

- A worker bee will produce up to one teaspoon of honey in her lifetime.
- To make one 12-ounce jar of Royal Hawaiian Honey, worker bees in a hive fly 41,250 miles and tap 1,500,000 flowers.
- In a single foraging trip, a worker bee will visit between 50 and 100 flowers. She will return to the hive bearing over half her weight in pollen and nectar.
- A productive hive can make and store up to two pounds of honey a day.
- While foraging for nectar and pollen, bees transfer pollen from the male to the female components of flowers. Each year, bees are responsible for pollinating one-third of the food we eat.
- The first European colonists introduced *Apis mellifera*, the common honeybee, to the Americas. She is not native to the continent of the Americas.
- While bees cannot recognize the color red, they do see ultraviolet colors.
- **Unlike the stingers in wasps, the honeybee's stinger is barbed.** Once the stinger pierces a mammal's soft skin, the attached venom pouch pumps a mixture containing melittin, histamine, and other enzymes into the target. When the bee pulls away, the barb anchors the stinger in the victim's body. The bee leaves the stinger and venom pouch behind and soon dies due to abdominal rupture. When a honeybee stings another insect, such as a honey-plundering moth, she does not leave her stinger planted in the invader. As she retreats from the insect victim, her barbed stinger tears through the insect's exoskeleton.
- **The beehive is ruled by a queen bee.** She is several milliliters larger than any of her

subjects. This is because of the special food she is fed during her gestation period: royal jelly. Royal jelly causes her to develop into a larger bee, which is biologically programmed to lay eggs her entire life.

- **A queen bee leaves the hive only once in her whole life.** This is on her “nuptial flight”. During this mating flight, several drones will deposit upwards of 90 million sperm in the queen's oviducts. She stores the sperm in a special pouch, the spermatheca. In one day a queen can lay her weight in eggs. She will lay one egg per minute, day and night, for a total of 1,500 eggs over a 24-hour period and 200,000 eggs in a year. Should she stop her frantic egg-laying pace, her workers will move a recently laid egg into a queen cell to produce her replacement.
- **While workers select which fertilized eggs to brood in queen or worker cells, the queen decides the sex of her young.** In a mechanism of sex determination known as haplodiploidy, fertilized eggs will become female offspring, while unfertilized eggs will become males.
- **There are three classifications of honey bees:** Worker bees, drones and the queen. Worker bees are the ones who make honey, and all of them are female. Male bees are known as drones, whose sole purpose in this matriarchy is to inseminate the queen. Once their purpose has been fulfilled they are hastily and sometimes violently expelled from the colony; pushed out the front entrance and left to die without food. There is always only one queen bee per hive.
- **Life span of the three different types of bees in a hive:**

1. Life span of a worker bee: 45 days

2. Life span of a drone: 60 days

3. Life span of a queen bee: Two to three productive years, she can live up to five years.

**Source for some of these bee facts: NOVA online, "Tales from the Hive"*