

The Facts about Honey Bees and Pesticides



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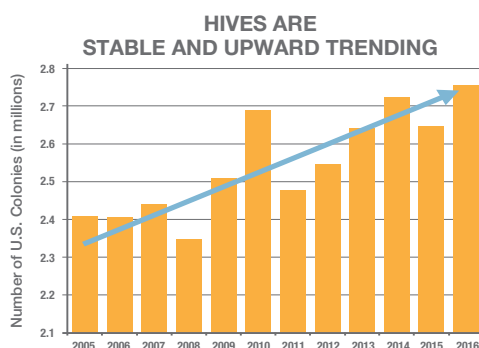
Fact: Honey bees help keep our grocery shelves stocked with nutritious food.

Honey bees play an important role in pollinating many of the fruits, nuts and vegetables that help contribute to a healthy diet. Many of our staple crops such as the grains we eat are wind pollinated.

2

Fact: The number of honey bee colonies is increasing.

Most people are surprised to learn that honey bee colonies actually increased by 45 percent worldwide over the past 50 years.¹ Annual surveys conducted by the United States Department of Agriculture (USDA) show that the number of honey bee colonies in the U.S. has trended upward over the past decade and in 2016 reached its highest level in 20 years.²



4

Fact: Neonicotinoid insecticides do not impact colony health when used according to the label.

Hundreds of studies on neonicotinoids and honey bees indicate that when used according to label instructions, “neonics” are not a long-term threat to honey bee colonies. Large-scale studies in Europe and North America show that poor bee health correlates well with parasites and diseases, but not with pesticides, including neonicotinoids.^{3,4,5,6,7,8}

5

Fact: Toxicity and hazard are not one in the same.

The Environmental Protection Agency’s neonicotinoid risk assessments show that when used in typical field applications and according to label instructions, neonics do not pose a significant hazard to bees, even though some neonics, like many insecticides, are toxic to bees. This is because at normal field doses, the potential exposure to bees is far below levels that would cause concern.⁹ Distinguishing toxicity from hazard is a routine activity performed by most of us, although we may be unaware that we are doing so. For example, caffeine is more toxic than many pesticides, and yet we drink it in coffee without fear because the levels are so low (i.e., the hazard is very small).

6

Fact: A tiny parasite is one of the biggest threats to honey bee health today.

Despite the growth in honey bee numbers, colonies are exposed to many factors that can affect their overall health. Most experts agree that factors such as parasites, diseases, inadequate nutrition or lack of available forage, adverse weather, improper use of pesticides and hive management practices play a role. Researchers are exploring many ways to help protect bee health, but there is much work yet to be done.

In the late-1980s, a parasite called the Varroa mite invaded North American bee colonies, and beekeeping has never been the same since. The Varroa mite is the “single most detrimental pest of honey bees,” according to the USDA.¹⁰ This parasite weakens bees and transmits diseases that can wipe out entire colonies. Beekeepers try to control the mite with insecticides, but effective control is difficult to achieve.

