

## Besselsleigh Wood - BAT SURVEY RESULTS 2014

### 1. Harp-trap and Mist-net Bat Catching Surveys (see Table 1)

The capture of a pregnant female Natterers' bat (*Myotis nattereri*) on 14/05/14 indicates that a maternity colony of this species is present within a 2-3km<sup>2</sup> radius. The existence of tree roosts used by maternity groups of Natterers' bats within Besselsleigh Wood itself is considered to be highly likely.

Four species of bat were caught on 16/07/14, confirming the presence of Brandts' bat (*Myotis brandtii*), Noctule (*Nyctalus noctula*) and Soprano pipistrelle (*Pipistrellus pygmaeus*) within the woods. All bats were adult males and were probably caught due to their response to sonic lures (ultrasonic bat call playback at harp traps 2 and 3, no bats caught at harp traps 1 and 4 where no sonic lures were used).

Trapping effort was lower on 17/09/14 with only two mist nets placed adjacent to and across the stream in the northern section of the woods. No bats were caught but a Brown long-eared bat (*Plecotus auritus*) was recorded approaching and then evading the net. The low intensity echolocation calls made by this species suggest it was flying within 0.5m of the net!

**Table 1.**  
**Bat data from harp trapping and mist-netting at Besselsleigh Wood 2014**

SITE (GRID REF)	DATE	Bat Spp.	Ringer or HANDLER BAT WORKER INITIALS	Sex ♂/♀	Age? JOINTS (1-4) Ad/Juv	♂ Testes 0/1/2	♂ Epid Size 0/1/2	♂ Epid Colour D/P/L	♀ Breeding Condition NB/PL	Forearm (mm)	BAT Weight (g)		Notes
											-	-BAG	
SP 448015	14/05/2014	<i>Myotis nattereri</i>	KC	F	A	-	-	-	PREG	-	-	-	Biometrics not taken - pregnant so released asap
SP 448017	16/07/2014	<i>Myotis brandtii</i>	DL	M	A	1	0	D	-	35.8	6.2	22:55 HARP TRAP 2	
SP 449017	16/07/2014	<i>Pipistrellus pygmaeus</i>	KC	M	A	2	0	D	-	31.2	5.7	23:36 HARP TRAP 3	
SP 448017	16/07/2014	<i>Nyctalus noctula</i>	KC	M	A	0	2	Pdt	-	52.7	34	00:05 HARP TRAP 2	
SP 449017	16/07/2014	<i>Myotis nattereri</i>	AL	M	A	0	0	Pdt	-	40.4	7.4	00:05 HARP TRAP 3	
		n.b. ALL BATS CAUGHT WERE ADULT MALES = TERRITORIAL RESPONSE TO SONIC LURES											
SP 448018	17/09/2014	NO BATS CAUGHT - BUT <i>Plecotus auritus</i> and <i>Nyctalus noctula</i> RECORDED AT / NEARBY TRAPPING SITE											

## 2. Ultrasound (Bat) Detector Surveys (see Table 2)

DATE	Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	Noctule bat <i>Nyctalus noctula</i>	<i>Myotis</i> spp. (≥6 spp. in the genus <i>Myotis</i> )	Barbastelle bat <i>Barbastellus barbastella</i>	Brown long-eared bat <i>Plecotus auritus</i>	NOTES
14/05/14	Y	Y	Y	Y	Y		Barbastelle calls recorded at SP 448 013
16/07/14	Y	Y	Y	Y			
17/09/14	Y	Y	Y	Y		Y	Noctule observed singing from tree roost

A range of hand-held and automatic detectors were used during survey visits. Pipistrelle and Noctule bats were often recorded foraging above moth trap lights. Barbastelle calls were only recorded on a remote Anabat SD1 unit. Unfortunately it is not possible to reliably distinguish call sequences to species level for bats in the genus *Myotis*.

## 3. Bat Species List and some background information...

- 1) Common Pipistrelle (*Pipistrellus pipistrellus*) - Widespread and abundant species with generalist habitat requirements, typically roosts in houses but will forage in woodland and around lights e.g. opportunistically over moth traps!
- 2) Soprano Pipistrelle (*Pipistrellus pygmaeus*) - Widespread and common species which exhibits strong habitat preferences for foraging over water and in and around woodland.
- 3) Noctule (*Nyctalus noctula*) - A large bat which typically roosts in trees and forages in open habitat or above the woodland canopy and can travel several (>20) kilometres per night whilst foraging. Males will sing during the autumn mating season to attract females into their tree roost.
- 4) Natterers' bat (*Myotis nattereri*) - Prefers to glean insects from the surface of vegetation or to catch spiders from their webs using their tail membranes rather than aerial hawking so typically forages in cluttered habitats e.g woodland interior. Roosts in trees and buildings e.g. barns and churches.
- 5) Barbastelle (*Barbastellus barbastella*) - A widespread and under-recorded species which is still considered to be a rare woodland specialist. Roosts in cracks, crevices, under flaking bark and other superficial features (avoids larger cavities preferred by most other bats). Feeds mostly on moths but will commute over great distances (>20km per night) and forage in open habitats.
- 6) Brandts' bat (*Myotis brandtii*) - One of three 'cryptic' small species in the genus *Myotis*. Very little is known about their distribution and habitat preferences due to the difficulty of distinguishing

from Whiskered bat (*Myotis mystacinus*) and Alcathees' bat (*Myotis alcathoe*). Often associated with woodland and known to roost in trees.

- 7) Brown long-eared bat (*Plecotus auritus*) - The third most common species found in the UK with a very wide distribution but under-recorded during detector surveys as it has very low intensity calls and can even fly and hunt silently so is rarely recorded. Roosts in trees and buildings, especially houses with large attic spaces and churches. Typically forages within a 3-4km<sup>2</sup> radius of the roost and prefers woodland with areas of dense understorey. A gleaner and moth specialist.

n.b. other species which were not recorded but are still considered likely to occur include Daubentons' bat (*Myotis daubentonii*), Whiskered bat (*Myotis mystacinus*), Serotine (*Eptesicus serotinus*) and Leislers' bat (*Nyctalus noctula*). Bechsteins' bat (*Myotis bechsteinii*) and Nathusius' pipistrelle (*Pipistrellus nathusii*) are also possibilities.

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