

BEEKEEPING TERMS EXPLAINED

Thanks to Nottinghamshire BKA via e bees June 2010

BEESPACE Discovered in the mid. 1800's and brought to the attention of the world by Langstroth. This is the distance 9mm between combs that the bees prefer to live and work. Any less and the bees try to fill the gap with wax or propolis, any more and the bees build brace comb to use up the space. This simple realisation made the movable frame hive possible and created modern beekeeping.

BRACE COMB Comb built by the bees in any available spaces within the hive. Modern hives are designed to minimise brace comb, which tends to fix parts of the hive together making it difficult to manipulate.

BROOD BOX A deep box without top or bottom in which the frames hang in a movable frame hive. This is where the queen lays and some stores are kept.

CELL One hexagonal unit in a comb. The worker bees build these from wax almost perfectly in complete darkness. The design of a cell is the perfect compromise of minimum weight to maximum strength and is admired by engineers the world over. The queen lays an egg in each cell, which is later capped with wax to allow the larvae to turn into a bee. Other cells are used to store honey and pollen.

COLONY The name given to a collection of bees either in the wild or in a hive. A healthy colony can contain up to 60,000 bees at the height of the summer. A collection of bees all flying together is called a swarm.

COMB The place where bees are born and stores are kept made up of hexagonal wax cells. Supported by a frame in modern hives. Cut comb is honey sold in block of comb straight from the hive.

DRONE A fertile male bee. He does little work in the hive and is thrown out of the hive in the autumn by the female workers. The queen will mate in the air with several drones that then die afterwards.

EXTRACTOR A machine drive by hand or motor which spins the frames of comb and throws out the honey by centrifugal force. This allows the beekeeper to put the empty frame back in the hive to be re-filled by the bees saving them a lot of extra work.

FRAME An open rectangle usually of wood into which a sheet of foundation is nailed. The bees use the foundation as a template to build their comb across the hive. The discovery of bee space in the mid 1800's made modern beekeeping possible as removable frames with exactly the right distance apart enabled the beekeeper to examine and manipulate the colony.

HIVE The home of the honeybee provided by the beekeeper. There are many different types of hive some examples are called skeps, Nationals or WBC's. Modern hives consist of a brood box, supers, movable frames. a floor, a roof, a crown board and a queen excluder.

HONEY Produced by the bees in the hive by concentrating nectar over and over again. It is stored in 'cells' to enable the bees to survive through winter without hibernating. The art of the beekeeper is to encourage their bees to produce a surplus of honey to extract.

HONEYBEE Bees are insects and belong to the 'superfamily' *Apoidea* and the order *Hymenoptera*. Various sub families of bees exist.

LIFT The sloping slats that make up the sides of the traditional WBC hive. Many lifts can be stacked up to cover and protect the brood box and supers inside.

MOVABLE FRAME HIVE Although tried by many inventors in many countries, Langstroth patented the movable frame hive in 1851. Opening from the top with ten frames it allowed the beekeeper for the first time, to remove, examine and reposition combs.

NATIONAL The name given to the most popular style of hobby hive in the U.K. The debate over a National Standard for frame and hive size continued for years with everyone having their own preference.

NECTAR A sweet liquid produced within certain flowers as an attraction to insects. This co-operation between plants and insects ensures the fertilisation of the flowers to produce seed. Bees concentrate the nectar in the hive to produce honey and store it in cells.

POLLEN Bees go from flower to flower gathering pollen and nectar as food. In doing so, some pollen is passed from one flower to another thus fertilising or pollinating the plant. This is a vital part of agriculture and we would have very little food or countryside without bees which perform around 95% of pollination in the U.K.

PROPOLIS This is a sticky brown filler or type of glue that bees collect to seal gaps in the hive. The main source is the sap of trees.

QUEEN The only fertile female in the hive the queen will lay up to 2000 eggs a day! After emerging from the queen cell a virgin queen will feed and get use to the hive. After around a week, she will fly from the hive to mate with several drones in the air. She will return to the hive never to leave unless the colony swarms. A queen can live up to five years but often exhaust her supply of fertile eggs within three years.

QUEEN EXCLUDER A metal grid placed between the brood box and super in a modern hive. The spaces are wide enough to allow workers to pass through with honey but are too narrow for the queen and drones to pass through.

SCOUT A worker bee that flies away from the colony or swarm to look for a new source of nectar or the site for a swarm to begin a new colony.

SKEP The traditional round hive made of straw or rushes. Few skeps are in use today as it is difficult to see between the combs built inside and attend to the bees. Skeps are still used to collect swarms by many beekeepers.

SMOKER A metal container with a spout operated by a hand bellows. If a whiff of smoke is blown into a hive, top and bottom, the bees instinctively sense that something is amiss and fill their stomachs with honey from the nearest cell in case they have to abandon the hive and start a new home. With full stomachs, they find it harder to position their abdomen and insert their sting, hopefully making them easier to handle. The beekeeper fills the smoker with dry grass, rotting wood or other vegetation. Corrugated paper is no longer used as it can contain toxic glues.

STORES Parts of the comb are filled with pollen and honey producing in effect a colonies larder. The pollen and honey is fed to the young bees, as it is high in protein and carbohydrate. The honey when eaten by the bees gives them energy. Honeybees do not hibernate: they have evolved to survive the winter by storing surplus honey and pollen in the combs to eat during the cold weather.

SUPER A shallow box without a top or bottom in which the frames of comb hang in a movable frame hive. A queen excluder prevents the queen from getting into the box yet allowing the worker bees to store honey in the comb. This is where the beekeeper finds the surplus honey to remove from the comb with an extractor.

SWARM The way bee colonies multiply; when a hive becomes too crowded the bees will build queen cells. Soon after these cells are sealed, up to half the bees will leave the hive with the queen as a swarm. After settling nearby, scouts will seek a new home and the swarm will fly off to settle in the site they consider most appropriate. In the original colony, the first queen to emerge could either destroy any queens still waiting to hatch or leave the hive with up to half of the remaining bees as a caste. As further queens hatch, this may result in further caste, denuding the colony of even more bees.

VARROA DESTRUCTOR A parasitic mite which lives on bee larvae and adult bees. Introduced into Britain from Europe in the 1980's it is at present impossible to destroy completely. Were it not for dedicated beekeepers, bees in the U.K. would have eventually died out before they could become resistant to the mite with catastrophic results for the pollination of crops.

WAX Produced in small plates by bees from glands along their abdomens. These thin oval plates are chewed by the bees to soften them and then form the wax into comb

WORKER A sterile female be that performs all the functions necessary in the hive. All honeybees seen flying around flowers will be workers.