

WITHIN THE HIVE

SEE SPACE—The critical measurement between parts of the hive that enables bees to move freely in the hive—1:1m or ¼ inch.

RESINWAX—A substance secreted by glands in the worker bee's abdomen and used to build comb.

ERAGE POMS—Bits of random comb that connect two frames. It should be removed by the beekeeper.

BROOD CHAMBER—The part of the hive where the queen is laying eggs & the brood is being raised. It is usually the lower hive box or the body.

BROOD—Immature bees in various stages of development before they emerge from their cells (eggs, larvae & pupae).

BURR COMB—Is any extension of comb beyond what bees build within the frame. It should be removed by the beekeeper.

CAPPED BROOD—Larvae or pupae with a wax cover over it enabling the larvae to spin cocoons & turn into pupae.

CAPPED HONEY—A wax cover placed over honey by bees.

CELL—The hexagon-shaped compartment of a comb. Bees store food & raise brood in these cells.

CLUSTER—A mass of bees who huddle together. Can be a swarm or a group in the hive in cold weather.

COMB—A back to back collection of hexagonal cells that are made of beeswax and used to store food and raise brood.

DRAWN COMB—Fully built honeycomb built up by bees on foundation (man-made wax sheets).

DRONE COMB—Comb that is made up of cells larger than worker brood, usually in the range of 5.9 to 7.0mm in which drones are reared and honey and pollen are stored.

FOOD CHAMBER—Part of the hive primarily used to store honey and pollen.

UNCAPPED BROOD—Eggs or larvae open to the air.

UNCAPPED HONEY—Cells that have honey open to the air.

WORKER COMB—Comb measuring between 4.4mm and 5.4mm, in which workers are reared & honey & pollen are stored.

THINGS THAT BEEKEEPERS DO

ARTIFICIAL FEEDING—Done in winter or early spring to ensure the survival of the hive. Usually a mixture of 50% of white sugar to 50% water.

REQUEENING—To replace an existing queen by removing her and introducing a new queen every 1-2 years.

Tested queen—A queen whose progeny shows she has mated with a drone of her own race and has other qualities which would make her a good colony mother.

GRAFTING—Removing a worker larva from its cell and placing it in an artificial queen cup in order to have it reared into a queen.

OTHER BEE INFORMATION

REVEREND LANGSTROTH—Father of modern hive management. He recognized the significance of bee space and box sizes of standardized dimensions. Most beekeepers in Australia use Langstroth hives.

TOP BAR HIVE—A hive with only top bars and no frames that allows for removable comb without as much carpentry or expense. Claimed to be more tolerant for bees than the langstroth hives.

'NASTIES' IN THE HIVE

COLONY COLLAPSE DISORDER—Where most of the bees in most of the hives in an apiary disappear leaving a queen, healthy brood and only a few bees in the hive with plenty of stores.

SMALL HIVE BEETLE—A pest whose larvae will destroy comb and ferment honey.

FOULBROOD—Generic term to describe bacterial diseases that affect only brood and no adult bees.

EUROPEAN FOULEBROOD (EFB)
MOST SERIOUS IS AMERICAN FOULEBROOD (AFB)
Victorian Dept Primary Industry has a free AFB Smart Honey Testing Program that all beekeepers should participate in.

NOSEMA—An illness that affects the digestive tract in bees.

WAX MOTH—Moth larvae live on pollen & honey and burrow through the wax. They leave a trail of webs and faeces.

CHALKBROOD—Is caused by a fungus & affects only larvae which dry to hard chalk-like and mummified remains.

VARROA DESTRUCTOR—are like ticks. They attach to the bees and suck the hemolymph fluid that is in the circulatory system from the adult bees and then get into cells before they are capped and reproduce there during the capped stage of the larvae development. Is some countries around the world they have had devastated bee colonies. So far they are not in Australia.

HONEY EXTRACTING

EXTRACTOR—A machine that spins hive frames to remove honeycomb by centrifugal force.

STICKY—A frame after honey has been extracted.

UNWRAPPING KNIFE—An electric or steam heated knife used to remove the wax caps from sealed honey prior to extraction.

SETTLING TANK—A large capacity container used to settle extracted honey, air bubbles and debris will float to the top, clarifying the honey.

HONEY GATE—A special tap used for removing honey from tanks and other storage receptacles.

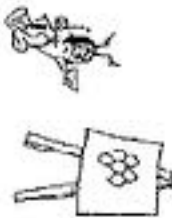
CAPPINGS—A combination of wax and some honey which results from removing the wax covering of cells containing honey.

SCUM GUM—A mixture of propolis, bits of resin, bits of wax, parts of dead bees and other debris that is left over after wax is melted.



BEE SPEAK

A Dictionary for BEGINNERS



When around experienced beekeeper, BEGINNERS hear a lot of words and concepts that are unfamiliar.

This brochure helps to demystify most of the common beekeeping terms and sayings.

Good luck and enjoy the fascinating world of beekeeping!

South

Gippsland Beekeepers

A division of the Gippsland Apiculturists Association

PERSONAL EQUIPMENT — THE BASICS

BEE SUIT—A pair of white coveralls made to protect beekeepers from stings. Most come with zip-on vents.

HIVE TOOL—A metal device used to open the hive, pry frames apart & to remove wax & propolis.

SMOKER—A tool with bellows. When lit & snaked from it is applied to the entrance, bee colonies are easier to work with.

BEE BRUSH—Soft brush to remove bees from comb.

BEES

SCIENTIFIC NAME of the common domestic honey bee = *Apis mellifera*

CASTES—2 types of female bees (queens & workers) and the male bee (drones).

3 STAGES OF BEE DEVELOPMENT

EGG—The queen deposits the egg in the bottom of the cell.

LARVA—The stage starting the 1st day from when the egg is laid until it's capped on about the 7th or 10th day.

PUPA—The final stage in a brood bee's metamorphosis during which it is inactive and sealed in its cocoon.

DRONE—The male honeybee which comes from an unfertilized egg laid by a queen or less commonly, a laying worker. Drones primary task is to impregnate virgin queens from other hives.

QUEEN—A fully developed female bee responsible for all the egg laying of a colony.

MARKED QUEEN—A queen bee that has been marked with a spot of paint on her abdomen for easier identification.

WINGED QUEEN—An unmated queen bee

WORKERS—Infertile female bees whose reproductive organs are only partially developed, responsible for carrying out most of the work of the hive.

- **FIELD BEES**—Worker bees which are usually 21 or more days old and work outside to collect nectar, pollen, water and propolis, also called foragers.

- **GUARD BEES**—Worker bees about 14 to 20 days old, which have their maximum amount of alarm pheromone and venoms; they challenge all incoming bees and other intruders.

- **NURSE BEES**—Young worker bees who feed the larvae.

- **SCOUT BEE**—Worker bees searching for a new source of pollen, nectar, propolis, water, or a new home for a swarm of bees.

- **LAYING WORKER**—An unfertilized, non-queen female bee that is capable of laying drone eggs. This is often the result of a hive remaining queenless for a period of time.

SUBSTANCES FORAGED BY BEES

NECTAR—A liquid rich in sugars, manufactured by plants in or near flowers; the raw material for honey.

POLEEN—Reproductive germ tissue of male flowers collected and fermented by the bees as their primary protein source.

PROPOLIS—Plant resins collected and used to disinfect the hive, seal cracks & openings & encasing foreign bodies e.g. hive beetle.

FOOD MADE BY BEES

BEE BREAD—Pollen that was collected by bees and then mixed with various solutions including honey which is stored within a cell of the comb. This is a high protein food for both the developing larvae and bees.

BEE MILK—Liquid food produced by young bees and fed to larvae, queens, drones & other bees. It is a product of the consumption and digestion of large amount of pollen and bee bread.

ROYAL JELLY—A highly nutritious glandular secretion of young bees used to feed the queen & young brood.

HONEY—Produced by bees from the nectar of flowers, composed largely of a mixture of dextrose and levulose dissolved in about 17 percent water; contains small amounts of saccharose, mineral matter, vitamins, proteins, and enzymes.

BEE BEHAVIOUR

ALARM ODOUR—The pheromone substance, isopentyl acetate, released by worker bees that alert other bees of danger.

SEASIDING—When bees congregate on the front of the hive.

BEE DANCE—A basis of rudimentary communication used by bees to provide location information of food sources, water sources or possible new home. e.g. Crescent Dance and Wag-tail Dance.

NUPTIAL FLIGHT—The mating flight taken by a queen to mate with several drones in mid air.

PHEROMONE—A chemical scent produced to establish a basic form of communication or to stimulate a response.

QUEEN SUBSTANCE—The pheromone produced by the queen bee that alerts a colony to the fact that it is 'Queen Right'.

SUPERCEDURE—Rearing a new queen to replace the mother queen in the same hive; shortly after the daughter queen begins to lay eggs, the mother queen often disappears.

SWARM—A temporary collection of bees, containing at least one queen that split apart from the mother colony to establish a new one; a natural method of propagation of honey bee colonies. **DEADWAX**—Empty hive where bees have abandoned.

HIVE COMPONENTS

BEE ESCAPE—A device to permit bees to pass one way, but prevent their return; used to clear bees from supers.

BOTTOM BOARD—Base of hive or ground floor of the hive. The hive body fits onto it.

COLONY OR HIVE—Bees & Boxes

FRAMING REDUCER—A wooden strip used to regulate the size of the entrance.

FOUNDATION—A mar-made sheet of beeswax embossed with an hexagonal comb pattern that the bees add beeswax to make suitable for egg laying, nectar and pollen storing.

FRAMES—Open rectangular housing designed to hold foundation and hangs parallel to other frames in a hive body. Hive bodies can have 10 or 8 frames—full or half frames.

HIVE BODY—Bottom box normally contains frames, honey, pollen and broodnest. Also called **BROOD BOX**.

HIVE STAND—A structure that stands on the ground and supports the hive structure—can be a wooden pallo.

HIVE MAT—Lino or cork flute that fits over the upper most hive body and under the external hive cover. Its purpose is to allow excessive moisture to escape while preventing the loss of bee heat as well as reducing built up of Burr Comb in the cover.

HIVE CLAMP WITH STRAP—A device that when tightened is designed to keep bottom board, hive body and supers together when being moved.

NUCLEUS HIVE—A small colony of bees housed within a smaller hive container.

OUTER COVER OR LID—Fits on the top hive body. It is waterproof—top is lined with galvanized iron sheathing.

SUPER—Hive boxes added above the hive body.

SHALLOW SUPER—A hive box with frames that is smaller and lighter than traditional sized frames. Also called **HONEY SUPER**. **EXCLUDER-QUEEN EXCLUDER**—A thin frame with grids made of plastic or metal that allows worker bees to pass through but prevents the queen from getting through. Usually placed below supers.

OTHER EQUIPMENT

EMBEDDER

ELECTRIC—A device that electrically produces heat through wires in frames. It melts wax foundalica onto the frame wires in the frame.

SPUR WHEEL—Wheel placed in boiling water and run along wire in frame to melt wax foundation onto frame wires.

SOLAR BEEWAX EXTRACTOR—A device used to melt wax from cappings from the extraction process. Unsuitable frames containing drawn comb & foundation are also placed in the solar extractor to melt the wax.