



Metadata

Notes on interpreting data from NBMP surveys

General note: NBMP data are collected for the purposes of UK surveillance of bats according to a stratified random or other sampling design. The results do not, therefore, necessarily reflect the true distribution of the species in 1km squares, nor are they a complete record of species occurrence in each area, and properly designed surveys to assess species presence should still be carried out. However, they do contribute additional information to the recording effort for each region.

Survey methodologies

Colony Counts: Subject species are **common pipistrelle**, **soprano pipistrelle**, **pipistrelle sp** (i.e. not identified to species level), **serotine**, **Natterer's bat** and **lesser horseshoe**. A few incidental records of other species are also included. Volunteers carry out counts of bats emerging at dusk from known bat roosts, normally on two evenings in June, although some counts carried out in other months are also included. Counts commence at sunset or shortly before (depending on the species being counted); reasons for stopping the count are given in the dataset.

Field Survey: Subject species are **common pipistrelle**, **soprano pipistrelle**, **noctule** and **serotine**. Any other species encountered are not recorded. Volunteers are asked to carry out two surveys in July. The survey begins 20 minutes after sunset. Volunteers walk a roughly triangular transect within a 1km square normally selected from a list of randomly generated 1km grid refs. In each survey square the same route is followed each year (with slight variations if parts of the route become dangerous or inaccessible). Twelve spots, approximately evenly spaced, are marked out along the survey route. At each spot the bat detector is tuned around 50 kHz and common and soprano pipistrelle passes are counted for two minutes. While walking between each spot the bat detector is tuned around 25 kHz and noctule and serotine passes are recorded. NB the number of passes indicates levels of bat activity and not numbers of individual bats.

Waterway Survey: Subject species is **Daubenton's bat**, but a few incidental records of other species are also included. Volunteers are asked to carry out two surveys in August. The survey begins 40 minutes after sunset. Volunteers walk along a stretch of waterway of roughly 1km in length. Sites are normally selected from a list of waterways previously surveyed as part of the Environment Agency's River Habitats Survey. At each survey site the same route is followed each year (with slight variations if parts of the route become dangerous or inaccessible). Ten spots, approximately evenly spaced, are marked out along the survey route. At each spot Daubenton's bat passes are counted for four minutes with the bat detector tuned to 35 kHz. NB the number of passes indicates the levels of bat activity and not numbers of individual bats.

Hibernation Survey: Licensed volunteers visit known or potential bat hibernation sites, preferably once in January and once in February, although some counts from other months are also included. All bats seen are identified where possible and numbers are counted. The survey is biased towards hibernation sites which are accessible to humans, such as caves, mines and tunnels, so bat species which tend not to use such sites are under-recorded. The results are also biased in favour of bats that hang in full view and against those that tend to conceal themselves in nooks and crannies. The ratio of bats seen to bats not seen is unknown. If no bats are recorded at a site it should not be assumed that bats are not present.

Sunset / Sunrise Survey: This survey takes place in July and August and is aimed at engaging new volunteers and enabling both new and experienced volunteers to locate new roosts in their local area. The survey comprises two parts, either or both of which may be carried out. The Sunset Survey involves going out into a garden or other open space at dusk, looking out for bats flying past and making a note of the general direction from which they appear to be arriving. The Sunrise Survey involves going out one hour before sunset and looking for bats “swarming” as they arrive back at their roosts. Observations made while doing the Sunset Survey on a preceding evening can be used to guide the volunteer in looking for possible roost sites. As many of the participants are beginners, the species identifications are not necessarily accurate. The main value of the data is recording the presence of bats and/or bat roosts in the survey area.

Interpretation of data

Established statistical techniques for interpreting data have been applied when producing national species population trends based on NBMP data. If you wish to refer to the methods used then please see the NBMP Annual Reports at http://www.bats.org.uk/pages/results_and_reports.html or contact us on 0845 1300 228 for a copy of the latest report.