

# Waikato

# ENVIROSCHOOLS



## Backyard Ecosystems - Butterflies

Butterflies, like bees, are pollinators - animals that cause plants to make fruit or seeds. They move pollen from the male part of the flower of a plant to the female part of the flower. This process makes the seed or fruit grow. **Without pollinators, we would not have many of the fruits, vegetables, seeds or grains that we eat.**

Monarchs are commonly seen in our gardens, but where do they go in winter? Monarchs in New Zealand do not follow the same migration pattern as their northern relatives. They have adapted their migration behaviour to suit local conditions. When the air temperature drops to 12.8°C, monarchs flock together in overwintering sites. **Listen [here](#) to find out more about Monarchs in winter**

## Butterfly Art

Explore symmetry with a butterfly print.

- From the centre fold, draw half a butterfly.
- Cut it out.
- Open the folded butterfly out flat.
- Paint one half of the butterfly. (Paint thickly so it doesn't dry too fast.)
- Carefully fold the paper over and press the halves together.
- Unfold to reveal a full, symmetrical butterfly.



## In your garden

What do you think a manicured lawn looks like? Why might a manicured lawn be the enemy of butterflies?

Have a look for sunny spots where you could plant more nectar-bearing flowers, let the lawn grow unkempt or plant swan plants. You could make a sign and name it "Butterfly Corner".

New Zealand has about twenty native species of butterfly. Why do you think a lot of people think we have only monarchs and cabbage white butterflies? How many butterflies have you seen before? Learn about other species [here](#). Learn more about Monarchs [here](#) and [here](#).



## Extension: Citizen Science

### From NZ Geographic:

Have you seen any monarch butterflies in your garden or at your school? It may be that these monarchs have been attacked by parasites resulting in crumpled wings which do not work (see the picture, right). A Wellington scientist is finding out more about parasitism in our monarch butterflies—and you can help!

Professor Phil Lester from Victoria University of Wellington is asking citizen scientists from around New Zealand to take a sample from the abdomen of butterflies.



Anyone primary school age or older throughout New Zealand can help Professor Phil investigate how many butterflies in New Zealand have this parasite.

You can sample *Ophryocystis elektroscirrha* (or OE) parasites by pressing clear Sellotape or Scotch tape on a butterfly's abdomen. The tape will pick up the OE spores and a few scales of the butterfly.

1. First, catch a monarch butterfly—[this video shows how to safely catch monarch butterflies without a net.](#)
2. Press a piece of ultra-clear tape against the butterfly's abdomen.
3. Place the tape on a white piece of paper. Record the date, and the location of your sample.
4. Include an address (preferably e-mail) so Phil can contact you.
5. Place the sample in an envelope addressed to:  
Professor Phil Lester - Monarch Disease Survey  
School of Biological Sciences  
Victoria University of Wellington  
PO Box 600, Wellington 6140

Phil will count the spores in the laboratory and post results on [his website](#). More about the science behind monarch butterflies [here](#).

