



**1, TIVY DALE DRIVE, CAWTHORNE,  
SOUTH YORKSHIRE**

**OS REF: SE 28097 07801**

**PRELIMINARY ROOST ASSESSMENT AND  
BAT SURVEY.**

**Ref No: 230684**

**Date: 25<sup>th</sup> August 2023.**

## **TABLE OF CONTENTS.**

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|                                     | Page Number |
|-------------------------------------|-------------|
| <b>1. INTRODUCTION.</b>             | <b>3</b>    |
| <b>2. SURVEY METHODOLOGY.</b>       | <b>4</b>    |
| <b>3. SURVEY RESULTS.</b>           | <b>6</b>    |
| <b>4. EVALUATION OF FINDINGS.</b>   | <b>12</b>   |
| <b>5. RECOMMENDATIONS.</b>          | <b>13</b>   |
| <b>6. REFERENCES.</b>               | <b>14</b>   |
| <b>Appendix I. BAT INFORMATION.</b> | <b>15</b>   |
| <b>Tool Box Talk – Bats.</b>        | <b>17</b>   |

# **1. INTRODUCTION.**

1.1. Mr Hamer has planned the demolition of the current residential building at 1, Tivy Dale Drive, Cawthorne, South Yorkshire, and the building of a new residential dwelling over the footprint.

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. A Preliminary Roost Assessment was carried out on 18<sup>th</sup> July 2023 and that assessed the building to have a low potential for roosting bats. Therefore, a dusk emergence survey was carried out on 15<sup>th</sup> August 2023. This report outlines the findings of both surveys 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.

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## 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 (3<sup>rd</sup> edition)*, with an assessment of the buildings suitability for roosting bats made in accordance with these guidelines.

2.6. The subsequent dusk emergence survey was also conducted in accordance with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edition)*. It was conducted by a sufficient number of surveyors to cover all areas of roosting potential, in suitable weather conditions from fifteen minutes before sunset to at least an hour and half after.

2.7. All surveyors were equipped with Batbox Duet bat detectors, or similar. The use of static recording devices such as Anabat SD2's and video cameras with infrared lights were also utilised where appropriate.

2.8. This survey was carried out by Fern Oscroft BSc, under the supervision and license of Derek Whitcher (see below). Fern has four years' experience in the environmental sector, has worked professionally as an ecologist since 2020 and is a Qualifying member of CIEEM, meaning she is committed to continued professional development. Fern has experience in a range of wildlife surveys including bats, great crested newts, nesting bird surveys, Preliminary Ecological Assessments, Phase 1 Habitat Survey, and Biodiversity Net Gain. Fern is currently working towards level 1 bat and great crested newt survey licenses.

2.9. The initial survey was supervised and undertaken under the license of Derek Whitcher who also led the dusk emergence survey. Derek Whitcher has over twenty years' experience of surveying for wildlife and has run his own wildlife consultancy since 1998. He has extensive experience of a wide variety of survey techniques for a variety of species of protected wildlife supplemented by attendance on a wide range of training courses through CIEEM, FSC and BCT. As a member of CIEEM he is committed to continuous professional development, a continual process of learning and career development, a condition of CIEEM membership. He holds current Natural England, CCW and NRW survey licences for bat, great crested newt and white clawed crayfish.

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### 3. SURVEY RESULTS.

#### 3.1. Data Search Results.

3.1.1. A data search request was sent to South Yorkshire Bat Group (SYBG) to obtain records of bat records within 2km of the survey location.

3.1.2. SYBG reported seven roosts within 2km of the surveyed area. Species identified within this range included common pipistrelle, soprano pipistrelle, brown long-eared (BLE), and *Myotis* sp. including Leisler's, Daubenton's, and Whiskered.

3.1.3. The nearest roost was on Tivy Dale. This roost was recorded in 2021 and was reported to have Common Pipistrelle, BLE, and Whiskered bats in day roosts, as well as a possible Brown Long-eared bat maternity roost.

3.1.4. There were three roosts identified within Cannon Hall Country Park, to the northwest of the surveyed area. In 2016, a Common Pipistrelle roost was identified within a Chestnut tree, 941m from the surveyed area. In 2019, a BLE was found roosting in a deer shed 976m northwest of the surveyed area and a Pipistrelle roost was found in a bat box 1.1km northwest of the surveyed area.

#### 3.2. Site Description.

3.2.1. The site was located to the northern end of Tivy Dale Drive. The current landowners propose to demolish the existing building and replace it with a new residential dwelling on top of the footprint.

3.2.2. The photograph below shows the northeastern elevation of the building.



3.2.3. The aerial photograph below shows the location of the surveyed area, outlined in red, and the immediate surrounding area.



3.2.4. The surrounding area comprised residential dwellings with lines of trees through the gardens, connecting the residential area to small woodland blocks and arable fields with hedgerow and treelines.

### **3.3. Preliminary Roost Assessment Results.**

3.3.1. The building has cavity walls, constructed of brick and mortar. The brickwork was in a good state of repair with no gaps or missing bricks. The building had PVC windows, fascia and soffit boards. The main building was conjoined with the garage by a small flat-roofed porch, with PVC and glass door and bitumen felt roofing.



3.3.2. The garage building was to the southeast of the main building and was also built of brick and mortar, with PVC windows, fascia and soffit boards.



3.3.3 The roof of the main building and the garage were pitched roofs, covered with interlocking tiles and ridge tiles. There were no missing tiles noted during the survey, although there were gaps beneath the pantiles and some of the ridge tiles and there were some lifted pantiles.



3.3.4. Internally, the loft space had a rafter and purlin structure, with a woven fabric liner beneath the tiles. There were no gaps in the roof liner through which daylight could be seen. There was rockwool insulation on the floor of the loft space, between the joists and some areas of the loft were fully boarded with no field signs found.



3.3.5. The building was assessed to have ‘Low’ potential for roosting bats, in line with Bat Conservation Trusts “Good Practice Guidelines” due to the lifted tiles and gaps beneath the tiles that provide opportunities for individual, crevice dwelling bats to roost.

3.3.6. A comprehensive assessment of the bat foraging habitat on the site was undertaken during this daytime survey. The site provides ‘Moderate’ habitat for foraging bats due to the treelines and hedgerow surrounding the site. There are multiple large trees within the surveyed area that may also form part of flight lines important for bats navigating through the landscape.

3.3.7. There were several large oak trees within the garden of the property that also held ‘low’ potential for roosting bats. These trees could not be fully assessed from the ground and are of a size and age where they may be concealing features suitable for bats.



### **3.4. Dusk Emergence Survey Results.**

3.4.1. A dusk emergence survey of the buildings was carried out by two surveyors on the evening of 15<sup>th</sup> August 2023. One surveyor holds a current Natural England licence for surveying bats and the other is an experienced bat surveyor.

3.4.2. Each surveyor was equipped with a Batbox Duet detector and a radio for communications. In addition, a static Anabat recorder was deployed adjacent to each surveyor to record bat activity for subsequent analysis using Analook software.

3.4.3. The positions of the surveyors and the static Anabats are shown on the aerial photograph below where S is a surveyor.



3.4.4. The evening was overcast with a light to moderate wind blowing at 11 mph from the east, 1 to 2 on the BWS. The temperature was 17°C at 20:15 and sunset was at 20:30. The survey started at 20:15 and ended at 21:45.

3.4.5. The following are the observations of the surveyor.

3.4.5.1. Surveyor 1.

21:02. Common Pipistrelle passed over the site east to west.

21:09. Common Pipistrelle from the west, foraged over the site and returned.

21:14. Common Pipistrelle from the west, circled over the front yard foraging and then returned.

3.4.5.2. Surveyor 2.

20:56 to 21:45. Continuous Common Pipistrelle foraging over the rear gardens and around the oak trees throughout.

3.4.5.3. The Anabat recordings confirmed the findings of the surveyors.

3.4.5.4. No bats emerged from the bungalow on site.

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## 4. EVALUATION OF FINDINGS.

4.1. There were no bat roosts or bat field signs identified within the building during the Preliminary Roost Assessment but, as there were opportunities for crevice-roosting bats, the building was determined to have **‘Low’ potential** for roosting bats, in line with Bat Conservation Trust “Good Practice Guidelines”.

4.2. During the subsequent dusk emergence survey, no bats were found to be roosting in the buildings on site. Therefore, demolition of the existing buildings will have no negative impact on roosting bats.

4.3. There were several mature trees within the garden the had the potential to provide roosting opportunities for bats. These held **‘Low’ potential** due to have few features to support single bats, and their size and maturity meaning they could conceal features in the upper canopy suitable for bats. Therefore, if these trees are removed as part of the works, this could have a **high impact** on bats roosting in trees.

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## 5. RECOMMENDATIONS.

5.1. As no bats were found to be roosting in the buildings on the site, no further surveys are recommended and there is no requirement for a mitigation strategy or for a Natural England licence in connection with the proposed works.

5.2. It is recommended that the mature trees within the garden area are retained to continue to provide potential roosting opportunities and commuting and foraging opportunities for bats.

5.3. In line with the National Planning Policy Framework, there will be a requirement to provide biodiversity enhancements that are above and beyond any mitigation measures that are implemented. It is recommended that these are provided in the form of integrated bat boxes or bat bricks.

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| Prepared by:                |                                     |
| Fern Oscroft-Crompton. BSc. | Date: 25 <sup>th</sup> August 2023. |

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|-----------------------------------|-------------------------------------|
| Checked by:                       |                                     |
| Derek Whitcher, BSc, MCIEEM, MCMI | Date: 25 <sup>th</sup> August 2023. |

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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.

## Toolbox Talk: Bats

# Whitcher Wildlife Ltd

## Ecological Consultants



18 species of bat have been recorded in Britain, 17 of which are known to breed here.

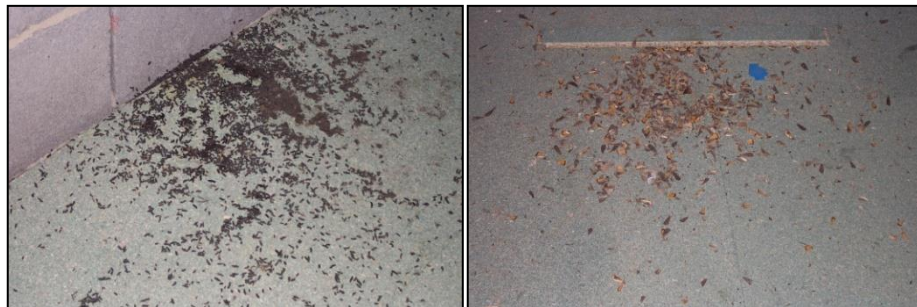
### Identification.

Some species can be extremely difficult to identify in the hand and even more so in flight.

Species such as the Brown Long Eared bat pictured above can be more easily identified in the hand. Whereas, the Common Pipistrelle and Soprano Pipistrelle are more difficult to identify.



Bats are more easily identified by field signs such as droppings or feeding remains.



### Habitat.

Bats are highly specialised creatures and require a relatively narrow range of suitable conditions in order to sustain a viable population. Bats require an abundant supply of flying insect food in places where they can easily be caught and they need safe and reliable roosting sites, particularly during breeding and hibernation.

Bats are heavily dependent on buildings and trees for their roost sites and therefore extremely susceptible to disturbance from human activities. Development schemes can also isolate bat populations and sever roost sites from favoured feeding areas by removing hedgerows or other features used as commuting routes.

Bats are susceptible to disturbance and have been known to abandon roost sites after instances of disturbance. The effects of disturbance are more pronounced at different times of year. Serious disturbance during breeding can result in the breeding females being killed or the abandonment and subsequent starvation of dependant young. Repeated disturbance during winter hibernation can result in the death of adult animals from starvation.

The level of protection afforded to bats in the UK and European legislation reflects the fact that it is now generally accepted that bats have declined substantially, maybe by as much as 60%, over recent years. Most species are declining and vulnerable with all species being protected.

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 occasionally the roofs of buildings.

Certain species, particularly Pipistrelle, can quickly adapt to manmade structures and will readily use these to roost and to rear their young.

### Legislation.

Bats and their roosts are fully protected at all times (whether the bats are currently present or not). This protection comes from the Wildlife & Countryside Act 1981 (updated by the Countryside Rights of Way Act 2000) and the Habitats Regulations 1994. Under this legislation it is an offence to intentionally or recklessly kill, injure, capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

Under the Habitats Regulations, where bats may be affected by development proposals, a licence is required from Natural England. Natural England's published guidelines on the licence procedure indicate that if, on the basis of survey information and specialist knowledge of the species concerned, the proposed activity is reasonably likely to result in an offence then a licence is required. If, on the other hand the proposed activity is reasonably unlikely to result in an offence, then a licence is not required.

If bats or bat field signs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at [info@whitcher-wildlife.co.uk](mailto:info@whitcher-wildlife.co.uk)