

Bat Conservation Trust



Bechstein's Bat Survey Summary Report for Funders Sept 2009 - Sept 2010

This is an interim progress report for the Bechstein's bat survey which has now completed its third survey season. The four-year project started in September 2007 and is due to end in September 2011. This report provides a short summary of the results from the third year; a full and final report will be completed for the end of the project in September 2011.

1.0. Introduction

The Bechstein's bat survey is a four year funded project which aims to map the UK distribution of the elusive Bechstein's bat (*Myotis Bechsteinii*). Bechstein's bat is a UK BAP priority species and is also listed on Annex II and IV of the Habitats Directive. The UK represents the north-western edge of its European range, where it is understood to occupy a narrow ecological niche. Bechstein's bat is closely associated with ancient oak woodlands and dense native understorey.

The overall aims of the project are:

- To deliver systematically acquired baseline distribution data for Bechstein's bat across its entire range in England and Wales.
- To better delineate the species' range and hotspots for conservation action.
- To better understand the habitat associations of the species across its range in the UK.
- To provide conservation management guidelines for landowners and managers of sites where Bechstein's bats are present.
- To provide a baseline against which ongoing presence of the species in 10km squares can be monitored for future Biodiversity Action Plan reporting and conservation status assessments. (Note that the survey is about mapping the distribution of core breeding maternity colonies, male only presence and inference of likely absence of a breeding maternity colony during the survey event - a much more detailed result than just a snapshot of presence/absence).

Selected woodlands in southern England and south Wales are being surveyed to gather more information about this species' known range, its habitat associations and to identify conservation hotspots.

2.0. Bat Groups in 2010

In the third year of the project seven bat groups took part. This included three groups (Devon, Dorset and Kent) that undertook most of their surveys during the summer of 2009. These groups aimed to survey remaining woodlands in their counties during May and June 2010. Due to cold temperatures in early May, which affected the opening of the canopy (and hence the presence of Bechstein's bats), these groups were granted a small extension and surveyed until July.

In addition, four new counties were also surveyed in 2010. Co-ordinators from each group that take part are trained up and asked to organise the surveys in their counties. Volunteers from North Buckinghamshire, Gloucestershire, Somerset and Worcestershire Bat Groups attended a one day course in January (woodland identification) and a four day course (practical and theory) in May. In total, nine individuals from the four counties completed the training to become bat group coordinators. These four groups surveyed woodlands between May and September 2010.

3.0. Results for 2010

- Selected woodlands in 91 10km squares were surveyed across seven counties
- 11 bat species were recorded: Barbastelle, Bechstein's bat, brown long-eared bat, common pipistrelle, Daubenton's bat, lesser horseshoe bat, Natterer's bat, noctule, serotine, soprano pipistrelle, whiskered/Brandt's/alcaho bat.
- In 2010 a total of 33 Bechstein's bats (22 females and 11 males) were caught at 19 sites: nine of these were caught in Buckinghamshire, four in Dorset, two in Gloucestershire, one in Kent, nine in Somerset and eight Bechstein's bats in Worcestershire.
- In total for all years, 50 Bechstein's bats (26 females and 24 males) have now been caught at 32 sites across seven counties
- One or more bats were caught in 87 of the 91 woodlands surveyed.
- Brown long-eared bats were the most frequently encountered bat: 41% of all bats caught were long-eared bats. Natterer's bat was the second most frequently encountered bat at 13.4%. 7.6% of bats captured were Bechstein's bats

4.0. Preliminary discussion

2010 has been a very successful year for the project, with more woodlands surveyed, individuals caught and Bechstein's bats captured than other years of the project. Approximately 75 volunteers took part this summer, learning new skills and gaining experience in survey techniques and bat identification.

Bechstein's bats were caught across Buckinghamshire, Dorset, Gloucestershire, Kent, Somerset and Worcestershire in 2010 and add to records collected in Dorset, Kent and Surrey in 2008 and 2009. These records are providing a better understanding of Bechstein's bat distribution across Southern England.

Surveys in 2009 highlighted the importance of the southwest for this species with two female and ten male Bechstein's bats captured in Dorset. The results from the 2010 surveys in Dorset and Somerset have strengthened this picture with more woodlands with Bechstein's bats present being identified.

Surveys in Buckinghamshire and Worcestershire also generated some exciting results, with breeding female Bechstein's bats being recorded in these counties for the first time. These counties are on the edge of the known range and therefore represent an interesting opportunity to look at outlying populations and potential differences in woodland use.

Gloucestershire already has previous Bechstein's bat records so it was expected that surveys in this county would deliver new records for this species. However just two male Bechstein's bats were caught during the surveys in 2010. In addition the catch rate of bats per survey was significantly lower in Gloucestershire (with just one or two bats being caught in a night) compared to other counties. Gloucestershire is a particularly wooded county and many of the sites surveyed were part of larger woodland blocks. Possible reasons for the lack of captures and in particular Bechstein's bats could be that with so much available woodland, there is less need for these bats to be territorial (the Autobat relies on a territorial response) or perhaps that the extensive woodland means that bats are more spread out and therefore less likely to hear and respond to the Autobat's calls.

Devon was the only county that did not record Bechstein's bats during 2010. Existing Bechstein's bat records in Devon are restricted to the south east of the county close to the Dorset border. These are the most westerly records for the species in England and may represent the western boundary of the Bechstein's bat's distribution.

5.0. Plan for 2011

Buckinghamshire, Gloucestershire, Somerset and Worcestershire Bat Groups will complete their involvement in May and June 2011. Data from these surveys will be added to the data collected in 2009 and 2010. A final project report and distribution map will be produced in September 2011.

