



# Love our pollinators

2018/2019

Bees and other pollinating insects help produce our food. They pollinate fruit, vegetable, nut and seed crops. They also pollinate plants, like clover, that improve the quality of our grazing for sheep, beef and dairy cows. Many of our native plants also rely on pollinators to reproduce. Find out more about New Zealand's pollinators, and how you can help them.

## Our pollinators



Bumblebee

Photo: Thomas Jorn

Bees are probably the best-known pollinators. Honey bees contribute to a large part of our economy by pollinating crops. They also create honey and honey-related products, like beeswax, royal jelly and propolis, which are used in food supplements and cosmetics. We also have four types of bumblebee and 28 types of native bee. The native bees are generally smaller and blacker than the honey bees and bumblebees, which were both brought over from England.

Our other pollinators include many types of fly, several native butterflies and moths, and a beetle called the flower longhorn beetle. Our nectar-eating birds, such as tūī and bellbirds, are thought to pollinate around one in twelve of New Zealand's native plants.

## What pollinators do

Pollination is how flowering plants reproduce. The pollinators help transfer pollen from the male parts of one flower to the female parts of the same type of flower and fertilise it. Once the flower is fertilised, it produces a fruit or a pod and seeds to grow the next generation of plants. Flowers can have an attractive scent or colour, or food (nectar and the pollen) to entice pollinators to spread their pollen.

## Threats to pollinators

In some parts of the world, pollinator populations have declined for a number of reasons. In some countries, such as America, where large areas of commercial monoculture (single species) crops have replaced previously diverse habitats, there aren't enough local bees to pollinate crops effectively, so landowners hire beehives from other parts of the country to pollinate crops. In parts of China, where intensive farming and pesticide use have decimated local insect populations, farmers pay people to painstakingly hand-pollinate crop flowers. The New Zealand population of managed, introduced honey bees are generally in better shape than many places, thanks to our strict biosecurity laws and monitoring for pests and diseases. However, recent research shows that some types of intensive agriculture affect our native bees. And across our country, all of our pollinators face the problem of loss of habitat and potential poisoning, if exposed to pesticides and other chemicals.

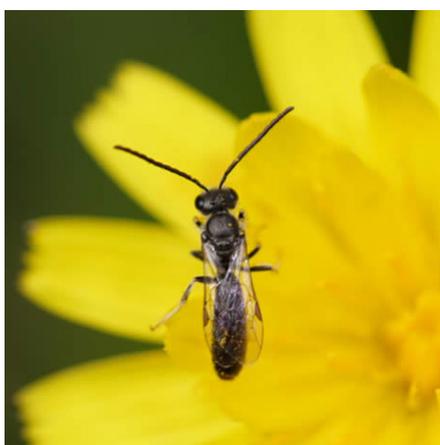
## What you can do

Here's a checklist of things you can do to look after our pollinators:



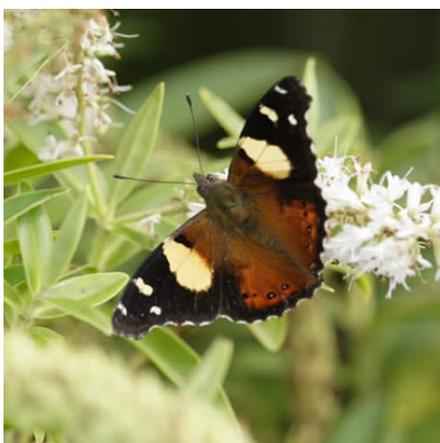
Honey bee

Photo: Aaron Burden



Native bee

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Yellow admiral butterfly

© Manaaki Whenua – Landcare Research

- Grow more flowering plants and trees – plant a mixture and include varieties that our pollinators love to visit and feed on (including native plants) that flower at different times of the year. Grow flowering shrubs and hedges along your boundaries for food and shelter, and let the grass grow long beneath them.
- Cut your lawn less often and don't worry about clover flowers. They are food for bees! Let the dandelions flower and mow them before they go to seed. Think about cutting smaller areas of lawn on a rotation to provide more flowers for pollinators.
- Use insecticides and other garden chemicals carefully. Think about:
  - Do you need a chemical to do the job? For example, could you pull weeds or squash pests by hand? Could you use a net to protect garden vegetable crops from caterpillars? Could you use boiling water to spot-kill weeds or moss on your paths?
  - Leave patches of garden to grow wild and don't spray chemicals there. Remember, some flowering weeds are valuable food sources for pollinators. Leave areas of long grass as shelter for our pollinator insects.
  - If you do need to spray, always read the label and follow the instructions carefully. Don't spray near budding or flowering plants, where bees and other insects are likely to forage. Spray in dry conditions and avoid spraying when it is windy, it's safer for you that way too. Spot treat where you can, avoid blanket spraying an entire area. Spray after sunset to reduce the amount of direct contact of the spray on the pollinators.
- Make clean pesticide-free water available, either in a pond or water feature, or it can be as simple as filling a saucepan with water, and putting some twigs or pebbles in for bees and insects to land on while they drink. Keep it in the shade on sunny days so it doesn't get too hot.
- Don't disturb insect nests.
- Have some earth banks or bare soil in your garden. Native bees nest in these. Or make a backyard bee hotel - fill pots with sticks and bamboo for bees to build nests and secure them in a sheltered place.
- Chat with your neighbours, family and friends about looking after pollinators. Share cuttings and seeds from pollinator-friendly plants to reduce costs. Find out about looking after your pollinators on community land or in schools.
- Get to know our pollinators, look out for them in your garden and neighbourhood. Sit still and see how many pollinators fly by while you are watching. Our 'Meet the pollinator' activity sheet will help you identify some of them.



Keep connected.  
For more information

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Te Mana Rauhi Taiao