Standardised pollinator survey method

For current and previous Buglife 'Buzzing' projects (such as for Glasgow's Buzzing and Fife's Buzzing), surveys have been completed before and after meadow creation/ enhancement/ management to highlight changes within the wildflower communities from before and during the project and to record invertebrates that are using the area with a focus on pollinating insects.

Generally due to time restrictions invertebrates are surveyed during a single visit at each site during dry and warm days in August/September (although these surveys can also take place in warm days in spring).

It is important to also record wildflowers that you can see that are either in flower or are yet to flower. This allows for changes within the plant community to be observed and identified during meadow creation etc. It is best to complete wildflower surveys before any meadow enhancement work ensues and can be done from May-September.

A surveyor walks a transect (in a line) across the site (for about 50 metres) using direct observations and a sweep net to survey for invertebrates concentrating on pollinating insects such as bees and wasps (Order Hymenoptera), hoverflies (Family Syrphidae, Order Diptera) and butterflies and moths (Order Lepidoptera). Other invertebrate species found during a survey are also recorded. Whilst this transect is being completed, wildflowers can also be identified at the same time or as a separate transect across the site. Depending on the size of the site and if different habitats are present it may be appropriate to do several transects and to note the habitats each was completed in.

Sweeping vegetation

Sweep nets are used to collect invertebrates from vegetation, particularly from flower heads. A canvas net is swept over vegetation in a figure of eight for one minute in a transect across a site and specimens are collected from the net. Depending on the size of the site and if different habitats are present it may be appropriate to do several sweep net transects and to note the habitats each was completed in.

Specimens collected from a sweep net are either put into a pot with 70% ethanol to be identified later or if they could be identified by the surveyor at the site the specimen is then released. It is important to remember that taking photographs of your specimen can help confirm identifications if you are not 100% sure and are unable to preserve them in ethanol. Photographs can be taken of bumblebees and butterflies and many of the hoverflies and beetles (Order Coleoptera).

Direct observations of pollinators

Identification of several species of bees, wasps, butterflies, moths and hoverflies can be made through direct observation of specimens visiting flowers or in flight during a site survey. Sweep nets are sometimes used to aid in identification of a species which could

then be released. Other species identified through direct observations included true bugs (Order Hemiptera), and some beetles.

Similar to using a sweep net it is important to remember that taking photographs of your specimen can help confirm identifications if you are not 100% sure and are unable to preserve them in ethanol. Photographs can be taken of bumblebees and butterflies and many of the hoverflies and beetles.

Counting wildlife – how to submit your records

Monitoring and recording wildlife is a key part of assessing how wildlife is faring across the UK, it's seas, Crown Dependencies and Overseas Territories. You can take part easily!

iRecord is a free and easy to use portal for wildlife recording. You can add records from the Inner Forth and across the UK at www.brc.ac.uk/irecord/enter-inner-forth-records

You can also add records to iRecord via the mobile app. Browse your app store to download the app for free. There are also species specific apps that you may be interested in eg iRecord Butterflies.

However you submit your records, please remember to collect the following information:

Who?	Who made the identification – was it you, or someone else. iRecord also asks for an email address.	This information helps the person verifying the record. They may wish to contact you if they have any queries about the record.
What?	What did you see, how certain are you of the identification, how many, did you record any behaviour?	Please record the species name and quantity as a minimum. Any additional information, such as a photograph can also help the verifier and may be of assistance to those who use species data for research.
Where?	A grid reference with location name of where the species was seen. If possible a description of habitat eg pond, woodland, montane, arable field.	Not all species are found everywhere, it's helpful to verifiers and researchers who use the data to have this information.
When?	What date was the sighting made?	This helps identify trends in species sightings and can be particularly important to researchers who look at migrating species or species lifecycles.

The State of Nature report is just one example of how wildlife data is used: https://www.rspb.org.uk/our-work/stateofnature2016/