

Bees see all colors except the color red. That and their sense of smell help them find the flowers they need to collect pollen. Not only is pollen a food source for bees, but also some of the pollen is dropped in flight, resulting in cross pollination. The relationship between the plant and the insect is called symbiosis.

**Did you know that there are lots of small so-called native bees in this country? These are ones that have lived in North America for hundreds of years.**

- Some people call these bees "**super pollinators.**" That's because they can often pollinate specific crops much more easily than honey bees (non-native bees that were brought here from Europe centuries ago).
- For instance, in a small apple orchard, 250 females of a kind of native bee called the blue orchard bee can do the work of 35,000 honey bees.
- As you may know, honey bees in this country are dying off.
- Tiny bugs called mites are killing them.
- So farmers who have relied on honey bees to pollinate their crops are turning more and more to native bees.
- The good news is: native bees seem pretty tough and aren't being harmed by the tiny bugs that are killing off the honey bees.
- Now native bees are helping farmers in this country earn lots of money each year—in fact, billions of dollars worth from sales of bee-pollinated crops.

# Fun Bee & Wasp Facts for Kids

Check out our fun bee, bumblebee, honey bee and wasp facts for kids. Learn about different types of bees in a colony such as the queen, workers, soldiers, and drones, where do wasps like to build nests and much more.

Read on and enjoy our interesting information about bees and wasps.

- There are 9 different families of bees and around 20,000 known species.
- Some common types of 'social' hive inhabiting bees include the Honey bee, The Africanized Honeybee, (or 'killer bee') and the Bumble bee.
- 'Solitary' bees that make their own single nest include the Carpenter Bee, Leafcutter bee, Mason bee, Digger Bee and Mining Bee.
- The every day bee that we associate with most is the honey bee (or honeybee). There are 7 species of honey bee and 44 subspecies.
- Honey bees live as large colonies in honeycomb structures built from beeswax called hives. There are 3 types of bees in a colony, drones, workers, and queens.
- Beeswax comes from abdomen glands of a worker bee, they use the wax to form the walls and caps of the comb.
- Honey is made from the nectar and sweet deposits that bees collect from plants and trees. Honey is stored in honeycomb as a food source for the colony.
- Bees have a long proboscis (type of tongue) that helps them to get the nectar out of flowers, they collect pollen in pollen baskets on their body.
- Worker bees are female, they collect pollen and nectar to feed the colony, they clean the hive, make the honey, take care of the offspring and groom / feed the queen. Worker bees live from 1 month in summer up to 9 months over winter.
- Drones are male, their one job is to mate with the queen, they live for 40 - 50 days.
- The queen bee's only job is to lay eggs, they lay up to 1,500 eggs a day. The queen can live for 2 - 5 years, and lay about 1 million eggs over her lifetime.
- Bees have two pairs of wings, the larger fore wings and the smaller hind wings.
- The smallest bee is a type of stingless worker bee that's about 2.1 mm long. The largest bee is a type of leafcutter bee whose females can reach 39 mm.
- There are over 250 known species of bumble bee.
- Only the queen bumblebee survives the winter, so there's no need for bumblebees to store large quantities of honey in the hive like honey bees do.
- There are over 100,000 species of wasp. Two common types of wasp are the yellowjacket wasp and the hornet.
- Most wasp species are 'parasitic' which means they use the venom from their stings to paralyze prey and lay their eggs within the host, so larvae will hatch.
- Wasps can build their nests in a variety of places but they usually pick sunny areas, in holes underground along riverbanks, or attached to the side of walls and trees, or underneath floors, wasp can be agitated and dangerous near nests.
- A bee's buzz is not produced by the beating of its wings but by vibrating muscles.
- Only female bees (queen and worker bees) can sting. A honey bee can only sting once, as barbs rip the stinger out of the bee and it will die. Bumblebee's and wasps stingers don't have barbs, so they can sting multiple times without injury.

There are about 4,000 native bee species in the United States, each with different pollination methods and plant specializations. There is only one species of European honey bee and it is limited in its plant interactions. Michael Warriner notes that "In some cases, just over 200 native bees can do the same level of pollination as a hive of honey bees containing over 10,000 workers," (Warriner, 2012). Native bees are more efficient pollinators than honey bees, too: "Many native bee species are more effective than honey bees at pollinating flowers on a bee-for-bee basis," (Mader et al 2010). Honey bees operate at 72% efficiency, while native bees operate at 91% efficiency (Winfrey et al, 2007). Also, native bees are active for more hours in the day and more days in the year than honey bees (Winfrey et al, 2007).

# Join the Conversation about Native Bees



## What's the buzz?

North America has over 4,400 described species of native bees\* that pollinate wildflowers and crops. From the tiny *Pedicularis* to the substantial carpenter bee (*Xylocopa virginica*), these local pollinators are hard at work in the floral landscapes of gardens, farms, forests, grasslands and urban and wild lands. Unfortunately, several species of native bees are showing disturbing signs of decline. Learn more about these colorful pollinators and how you can support them at [www.pollinator.org](http://www.pollinator.org)

