

Devon Bat Survey Instruction Manual



Introduction

Devon Bat Survey is running each summer between 2016 and 2020 with the aim of finding as many bats as possible. Please see our website www.devonbatproject.org for further information.

If you have any problems with any of the kit, please contact Ruth on 07398 182226 (Mon-Fri) or Helen on 07572 687657 (Mon-Thurs) during office hours. You can also view/download all the relevant information from our website.

Overview

The detector should be placed out for 3 nights in a secure location on the same afternoon that it is collected from the host centre – please leave it in the same place each night. The detector kit should be returned on the 4th day with one set of batteries charged ready for the next person. The SD card should be returned using the pre-paid padded envelope **as soon as possible** after the survey has ended, along with your completed Recording Form. If your booking spans a period when the monitoring centre is closed you will have a slightly longer booking slot – you can leave the detector out for the whole time.

Step 1: check the kit

- Check that the kit contains all the correct equipment as shown in the photo below as well as a bamboo cane, yellow jiffy bag with a pre-paid stamp and recording sheets.
- Make sure that the batteries are charged and ready (use the battery tester provided). Batteries should read 'good' on the battery tester's display. If not, charge batteries before deploying the detector (warning: batteries get hot when charging).
- There should be at least one SD card with the kit. You can test these to make sure they are empty using the SD card reader. If there are any SD cards which contain previous WAV files then do not use these but please send them back to us together with the SD card that you used to undertake your survey.

Song Meter SM4BAT FS
Bat detector

Box containing:
- Spare SD cards
- SD card reader
- Battery tester

Microphone

Battery charger
(Batteries inside)
& power lead



You do not need to inform us if there are no spare SD cards in the kit box.



How to test the batteries: simply push the red slider as far to the right as it will go, and insert the battery into the space (with positive charge on the right, next to the slider). Read the display to check that it says 'good'.

How to check the SD card: remove the plastic caps from the SD card reader and slot the SD card into the SD card reader (the writing on the SD card should be facing upwards). Now insert the SD card reader into the USB port of your computer; a red light will show on the SD card reader when connected. A dialogue box should appear on your screen giving a few options, and you need to select 'Open folder to view files' – check that the next window says 'This folder is empty'.



Choosing the location for your bat detector

- Bats prefer quiet areas away from too much disturbance
- Please do not put them in fields with livestock – they like to eat the microphones!

See below for some advice on potential detector locations:

Suitable locations	Unsuitable locations
<ul style="list-style-type: none"> • Hedges • Lines of trees • Old trees • Orchards • Leafy gardens with lots of shrubs • Woodland glades • Banks of rivers and streams 	<ul style="list-style-type: none"> • Centre of open fields • Areas where the detector is visible to the public • Near street lights and other well-lit areas • Busy roads • In areas without protection from livestock

Important!

If you are placing your detector on land which you do not own you **must** gain permission from the land owner first and make sure that the detector is not in danger of being stolen or removed by members of the public. You should speak to the landowner prior to selecting your grid square. A permission form and introduction letter are available on our website www.devonbatproject.org

Setting up the detector

Once you have chosen a suitable location for your detector you will need to set it up ready for deployment.

1. Open the lid of the detector and follow the instructions written on the inside of the lid.
2. Once the detector is set up it will say that it is going to sleep – this is normal; the detector will start to record before sunset and will go to sleep again in the morning after sunrise.
3. Attach the end of the microphone cable to the detector – this is a push fitting – then carefully twist the collar to lock it in position.
4. The microphone cable attached to the detector should be looped together with some garden wire; use this wire to attach the microphone to the bamboo cane provided. Extra wire is provided in case you want to attach the microphone to a tree instead of the cane.
5. Take the detector, recording sheet and the cane out to your chosen location, push the thin end of the cane into the ground until stable.
6. Place the detector safely on the ground out of sight.
7. Secure the microphone to the thick end of the cane with the garden wire. Try to position the microphone to point outwards at a roughly 45° angle and with minimum vegetation in front of the microphone (see photo, right).



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Filling in the recording sheet

You will find a number of recording sheets in the box. You will just fill in one for your chosen location.

An accurate 10 figure grid reference is vital to ensure the data is useful. Visit <https://www.gridreferencefinder.com/> find your location, then right click on the pin to get a screen like this.



Posting the SD card and recording sheet

The recording sheet and the SD card (placed back into its plastic case) will need to be sent back to us in the freepost envelope provided **on the same day that you return the detector to the host centre**. The data from the SD card will then be analysed and the results distributed back to you at the end of the season. If you have placed the detector on private land, please also enclose the signed permission from the landowner.

Charging the batteries

While your detector is out, please re-charge the spare batteries ready for the next person. The batteries will need around 6 hours to re-charge. Ensure the batteries are returned to the host centre with the charged batteries in the battery charger, and the used batteries loose in the box and not in the detector.

Returning the detector kit

Ensure that all the pieces of equipment are placed back as they were found (minus an SD card and recording sheet!). Make sure that the bamboo cane is also returned and the wire is looped back around the microphone lead. Return the kit to the centre ready for the next person to pick it up the day after (check opening times of the centre to avoid problems)

PLEASE READ THE ENCLOSED RISK ASSESSMENT CAREFULLY AND HAVE IT AVAILABLE TO REFER TO AT ALL TIMES DURING THE SURVEY



We hope you enjoy the survey and thanks for taking part in the **Devon Bat Survey!**

bats@devonwildlifetrust.org or ring 01392 279244 – ask to speak to a member of the Bat Project team