

Activity – Collect soil bugs!



Mesh grid in place on top of collection pot



Lid placed on top of trap

You can collect and examine your own soil bugs (scientists call them arthropods*) using a few simple items. Here is one way to do it for larger bugs:

What you will need:

- A 1 to 4 cup sized container (e.g. large yoghurt pot)
- Small spade/trowel
- Magnifying glass to view creatures

Stages of investigation ;

- 1 Set up the traps in the field. Choose a place where the soil will not be disturbed. (Maybe choose two contrasting ecosystems such as woodland and grassland and compare the communities found). Dig a hole slightly larger than the container. Place the container in the hole so that the top is even with the soil surface. (If it is higher, then the bugs will walk around the edge and escape). Backfill the soil at the sides of the container and smooth the top rim of the container. (You can place a mesh grid on the surface to stop larger creatures falling into the trap or hurting themselves). You can also 'cover' the trap with a lid either with or without legs and label your trap. with a number for reference to later on.

Some 'creepy-crawlies' are wrongly known as insects: centipedes, millipedes, woodlice, spiders, scorpions, harvestmen, ticks and mites are all from the family Arthropoda.

** All insects are arthropods, but not all arthropods are insects.*

An insect is a small creature with three body parts (head, thorax and abdomen) and three pairs of legs. Many have wings. Most of them undergo complete changes of shape during their lifecycles.

* Did You Know *

Only bumblebees and honeybees live in colonies. Most species of bees live on their own, some in holes in the ground

- 2 Collect your soil bugs. Leave the traps in place for about a week. Then try to check daily if you can to make sure that you are collecting something.
- 3 Look at your bugs. Look at, draw (photograph them if you have access to a camera) and/or count (and even try to identify by reference to books) the bugs you have collected after emptying them out into an observation dish, or store them in a bottle.
- 4 Release your bug collection back out into their natural habitat.
- 5 Look at your data set. Compare what species you are observing in one habitat compared to another... Even compare different times of year, different species of trees, different gardens, etc etc..and have fun!

*** Did You Know ***

Some plants eat insects! They do this by catching them and dissolving their bodies, then they absorb the juice. This gives them nitrogen, which normal plants get from the soil – but these plants live in places where there isn't any



Example of a collected specimen