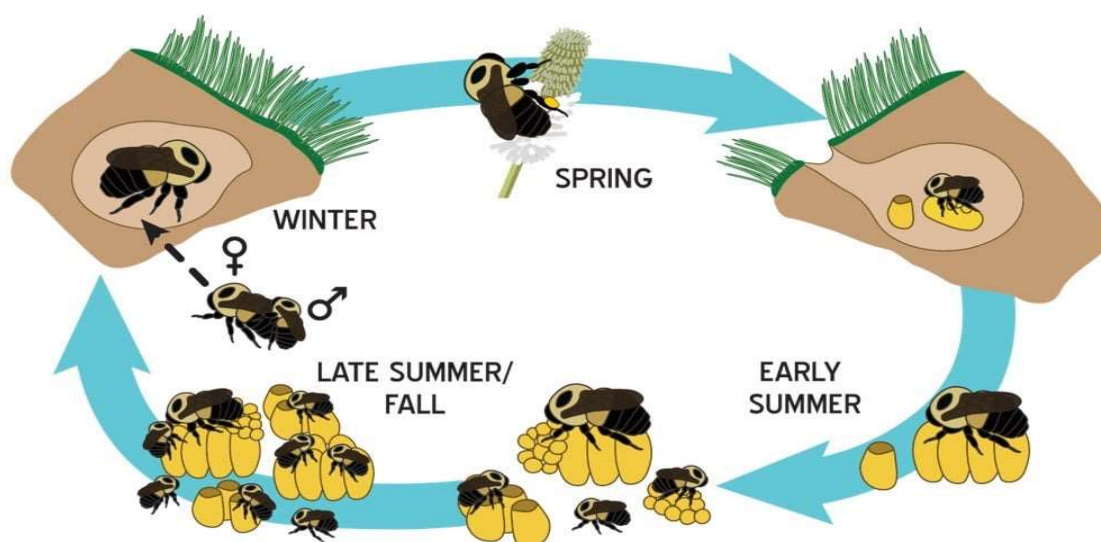


Where do bumble bees go in winter?

By Anthony Colangelo, Pollinator Partnership Communications Coordinator

Did you know that queen bumble bees are able to hibernate during the winter? Bumble bees, which make up the genus *Bombus*, are some of the most fascinating pollinators, and are often considered the "teddy bears" of the bee world because of their fuzzy bodies and sometimes clumsy demeanor. Bumble bees live in colonies that can include up to 500 bees, and each colony is centered around the queen who is the founder of each nest which is usually located under leaves or compost piles. Amazingly, future queens leave their initial colony and hibernate over winter to reemerge in the spring when temperatures are warmer and flowers are in bloom.



Bumble bee life cycle, illustration by Jeremy Hemberger

Newly emerged queens find safe nesting spots, lay eggs, and independently raise their first round of larvae which eventually mature into worker bees. Worker bees are all female and keep the colony alive by collecting valuable resources such as pollen and nectar for developing larvae. Drone bees on the other hand are all male and are born later in the season to mate with future queens. Worker bumble bees are excellent pollinators, having bodies that are completely covered in specialized hairs that are perfect for collecting pollen grains and transferring them between flowers. In addition to their hairy bodies, bumble bees are also fantastic pollinators because of their ability to "buzz" pollinate flowers, which consists of bees visiting flowers and buzzing their bodies at high frequencies to maximize pollen collection, which also maximizes pollen dispersal for crops and flowers. Bumble bees are some of the best pollinators as they are able to withstand cooler temperatures in comparison to other bees, allowing them to forage earlier in the morning, later in the evening, and also earlier and later in the year.