * Holes, cracks or crevices.
- * Bat droppings.
- * Prey remains.
- * Staining on external walls.

2.2. Unless otherwise stated, all lofts were accessed and inspected using a high-powered torch and where necessary an endoscope.

2.3. A thorough external inspection was carried out from ground level for any gaps or openings in the roof and ridge tiles, behind soffits and fascia's and in the walls of the structure for suitable roost access points and field signs to indicate possible use by bats.

2.4. All window cills, walls and the ground around the structure were checked for signs of bat droppings or staining to indicate possible use by bats. Where necessary, ladders were utilised to gain access within the limits of health and safety. Any access constraints encountered are outlined within the following report.

2.5. All survey work was carried out in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)*, with an assessment of the buildings suitability for roosting bats made in accordance with these guidelines.

2.8. This survey was carried out by Ruth Georgiou BSc MCIEEM. Since 2004 Ruth has had experience in a professional capacity as a Wildlife Consultant carrying out ecology surveys and phase I habitat surveys. As a full member of CIEEM Ruth is subject to peer review on an annual basis. Ruth holds Natural England survey licences in respect of bats, great crested newts and white clawed crayfish and has held her own or has been named ecologist on site specific licences for badgers, great crested newts and bats. She also holds a degree in Environmental Science (BSc) and has successfully completed a number of courses run by CIEEM, BCT and FSC in the relative protected species, carrying out phase I habitat surveys and BREEAM assessments.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search was carried out with the South Yorkshire Bat Group for records of bats within 2km of the survey area.

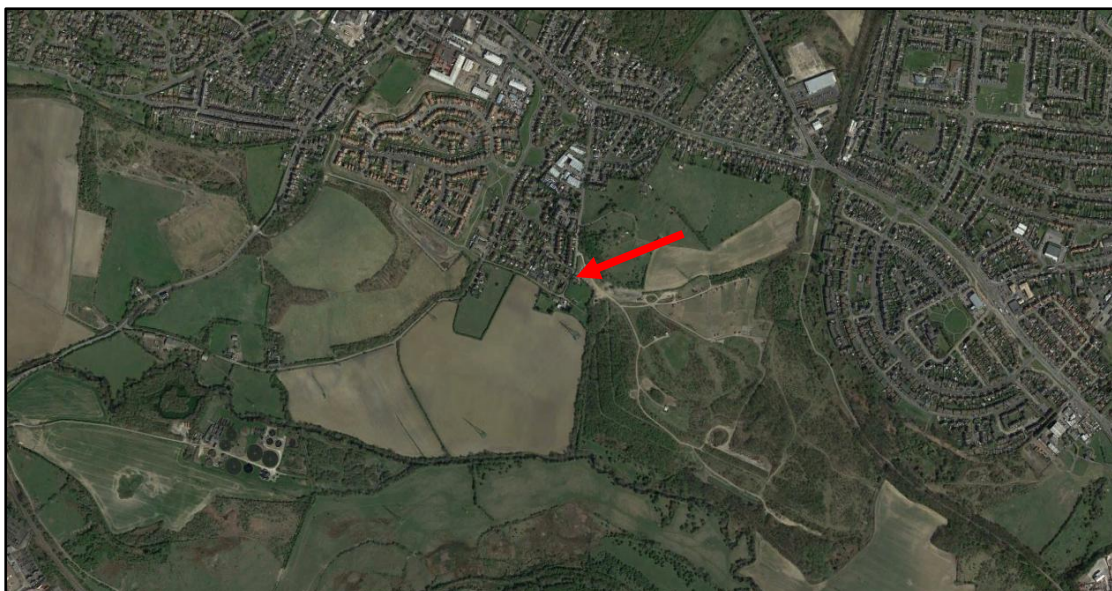
3.1.2. The results show there are fifty four records in the area of the following species: Pipistrelle species, Daubentons, Noctule and Leislars bats. The closest confirmed roost record is a Daubentons bat roost located 1.2km away.

3.1.3. A copy of the data search results can be provided to the client upon request.

3.2. Site Description.

3.2.1. The site is located in a semi-rural setting on the edge of Mapplewell, surrounded by residential areas, paddocks and a former mining tip that has generated into scrub and woodland. There are some occasional tree lines and hedgerows in the area, with open water and woodland habitats close by. The River Dearne flows across the landscape approximately 450m south of the survey area.

3.2.2. The aerial map below shows the location of the survey area indicated by the red arrow, and the surrounding landscape.



3.2.3. The survey area comprises a former Yorkshire Water pumping station that is now used for storing equipment. These are shown in the aerial map below.



3.3. Daytime Survey Results.

3.3.1. The former pumping house is a small rectangular shaped building constructed from cavity brick walls and a flat roof with two large skylights and brick parapets around the top of the building on all sides. There is one set of double doors on the eastern elevation and two sealed windows.

3.3.2. Photographs to show the general nature of the external of the former pumping station.



3.3.3. The building is very well sealed on the external. The brickwork is in good condition, there is the occasional gap at the very top of the parapet but these do not

lead into the wall cavities as there is a damp course between the parapets and the walls of the building. There are two redundant wall fittings from some old external lights on the north elevation wall. These have some small gaps next to them but these are not ideal features for bats and there is no evidence of these being utilised by bats.

3.3.4. Internally the building is open throughout with a plasterboard ceiling and large beams supporting the roof. The walls are exposed brickwork. The large skylights light up the most part of the internal of the building. The walls and ceilings are well sealed with no access for bats inside the building.

3.3.5. The photographs below show the general nature of the internal of the building.



3.3.6. As the building is in very good condition with no suitable potential roosting opportunities and no access for bats inside the building and no evidence of roosting bats found, the building is assessed to provide **negligible** potential for roosting bats.

3.3.7. The building does not provide any foraging potential for bats. There is moderate connectivity to and from the building, via hedgerow corridors.

4. EVALUATION OF FINDINGS.

4.1. The former pumping station building was assessed to provide **negligible** potential for roosting bats. Therefore, the proposed works to convert the building will have no impact on roosting bats.

4.2. The building does not provide any potential for foraging for bats therefore the proposed conversion of the building will not result in any loss or fragmentation of bat foraging habitat.

5. RECOMMENDATIONS.

5.1. No bat roosts were identified present, and the building provides negligible potential for roosting bats therefore there is no requirement for any further bat surveys to be carried out of the building.

5.2. To satisfy the NPPF requirements, it is recommended that an integrated bat box is provided in the wall of the new dwelling. This should ideally be a Habibat Bat Box – Custom Facing as shown below, or similar. This should be placed at least 3m above ground level and away from any artificial light. It should also not be positioned above any doors or windows to avoid a build up of droppings on cills.



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Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 25 th January 2022.

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Appendix I. BAT INFORMATION.

Ecology

There are currently 18 species of bat residing in Britain, 17 of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

Surveys

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window cills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

Legislation

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species Regulations (2010) and EUROBATS agreement. Numerous species are

also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SAC's) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number of bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.