

Honeybees



Honeybees, which have the scientific name *Apis mellifera*, have been around for millions of years. They are native to Europe. They are the only insects that make food that humans eat.



The hive is where all the bees in a colony live. A **colony** is like one big family where as many as 50,000 bees live together. In the hive, bees build **honeycombs** out of wax they make in their bodies. They shape the wax into **six-sided or hexagonal tubes** where they store honey and nectar and where the queen lays her eggs.

Honeybees are social and cooperative insects. Every honeybee has a special job within the hive. Members of the hive are divided into three types. Workers, which are sterile females, live up to 6 weeks. They forage for food (pollen and nectar from flowers); build, protect and clean the hive; and circulate air by beating their wings. Male bees, which are called drones, are responsible only for mating with a new queen bee. The hive contains only one queen bee which may live up to 5 years. Her job is to lay eggs, as many as 1600 per day, for the next generation of bees. A queen bee regulates the activities in the hive by producing chemicals that guide the behavior of the other bees.

Most of the bees you see flying are worker bees. Their wings beat incredibly fast, about 200 beats per second creating a buzzing sound. Worker bees can each fly up to six miles per day, and as fast as 15 miles per hour. They can visit up to 100 flowers in one collecting trip. Their sense of smell is so precise that it can tell hundreds of different flower varieties apart and tell whether a flower carries pollen or nectar. This sense of smell also lets them recognize members of their own hive. During its lifetime a worker bee makes only about 1/12th of a teaspoon of honey. The nectar that worker bees gather from flowers gives the honey a distinctive taste. Only worker bees sting if they feel threatened. **What happens to a honey bee if it stings you?** _____

Honeybees pollinate more than 100 crops that are important to humans. They are incredibly important to our lives. If bees were to disappear, we humans would be in big trouble.

Is the honeybee the only insect that can pollinate plants? _____

Ways in which you can help our bees:

1. Do not aggravate them. Never swat at them. Just stay calm and they will leave you alone
2. Provide them with a suitable place to live
3. Provide them with food and water in a convenient place
4. Use as little insecticide as possible (not even organic ones) in your garden
5. If you must spray an insecticide, do it in the evening when bees do not fly

How many bees may live in a hive? _____

What is the main job of a queen bee? _____

What is the name of the shape of the waxy cells that bees build in their hive called?