

Chilled Bumblebees in January 2022

One of the problems facing our hibernating queen bumblebee is that an early spell of warm weather may wake her up before there are any flowers in bloom, particularly if she is out in the countryside rather than in a garden. She will emerge and fly around looking for food. This will quickly empty her energy stores as she tries to keep warm and using her flight muscles, with the possible result that she will become exhausted and die. If she is lethargic, she will be easy prey for small song birds. Should we, as keen helpers of pollinators, try to catch such early bees and put them in the fridge to keep them safe until reliable warmer weather arrives? Actually, no.

Bumblebees evolved in parallel with flowering plants and they can even survive within the Arctic circle. One of the two species that lives there is ***Bombus polaris***. They have extra thick fur coats so that they can maintain a body temperature of 30C during the very short summer season. They need to establish their small family while the local flowers are blooming. In warmer parts of the world, the queen bee conserves heat by restricting blood flow to the back part of her body (abdomen) while she is out and about but, in the Arctic she keeps her whole body up to temperature because the developing eggs in her abdomen have very little time to develop.



Here in the Thames Valley, Snowdrops are already in flower and other spring delights will soon follow. Bumblebees get all their protein, carbohydrate, and vitamins from pollen and nectar. These wonderful vegans rely on us increasingly as the countryside becomes more and more incapable of meeting their needs, at least until June or July. Gardens of all sizes have a vital role to play in helping pollinators to survive while global warming, urban development and habitat loss make life harder for them.



So, which plants are really beneficial, and which plants are useless? Top of the pops come **Field poppy**, Cornflower, Wallflower, Antirrhinum and Echium (Vipers bugloss) because they are some of the best producers of pollen and nectar, or have long flowering periods, or replenish their offerings at an amazing speed. Those to avoid are Petunia, Busy lizzie, Begonia, the scarlet “Geraniums” and Pansy. These provide neither nectar nor pollen, and take up the space that more useful plants could occupy.

If you can advise people in charge of planting other gardens to follow this advice, it would help pollinators. These other gardens may be at schools, council sites, business premises, housing developments, wildlife patches, nursing homes, Etc. Etc.

Adrian Doble (Bumblebee Conservation Trust volunteer)