Bumblebee Aware January 2021

December was a dark month for bumblebees. They spent most of their time sleeping in hibernation mode, living off their store of body fat, quietly maturing the eggs inside their ovaries, and waiting to be woken up by warmer weather. When we visited the 3.5 kilometer BeeWalk route in the Chilterns on Christmas day there was not a single flower to be seen and (therefore) no bees. That same week we saw local bumbles on Mahonia in two local gardens even though the temperature was only 7C. This is clear evidence of the



importance of the plants like Winter-flowering clematis in our parks and gardens.

How do these queens who hold the seeds of future generations, know where to find food in winter? They have to rely on the memories that they have built up since leaving their nest for the first time last year. They have to learn to find and identify rewarding plants, how to collect pollen and nectar from a range of flower shapes, and how to find their way home.



The sense of smell plays a major role in the lives of bees. The long jointed antennae that are borne on the head allow bees to pick up on odours that are too faint for us to detect. It has been shown that bees produce a wide range of chemical "Pheromones" that are used to communicate within the colony.

During the summer, when the queen is laying eggs within the nest and while workers are out foraging, the queen produces a chemical that keeps the family working harmoniously but there comes a time when she stops making this pheromone. This signals the end of her dominance and a switch from the colony producing only female workers to one where males and then new queens are created. Pheromones are also produced by males who paint them on bushes to attract newly emerged queens.

Many of us are struggling to find mental stimulation in these days of restriction. One way out is to begin a new project such as entering the world of the bumblebee. There are interesting facts to learn about these beautiful endangered insects, plants to grow for their benefit, observations to make, survey walks to plan, nest sites to create, and an important cause to become involved in. Visit the Bumblebee Conservation Trust website.

Adrian Doble (Bumblebee Conservation Trust) January 2021