



# QUEEN BEES

Within the hive the queen bee can be seen inspecting cells as she gets ready to lay her eggs.

## KEY FACTS

**Length:**

20mm - 25mm

**Weight:**

175mg-200mg (average)

**Lifespan:**

2-5 years

The queen bee is the heart of the hive, with each colony having just one. She is easily identified by having a larger abdomen than the other bees.

The queen's job is to lay eggs. The queen emits a pheromone which disables the worker bees' ability to reproduce.

## QUEEN BEE DEVELOPMENT

The life of a queen bee begins with female bees (workers) building specially designed cells known as a 'queen cup'. Workers will build several queen cells.

The larvae in the queen cells are fed a specialised substance called 'royal jelly' which activates the development of their distinctive body shape. The first queen to emerge from her cell destroys all other developing queens to ensure she is the only one!

The new queen goes on a 'mating flight' five to twelve days after emerging from the cell. The queen will travel up to several kilometres on one of her flights. By leaving the hive to mate, she is increasing the likelihood of mating with a male bee (drone) that did not come from her own colony. This therefore increases the genetic diversity of the colony.

After a few mating flights, the queen returns to the hive. She spends the remainder of her life laying eggs. The queen has a life span of 2 to 5 years, in which time she can produce more than one million eggs, laying approximately 2,000 a day! The queen lays two different types of eggs; fertilised female eggs, and unfertilised male eggs.

## IMPORTANT 'BUZZ'NESS

Before laying her eggs, the queen inspects each cell to ensure it has been cleaned properly. She also uses her legs to measure the size of the cell to determine which egg to lay; the drone cell being larger than the worker cell.

Should the colony become too big, the queen will leave with around half the population to form a new hive. This is known as 'swarming'. Swarming is one of many reasons why a new queen is needed. When the colony needs a new queen, they build new queen cells and the whole life cycle begins again.

Other reasons for a new queen bee include poor colony health, or low quantity of eggs laid. Either the worker bees prepare new queen cells or the beekeeper determines, for hive survival, a new queen is needed.

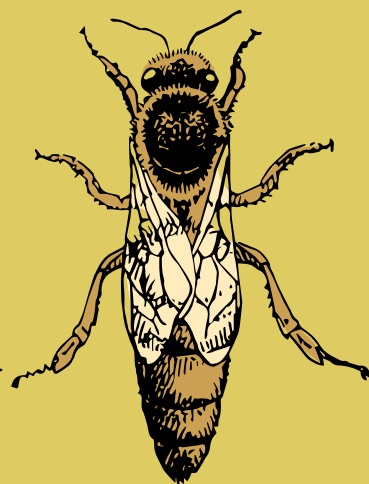
## HOW DO THEY COMPARE?



Worker Bee



Drone Bee



Queen Bee



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For Bee  
Education

Centre for Bee Education is a collaboration between When Bee Foundation and Bee School by Beechworth Honey and provides a wealth of learning resources and tools on the important role bees and other pollinators play in the environment and food production systems.

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