Whitcher Wildlife Ltd.
Ecological Consultants.

SILKSTONE LANE, CAWTHORNE.

OS REF: SE 29143 06439.

BAT SURVEY REPORT.

Ref No: **240507.**

Date: **13th May 2024.**

Unit 34, The Business Village, Cudworth, Barnsley, S72 8RP
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

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1. INTRODUCTION.

1.1. There are plans to demolish the existing barn at land off Silkstone Lane, 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 a combined Preliminary Roost Assessment (PRA) and dusk emergence survey was carried out on 2nd May 2024.

1.4. Appendices I and II of this report provides additional information on bats and nesting birds, 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 windowsills, 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. The PRA was carried out in line with Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition),* with an assessment of the buildings suitability for roosting bats made in accordance with these guidelines.

2.6. 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).*

2.7. The initial site survey was carried out by Sam White BSc ACIEEM. Sam has had experience in a professional capacity as an Ecologist focusing primarily on survey work for protected species and Phase 1 Habitat surveys. Sam has a BSc in Environmental Conservation from Sheffield Hallam University and Graduated in 2015. Sam joined Whitcher Wildlife Ltd in May 2018 as an Ecological Consultant. Sam holds a survey licence for Great Crested Newt *Triturus cristatus*, Barn Owl *Tyto alba* and a Level 2 Class Licence for Bats. Sam is an Associate Member of the Chartered Institute of Ecology and Environmental Management.

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3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A desktop data search has been requested from the South Yorkshire Bat Group (SYBG) and Barnsley Biological Records Centre (BBRC) for all records of bats and their roosts within a 2km radius of the survey area.

3.1.2. The BBRC data search returned records of common pipistrelle, soprano pipistrelle, noctule, Leisler's, brown long-eared, Natterer's and other unidentified Myotis species within a 2km radius of the site. The closest roost record to the site is a common pipistrelle day roost, recorded approximately 350m south of the survey area.

3.1.3. The SYBG data search returned similar results, with no closer relevant records. However, it also added records of bats roosting in crags within Silkstone Fall Woods.

3.2. Site Description.

3.2.1. The survey area comprises a barn off Silkstone Lane, Cawthorne. The location of the survey area is shown on the aerial photograph below.

3.2.2. The immediate surrounding area comprises broadleaf woodland directly connected to the survey area, Banks Bottom Dyke directly to the north and both arable land and pasture in the wider landscape.

3.2.3. The building is a single story brick agricultural building with a picthed corrugated asbestos roof. The building is currently used for livestock internally and has no loft space present.

3.3. Preliminary Roost Assessment.

3.3.1. The brick walls of the building are largely in good condition, with the exception of a single fracture, shown below, leading into the cavity wall. This may be used by roosting bats, however the poor condition of the roof leaves the cavity exposed to rainfall, making it significantly less likely that this feature would be used regularly by roosting bats.

3.3.2. The building does not have any soffits or fascia boards, however there are areas of overlapping asbestos on the eastern gable. These were generally flush, although there may be opportunities for individual bats to roost where the corners have become loose.

3.3.3. The roof of the building is in poor condition, broken in places leaving the internals extremely exposed. The asbestos sheets heat dramatically under sunlight and cool dramatically in cooler temperatures, as such the roof is not assessed as providing opportunities for roosting bats.

3.3.4. Internally no loft space is present and as noted above, the internals are extremely exposed through broken windows and gaps in the roof. The internals of the building are not suitable for roosting bats.

3.3.5. No bat field signs such as staining, droppings or prey remains were found within the survey area.

3.3.6. Overall, the building is assessed as providing **low** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition. The building has opportunities for individual bats but would not support a roost of more significant conservation status. The building does not provide suitable habitat for hibernating bats with the cavity being exposed to rainfall.

3.3.7. It should be noted that the surrounding habitat is ideal for foraging and commuting bats with good woodland connectivity and Banks Bottom Dyke immediately to the north.

3.3.8. No nests, active or disused, were found within the barn, however the barn is suitable for nesting birds.

3.4. Dusk Emergence Survey – 2nd May 2024.

3.4.1. As the building was assessed as having low potential for roosting bats, a single dusk emergence survey was undertaken in line with the Bat Conservation Trust Good Practice Guidelines 4th Edition.

3.4.2. The survey was undertaken by a team of ecologists led by Sam White BSc ACIEEM, who holds a level two Natural England survey licence in respect of bats (2024-11988-CL18-BAT). He was accompanied by one other surveyor, who is experienced in undertaking bat surveys.

3.4.3. The survey was carried out on the 2nd May 2024. The evening was mild, with a temperature of 13°C at the start of the survey and a wind measuring 1 on the Beaufort scale. Sunset was at 20:39 and the survey lasted from 20:21 until 22:09.

3.4.4. Both surveyors were equipped with Batbox Duet detectors and two-way radios. Three Anabat recorders were deployed around the site to record bat activity for subsequent computer analysis using Analook software.

3.4.5. Night Vision Aids (NVAs) were deployed covering all potential features. In this case four Nightfox Red or Whisker infrared camera, along with 4 Nightfox XB5 850NM infrared torches were situated covering each aspect of the building. The below photographs show the view of each camera and clear visibility at the conclusion of the survey.

3.4.6. The aerial photograph below shows where the Surveyors (S) were positioned. The location and viewing angles of the NVAs are shown in red.

3.4.7. There was a consistent level of foraging throughout the survey, this included soprano pipistrelle, common pipistrelle, Daubenton's, noctule and brown long-eared. The total numbers of each species are shown below, these were recorded across two external Anabat Rangers, with the internal unit recording no bats. The bat foraging activity began from 20:45 and continued consistently until the end of the survey.

Species	Count
Brown long-eared *Plecotus auritus*	2
Common pipistrelle *Pipistrellus pipistellus*	752
Daubenton's *Myotis daubentonii*	23
Noctule *Nyctalus noctula*	10
Soprano pipistrelle *Pipistrellus pygmaeus*	37

3.4.8. Neither surveyor nor the NVAs used observed any bats emerging from or entering the building during the entirety of the survey.

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4. EVALUATION OF FINDINGS.

4.1. The PRA assessed the building as providing **low potential** for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition. As such, a single dusk emergence survey was undertaken of the building.

4.2. During the dusk emergence survey, no bats were found to emerge from the building and as such, the demolition of the barn will have no impact on roosting bats if due care is taken by the workforce.

4.3. The survey area provides suitable habitat for nesting birds during the nesting bird season, extending from March to August each year. Therefore, any works within this period may have an impact on nesting birds.

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5. RECOMMENDATIONS.

5.1. As no bats were found to be roosting within the building, there is no requirement for further surveys. Regardless, opportunistic bats can roost almost anywhere and therefore, it is recommended that due care still be taken during the works. In the unlikely event that any bats be identified, works should stop immediately and the undersigned contacted for further advice.

5.2. As birds may use the building to nest, it is recommended that the works take place outside of their nesting season, which extends from March to August inclusive. If works are to take place within nesting season, then they should be preceded by a nesting bird survey, undertaken by a suitably experienced surveyor. Any active nests found must be left undisturbed until the young have fledged and the nest is no longer in use.

5.3. It is recommended that consideration is given to the foraging bats using the site. These are predominantly common pipistrelle, which is a light tolerant species, however a sensitive lighting plan should be in place to minimise any potential impacts, with lighting focused directly downwards from eaves height.

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Prepared by:	
Sam White BSc, ACIEEM.	Date: 13th May 2024

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 13th May 2024

6. REFERENCES.

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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”.