



Heroic Honey Bees

The **drones** (male bees), **queen bee**, and **workers** (female bees) live in a colony in a hive or tree. Inside a hive are wooden “frames” with wax in them. The bees make six-sided wax cells forming combs and this is where they store their honey and their young live safe and warm.

Lifecycle of the Honeybee

Bees are insects with a four stage life cycle: egg – larva – pupa – adult. It takes 21 days for a worker bee to emerge as an adult.

Day 1 – The queen lays an egg in a cell of the comb.

Day 4 – The egg hatches into a tiny white larva. The larva is fed on a mixture of pollen and nectar.

Day 9 – The cell is sealed with wax and becomes a pupa, becoming more and more like an adult bee each day.

Day 21 – The new adult worker bee emerges.

Busy Bees

Life in the hive is very busy – there is much to do so the bees can be strong and do well. Here are some of the tasks the workers must do:

First week: A new worker bee cleans and polishes cells ready for the queen to lay eggs in them. Then she works as a nurse bee making food and feeding the larvae.

Second and third week: The worker bee produces flakes of wax from her underside which she uses to build new comb. A worker bee may also work to carry nectar from the hive entrance and make it into honey. She may carry pollen or water or even seal draughty holes with bee glue called propolis. Keeping the hive the right temperature or guarding against intruders are also duties for these bees.

3 to 6 weeks old: worker bees begin to leave the hive to collect nectar and pollen for food, this is “foraging”. Some bees collect water or propolis. But first they make several short flights so they can remember where home is. Bees dance in the hive to tell other bees where the best food is. After about three weeks of foraging the worker bee will die with younger bees all ready to take her place.



Drone



Worker Bee



Queen Bee



The Beekeeper

Beekeepers look after bees in hives, giving them a dry, safe home and ensuring they have enough food and are healthy. In return, the beekeeper sometimes takes extra honey and puts it in jars to eat or sell.

Why Bees are important

A honey bee is very small but also very important. She pollinates plants and trees with pollen carried from one plant to another on her hairy body so we can have fruit and seeds. Without bees fewer plants would grow and we would not have enough variety in our food to keep everyone healthy.

Bees also make honey for us to eat and use in medicine. Beeswax can be used to make candles, beauty products and furniture polish.

Grow bee friendly plants – bees like many varieties of flowers and trees as well as flowering fruits and vegetables.

Show the leaflet *Flowering Plants for Bees* to your teacher and your parents or guardians. Even the flowers in a window box can help bees.