

The Honey Bee: Amazing Facts and Feats

- Honey bees must visit some 2 million flowers to make one pound of honey.
- Honey bees fly about 55,000 miles to bring in enough nectar to make one pound of honey.
- About one ounce of honey would fuel a honey bee's flight around the world.
- Honey bees have been producing honey from flowering plants for about 10-20 million years.
- The average honey bee worker makes 1/12 teaspoon of honey in her lifetime.
- Honey bees contribute 8 to 10 billion dollars to the U.S. economy yearly.
- Honey bees have four wings that are latched into pairs by hooks.
- There are an estimated 200,000 beekeepers in the United States.
- Honey bees are the only insects that produce food for humans.
- The male honey bee, the drone, has a grandfather but no father.
- The average honey bee flies between 12 and 15 miles per hour.
- A honey bee flaps its wings about 12,000 times per minute.
- A honey bee worker visits more than 2,000 flowers on a good day.
- Honey bees communicate with one another by smell and dances.
- The average summertime honey bee lives only about 28 to 35 days.
- There are 3 million plus honey-producing colonies in the United States.
- A honey bee visits between 50 and 100 flowers during one collection trip.
- A typical healthy hive may contain up to 60,000 honey bees during peak times.
- Honey bees make an average of 1,600 round trips in order to produce one ounce of honey.
- Bees will travel as far as one or two miles from the hive to gather nectar.
- Honey bees from a typical hive visit approximately 225,000 flowers per day.
- Queen bees will lay as many as 2,000 eggs on a good day -- an average of one every 45 seconds.
- A good queen bee will lay between 175,000 and 200,000 eggs per year.
- The average central temperature of the brood nest is kept between 92 - 95 degrees Fahrenheit.
- Beeswax production in most hives is only about 1.5% to 2.0% of the honey yield.
- Approximately eight pounds of honey is eaten by bees to produce one pound of beeswax.
- The Americas have no native honey bees -- early pioneers first brought them from Europe.
- Honey bees pollinate approximately 25% of all the foods humans consume.
- Besides honey, honey bees produce wax and propolis, gather pollen, and produce royal jelly.
- A typical foraging honey bee will work herself to death in about three weeks.



THE COLONY

Honey bees are social insects, with a marked division of labor between the various types of bees in the colony. A colony of honey bees includes a queen, drones and workers.

THE QUEEN

The queen is the only sexually developed female in the hive. She is the largest bee in the colony. A two-day-old larva is selected by the workers to be reared as the queen. She will emerge from her cell 11 days later to mate in flight with approximately 18 drone (male) bees. During this mating, she receives several million sperm cells, which last her entire life span of nearly two years. The queen starts to lay eggs about ten days after mating. A productive queen can lay 3,000 eggs in a single day.

THE DRONES

Drones are stout male bees, which have no stingers. Drones do not collect food or pollen from flowers. Their sole purpose is to mate with the queen. If the colony is short on food, drones are often kicked out of the hive.

THE WORKERS

Workers, the smallest bees in the colony, are sexually undeveloped females. A colony can have 50,000 to 60,000 workers. The life span of a worker bee varies according to the time of year. Her life expectancy is approximately 28 to 35 days. Workers that are reared in September and October, however, can live through the winter. Workers feed the queen and larvae, collect nectar, guard the hive entrance and help to keep the hive cool by fanning their wings. In addition, honey bees produce wax comb. The comb is composed of hexagonal cells, which have walls that are only 2/1000 inch thick, but support 25 times their own weight.

Honey bees' wings stroke 11,400 times per minute, thus making their distinctive buzz.

Honey History Facts

LITERATURE: 21ST CENTURY B.C.

Honey is alluded to in the Sumerian and Babylonian cuneiform writings, the Hittite code, the sacred writings of India, the Vedas and in the ancient writings of Egypt.

BIBLICAL

Palestine is often referred to as "the land of milk and honey." (Exodus 3:8)

EGYPT: 30TH CENTURY B.C.

Honey was used in most households as a sweetening agent. The people of this time valued honey highly, thus, it was commonly used as a tribute or payment. Honey was also used to feed sacred animals.

SUMERIA, ASSYRIA AND BABYLONIA: 21ST CENTURY B.C.

Honey was poured over thresholds and stones bearing commemorative offerings. Honey and wine were also poured over bolts that were to be used in sacred buildings.

GREECE: 7TH CENTURY B.C.

An ancient custom was the offering of honey to the gods and to spirits of the dead. Mead, an alcohol drink made with honey, was considered the drink of the gods.

GERMANY: 11TH CENTURY A.D.

German beer was sweetened with honey. German peasants were required to give their feudal lords a payment of honey and beeswax.

AMERICAS: 16TH CENTURY A.D.

Conquering Spaniards found that the natives of Mexico and Central America had already developed beekeeping. A distinct family of stingless bees (not true honey bees) was native to these regions.

AMERICAN COLONIES: 17TH CENTURY A.D.

European settlers introduced European honey bees to New England in about 1638. North American natives called these honey bees the "white man's flies." Honey was used to prepare food and beverages, to make cement, to preserve fruits, to concoct furniture paste-polish and varnish and for medicinal purposes.