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## Minibeast adaptations...

Following on from bug hunting, we have been looking at ways minibeasts are adapted to the environment they live in. We have been especially interested in the ways they protect themselves from being eaten and the ways they hunt!

### Defence

All animals need to protect themselves from being eaten by others. Different ways can include:

- **Camouflage** – you are less likely to be eaten if you can't be seen! Camouflaged creatures blend into their surroundings. Look for pictures of the Merveille du Jour moth that blends into lichen covered bark or the buff tip moth that looks like a twig.
- **Look like something that really isn't tasty** – for example young swallowtail caterpillars look like bird poo.
- **Warning colours** – some colours indicate danger. Think yellow and black like many bees and wasps or red and black like some ladybirds. These are warning colours which tell potential predators that they are either poisonous or will taste disgusting.
- **Chemical defence** – lots of minibeasts release a horrible smell (like some woodlice) or a painful chemical (like some ants) when they feel threatened. Check out the chemical defence systems these minibeasts have in this [BBC Earth clip](#).



These aren't all minibeasts, or all found in the UK, but it is interesting to see some of the ways animals try to stop themselves being eaten. [Watch this video to find out more](#).

### The hunt!

Some minibeasts are herbivores and eat plant material, others are detritivores and eat dead organic matter (dead plants and animals) and some are carnivores and eat other animals. If you are a carnivore you have to be good at catching and overpowering your prey. There are so many examples of how this is done, through speed, fantastic eyesight, venom, strength, teamwork. We've included a few of our favourites overleaf. Check them out.

## Dragonflies

They live for most of their lives as nymphs underwater. Dragonfly nymphs are amazing hunters. They may usually move slowly, camouflaged against the plants and algae in the water but there is part of their body that moves quickly – their jaws! This [video from The Creekside Education Trust](#) shows you how they shoot their jaws forward to catch their prey. This trick means they can lay still, and wait for unsuspecting prey to pass before grabbing them in their jaws. Occasionally they need to move more quickly than a gentle stroll. To do this they shoot jets of water out of their abdomen.



## The Raft Spider

It is an incredible creature. Unlike most of the spiders it lives in and out of water. It can stay under water by using air that it has trapped under the hairs on its body. It will dive under the water to catch small animals like tadpoles. Once it catches them, it injects a venom which turns its prey's insides into mush (almost all spiders overcome their prey this way), the mush is then sucked up through the mouth. This [Deadly 60 clip](#) shows you the raft spider hunting. If you spot the little beetle in the video can you see the bubble of air it is carrying on the tip of its abdomen – it too is carrying air it can use underwater.



## Spoor Spider and Antlion

Many, many miles away but amazing is the spoor spider. Check out this video from [BBC Earth](#). Also in the desert, incredible antlion larvae create a trap for their prey. [Watch how it does it.](#)

## Have a go!

Try to design your own ferocious predators and great defenders using some of the information you found out. Think about where your minibeasts will live and what they like to eat before you start drawing.

Children had a go and this is what they came up with:

