

Whether you find them crawling amongst the grass, or buzzing around your lemonade, insects are carrying out vital jobs which contribute to a healthier environment, and help us too. Find out about some incredible insects we have living here in UK.



THE POWER OF POLLINATORS

Did you know that 1 in 3 mouthfuls of food that you eat has been made thanks to pollinating insects such as bees, butterflies and moths?

Insects help plants to grow by pollinating them. It all starts with a flower...



L HONEY BEE DISPLAY (Wytham Room)

Bees are one of our busiest pollinators. If you drank coffee or orange juice this morning or had raspberry jam on your toast, you can thank bees! They worked hard to pollinate the plants needed to make these things.



Because they don't like smell of honey

Bees make honey by blowing spit bubbles with the nectar collected from flowers. They store the honey in the comb in their hive so they can eat it when there are no flowers around. Humans like honey too and we've been collecting it for 13,000 years. The Egyptian Pharaoh, Tutankhamun, was buried with pots of honey as he enjoyed it so much!

Bees seal the honey in each cell with a wax lid. Why do you think they do this? Choose one answer:

To keep the honey fresh



Because they know humans like to turn their wax into candles

2 WASPS - Find the wasp nest

Wasps might get on your nerves, especially when they're after your ice cream, but we musn't be too hard on them. Like bees, they pollinate plants. In fact, they enable us to have more strawberry ice cream by helping strawberry plants to grow!

Look at this wasp nest. The wasps made it from wood which they chewed up then spat out! Choose 2 things outside which the wasps might have chewed on to make their paper mache palace:









3 FLIES - find the blue bottle fly model



Most of us find flies really annoying, but you might find them less pesky when you find out that some types of fly do 70% of all pollination! Flies help to pollinate fruit and vegetables such as pears, apples, cherries, onions and carrots.

There's one type of fly that is the only insect which can pollinate the flowers of the cocoa tree. When pollinated, these flowers grow large fruits full of beans. We take the beans, roast them then blitz them up with sugar to make a scrumptious sweet food. What do you think it is? Write your answer here:

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4 VIOLET GROUND BEETLE find the model of this beetle

The violet ground beetle is a gardener's best friend. If you want to protect your tomatoes and cucumbers from plant munching minibeasts, attract some violet ground beetles to your garden! These beetles come out at night from under logs, leaves and stones to hunt slugs and snails.

Insects have a mouth which helps them to chew, suck or lap up their food. Look at the violet ground beetle's mouth. **How do you think it eats its food?**:



If it wasn't for dung beetles, our fields would be absolutely covered in cow pats! We can rely on these beetles to tidy away animal dung by rolling it into little balls and burying it underground. The dung balls are either used by the female to lay her eggs in, or as food for the adults to eat.

Dung beetles are incredibly strong for their small size. If a human tried to match the strengh of a dung beetle rolling a ball of dung, how many double decker buses do you think they would have to pull? Choose one answer:

3 buses 1 bus 6 buses

POLICE

6 CRIME BUSTING INSECTS - find the forensic entomology case

Insects can help solve murder cases by appearing at the scene of a crime. A dead body will attract insects - some can smell a dead body within a matter of hours after death. The insects feed on the body and lay their eggs inside. Blowflies are usually the first to arrive where they lay their eggs within two days after death. Over time, other insects arrive. Flesh flies are usually next, then beetles.

What can the insects found on a body help us to find out about the victim? Choose one answer:

What the victim did before they died

How they died

How long they have been dead

7 BUTTERFLIES - find the small Oxfordshire butterflies case

(it's on a ledge, next to the black touch screen showing magnified insects)

Butterflies pollinate plants throughout the day then after dark, moths take over the night shift for pollination.



Small tortoiseshell butterfly

One reason for the decline in the number of butterflies is habitat loss caused by human activity. As we build new roads, cities and farmland, we destroy the plants that butterflies live in and feed from. What could we do to help butterflies? Choose one answer:

Keep our gardens and green spaces neat and tidy by cutting grass and plants

History



Spray plants with pesticides (chemicals) to help them grow



Well done, you've completed the trail! Check your answers at the Welcome Desk. Next time you're outside, do have a look out for these incredible insects and let us know if you find some. We'd love to see your photos and pictures. Show us by emailing **hopelearning@oum.ox.ac.uk**