

Where are all the bumblebees?

So, where are all the bumblebees today? If you go for a walk in the countryside this month, you will probably not see any, nor will you see much in the way of blossom in the hedges and ditches. Bees can only get the food that they need to feed their young by visiting flowers, collecting the nectar and pollen, and taking it back to their nests. If there are no flowers in bloom, how does any bee survive the winter?



The vast majority of bumblebees die at the end of the summer having served their purpose of producing large healthy new queens. Once these have left the nest, they mate, eat as much as they can, and seek out a secluded niche in which to hibernate.

The favoured site will be sheltered, and somewhere that birds, rodents and other insects cannot reach her. It will be north-facing so that she will not be awakened by a rare day of hot weather at a time when the plants are still devoid of flowers.

At this time, she is not dead but hibernating. To save energy, the bumblebee slows down all bodily activities and lives off her fat stores. These are accumulations that she has laid down in her abdomen at the end of the summer, with as much honey as she could gather and store in her stomach. The energy is needed to keep her heart beating and pumping blood round her body. She needs to keep breathing. Her immune system is essential to defend her against parasites, bacteria and viruses. Her brain cannot switch off completely because she needs to be aware of the rise in air temperature that will mark the arrival of spring. Most crucially, the energy is essential for the development of the fertilised eggs that she carries. The future of her entire family, colony and lineage depends on her surviving the winter. Bumblebees in the UK typically hibernate for 3 or 4 months but many die because they could not stock up with enough food at the end of the summer.

She will not be dreaming of the spring flowers and all the nectar that she will drink in the weeks ahead because she has never seen them. She was not alive a year ago. She will have to learn all about them on the wing.



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