

## Honey bees

### COOL FACTS:

If you are stung by a honeybee, scrape the stinger away immediately with a fingernail. Do not try and pull the stinger out by squeezing it, this will inject more of the venom into you.

<b>Scientific name:</b>	Apis mellifera
<b>Average size:</b>	1.3 cm
<b>Lifespan:</b>	Queen: 3 - 4 years Worker: 6 - 7 weeks Drone: up to 4 months (upon mating with the queen, drones die immediately)



### PHYSIOLOGY

Honeybees are short haired, black and amber striped insects. There are three kinds of bees in a hive; queen, worker (female) and drone (male). The honeybee has a 4 stage lifecycle; Egg, larva, pupae and adult. An egg is laid and after several days develops into an embryo which hatch into a Larva. Most of the growing takes place during the larval phase. This phase last 4-6 days. The tiny larva develops at the bottom of a cell until it stretches out then spins a cocoon. The larva's cell is capped over to seal in the pupae (which has emerged from the cocoon). In the Pupa stage the greatest amount of physical change happens. The pupa metamorphoses into a mature adult honeybee. The adult chews away the cell cap and emerges. The phase takes about 16 days for queens, 21 days for workers, and 24 days for drones.

### HABITAT/BEHAVIOUR

Honeybees live in a hive made out of beeswax, the wax is secreted from the four sets of glands located in a worker bee's abdomen, and the wax is mixed with saliva and kneaded so that it can be molded. The comb is formed and shaped by the worker bees into hexagonal cells, set back-to-back.

The queen bee lays all the eggs, around 1,500 per day. The worker bee takes care of the hive; cleaning, building, repairing and feeding the baby bees. Outside the hive the worker bee collects nectar, pollen, water and propolis. The drone bee's job is to mate with the queen. Drones do not have stingers but the worker's and queen bees do.

Honeybees feed on a combination of pollen and nectar. Pollen is the only natural protein source for honeybees. Worker honeybees eat 3-4 mg of pollen per day.

### MORE COOL FACTS:

- Honeybees have been present on the Earth for millions of years and beekeeping is one of the oldest agricultural pursuits.
- There have been many studies noting the decline in the honeybee population - one cause is the use of pesticides on plants
- There are five products that come from a hive: honey, beeswax, pollen, propolis and royal jelly.

***Plant a wildflower garden in your backyard, free of harmful chemicals and help the honeybee population.***