

Bumblebee aware for April 2020

This Spring seems to have brought out dozens of magnificent queen bees, mainly flying low over the ground looking for nest sites. There is little that we can do to help them because very few will use artificial nest boxes and so we are limited to the highly important role of providing the best floral resources that we can.

A survey in 2007 showed how significant our gardens are in this respect. When the number of nests per hectare (roughly the area of 5 tennis courts) was counted, they found 36 per gardens, 28 in hedges, and 13 in open sites such as fields and woods. The garden nests were in untidy areas, compost heaps, under sheds, in banks at the base of hedges, and in old mouse burrows. It is great if we can create these conditions for them but, if we provide loads of flowers, the bees will find the local sites for nesting.

Our bees come out of hibernation, or hatch, at different times of the year. The busy little black Hairy-footed flower-bees are highly visible in April and now other solitary bees are active around the insect hotels and in banks of soft earth. Meanwhile the large, queen Buff-tailed bumblebees have been joined by their ginger-coloured Common Carder cousins, and this month's star, the Red-tailed bumblebee.

Bombus lapidarius is all black apart from her obvious tomato-red tail. Her nest is usually underground where she will raise a family of up to 300 workers before producing males and then new queens. Because her tongue is of medium length, she can feed on a wide range of flowers from dandelion to clover, thistle and bramble. The colonies usually die off in August and the new queens will mate and find hibernation sites within a few weeks. This reminds us that the trigger for bumblebees to hibernate is not a lack of flowers to visit but something to do with the way that bees have evolved in such a way that different species do not compete for the same resources.



Bumblebees need to keep their temperature up to nearly 40 C in order for their flight muscles to work and this heat is provided by those same flight muscles. When they are collecting from flowers, their temperature falls to that of the surrounding air and so they learn to balance the need to collect as much as possible from each bloom with the cooling effect. Some species choose to spend time flying from flower to flower rather than staying on something like Ox-eye daisy where there are loads of individual flowers. It is also why bees are much more likely to visit flowers that are growing in full sun.



Even so, one of the most valuable wild flowers is the White dead nettle (shown in the picture). It grows in hedge bases but blooms nearly all through the year, and does not sting.

If you find yourself with time on your hands and a wish to learn more about how to identify bumblebees, you will find help in the book; "Bumblebees, an introduction" written by staff of the Bumblebee Conservation Trust, or by looking at their excellent website (www.bumblebeeconservation.org). There is also plenty about which plants to grow.

Adrian Doble (WildCookham and Bumblebee Conservation Trust) April 2020