

# Animals and the environment



Moths transfer pollen on their bodies.

**SWEET PERFUME**  
A male giant silkworm moth can smell a female more than seven miles away.

## Like a moth to a flame



Some moths fly towards light.

You might have heard people using the saying, "like a moth to a flame". It is usually used to describe a person with a strong desire to do something, even though it is likely to be bad for them. The phrase comes from the fact that certain types of moths often fly towards light sources like candles or torches at night, even though they can be hot enough to kill bugs. There is no definite answer as to why they do this. One theory is that because moths may use moonlight to guide them at night, they confuse the man-made lights with the glow from the Moon.

## Scientists shine light on pollinating moths

Moths are as important as bees in pollinating plants, a new study has found.

Pollinators are animals that carry pollen from one plant to another. They usually do this by accident because the powdery pollen grains stick to their bodies while they feed on one plant, and then rubs off onto others. Once a plant is fertilised with pollen from the same species of plant, it can create seeds to grow into new plants.

Researchers from University College London (UCL) have found that during the night, moths visit



A moth uses its proboscis to feed.

a greater range of plants than bees do during the day. For years, there has been concern over the decline in the numbers of insects such as bees and butterflies, which are known to be important pollinators. However, until now, the role of moths was not well understood.

Dr Richard Walton, from UCL, along with his team, studied moth activity on farmland in Norfolk. They found 103 moth species involved in transporting pollen. Of these, roughly 45% had pollen on their bodies when they were tested. The study showed that although bees transfer more pollen, they

tend to focus on specific plants that produce lots of nectar. Moths, on the other hand, visit all types of plants. When they analysed the pollen, the team found that it had come from 47 different species, far more than those visited by bees. These included seven species that bees and butterflies hardly visit at all.

One of the reasons moths have gone unnoticed as pollinators is the way they have been tested in the past. Previous studies only measured the amount of pollen on a moth's proboscis (the long, thin sucking mouthpart it uses to feed). Walton's study examined the amount of pollen that stuck to the moth's whole body as it fed on a plant. Walton said the research shows that moths are an important part of the network of pollinators.



**ECO TIP OF THE WEEK**

## LOOK AFTER THE BIRDS

Spring is one of the best times of year to watch birds in your garden or from your window. You can help the birds by putting out bird feeders. This could be a bird table or a seed feeder hung from a branch. Different seeds will attract different birds. Greenfinches enjoy sunflower seeds, and mealworms will probably

attract robins. Birds also need water. You could put up a birdbath or a hanging water drinker. It's important to not to put feeders and water stations within reach of predators like cats, and to keep them clean so that the birds don't spread diseases to each other. To find out more and for other useful tips, visit [tinyurl.com/TWJ-feedbirds](http://tinyurl.com/TWJ-feedbirds)

**WOW!**  
There are 621 species of bird in Britain. The wren is the most common; there are 11 million pairs across the UK.

A starling feeding its chicks.



# Scientists shine light on pollinating moths

Once you have read the article, try any of the following activities...



## Investigate

Write a fact file for three-to-five moths found in the UK. Include descriptions of important physical features such as size, colour and markings, as well as stating where they tend to live and what they eat.

## Writing challenge!

Choose one of the following writing warm-ups.

**1** Write an imagined dialogue between a moth and a flower. Perhaps the flower is surprised to be visited by a moth in the middle of the night. Perhaps the flower has secretly encouraged the moth to visit when the bee won't notice. Whatever they say to each other, make sure you include all speech punctuation and use an interesting range of speaking verbs, such as whispered, cried, moaned and so on.

or

**2** Write an extract for an information text, describing the difference between moths and butterflies. Include at least four important distinctions and use contrasting conjunctions such as while, whilst, whereas, conversely, although and however.

## Hold a debate with your family

So, we now know that moths perform a valuable role in the pollination of plants. No doubt, many other insects carry out a whole variety of essential tasks without us noticing. Yet many of us think nothing of swatting a bug that just happens to be in our way, when we wouldn't dream of killing other animals. Is it time we gave the same protection to insects that we do to other wildlife? Should we make it an offence to kill any animal, no matter how small? Or is that taking things too far? After all, there are plenty of insects in the world and if, for example, a mosquito is about to bite, where's the harm in getting it first? What do you think?