

# **BERRY FOLD COTTAGE, HOWBROOK.**

# OS REF: SK 32501 98058.

# **BAT SURVEY REPORT.**

Ref No: 240820.

Date: 18<sup>th</sup> August 2024.

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## **1. INTRODUCTION.**

1.1. A planning application has been prepared for the redevelopment of the site of the existing Berry Fold Cottage. The local authority has requested a bat survey of the existing buildings in support of that application.

1.2. Whitcher Wildlife Ltd were therefore commissioned to carry out a Preliminary Roost Assessment and dusk emergence survey to establish whether there is potential for a bat roost in the buildings.

1.3. The initial Preliminary Roost Assessment and the dusk emergence survey were both arranged for 13<sup>th</sup> August 2024 and were carried out during the same visit. This report outlines the findings of both surveys and makes appropriate recommendations.

1.4. Appendices I and II of this report provide background information with respect to protected species and the legal protection afforded to them.

# 2. SURVEY METHODOLOGY.

2.1. The structure was checked for potential bat roosting sites in line by looking for the following signs: -

- \* Holes, cracks or crevices.
- \* Bat droppings.
- \* Prey remains.

2.2. A thorough external inspection was carried out from ground level for any gaps or openings of the structure which may provide suitable roost access points and field signs to indicate possible use by bats.

2.3. All 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.

2.4. All survey work was carried out in line with Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition)*, with an assessment of the structures suitability for roosting bats made in accordance with these guidelines.

2.5. The subsequent dusk emergence and dawn return surveys were also conducted in accordance with Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).

2.6. The survey was carried out by Derek Whitcher who 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.

## **3. SURVEY RESULTS.**

#### 3.1. Data Search Results.

3.1.1. A data search request has been submitted to South Yorkshire Bat Group for existing records of bat roosts within 2km of the site.

3.1.2. The results of the data search included a variety of sightings and recordings of individual bats in the surrounding area. The only significant bat roost record dates from 1999.

3.1.3. The nearest bat mitigation licence recorded on the MAGIC website was at Hoyland 2.88km northeast of the survey area. This was a BLE, whiskered and common pipistrelle licence dated 2020.

#### **3.2. Site Description.**

3.2.1. Berry Fold Cottage is located at the southern end of the village of Howbrook, as shown by the red arrow below.



3.2.2. The site is located immediately south of How Brook and the wooded valley along the watercourse. There are other residential properties to the west and open grazing land to the south.

3.2.3. The site comprises a small cottage in a very overgrown garden and a small outbuilding adjacent.

#### 3.3. Preliminary Roost Assessment.

3.3.1. The existing building comprises a two storey rendered cottage with a pitched roof covered with concrete interlocking tiles, as shown in the photographs below.



3.3.2. There is a small stone porch on the front of the cottage, also with a pitched roof covered with concrete interlocking tiles.

3.3.3. There is also a single storey extension on the rear of the property constructed with the same materials.

3.3.4. The garden behind the cottage slopes steeply down to the woodland in the valley and the garden is very overgrown. Access to view the rear of the cottage was challenging and the view of the rear of the cottage limited but not sufficiently to be a constraint to the survey.

3.3.5. Internally there are rooms into the roof with no loft space in the property.

3.3.6. The cottage is in excellent condition, well-sealed walls, close fitting frames, tight fitting fascia boards, well pointed verges etc. As far as could be seen, there were no opportunities for roosting bats.

3.3.7. However, one end of the cottage is concealed under a large clump of ivy and visibility to the rear of the cottage was limited. Therefore, the cottage was assessed to

have low potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines Edition 4.

3.3.8. In the garden of the property there is a derelict shed, shown in the photographs below. The building has solid brick walls and a pitched roof covered with Welsh slates. One end of the building is concealed under dense ivy.



3.3.9. The building is in a poor state of repair with holes in the roof and an open door. However, there were no bats or bat field signs inside or outside the building and the building was assessed as too derelict, exposed and draughty to be suitable for roosting bats. However, because of the presence of the ivy, the shed was assessed to have low potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines Edition 4.

3.3.10. No bird activity was identified around the buildings and there was no evidence of nesting birds. However, the shed and the ivy on both buildings provide ideal nesting sites for birds during the nesting season, which extends from March to August each year.

#### 3.4. Dusk Emergence Survey Results.

3.4.1. Two surveyors carried out a dusk emergence survey on the evening of 13<sup>th</sup> August 2024, immediately following the Preliminary Roost Assessment.

3.4.2. The survey was led by Derek Whitcher, who holds a level two Natural England survey licence in respect of bats (2015-13205-CLS-CLS.). He was accompanied by one other experienced assistant.

3.4.3. All surveyors were equipped with a Batbox Duet detector and a two-way radio. Three Anabat Ranger static recorders were deployed around the site to record bat activity for subsequent computer analysis using Anabat Insight Software.

3.4.4. Three infra-red cameras and infra-red torches were also set up around the buildings, ensuring that all suitable features were covered. The photographs below show the view of each camera at both the start and end of the survey.

C1



C11



C16



3.4.5. The aerial photograph below shows where the Surveyors (S) and Anabat Rangers (R) were located throughout the survey.



3.4.6. The aerial photograph below shows where the cameras were positioned along with their approximate field of view.



3.4.7. The survey was carried out on 13<sup>th</sup> August 2024. The evening was mild and overcast with a temperature of 19°C at the start of the survey with a very slight breeze measuring 1 on the Beaufort scale. Sunset was at 21:35 and the survey lasted from 21:20 until 23:05.

3.4.8. The following bat activity was observed by the surveyors.

#### 3.4.8.1. Surveyor 1.

20:35. Common Pipistrelle foraging along the tree line to the north. This continued throughout the survey becoming more intermittent from 21:15 onwards.

21:44. Noctule heard overhead.

No bats emerged from the cottage or the shed.

Ranger 9 by the house recorded two hundred and forty-one Common Pipistrelle calls between 20:42 and 22:06, three Soprano Pipistrelles between 21:04 and 21:37, sixteen Noctule calls between 21:14 and 21:25 and four myotis calls between 21:24 and 22:06.

Ranger 10 was close to Ranger 9 and recorded the same calls.

#### 3.4.8.2. Surveyor 2.

20:35. Common Pipistrelle heard not seen foraging along the trees north of the site. This continued throughout the survey, reducing in volume from 21:10. No bats emerged from the cottage.

Ranger 6 with Surveyor 2 recorded one hundred and thirty-three Common Pipistrelle calls between 20:33 and 22:06, eight Soprano Pipistrelles between 20:43 and 21:57, six Noctule calls between 21:04 and 21:23 and seven myotis calls between 21:07 and 21:44.

3.4.9. Activity during the survey was very high and although predominantly Common Pipistrelle activity, Soprano Pipistrelles, Noctules and Myotis were also recorded.

3.4.10. No bats were seen to enter or emerge from the cottage or the shed on the site, either during the survey or from subsequent camera analysis.

### 4. EVALUATION OF FINDINGS.

4.1. The walls and the roof of the cottage were in good condition with no opportunities for roosting bats. However, there was a large clump of ivy over one end of the cottage and because it was present, that end of the cottage could not be inspected. Therefore, the cottage was assessed to have a low potential for bats and one dusk emergence survey carried out. No bats emerged from the cottage during the survey and therefore, there is no bat roost in the cottage. Demolition of the cottage will have no impact on roosting bats.

4.2. The shed was in a very poor state of repair and is probably too open and exposed for the presence of a roost. However, it also had a large clump of ivy over one end and therefore was assessed to have low potential for bats and one dusk emergence survey was carried out. No bats emerged from the shed building during the survey and therefore, there is no bat roost in the shed.

4.3. A high level of bat foraging activity was heard to the north of the site where the ground slopes steeply down to the wooded valley along How Brook confirming that this is high quality bat foraging habitat.

4.4. The two buildings were assessed to have little potential for nesting birds except in the dense clumps of ivy on them. No nests or nesting activity was observed during the survey.

4.5. The proposed development of the site will have no negative impact on roosting bats or nesting birds.

# **5. RECOMMENDATIONS.**

5.1. No bats emerged from the two buildings during the survey. Therefore, no further bat surveys are recommended and there will be no requirement for a mitigation strategy or a Natural England licence to undertake the proposed development of the site.

5.2. There is little potential for the presence of nesting birds in the existing buildings but there is potential in the dense clumps of ivy. It is therefore strongly recommended that the ivy be removed between October and February inclusive to avoid the nesting bird season. A nesting bird survey of this ivy will not be feasible due to the density and the awkward access to observe the clumps.

5.3. The NPPF requires biodiversity enhancements are provided in the new buildings on the site. It is recommended that one integrated bat box and two integrated swift nest boxes are built into any new dwelling on the site.

5.4. It is recommended that a lighting strategy be designed for the house that will avoid light interference to the trees lining How Brook to ensure the integrity of the high value bat foraging habitat is retained without any negative impact.

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# Appendix I. BAT INFORMATION.

#### Ecology

There are currently 18 species of bat residing in Britain, 17 of which 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.

## Appendix II. NESTING BIRD INFORMATION.

#### Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man- made structures or buildings.

#### Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

#### Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after "intentionally" the words "or recklessly".

# **Toolbox Talk: Bats**

# Whitcher Wildlife Ltd

Ecological Consultants

DAV

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

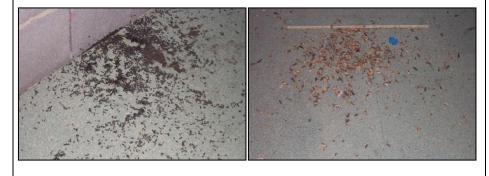
Identification.

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