

**Apiary** - colonies, hives, and other equipment assembled in one location for beekeeping operations; also known as a bee yard.

**Apiculture** - the science and art of raising honey bees.

**Apis mellifera** - Genus and species of the Western honey bee originating in Europe and Africa and now located around the world.

**Bait hive** - A hive or box placed preferably in an elevated location used to attract and hopefully capture swarms.

**Bee bread** - a fermented mixture of collected pollen and nectar or honey, deposited in the cells of a comb. Pollen is the primary pollen source for bees and is used especially by the nurse bees to produce royal jelly to feed the young larvae.

**Beehive** - a box or receptacle with movable frames, used for housing a colony of bees.

**Bee metamorphosis** - the three stages through which a bee passes before reaching maturity: egg, larva, and pupa. During the pupal stage, large fat reserves are used to transform both the internal and external anatomy of the bee.

**Bee space** - 3/8-inch space between combs and hive parts in which bees build no comb or deposit only a small amount of propolis. Bee spaces are used as corridors to move within the hive.

**Beeswax** - a complex mixture of organic compounds secreted by four pairs of special glands on the worker bee's abdomen and used for building comb. Its melting point is from 143.6 to 147.2 degrees F.

**Bottom board** - the floor of a beehive that all the other components build upon.

**Brace comb** - a small bit of wax built between two combs or frames to fasten them together. Brace comb is also built between a comb and adjacent wood, or between two wooden parts such as top bars.

**Brood** - immature bees that not yet emerged from their cells. Brood can be in the form of eggs, larvae, or pupae of different ages.

**Brood chamber** - the part of the hive in which the brood is reared; may include one or more hive bodies and the combs within.

**Burr comb** - a bit of wax built upon a comb or upon a wooden part in a hive but not connected to any other part.

**Capped brood** - pupae whose cells have been sealed with a porous cover by mature bees to isolate them during their nonfeeding pupal period; also called sealed brood.

**Cappings** - a thin layer of wax used to cover the full cells of honey. This layer of wax is sliced from the surface of a honey-filled comb.

**Castes** - a term used to describe social insects of the same species and sex that differ in morphology or behavior. In honey bees there are two castes, workers and queens. The drones are a different sex and therefore not included.

**Cell** - the hexagonal compartment of comb built by honeybees.

**Cluster** - a large group of bees hanging together, one upon another.

**Colony** - all the worker bees, drones, queen, and developing brood living together in one hive or other dwelling.

**Comb** - a mass of six-sided cells made by honey bees in which brood is reared and honey and pollen are stored; composed of two layers united at their bases.

**Comb foundation** - a commercially made structure consisting of thin sheets of beeswax with the cell bases of worker cells embossed on both sides in the same manner as they are produced naturally by honey bees.

**Comb honey** - honey produced and sold in the comb. It is produced either by cutting the comb from the frame or when the comb is built in special frames which allow for its easy removal.

**Crimp-wired foundation** - comb foundation which crimp wire is embedded vertically during the manufacturing of the foundation. The wire increases the strength of the foundation.

**Crystallization** - the formation of sugar crystals in honey. Syn. Granulation

**Cut-comb honey** - comb honey cut into various sizes, the edges drained, and the pieces wrapped or packed individually

**Dividing** - splitting a colony to form two or more colonies.

**Drawn combs** - cells which have been built out by honey bees from foundation in a frame.

**Drifting of bees** - the failure of bees to return to their own hive in an apiary containing many colonies. Young bees tend to drift more than older bees, and bees from small colonies tend to drift into larger colonies.

**Drone** - the male honey bee

**Drone comb** - comb measuring about four cells per linear inch that is used for drone rearing and honey storage.

**Drone layer** - a queen who is incapable of fertilizing eggs. As a result all brood produced is drones.

**Extracted honey** - honey removed from the comb.

**Extraction** -the process in which honey is drawn out of frames using centrifugal force with a honey extractor.

**Extractor** - a machine which removes honey from the cells of comb by centrifugal force.

**Field bees** - worker bees generally two to three weeks old that work to collect nectar, pollen, water, and propolis for the colony.

**Frame** - a piece of equipment made of either wood or plastic designed to hold the honey comb.

**Fume board** - a rectangular cover the size of a super which has an absorbent material on the underside. A chemical is placed on the material to drive the bees out of supers for honey removal.

**Harvest**- the process of extracting honey from a hive.

**Hive** - the structure used by bees for a home.

**Hive body** - a wooden box which encloses the frames and is usually used as a brood chamber.

**Hive stand** - a structure that supports the hive.

**Hive tool** - a metal device used to open hives, pry frames apart, and scrape wax and propolis from the hive parts.

**Honey** - a sweet viscid material produced by bees from the nectar of flowers, composed largely of a mixture of sugars dissolved in about 17 percent water. It contains small amounts of mineral matter, vitamins, proteins, and enzymes.

**Honeydew** - a sweet liquid excreted by aphids, leafhoppers, and some scale insects that is collected by bees, especially in the absence of a good source of nectar.

**Honey stomach** - a specially designed organ in the abdomen of the honey bee used for carrying nectar, honey, or water.

**Inner cover** - a lightweight cover used under a standard telescoping cover on a beehive.

**Larva (plural, larvae)** - the second stage of bee metamorphosis; a white, legless, grub-like insect.

**Laying worker** - a worker which lays unfertilized eggs, producing only drones, usually in colonies that are hopelessly queenless.

**Mating flight** - the flight taken by a virgin queen while she mates in the air with several drones.

**Nectar** - a sweet and often fragrant liquid secreted by the nectaries of plants for attracting animals. Nectar is the raw product of honey.

**Nectar flow** - a time when nectar is plentiful and bees produce and store surplus honey.

**Nurse bees** - young bees, three to ten days old, which feed and take care of developing brood.

**Pheromones** - chemical substances secreted from glands and used as a means of communication. Honey bees secrete many different pheromones.

**Pollen** - the male reproductive cell bodies produced by anthers of flowers. It is collected and used by honey bees as their source of protein.

**Pollen basket** - a flattened depression surrounded by curved hairs, located on the outer surface of a bee's hind legs and adapted for carrying pollen to the hive.

**Pollination** - the transfer of pollen from the anthers to the stigma of flowers.

**Primary swarm** - the first swarm to leave the parent colony, usually with the old queen (see secondary swarm).

**Propolis** - sap or resinous materials collected from trees or plants by bees and used to strengthen the comb and to seal cracks; also called bee glue.

**Pupa** - the third stage in the development of the honey bee, during which it changes (pupates) from a larva to an adult bee.

**Queen** - a female bee with a fully developed reproductive system, and she is larger and longer than a worker bee.

**Queen cage** - a small cage in which a queen and three to five worker bees are confined for shipping and introduction into a colony.

**Queen cell** - a special elongated cell in which the queen is reared. It is above an inch or more long and hangs down from the comb in a vertical position.

**Queen excluder** - metal or plastic device with spaces that permit the passage of workers but restrict the movement of drones and queens to a specific part of the hive.

**Robbing** - stealing of nectar, or honey, by bees from other colonies which happens more often during a nectar dearth.

**Royal jelly** - a highly nutritious glandular secretion of young bees, used to feed the queen and young brood.

**Smoker** - a device in which materials are slowly burned to produce smoke (not flames) which is used to subdue bees. It is important to use a material that produces a cool smoke as not to harm the bees.

**Super** - any hive body, or smaller box, used for the storage of surplus honey which the beekeeper will harvest. Normally it is placed over or above the brood chamber.

**Supersedure** - the natural replacement of an established queen by a newly reared queen in the same hive.

**Surplus honey** - honey removed from the hive which exceeds that needed by bees for their own use.

**Swarm** - a large number of worker bees, drones, and usually the old queen that leaves the parent colony to establish a new colony.

**Swarming** - the natural process of propagating a colony of honey bees.

**Swarm cell** - queen cells usually found on the bottom of the combs before swarming.

**Uncapping** - the process by which the thin layer of beeswax is removed, exposing honey frames for honey harvesting.

**Uncapping knife** - a knife used to shave or remove the cappings from combs of sealed honey prior to extraction. These can be heated by steam or electricity.

**Worker bee** - a female bee whose reproductive organs are undeveloped. The majority of the honey bees are worker bees and they do all the work in the colony except for laying fertile eggs.

**Worker comb** - comb measuring about five cells to the inch, in which workers are reared and honey and pollen are stored.