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_____ = cool new words _____ = I have a question

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One-Third of U.S. Honeybee Colonies Died Last Winter, Threatening Food Supply

BY BRANDON KEIM - 05.08.13 6:30 AM

Image: Jennifer C./Flickr

Nearly one in three commercial honeybee colonies in the United States died or disappeared last winter, an unsustainable decline that threatens the nation's food supply.

Multiple factors are believed to cause the losses, which were officially announced today by a consortium of academic researchers, beekeepers and Department of Agriculture scientists.

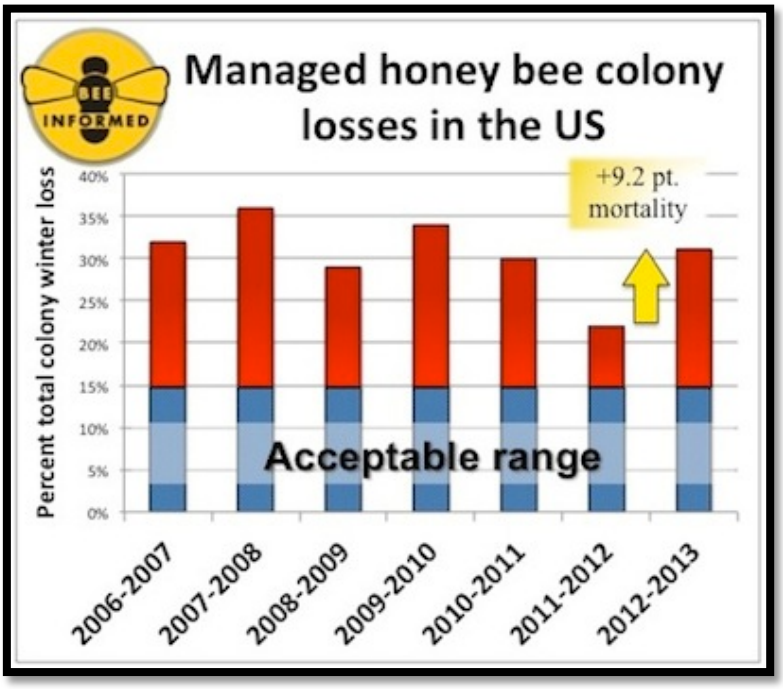
"We're getting closer and closer to the point where we don't have enough bees in this country to meet pollination demands," said entomologist Dennis vanEngelstorp of the University of Maryland, who led the survey documenting the declines.

Beekeepers lost 31 percent of their colonies in late 2012 and early 2013, roughly double what's considered acceptable attrition through natural causes. The losses are in keeping with rates documented since 2006, when beekeeper concerns prompted the first nationwide survey of honeybee health. Hopes raised by drop in rates of loss to 22 percent in 2011-2012 were wiped out by the new numbers.

The honeybee shortage nearly came to a head in March in California, when there were barely enough bees to pollinate the almond crop.

Had the weather not been ideal, the almonds would have gone unpollinated — a taste of a future in which honeybee problems are not solved.

“If we want to grow fruits and nuts and berries, this is important,” said vanEngelstorp. “One in every three bites [of food consumed in the U.S.] is directly or indirectly pollinated by bees.”



Honeybee colony losses over the last seven years. Image: *Engelstorp et al.*

Scientists have raced to explain the losses, which fall into different categories. Some result from what’s called colony collapse disorder, a malady first reported in 2006 in which honeybees abandon their hives and vanish. Colony collapse disorder, or CCD, subsequently became a public shorthand for describing bee calamities.

Most losses reported in the latest survey, however, don’t actually fit the CCD profile. In fact, CCD seems to be declining, even as total losses mount. The honeybees are simply dying.

Studying these issues isn’t easy. In real-world agricultural settings, it’s hard to run the rigorous, every-last-variable-controlled experiments on which definitive conclusions are founded. These experiments can be run in labs and small-scale test fields, but whether those accurately reflect real-world complexity is debated.

Amidst the uncertainties, scientific attention has settled on a group of culprits: pesticides, fungicides, parasites, viruses and malnutrition.