Whitcher Wildlife Ltd.
Wildlife Consultants.

OAKS FARM, DARTON.

OS REF: SE 319 100.

BAT SURVEY.

Ref No:- **160503.**

Date:- **27th May 2016.**

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1. INTRODUCTION.

1.1. Plans are being prepared for the residential development of a derelict barn in a complex of buildings located off Oaks Wood Drive, Darton.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a daytime, dusk emergence and dawn swarming bat surveys of the site to establish whether there are any issues that may affect the proposed works.

1.3. The site surveys were carried out on 11th May 2016 and the 27th May 2016 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.

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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 Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).*

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

2.7. 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.

2.8. 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.

2.9. Sheila Whitcher, who is an experienced bat surveyor working as an agent under the above two surveyors.

2.10. This survey was followed by a dawn swarming bat survey carried out by one surveyor.

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3. SURVEY RESULTS.

3.1. Desktop Data Search.

3.1.1. Sheffield Biological Records Centre and South Yorkshire Bat Group were contacted for records of bats within the survey area and the direct surrounding area.

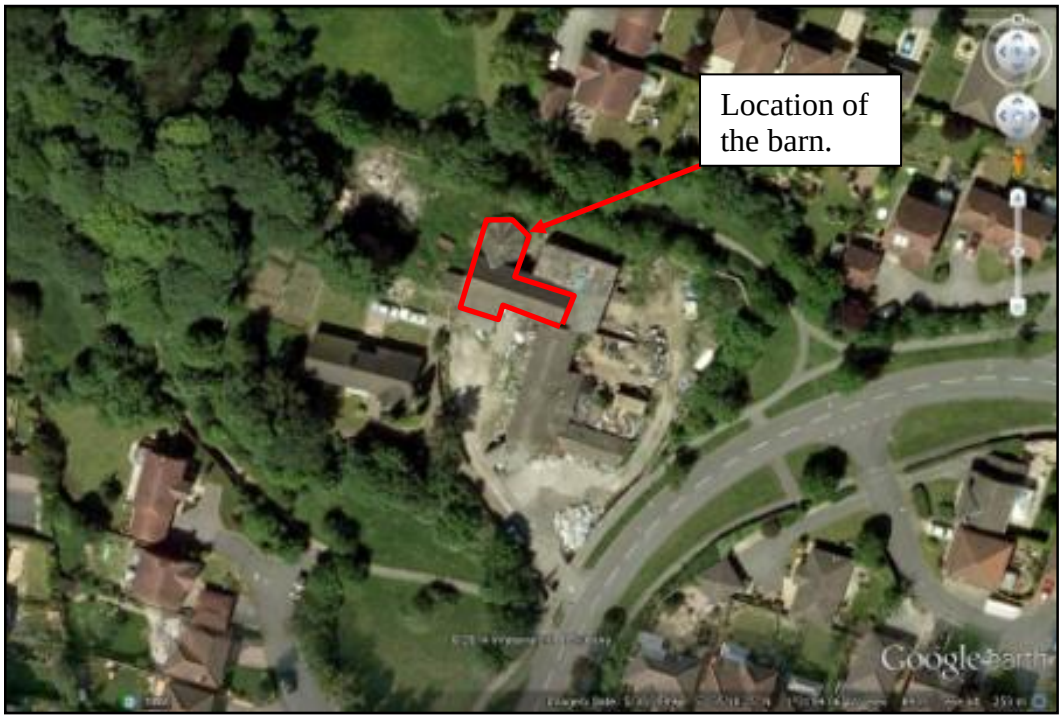
3.1.2. There are no records of bat within the survey area or the direct surrounding area. The data search results are included in Appendix II of this report.

3.2. Site Description.

3.2.1. The surveyed building is a derelict barn located in a complex of buildings on an area of land, off Oaks Wood Drive, Darton.

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

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



3.3. Daytime Survey Results.

3.3.1. The aerial photograph below shows location of the Barn.

3.3.2. The Barn is a two storey stone structure with a pitched roof. The dressed stone walls are well pointed with some shallow mortar loss.

3.3.3. 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.

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

3.3.5. 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.

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

3.3.7. The photograph below shows the southern elevation of the Barn.

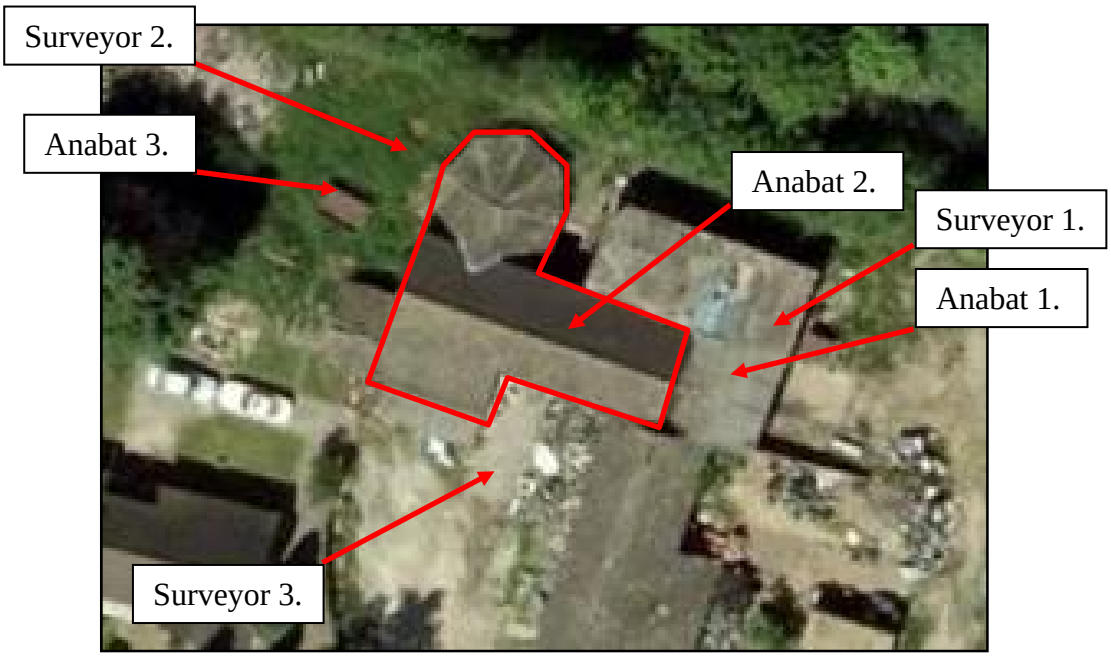
3.3.8. On the northern elevation of the Barn there are several stone pillars with a wooden lintel spanning between two of the pillars.

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

3.4. Dusk Emergence Survey Results.

3.4.1. Three surveyors carried out a dusk emergence survey on the evening of 11th May 2016. Two of the surveyors hold a current Natural England Class Licence for bats. The third is an experienced bat surveyor working as an agent under the above two surveyors.

3.4.2. The surveyors were equipped with Batbox Duet detectors and three static Anabat recorders were also placed in suitable locations around the site to maximize the findings of this survey.



3.4.3. The three surveyors were positioned in suitable places around the site. The aerial photograph above shows the positions where the surveyor and the Anabat recorder are located.

3.4.4. The evening was mild and overcast with a temperature of 12°C at 20:30.

3.4.5. The following are the observations made by the three surveyors.

3.4.5.1. Surveyor 1.

21:16 – A bat was identified flying and foraging from the east to the west towards Surveyor 2 and then returning to the east.
21:17 – A bat was identified flying and foraging from the east to the west towards Surveyor 2.
21:19 – A bat was identified flying and foraging from the west to the east from Surveyor 2.
21:25 to 21:28 – A bat was identified flying and foraging from the east to the west towards Surveyor 2. The bat then returned to the east and continued to forage around the eastern elevation of the barn.
21:26 to 21:32 – A second bat was identified flying and foraging from the east to the west towards Surveyor 2.
21:35 – A bat was identified flying and foraging from the west to the east from Surveyor 2.

21:42 – A bat was identified flying and foraging from the east to the west towards Surveyor 2.

3.4.5.2. Surveyor 2.

21:15 – A bat was identified flying and foraging from the east to the west from Surveyor 2.
21:17 – A bat was identified flying and foraging from the east to the west from Surveyor 2 then leaving the site to the north.
21:25 – A bat was identified flying and foraging from the east to the west from Surveyor 2 then leaving the site to the south.
21:26 to 21:33 – A bat was identified flying and foraging from the east to the west from Surveyor 2. The bat continued to forage over the site for several minutes.
21:40 – A bat was identified flying and foraging from the east to the west from Surveyor 2 then leaving the site to the north.

3.4.5.3. Surveyor 3.

21:09 – A bat was identified emerging from the eaves above the double doors.
21:28 – A bat was identified flying from the west of the barn and foraging at the front of the barn then leaving to the west.
21:30 – A bat was heard foraging but not seen.
21:31 – A bat was heard foraging but not seen.
21:32 – A bat was identified flying from the west of the barn and foraging at the front of the barn then leaving to the west.
21:32 – A bat was identified flying from the west and returned to the west.
21:33 – A bat was identified flying from the west and returned to the west.
21:35 – A bat was identified flying from the west and returned to the west.
21:36 – A bat was heard foraging but not seen.
21:41 – A bat was heard foraging but not seen.
21:42 – A bat was identified flying from the west and then over the roof to Surveyor 1.

3.4.6. The following bat activity was recorded on the three Anabat recorders.

3.4.6.1. Anabat 1 recorded twenty four Common Pipistrelle calls between 21:14 and 21:40.

Time	Pip45	Grand Total
21:14	1	1
21:15	1	1
21:17	1	1
21:23	3	3
21:24	5	5
21:25	1	1
21:27	4	4
21:28	1	1
21:29	2	2
21:31	2	2
21:33	1	1
21:40	2	2
Grand Total	**24**	**24**

3.4.6.2. Anabat 2 recorded seventeen Common Pipistrelle calls between 21:09 and 21:13.

Time	Pip45	Grand Total
21:09	2	2
21:10	4	4
21:11	4	4
21:12	4	4
21:13	3	3
Grand Total	**17**	**17**

3.4.6.3. Anabat 3 recorded twenty six Common Pipistrelle calls between 21:07 and 21:40.

Time	Pip45	Grand Total
21:07	1	1
21:15	1	1
21:17	1	1
21:24	1	1
21:25	1	1
21:26	2	2
21:27	1	1

21:28	1	1
21:29	2	2
21:30	3	3
21:31	3	3
21:32	2	2
21:33	4	4
21:34	1	1
21:39	1	1
21:40	1	1
Grand Total	**26**	**26**

3.4.6.4 The photograph below shows the location Surveyor 3 identified a Common Pipistrelle bat emerged from above the double doors at 21:09.

3.5. Dawn Swarming Survey Results.

3.5.1. One surveyor carried out a dawn swarming survey on the morning of the 27th May 2016. The surveyor holds a current Natural England Class Licence for bats.

3.5.2. The surveyor was equipped with a Batbox Duet detector. Two static Anabat recorders were placed in suitable locations around the site to maximize the findings of this survey.

3.5.3. The surveyor was positioned to the south of the building. The aerial photograph above shows the positions where the surveyor and the Anabat recorders were located.

3.5.4. The morning was mild with a temperature of 11°C at 3:00. The sky was cloudy and the morning was still with negligible wind.

3.5.5. The following are the observations made by the surveyor.

3.5.5.1. Surveyor 1.

3:27 – A bat was heard passing over the site but was not seen.
3:31 – A bat was heard passing over the site but was not seen.
4:07 – A bat was heard passing over the site but was not seen.
4:17 – A bat was seen flying from the south onto the site and across the front of the barn then leaving the site to the west.

4:22 – A bat was seen flying from the south onto the site and across the front of the barn then leaving the site to the west.

3.5.6. The following bat activity was recorded on the Anabat recorder.

3.5.6.1. Anabat 1 recorded four Common Pipistrelle calls between 3:33 and 4:14.

Time	Pip45	Grand Total
3:33	1	1
3:34	1	1
4:05	1	1
4:14	1	1
Grand Total	**4**	**4**

3.5.6.2. Anabat 2 recorded four Common Pipistrelle calls between 3:27 and 4:22.

Time	Pip45	Grand Total
3:27	1	1
3:31	1	1
4:21	1	1
4:22	1	1
Grand Total	**4**	**4**

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4. EVALUATION OF FINDINGS.

4.1. During the initial day time survey of the barn it was assessed as providing 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. As this was the case a further dusk survey was recommended.

4.2. During the dusk emergence survey three surveyors were positioned in three places around the site and they identified bat activity between 21:09 and 21:42. At 21:09 a Common Pipistrelle bat was identified emerging from the southern elevation of the building above the double doors by Surveyor 3.

4.2.1. As this was the case a further dawn swarming survey was recommended to gather enough information to prepare a Natural England Bat Licence.

4.3. During the dawn swarming survey one surveyor was positioned on the southern elevation of the building. The surveyor is positioned to gather further information on the classification of the roost which was identified during the dusk emergence survey.

4.3.1. Low levels of Common Pipistrelle bat activity were identified and no bats were seen to enter the roost which was previously identified during the dusk emergence survey.

4.4. When the roof is stripped and replaced the bat could be injured or killed and the roost could be lost. This will have a high impact on bats.

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5. RECOMMENDATIONS.

5.1. As the bat roost identified during the dusk emergence survey is proven to be an occasionaly used Common Pipistrelle day roost used by small small numbers of Common Pipistrelle bats. It is recommended that the proposed works to the roof of building are covered by a Natural England Bat Low Impact Class Licence.

5.2. This licence should be obtained prior to any works commencing on the roof or the walls surrounding this area of the building.

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Prepared by:	
James Campbell MCIEEM.	Date: 27th May 2016.

Checked by:	
Steven Whitcher, MCIEEM.	Date: 1st June 2016.

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.

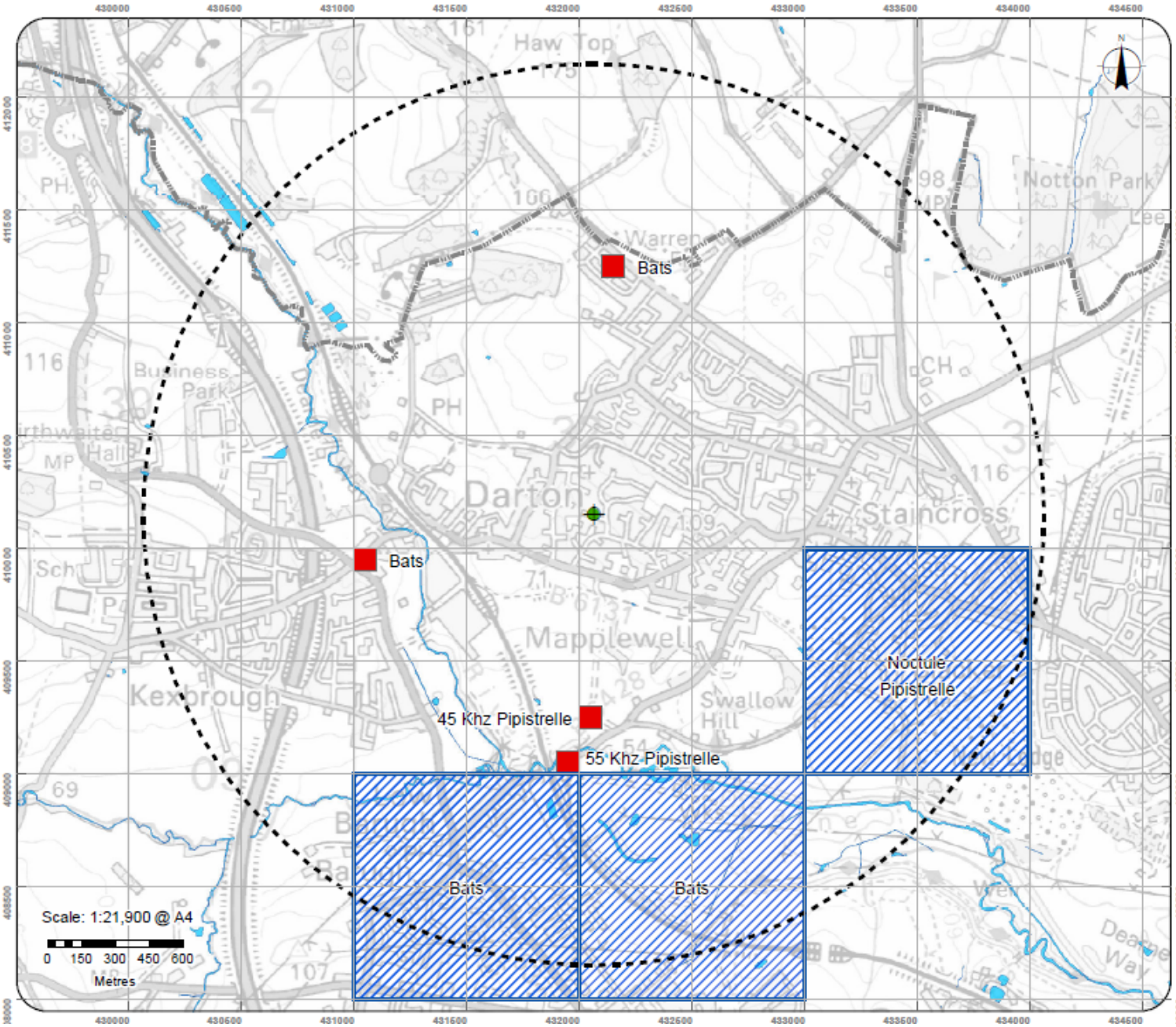
Appendix II. DESKTOP DATA SEARCH.

Recorder	Date	GridRef 6Fig	Grid Square	Address line 1	Address line 2	Address line 3	Type	Structure type	Access points	Notes	Species	Number
Natural England	21/08/2007	SE304095	SE3009	Beaumont Road	Dalton	Barnsley				Bat found on doorstep.Collected for care.	Vespertillionidae	1
Karen Larkin		SE302098	SE3009							Grid ref on Postcode	Common pipistrelle	Unknown
BCT/NEP	18/06/2012	SE302098	SE3010			South Yorkshire					Common Pipistrelle(23)	23
Middleton P	30/07/2011	SE3010	SE3010	River			foraging				Common pipistrelle	4
Middleton	12/08/2011	SE3010	SE3010	river			foraging				Common pipistrelle	4
Karen Larkin	07/08/2012	SE302105	SE3010							juvenile	Common pipistrelle	1
Jerry Brown	14/05/1984	SE300105	SE3010								Vespertillionidae	1
Eric Bennett	26/06/1988	SE300105	SE3010		Darton	Barnsley					Pipistrelle sp.	1
Eric Bennett	26/06/1988	SE300105	SE3010		Darton	Barnsley	Mansion		Hole in wall	Roost Lost	Pipistrelle sp.	1
Eric Bennett	28/11/1988	SE300105	SE3010		Darton	Barnsley					Pipistrelle sp.	1
Householder Unknown	29/04/1990	SE300105	SE3010								Vespertillionidae	3
P	30/07/2	SE3011	SE3011	River			foragin				Common	4

Middleton	011						g				pipistrelle	
Jerry Brown	28/07/1981	SE3108	SE3108		Barugh Green	Barnsley					Vespertillionidae	2
English Nature	21/06/2004	SE312084	SE3108	Barugh	Barnsley					10-12 fruit bats in house roof! Single storey extension soon. Gen info & advice given. FOB sent.	Vespertillionidae	12
Owner report	21/06/2004	SE3108	SE3108		Barugh Green	Barnsley				Bats in roof. No further details.	Vespertillionidae	20+
Eric Bennett	11/01/2004	SE319090	SE3109	Dearne Hall Road	Darton	Barnsley				Probable roost site in bridge outside scheme.	Vespertillionidae	Unknown
Eric Bennett	09/08/1999	SE310099	SE3109		Darton	Barnsley	Shop		Fascia eaves		Vespertillionidae	+ Dr
P Middleton	19/08/2011	SE31461125	SE3111	scrub and grassland			commuting				Noctule	1
P Middleton	19/08/2011	SE31101120	SE3111	trees, amenity grassland			foraging				Common pipistrelle	6
P Middleton	20-Jan-14	SE310118	SE3111	Wooley Reclamation site				grassland		colliery reclamation site	Brown hare	1
Middleton	23/07/2011	SE326080	SE3208	Redbrook			foraging				Common pipistrelle	1
English Nature	11/04/2005	SE321112	SE3211	Staincross	Barnsley		Roost			Bats seen under ridge tile. Total strip of roof planned. Work	Vespertillionidae	Unknown

										stopped. EB visit. No evidence of bats found.		
Eric Bennett	12/04/2005	SE321112	SE3211		Staincross	Barnsley				Bat found under ridge tile by builders.	Vespertillionidae	1
Eric Bennett	12/04/2005	SE321112	SE3211		Staincross	Barnsley	House		Gable apex	Bat found during building work	Vespertillionidae	1
Eric Bennett	20/04/1992	SE339080	SE3308	Tinkers Pond							Daubenton's bat	Unknown
Eric Bennett	20/04/1992	SE339080	SE3308	Tinkers Pond							Pipistrelle sp.	Unknown
Eric Bennett	05/09/2002	SE336080	SE3308	Greenfoot Lane	Wilthorpe	Barnsley	Footpath tunnel (rly)		Open ends		Daubenton's bat	5
Eric Bennett	15/01/2002	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				No bats present	nil	0
Eric Bennett	06/09/2002	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				6 M.daub in roof crevice.	Daubenton's bat	6
Eric Bennett	06/09/2002	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				Roosting in small joint crevice	Daubenton's bat	6
Eric Bennett	14/11/2002	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				No bats present.	nil	0
Eric Bennett	16/11/2002	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				No bats present.	nil	0
Eric Bennett	24/11/2002	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				No bats present	nil	0
Eric Bennett	17/11/2004	SE336081	SE3308	Greenfoot Lane	Wilthorpe	Barnsley				No bats present	nil	0

Eric Bennett	18/06/1988	SE3308	SE3308	Willowbank				Myotis sp.	Unknown
Eric Bennett	18/06/1988	SE3308	SE3308	Willowbank				Noctule	2
Eric Bennett	18/06/1988	SE3308	SE3308	Willowbank				Pipistrelle sp.	2
P Middleton	22/03/2011	SE336087	SE3308	Wilthorpe marsh		foraging		Common pipistrelle	15
P Middleton	23/07/2011	SE332088	SE3308	Wilthorpe marsh		foraging		Daubenton's bat	1
P Middleton	23/07/2011	SE330088	SE3308	Wilthorpe marsh		foraging		Common pipistrelle	2
Karen Larkin	08/04/2013	SE332095	SE3309				Female via Chris N	Common pipistrelle	1
English Nature	08/09/2003	SE338103	SE3310	Carcroft	Doncaster		Bat found in house. BS to collect for care. Bat died before collection.	Vespertillionidae	Unknown
Karen Larkin	23/07/2014	SE348095	SE3409			Bat Care	PTS	Common pipistrelle	1

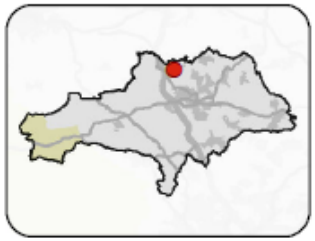


SHEFFIELD BIOLOGICAL RECORDS CENTRE

Known Distribution of a Selected Species Within Search Area
Bats

Oak Farm.
Oaks Wood Drive,
Darton

Centre of Search Area
2km Radius
Selected Species - Bats
100m - Species Distribution
1km - Species Distribution
Waterway
Barnsley District Boundary



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