



## Beekeeping Terms

With thanks to  
<http://www.beesfordevelopment.org>

**Abscending-** occurs when all adult honey bees leave the hive or nest.

***Achroia grisella***- The lesser wax moth: a serious pest of honey bee colonies in the tropics.

**Africanized-** Honey bees descended from those introduced to Brazil from Africa in 1956

**Agroforestry-** The use of both trees and agricultural production on the same piece of land to encourage economic and ecological benefits.

**Anther-** The part of a flower's stamen that produces pollen.

**Apiary-** The place where beehives are situated.

**Apiculture-** The science and art of bees and beekeeping.

**Apimondia-** The International Federation of Beekeepers' Associations

***Apis***- The genus to which honey bees belong Different species of *Apis* will be described in *Bees for Development 25*.

**Appropriate hive-** A hive which is technologically appropriate to the resources (materials, human skill, bee species) available.

**Bait hive-** An empty hive placed so that it will be occupied by a swarm of bees.

**Bark hive-** A hive made from the bark of trees.

**Batik-** A technique for producing designs on cloth by covering with wax, for each successive dipping, those parts of the cloth to be protected from dye.

**Bee-** An insect belonging to the superfamily Apoidea. Over 25 000 species of bees have been described.

**Bee space-** A gap large enough for bees to walk and work, for example the space between two

parallel combs or between a comb and the wall of the hive.

**Beeswax-** Wax produced by honey bees (secreted by special glands on the underside of the abdomen) and used to build comb.

**Braula-** Abbreviated name for a species of wingless fly, for example *Braula caeca*. Often known as bee louse.

**Brood-** All stages of immature honey bees; eggs, larvae and pupae.

**Brood nest-** The area of the colony where brood is being reared.

**Cell-** A single hexagonal wax compartment, the basic unit of comb. Each honey bee develops within a single cell, and honey and pollen are stored within cells.

**Chalkbrood-** A disease of honey bee colonies caused by a fungus *Ascosphaera apis*.

**Colony-** Honey bees are social insects. Each honey bee can only live as part of a colony and not individually. Each colony of honey bees contains one queen bee who is the female parent of the colony, a few hundred drone bees and thousands of worker bees.

**Comb-** The wax structure made of hexagonal cells in which honey bees rear young and store food.

**Cross-pollination-** The transfer of pollen between flowers of different plants of the same species. Plants that are not self-fertile must be cross-pollinated before they can develop seeds. Many crops depend upon cross-pollination by insects.

**Cut comb honey-** Pieces of comb containing honey and presented for sale in this way, *i.e.* honey which has not been extracted.

**Dadant hive-** A design of American, single wall, frame hive.

**Desertification-** Decline in the productivity of land until it is biologically useless.

**Diversity-** The number of species (plant and animal) in any given area.

**Drone-** A male honey bee Drones undertake no work within the hive: their sole function is to fertilize the queen.

**Extension-** Providing research findings and instruction to working people.

**Extractor-** The centrifugal machine in which honey is spun out of cells within comb.

**Feeder-** A device for giving food in the form of sugar syrup to honey bees.

**Fixed-comb hive-** A hive in which bees build their nests with the combs attached to the wall of the hive, and therefore fixed (the combs cannot be removed from the hive for examination without breaking).

**Forage-** Flowering plants which provide nectar and/or pollen for bees.

**Forager-** A worker honey bee that collects pollen, nectar, water or propolis for the colony.

**Foulbrood-** A bacterial disease of honey bees. American foul brood is caused by *Bacillus larvae*, European foulbrood is caused by *Melissococcus pluton*.

**Foundation-** A thin sheet of beeswax embossed with the hexagonal pattern of comb. A sheet of foundation is placed in each wooden frame and this serves as a base upon which honey bees build their comb. Without foundation honey bees would not necessarily build their comb in the orientation required by the beekeeper.

**Frame-** A wooden rectangular frame that holds a sheet of wax foundation. A number of frames hang parallel to one another inside the hive.

**Frame hive-** A hive which contains frames. The honey bees are encouraged to build their comb within these frames. The frames then enable combs to be lifted from the hive for examination.

**Galleria mellonella-** The greater wax moth, found everywhere that bees are kept. **GNP** Gross national product.

**Grafting-** One of the techniques involved in queen rearing: when a beekeeper moves a worker larva from her cell to a queen cup. Under the right conditions, this larva will develop into a queen bee.

**Granulated honey-** Honey in which sugar crystals have formed.

**Hive-** Any container provided by humans for bees to nest in.

**Honey-** Nectar or plant sap ingested by bees, concentrated by them and stored in combs.

**Honeybees-** Species of bees belonging to the genus *Apis*. All are social bees which store significant quantities of honey.

**Honey hunting-** Plundering wild bee colonies for their honey.

**Honeydew-** Insects such as aphids feed on large quantities of plant sap which they excrete almost unchanged (except for protein content). This sap collects on the leaves of plants and if collected by honey bees is known as honeydew.

**Inputs-** Refers to items that are needed for productive beekeeping. The basic inputs (which may be free) are bees, pollen- and nectar-bearing plants, water. Other inputs may not be free, for example equipment and transport.

**Kenya top-bar hive-**A design of top-bar hive with sloping sides.

**Langstroth hive-** A design of frame hive. The inventor, the Rev L Langstroth recognised the

importance of bee space and this allowed him to design the movable-frame hive.

**Lost-wax casting-** A technique for making a replica of an object by casting it in molten metal. The model is created in wax then covered with a shell of clay. The wax model and its clay coat are then fired to harden the clay and melt the wax. The wax is then poured out and replaced by molten metal.

**Low-technology hive-** A hive which is simple, cheap, reliable, mendable.

**Mandible** The jaw of an insect.

**Meliponinae-** The subfamily to which all stingless bees belong.

**Migration-** Seasonal movements of whole honey bee colonies, leaving no brood behind in the nest.

**Migratory beekeeping-** Beekeepers moving colonies of honey bees in hives to take advantage of honey flows in other areas.

**Mite-** Tiny, eight-legged creatures many species of which have been identified in honey bee colonies. Most of these feed on pollen or hive debris, but some species feed on the bees directly.

**Morphometry-** The measurement of form.

**Movable-frame hive-** A hive containing frames.

**Nasanov pheromone-** A substance produced by a bee's Nasonov gland to attract other bees, for example to a source of water.

**Nectar-** A sweet liquid secreted by flowers, a watery solution of various sugars. Nectaries The glands within plants that produce nectar.

**Nest-** The place where the comb or combs of a bee colony are sited.

**Networking-** Providing a channel (for example *Bees for Development*) for information on a subject (beekeeping) to flow between interested people (beekeepers).

**NGO** -Non-governmental organization, usually a non-profit group working for development.

**Nosema-** A disease of bees caused by a single cell organism *Nosema apis*.

**Nucleus-** A small colony of bees created by a beekeeper from an existing colony or colonies. Used to increase colony numbers or in queen rearing and bee breeding.

**Omdurman hive-** A clay hive named after its place of origin in Sudan.

**Organic honey-** There is no precise definition for this rather misleading term. Generally the term is taken to mean honey that is free from any additive or residues of pesticides, fertilizers or drug treatment.

**Pacifier** A substance used to calm bees.

**Package bees-** Supplies of bees produced for sale Sold by weight, including a caged queen but without combs. Supplied in a box with wire mesh forming two sides.

**Participatory Technology Development (PTD)** -Combining local skills and experience with research knowledge from elsewhere to identify, practise and apply new techniques.

**Pheromone-** A chemical substance produced by a bee (or any animal) to convey a precise message to another of the same species.

**Pollen-** The fine dust-like substances which are the male reproductive cells of flowering plants. Collected by bees as a source of protein.

**Pollen basket-** Areas of stiff hairs on the hind legs of worker honey bees where they carry pollen.

**Pollen trap-** A device for harvesting pollen from bee hives.

**Pollination-** The transfer of pollen from the anther of a flower to the stigma of that or another flower.

**Pollination agent-** Bees act as pollination agents when they transfer pollen from one flower to another. Apart from insects, other agents which may bring about the transfer of pollen are wind (cereals are pollinated by the wind). gravity, nectar-seeking birds and bats.

**Proboscis-** The mouth parts of an insect.

**Proceedings-** The papers presented at a meeting, published in printed form Propolis Plant resins collected by honey bees and used by them to seal cracks and gaps within the hive.

**Protectives-** Clothing to protect beekeepers from being stung by bees.

**Queen-** The female parent of the colony, the only sexually developed female.

**Queen rearing-** This term is taken to mean the raising of queen bees as a result of management by the beekeeper.

**Queenlessness-** A colony is queen less when it contains no queen or developing queens or brood from which a queen could be reared.

**Refractometer-** An instrument which can be used to measure the refractive index of honey (from this the sugar concentration of the honey can be calculated).

**Royal jelly-** Glandular secretions of worker honey bees mixed with some regurgitated carbohydrates and fed to developing bees.

**Sacbrood-** A viral disease of honey bees.

**Scout bees-** Worker honey bees that are responsible for locating new sources of forage', or a new location for a swarm.

**Shifting cultivation-** A method of cultivation whereby land is used until it is no longer fertile. After this cultivation is moved elsewhere.

**Slash and burn-** A method of clearing land ready for cultivation.

**Smoker-** A device for generating smoke to subdue bees. Often made from a metal can with bellows attached.

**Smoker fuel-** Material which can be burnt in the smoker, ideally to produce cool smoke over a long period.

**Solar wax extractor-** A piece of equipment in which the sun's heat is used to produce clean wax. Usually used for combs and odd scraps of wax from the apiary.

**Stamen-** The male reproductive organ of a flower. It consists of a stalk on the end of which is the anther.

**Stigma-** The receptive part of the female reproductive organ of a flower which receives the pollen.

**Stingless bees-** Social bees which store significant amounts of honey, but belonging to a different genus from honey bees.

**Super-**Any hive box placed above the brood nest. Usually contains combs in which bees will store honey.

**Sustainable beekeeping-** Beekeeping to benefit humans while also ensuring the safe conservation of the bees and their habitat.

**Sustainable development-** Improvement which will continue supporting life in the future.

**Swarming-** When a honey bee colony becomes large enough to divide into two, swarming takes place. When this happens a new queen is reared, the colony divides and a swarm leaves the hive or nest. This swarm consists of a queen, drones and workers which will form another colony in a new location.

**Top-bar hive-** A low-technology hive in which the bees are encouraged to build their combs suspended from bars placed across the top of the hive.

**Traditional beekeeping-** Beekeeping methods which were already in use prior to the invention of modern frame hives. Many traditional methods are highly skilled and in use today.

**Transitional hive-** A term sometimes used for top-bar hives referring to them as mid-level technology between traditional beekeeping (low-technology) and frame hive beekeeping (high-

technology).

**Tropilaelaps-** A genus of mite parasitic upon honey bees. Known species are *Tropilaelaps* *dame* and *Tropilaelaps* *koenigerum*.

**Varroa-** A genus of mite, parasitic upon honey bees The most widely known species is *Varroa* *jacobsoni*.

**Venom-** The poison of a bees' sting.

**Vespa spp-** Species of hornets which are social wasps.

**Wax moths-** Species of moths which destroy combs.

**Worker bees-** Female honey bees that make up the bulk of the colony and undertake all the work of the colony except for mating and egg laying. Workers are sterile females.