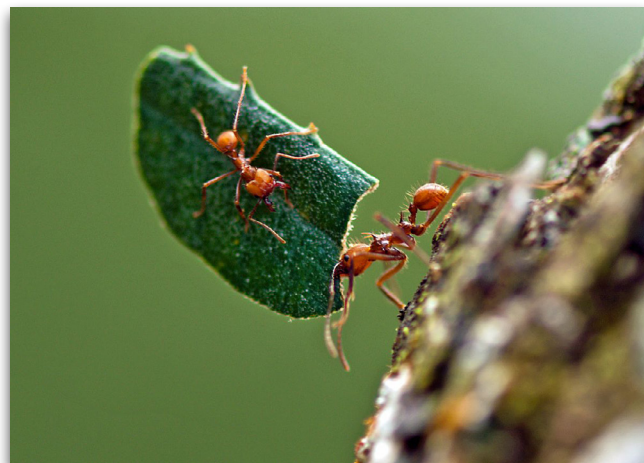


# Marvellous Minibeasts

Most people travel to the rainforest hoping to catch a glimpse of some colourful birds of paradise, magnificent big cats or fearsome reptiles that lurk in the rivers. In fact, most of the animals found in the rainforests are invertebrates such as insects, spiders and worms, and they can be just as magnificent!

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



*Leaf cutter ants found in the rainforests of Central and South America. Each ant has a specific job to do – the bigger one is collecting leaf cuttings which they then grow fungus on to feed the colony, and the smaller hitchhiker is looking out for predators or parasites. Image Credit: WikiCommons*

## So Why Are Insects So Important to the Rainforest?

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

Insects are a tasty snack for many rainforest animals including, birds, frogs and mammals. Having large numbers of insects means that the forest can sustain high numbers of larger animals too! Some rainforest insects are also ferocious hunters. Rainforests are very competitive places, so insects have evolved clever ways to catch their prey, including, mimicry and venom!

### **They help decomposition and add nutrients back into the soil.**

Insects help break down dead plant material alongside bacteria and fungi on the forest floor. 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 keep the rainforest healthy.

### **The help with plant pollination!**

Plants are vital to the rainforest ecosystem, 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 rainforest plants are very specific and can only be pollinated by one or two species of insect, therefore if the insect is lost, so is the plant.



## Minibeast Hunting!

All of the reasons why insects are important to the rainforest are just as important in our own ecosystems in Scotland too.

*Did you know that there are around 27,000 types of insect in the UK!*

## Let's go on a minibeast hunt!

Minibeasts like natural spaces so you are likely to find them in amongst wild flowers, in long grass, underneath leaves, on dead wood, underneath stone...



*7-spot ladybird, a common beetle species in the UK.  
Image Credit: WikiCommons*

### You will need:

- 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 – there are lots of good apps and ID guides available online. It is best to find one that is accurate for the area you live in. Alternatively, you could take photos of the minibeasts and identify them at home afterwards.

### Instructions:

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.
  - Be extra gentle when doing this – you don't want to cause harm to the animal.
  - 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.
3. 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?
4. 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.

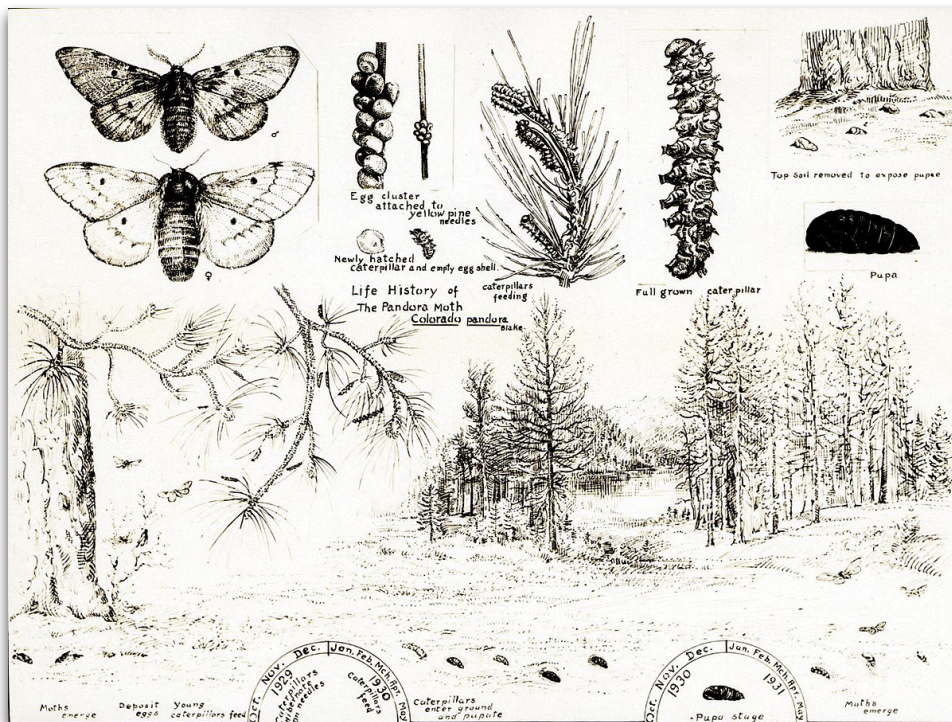




## More Ideas

### 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: WikiCommons

### Compare what you found to some rainforest species

- Are there any similarities between the insects you found in your local area and the ones found in the tropics?
- What differences are there? Why do you think that might be?
- Do you think if you surveyed the same size of area in the rainforest, you would find more or less minibeasts? Why?

### Upgrade your minibeast hunt:

We also love the [RSPB's Minibeast Safari](#) and instructions on how to build bug catchers and traps.

### Identify mystery bugs with this clever tool:

Then when you have found your bugs, use [Buglife's great online tool](#) to help you identify what you've found!

Check out [our activity](#) to find out how insects are vital for keeping our green spaces healthy and how you can make a biodegradable wildflower pot!