

Vocabulary and Concepts in “Ella-Bella Bee & the Pollinators”

Apis Mellifera- The official, scientific name for honey bees. I think it sounds like a super-hero!

Bees- There are over 20,000 species of bees. Honey bees are only one type. Some bees are social, having thousands of members in their hive, while others are solitary.

Bacteria- Is a type of germ. Anti-bacterials fight germs by sealing them out or killing them.

Bat houses-As people take more and more space, there is less natural habitat for bats. One can buy or make a house for bats. This is good because bats need more places to live. Also, bat houses spread populations out, so bats can more easily fight off a fungus that is hurting them. You wouldn't want to be crammed together with a bunch of other sick people either!

Belittled- Put down.

Clan- Group or extended family.

Coddle- Pamper. Sister bees pamper their brothers by bringing them food and water.

Conga Line- A dance in which dancers attach to each other, one after another. People all face the same way and hold onto the waist of the person in front of them. Bees do something similar in communicated to each other.

Deflect- Divert, cause to change direction. Guard bees do their best—stinging included-- to keep invaders out!

Despise- Dislike strongly. Bats eat the bugs you despise like mosquitoes!

Dew- Drops of water left on plants over night.

Drones- Male bees, the brothers in the colony. Drones do not gather food, do not take care of the queen, or do other work around the hive except for helping dry honey. Their short lives are mostly spent building their strength to one day help a new queen bee, from a different hive, make the millions of eggs she needs to continue a colony.

Echolocation – High vocalizations that allow one to find things by hearing how sound waves bounce off of them. Bats use this to find food without a lot of light. Some blind people do this with clicking.

Exclude- Remove from or not an option. Without bees and other pollinators, many fruits and vegetables would be excluded people's diets.

Flung- Thrown. Bees hives were flung down on invaders from fortresses in feudal times. The angry bees, disturbed from their peaceful home and anxious to save their families, stung the attackers --armor was no shield from these little creatures.

Fungus-Sporing organism that feeds on organic matter. Mushrooms are a delicious fungus, but athlete's foot is an awful fungus! The “white-nose fungus” that feed on bats, eats on their wing skin, making it thin and delicate.

Got a knack- Are good at doing something. Bats have a knack for virtually seeing at night.

Lure- Draw in, attract. One can lure hummingbirds by having bright red or orange flowers.

Obliterated- Wiped out, destroyed, annihilated.

Organic- Grown without weed-killer or insect-killer.

Pollinate- Take pollen from one plant and dusting another plant, allowing plants to flower. Pollen can also be distributed within a flower itself to allow it to fruit. Plants need an outside source—insect, animal, or wind to fruit.

Protect-To keep safe from harm or injury. Bees protect others in their hive from harm.

Pesticides or insecticides - Chemicals that are used to kill bugs that attack plants. Unfortunately, they effect both good and bad bugs. Especially dangerous to bees are neonicotinoids, which are chemically similar to nicotine, the ingredient in cigarettes. They are in the seeds or sprayed on plant.

Herbicides- Weed-killers-- chemicals that kill certain weeds. These can also radically hurt and weaken bees, other pollinators and animals.

Hover- To remain in place in the air. Hummingbirds can hover like a helicopter in the air!

Hygroscopic-A hygroscopic both dries up and seals to keep in water. That is why a hygroscopic like honey helps wounds heal.

Implied- "Directions implied" means that though it isn't said, it's clearly understood which way to go.

In vain- Without success. If something wasn't done in vain, it was worth it. If it was in vain, it wasn't successful.

Mammals-a warm-blooded vertebrate animal that has hair or fur, secretes milk to feed their young, and gives birth to live young. Bats are mammals.

Mono-culture- Growing one crop in one area. This invites pests and puts the world out of balance. Even where there are fields of one crop, wild flowers on the edges helps keep honeybees and other bees healthy. They need more than one food!

Nectar- The juice in flowers that becomes honey.

Rebound- Come back, recover. We hope hummingbird populations can rebound from pesticide and herbicide deaths. Hummingbirds can eat poisoned bugs and suck flowers with herbicide in them.

Roam- To move about.

Rotate crops- The soil is more fertile if crops change each year. There are less pests and therefore less need for insecticides if the same crop isn't planted in the same area each year. Unfortunately, large farms tend to do just that.

Scorned- To put down or look down on.

Scour- To look very carefully at every detail. Scouting bees carefully measure and explore possible new homes for the hive.

Sublime- Awesome!

Swarm- Large numbers of people or creatures coming together closely. Thousands of bees swarm together to fly to a new location when a new queen is born.

Swoon- Almost faint, usually because of something positive.

Take a toll- Hurts. Insecticides and herbicides injure pollinators like hummingbirds.

Vibrate-Very small but fast movements that are repeated.

Viruses- Viruses make you sick! Mosquitoes sometimes carry dangerous viruses. That's why it is so nice that bats eat virus-carrying mosquitoes!

Waggle- To shake one's rear!

Woo-Attract. Bees that have scouted for a new home come back to the hive and attempt to convince-- or woo-- the greatest number of other bees to agree that what they found was the best place for a new hive. Somehow-- from perhaps seven scouts telling about different places—they agree on one choice.

Bio-diversity- We want to keep a healthy Earth with bio-diversity: many different types of animals, insects, and plants. It is good for the planet's balance and good for people.

An excellent short video for elementary school children:

By Cornell University Naturalist Outreach- **"Pollination: Trading Fertilization for Food in 3 minutes"**
<https://www.youtube.com/watch?v=Lu7AjOvzh8>