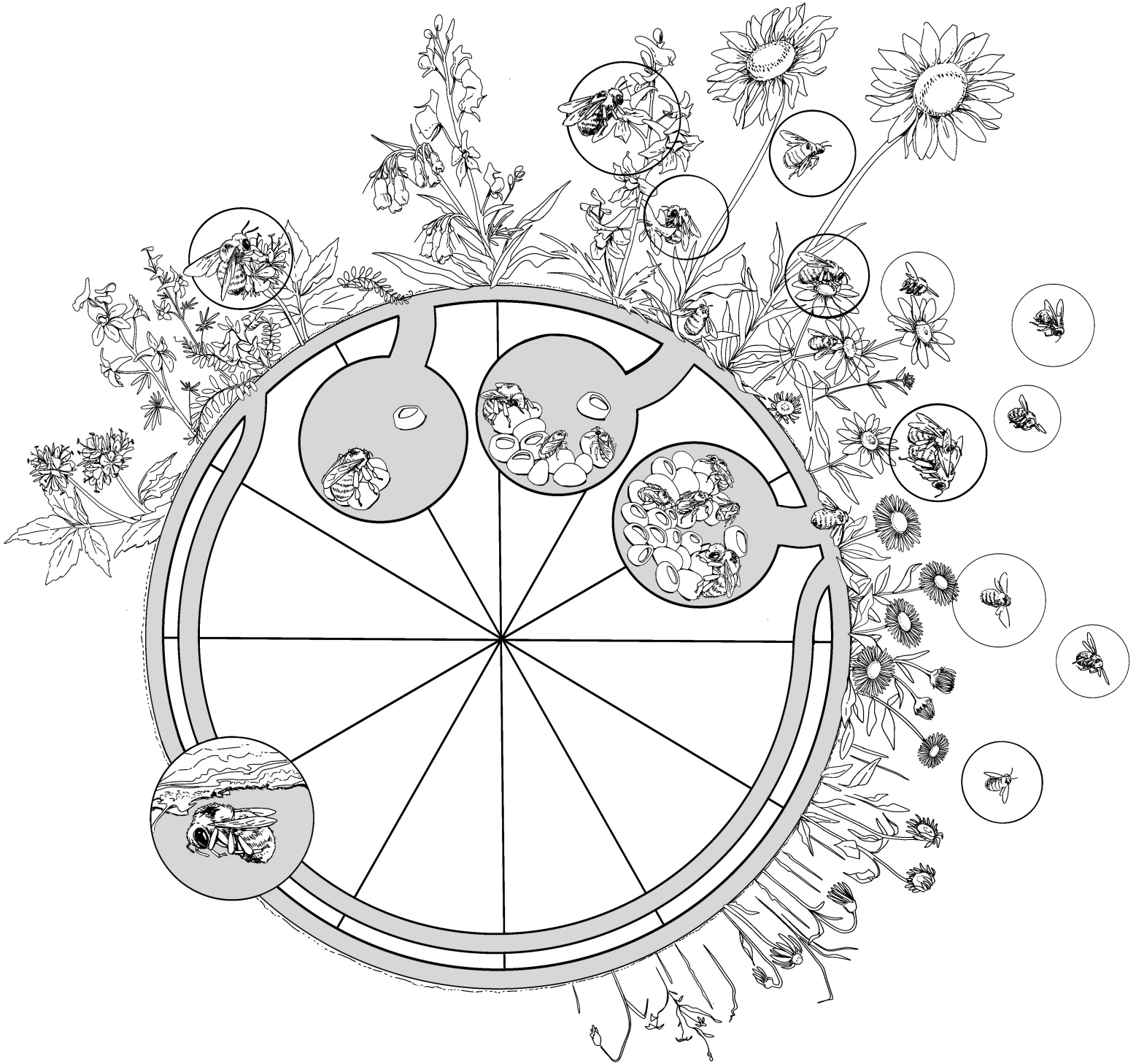


The life of a bumble bee



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Why do bumble bees matter?

There are more than 46 different species of bumble bees in North America. These remarkable little creatures have developed the ability to fly in cooler temperatures and lower light levels than most other types of bees. Bumble bees are an extremely effective pollinator, using a special technique called “buzz pollination” in which the bee vibrates parts of the flower to dislodge trapped pollen. Plants such as pepper, tomatoes, and cranberries benefit significantly from this type of pollination.

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Bumble bees are a type of “eusocial” native bee.

Eusocial bees have a colony, like the European honey bees, and one queen that produces all of the offspring -- but the workers take care of foraging for food, caring for young bees, and defending the nest from predators. However, unlike honey bees, they only live up to one year. This illustration represents 12 months.



1. Early Spring: A queen bumble bee will wake up from hibernation and find a nesting space to establish her colony. She will gather nutrients from the pollen and nectar from early spring flowers.

2. Spring: This queen must find a nesting space to establish her colony. She will forage for extra nutrients and save a small “honeypot” in the nest. The queen will lay a small number of eggs inside of waxy-pod structures. All of these first eggs will hatch into larvae and grow into worker bees, which are always female.

3. Summer: As the first wave of workers grow and emerge from the nest, they help gather food for the colony. They will leave and return to the colony to support the queen and the next batch of worker bees. These workers will also start tending to the next batch of eggs to help grow the colony. A successful bumble bee queen will stop leaving the nest because she is supported by her growing worker force of bees.

4. Late Summer / Fall: Later in the season, the queen will lay eggs that will become male bees, in addition to a special set of eggs that will become new queen bees. Alpine bumble bees typically lay a total of 15-45 new eggs in one summer.

As the new queens hatch, they are given additional resources to grow strong. When these new queens leave the nest, they will find males to mate, and then soon after find a safe burrow underground to start her hibernation alone for the winter. These new queen bees must survive on their fat stores in their bodies for the entire winter.

5. Fall / Winter: The original queen will fade away and will not live beyond the end of summer.

The next bumble bee queen actually spends most of her life in a deep hibernation. As a cold-adapted species, bumble bees can survive the deep freezes of the winter by going into a dormant state. The new queens are often under snow, which provides a nice layer of insulation.

When the new queen awakens in the spring, the next generation depends on her to start her journey and find a nest to begin the process again.

