

# ANIMAL BITES

## A BUZZ ABOUT BEES

Discover what makes  
bees so amazing

### INSIDE THIS ISSUE

- Bee facts
- Bee infographic
- Puzzles
- And more

Animal  
**Squad**

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[safeanimalsquad.org.nz](http://safeanimalsquad.org.nz)

# ALL ABOUT BEES

## EYES

Bees have very different vision to humans. They cannot see red light but they can see ultraviolet light, which people cannot see.

## ANTENNA

Bee antennae are amazing. They are used for a bunch of senses, such as touch, taste and smell, and even help bees land on angled surfaces.

## BODY

Bees have three body regions: a head, thorax and abdomen.

## LEGS

Bees have six legs. In honey bees, the back legs have special hairs used to collect pollen.

## WINGS

Most bees have two sets of wings that hook together when the bee is flying. They unhook and fold up when the bee is on the ground.



### Bees are amazing.

More than 20,000 species of bees have been discovered. They belong to seven different families and exist on every continent apart from Antarctica. Bees are needed to help many food crops and wild plants thrive.

### Bees in New Zealand

Along with introduced honey bees and bumble bees, New Zealand also has 28 known species of native bees. They range from 4 to 12 millimetres long. Most native bees are solitary, not living in groups or hives. They dig holes in the ground to nest and lay eggs.



## A HISTORY OF BEES

Humans collected honey as early as 10,000 years ago. Domestication of honey bees began around 4,500 years ago. Early honey harvesting was crude, with the whole comb smashed up, with all the larvae and eggs, and sieved. It wasn't until the 1800s that removable comb hives were invented so honey could be taken without destroying the whole bee colony.

The first documented introduction of honey bees to New Zealand was in 1839, up in Northland, in the Hokianga. Now New Zealand has more than 800,000 commercial beehives.

# THE NOT SO SWEET STORY OF HONEY

## TAKING THE BEES HONEY

Bees make honey for themselves and for the hive to survive over winter. People take that honey and replace it with cheaper sugar water, which isn't as nutritious for the bees.

## CULLING OF HIVES

In some cases it is cheaper for bee keepers to destroy the hives once the honey is collected in autumn, rather than feeding the bees over winter.

## QUEENS & COLONIES

Normally queens may lead a part of the colony to a new hive. But commercial beekeepers don't want this as it slows honey production. To prevent this beekeepers will clip the queens' wings, or even kill and replace them every couple of years.

## HUMAN CONTROL

The way humans have raised bees has probably made them more susceptible to disease and parasites (like the varroa mite).

An illustration of a garden scene. In the background, there is a large, dark brown tree. To the left of the tree, there is a wooden beehive hanging from a branch. In the foreground, there is a wooden fence and some green grass. Two bees are shown: one flying in the upper right corner and another flying near the bottom center. Dashed white lines connect the bees to the text boxes.

## INTRODUCED HONEY BEES

Honey bees are an introduced species. They compete with native bees. Because they are larger and can forage for longer, they create strong competition with native bees in some cases.

## TRANSPORT

Bees are often transported to pollinate crops all around New Zealand. In some cases they can travel very long distances. Transported bees have trouble developing food glands, which might affect their ability to nurse additional workers. The stress of transport can also reduce a bee's lifespan by up to a day, which is about 5% of their total lifespan or 20% of their foraging lifetime.

# HOW CAN I HELP?

## Plant bee-friendly flowers

A great way to help bees is to plant bee-friendly flowers around your garden. You can buy packs of bee-friendly seeds from many garden centres or online seed distributors.

## Honey for bees

If you want bees to keep their honey you could use sweeteners other than honey. Or try our apple honey recipe in this issue.



# KIND FOOD APPLE 'HONEY'

## Ingredients

2 cups of apple juice

1 cup of sugar

1 tsp of lemon juice



PREP TIME  
2 minutes

COOK TIME  
20 minutes



## Instructions

1. Add all ingredients to a large saucepan
2. Bring to the boil then reduce to a simmer
3. Reduce the liquid until you end up with just under a cup of liquid
4. Let cool and then store in the fridge in a sealed container for up to a month
5. Enjoy!



## A cartoon-style illustration of a bee with a yellow and black striped abdomen, a yellow thorax, and a black head. It has four transparent wings and is shown in profile, facing right. The background is a light blue sky with a green ground line at the bottom.

[illegible]

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A cartoon illustration of two bees. One bee is in the foreground, flying towards the left, with its wings spread. The other bee is in the background, flying towards the right. They are flying over a large, stylized flower with white petals and a yellow center. The background is a solid light blue color.

Hometown: **Glenbrook**



**HELP ME  
GET HOME**

**FOLLOW THE  
MAZE AND HELP  
FIND THE LOST BEE**

## **FURRY FEEL GOOD**

The father of one of our members, Darius, is a vet at VetCare.

At the start of the year, they had a small dog patient, Buddy, who had abdominal bleeding. They had to operate, and needed a blood donor so one of the other vet's dog, Kelly, stepped up. Kelly was very calm the whole time her blood was taken. The surgery went well and Buddy's dad was so happy to have him home and healthy.

What a beautiful story –  
**thanks for sharing, VetCare.**



# ANIMAL SQUAD MEMBERS



## Nikolai (13)

Nikolai shared a story about how his family rescued some cows destined to be killed. We loved it so much we made a video of Nikolai with his cows. You can find the video on the Animal Squad website. Amazing, **Nikolai.**



## Lily (12)

Lily and her family recently fostered some kittens from the SPCA. They turned out to have ringworm, but Lily's family treated them and got them back to the SPCA healthy and ready for adoption. Fantastic work, **Lily.**

## JOIN SAFE ANIMAL SQUAD

If you are 8-14 you can **join for free.**

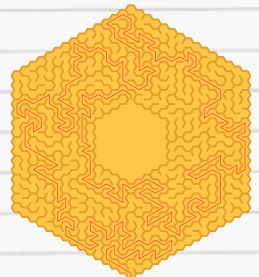
Sign up online at **[SafeAnimalSquad.org.nz](https://SafeAnimalSquad.org.nz)**

Or email **[animalsquad@safe.org.nz](mailto:animalsquad@safe.org.nz)**



Animal  
**Squad**

Why did the bees go on strike?  
Because they wanted more honey and shorter  
working hours!



**PUZZLE PAGE**  
**ANSWERS**