

Bumblebee Aware February 2021

Yes, the hours of daylight are getting longer and colour will soon be returning to our gardens, bringing pleasure to us and vital food for pollinators. Look out for the flowers of *Berberis darwinii*, *Daphne odora*, Pussy willow, *Pulmonaria*, Comfrey, Heather, Daffodil, Snowdrop etc and you may well see a bumblebee out foraging once the air gets a bit warmer. These early sources of nectar are vital for the energy that the queens need to fuel their labours, while the pollen holds the protein to build the larvae, and adults that will emerge 6 weeks later.

The star species this month is the Brown-banded Carder bee (*Bombus humilis*). It is among the seven most endangered bumblebee species of the 27 found in the UK. They are mainly ginger in colour. A dark band of hair on the abdomen distinguishes them from the Common Carder bee.



The nest is made on the ground in tussocky grass and will be the home for up to 100 young. These small broods, and vulnerable nesting sites, add to the other hazards faced by the species. They have a long tongue and so feed on legumes and lamiums such as vetches, clovers, White dead nettle, and **Birds-foot trefoil**, all of which grow abundantly in the Thames Valley.



Brown-banded carders used to be found throughout mainland Britain but populations are now mainly confined to the estuaries of the Thames and the Severn although they could be found on Salisbury Plain until recently. Loss of habitat is largely to blame, however, restoration of wetlands in north Kent have seen an increase in numbers locally.

The Thames Valley Environmental Records Centre recorded one in Cookham in 2009 and so we might be able to help this species. (Please report any sightings to the TVERC so that we can get an idea of where they are today.)

Isolated colonies of any animal or plant are doomed by loss of suitable habitat for food and shelter, and because they are then forced to interbreed with the result that they lose the ability to avoid genetic weaknesses as they build up. Brown-banded carder bees are also limited by the fact that they usually forage within 100 metres of their nest. The answer is to create appropriate habitats connected by hedges with grassy bases.

Gardens and allotments are much more productive than agricultural land in terms of the food that they grow, the condition of the soil, and the variety of organisms living

there. Generally, these small-scale ventures use much less in the way of pesticides and chemical fertilizers and this allows natural predators to play their beneficial role in the control of pests. We help this process by providing areas of long grass, undisturbed hedge-bases, piles of prunings and logs, compost heaps, ponds, bushy shrubs and trees that produce edible seeds in fruit. A network of these areas linking towns and villages would be very valuable.

Adrian Doble - Bumblebee Conservation Trust - February 2021