

The Life Cycle of the Honey Bee

A beekeeper, whether a casual hobbyist or a large commercial producer, can not be successful unless they fully understand the life cycle of the honey bee.

The honey bees life cycle is a unique and fascinating process.

It all starts with the egg. The hives queen bee lays an egg in one of the cells constructed for the sole purpose of laying eggs. Once queen has laid the egg and moved on to lay another (during the spring months the queen can lay an average of 1900 eggs daily) the egg is attached to the cell with a mucus strand.

When the egg hatches a larvae emerges. Nurse bees are in charge of caring for the young larvae. They feed the eggs bee bread. Bee bread is a strange mixture of gland secretions and honey. The larvae will go through five distinct growth stages. After each of these stages the larvae sheds its outer skin. When the larvae is six days old, a worker bee comes along and caps the larvae, cocooning the larvae in its cell. The larvae stays in the cocoon for for eight to ten days, when it emerges from the cocoon it is a fully formed young bee.

The average length of life average honey bee depends on what purpose the bee fulfills in the hive. A queen bee can live for two years providing that she was able to get herself inseminated with enough sperm during her nuptial flight. A good strong queen bee can lay as many as 2000 eggs a day. She is in charge of killing her sisters and mothers. The queen bee doesn't have to worry about taking care of herself, she is always surrounded by an entourage of worker bees who feed her and remove her waste. It is not uncommon for the elderly queen bee to leave the nest in the springtime when the rest of the hive is getting ready to swarm. Experts believe that the queen produces some sort of pheromone that prevents the hives workers bees from becoming interested in sex. A queen bee who has not made her nuptial flight is called a virgin queen. Drone bees are male bees that live only to impregnate queen bees during the queens nuptial flight.

After mating with a queen the drone dies. During the winter months, a worker bee can live up to one hundred and forty days old. During the summer months the worker bee is lucky to live for forty days, the short summer life span is because the worker bees are literally worked to death. The worker bee's duties are wide and varied. Worker bees called nurse bees are in charge of caring for the young larvae, other workers are sent out to gather pollen to be made into honey. Some workers spend their time capping off honey combs, other workers are responsible for taking care of the queen. Worker bees are in charge of starving the unwanted drone bees and cleaning the hive. There can be anywhere from twenty thousand to two hundred thousand worker bees in a single hive. Worker bees are

always sterile. If a worker bee lays an egg it becomes a drone bee. Workers bees are the bees that people see defending the hive.

The survival of the bee hive depends on the hive having a healthy queen that is laying eggs. If something happens to the queen the hive will die.