

Scottish Beetles



Visual surveys

To search for beetles, inspect plants, making sure to note down plant species if you find a beetle. Look under leaves, around stems and on the ground. Often beetles are easily seen crossing footpaths so keep an eye out as you are walking. A hand lens is useful for looking at smaller beetles.



Pitfall traps

Pitfall trapping is a useful technique for finding beetles that often hide in the undergrowth, such as ground beetles. Use a plastic tub from your recycling. Dig a hole in the ground big enough so the top is level with the surrounding ground.

Prop a rock over the top ensuring a small gap to allow beetles and other invertebrates access. Remember to check the trap every day.



Tree beating

Tree beating is a relatively easy technique. You can use several items to catch the invertebrates depending on what you have to hand: a professional beating tray, a white sheet, or an upside down white umbrella will all work.

Place the sheet beneath the branches you are going to survey, making sure to cover as much ground as possible below the branches. Shake the branches, but not so vigorously so as to damage the tree. It is often handy to have two or more people on hand to catch any of the flying insects that may escape.



Sweep netting

Sweep netting can be used to find insects usually unseen, particularly in long grasses or deep heather. You will need a sweep net (a tougher canvas net) instead of a delicate butterfly net. Sweep your net through the dense vegetation, ensuring you don't get caught in any brambles.

Moving the net back and forth quickly in a sideways figure of eight pattern will keep the insects inside the net, making it easy to catch specimens and put them into pots.





Surveying and recording beetles



Recording beetles

When searching for beetles always make a note of what you find! Remember you will need the name of the location, a grid reference (or postcode), the date of when it was found and the name of the recorder. A description of the habitat where the beetle was found is also helpful. Take a photo of your beetle to help verifiers confirm your species.

Please share your records and information with the beetle recording schemes:

www.coleoptera.org.uk/recording-schemes

Remember that not all beetles in the UK can be identified in the field without the aid of further examination of an adult under a microscope.

You can also submit wildlife records to iRecord (www.brc.ac.uk/irecord) even if you only know the family or have managed to get down to genus – every record counts!

There are several books, guides and webpages to help with your identification and improve your confidence and experience of beetles, see the list of useful resources below.

Resources

- Field Studies Council produces a series of fold out guides and more in depth AIDGAP keys to several beetle families. www.field-studies-council.org
- Pelagic Publishing Leaf Beetles, Naturalists handbooks 34, by D. Hubble (2017)
- Richmond Publishing **Ground beetles, Naturalists Handbooks 8,** by T.G. Forsythe and S. Allington (1987)
- Bloomsbury Wildlife Guides Field Guide to the Ladybirds of Great Britain and Ireland, by Helen Roy and Peter Brown (2018)
- A.G. Duff Publishing **Beetles of Britain and Ireland vol. 1-4**, by Duff, A.G. (2016)
- H. F. & G. Witherby A Practical Handbook of British Beetles, by Joy, N.H. (1932)
- UK Beetles www.ukbeetles.co.uk
- UK Beetle Recording <u>www.coleoptera.org.uk</u>
- iSpot for help with identification: <u>www.ispotnature.org/</u>
- **iRecord** to upload wildlife records: <u>www.brc.ac.uk/irecord/</u>
- Mark Telfer Blog on Beetles <u>www.markgtelfer.co.uk/beetles</u>
- Checklist of Beetles of the British Isles
- Bark and wood boring beetles of the World
- The Coleopterist
- Royal Entomological Society <u>Handbooks for the Identification of British Insects series Various</u>
- Buglife https://www.buglife.org.uk/