

**Whitcher Wildlife Ltd.
Wildlife Consultants.**



OAKS FARM, DARTON.

OS REF: SE 319 100.

BAT SURVEY.

Ref No:- 141030.

Date:- 28th October 2014.

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1. INTRODUCTION.

1.1. Plans are being prepared for the residential development of an area of land which includes a bungalow and several derelict barns. The buildings are located off Oaks Wood Drive, Darton.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a daytime bat survey of the site to establish whether there are any issues that may affect the proposed works.

1.3. The site survey was carried out on 28th October 2014 and this report outlines the findings of that 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.

2: SURVEY METHODOLOGY.

2.1. The buildings were thoroughly checked internally and externally for potential bat roosting sites in line with L Hundt (2012). *Bat Conservation Trust Good Practice Guidelines* 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 L Hundt (2012). *Bat Conservation Trust Good Practice Guidelines*.

2.6. This survey was not followed by a dusk emergence bat survey due to the time of year the survey was carried out.

2.7. This survey was carried out by James Campbell MCIEEM. Since 2003 James has had experience in a professional capacity as a Wildlife Consultant carrying out Ecology Surveys and Phase 1 Habitat surveys and is a full member of CIEEM. James holds Natural England Survey Licences in respect of bats, great crested newts, crayfish and barn owls. He has also successfully completed numerous courses run by CIEEM, BCT and FSC regarding protected species and in carrying out Phase 1 Habitat surveys.

3. SURVEY RESULTS.

3.1. Site Description.

3.1.1. The surveyed buildings are a bungalow and a collection of derelict barns located in an area of land, off Oaks Wood Drive, Darton.

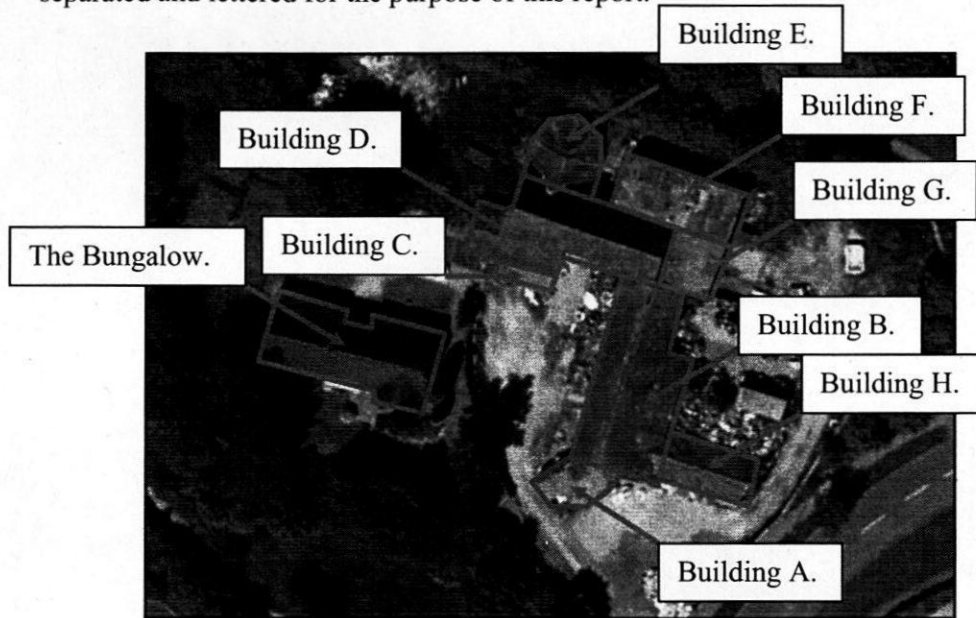
3.1.2. The survey area is surrounded by residential properties with woodland and open gardens to the northwest.

3.1.3. An aerial photograph is provided below which shows the location of the surveyed buildings and the direct surrounding area.



3.2. Daytime Survey Results.

3.2.1. The aerial photograph below shows the surveyed buildings which have been separated and lettered for the purpose of this report.

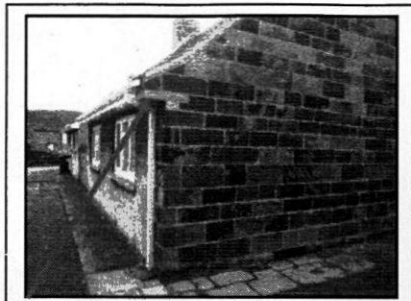


3.2.2. **The Bungalow** is a single storey stone structure with a pitched roof. The dressed stone walls are well pointed with no mortar loss or missing stonework.

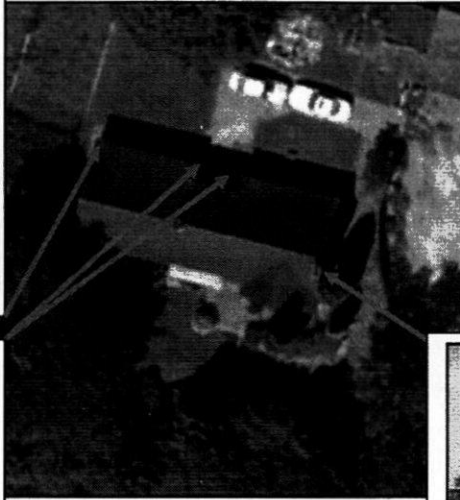
3.2.2.1. The roof of the building is pitched and covered with Rosemary tiles. There are some areas where the tiles have cracked in half, but these do not provide access for bats into the loft space or the cavity between the lining and the Rosemary tiles.

3.2.2.2. The gable ends are mostly well pointed with one small gap on the western gable end. There are plastic soffits and fascia boards around the building which are mostly tight fitting. However, there are two small areas where there is a gap leading underneath the Rosemary roof tiles. There is also a gap underneath the soffit on the western gable end and an area of lifted lead flashing on the eastern chimney. These areas will provide possible access for bats.

3.2.2.3. The aerial photograph below shows the location of the identified gaps.



Western gable end.



Fascia gap.



Lead flashing gap.

3.2.2.4. Internally the roof is supported by a rafter and purlin design wooden frame with a hessian lining. The lining is in a good condition with few gaps or crevices and no bat field signs were identified within the loft space.

3.2.2.5. There are windows and doors on the northern, eastern and southern elevation of the building which are all tight fitting with no gaps or crevices suitable for roosting bats.

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

3.2.2.7. The photograph below shows the south eastern elevation of the Bungalow.



3.2.3. **Building A** is attached to Building B on the northern elevation. Building A is a single storey stone structure with a single pitch roof. The dressed stone walls are well pointed with no mortar loss or missing stonework.

3.2.3.1. The roof of the building is a single pitch, supported by metal framework and covered with corrugated cement sheets. There are coping stones on the northern elevation of the roof at the top of the pitch. Internally the roof is partially lined with plywood.

3.2.3.2. There are windows and doors on the northern and southern elevation of the building which are all tight fitting with no gaps or crevices suitable for roosting bats.

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

3.2.3.4. The photograph below shows the southern elevation of Building A.



3.2.4. **Building B** is connected to Building A on the southern elevation and Building H on the eastern elevation. Building B is a two storey stone structure with a pitched roof. The dressed stone walls are well pointed with some mortar loss and a small area of cracked stonework.

3.2.4.1. The roof of the building is pitched and covered with stone roof tiles. The roof is generally in a good state of repair. However, there are some areas where the stone roof tiles have slipped as the timber is deteriorating. Due to the nature of the stone roof tiles there are gaps between the roof tiles which will provide access for bats.

3.2.4.2. Internally the roof is supported by a queen post design wooden frame with no lining.

3.2.4.3. There are windows and doors on the eastern, southern and western elevation of the building which are all tight fitting with no gaps or crevices suitable for roosting bats.

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

3.2.4.5. The photograph below shows the western elevation of Building B.



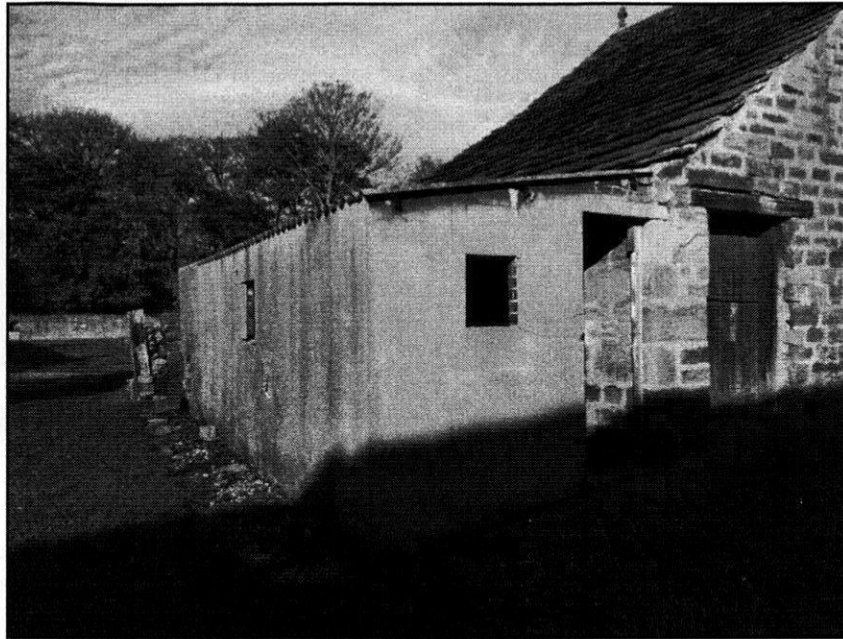
3.2.5. **Building C** is attached to Building D on the northern elevation. Building C is a single storey brick structure with rendered external walls and a single pitch roof. The rendered walls are in a good condition with no cracks or gaps.

3.2.5.1. The roof of the building is a single pitch, supported by metal framework and covered with corrugated cement sheets.

3.2.5.2. There are windows and doors on the southern and eastern elevation of the building which are open which will provide access into the building.

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

3.2.5.4. The photograph below shows the southern and eastern elevations of Building C.



3.2.6. **Building D** is attached to Building C on the southern elevation Building E and F on the northern elevation and Building G on the eastern elevation. Building D is a two storey stone structure with a pitched roof. The dressed stone walls are well pointed with some shallow mortar loss.

3.2.6.1. The roof of the building is pitched and covered with stone roof tiles on the southern elevation and blue slate on the northern elevation. The roof is generally in a good state of repair. However, there are some areas where the stone roof tiles have slipped. Due to the nature of the stone roof tiles there are gaps between the roof tiles which will provide access for bats.

3.2.6.2. Internally the roof is supported by a queen post design wooden frame with no lining.

3.2.6.3. There are windows and doors on the eastern, southern and northern elevation of the building which are all tight fitting with no gaps or crevices suitable for roosting bats.

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

3.2.6.5. The photograph below shows the southern elevation of Building D.



3.2.7. **Building E** is attached to Building D on the northern elevation. Building E is a single storey stone, brick and rendered structure with a semicircular hipped pitched roof. The walls are well pointed with some shallow mortar loss.

3.2.7.1. The roof of the building is covered with a semicircular hipped pitched roof and covered with stone roof tiles. All the ridge tiles are in place. However, there are several areas of mortar loss. The roof is generally in a good state of repair. However, there are some areas where the stone roof tiles have slipped due to the deteriorating timbers. Due to the nature of the stone roof tiles there are gaps between the roof tiles which will provide access for bats.

3.2.7.2. Internally the roof is supported by a rafter and purlin design wooden frame with multiple extra wooden supports with no lining.

3.2.7.3. There are windows and doors on the eastern, northern and western elevation of the building which are all open providing access for bats.

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

3.2.7.5. The photograph below shows the western elevation of Building E.



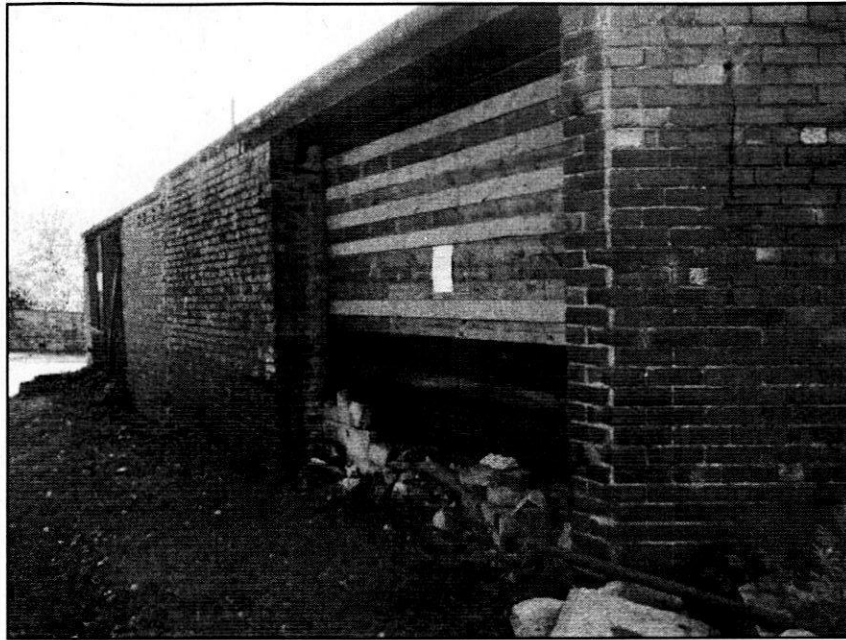
3.2.8. **Building F** is attached to Building D and Building G on the southern elevation. Building F is a single storey brick structure with a flat concrete roof. The brickwork is in a good condition with no cracks or crevices.

3.2.8.1. The roof of the building is flat and covered with a reinforced concrete roof.

3.2.8.2. There are windows and doors on the northern, eastern and southern elevation of the building which are sealed with no access for bats.

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

3.2.8.4. The photograph below shows the northern elevation of Building F.



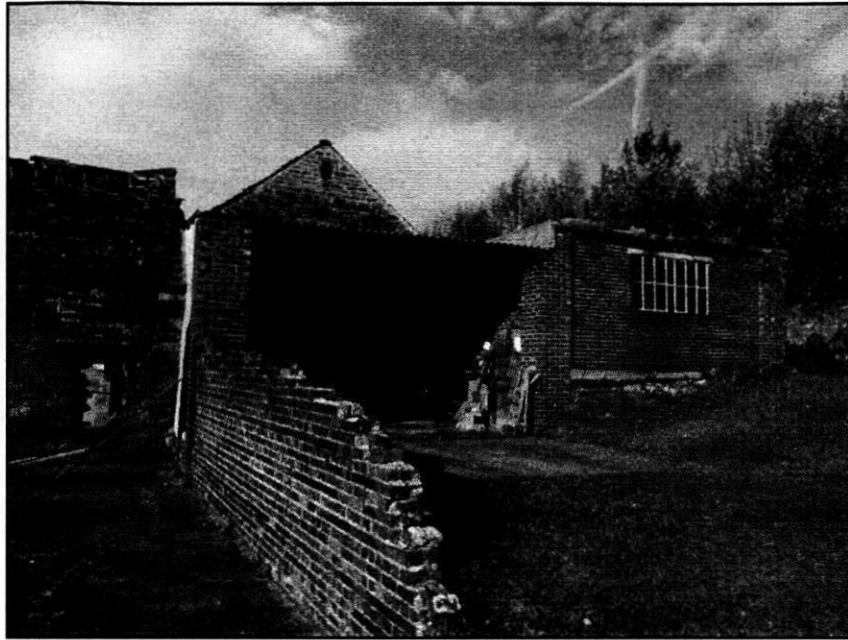
3.2.9. **Building G** is attached to Building F on the northern elevation and Building D on the western elevation and Building B on the southern elevation. Building G is a single storey brick structure with a single pitch roof. The brickwork is in a good condition with no cracks or crevices.

3.2.9.1. The roof of the building is single pitched and covered with a reinforced concrete roof.

3.2.9.2. The front of the building is fully open with constant access for bats.

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

3.2.9.4. The photograph below shows the eastern elevation of Building G.



3.2.10. **Building H** is connected to Building B on the eastern elevation. Building H is a single storey stone structure with a pitched roof. The dressed stone walls are well pointed with some minor mortar loss.

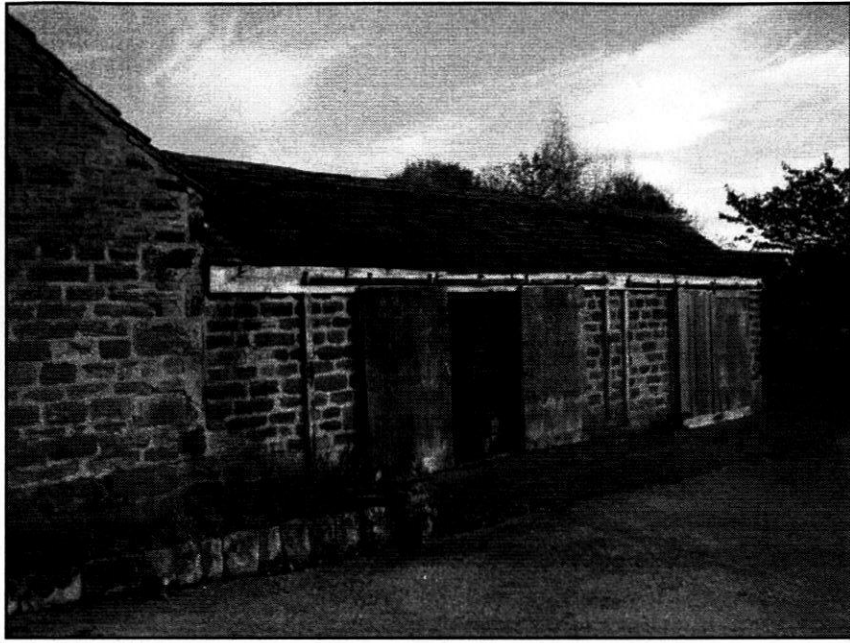
3.2.10.1. The roof of the building is pitched and covered with stone roof tiles. The roof is generally in a good state of repair. Due to the nature of the stone roof tiles there are gaps between the roof tiles which will provide access for bats.

3.2.10.2. Internally the roof is supported by a king post design wooden frame with no lining.

3.2.10.3. There are windows and doors on the southern elevation of the building which are all tight fitting with no gaps or crevices suitable for roosting bats.

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

3.2.10.5. The photograph below shows the southern elevation of Building H.



4. EVALUATION OF FINDINGS.

4.1. The Bungalow will provide a low potential for roosting bats. This is due to a gap being identified in the western gable end, two gaps in the northern fascia boards and an area of raised flashing on the eastern chimney. No bat roosts or bat field signs were identified internally or externally during this survey. However, if these locations are used during the summer months during the bat activity season and field signs are not currently present there could be an impact on bats.

4.2. Building A will not provide a suitable habitat for roosting bats as there are no suitable roosting points and no bat field signs were identified internally or externally during this survey. The proposed works will have no impact on roosting bats.

4.3. Building B will not provide a suitable habitat for roosting bats as there are no suitable roosting points as the building is very exposed and rapidly deteriorating. No bat field signs were identified internally or externally during this survey and the proposed works will have no impact on roosting bats.

4.4. Building C will not provide a suitable habitat for roosting bats as there are no suitable roosting points and no bat field signs were identified internally or externally during this survey. The proposed works will have no impact on roosting bats.

4.5. Building D will provide a low potential for roosting bats as there are some areas of missing mortar and opportunities for bats to roost within the roof timbers. No bat roosts or bat field signs were identified internally or externally during this survey. However, if these locations were in use when the works are carried there will be an impact on bats.

4.6. Building E will not provide a suitable habitat for roosting bats as there are no suitable roosting points and no bat field signs were identified internally or externally during this survey. The proposed works will have no impact on roosting bats.

4.7. Building F will not provide a suitable habitat for roosting bats as there are no suitable roosting points and no bat field signs were identified internally or externally during this survey. The proposed works will have no impact on roosting bats.

4.8. Building G will not provide a suitable habitat for roosting bats as there are no suitable roosting points and no bat field signs were identified internally or externally during this survey. The proposed works will have no impact on roosting bats.

4.9. Building H will not provide a suitable habitat for roosting bats as there are no suitable roosting points and no bat field signs were identified internally or externally during this survey. The proposed works will have no impact on roosting bats.

5. RECOMMENDATIONS.

5.1. It is recommended that further surveys are carried out of the Bungalow and Building D as a low roosting potential has been identified during this survey.

5.2. One further dusk/dawn survey will be required in line with the Bat Conservation Trust Bat Survey Good Practice Guidelines. This survey is required to prove or disprove the presence of roosting bats within the Bungalow and Building D. This survey will need to be carried out during the bat activity season which extends from May to August, weather dependent.

5.3. The table below shows the insert for how many surveys are required from the Bat Conservation Trust Bat Survey Good Practice Guidelines.

Table 8.5 Minimum number of presence/absence survey visits required to provide confidence in negative preliminary roost assessment results from buildings, built structures and trees in summer

High roost potential	Low to moderate roost potential	Low roost potential
3 dusk emergence and/or pre-dawn re-entry surveys during May to September Optimum period May – August	2 dusk emergence and/or pre-dawn re-entry surveys during May to September Optimum period May – August.	1 dusk emergence and/or pre-dawn re-entry survey during May to September Optimum period May – August.
If bats are discovered emerging from any of the buildings during surveys, the survey schedule should be appropriately adjusted to increase the survey effort so that sufficient information can be collected.		
Note: two surveys carried out within the same 24 hour period constitute 1 survey		

Prepared by:	
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Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 30 th October 2014.

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 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, 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.