## Bechstein's Bat *Myotis bechsteinii* at Besford, Worcestershire

Jean Young Pictures © Jean Young.

Although I enjoy watching bats doing circuits while hunting outside my kitchen window on warm summer evenings, I was rather surprised to find one on the ground in early October. While walking across a lawn I noticed a small dark area and on closer inspection I realised that it was a dead bat. I took a few photos, which I appreciate may seem a little odd, but it's not often that you get the opportunity to have a close up look at the features of a bat!

The bat looked as though it had died fairly recently, as it was in good condition with just a small amount of damage to one wing. I hate to let a good dead body go to waste, as they can be of great value/interest for research and education so I took it indoors (managing to avoid encountering any neighbours on the way!), snapped a few more photos and popped it in the freezer. From my photos, Johnny Birks, a local mammal expert, and Colin Morris of the Vincent Wildlife Trust were able to confirm that the bat was a Bechstein's Bat *Myotis bechsteinii* 

Some of the features that helped with the identification can be seen in the photos of the dead bat:

- 1. The face is pink, bare and has quite a long muzzle.
- 2. The ears are well separated and pink at base grading to more or less brown tips. The tragus (visible within the ear) tapers to a point and is less than half the length of the ear. (The comparative tragus length is fairly obvious in the 'flight' shot but not so clear in the shots where the bat is lying on its back, due to the angles involved).
- 3. The under fur is white-tipped.
- 4. The wing membranes are mid to dark brown and the tail membrane is deep.



01. Dead Bechstein's bat with centimetre scale 02.10.2018.



02. Dead Bechstein's Bat back view showing damaged wing to



03. Dead Bechstein's bat ear, nose, jaw detail 02.10.2018.



04. Dead Bechstein's bat 02.10.2018.



05. Dead Bechstein's bat detail of foot 02.10.2018.



06. Dead Bechstein's bat back view wings outstretched showing damage to wing 02.10.2018.

Having the bat identified as Bechstein's was very exciting news, as it is one of our rarest bats, found mainly in woodland in Southern England and Wales with some in the Midlands including a few sites in Worcestershire. As it is classified as Near Threatened on the IUCN Red List and a Priority Species in the UK Biodiversity Action Plan, surveys were carried out across several counties including Worcestershire to study distribution, range and habitat preferences between 2007 and 2010. Due to the success of the previous survey a follow-up radio-tracking study of roosting and foraging ecology was undertaken in 2012 in Grafton Wood, a nature reserve owned jointly by Worcestershire Wildlife Trust and Butterfly Conservation.

Articles detailing these surveys appeared in *Worcestershire Record* 30, 32 and 33 and the final report of the 2012 study is available to download online (see References).

From the above mentioned articles it was interesting to note that the bats are generally associated with broadleaf woodland and ideally need mature trees 80 to 120 years old with a good supply of woodpecker holes for roosting. Although there are several woodlands nearby, the site where the dead bat was found is not in a woodland but there are several copses with a good number of mature trees with woodpecker holes on site. The distance from where the bat was found, to the edge of local woodlands varies between just over a kilometre to 1.75km away. In the radio tracking study at Grafton Wood, bats travelled up to 1.5km from their day roosts with one individual venturing 3.8km.

A few weeks prior to finding the dead bat we had borrowed a bat detector and walked around the site to see what we could find. The detector we were using records bats calls and attempts to identify the species heard. Nine species of bats were suggested (including Bechstein's) but we took it all with 'a pinch of salt' as were aware that the suggested species would not necessarily be accurate and analysis of the data by experts would be required to ascertain what had been picked up. It was unfortunate that the dead bad was discovered so late in the season, but we hope that surveys next year will help us to ascertain what species of bats are around. Hopefully the dead bat I found was not the only Bechstein's in the area!

## Acknowledgements

Many thanks to Johnny Birks and Colin Morris for their help with identification.

## References

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https://www.worcswildlifetrust.co.uk/species/bechsteins-bat A study on the population size, foraging range and roosting ecology of Bechstein's bats at Grafton Wood SSSI Worcestershire http://www.bats.org.uk/pages/bechsteins\_bat\_project.html

## Images

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