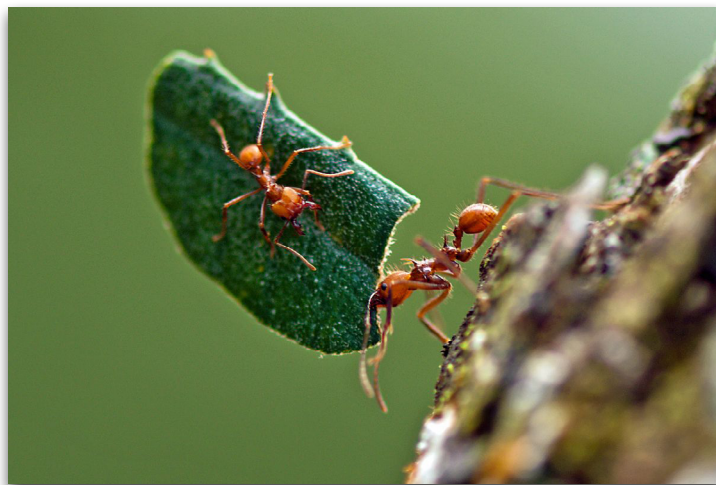


Minibeast Safari

Welcome to our minibeast safari! This guide will help you search for the bugs and beasts which live in your garden, playground or local park.

Incredibly, about 40% of all known animal species on the planet are insects, and scientists expect that we have not even discovered the vast majority of insect species! In fact, as it stands now, for every 1 species of mammal we know of, there are over 170 species of insect!



*Leafcutter ants showing off how strong they are
Image Credit: Wikimedia Commons*

Why Are Insects So Important?

They are vital to rainforest food webs, both as predators and prey!

Insects are a tasty snack for many animals including, birds, frogs and mammals. Having large numbers of insects means that the you get lots of larger animals too!

They help decomposition and add nutrients back into the soil.

Insects help break down dead plant material alongside bacteria and fungi. This helps the nutrients that are locked in be returned to the soil and allow new plants and trees to grow in place of the dead ones. This regeneration is vital to keeps habitats healthy.

They help with plant pollination!

Plants are vital life on Earth, and many rely on insects to reproduce. The insects visit the plants to drink the nectar (sugary liquid made by plants to attract pollinators) and carry pollen from one plant to another. Some plants are very specific and can only be pollinated by one or two species of insect, so if the insect is lost, so is the plant.

Lets go on a minibeast hunt!

What you need:

You don't really need any specific equipment to do a minibeast hunt but here are some thinks which might be useful.

- A clean container to look at your minibeasts - a recycled glass jar or yoghurt pot works perfectly.
- Something to move your minibeasts into the container – you could use a spoon or a stick you find in the garden.



- A magnifying glass – this isn't vital, but it will help you get a closer look at the animals and make it easier to identify them
- An ID chart or app – to identify what you have found (we have some common bugs listed below but you will find things not listed here)
- A sweep net- to catch minibeasts in long grass or bushes. If you don't have one the RSPB has brilliant instructions of how to make one [here](#)
- A pen and paper- to draw or record what you find

What to do:

1. Carefully search in places that look likely to be good minibeast habitat.
2. When you find a minibeast, move it into the container to have a closer look.
3. Be extra gentle when doing this – you don't want to cause harm to the animal.
4. It is very important that you only have one minibeast in the container at one time so that they don't cause harm to each other.
5. Try to identify what minibeast you have caught.
Some good questions to ask yourself are:
 - How many legs does it have?
 - How many body segments does it have?
 - What colour is it?
 - Where did I find it?
6. Try not to have the minibeast in the pot for too long.
7. When releasing it, gently lower the container to the ground and let it crawl out on its own if possible. Try to release it as close to where you found it as possible so that it can find its way home.



Turn over for your minibeast guide!



Where is good minbeast habitat?



Minbeasts live in lots of different places but here are some ideas of where to look and what you might find:

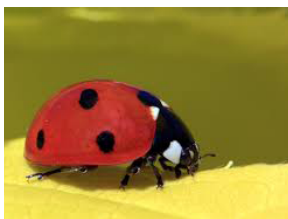
- Under logs or stones (Slaters, beetles, earwigs, slugs, snails, worms)
- In long grass (flies, dragonfly, ladybirds, ants)
- On flowers (Bees, hoverfly, butterfly, dragonfly)
- On trees and in bushes (beetles, ants, spiders)



What is a good time of year?

You can look for minibeasts at any time of the year but what you find will be slightly different. We have two ID keys below showing some of the most common things you would find in Scotland in winter and summer but remember lots of them you find all year round!

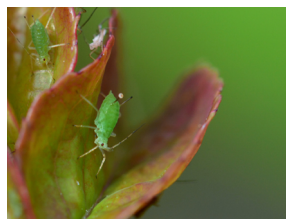




Ladybug



Dragonfly



Aphid



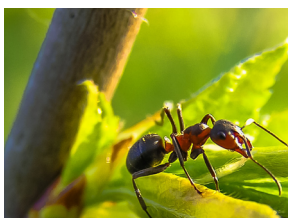
Bumblebee



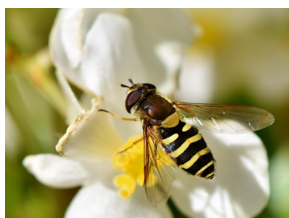
Butterfly



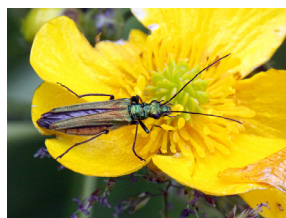
Shield Bug/ Stink Bug



Ant



Hoverfly



Flower Beetles

SUMMER



Slug



Snail



Spider



Woodlouse/Slater



Earwig



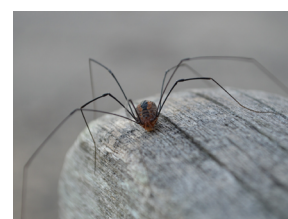
Beetle



Worm



Centipede



Harvestman

WINTER

Minibeast ID resources:

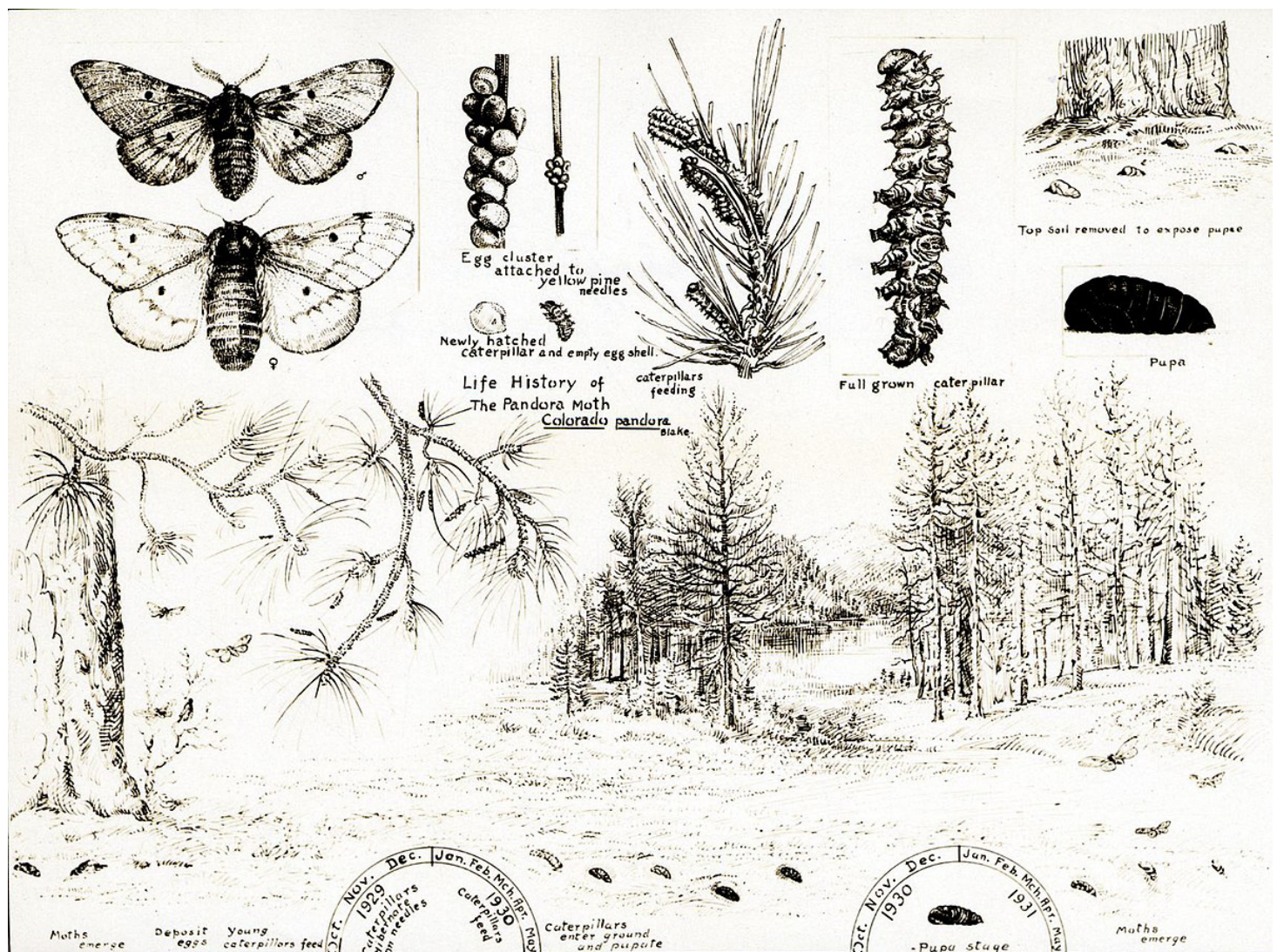
Butterfly ID: <https://butterfly-conservation.org/butterflies/identify-a-butterfly>

Bug Identification: <https://www.buglife.org.uk/bugs/identify-a-bug/>

RSPB ID keys and build bug hunting kit: <https://www.rspb.org.uk/fun-and-learning/for-teachers/schools-wild-challenge/activities/minibeast-safari/>

Why not try drawing your minibeasts?

When scientists first began discovering and identifying new species there were no cameras, so they would take artists on expeditions with them to accurately draw the animals and plants that they found. They would also write down lots of their features such as where it lived, how it moved and if he had any interesting behaviour.



Drawing by Scottish artist William D. Edmonston showing the life-cycle of the Pandora moth. Drawings like this were used to document the natural world when photography was expensive and difficult. Image Credit: Wikimedia Commons

Make your own pine cone spider

Materials:

- A pine cone (find one while you are out on your bug hunt)
- 4 pipe cleaners
- Googly eyes

What to do:

1. Wind a pipe cleaners around the pine cone so that a bit sticks out either side to make a pair of legs
2. Repeat 4 times to give your spider 8 legs
3. Stick googly eyes on one side (spiders have lots of eyes- usually 6 or 8 but not always so you can give your spider as many eyes as you like!)

