

# Why Are Honeybees Dying Off?

*According to Mr. Green, it's complicated*

By [Bob Schildgen](#) | Jan 20 2018



*Photo by nayneung1/iStock*

**Q: What's the latest news about the massive die-off of honeybees?**

—*Larry in Dallas, Texas*

**A:** We're pretty certain that bees are *not* dying from GMOs, cellphones, ultraviolet lights, electromagnetic radiation, or aliens, all of which have been blamed at one point or another. There is no single cause, according to most scientists who have studied the problem, but rather a combination of factors that include parasites, pathogens, pesticides, poor nutrition, and habitat loss.

The most dangerous parasite is the aptly named *Apis destructor*, the varroa mite that sucks out bees' "blood" while also transmitting the deformed wing virus. Varroa mites were accidentally brought here in 1987 from Asiatic bees and have spread to most of the world. In order to stem varroa, beekeepers apply pesticides such as Acetamiprid, Clothianidin, Dinotefuran, Imidacloprid, Nitenpyram, Thiacloprid, and

Thiamethoxam, some of which can weaken a bee's immune system. The EPA announced in 2016 that Imidacloprid, a widely used neonicotinoid insecticide, "potentially poses risk to hives when the pesticide comes in contact with certain crops that attract pollinators." Another factor is that bees' diets are not exactly health foods, but often consist of junk food in the form of sugar or corn syrup, which do not contain pollen that stimulates resistance to disease.

Finally, there has been a reduction in the variety of flowers on which bees feed because of monocultural farming and suburban development. Add up all these factors—and others—and the weakened bees have an uphill battle.

The problem may be abating somewhat. In April 2017, the number of commercial U.S. bee colonies had risen by 3 percent (to 2.89 million) compared with 2016, while the number of hives lost to colony collapse disorder was down by 27 percent from a year earlier.