



IVY HOUSE FARM BARN, PILLEY.

OS REF: SE 33419 00629

BAT SURVEY REPORT.

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Date: 14th July 2023.

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1. INTRODUCTION.

1.1. There are plans to convert a barn at Ivy House Farm, Pilley for residential use.

1.2. Whitcher Wildlife Ltd were therefore commissioned to carry out a bat survey to establish whether there is a roost present and if there is, what species of bat is using the roost and in what numbers.

1.3. The initial Preliminary Roost Assessment was carried out on 9th May 2023 and a dusk emergence survey on 17th May 2023. A subsequent dawn swarming survey was carried out on 21st June 2023. This report outlines the findings of those 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.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)*, with an assessment of the structures suitability for roosting bats made in accordance with these guidelines.

2.4. The subsequent dusk emergence and dawn swarming survey were 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.

2.5. 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.

2.6. The initial site surveys were carried out by a team led 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.

2.7. The dawn swarming survey was carried out by a team of surveyors lead by Ruth Georgiou BSc, MCIEEM. Since 2004 Ruth has had experience in a professional capacity as a Wildlife Consultant carrying out ecology surveys and phase I habitat surveys. As a full member of CIEEM Ruth is subject to peer review on an annual basis. Ruth holds Natural England survey licences in respect of bats, great crested newts and white clawed crayfish and has held her own or has been named ecologist on site specific licences for badgers, great crested newts and bats. She also holds a degree in Environmental Science (BSc) and has successfully completed a number of courses run by CIEEM, BCT and FSC in the relative protected species, carrying out phase I habitat surveys and BREEAM assessments.

3. SURVEY RESULTS.

3.1. Data Search Results.

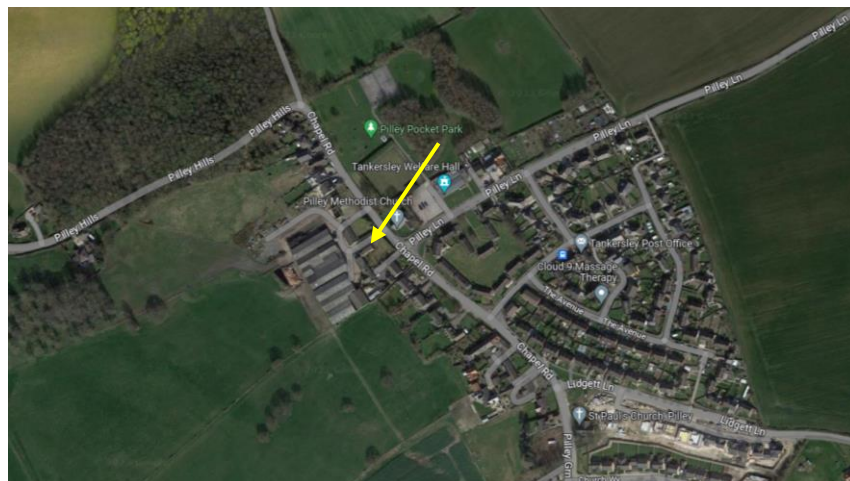
3.1.1. A data search request has been submitted to south Yorkshire Bat Group and the Barnsley Biological Records Centre for existing records of bat roosts within 2km of the site.

3.1.2. South Yorkshire Bat Group provided historic records of a Whiskered bat roost 0.77km from the site and a Daubenton's roost 0.84 km from the site. All other records were in excess of 1km from the site.

3.1.3. The Barnsley Biological Records Centre have provided records of various bat species and roosts within 2km, although none are relevant to the survey area, with no records within the grid reference square SE 33 00. The records are predominantly of bats recorded roosting in Broom Royd Bat Tunnel, approximately 0.84km from the survey area.

3.2. Site Description.

3.2.1. Ivy House Farm is located in the village of Pilley, in an elevated location, surrounded by open farmland, shown by the yellow arrow below.



3.2.2. The survey area is a barn located adjacent to the access to Ivy House Farm yard, as shown below. The main farm buildings are to the west of the barn and Pilley village to the east with farmland beyond.



3.3. Preliminary Roost Assessment.

3.3.1. The barn is a stone built structure that is now in an unsafe condition. The stone of the stone walls is badly weathered and the wall against the drive side is bowed. The roof of the building is missing. The following photographs show the barn.



3.3.2. Because of the numerous holes in the external walls, despite there being no roof on the building, the barn is assessed to have a moderate potential for roosting bats.

3.3.3. During the survey, there was a high level of house sparrow activity in and out of the holes in the walls. This was assumed to be nesting activity.

3.4. Dusk Emergence Survey Results, 17th May 2023.

3.4.1. A dusk emergence survey of the buildings was carried out by three surveyors on the evening of 17th May 2023. One surveyor holds a current Natural England licence for surveying bats and the other two are experienced assistants.

3.4.2. Each surveyor was equipped with a Batbox Duet detector and a two-way radio for communication. In addition, three static Anabat recorders were deployed, one by each surveyor to record bat activity for subsequent analysis using Analook software.

3.4.3. The position of the surveyors and the static Anabats are shown on the aerial photograph below where S is a surveyor. An Anabat recorder was placed adjacent to each surveyor.



3.4.5. The evening was fine, with high cloud and a light wind blowing at 4mph from the west, 0 on the BWS. The temperature was 13°C at 21:00 and sunset was at 21:03. The survey started at 20:45 and ended at 22:30.

3.4.6. The following are the observations of the surveyors.

3.4.6.1. Surveyor 1.

21:28. Common Pipistrelle heard not seen.

21:28. Common Pipistrelle heard not seen.

21:35. Common Pipistrelle from the west and flew over the barn.

21:38. Common Pipistrelle flew over the barn from the northeast.

21:38. Common Pipistrelle flew from the west to the southeast over the barn.

21:42. Common Pipistrelle flew from the east overhead.

21:45. Distant Common Pipistrelle heard not seen.

21:45 onwards. Went completely quiet.

Anabat 12 with Surveyor 1 recorded ten Common Pipistrelle calls between 21:28 and 21:45.

3.4.6.2. Surveyor 2.

21:14. Common Pipistrelle foraging between me and Surveyor 3.

21:14. Common Pipistrelle foraging between me and Surveyor 3.

21:28. Common Pipistrelle from the southeast, circled overhead foraging.

21:33. Common Pipistrelle passed over south to north.

Anabat 23 with Surveyor 2 recorded seventeen Common Pipistrelle calls between 21:26 and 21:44.

3.4.6.3. Surveyor 3.

Surveyor 3 recorded the following bat activity.

21:14 to 21:46. Common Pipistrelle circling between the barn and the trees to the east. Second Common Pipistrelle arrived at 21:24 and foraged.

Anabat 24 with Surveyor 3 recorded sixty-three Common Pipistrelle calls between 21:14 and 21:46 and one Myotis at 21:38.

3.4.6.4. Summary of the Dusk Emergence Survey Results.

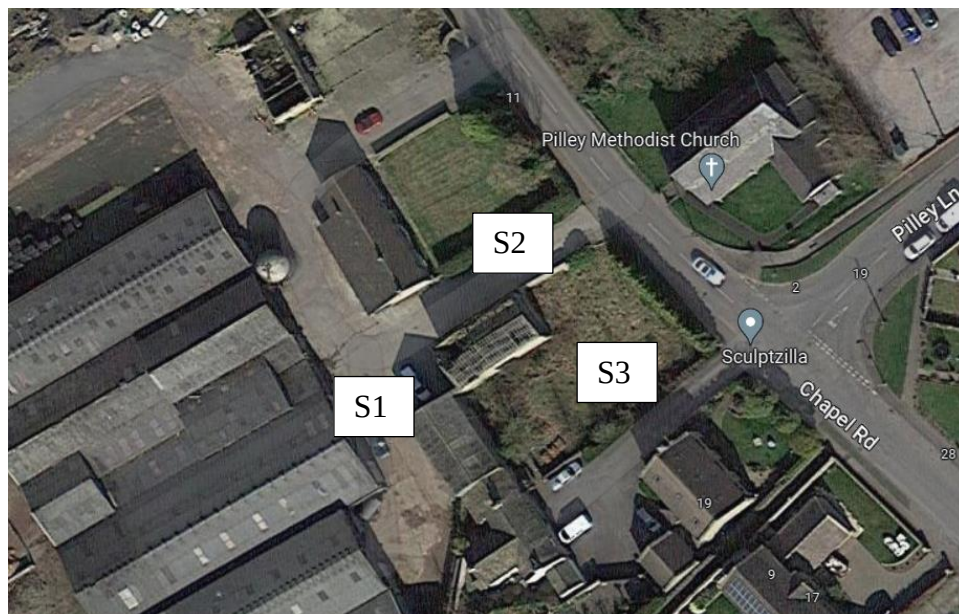
The bat activity recorded was entirely Common Pipistrelle activity with the exception of one distant Myotis at 21:38. Most of the foraging was to the southeast of the barn with occasional bats passing over the barn. No bats emerged from the barn and the high level of house sparrow activity noted during the preliminary day time survey had disappeared.

3.5. Dawn Survey Results, 21st June 2023.

3.5.1. A dawn swarming survey of the buildings was carried out by three surveyors on the morning of 21st July 2023. One surveyor holds a current Natural England licence for surveying bats and the other two are experienced assistants.

3.5.2. Each surveyor was equipped with a Batbox Duet detector and a two-way radio for communication. In addition, three static Anabat recorders were deployed, one by each surveyor to record bat activity for subsequent analysis using Analook software.

3.5.3. The position of the surveyors and the static Anabats are shown on the aerial photograph below where S is a surveyor. An Anabat recorder was placed adjacent to each surveyor.



3.5.5. The morning was fine and still with some partial cloud cover, although there had been some light rain overnight. The temperature was 14°C at 03:30 and sunrise was at 04:36. The survey started at 03:05 and ended at 04:50.

3.5.6. The following are the observations of the surveyors.

3.5.6.1. Surveyor 1.

03:58. Common Pipistrelle briefly heard but not seen.

Anabat 18 with Surveyor 1 did not record any bat calls throughout the survey.

3.5.6.2. Surveyor 2.

03:30. Bat was heard but not seen.

03:43. Bat flew over from northeast to southeast.

03:45. Bat flew over southwest to northeast.

03:51. Bat foraging between surveyors 2 and 3.

03:55. Bat flew over northeast to southeast.

04:00. Bat foraging northeast to southeast.

Anabat 24 with Surveyor 2 recorded twenty six Common Pipistrelle calls between 03:30 and 04:04.

3.5.6.3. Surveyor 3.

03:31. Bat flew over south to north.

03:42. Constant foraging up to 04:04.

Anabat 13 with Surveyor 3 recorded thirty four Common Pipistrelle calls between 03:31 and 04:04 and one myotis at 03:43.

3.5.6.4. Summary of the Dawn Swarming Survey Results.

The bat activity during this survey was very similar to that found during the first dusk emergence survey. The activity recorded was entirely Common Pipistrelle activity with the exception of one Myotis at 03:43. Most of the foraging was to the southeast

of the barn with occasional bats passing on other sides of the barn. No bats entered any roosts in the barn and no notable bird activity was observed.

4. EVALUATION OF FINDINGS.

4.1. The barn was initially assessed to provide moderate potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 3rd Edition. The subsequent dusk emergence and dawn swarming surveys did not identify a bat roost in the building and therefore the proposed works will have no impact on roosting bats.

4.2. During the initial daytime inspection of the building a high level of house sparrow activity was identified in and around the building. No house sparrows were observed during the dusk emergence or dawn swarming survey therefore it is likely that they were feeding on insects on the walls of the building. However, the building does still provide potential nesting opportunities for birds. The nesting bird season extends from March to September. Any works carried out to the building during the nesting season could potentially have a high impact on nesting birds.

5. RECOMMENDATIONS.

5.1. No bat roosts have been identified in the building therefore there is no requirement for any further surveys or a licence to cover the proposed works.

5.2. Regardless, individual bats can roost almost anywhere on a temporary basis. Therefore, it is recommended that the works are carried out with care and in the unlikely event that a bat is found, it should be kept safe and protected, the works should stop and professional advice should be sought immediately.

5.3. It is recommended that the works are carried out outside the nesting bird season to avoid any impact on nesting birds. Where it is necessary to undertake the works within the nesting season, it is recommended that the works are immediately preceded by a nesting bird survey. Any active nests found must be left undisturbed until the young have fledged.

5.4. It is recommended that one integrated bat box and one pair of integrated swift boxes are installed into the converted building to provide enhancements for roosting bats and nesting birds.

Prepared by:	
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Checked by:	
Derek Whitcher, BSc, MCIEEM, MCMI	Date: 16 th July 2023.

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 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.