## Welcome to Bee Explorer!

Learn about four amazing types of bees and discover how they help plants, flowers, and the entire environment.













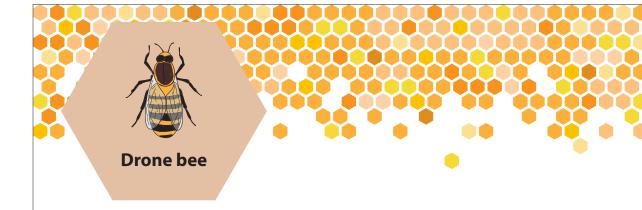
This is the queen bee. She is the only bee in the colony that can lay fertilized eggs, and she plays a key role in keeping the hive organized and growing. Her main job is to lay eggs—sometimes thousands in a single day—to help the colony survive and stay strong. The queen mates only once in her life, storing enough sperm to lay eggs for years.

Like royalty, she is always surrounded by loyal worker bees. They care for her, feed her, and keep her safe. There can only be one queen in a colony. If a new queen appears, the bees may choose—sometimes through a battle—who stays.

You can always tell who she is. The queen is larger than all the other bees in the hive. She may not leave the hive often, but her role is vital to the life of the colony—and to the environment. Without her, the colony could not grow, and without strong colonies, the plants and crops that rely on pollination could not thrive.



Queen bee ensures the survival of the bee colony, which supports plant pollination across seasons.

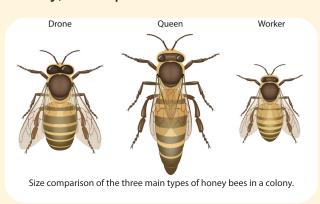




Drone bees are male bees. Their main job is to fly out and find a queen bee from another colony to mate with. Mating takes place in mid-air—drone bees must spot a queen while flying!

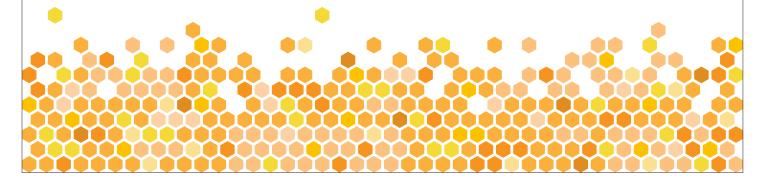
Other than mating, drone bees don't do much in the hive. They don't collect nectar, make honey, or help clean.

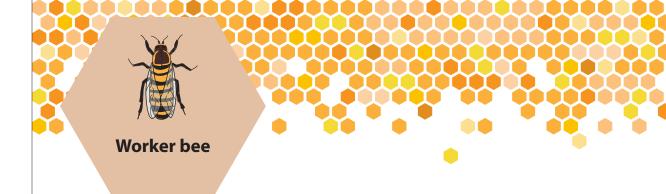
Drone bees have larger bodies and bigger eyes to help them see queens while flying. Most of them don't have stingers. They may not do as much work as other bees, but they still play an important role in helping bee colonies grow.





Although drones don't pollinate, they help increase genetic diversity in bee populations.





This is the worker bee—one of thousands in the colony, all loyal to the hive and the queen. All worker bees are female, but they cannot lay fertilized eggs—that's the queen's job. As they grow older, worker bees take on different jobs to keep the hive running smoothly. They clean the hive, feed



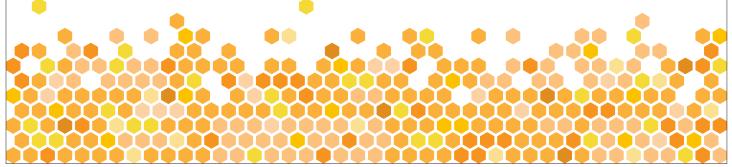
baby bees, build honeycomb, collect nectar and pollen, guard the entrance, and help control the hive's temperature.

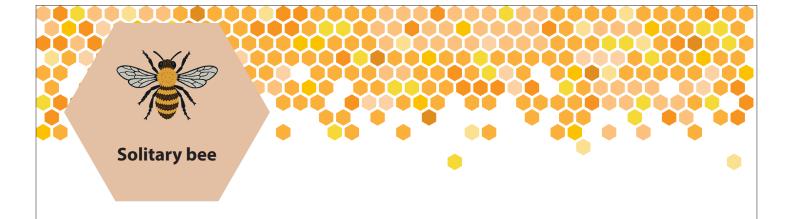
But worker bees don't just help the hive—they also help nature. As they collect nectar, they spread pollen from flower to flower. This helps fruits, vegetables, and wild plants grow, which supports ecosystems—natural places where plants, animals, and people all depend on each other.

When we protect bees, we also protect the environment and life on Earth. Worker bees may be small, but they do big things for the planet—and for us.



Worker bees are major pollinators. They help flowers grow, food crops develop, and ecosystems stay healthy.





Unlike honey bees that live in busy hives, solitary bees live alone. They are quiet, hardworking, and very important to our planet. Solitary bees build their nests in small places, like a hole in the ground, a crack in wood, or even a hollow plant stem. They don't have a queen, workers, or guards.

They do everything on their own—collecting pollen, laying eggs, and making sure their babies are safe. Solitary bees may be small, but they are powerful pollinators. As they



visit flowers, their fuzzy bodies pick up pollen and carry it to other plants. This helps fruits, vegetables, nuts, and flowers grow—which means bees help feed both people and wildlife.

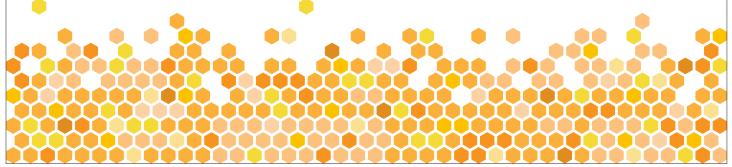
There are many kinds of solitary bees, like the shimmering green sweat bee, the gentle leafcutter bee, the long-horned bee with tall antennae, and the blue orchard bee, busy pollinating spring blossoms.

Most solitary bees are not aggressive, and many can't even sting. They're not scary—they're nature's tiny heroes.

So next time you see a little bee buzzing quietly by itself, remember: she's working hard to help our gardens, forests, and food grow. By protecting bees, we also protect the environment and support life on Earth



Solitary bees are excellent pollinators, often more efficient than honeybees. They help many native plants thrive.





### **Help Bees in Nature**

Bees need plants to live and work. They visit flowers to drink nectar and collect pollen. You can help bees by growing the right plants and making safe homes for them. Let's see how!



# Plant Local Flowers

Bees love flowers that grow in your area.



# **Grow Many Kinds of Plants**

Different flowers bloom at different times—this gives bees food all season.



Grow plants like flowers, bushes, and herbs that give nectar and pollen.



## Avoid Pesticides

Some garden sprays can hurt bees. Use bee-safe or natural choices.



#### **Let Herbs Bloom**

Let herbs like basil, thyme, and mint flower so bees can enjoy them!



#### **Make Bee Homes**

Leave bare soil or build bee hotels so solitary bees have a place to nest.

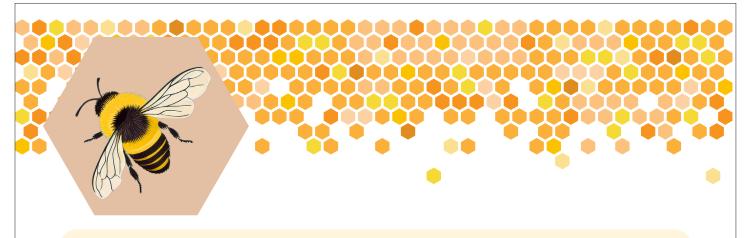


Remember: When you care for bees, you help protect the natural environment.

BACK

Play Bee Sound Explore Other Bees

Flowers Bees Love Save the Bees Share What You Learned



#### **Bees' Favorite Flowers**

- Bees get food from flowers, and flowers need bees to grow. Bees help by spreading pollen — this is called pollination.
- But bees are disappearing because they're losing places to live and find food.
- You can help by planting flowers bees love and making safe spaces in your garden.



Bee Balm



Blue Globe Allium



Borage



Coneflower



Great Blue Lobelia



Stiff Goldenrod



Lavender



Zinnia



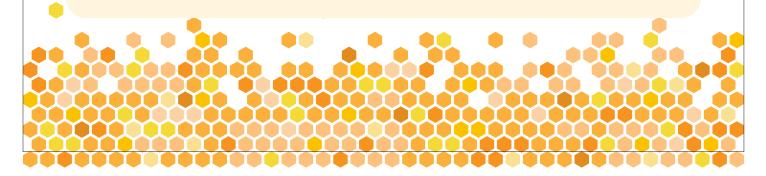
Chives

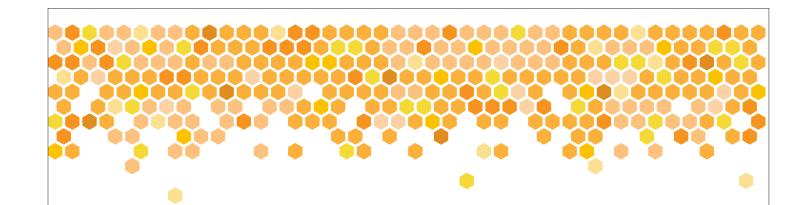


Sunflower



When we care for bees, we care for the Earth.





### **Take Nature Observation Photos**

Using your iPad's camera, take clear photos of various flowers or plants you find in nature. If you're unsure if a plant is 'bee-friendly,' take a photo of any plant you think a bee might visit, or one you find interesting.

