



**UPPER HOUSE FARM, NORTH LANE,
CAWTHORNE.**

OS REF: SE 26342 06785.

BAT SURVEY.

Ref No: 211141 / Rev 1.

Date: 3rd June 2022.

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1. INTRODUCTION.

1.1. Planning permission is being applied for to convert a barn within the grounds of Upper House Farm, Cawthorne.

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. The initial survey was carried out on 19th November 2021. This survey assessed the barn as having low bat roost potential and therefore a dusk emergence survey was carried out on 31st May 2022. This report outlines the findings of those surveys and makes appropriate recommendations.

1.4. Appendices I and II of this report provides additional information on bats and nesting birds 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.

2.6. The subsequent dusk emergence survey was also conducted in accordance with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd 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. The initial survey was carried out by Stevan Roebuck. Since 2011 Stevan has had experience carrying out great crested newt and bat surveys. Since 2013 Stevan has had experience in a professional capacity as a Wildlife Consultant carrying out ecology surveys, badger, great crested newt and bat surveys. Stevan holds a Natural England Survey License for Great Crested Newts and Bats and is currently working towards gaining further Natural England, NRW and SNH survey licences. Stevan is also a Qualifying Member of CIEEM.

2.9. The bat dusk emergence survey was led by Alex White BSc, MSc, ACIEEM. Alex has had experience in a professional capacity as a Graduate Ecologist carrying out ecology and protected species surveys and Phase 1 Habitat surveys and joined Whitcher Wildlife in 2016 as a Wildlife Consultant. Alex holds Natural England Survey Licences for Great Crested Newts, Bats, Hazel Dormice and Barn Owls and is currently working towards gaining further Natural England survey licences. She also holds Scottish Natural Heritage and Natural Resources Wales Licences for Great Crested Newts. She has successfully completed courses run by the Chartered Institute of Ecology and Environmental Management (CIEEM) and The Mammal Society to further her knowledge of protected species and plant identification. Alex is also an Associate member of CIEEM.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to Sheffield Biological Records Centre and South Yorkshire Bat Group for records of bats within 2km of the surveyed area.

3.1.2. The data search provided various records of seven species of bat within 2km of the site with most of the records located at Cawthorne Park and Cannon Hall.

3.1.3. The closest bat record was located 0.4km northeast of the surveyed barn with Common Pipistrelle, Brown Long Eared, Whiskered and Noctule bats all record at this location.

3.2. Site Description.

3.2.1. The surveyed building was a double story barn that lies within the grounds of Upper House Farm, North Lane, Cawthorne. The aerial photograph below shows the location of the barn and the immediate surrounding area.



3.2.2. The aerial map below shows the location of the barn and the wider surrounding area.



3.2.3. The surveyed barn lies within Upper House Farm with various stone buildings within the grounds. The wider surrounding area around the barn consists of arable land, grazing fields, scattered pockets of woodland and residential and agricultural buildings.

3.3. Daytime Survey Results.

3.3.1. The surveyed barn is constructed with rubble filled stone walls to the northern elevation and to the first story of the western elevation with breeze block above. The eastern elevation is constructed with steel cladding and the southern elevation is constructed with brick pillars and arches. The photograph below shows the southern elevation.



3.3.2. The ground floor is open with no doors on the southern elevation and is currently used for storage. There is a timber staircase that leads up to the first floor, which is also used for storage. The first floor is open to the roof, which is supported by a timber and steel frame. There is a felt liner, which is generally in a good state of repair, although there are occasional gaps in the felt. On the eastern gable end, there are gaps between the timber frame and the cladding. The photographs below show the internal eastern gable end and one of the gaps.



3.3.3. The roof of the barn is pitched and covered with concrete tiles and is generally in a good state of repair with all tiles and ridge tiles in place. However, on both gable ends, there are gaps between the felt liner and the concrete tiles leaving a cavity throughout. The photographs below show the eastern gable end and the cavity between the liner and the tiles.



3.3.4. During this survey, a concentration of moth wings was identified on the floor of the first floor towards the eastern gable end, which may indicate a bat feeding roost. No bat droppings were identified in this area, although occasional mouse droppings were identified. The photograph below shows the concentration of moth wings.



3.3.5. No other bat field signs were identified externally or internally during this survey.

3.3.6. Although no bats or any bat field signs other than the potential feeding roost were identified, the barn has been assessed as providing **low bat** roost potential within the cavity between the roof felt and concrete tiles.

3.3.7. The surveyed barn provides suitable opportunities for nesting birds during the nesting season, which extends between March and September each year. During this survey, an old unidentified bird's nest was identified just inside the barn on top of the western brick pillar of the southern elevation. The photograph below shows the nest.



3.3.8. During the bat emergence survey swallows were noted to be in the building although no nests were identified. One of the surveyors noted the swallows also utilising an open building to the south west.

3.4. Bat Dusk Emergence Survey – 31st May 2022.

3.4.1. Two surveyors carried out a dusk emergence survey on the evening of 31st May 2022. The evening was dry and clear with a temperature of 12°C at 21:00. There was a slight breeze throughout the survey. Sunset was at 21:24 and the survey commenced at 21:09.

3.4.2. The two surveyors were positioned so that they could see all aspects of the buildings to be surveyed. The position of each surveyor (S) was as shown on the aerial photograph below. Each surveyor was equipped with a Batbox Duet detector and a two-way radio for communication and a static Anabat recorder was placed close by to record bat activity for subsequent computer analysis using Analook software. One Anabat was also placed within the roof void.



3.4.3. One of the surveyors holds a current Natural England bat survey licence and the other surveyor was an experienced assistant.

3.4.4. The following are the observations of the surveyors.

3.4.4.1. Surveyor 1.

21:48 – Common Pipistrelle heard not seen.

22:06 – Common Pipistrelle foraging around the courtyard, from the west, and then passed over the building to Surveyor 2.

22:11 – Common Pipistrelle still faintly heard foraging.
22:12 – Common Pipistrelle passed north west to south east over building.
22:16 – Common Pipistrelle heard not seen.
22:22 – Common Pipistrelle passed over the building from west to east.

Anabat 6 with Surveyor 1 confirmed the findings of the surveyor.

3.4.4.2. Surveyor 2.

22:05 – Common Pipistrelle heard not seen.
22:06 – Common Pipistrelle north west to south east over building.
22:13 – 22:18 – Common Pipistrelle foraging along edge of the barn and adjacent building.
22:22 – Common Pipistrelle pass heard not seen.

Anabat 2 with Surveyor 2 confirmed the findings of the surveyor.

3.4.4.3. Internal Anabat.

The Anabat (AB7) placed within the upper story of the barn; this Anabat identified no bat activity.

4. EVALUATION OF FINDINGS.

4.1. The surveyed barn is generally in a good state of repair, although it does provide **low** roosting bat potential between the felt roof lining and the concrete tiles.

Therefore, the proposed conversion may have an impact on roosting bats if they are present.

4.2. No bats or bat field signs other than a potential feeding roost were identified internally or externally around the barn.

4.3. The dusk emergence survey revealed a low number of common pipistrelles foraging around the barn. No roosting bats were recorded during this survey and therefore, the proposed development will not impact on roosting bats.

4.4. The barn was assessed as unsuitable for hibernating bats as the features within this building would not provide the necessary stable climatic conditions required by hibernating bats.

4.5. During the initial survey, an old unidentified bird's nest was identified just inside the barn on top of the western brick pillar of the southern elevation. Therefore, the proposed conversion may have an impact on nesting birds if the works are carried out during the nesting bird season, which extends between March and September each year.

5. RECOMMENDATIONS.

5.1. As no roosting bats were identified to be roosting within the barn, no further surveys will be required. However, works should be carried out with care and in the unlikely event a roosting bat is identified, works must cease and the undersigned should be contacted for further advice.

5.2. A Toolbox Talk on roosting bats has been appended to this report to aid in the identification of roosting bats and their field signs.

5.3. As the barn provides potential for nesting birds, it is recommended that the works are carried out outside the nesting bird season. If the works will be carried out during the nesting season, a thorough nesting bird survey must be carried out within one week of the works commencing. If an active nest is identified, the works must be put on hold until the young have fledged the nest.

5.4. A Toolbox Talk on nesting birds has been appended to this report.

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Checked by:	
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6. REFERENCES.

- Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Preliminary Ecological Appraisal, Second Edition***. CIEEM, Hampshire.
- Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Ecological Report Writing, Second Edition***. CIEEM, Hampshire.
1981. ***Wildlife and Countryside Act***. <http://www.legislation.gov.uk/ukpga/1981/69> (accessed 18/02/16)
2000. ***Countryside and Rights of Way Act***.
<http://www.legislation.gov.uk/ukpga/2000/37/contents>.
2017. ***The Conservation of Habitats and Species Regulations***.
<http://www.legislation.gov.uk/uksi/2010/490/contents/made>.
2012. ***National Planning Policy Statement***.
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- Anon. 1995. ***Biodiversity: the UK Steering Group report. Vol 2: Action Plans***. HMSO, London.
- Collins J. (ed.) 2016. ***Bat Surveys for Professional Ecologist: Good Practice Guidelines***. 3rd ed. The Bat Conservation Trust, London.
- English Nature. 2004. ***Bat Mitigation Guidelines***. English Nature, Peterborough, UK.
- BTHK 2018. ***Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals***. Exeter: Pelagic Publishing.

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.

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



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

Toolbox Talk: Nesting Birds

The bird nesting season varies according to the weather each year but generally commences in March, peaks during May and June and continues until September.

A bird's nest is the place in which a bird lays and incubates its eggs. Some species build a nest structure while other species lay their eggs directly onto the ground or on a rocky ledge. Nests can be constructed from a variety of materials and are usually lined with feathers or fur.

Identification.

Some birds construct nests in an area where it can be seen while others construct nests that are hidden from view and are more difficult to identify.

The photograph to the right shows a Moorhen nest which can easily be seen.



Nests can also be identified from field signs without the necessity to see the nest itself. The presence of a nest can be identified by seeing the adult birds leaving and returning to the nest regularly with food to feed the chicks.

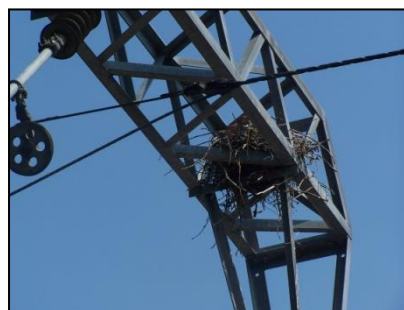
The photograph to the left shows a Wren's nest in overhanging tree roots, which is almost impossible to see.

Care should be taken at any time during the nesting season particularly when regular bird activity is seen, or birds can be heard calling.



Habitat.

Birds regularly nest in a variety of places with some species nesting in buildings or vegetation and others nesting on the ground or on water. However, birds may nest in any habitat or situation if they identify a suitable nest site.



Legislation.

Part 1. -(1) of the Wildlife and Countryside Act 1981 states that:

If any person intentionally or recklessly:

- 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 or recklessly:

- 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.

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If a nest or potential nesting activity is identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk