

Worldwide Loss of Bees a Growing Concern

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(Adapted by ReadWorks)



When we think of bees, we think of pesky, buzzing insects that sting us and ruin outdoor gatherings. We might wonder: how badly can we possibly need bees? The truth is, bees are an incredibly important part of our ecosystem on earth—no matter how annoying they may be to humans. Unfortunately, bees have been disappearing around the world for some time now. The disappearance of large numbers of bees continues to cause new problems around the planet.

Researchers have been trying really hard for the past 15 years to understand why honeybees around the world are dying off at very high rates. Over 1 million bee colonies, or communities of bees, disappear every year and never return.

An official from the national government's agriculture department called the massive honeybee disappearance "the biggest general threat to our food supply."

How could something so small be so important to us as humans? Bees are used to pollinate many crops people eat, like many of the almonds in California. Bees pollinate crops by transferring pollen from one plant to another, allowing the plants to reproduce. Pollen is powder that the plant makes that helps it produce new plants. Bees are also essential for the

pollination of apples and other fruits. Without the pollination by bees, these plants are unable to reproduce and may die off.

The mass deaths of honeybees have been linked to Colony Collapse Disorder, a mysterious loss of bee colonies that has many possible causes. The deaths of honeybees may also be due to pesticides, parasites and disease. Other possible causes include land development and changes in agricultural practices around the world.

There are many kinds and species of bees. Honeybees are not the only ones disappearing in large numbers. Bumblebees are another group of pollinators whose widespread disappearance worries scientists. While some of the dangers of losing bees, such as the damage to our food supplies, have been known for a long time, researchers are still learning even more troubling information about the loss of these crucial insects.

Researchers say the disappearance of bumblebees presents a problem for certain plants that rely on them for pollination. These plants are having difficulties reproducing without the bumblebees. They are now at a higher risk of dying off completely.

Two scientists have been studying the impact of bumblebee loss on plant reproduction. As part of an experiment, they removed a certain species of bumblebee from a group of pollinators. The plants these removed bees normally pollinated were not all pollinated by the remaining bees. The remaining bumblebees flew between many different plants because the other bees had been taken out. They were less likely to pollinate just one kind of plant.

The researchers said this experiment had damaging effects. For instance, one type of purple wildflower needs pollen from its own species to reproduce and survive. With fewer bumblebees, the remaining bees transferred pollen from different plants. As a result, this purple wildflower was unable to survive as it would have before the loss of bumblebees.

The study points to a much larger issue, beyond the harmful effects bumblebee loss has on the flowers. This study shows how important bees are to keeping the variety of plant and animal life, or biodiversity, in our ecosystems. The purple wildflower is just one example of how bee loss decreases biodiversity.

In 2012, two national organizations discussed the issue of bee loss. They also discussed the search for a solution to the problems caused by bees dying off.

The organizations concluded that there is no simple, easy solution for these problems. Although, the organizations did list some solutions that could help. These solutions included improving the habitats and care of bees and reducing the use of pesticides.

The organizations noted that increasing honey bee survival is critical to the pollination of crops and to our food supply.

