

Bees & Swarms

*“A swarm in May is worth a load of hay;
a swarm in June is worth a silver spoon;
but a swarm in July is not worth a fly”.*

Some of you may already know me, Colin Simmonds, being your local Beekeeper providing “Gayton Honey”.



In the UK, there is just the one Honeybee species but many wild species of bees.

Honeybees (*Apis mellifera*), are social insects that live in colonies. A typical colony consists of a queen, thousands of female worker bees, and a smaller number of male drones. The worker bees collaborate, carrying out specific roles as they mature; foraging, tending to the brood, and building honeycomb, while the drones' primary purpose is to mate with other colonies queens.

Honeybees are fascinating creatures that are essential contributors to the UK's biodiversity and agricultural productivity. As they forage for nectar and pollen, they transfer pollen from flower to flower, facilitating the process of pollination. This enables the reproduction of many plants, including those of economic significance, such as fruits,

vegetables, and oilseed rape. It is estimated that they contribute billions of pounds annually to the UK economy. Honeybees have long been cherished for their honey production. With their unique foraging abilities, they gather nectar from flowers, which they transform into honey through enzymatic processes and evaporation. Surplus honey is harvested for us to enjoy!

However, one of the most intriguing phenomena associated with honeybees is **swarming**, a natural process in the life cycle of a honeybee colony, ensuring propagation and genetic diversity.

To prevent swarming, beekeepers conduct regular inspections to identify and address potential swarming indicators and then employ management techniques such as splitting the colony before the bees decide to swarm. Understandably, large swarms of bees can be alarming to those unfamiliar with their behaviour. However, it is good to know that swarms are generally docile and unlikely to sting, as they are focused on finding a new home. It typically occurs in the spring or early summer when the colony's population has grown too large to be sustained in its current hive. Sensing the overcrowding, some



young larvae are developed into new queens. Once these new queens have matured, the old queen, along with a significant portion of worker bees, leave the hive in search of a new location for a fresh start.

As the swarm emerges from the hive, it forms a swirling cloud of bees in the air, with a sound likened to “the roar of the ocean”, a mesmerizing sight & sound to behold. The swarm often settles on a nearby tree branch temporarily, creating a clump or cluster of bees.

This is the ideal time for it to be captured and rehomed by a Beekeeper, don't delay, call me or a fellow Beekeeper (BBKA.org.uk).



While resting, scout bees are sent out to explore potential new homes, such as tree cavities, before the swarm decides on a suitable location to establish a new colony.

Unfortunately this can sometimes be in our House chimneys or building eaves and at that point it will require a professional Pest Company to remove or eradicate them. Leaving them alone will generally only result in future problems of soggy ceilings or the risk of a chimney fire!

Other Native Bees

Of the 24 species of **Bumblebees** (*Bombus*) in the UK, some can occasionally be a minor nuisance, for example taking up residence in Bird Nest Boxes, compost heaps, under sheds or, as I recently relocated, from the back of a Freezer in a garage!



The life cycle of Bumblebees is different to Honeybees, beginning each spring with the emergence from hibernation of large Queen Bumblebees. They search for suitable nesting sites, such as old mouse holes or grass tussocks and are often seen in the

spring low flying in a zig zag pattern across shady areas looking for the perfect home.

They begin to lay eggs in little upright Honey Pots and care for their initial offspring. The first female worker bees emerge and begin foraging for food and to care for their sisters, allowing the Queen to concentrate on egg laying and

this is when a colony can build up to 400 bees and become noticeable.

Towards the end of the summer, the queen starts to produce new queens and male bees which emerge to mate, this can result in some disconcerting “swirling” flight behaviour in front of nests, particularly by Tree Bumblebees (*Bombus hypnorum*).



With the onset of autumn, the population declines, and the original queen dies. The nest disintegrates, and only the newly mated queens survive into the next year.

Bumblebees can be fascinating to watch, the only caution I would advise is not to allow Humans or Dogs to breathe onto the nest as this can provoke a defensive reaction!

In the UK, there are hundreds of **Solitary bee** species, each with a unique life cycle, some of which are:

Mason Bees (*Osmia*), emerge in spring, around March/April. The females constructs individual nests in holes, often



in our masonry, and then collect pollen as food for their larvae. The pupae overwinter and adult bees will emerge the following spring, continuing the cycle. A wooden Bee Hotel will provide a good environment for them and it can become very busy for a short duration, but they are individuals not a colony, it's just a credit to your good location!

Mining Bees (*Andrena*), are early spring emergers, typically appearing from March to April. The female excavates tunnels in the ground, leaving "volcanoes" of fine soil in lawns and often between paving slabs. A series of underground cells are provisioned with pollen and an egg is laid to develop and mature into an adult for the next year.



Leafcutter Bees (*Megachile*) emerge April/May. The female constructs nests by cutting circular pieces from leaves and using them to line individual cells within pre-existing cavities or artificial nesting boxes made of bamboo canes or similar. If you see the end of the canes filled with mud or leaves then you know that you've been successful! Likewise, pollen is collected as food for larvae to mature into pupa and then to emerge as adults the following spring.



Nomad Bees, (*Nomada*) these are “cuckoo” bees that lay their eggs in the nest prepared by the above species and then consume their young!

If you have any questions or concerns about bees, feel free to contact me.

Colin Simmonds, 01604 858933, Gone4aBeer@gmail.com