

## Bumblebee aware September 2019

By the middle of September this year, most hedgerows, woodlands and fields are totally devoid of flowers. However, where there are clumps of Marjoram or Toadflax there are busy bumblebees collecting as much nectar as they can find. All of our gardens, where we have cultivated beneficial blooms, are attracting magnificent queen bees now. Lookout for the Common carder with her chestnut thorax and paler abdomen, or the Buff tailed bumblebee with two orange bands on her mainly black body. They are particularly showy because they have recently emerged from their family nest and have not had time to wear the fur off their bodies.



Carder bee

Many insects emerge from their pupal stage as fully formed adults at the size that they will remain. Our queen bumblebees look terrific but they are empty and so need to fill up with nectar in time to hibernate with enough of a fat depot inside them to last until the Spring. Now is the time when we



Buff tailed bee

can look at the flowers around us and know that we are making a difference to the survival chances of each bee and hence to future generations of pollinators.

Providing forage in the form of garden plants is the easy part of the project, not just in Cookham but globally. Hibernation is essential if the bumblebees are to survive the Winter but no one has worked out how to provide suitable sites for them to find. Bumblebees do not use hives, those are for honeybees, nor do they use insect hotels because those are for solitary bees.

Observations have shown that bumblebees favour north-facing banks where they can climb into small spaces to a depth where birds and mice cannot reach them. They can survive low temperatures because they evolved in the Himalayas and have the appropriate metabolism as well as a suitable spherical shape and a furry coat. They must avoid being woken from their sleep by a few warm days before any flowers have begun to make nectar and pollen.

Global warming is resulting in some species emerging earlier in the year than they used to and there are many cases where individuals remain active though the Winter. This is risky because their defences are not at their best when they are on low rations and they are more prone to run out of energy on foraging flights. Parasites and viral infections are more dangerous while their immunity is poor, and all their predators are really hungry.

Bumblebees need our help.

Ivy hedges are now buzzing with insects. It is not just the solitary ivy bee (which specialises in this plant) but you will also see many wasps and honeybees gathering the nectar.

*Adrian Doble (19 September 2019) (Member and volunteer with Bumblebee Conservation Trust)*