

Simple A-Z of beekeeping (certainly not comprehensive)

A

Abdomen	main body of the bee, behind the thorax
Acarine	small parasitic mite that infests the airways of the honeybee
Alarm pheromones	are released with the sting; it recruits more bees from within the hive to defend
American foul brood	caused by spore-forming paenibacillus larvae – deadly disease, it is a notifiable disease to National bee unit and there is no known cure
Antennae	thin sensory appendages on the heads of insects that detect smell
Apiary	a collection of beehives
Apicentric beekeeping	natural beekeeping, cause minimum disruption to lifecycle of bees
Apis mellifera	honeybee
Arnhart glands	gland that produces pheromones, found on the feet of bees
Asian Hornet	large wasp invasive non-native species – enemy of the bee

B

BeeBase	beekeeping resource provided by the National Bee Unit, a place to register your bees National bee unit
Bee brush	a soft brush used to brush bees away from frames
Beekeeper	Someone who keeps bees
Bee space	the space between frames in which bees can work
Beeswax	major component of honeycomb it is secreted from the underside of the worker bees and moulded into honeycomb – it can be used to make many things, candles and is an ingredient in furniture polish, cosmetics and ointments to name a few
Black bee	species of honeybee that was devastated in Britain in early 20th century. It is claimed there are still small pockets of Britain in which it can be found
Brood	the immature stage of bees (eggs, larvae and pupae)
Brood chamber	where young bees are raised, nectar and pollen can also be stored here by the bees
Buckfast bee	a hybrid bee developed at Buckfast Abbey in Devon

C

Capped cells	a dome of wax bees build over cells that have either honey or pupating grubs within
Carniolan bees	a subspecies of honeybee originating in central Europe
Cells	wax that is hexagonal in shape constructed by the bees for storing honey or rearing larvae
Chalk brood	fungal disease that infests the gut of the larva then goes on to consume the larva causing it to appear white and chalky
Colony	honeybees live in large families called colonies with a queen, workers and drones
Colony collapse disorder	cause not fully known, possibilities are environmental change related stresses, mites, pesticides known as neonicotinoids
Comb	see honeycomb
Compound eye	used for general distance sight
Crown board	movable flat board placed on top of the hive under the roof

D

Dadant	a French American beekeeper considered to be one of the founding fathers of 'modern' beekeeping
Deformed wing virus	usually caused by heavy infestation of varroa mite
Drone	male bee, drones have no sting

E

Eyes	the honeybee has two large compound eyes and 3 small simple eyes called ocelli
European foul brood	Melissococcus plutonius bacterium that infects the mid-gut of bee larvae before the cell is capped – it is a notifiable disease to National bee unit
European hornet	largest eusocial wasp in Europe. They are carnivorous and eat large insects, primarily wasps, large moths, and large bees.

Extraction	extracting honey from honeycomb
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F

Fanning	flapping of wings to regulate temperature in the hive or distribute pheromones
Feeder	a container filled with sugar syrup for the purpose of feeding bees
Fondant	a substance similar to fondant icing fed to bees when natural food is scarce

Foundation	a wax sheet that has been embossed with a hexagonal pattern. Bees build their comb upon it
Frame	a structural element in a hive that holds the foundation/comb
G	
Guard bee	a bee that guards the hive from predators such as wasps and hornets
H	
Haemolymph	bee blood
Hefting	lifting the hive to determine the weight
Hive	a container for housing honeybees
Hive tool	implement to aid beekeeper for levering and separating frames etc within the hive
Honey	ripened nectar
Honey flow	time in the year when nectar in flowers is at its peak
Honeycomb	hexagonal cells which are used within the beehive for storage, it is constructed of beeswax
I	
Imidacloprid	One of the neonicotinoid insecticides restricted by the EU
Isle of Wight disease	acarine mite infestation first observed on the Isle of Wight in 1904 thought to have wiped out the black bee – the Buckfast bee was developed to combat the disease
Italian bee	a bee from Italy generally thought to have a good temperament and rarely swarms
J	
Jelly	see royal jelly
L	
Langstroth hive	a type of hive common in America
M	
Marker pheromone	for marking food and water sources, hive locations, gathering swarms. Pheromone produced by the Arnhart glands
Mead	alcohol made with honey
Mellifera	honey bearer
Moult	a bee larvae moults its skin 6 times before it emerges as a bee
Mouse guard	a grid which allows bees in and out of the hive whilst keeping mice out
Microsporidia	spore-forming unicellular parasite

N

National Bee Unit	telephone +44 0300 3030094
National hive	a hive widely used in Britain
Nasonov gland	gland that produces pheromones
Neonicotinoid	neuro-active insecticides - use is linked adverse ecological effects, including honeybee colony collapse disorder (CCD). Because of this use has been restricted / banned in some countries.
Nectar	sweet substance produced by flowers
Nosema	microsporidian that invades the intestinal tracts of adult bees
Nosema disease	a type of dysentery
Nuc/nucleus	a box with 4 or more frames of brood, some honey, a queen and some workers, bees are usually bought in a nuc
Nurse bees	a worker bee that rears brood in the colony

O

Ocelli	eyes which are used in poor light conditions within the hive
Open mesh floor	a fine mesh floor used to help control varroa mites, they can fall through but are unable to return to the hive

P

Pheromones	a chemical substance produced and released into the environment by an animal, especially a mammal or an insect, affecting the behaviour or physiology of others of its species
Pollen	microscopic grains discharged from the male part of a flower or from a male cone and fed to bee larvae; essential bee food
Pollen baskets	located on hind leg of the bee in which pollen is transported back to the hive
Proboscis	long tube the bee uses like a straw to feed and drink
Propolis	resin from trees, used by bees to seal cracks in the hive, has been found to show antiseptic properties

Q

Queen	the only bee in the hive that lays eggs, she can lay fertile (worker) or infertile eggs (drone)
Queen cell	an elongated cell made by worker bees that contain larvae that become queens. The larvae are fed royal jelly

Queen Mandibular pheromone	The queen bee exerts her influence over the hive by means of this. It acts as a mating attractant for the drones, and suppresses the reproductive systems of the workers, ensuring that the queen is the only reproductive female in the hive. It is also passed between bees during Trophillaxis
Queen marking	to aid visibility the queen is marked by the beekeeper with a brightly coloured dot of non-harming ink
R	
Records	as bees are considered to be food-producing species, beekeepers must keep records for each hive
Robbing	when other insects steal honey from the hive
Royal jelly	fed to larvae that would normally develop into workers, which instead become queens
S	
Sac brood	viral disease that causes larvae to die before their final moult
Skep	a wicker dome shaped basket used to collect bees
Small hive beetle	a small, dark-coloured beetle that lives in beehives not yet found in the UK
Smoker	a receptacle used to puff smoke into a hive to move the bees
Spiracles	tiny holes along the sides of the bee's thorax and abdomen through which the bee breathes
Sugar syrup	mix of water and granulated sugar fed to bees by the beekeeper in times of shortage of nectar
Super	top box on a hive the bees use to store nectar
Supersedure	when a new queen replaces the old queen without swarming
Sting	used as a form of defence, it is barbed and cannot be used repeatedly. Only the worker bees and queen bee have a sting
Swarming	the queen leaves the hive taking with her worker bees (approximately half the colony) to set up home elsewhere. The natural way for colony reproduction
T	
Thorax	middle part of the bees body, attached to the head and abdomen
Top bar beehives	a type of beehive which allows bees to form their own comb without frames and foundation
Tracheal mite	see acarine

Trophillaxis

transfer of food through mouth-to-mouth also transferring pheromones

V

Varroa

parasitic mites that feed on the bodily fluids of adult, pupal and larval bees

Venom

administered via the sting it causes local inflammation and acts as an anticoagulant

Vitellogenin

egg yolk protein precursor, as female bees rarely lay eggs they have no need for this so they have developed it into food storage reservoirs within their bodies and heads and also use it to synthesise royal jelly

W

Waggle dance

a figure of eight dance performed by honeybees to communicate location of nectar sources to other members of the colony

Wasp

carnivorous insect, similar in shape of the bee

Wax

substance secreted from the wax gland of the bee from which she constructs comb and caps cells

Wax moth

do not attack the bees but feed on the wax

WBC hive

a hive designed by William Broughton Carr

Worker

female bee, works tirelessly for the colony. Typically lives for only 6 weeks during the summer months when hives are collecting nectar and pollen