

## Biology of Honeybee

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### Biology of Honeybee

Bees pass through four stages of development: egg, larva, pupa, and adult. The four stages of a bee's lifecycle: egg, larva, pupa, and adult. The length and events of a bee's life vary, depending on the seasons they emerge, what flowers they gather food from, and whether they are solitary or social.



### Introduction

Phylum: Arthropoda  
 Class: Insecta  
 Order: Hymenoptera  
 Family: Apidae  
 Genus: *Apis*  
 Species: *mellifera*

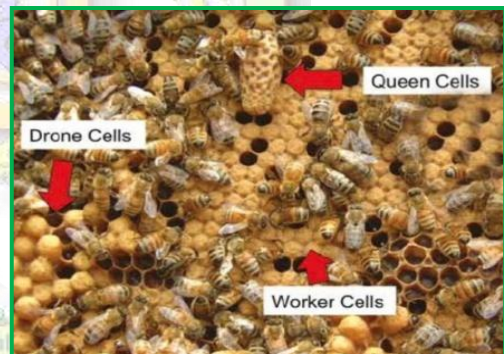
### Colony of Organization

Honey bees are social insects that live in colonies. Honey bee colonies consist of a single queen, hundreds of male drones and 20,000 to 80,000 female worker bees. Each honey bee colony also consists of developing eggs, larvae and pupae.

**Queen:** Queen Bee" is typically used to refer to an adult, mated female that lives in a honey bee colony or hive, and she is usually the mother of most, if not all, of the bees in the beehive.

**Drone:** The drone is a fertile male in a beehive. The main function of drones is to mate with the queen bee. They will die after mating with the queen bee as the male reproductive parts explode within the queen's female reproductive organ.

**Worker:** The worker bees are sterile females and cannot reproduce. They perform all function for the hives and thus, called as worker honey bee. They have the responsibility of maturing honey, feeding the larvae and drones, grooming the queen, cleaning cells, producing wax, pollinating flowers and much more.



### Honeybee Communication

Honey bees have two primary methods of talking to one another: movement and odor. Bees use these behaviors, such as the famous "waggle" dance, to send messages throughout the colony, locate a nearby food source, and communicate other.

It has long been known that successfully foraging Western honey bees perform a waggle dance upon their return to the hive. The laden forager dances on the comb in a circular pattern, occasionally crossing the circle in a zig-zag or waggle pattern.

