



**HEALD HEAD COTTAGE, CAWTHORNE,
BARNSELY**

OS REF: SE 25682 07207.

DAYTIME BAT SURVEY.

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1. INTRODUCTION.

1.1. There are plans to demolish the existing Heald Head cottage and construct a new building in its place.

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

1.3. The initial daytime was carried out on 8th July 2021. This report outlines the findings of this 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 on 23rd June 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.

2.6. The survey was undertaken by Ashley Reaney.

2.7. Ashley has had experience in a professional capacity as an Assistant Ecologist focusing primarily on survey work for birds, protected species and Phase 1 Habitat surveys. He has also successfully completed numerous courses run by CIEEM, BCT and FSC regarding protected species and in carrying out Phase 1 Habitat surveys. Ashley joined Whitcher Wildlife Ltd in June 2021 as an Ecological Consultant.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A desktop data search has been requested from the Barnsley Record Centre for records of bats and bat roosts within 2km of the survey area.

3.1.2. The data search returned a large Pipistrelle roost of 100+ individuals in 2010 approximately 2km north-east of the survey site and 82 individuals of an unknown bat species 1.3km south-west of the survey area.

3.1.3. The results also returned 11 unique records of Common Pipistrelle, 7 instances of Brown long-eared bat, 5 Daubenton's bat and 2 Whiskered bats.

3.2. Site Description.

3.2.1. The survey area is an old cottage in a neglected state accessible from a public bridleway and a North Lane access track. The aerial photograph below shows the survey area.



3.2.2. The surrounding area comprised largely of mixed woodland, the closest being the riparian woodland along Rons Cliff Dyke. Much of the surrounding area is agricultural farmland with the nearest settlements being Cawthorne and Upper Denby approximately 2km to the east and west respectively.

3.2.3. The aerial photograph below shows the surrounding landscape where the site is situated.



3.2.4. The survey area is a derelict cottage in an isolated location off Coach Gate Lane. A public bridleway gives access to the site in addition to the main access from North Lane, which is a legal right of way by foot and vehicles.

3.2.5. The cottage is in a dilapidated state with most of the roof and its supporting structures having collapsed due in part to vandalism. The walls of the old cottage are mostly constructed of stone with the chimney stack made from brick. The building has three associated lean-to structures on its northern and western aspects. The photograph below shows the western aspect of the building.



3.2.6. Much of the first floor is missing with the exception of the south-east corner, which is accessible via an exterior stairway on the southern face of the building. The majority of the floorspace was covered in dirt and overgrown with vegetation.

3.2.7. The remnants of the pitched stone tiled roof, largely restricted to the south-east corner, are supported by timber joists, timber support beams and a single steel beam. Numerous holes in the stone walls were present where timber beams used to sit. The building had no soffits or ridge tiles and many of the end tiles were raised or missing leaving behind numerous gaps and crevices.

3.3. Daytime Survey Results.

3.3.1. The walls of building are in a poor condition with many crevices and cracks both on the exterior and interior. The opening of the ventilation shaft on the chimney stack likely has a sizeable cavity behind it, which could provide good roosting potential for a small number of bats, see right photograph.



3.3.2. The lean-to structures provide low roosting potential, despite the insulation present here, due to the amount of light entering the structure as a result of missing tiles.

3.3.3. Despite much of the roof tiles and their supporting structures missing from the building, what remains is felt lined, see right photograph, but still unlikely to support roosting bats in high numbers. The stone roof tiles atop the gable ends, and much of the end tiles, are raised, slipped or missing entirely providing opportunities for crevice dwellings bats to use such spaces in low numbers.



3.3.4. No bat field signs were found during the daytime survey. Much of the floor space within the building was covered in dirt and overgrown with vegetation. Man-made materials were inspected for bat droppings and insect wings, where it was possible and safe to do so, though none were found.

3.3.5. It should also be noted the survey area is within a rural environment with very little light pollution and ample connectivity to large areas of foraging habitat along with a stream close to the survey area.

3.3.6. A timber support beam spanning the length of the most complete section of roof at the south-east corner was stained from bird faecal matter, see right photograph. Below this were the remains of the first floor which consisted of a few plastic corrugated sheets. Barn Owl (*Tyto alba*) pellets were found in the entrance way and scattered on the plastic sheets with fresher pellets identified on the latter, see photographs below.





3.3.7. The findings of the Barn Owl field signs described above suggest the survey area is used by owls on at least a semi regular basis given the recordings of pellets at different ages on site. No nest was identified during the survey but much of the first floor at the south-east corner of the building, where the droppings and pellets were found, was lacking sufficient structural integrity to safely inspect all cavities in this area.

3.3.8. The area surrounding the building is overgrown with vegetation, despite aerial photographs appearing to show it as bare ground. Dominant grass species include Common Soft Grass (*Holcus mollis*), Cock's Foot (*Dactylis glomerata*), False Oat Grass (*Arrhenatherum elatius*) and Creeping Bent (*Agrostis stolonifera*).

3.3.9. Tall ruderal was the most common vegetation type throughout the survey area, particularly in the area west of the building. Common Nettle (*Urtica dioica*), Creeping Thistle (*Cirsium arvense*), Broadleaved Willowherb (*Epilobium montanum*), Rosebay Willowherb (*Chamerion angustifolium*), Common Vetch (*Vicia sativa*), Common Ragwort (*Senecio jacobaea*), Foxglove (*Digitalis purpurea*), Common Ladyfern (*Athyrium filix-femina*), Dandelion (*Taraxacum officinale*) and Cow Parsnip (*Anthriscus sylvestris*) were identified during the survey. None of these are rare plants.

3.3.10. The survey area is bordered by trees including Sycamore (*Acer pseudoplatanus*), Goat Willow (*Salix caprea*) and Blackberry (*Rubus fruticosus*).

4. EVALUATION OF FINDINGS.

4.1. Overall, the building provides **low** potential for roosting bats. The structural gaps provide ease of access into building with many gaps on the interior walls being relatively sheltered from the external environment.

4.2. Some suitable roosting locations were identified but the building has been left in such poor state for a considerable period of time that the survey area is unlikely to support a roost of any significant size.

4.3. No bat field signs were discovered during the daytime survey.

4.4. The numerous Barn Owl pellets found at the south-east corner of the building, and their various ages, indicate repeated use of the building and alludes to a potential nest somewhere within the structure.

5. RECOMMENDATIONS.

5.1. It is recommended a dusk survey is conducted on the survey site in order to accurately determine whether bats are using the building as a roost site.

5.2. A second visit for a dusk survey would also help in determining whether any Barn Owls are currently using the building and the location of any potential nests.

5.3. If any works are carried out during the nesting bird season, which extends from March to September, a nesting bird survey should be carried out by a suitably experienced surveyor, before any works are undertaken.

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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 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.