

**Whitcher Wildlife Ltd.
Wildlife Consultants.**



CROW EDGE.

BAT SURVEY.

Ref No:- 100939

Date: 30th September 2010.

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1. INTRODUCTION.

1.1. Michael A Clynch is in the process of preparing a planning application for the development of an existing derelict farm building in the village of Crow Edge Barnsley.

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. This survey was carried out on 28th September 2010 and this report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendix I of this report provides back ground information with respect to bats and the legal protection afforded to them.

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. This was followed by a dusk emergence survey by three surveyors, each equipped with a Batbox Duet detector.

3. SURVEY RESULTS.

3.1. Data Search Results.

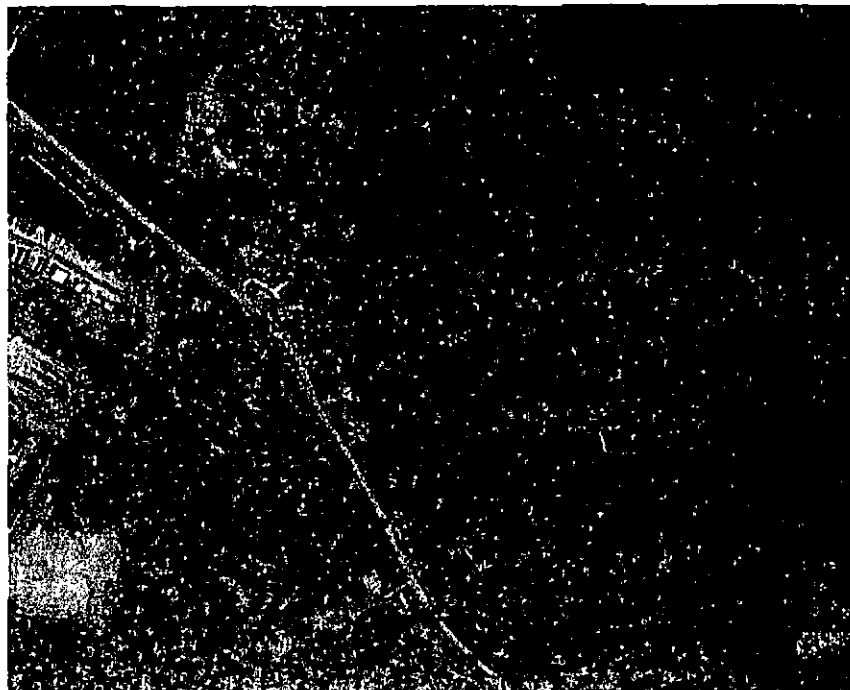
A data search request was submitted to Barnsley Bat Group for existing records of bat roosts within 1km of the site. The table below provides the search results. There are no recorded bat roosts close to the site.

Records for sites SE 1804 SE 1804 SE2301-28/09/2010

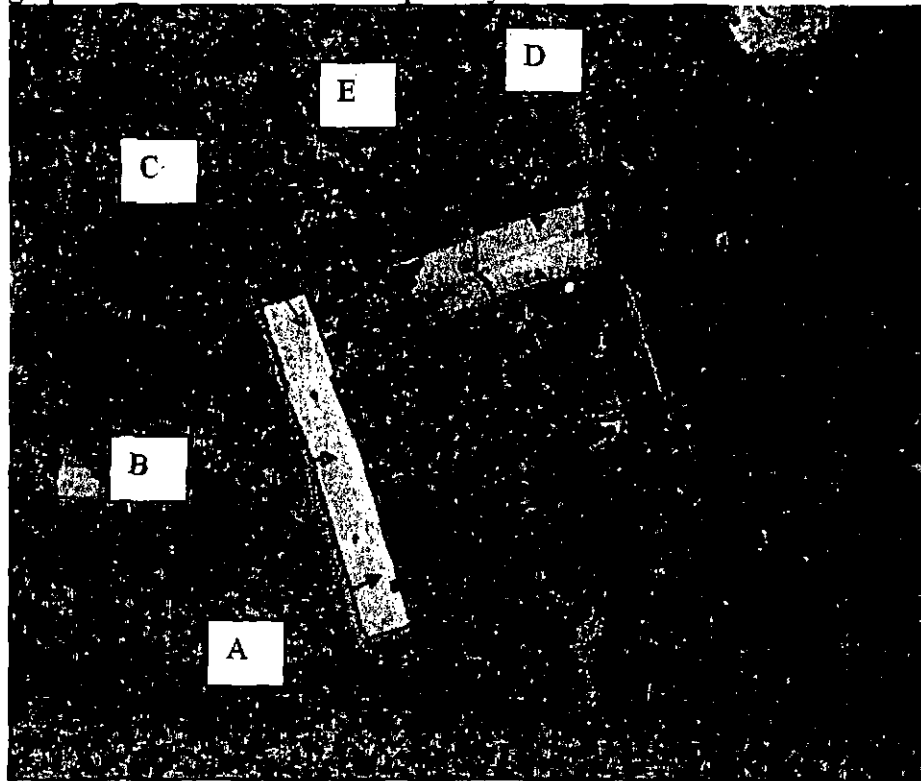
Site Name	District	Roost Type	NGR	Species	Count	Date	Notes
Electric Sub-Station	Dunford	Industrial building	SE172026	Daubenton's	* Dr	/97	Since demolished
River Don Tunnel	Hazlehead	River Tunnel	SE193029	Natterers	8	27/07/91	Probable nursery
Hazlehead Station Tunnel	Hazlehead	Tunnel	SE192028	Brown Long-eared	1	17/01/88	Hibernacula.
Don Villa	Hazlehead	House	SE195030	Indet	*Dr	01/06/91	Probable Pip nursery still present
Manchester Road	Thurstone	House	SE233034	Pipistrelle	* Dr	22/07/95	Probable mole roost
Thurstone Co-op	Thurstone	House	SE233034	Pipistrelle	2	25/04/88	Probable mole roost

3.2. Site Description.

3.2.1. The surveyed site is a derelict group of farm buildings situated in an elevated and remote position within a large area of agricultural farm land to the east of the village of Crow Edge, Barnsley, as shown in the aerial photograph below.



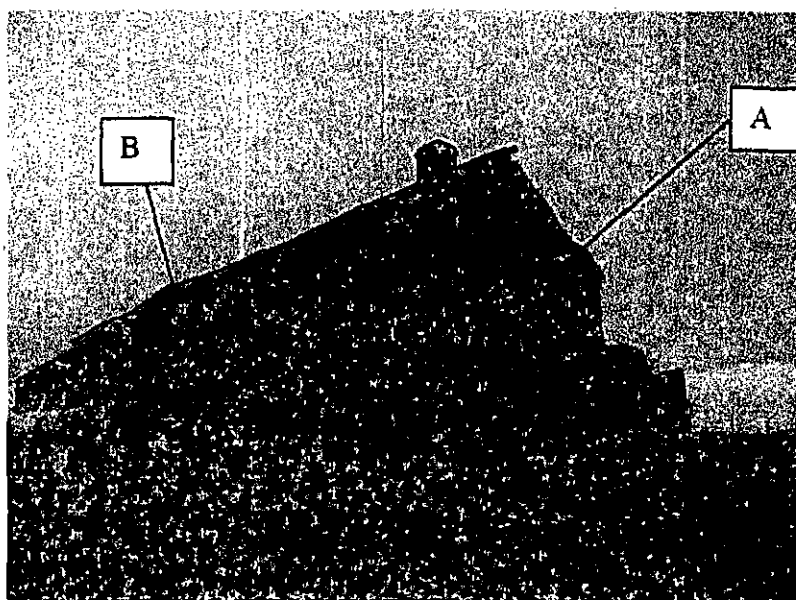
3.2.2. The site comprises a group of five buildings as shown below with a courtyard surrounded by dry stone walls. Each building has been labeled in the aerial photograph below and is dealt with separately below.



3.3. *Day Time Survey Results.*

3.3.1. *Building A.*

3.3.1.1. Building A is the old farm house on the southern end of the site.



3.3.1.2. The building is constructed with close fitting coursed stone external walls with random stone on the inside and a rubble fill. The external walls are in remarkably good condition for the state of the building although there are a number of open joints where the pointing is missing. The building appears to have been tile clad at some point in time but all that remains are the timber lathes that fixed the cladding to the stone walls. All windows and doors are missing and open.

3.3.1.3. The roof of the building is supported on a king post timber frame. The roof covering is stone slates with no lining and is in a poor state of repair with numerous missing and displaced slates.

3.3.1.4. Internally the middle floor has rotted and is mostly missing and the entire building is very wet as a result of being open to the elements.

3.3.1.5. There are the remains of a single storey lean-to extension on the eastern side of the building but all that remains is part of the external walls.

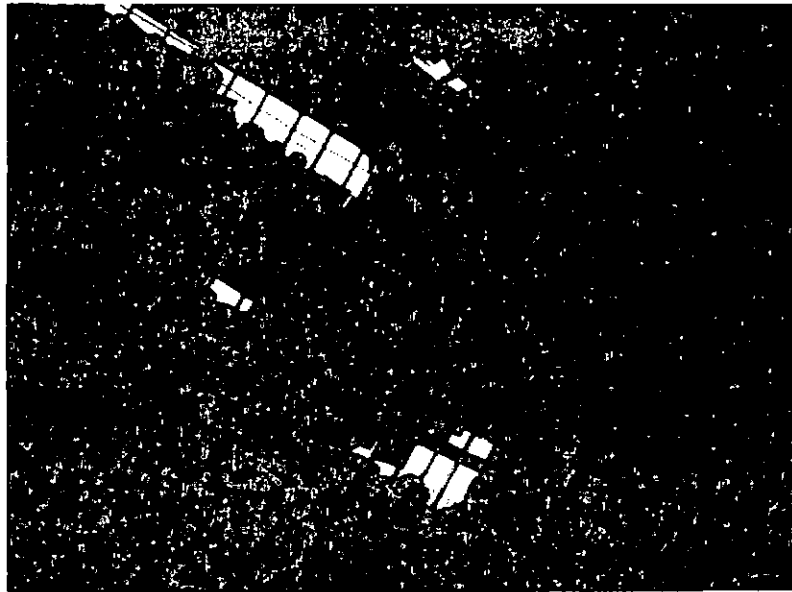
3.3.1.6. No bats or bat field signs were identified anywhere inside or outside this building.

3.3.2. *Building B.*

3.3.2.1. Building B is the main barn building, shown attached to the farm house in the photograph above.

3.3.2.2. The building is constructed with close fitting coursed stone external walls with random stone on the inside and a rubble fill. The external walls are in remarkably good condition for the state of the building although there are a number of open joints where the pointing is missing.

3.3.2.3. The roof of the building is supported on a king post timber frame. The roof covering is stone slates with no lining and is in a poor state of repair with numerous missing and displaced slates and with the majority of the ridge tiles loose or missing, as shown in the photograph below.

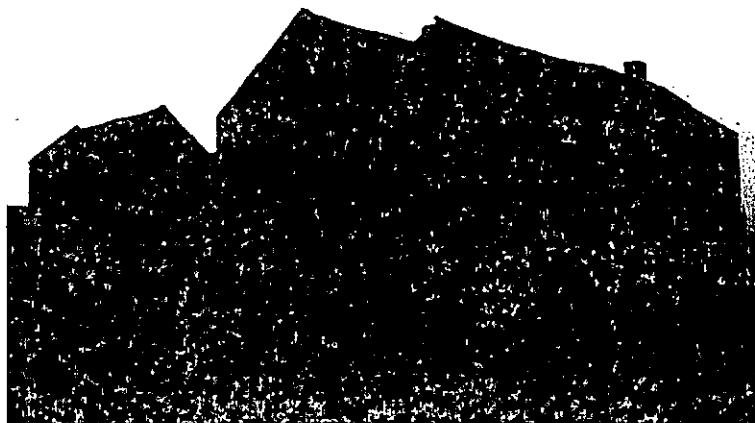


3.2.2.4. The inside walls of the building are in a fairly good state of repair although the building is very wet as it is so exposed to the weather.

3.3.2.5. No bats or bat field signs were identified anywhere inside or outside the building.

3.3.3. *Building C.*

3.3.3.1. This appears to have been a two storey store built onto the northern end of the barn.



3.3.3.2. The construction of the building is the same as above with solid coursed stone walls and a pitched slate roof, as shown below.

3.3.3.3. The roof is supported on a king post timber frame with a stone slate covering with no lining.

3.3.3.4. The walls are generally in a good state of repair although there were a number of openings where the pointing is missing.

3.3.3.5. There are large holes in the roof where there are missing or slipped slates although most of the ridge tiles remain in place.

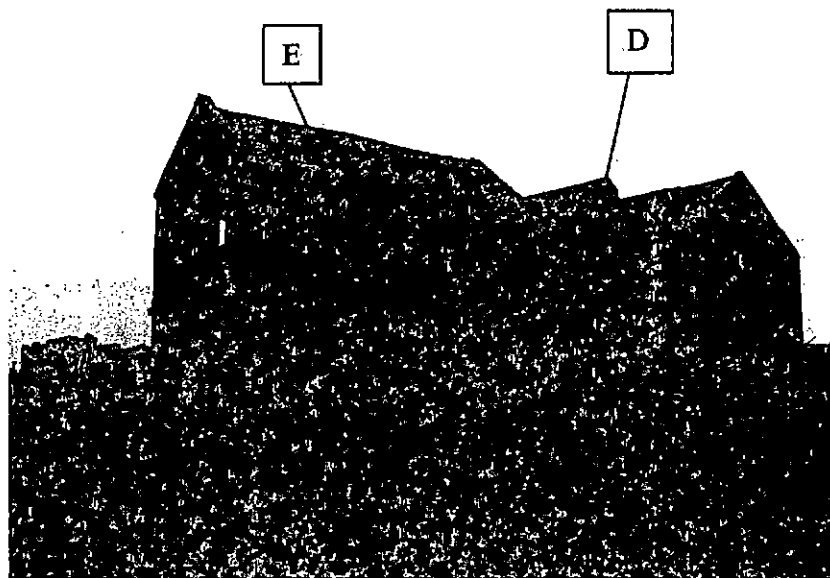
3.3.3.6. Internally the building is very wet and the middle floor has rotted and it was unsafe to access the upper floor.

3.3.3.7. No bats or bat field signs were identified inside or outside this building.

3.3.4. Building D.

3.3.4.1. This is a stone built single storey vehicle shed that abuts Building C and Building F.

3.3.4.2. The construction is similar to the other buildings with solid stone walls and a pitched, stone slate roof. The front of the building is open to provide access for farm machinery.



3.3.4.3. The roof is supported on a traditional purlin and rafter timber frame and there is no lining under the roof slates.

3.3.4.4. The roof is in a poor state of repair with missing and displaced roof slates.

3.3.4.5. No bats or bat field signs were identified anywhere inside or outside this building.

3.3.5. Building E.

3.3.5.1. Building E is the on the eastern end of the site and appears to have provided additional living accommodation.

3.3.5.2. The construction of the building is the same as above with solid coursed stone walls and a pitched slate roof, as shown above.

3.3.5.3. The walls are generally in a fairly good state of repair although an external staircase on the eastern end has collapsed and there are holes in the back wall that would suggest there has been another building present at some time and the holes were to support timbers. No signs of a building exist today.

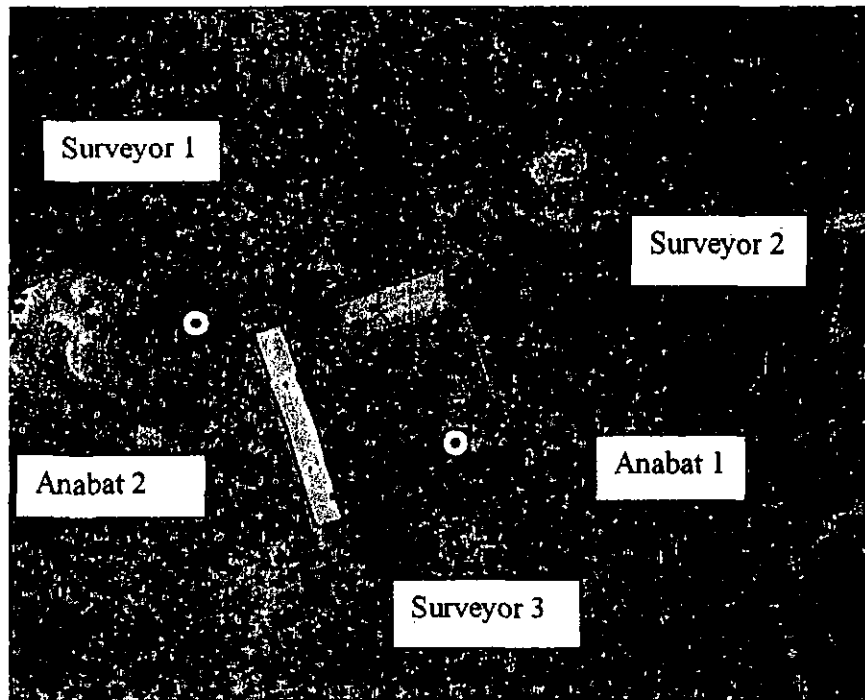
3.3.5.4. The pitched roof is supported on a traditional purlin and rafter timber frame and is covered with stone slates with no lining. The roof is in a fairly good state of repair although there are displaced stone slates that have allowed the ingress of water and the middle floor was unsafe to access.

3.3.5.5. No bats or bat field signs were identified inside or outside this building.

3.4. Dusk Emergence Survey Results.

3.4.1. Three surveyors carried out a dusk emergence survey on the buildings on 28th September 2010. The evening was mild and damp from earlier rain with a light breeze and a temperature of 13°C at 18-45.

3.4.2. The three surveyors were positioned at three corners of the building to provide all round visibility, as shown in the diagram below. Each was equipped with a Batbox Duet detector and two static Anabat recorders were also used.



3.4.4. The following bat activity was identified by the three surveyors.

19:14. A Pipistrelle 45 appeared from the east, foraged around Surveyor 2 and flew back to the east.

19:18. A Pipistrelle 45 flew directly from the south east, over the site and directly away to the north west.

19:28. A Pipistrelle 45 flew from the west, foraged around Surveyor 1 for approximately five minutes then flew away to the east.

19:32. A Pipistrelle 45 appeared from the west, foraged around the west and north of the building before flying back to the west.

19:45. Two Pipistrelle 45s appeared from the east, foraged around the site for approximately ten minutes and then flew back towards the east.

3.4.5. The survey continued until 20:30 and no other bat activity was seen or heard.

3.4.6. The Anabat recorders confirmed the above findings.

3.4.7. No other bat species were identified and no bats were seen to emerge from the buildings.

4. EVALUATION OF FINDINGS.

4.1. The buildings are located in an elevated and extremely exposed position on top of a hill with no trees or scrub anywhere near to the buildings to provide continuity of bat foraging activity.

4.2. The buildings are all in a very poor state of repair and have clearly not been used for an extremely long time. They are therefore very exposed to the weather and the walls were wet and much of the internal timber rotted.

4.3. There are a lot of areas within all of the buildings where the pointing is missing allowing access to the core of the walls but there are no bat roosting opportunities in any of the roofs.

4.4. The level of bat activity identified during the dusk emergence survey was very low although possibly greater than would have been anticipated for the location. However, the evening was still with only a light breeze and on a windy night the level of bat activity would be expected to be even less.

4.5. The bats that were identified foraging around the site were all Pipistrelle 45s. Most appeared from either the west or the east and foraged around the site before moving away to forage elsewhere.

4.6. The buildings are assessed to be very unattractive for summer roosts but there are opportunities for bats to hibernate in the core of the walls, although the exposed nature of the site will make it very cold and draughty during winter.

4.7. No old birds' nests were identified in the buildings.

5. RECOMMENDATIONS.

5.1. No bat roosts were identified in the buildings and therefore there is no requirement for a Natural England Licence in connection with the proposed works.

5.2. However, there is the possibility of hibernating bats within the core of the walls of the buildings. These would only be deep inside the walls if present at all and therefore difficult to find. It is therefore recommended that the following precautionary measures are adopted.

5.3. It is recommended that all external pointing works is undertaken during the period when bats would not be hibernating, between April and October.

5.4. It is recommended that approximately 5% of the missing pointing in the external walls should be left open to allow for bats to continue to hibernate in the walls, if indeed they wish to do so.

5.5. These would also provide potential summer roosting opportunities and therefore no additional biodiversity enhancements are recommended.

5.6. Individual bats can seek temporary shelter almost anywhere and therefore all employees working on the project should be briefed with respect to the possible presence of bats and should be vigilant. In the unlikely event a bat is found, this should be protected from harm and work in that area should cease until further advice has been obtained from Whiteher Wildlife Ltd.

Steve Lingwood and Derek Whiteher.

Natural England Bat Survey Licence Number:- 20100181

30.09.10

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.

Over 15 species of bat have been recorded in Britain. These fall into two families, the horseshoe bats and the 'ordinary bats'. 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 man made structures and will readily use these to roost and to rear their young.

Bats are protected under the Wildlife and Countryside Act 1981, The Habitats Regulations 1994 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.