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Could We Be the Cause for Honeybees Coming to An End?

Honeybees have been around for millions of years, which shows how much these small mighty creatures could have possibly lived through. Currently, some of these honeybees are put to work and are expected to pollinate thousands of crops in the warm seasons. We expect so much of honeybees but they are harshly treated by harmful pesticides and given a poor diet.

“Those questions inform research into [colony collapse disorder](https://www.scientificamerican.com/article.cfm?id=saving-the-honeybee) (CCD), a phenomenon that has killed over a third of commercial honeybees in the U.S. and some European countries since 2006. With no obvious cause, scientists have begun examining how beekeeping practices and environmental contamination may be impairing hive immunity” says Wendy Lyons Sunshine, an award-winning journalist and co-author of The Connected Child.

It has been troublesome to obtain reliable information for research on the colony collapse disorder. Researchers have tagged certain honeybees to find evidence that trails back to why they are unable to survive. These tests were found to be unreliable because the bees would disappear and there was no way to locate them. For many years, researchers have been trying to shine light onto this epidemic issue. Research has shown that there has been a major decline in honeybee colonies and that numbers are steadily decreasing. The severity of this situation has acquired the public’s eye. People are beginning to become more aware of this conflict and are trying to be proactive the best way they can.

“All four researchers suggest planting native flowers and leaving untended areas in our yards and gardens. Native bees readily nest in such areas. That helps ensure more pollinators will be around the next year. The experts all recommend avoiding the use of pesticides around our homes. The best way to do this is by using integrated pest management. This approach can be effective and good for the environment” says Alison Pearce Stevens, who was a former biologist. Over the years, citizens have shown greater concern for this issue and this shows how there can be a better likelihood for honeybee colonies being restored.

Despite the fact that citizens are taking proper action towards the decline of honeybees, the current reality of bees is still left to change. “On average since 2006, beekeepers have lost about 30% of colonies each winter, when hives must subsist on honey reserves to survive. But this winter, that figure jumped, surpassing a previous high of 36% in the winter of 2007-2008, the survey found. Over the past year, about 41% of commercial colonies had failed” says Scott Dance, who is an award winning environmental reporter. Statistics show dramatic the loss of honeybees has come to. Researchers are set to acknowledge that harmful pesticides, lack of nutrition, and obtaining illnesses from parasites are the leading cause for the decline in honeybee colonies.

**Lack of nutrition**

It is instinctive for bees to look for food in various flowers miles away from their colony. “Like the food pyramid for humans,” Sunshine quotes from Jerry Hayes, Florida’s assistant chief of apiary inspection, “bees need variety in their diet.” As human beings, it can be understood that a person does not willingly want to eat one food dish for months at a time. Here it can be said the same for bees. As a result, this enforces more of a reason for beekeepers to feed their bees with nutritional food. However, there is uncertainty if these nutritional supplements are sufficient enough for bees to sustain themselves properly.

**Pesticides**

Pesticide exposure is another leading cause for the decrease in the numbers of honeybee colonies. According to an interview by Sunshine with entomologist Jeff Pettis, leading researcher at the U.S. Department of Agriculture Agricultural Research Service’s Bee Research Laboratory, there are tests conducted on bees that are lethal and that this has to be changed. "The general feeling is that we need to move beyond mortality testing to sublethal testing that looks at the shortening of life span, disorientation, reduced vigor, and other things," says Pettis.

**Parasites**

Another potential cause for the death of many bees are viral infections and some parasites. The researcher Jeff Pettis, conducted research showing a potential parasite known as, Nosema gut parasite could be affecting bee’s digestive tract. It is uncertain if this parasite poses a major threat because some bees are found to be affected more than others. According to other studies made by the research team at the University of Maryland, studies have shown that varroa mites are the leading cause for bee’s deaths.