

**BAT SURVEY OF A SEWAGE PUMPING STATION
BUILDING OFF TUXFORD ROAD IN BOUGHTON
NOTTINGHAMSHIRE**

A report to:

Severn Trent Water Limited

By:

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1. INTRODUCTION

- 1.1 This report has been prepared by EMEC Ecology for Severn Trent Water Limited. It provides the details of a bat survey of a sewage pumping station (SPS) off Tuxford Road, Boughton, Nottinghamshire (grid reference SK 68030 68185) where engineering works are proposed. The survey was commissioned to find out whether the proposed works would affect protected species, specifically bats.
- 1.2 All species of British bat and their roosts are protected under British law by the Wildlife and Countryside Act (WCA) 1981 (as amended), and bats are classified as European Protected Species (EPS) under The Conservation of Habitats and Species Regulations 2010 (as amended). This makes it an offence to kill, injure or disturb a bat and to destroy any place used for rest or shelter by a bat. The Countryside and Rights of Way (CRoW) Act 2000 strengthens protection given by the WCA and covers 'reckless' damage or disturbance to a bat roost. Breaches of the CRoW Act may result in a fine of up to £5000 or up to six months imprisonment.
- 1.3 Development work can only be permitted to affect a bat roost under an EPS licence from Natural England. Licences in respect of EPS affected by development can be granted under Regulation 44(2)(e) of The Conservation of Habitats and Species Regulations 2010 (as amended), for the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of social or economic nature and beneficial consequences of primary importance for the environment.
- 1.4 Under The Conservation of Habitats and Species Regulations 2010 (as amended) licences can only be issued if Natural England are satisfied that:
- There is no satisfactory alternative; and
 - The action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.
- 1.5 Natural England aim to process licence applications within 30 working days of receipt.

2. SITE DESCRIPTION

2.1 General

The site was previously surveyed by EMEC Ecology in 2012 (EMEC 2012¹). This survey recommended bat activity surveys of the building. The site location is shown in **Appendix 1** and the SPS is shown in the below photograph. All dimensions given are approximate.

2.2 SPS Building

The single storey brick building (5m x 5m) has a clay tile hipped roof and is 2.5m to the ridge. The brickwork is in good condition, with no gaps or cracks apparent. However, the roof is in poorer condition, with a number of displaced tiles (especially along the hip lines) providing gaps and crevices with potential for bat-use. The eaves are 'boxed' although no potential access points for bats were apparent.

Views of the SPS Building



2.3 Surrounding Habitat

The building is situated within a small fenced area of hardstanding and rough grassland/tall ruderal vegetation. There is a hedge on the western side and the surroundings comprise of arable fields on the edge of Boughton.

¹ EMEC Ecology August 2012 *Proposed Works at the Sewage Pumping Station off Tuxford Road in Boughton, Nottinghamshire* A Report under Contract to Severn Trent Water

3. SURVEY METHODOLOGY

3.1 Daytime Bat Survey

The building exterior was surveyed for the following signs of bats: droppings, feeding remains, scratch marks, urine stains and actual sightings, as well as potential access points and roost sites such as holes, cracks and crevices.

3.2 Bat Activity Survey

EMEC Ecology carried out two evening bat emergence surveys. The surveyors used 'Anabat' and heterodyne bat detectors for the duration of the surveys.

3.3 Nesting Bird Survey

The building exterior was also searched for evidence of bird nests.

3.4 Survey Details

EMEC Ecology carried out the two bat activity surveys on the evenings of 22nd May 2013 and 19th June 2013.

3.5 Survey Personnel

The first activity survey was carried out by Sarah Love BSc MCIEEM AIEMA (Licence number CLS02619) assisted by Will Sheppard BSc (Hons).

The second activity survey was carried out by Sean Gallagher MSc MCIEEM (Licence number 2012 3508) assisted by Robert Melrose Dip.Ag.

4. SURVEY RESULTS

4.1 Evening Emergence Surveys

4.1.1 22nd May 2013

On the first evening emergence survey, conditions were cool (9°C at dusk), dry and clear with a light breeze. Sunset was at 9.07pm. Dusk was taken to be at 9.36pm when light levels had fallen to 50Lux. The survey continued until an hour after dusk at 10.36pm.

No bats were recorded emerging from the building during the survey.

Bat activity was low, with only a single common pipistrelle bat (*Pipistrellus pipistrellus*) detected faintly at 10.21pm. The bat was foraging to the west of the site and being detected 45 minutes after dusk, would have emerged from a roost some distance away.

4.1.2 19th June 2013

On the second evening emergence survey, conditions were warm (17°C at dusk), dry and still with a lightly overcast sky, clearing as the survey progressed. Sunset was at 9.35pm. Dusk was taken to be at 9.57pm when light levels had fallen to 50Lux. The survey continued until an hour after dusk at 10.57pm.

No bats were recorded emerging from the building during the survey.

Common pipistrelle bat activity was low, similar to the first survey. The first bat detected was foraging along the western hedge at 10.12pm (15 minutes after dusk). Another bat (or possibly the same bat) was detected at 10.15pm.

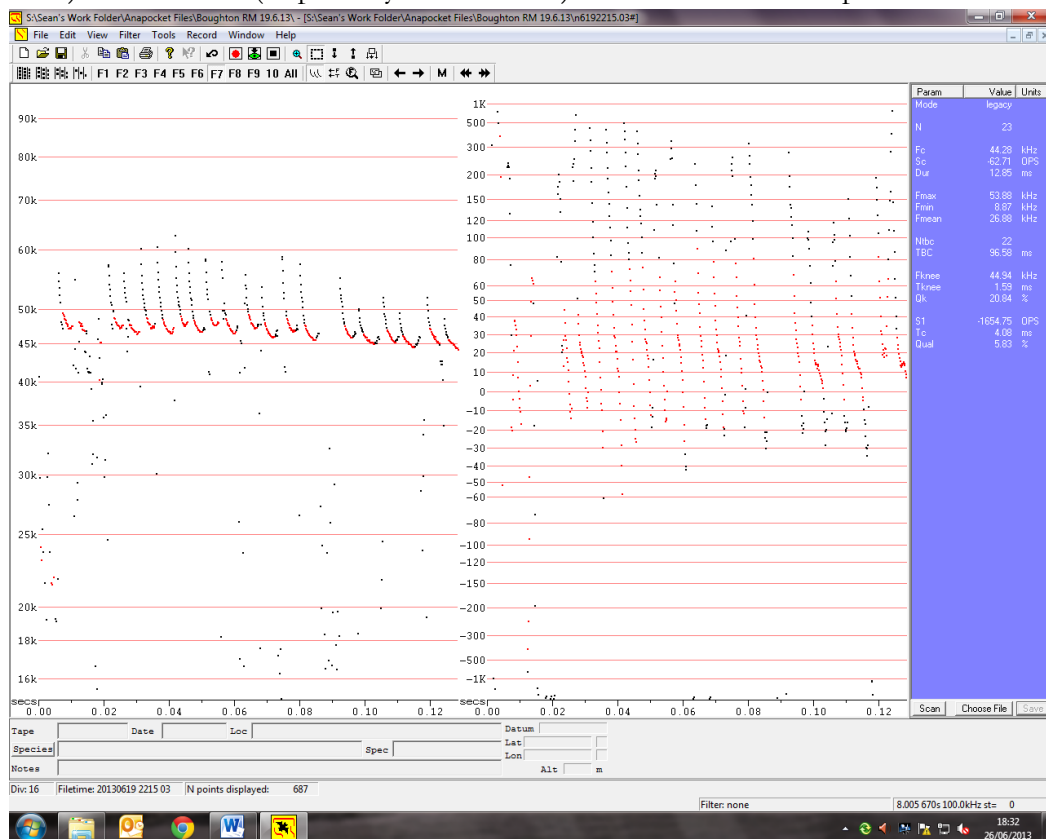


Figure 1: Common Pipistrelle Bat Detected at 10.15pm

Noctule bats (*Nyctalus noctua*) were also detected foraging high overhead at 10.32pm, 10.41pm, 10.42pm, 10.46pm and 10.47pm.

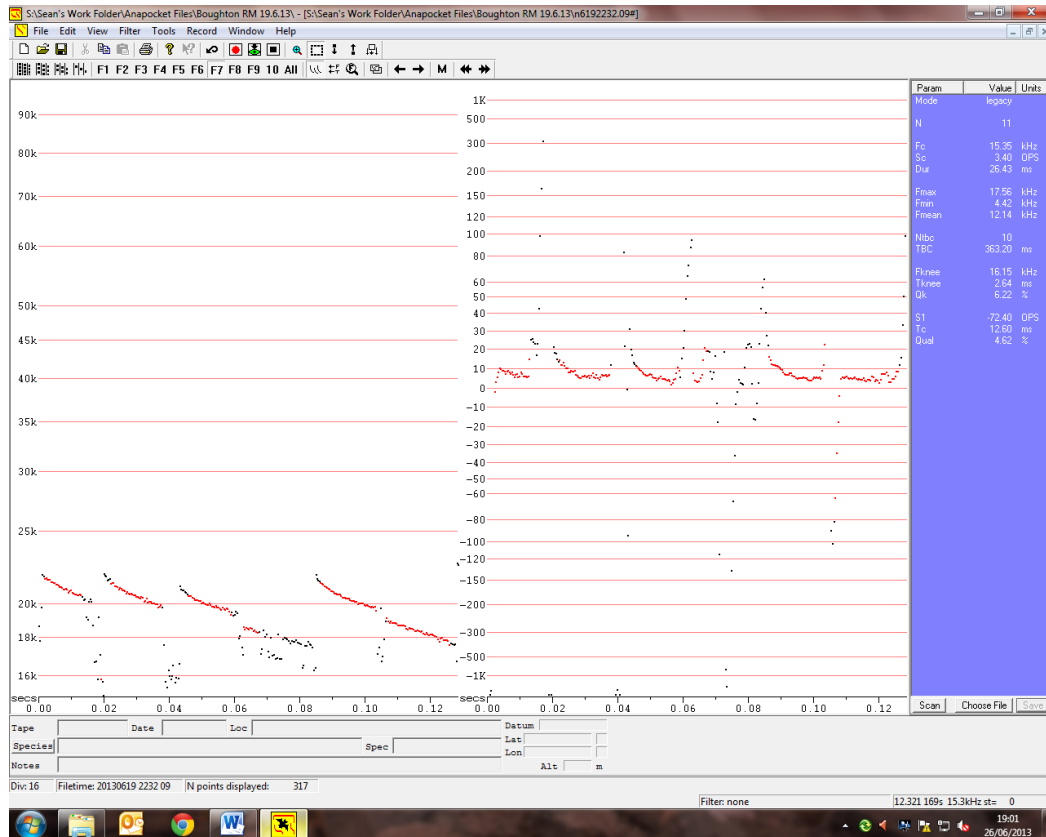


Figure 1: *Noctule Bat Detected at 10.32pm*

4.2 Nesting Bird Survey

No evidence of breeding birds was found and the gaps beneath the hip tiles did not appear to provide suitable nesting habitat.

5. EVALUATION & MITIGATION RECOMMENDATIONS

5.1 Bats

As no evidence of roosting bats was found and no bats were recorded emerging from the SPS building during either of the two evening emergence surveys, it is considered that no bat roosts are currently present. Therefore, the proposed works can proceed without any further survey work or mitigation. Also a Natural England European Protected Species (EPS) Licence (Bats) **will not be required**.

In the extremely unlikely event of a bat(s) being found during this or any other works, the procedure as outlined in **Appendix 2** should be followed.

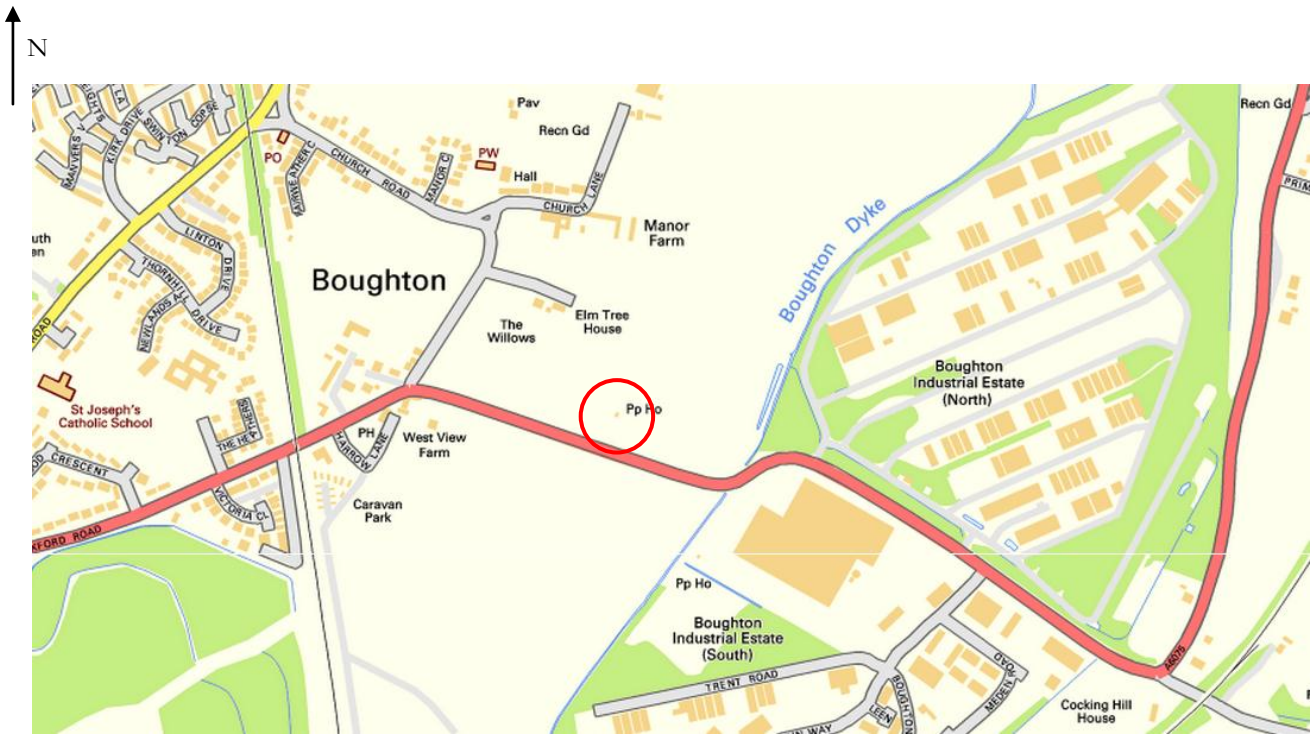
As bats can change roosting sites frequently and throughout the year, including in winter, the negative result of the survey should only be considered reliable for a short period of time.

5.2 Nesting Birds

No birds were recorded nesting within the building and the available habitat appeared unsuitable. Therefore works should not be constrained by the bird breeding season, which runs from March to September (inclusive). If the work commences during the bird-breeding season then in the extremely unlikely event of finding an active bird nest, work must stop and all young birds allowed to fledge.

All birds are protected under the Wildlife and Countryside Act 1981 (as amended) whilst breeding. This legislation protects nests, eggs and unfledged young from damage, or destruction.

APPENDIX 1: SITE LOCATION



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APPENDIX 2: PROCEDURE TO FOLLOW IF BATS ARE DISCOVERED DURING WORKS

- If at any point during the works bats are discovered, contractors should stop work immediately and telephone EMEC Ecology on 0115 964 4828.
- EMEC Ecology will either provide a licensed bat worker to the site or provide a member of staff who will liaise directly with Natural England. Actions will then be taken following advice given by Natural England. This may include removal of bats, but only where direct written or verbal permission is gained from Natural England.
- Only when Natural England is satisfied that the risk to bats is ceased will works recommence.
- Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then it is likely that works will only be able to proceed under a development licence from Natural England.
- If a bat is found under a tile or any other aperture, works will stop immediately (as above). If the bat does not voluntarily fly out, then the aperture will be carefully covered over to protect the bat(s) from the elements, leaving a small gap for the bat to escape voluntarily. Further advice will then be sought from Natural England (as above). Any covering should be free from grease or other contaminants, and should not be fibreglass-based materials.
- Avoid handling bats. Bats should **not** be handled with bare hands. If a decision is made to handle a bat (e.g. for good reason in the case of an injured bat or a bat in 'harms way') then gloves **must** be worn to avoid being bitten. Any injured bats could be placed in a secure ventilated box (e.g. cardboard box) by the contractor for the bat's protection whilst awaiting the arrival of the Batworker.
- **NB** - If during the course of works anyone is bitten by a bat then the area of the bite should be washed immediately with soap and water and medical advice sought.

QUALITY ASSURANCE:

TITLE: Bat Survey of a Sewage Pumping Station (SPS) Building off Tuxford Road in Boughton, Nottinghamshire

SUBMITTED TO: Severn Trent Water Ltd

ISSUE AND REVISION RECORD:

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For Data Protection

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