

Missouri Master Naturalist 2017 Certification Pin



Bumble Bee

Bombus spp.

Description

A large, fuzzy or hairy bee with a black and yellow (sometimes orange), usually banded, coloration. Bumble bees always have some fuzz on the abdomen. Females have pollen baskets on the last pair of legs.

Size

Length about ½ to 1 inch

Habitat

In the day, they are commonly seen foraging among flowers for nectar and pollen. Bumble bees often sleep at night by clinging to the underside of a leaf.

Food

Adults eat nectar, and pollen, and honey are fed to the young. Honey and pollen may be stored in vacant nest cells. Edwin Way Teale described the specialized structure (the corbicula) on the hind legs of bumblebees and honeybees as "baskets for carrying pollen home from the fields." Despite their many similarities to honeybees, bumblebees don't overwinter as a hive and thus don't stockpile much honey.

Status

At least six species of bumblebees occur in Missouri. Nests rarely have more than a hundred workers at a time, and unlike honeybees, bumblebee hives don't usually survive the winter. Although they are social insects and are capable of stinging, they do not aggressively defend their colonies like some species of wasps or Africanized honey bees.

Life Cycle

Bumblebees usually nest in cavities below ground (frequently rodent burrows), but nests may also be in brush piles, trash heaps, bird houses, and so on. They are rarely in direct sun. In spring, a single fertilized female (queen) finds a suitable nest site and builds in it a large, irregular cell of wax and pollen and stocks it with pollen and nectar. Several eggs are laid in the cell; the queen then enlarges the nest and supplies the grub-like young with additional food. She speeds the development of her eggs and young by incubating them. They will become workers and take over the pollen and nectar collecting, feeding additional young, and other nest duties. Later in the season, the queen lays eggs for queens and males (drones); in fall, these leave the colony to find mates. In our area, the whole colony dies during the winter. Only young queens survive the winter by hibernating in the ground. The next spring, these fertilized queens begin a new colony.

Interesting Facts

The buzzing sound bumble bees make is caused by vibrations of the wing muscles inside the insect's body, and not by the wings themselves. A common myth maintains that bumble bee flight defies the "laws of physics." That notion was based on the idea that insects flap their wings up and down; instead, they sweep them back and forth, changing the angles, something like helicopter or hummingbird flight. Bumble bees are capable of stinging, if molested or if their nest is endangered, but you need not fear them; they are not aggressive.