Bat Survey Report

Pea Field Cottage Stable, Bromley.

4th June 2015

Prepared by:

Peter Middleton MIEEM ……

Middleton Ecological Consultancy, 33 Wilthorpe Road, Barnsley S75 1JA

Contents

1. Report summary

1.1 The bat survey was commissioned by architect Mark Booth on behalf of the owner Mr Ben Hawley.

1.2 The preliminary roost assessment survey was conducted on the 1st June 2015 followed by a dusk emergence survey on the 3rd June 2015.

1.3 There were no visible signs of bat presence found in the stable. However, it has perhaps a few suitable features that can accommodate bats. The building was therefore assessed as having low bat roost potential.

1.4 The activity survey confirmed that no bats were roosting in the building subject to the planning application.

1.5 It was concluded that a European Protected Species licence is not required and no further survey effort is necessary.

2. Introduction

2.1 The Building is subject to a planning application. Middleton Ecological Consultancy was therefore contracted initially to conduct a baseline assessment to confirm presence of bats and to identify roost locations, access points, species present, level of use and the importance of nearby landscape features. This report confirms the findings of the survey carried out by one/two surveyors.

3. Site description

3.1 The site is situated in a rural location within a small hamlet (Bromley). The site consists of a relatively small single storey stable built of concrete blocks that is cement rendered on the façade. The stable has a pitched roof with a ridge and gables and has a covering of concrete pan-tiles (see plate 2). There are three compartments each having its own doorway plus an adjoining section with a corrugated galvanised metal roof.

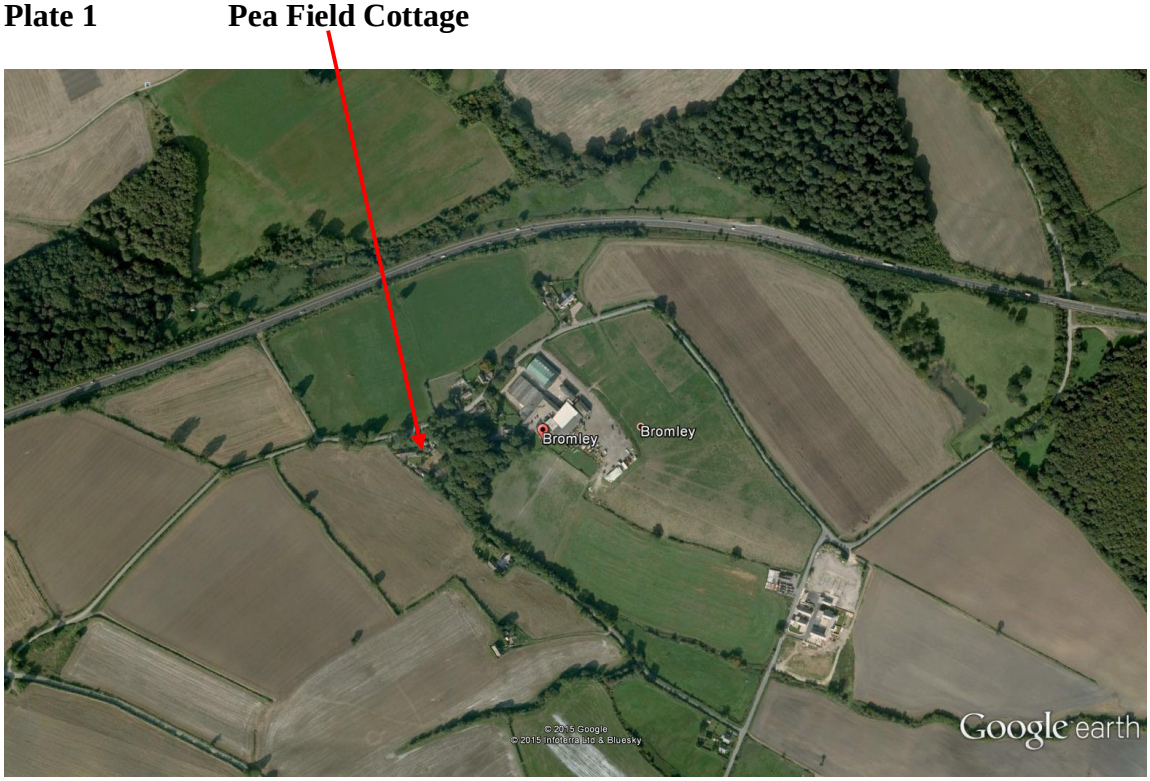
3.2 Habitat assessment

3.2.1 The surrounding area is predominantly arable together with grassland and woodlands. Table 1 outlines the habitats present, adjacent to and further afield to Pea Field Cottage Stable at Bromley (see plate 1).

Table 1

Name and address: Pea Field Cottage Stable, Bromley, Nr Wortley S35 7DE			
OS Grid Ref. SK3230 9885		**Altitude. 183m**	
Local Planning Authority: Barnsley			
Features on site and adjacent to site			
Feature	**On site**	**Adjacent**	**Comments**
Buildings	✔	✔	**Residential plus farm**
River bordered by trees			
Standing water			
Bridges tunnels and culverts			
Trees		✔	**In hedgerows**
Woodland			**330m northwest**
Grassland		✔	**Improved grassland nearby**

Plate 1 **Pea Field Cottage**



3.3 Aims of survey

3.3.1 The survey was conducted to find out the following:

- The presence of bats.
- Where in the buildings are bats likely to roost.
- Where bats are likely to enter and exit.
- Whether additional survey work is required.

4. Methodology

4.1 Field survey

4.1.1 The following personnel conducted the surveys:

Surveyors: Peter Middleton (WML-A34-level 2; 2015-11028-CLS-CLS)
Carl Dixon

4.1.2 The following activities were carried out during the surveys.

- A brief inspection and assessment of the site and habitats present to within 300m.
- An extensive examination of all parts of the buildings both inside and out to record structural features and condition and to record features that may be suitable for roosting bats.
- A thorough search of all sections of the inside of the building for the presence or evidence of roosting bats including droppings, scratch marks and staining.
- Activity survey in the form of an emergence survey on the building beginning 15 minutes before sunset and finishing 75 minutes after sunset.

4.1.3 The following equipment was at hand or used during the surveys:

- Cluelite
- Binoculars
- Ladder
- Camera
- Endoscope
- Themometer

- Bat detectors (Ipad & Echometer touch, Batbox duet)
- Digital recorder

5. Results

5.1 Desk survey

Desk survey - Data supplied by South Yorkshire Bat Group for a 2km radius of site. The data search suggest that there is good foraging habitat in the area because all of the locally occurring species are present (See table 2).

Table 2

Date	GridReference	Address line 1	Type	Notes	Species	Number
02/10/1987	SE302015	Lower Toad Hole Wood Tree	Tree Cherry		Noctule	+Dr
02/10/1987	SE303015	Lower Toad Hole Wood			Noctule/Leislers	Unknown
20/04/1988	SE302015	Lower Toad Hole Wood			Noctule/Leislers	Unknown
16/05/1988	SE302015	Lower Toad Hole Wood			Noctule/Leislers	Unknown
01/07/1992	SE304014	Crane Moor Road	House		Vespertillionidae	81
17/07/1992	SE304014	Crane Moor Road			Pipistrelle sp.	84
17/07/1992	SE304014	Crane Moor Road			Noctule	2
22/01/2004	SE305014	Woodland View	Roost	200 bats counted out last year. Doing work inside house	Vespertillionidae	200
25/01/2004	SE305014	Woodland View	House	200+ owner count, dessicated baby in loft.	Pipistrelle sp.	Dr
01/08/2001	SE318008	The Old Engine House			Vespertillionidae	1
16/08/2001	SE318008	The Old Engine House	House		Vespertillionidae	1/Dr
16/08/2001	SE318008	The Old Engine House			Vespertillionidae	Unknown
31/05/2002	SE316006	Hermit Hill Lane		No roost in barn but possible roost in cottage.2 P.pip feeding.	Common pipistrelle	2
10/07/2014	SE315005		Bat Care	DOA	Common pipistrelle	1
12/05/1989	SE327009	Cannon Hall Country Park			Whiskered bat	2
13/05/1989	SE327009	Cannon Hall Country Park			Whiskered bat	2
18/05/1992	SE327009	Worsbrough Country Park			Whiskered bat	1

13/04/1993	SE326008	Pilley Bridge, Green Springs	Bridge		Daubenton's bat	5
01/05/1993	SE327009	Bruce Lodge 1	House		Whiskered bat	52
01/05/1993	SE327009	Bruce Lodge 2	House		Soprano pipistrelle	15
27/05/1993	SE327009	Bruce Lodge			Whiskered bat	2
31/05/1993	SE326008	Pilley Bridge, Green Springs			Daubenton's bat	3
31/05/1993	SE327009	Bruce Lodge			Whiskered bat	52
11/06/1993	SE327009	Bruce Lodge			Whiskered bat	35
12/06/1993	SE327009	Bruce Lodge			Whiskered bat	44
13/06/1993	SE327009	Bruce Lodge			Whiskered bat	19
14/06/1993	SE327009	Bruce Lodge			Whiskered bat	30
15/06/1993	SE327009	Bruce Lodge			Whiskered bat	17
16/06/1993	SE327009	Bruce Lodge			Whiskered bat	29
17/06/1993	SE327009	Bruce Lodge			Whiskered bat	30
18/06/1993	SE327009	Bruce Lodge			Whiskered bat	34
21/06/1993	SE327009	Bruce Lodge			Whiskered bat	22
22/06/1993	SE327009	Bruce Lodge			Whiskered bat	32
23/06/1993	SE327009	Bruce Lodge			Whiskered bat	19
24/06/1993	SE327009	Bruce Lodge			Whiskered bat	26
25/06/1993	SE327009	Bruce Lodge			Whiskered bat	24
26/06/1993	SE327009	Bruce Lodge			Whiskered bat	33
04/09/1993	SE326008	Pilley Bridge, Green Springs			Daubenton's bat	1
05/06/1994	SE327009	Bruce Lodge			Vespertillionidae	Unknown
13/06/1994	SE327009	Bruce Lodge			Whiskered bat	43
14/06/1994	SE327009	Bruce Lodge			Whiskered bat	47
18/06/1994	SE327009	Bruce Lodge			Whiskered bat	47
25/06/1994	SE327009	Bruce Lodge			Whiskered bat	41
25/06/1994	SE327009	Bruce Lodge			Noctule	1
24/06/1996	SE327009	Bruce Lodge			Whiskered bat	15
30/06/1996	SE327009	Bruce Lodge			Whiskered bat	1
01/07/1996	SE326008	Pilley Bridge, Green Springs			Daubenton's bat	5
01/07/1996	SE327009	Bruce Lodge			Whiskered bat	10
04/06/1997	SE326008	Pilley Bridge, Green Springs			Daubenton's bat	2
04/06/1997	SE327009	Bruce Lodge			Whiskered bat	29
24/06/1997	SE327009	Bruce Lodge			Whiskered bat	15
09/09/1997	SE327009	Wombwell lane		bat found within plastic wrapped stack of bricks.	Whiskered bat	1
21/06/1999	SE326008	Pilley Bridge, Green Springs			Daubenton's bat	2
30/07/2000	SE327009	Bruce Lodge			Soprano pipistrelle	1
01/08/2000	SE327009	Bruce Lodge			Pipistrelle sp.	19
23/03/2003	SE324008	Hermit Hill		Droppings.	Vespertillionidae	Unknown

		Lane				
23/03/2003	SE324008	Hermit Hill Lane			Brown long-eared bat	dr
05/06/2004	SE324008	Hermit Hill Lane		9 P.aur recorded.	Brown long-eared bat	9
05/06/2004	SE324008	Hermit Hill Lane		Single P.pip feeding.	Common pipistrelle	1
05/06/2004	SE324008	Hermit Hill Lane		feeding at side of barn	Common pipistrelle	1
05/06/2004	SE324008	Hermit Hill Lane			Brown long-eared bat	9
16/07/2007	SE322008	Hermit's Hill	Yes	Bats seen in roof spaceRoost confirmed.	Pipistrelle probably	Unknown
16/07/2008	SE322008	Hermit's Hill	Roost	Bats seen in roofspace by grandson. Elderly lady - visit requested for reassurance. NR visit. Roost confirmed. House being sold.	Pipistrelle sp.	Unknown
31/03/2012	SE3200	Hermit's Hill			Brown hare	3
08/08/2012	SE326008	Bruce Lodge		emerging from roost	Soprano pipistrelle	11
08/08/2012	SE326008	Bruce Lodge		emerging from roost	Whiskered bat	4
08/08/2012	SE326008	Bruce Lodge		foraging	Common pipistrelle	1
	SE323008	Hermit's Hill	Barn		Brown long-eared bat	Unknown
27/07/2005	SE335001	Carr Lane	House	Owner count (30 minutes)	Pipistrelle sp.	60+
22/07/2003	SE346002	Westwood New Road		Bat found in playground. Box & dusk release advised.	Vespertillionidae	Unknown
26/07/2007	SE345001	Walker Road		Bat found in doorway yesterday. Failed to fly last night. Possible roost noises above bedroom. JG visit. No roost identified. Bat collected for care. Bat died	Pipistrelle sp.	Unknown
19/06/1989	SK302989	Finkle Street fields to north			Pipistrelle sp.	2
19/06/1989	SK302989	Finkle Street fields to north		Bats feeding low over fields	Noctule	5
12/07/1994	SK302986	Hare Springs Cottage	House	Prob. Excluded	Vespertillionidae	-
13/06/1993	SK3099	Rose Cottage		Bat found dead in garden	Brown long-eared bat	1
21/09/2004	SK311978	Woodhead Road		P.aur feeding perch. P.pip social calls.	Various	Unknown
24/08/2012	SK312995	Wortley hall, S36 1EW		adult male	Common pipistrelle	1
01/09/2003	SK327983	Carr Head Road		P.aur feeding perch. 2 P.pip feeding.	Vespertillionidae	Unknown
01/09/2003	SK327983	Carr Head Road	Barn		Various	Unknown
20/03/2008	SK324980	Berry Lane		Pl.aur dr & moth wings roost	Brown long-eared bat	Unknown

08/07/2010	SK324980	Berry Lane		5 Pl.aur dr not fresh - occasional male habg-up. Single P.pip feeding round farmyard.	Various	Unknown
04/07/1981	SK3398				Vespertillionidae	1
30/07/2001	SK339996	Wentworth Ind. Park		Bat trapped in factory 111	Soprano pipistrelle	1
13/06/2003	SK349964	Marrick Court		Elderly,partially sighted lady. Very concerned about the bats in her loft RH reassured, no bats, possibly birds.	Nil	0
15/07/2003	SK343967	Reaper Crescent	Roost	Roost entrance at gable apex. Concerns about droppings. Info & advice given, FOB sent. Will ring if signs of bats inside loft.	Vespertillionidae	Dr
13/02/2004	SK342960	Meadow Drive		Bat on conservatory roof. Summer roost known at roof apex. Help needed. MM to collect bat.	Vespertillionidae	1
30/04/2004	SK341968	Charlton Drive		Bat in bedroom - terrified. Vol to visit. A bluetit found by MM.	Vespertillionidae	1
14/04/2009	SK337960	Bracken Hill			Common pipistrelle	Unknown
20/06/1996	SK342978	Dowling Avenue	House		Vespertillionidae	+ Dr
14/07/1999	SK342979	Taverner Way	House		Pipistrelle sp.	+ (51-100)
26/09/2006	SK349972	Cart Road		Bat flying inside warehouse - several days?	Vespertillionidae	Unknown
01/08/2011	SK3497	Westnall House			Common pipistrelle	1
03/06/1983	SK3498	Westwood Reservoir Tunnel	Tunnel		Daubenton's bat	2
25/07/2006	SK341980	Merbeck Drive		Bat in room.Removed bat - no roost identified.	Pipistrelle sp.	Unknown
29/05/1981	SK3499				Vespertillionidae	1
11/08/2009	SK349997	Tankersley Lane		Pl.aur in barn D and cottage E. 2 seen poss juv present.	Vespertillionidae	Unknown
11/08/2009	SK349998	Tankersley Lane	Barn	Lots of discarded moth wings.	Brown long-eared bat	2-5

5.2 Preliminary daytime assessment

5.2.1 The building was internally and externally inspected for bats using a high powered lamp where necessary. The potential of the building to accommodate bats was assessed along with a search for signs (e.g. droppings, moth wings, scratch marks, staining etc) or bats that were present. Particular attention was paid to any crevices or gaps in walls, lintels, gaps between beams and joists and to the possibility of finding droppings stuck to walls, floors or other

surfaces, or insect remains below beams, among a number of other factors and signs indicative of a bat roost.

5.3 Outside inspection of building

5.3.1 There are no potential features within the walls of the cement rendered elevations or the exposed concrete block wall at the rear. However, there are gaps beneath ridge tiles and the tile ends above the gutter that have not been mortared. Also, the southwest elevation has a wooden fascia with a gap beneath in several places. However, the gap was found to be very 'cobwebby'.

Plate 2 Northeast elevation

Plate 3 Southwest elevation

Plate 3 Bricks positioned to exclude swallows but bats can still access.

5.4 Inside inspection of building

5.4.1 There are several roof timbers close to the walls that create an ideal gap potentially allowing crevice dwelling bats access to the wall top. However, all are 'cobwebby'. There is bitumen hessian felt beneath the ridge tiles but there is no ridge board. No signs of bats were found.

5.6 Emergence/re-entry surveys

5.6.1 **Dusk survey, 3rd June 2015** – Two people undertook the survey and both were in position 15 minutes before sunset (Sunset 21.08). The surveyors were positioned so that all of the building could be monitored for bat activity.

5.6.2 The temperature at the beginning of monitoring was 11.8c with a force 0/1 NW wind and a clear sky. The temperature plummeted to 7.6c by the end of monitoring and the other conditions remained the same.

5.3.3 Single Common pipitistrelles were audible from 21.52 together with a distant Noctule *Nyctalus noctula* at 22.03. From 21. 04 single Common pipistrelles were seen foraging intermittently on both sides of the stable until monitoring ceased. No bats emerged from the stable.

6. Assessments

6.1 Summary and evaluation of findings

6.1.1 No bats were found roosting in the building and no signs of bat presence were found either during the preliminary daytime assessment. The building has a few features that can accommodate crevice dwelling bats and in spite of its low height it was assessed as have low bat roost potential.

6.1.2 There are buildings adjacent to the stable and in the wider area that have much more bat roost potential than the stable. Nevertheless, bats do the unexpected and that is the reason why a single activity survey was undertaken.

6.2 Survey limitations

6.2.1 A daytime bat survey is used only to determine whether bats are present and if a more detailed survey is required in preparation for a protected species license application. A dusk/dawn bat activity survey in the summer months when bats are most active can give a much greater indication of the level of use of the building, in addition to the species present, roosting locations and access and exit points.

6.2.2 Large or complex buildings require a number of surveyors equipped with appropriate bat detectors and monitoring devices to ensure that the range of frequencies used by British Bats are covered, thus ensuring that no bat species are overlooked during the dusk survey. The 'Frequency Division' detector is a broadband detector i.e. all frequencies used by British bats can be heard at the same time. The heterodyne detector can only monitor one frequency at a time but by continually rotating the frequency dial between 35 and 50 kHz, this covers many of the species likely to be found roosting inside a building. Rotating the dial through all frequencies at regular intervals allows the surveyor to identify the specific frequency of the call.

6.3 Legislation and policy guidance

6.3.1 Bats receive protection under the Conservation of habitats and Species Regulations 2010 (and 2011 Amendment Regulations) and the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats &c.) Regulations 1994.

6.3.2 It is an offence to:

- Deliberately capture (or take), injure or kill a bat.
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly effect the ability of any significant group of animals to survive, breed, rear or nurture their young or likely to significantly effect the local distribution or abundance of the species, whether in a roost or not.
- Damage or destroy the breeding or resting place (roost) of a bat.
- Possess a bat (live or dead), or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.
- Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.

6.3.3 The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a

range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.

6.3.4 Individual Species Action Plans (SAPs) have been developed to address the causes of decline for those species that have been identified as priorities for UK conservation action. Country-level lists contain species considered of national importance in biodiversity strategies. The current list includes Bechstein's Bat, Greater Horseshoe Bat, Lesser Horseshoe Bat, Barbastelle, Noctule, Soprano Pipistrelle and Brown long-eared bat. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.

6.3.5 In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". It notes that "conserving biodiversity includes restoring or enhancing a population or habitat".

6.3.6 Where it is proposed to carry out works which will have an adverse impact on bats or on a bat roost, a European Protected Species (EPS) license must first be obtained from Natural England, even if no bats are expected to be present when the work is carried out.

6.3.7 An EPS license application requires details of the proposed works, the bats which may be affected and the mitigation proposed to maintain the favourable status of bats in the region. The application is usually drawn up on behalf of the client by a specialist ecological consultant. The consultant is likely to be required to check that work is proceeding in accordance with the method statement and to also carry out monitoring of the impact on bats for sometime after completion of the works.

6.3.8 When considering an application, the Natural England licensing section may consult with the local planning authority and specialist conservation staff. This process may take a considerable length of time. Natural England presently states that it aims to make a decision on an application within 30 working days of receipt. There is no guarantee that a license will be granted and no fast track process to obtaining a license. Applications can only be made once planning permission has been granted (where appropriate).

6.3.9 EPS licenses can only be issued if Natural England is satisfied that there is no satisfactory alternative to the development and that the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

6.3.10 NPPF: 11 Conserving and enhancing the natural environment. The planning system should contribute to and enhance the natural and local environment by:

- Protecting and enhancing valued landscapes, geological conservation interests and soils.

- Recognising the wider benefits of ecosystem services.

- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

7. Recommendations

7.1 No bats were recorded roosting on site during the survey works and consequently there is no compulsory requirement for mitigation. However, in order to enhance the ecological value of the site and in accordance with the aims of planning policy NPPF: 11, it is suggested that the developer integrates bat roosting features into the proposed development. For further information; contact Middleton Ecological Consultancy.

8. Conclusion

8.1 The building has few features that can accommodate bats. Consequently the building was considered to have only low roost potential. No visible signs of bat occupation were found and the emergence survey was also negative.

8.2 No further survey effort is necessary for the building subject to the planning application and therefore a European Protected Species License is not required.

8.3 Works should proceed with caution and vigilance for unexpected bat presence, as single bats can roost almost anywhere. If bats are subsequently discovered, work should be stopped and further advice sought without delay.

8.4 The precautionary measures are recommended.

References

Mitchel- Jones AJ, 2004, Bat Mitigation Guidelines, English Nature.

Bat Concervation Trust, 2007. Bat Surveys, Good Practice Guidelines.