

People around the world are very concerned that the numbers of insect pollinators seem to be declining.

For some plants the wind is enough to move pollen from one flower to another but others need different animals to be involved in the process of pollination around the world (moving pollen between flowers).



Meet the pollinators!



Common wasp

Pollinators make very important contributions to people and nature. They are vital for maintaining biodiversity but also pollinate the plants that provide us with food, medicine, timber, biofuels. Without pollinators, life on our planet would be very different.

What do pollinators do?

Take action now! One Planet • One Health • One Team

- Grow flowering plants
- Do not spray pesticides and herbicides
- Build bee hotels
- Find out about local actions in your neighbourhood for protecting pollinators and flowering plants
- Tell everyone about the importance of pollinators and help monitor their numbers



We are Dr Kelly Martinou and Professor Helen Roy, entomologists fascinated by insects. We dedicate this leaflet to all our friends and colleagues who work on pollinators and their conservation. To find out how to become a citizen scientist visit alien-csi.eu or contact us: thethreemosquiteers@gmail.com



AlienCSI The Three Mosquiteers learn about pollinators



Hi, I am Mo, and today we will find out about pollinators.

Hi, I'm Ski.

MEOW

Hi, I am Do. You can help us by becoming a citizen scientist.



Produced by FSC Publications

Pollinators have been busy for a long time...



Ancient people worshipped pollinators.

In Ancient Egypt, bees were thought to be the tears of Ra (Sun God) and were worshipped as a source of eternal life.



The word for butterfly in formal Greek is psyche, thought to be 'the soul of the dead'.

A piece of jewellery from Ancient Crete, Greece showing two bees or two mammoth wasps.



Olmecs, Aztecs and Mayans in South and Central America thought cocoa was a gift from gods and more important than gold, they used cacao with every meal. Cacao plants rely on some small biting midges in order to be pollinated.



Forcipomyia midge
© Christophe Quintin via Flickr (CC BY-NC 2.0)

What's changing?

Pollinators need food (pollen and nectar), clean water and nesting sites. Nowadays they face many threats.

A large group of people from around the world worked together to report on pollinators and they found that changes to the way land is used and managed, including agricultural practices and pesticide use, pollution,

invasive alien species, pathogens and climate change are the main threats to pollinators.

Mammoth wasp



Full report IPBES (2016).
<https://doi.org/10.5281/zenodo.3402856>



Habitat loss



Agricultural intensification



Pesticide and herbicide use



Climate change



Invasive alien species

What can you do?



Find out if there is a citizen science programme for pollinators near you or get involved by doing a **Flower-Insect Timed Count**.

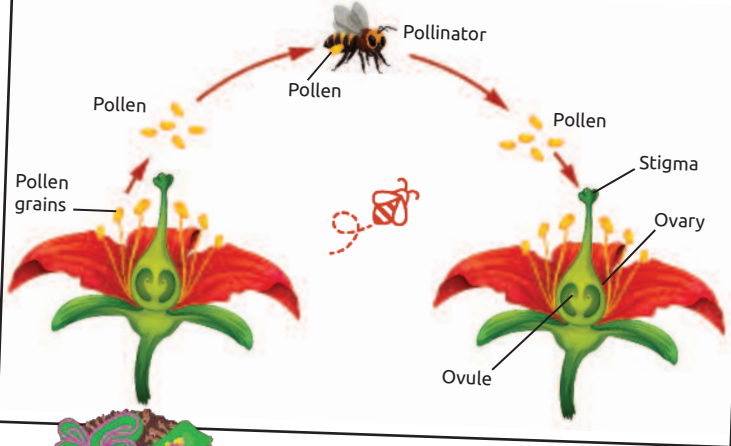
- Find a patch of flowers and place a quadrat around them. If there are many different flower species in the patch just pick your favourite one. It is interesting to compare the insects visiting native and non-native flowers. So choose a patch of each.



50 x 50 cm quadrat



The pollination process



- Use your phone to record and take pictures of the pollinators.

- Count all the insects that land on the flowers in the patch for ten minutes.



- See how your observations compare with those made by others and whether there are changes over time.

Find out more

