# Devon Bat Survey Report

2018



### Introduction

Thank you for taking part in the Devon Bat Survey. The records that you have helped to provide will help us to work out how bats are using our landscape. This survey is being run as part of the Devon Greater Horseshoe Bat Project, which is a 5 year partnership project of 18 organisations led by Devon Wildlife Trust and is supported by the National Lottery through the Heritage Lottery Fund, as well as other funders.

There are 18 species of bat in Britain and they all have different needs, so some are more likely to be found in dark, rural areas such as the greater horseshoe bat, and others are happy in towns and cities, like the common pipistrelle. All the bats in the UK eat insects, so they are great natural pest controllers! This means that their droppings are made up of tiny bits of insect, so they are crumbly and dry.

Bats find their prey through echolocation - this is where the bat calls at a very high frequency (most humans cannot hear this - although children are sometimes able to) and listens for the return call as it bounces off an object. Horseshoe bats have a special nose-leaf that is shaped like a horseshoe which helps them to direct their calls. This helps them to build up a map of their surroundings and find their prey. It is these calls that the bat detector you borrowed has recorded, and many of these are distinctive to a particular bat, or a group of bats, allowing us to work out what species have been detected.

This report will tell you what bats have flown past your detector. It does not give an exact number of bats, but tells you how many times a bat of each species has been recorded passing by - it could be one bat flying past lots of times! It will also give you some information on each species of bat.

We hope that you have enjoyed taking part in the survey and will take part again next year.

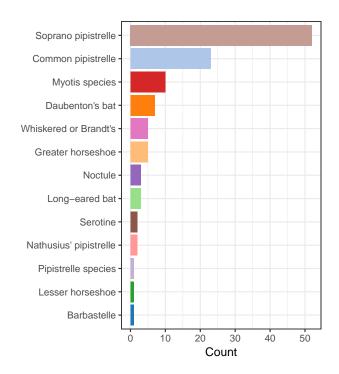
Devon Greater Horseshoe Bat Project Team

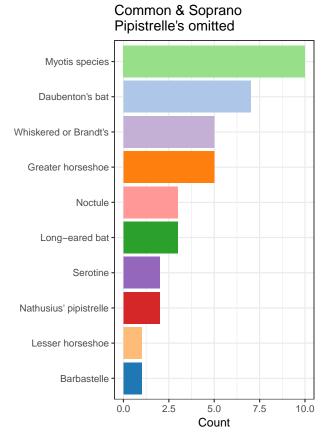
### Survey Details:

Date of Survey: 2018-09-19 Surname of surveyor: Pullar Location: Dartington SD card number: 15.5

## Survey Results

Species	Bat Passes (Nr)
Soprano pipistrelle	52
Common pipistrelle	23
Myotis species	10
Daubenton's bat	7
Greater horseshoe	5
Whiskered or Brandt's	5
Long-eared bat	3
Noctule	3
Nathusius' pipistrelle	2
Serotine	2
Barbastelle	1
Lesser horseshoe	1
Pipistrelle species	1





Below is some information on the species which were found on your survey. For more information please visit the Bat Conservation Trust website http://www.bats.org.uk.

#### Barbastelle Barbastella barbastellus

The barbastelle is a distinctive looking medium-sized bat. It has a pug-shaped nose and broad ears which join across the top of the head, and its fur is very dark with "frosted" tips. It prefers woodland, roosting in trees and hunting both beneath the canopy and over tree-tops but can also be found over rough meadows, ponds and streams.

#### Long-eared bats Plecotus species

The ears of a long-eared bat are nearly as long as its body! Their highly sensitive hearing means they can hunt by listening for sounds made by insects, rather than using echolocation, which some moths can detect. There are two species of long-eared bat in the UK; The brown long-eared bat and the grey long-eared. Brown long-eared bats are found across most of the UK hunting amongst vegetation in gardens and parks, along hedgerows and in woodland where they will pluck insects off leaves as well as catching them mid-air. The grey long-eared bat is incredibly rare, but is found in small pockets of Devon, favouring coastal areas where it is found feeding over unimproved grassland and marshes. It is very hard to tell them apart from sound alone, so we put them together in our reports.

#### Common Pipistrelle Pipistrellus pipistrellus

Common pipistrelles are the most common and widespread of all British bat species. They are found in lots of places, including towns and cities, as well as in the countryside. They are small, and their flight is fast and jerky as they pursue small insects which they catch and eat whilst flying. A single pipistrelle can consume up to 3,000 insects in one night!

#### Daubenton's Bat Myotis daubentonii

Daubenton's bats have a strong association with water and they normally hunt for food over smooth surfaced water such as ponds, lakes and slow flowing rivers and streams. They have a pale belly and fly low over the water, using their large feet and tail to scoop up insects from the water surface.

#### Greater horseshoe bat *Rhinolophus ferrumequinum*

Horseshoe bats can be distinguished from other British bats by the presence of a complex horseshoe-shaped nose which is needed for their particular type of echolocation. When roosting they hang free by their legs from a perch, with their wings more or less wrapped around their body. The greater horseshoe is one of our largest bat species, about the size of a small pear. It requires a network of cattle-grazed pasture, mature hedgerows, woodland edge and species-rich grassland to hunt its insect prey, which includes dung beetles. Horseshoe bats are known to avoid areas which are artificially lit, and are therefore vulnerable to increased light levels as they disrupt their commuting paths, roost flight-lines and foraging areas. This is one of the UK's rarest bat species, and Devon is one of their strong-holds in Northern Europe.

#### Lesser Horseshoe Bat Rhinolophus hipposideros

The lesser horseshoe bat is one of the smallest British species, being about plum - sized. It has a complex horseshoe shaped nose which is related to the way it echolocates. It rests by hanging upside - down with its wings wrapped around its body, and avoids flying and foraging in lit up areas. Lesser horseshoe bats mostly hunt close to their roost in sheltered valleys, woodland edge, pasture and wetlands.

#### Myotis Species

The Myotis are a group of bats which includes Alcathoe, Bechstein's, Brandt's, Daubenton's, Natterer's and Whiskered bats. They all make very similar sounds which mean that sometimes it is very hard to tell them apart from their recordings alone.

#### Nathusius' Pipistrelle Pipistrellus nathusii

This bat is quite rare in the UK, though records have increased in recent years. It is migratory (with one bat recorded travelling between Bristol and Holland!) and is most commonly found in autumn, although there are now records of colonies remaining all year and breeding in the UK. It is similar in appearance to, but slightly larger than the common and soprano pipistrelles and the fur on its back is longer, sometimes giving a shaggy appearance. The Nathusius' is strongly associated with water and woodlands.

#### Pipistrelle Species

There are 3 species of pipistrelle that are commonly found in the UK, the common, soprano and Nathusius'. They are the smallest of the British bats, with both the common and soprano likely to be found in most

areas - including the middle to towns and cities. The Nathusius' is a rarer, migratory bat, normally found near water.

#### Soprano Pipistrelle Pipistrellus pygmaeus

The soprano pipistrelle was discovered as a different species to the common pipistrelle in the 1990s - they are very similar but they use slightly different echolocation calls and there are subtle differences in how they look. They also tend to roost and hunt in slightly different places, with the soprano pipistrelle favouring river habitat and wetland areas.

#### Whiskered or Brandt's

Whiskered and Brandt's bats are very similar in appearance, both are small with slightly shaggy fur - and Brandt's is normally a bit bigger, but often DNA analysis is the only way to tell them apart. They are often found in slightly different areas; whiskered bats are mostly found in open wooded country, often near water, whilst Brandt's feed through the night at low heights in woodland, parks, meadows and near water bodies.

#### Noctule Nyctalus noctula

The noctule is one of the largest British species and is striking with its sleek golden brown fur and very dark face and wings. It flies high and fast in a straight line with occasional steep swoops as it pursues insects and catches them on the wing. As a fast-flyer it is less vulnerable to predators so emerges from its roost early, sometimes even before sunset, and is often seen flying over tree-tops. Noctules favour open habitats such as pasture, woodland edge, marshland and parkland, and they are also commonly found close to rivers and lakes.

#### **Serotine** *Eptesicus* serotinus

The serotine is one of Britain's largest bat species and usually one of the first to appear in the evening. It has a leisurely flight style, with distinctive short glides, steep descents and circling over open areas. Serotines look for food over a range of open habitats such as pasture, parkland, woodland edge, tall hedgerow, over water bodies and will also hunt over streetlights in suburban areas.

The code that generated this report, from the analysed survey data, was produced by Steve Markham of Devon Bat Group and Marquis & Lord Ltd.

DWT ref: 650





