

Honeybee Facts

Honeybees are called **social insects** because they live together in the same **colony**. They can't survive by themselves, or in any other colony. There are three different kinds (**castes**) of bees in the colony - the **queen**, the **workers** and the **drones**. The queen bee and the workers are females, and the drones are males.

The queen lays eggs to produce the other bees in the colony. She does not look for food, feed the young or build comb. She is like an egg laying machine. Workers do different jobs at different times of their lives. They find food, make honeycomb, guard the hive, look after the **larvae** (young bees or brood), and clean the hive. Drones are only produced in late summer and autumn. They mate with the queen bee, then they die.

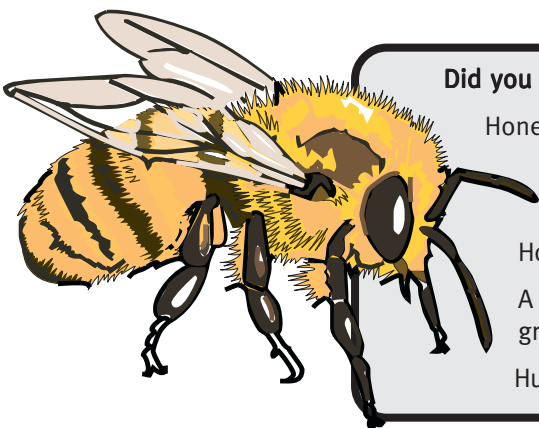
Workers and queens start from the same type of egg but larvae that are only fed **royal jelly** will become queens. Royal jelly is a special food which comes from glands near the workers' mouths. Larvae which become workers are fed royal jelly for four days, and then a mixture of **nectar** and **pollen**.

During the winter there is one queen in the hive, about 20,000 workers, no drones, and none or very few brood. This is because there is not much food, it is colder and the days are shorter. The bees live off the pollen and honey they gathered during the summer. In spring the bees start to look for food again and there are more young bees produced. In early summer there are about 60,000 workers, several hundred drones, and the queen bee. At this time flowers start to make large amounts of nectar, and this is when beekeepers start to collect the honey from the hives.

This is also the time of the year that bees will **swarm**. When bees swarm, the old queen bee leaves the old hive with some workers to find a new home, and start a new colony. A new queen will hatch in the old colony. She will go on a **nuptial flight** with the drones, where she will mate with one drone and then return to the hive to start laying eggs. After the nuptial flight, all the drones will die. The queen bee only mates once and then lays eggs for the rest of her life. The queen can choose to **fertilise** eggs. If she does, the egg becomes a female (queen or workers). If she doesn't, it grows into a male (drone).

What is Honey?

Honey is made by bees from the nectar of many kinds of flowers. The bees collect the nectar in their honey sacs, and carry it to the hive where it is put into the honeycomb. The bees use honey as food for the hive, and they collect and store it to keep them alive through the winter. Some beehives will store more than 150 kg for the winter. Honey is made of two different sugars (dextrose and levulose) and water.



Did you know?

Honeybees were first brought to New Zealand in about 1839.

When honeybees reached America, the Indians called them the white man's flies.

Honey is 77% sugar.

A bee would have to make up to 80,000 trips collecting nectar to make 500 grams of honey.

Humans have kept honeybees for more than four thousand years.