Whitcher Wildlife Ltd.
Ecological Consultants.

LEAPINGS LANE, THURLSTONE.

OS REF: SE 229 031

BAT SURVEY.

Ref No:- **160915**

Date: **9th September 2016.**

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TABLE OF CONTENTS.

	Page Number
1. INTRODUCTION.	3
2. SURVEY METHODOLOGY.	4
3. SURVEY RESULTS.	5
4. EVALUATION OF FINDINGS.	14
5. RECOMMENDATIONS.	15
6. REFERENCES.	16
Appendix I. BAT INFORMATION.	17
Appendix II. SOUTH YORKSHIRE BAT GROUP DATA SEARCH RESULTS.	18
Appendix III. BARNSLEY BIOLOGICAL RECORDS CENTRE DATA SEARCH RESULTS.	21

1. INTRODUCTION.

1.1. A planning application has been submitted to convert a group of stone buildings on Leapings Lane, Thurlstone. A bat survey is required in support of that application.

1.2 Whitcher Wildlife Ltd surveyors have therefore been commissioned to carry out an initial bat assessment of the site.

1.3. A day time inspection followed by a dusk emergence survey was carried out on 7th September 2016. This report outlines the findings of the 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.

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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 fascias 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).*

2.6. This survey was followed by a dusk emergence survey carried out by two surveyors.

2.7. The survey team was 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 survey licences for barn owl, bat, great crested newt and white clawed crayfish.

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3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to South Yorkshire Bat Group for existing records of bat roosts within 2km of the site. The records include no roost records in Thurlstone. The full data search results are provided in Appendix II of this report.

3.1.2. A data search request was submitted to Barnsley Biodiversity Records Centre for existing records of bat roosts within 2km of the site. There are records of Pipistrelle and Noctule close to the site but no further details are provided. The full data search results are provided in Appendix III of this report.

3.2. Site Description.

3.2.1. The site is a group of stone farm buildings off Leapings Lane, Thurlstone, as shown on the aerial photograph below. The site lies on a north facing valley side above Penistone with woodland a pasture fields around with large areas of arable fields and pasture further to the north and south with the village of Thurlstone to the northeast and Millhouse Green to the west.



3.2.2. The site comprises three conjoined buildings as shown in the aerial photograph below. Each has been given a separate letter code and each is described below in detail.



3.3. Daytime Survey Results.

3.3.1. Building A.

3.3.1.1. A stone building, with well pointed and sealed walls and eaves and with a pitched, stone slate covered roof. All windows and doors are in place and are well sealed providing no access into the building.



3.3.1.2. At the front the building appears to be two storeys with a downstairs door and with a window above as shown in the photograph above.

3.3.1.3. The ground slopes up to the south of the building and much of the rear wall is below ground level, as shown in the photograph below.



3.3.1.4. Internally, the western end of the building is open to the underside of the roof slates but the eastern end has a mezzanine floor. There were abundant cobwebs beneath the ridge in this building showing that no bats have disturbed these cobwebs.



3.3.1.5. The roof is in very good condition with all roof slates in place and with well pointed ridge tiles. As the roof is covered with natural stone, there are some gaps beneath the roof slates where they do not lay completely flat.



3.3.1.6. No bat droppings or field signs were identified anywhere inside or outside of this building and the building was assessed to have a **low** potential for individual bats to seek temporary shelter beneath the roof slates only.

3.3.2. Building B.

3.3.2.1. Building B is the central building of the three, it is single storey and of like construction, with well pointed stone walls and a good condition, stone slate roof.



3.3.2.2. The ground slopes up to the south of the building and much of the rear wall is below ground level, as shown in the photograph below.



3.3.2.3. Inside the roof timbers appear to have been replaced and treated, as can be seen in the photograph below. There was also a generous coating of cobwebs beneath the ridge and around the tops of the walls.



3.3.2.4. The roof is in very good condition with all roof slates in place and with well pointed ridge tiles. As the roof is covered with natural stone, there are some gaps beneath the roof slates where they do not lay completely flat.

3.3.2.5. No bat droppings or field signs were identified anywhere inside or outside of this building and the building was assessed to have a **low** potential for individual bats to seek temporary shelter beneath the roof slates only.

3.3.3. Building C.

3.3.3.1. Building C is the western of the three buildings, it is single storey and of like construction, with well pointed stone walls and a good condition, stone slate roof. It has two separate rooms, each with its own outside door.



3.3.3.2. The ground slopes up to the south of the building and much of the rear wall is below ground level, as shown in the photograph below, which also shows the gable end wall, the quality of the stonework and the well sealed joint between the wall and the underside of the slates.



3.3.3.3. Inside the roof timbers appear to have been replaced and treated, as can be seen in the photograph below. There was also a generous coating of cobwebs beneath the ridge and around the tops of the walls.



3.3.3.4. The roof is in very good condition with all roof slates in place and with well pointed ridge tiles. As the roof is covered with natural stone, there are some gaps beneath the roof slates where they do not lay completely flat.

3.3.3.5. No bat droppings or field signs were identified anywhere inside or outside of this building and the building was assessed to have a **low** potential for individual bats to seek temporary shelter beneath the roof slates only.

3.4. Dusk Emergence Survey Results.

3.4.1. Two surveyors carried out a dusk emergence survey. One surveyor holds a Natural England Class Licence for surveying bats and the other is an experienced surveyor.

3.4.2. The evening was mild and humid with a southerly wind of 7mph, light and patchy cloud cover and a temperature of 20°C at 19:30. Sunset was at 19:30.

3.4.3. The two surveyors were positioned where they could see all aspects of the building simultaneously and a static Anabat recorder was positioned next to each to record bat activity for subsequent analysis using Analook software. The positions of the Surveyors (S) and Anabats (A) are as shown below.



3.4.4. The following are the observations of the surveyors and details of the recordings on the Anabat recorders.

3.4.4.1. Surveyor 1.

19:41. Noctule passed high over the site.
20:06. Noctule passed high over the site.
20:10. Common Pipistrelle heard not seen.
20:11. Common Pipistrelle foraging along the lane north of the site.
20:13 to 20:36. Common Pipistrelles continuously foraging over the site.
20:22. Two Common Pipistrelles south to north over buildings.
20:41. Common Pipistrelle heard not seen.
21:19. Two Common Pipistrelles flew over the site.

3.4.4.2. Anabat 10 adjacent to Surveyor 1 recorded two Noctules at 19:41 and 20:06 and eighty - nine Common Pipistrelles between 20:08 and 20:39.

3.4.4.3. Surveyor 2.

19:41. Noctule passed over the site.
19:57. Noctule passed over the site.
20:07. Noctule passed high overhead.
20:08. Distant Common Pipistrelle heard not seen.
20:10. Distant Common Pipistrelle heard not seen.
20:11. Unidentified bat, heard not seen.

20:13. Distant Common Pipistrelle heard not seen.
20:14. Common Pipistrelle foraging on the opposite side of the buildings.
20:15. Common Pipistrelle east to west along the back of the buildings.
20:17. Faint Common Pipistrelle heard not seen.
20:21. Faint Common Pipistrelle heard not seen.
20:22. Two Common Pipistrelles south to north over buildings.
20:26. Faint Common Pipistrelle heard not seen.
20:28. Faint Common Pipistrelle heard not seen.
20:32. Faint Common Pipistrelle heard not seen.
20:36. Faint Common Pipistrelle heard not seen.
20:42. Common Pipistrelle heard not seen.

3.4.4.4. Anabat 9 adjacent to Surveyor 2 recorded three Noctules at 19:41, 19:57 and 20:07, two Myotis calls at 20:12 and 20:20 and four Common Pipistrelle calls at 20:13, 20:33 and 20:34. The Myotis calls were assessed to be Whiskered bats passing the site.

3.4.4.5. Anabat 6 in Building A recorded no bat activity.

3.4.4.6. Anabat 7 in Building C recorded seventy six Common Pipistrelle calls between 20:09 and 20:25. All of these calls were faint and of short duration and coincided with the high level of Common Pipistrelle foraging observed by Surveyor 1 outside the buildings.

3.4.5. No bats emerged from the building during the survey.

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4. EVALUATION OF FINDINGS.

4.1. The day time inspection survey identified the buildings to be in good condition with well pointed stone walls sealed to the eaves and to the underside of the roof slates at the gable ends with roofs supported on recently treated timber frames covered with stone roof slates that are all in place with well-sealed and pointed ridge tiles. No bat droppings or field signs were identified inside or outside of the buildings and all were assessed to have low potential for roosting bats, limited to the small gaps between the stone roof slates.

4.2. The foraging habitat was assessed to be generally good with the area surrounding the site interspersed with grassland, hedges, trees and woodland.

4.3. The dusk emergence survey identified a small number of Common Pipistrelles continuously foraging over the site. Occasional Noctules flew high over the site and two Myotis calls were briefly recorded to the south of the buildings.

4.4. No bats emerged from the buildings and therefore there are no bat roosts present in the three buildings.

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5. RECOMMENDATIONS.

5.1. The three buildings on the site were assessed to have very low potential for roosting bats, restricted to small numbers of crevice dwelling bats between the stone roof slates. A precautionary dusk emergence survey showed there to be no roosting bats in the existing buildings and therefore there is no requirement for further surveys, a mitigation strategy or a Natural England licence.

5.2. Nevertheless, individual bats can seek temporary shelter almost anywhere and therefore it is recommended that works to the existing buildings on site are carried out with due care and vigilance. In the unlikely event a bat is found, the bat should be covered and protected, work should cease at that location and the undersigned should be immediately contacted for further advice.

5.3. In order to enhance the biodiversity of the site, it is recommended that one bat box be erected on the tree to the north of the buildings.

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Prepared by:	
Derek Whitcher. BSc, MCIEEM, MCMI.	Date: 10th September 2016.

Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 13th September 2016.

6. REFERENCES.

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1981. ***Wildlife and Countryside Act.*** *http://www.legislation.gov.uk/ukpga/1981/69* (accessed 18/02/16)

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Appendix I. BAT INFORMATION.

It is necessary to understand a little about bats, their basic nature, ecology and legal protection in order to evaluate the findings of this report.

18 species of bat currently reside 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 shortage of food, caused by pesticides, as insects are their sole diet, and habitat change.

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 manmade structures and will readily use these to roost and to rear their young.

Bats are protected under the Wildlife and Countryside Act 1981, Regulation 41 of The Conservation of Habitats and Species Regulations 2010, and the Countryside & Rights of Way Act 2000.

It is an offence to intentionally or recklessly kill, injure or capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

A breeding or resting site of any bat is known as a bat roost. A bat roost is therefore any structure a bat uses for shelter or protection. Because bats tend to use the same roosts each year, legal opinion is that the roost site is protected whether or not the bats are present at that time.

Bat roosts can be identified by looking for:-

- Suitable holes, cracks and crevices.
- Bat droppings.
- Prey remains.
- By carrying out night observations using a bat detector.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

The person applying for that licence has to be suitably qualified and experienced in bat matters. That person is then responsible for ensuring that the measures contained in the licence are carried out.

Appendix II. SOUTH YORKSHIRE BAT GROUP DATA SEARCH RESULTS.

Recorder	Date	GridRef 6Fig	Address line 1	Address line 2	Notes	Species	Number	Evidence
BCT/NE	7/19/2008	SE213009	101		South Yorkshire	Common Pipistrelle	64	
Jerry Brown	9/27/1983	SE2105		Ingbirchworth		Daubenton's Bat	2	
Unknown	2/13/1998	SE2202	Cross lane	Hartcliffe		Vespertillionidae	1	
Eric Bennett	7/29/2004	SE220029	Birks Lane	Millhouse Green	P.pip single feeding round bridge, arrived from downstream.	Common pipistrelle	1	
Eric Bennett	7/29/2004	SE220029	Birks Lane	Millhouse Green	Several M. sp. feeding round bridge, arrived from downstream.	Myotis sp.	Unknown	
Eric Bennett	8/18/2004	SE220029	Birks Lane	Millhouse Green	P.pip single feeding round bridge, arrived from upstream.	Common pipistrelle	1	
Eric Bennett	8/18/2004	SE220029	Birks Lane	Millhouse Green	Several M. sp. feeding round bridge, arrived from upstream.	Myotis sp.	Unknown	
Eric Bennett	7/11/1989	SE2203	Manchester Road	Thurlstone	wing membranes DOA	Pipistrelle sp.	1	
Eric Bennett	9/22/2002	SE222042	Royd Moor Road	Royd Moor	Leisler!	Noctule	1	
Eric Bennett	9/22/2002	SE222042	Royd Moor Road	Royd Moor	farm.	Common pipistrelle	1	
Eric Bennett	4/25/1988	SE233034	Manchester Road	Thurlstone		Pipistrelle sp.	2	
Eric Bennett	4/25/1988	SE233034	Manchester Road	Thurlstone		Vespertillionidae	1	
Eric Bennett	4/25/1988	SE233034	Manchester Road	Thurlstone		Noctule	1	
Eric Bennett	4/25/1988	SE2303	Thurlstone	Thurlstone		Pipistrelle sp.	1	
Eric Bennett	4/25/1988	SE2303	Thurlstone	Thurlstone		Noctule	1	
Eric Bennett	5/28/1988	SE233034	Manchester Road			Pipistrelle sp.	1	
Eric Bennett	11/1/1988	SE233034	Manchester Road	Thurlstone		Pipistrelle sp.	2	
Eric Bennett	7/22/1995	SE233034	Manchester Road	Thurlstone		Pipistrelle sp.	Dr	
Eric Bennett	7/28/1997	SE236035	Don Terrace	Thurlstone	Grounded bat, died later.	Pipistrelle sp.	1	
Eric Bennett	8/1/1998	SE233038	Ingbirchworth Road	Thurlstone	Found on doorstep, died shortly after	Pipistrelle sp.	1	
Eric Bennett	9/1/1998	SE230030	Hornthwaite Hill Roa	Thurlstone	Grounded bat DOA	Pipistrelle sp.	1	
Christine Blanco	8/6/2011	SE231039	303		Species reported: Pipistrelle unsure	Vespertillionidae	4	
Christine Blanco	06/08/2011	SE231039		South Yorkshire		Bat (species unknown)	4	Species reported: Pipistrelle species
Christine Blanco	07/08/2013	SE231039		South Yorkshire		Bat (species unknown)	4	Species reported: Pipistrelle species

Christine Blanco	31/07/2014	SE231039		South Yorkshire		Bat (species unknown)	4	Species reported: Pipistrelle species
Christine Blanco	07/08/2015	SE231039		South Yorkshire		Bat (species unknown)	3	Species not identified
Eric Bennett	4/27/1991	SE2304	Reservoir outflow Scout Dike	Penistone		Pipistrelle sp.	Unknown	
Eric Bennett	5/27/1991	SE2304	Reservoir Scout Dike	Penistone		Daubenton's bat	Unknown	
Eric Bennett	5/27/1991	SE2304	Reservoir Scout Dike	Penistone		Noctule	3	
Eric Bennett	5/27/1991	SE2304	Reservoir	Penistone		Pipistrelle sp.	Unknown	
Christine Blanco	7/22/2011	SE2304	Penistone			Common pipistrelle	59	
Christine Blanco	7/22/2011	SE2304	Penistone			Noctule	16	
Christine Blanco	22/07/2011	SE2304	Penistone	South Yorkshire		Common pipistrelle	59	Method of ID - HT: Detector - heterodyne
Christine Blanco	22/07/2011	SE2304	Penistone	South Yorkshire		Noctule	16	Method of ID - HT: Detector - heterodyne
Christine Blanco	12/07/2015	SE2304	Penistone	South Yorkshire		Common pipistrelle	29	Method of ID - HT: Detector - heterodyne
Christine Blanco	12/07/2015	SE2304	Penistone	South Yorkshire		Noctule	1	Method of ID - HT: Detector - heterodyne
Christine Blanco	30/08/2015	SE2304	Penistone	South Yorkshire		Common pipistrelle	58	Method of ID - HT: Detector - heterodyne
Christine Blanco	30/08/2015	SE2304	Penistone	South Yorkshire		Noctule	23	Method of ID - HT: Detector - heterodyne
Eric Bennett	4/26/1991	SE235050	Woodland	Penistone		Vespertilionidae	Unknown	
Eric Bennett	4/27/1991	SE234050	Scout Dike Shelters	Penistone		Myotis sp.	+Dr	
Eric Bennett	6/6/1991	SE234050	Scout Dike Shelters	Penistone		Vespertilionidae	Unknown	
Eric Bennett	6/22/1991	SE234050	Scout Dike Shelters	Penistone		Vespertilionidae	Unknown	
Eric Bennett	7/27/1991	SE234050	Scout Dike Shelters	Penistone		Vespertilionidae	Unknown	
Eric Bennett	6/27/2001	SE241023	Gledhill Ave	Penistone		Pipistrelle sp.	40	
Eric Bennett	7/23/2001	SE242029	Bluebell Ave	Penistone	Grounded bat	Soprano pipistrelle	1	
Owner	4/22/2002	SE241023	Gledhill Ave	Penistone		Pipistrelle sp.	Unknown	

English Nature	4/29/2003	SE242027	Wordsworth	Penistone	Bat found during building works.	Vespertillionidae	1
English Nature	11/29/2004	SE245028	Site at Green Road	Penistone	Bat found in building being	Vespertillionidae	1
Natural	7/18/2007	SE243021	Hackings Avenue	Cubley	Bat found in garden. Dusk release	Vespertillionidae	1
SYBG/ Martin	6/1/2011	SE246025	Penistone	Sheffield	2 bats found in the house - one	Possibly Leislers	2
SYBG	7/1/2011	SE2	Aughton	Sheffield	Bat found on outside of wall.	Pipistrelle sp.	1
Karen Larkin	9/5/2014	SE242021	402		Bat Care	Common pipistrelle	1
Eric Bennett		SE243027	Wordsworth	Penistone		Common pipistrelle	Unknown
Eric Bennett	7/31/1987	SE247036	Keats Grove	Penistone		Whiskered bat	8
Eric Bennett	7/31/1987	SE247036	Keats Grove	Penistone		Pipistrelle sp.	31
Eric Bennett	7/31/1987	SE247036	Keats Grove	Penistone		Vespertillionidae	5
Eric Bennett	8/18/1987	SE247036	Keats Grove	Penistone		Vespertillionidae	7
Eric Bennett	8/18/1987	SE247036	Keats Grove	Penistone		Whiskered bat	8
Eric Bennett	3/8/1988	SE249033	Penistone Cinema	Penistone	Bat trapped in cinema.	Pipistrelle sp.	1
Peter Carter	5/27/1988	SE247036	Keats Grove	Penistone		Vespertillionidae	2
Eric Bennett	6/9/1988	SE247036	Keats Grove	Penistone		Pipistrelle sp.	6
Eric Bennett	7/7/1988	SE247036	Keats Grove	Penistone		Pipistrelle sp.	31
Eric Bennett	8/15/1988	SE247036	Keats Grove	Penistone		Pipistrelle sp.	27
Eric Bennett	7/17/1989	SE247036	Keats Grove	Penistone		Pipistrelle sp.	76
Eric Bennett	7/17/1989	SE247036	Keats Grove	Penistone		Noctule	1
Eric Bennett	7/17/1989	SE247036	Keats Grove	Penistone		Pipistrelle sp.	76
Eric Bennett	6/16/1990	SE247036	Keats Grove	Penistone	Bat in living area	Brandts	1
Eric Bennett	6/16/1990	SE247036	Keats Grove	Penistone		Pipistrelle sp.	2
Eric Bennett	6/30/1990	SE248035	Shelley Close	Penistone		Pipistrelle sp.	39
Householder	7/16/1990	SE247036	Keats Grove	Penistone		Vespertillionidae	1
Householder	7/20/1990	SE247036	Keats Grove	Penistone		Brandts	1
Householder	7/30/1990	SE248035	Shelley Close	Penistone		Vespertillionidae	20
Eric Bennett	8/2/1990	SE248036	Shelley Close	Penistone		Pipistrelle sp.	1+Dr

Appendix III. BARNSLEY BIOLOGICAL RECORDS CENTRE DATA SEARCH RESULTS.

