

FACT:

Wildfires burn over 4 million acres a year.

What can you do?

▶ [CLICK HERE](#)
nationalgeographic.com


ADVERTISEMENT

 Subscribe for
 Only \$15.00 for a
 Year!


TOP STORIES | ANIMALS & NATURE | PEOPLE & PLACES | SCIENCE & SPACE | HISTORY | MORE STORIES



STORIES

Animals & Nature**Honey Bee Mystery**

September 2, 2008



Although the 22-percent smaller size of starter honeycomb cells on the right cannot easily be seen, the tighter, more natural spacing helps honeybees better survive varroa mite infestations.

Photograph by Jack Dykinga/ARS/USDA

[« Previous](#) [Next »](#)

All across the United States, honeybees are flying away from their hives and dying. Empty hives are causing a lot of worry about some important food crops.

Bees give us a lot more than delicious honey. They are pollinators—they enable plants to produce the fruits and nuts we enjoy by carrying pollen from one plant or flower to the next. The wind pollinates oats, corn, and wheat, but many other plants (like apple and cherry trees and melon vines) depend on insects, bats, and birds.

Animals pollinate about one out of every three bites of food we eat. And in the U.S., millions and millions of bees kept by human beekeepers fly around doing a lot of this important work for food crops.

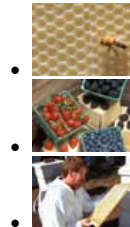
Professional beekeepers raise honeybees, box them up, and send them on trucks to fields where farmers grow food. Bees live in groups of about 40,000 individuals called colonies.

California's almond crop alone depends on about half the bees in the country, about 1.5 million colonies! The bees pollinate in the almond groves for about six weeks, and then are sent on to work other crops. But now the almond crop and many others could be in trouble with so many bees dying.

"The colony is what we call a super-organism," says Dr. Jeff Pettis of the Bee



More Photos:



- Game


[What in the World?](#)
[Bugging Out!](#)

- Video


[Angel Bees vs. Robber Bees](#)
[Bees](#)

- Related Web Links


[Bug Pictures](#)

Research Laboratory at the U.S. Agricultural Research Service in Beltsville, Maryland. "When a lot of the bees die, the whole colony is at risk." Researchers like him at government and university labs all over the country are trying to figure out why so many bee colonies are dying.

However, explains Pettis, bees are hard to study. Most die away from the hive, so researchers don't have dead bodies to examine. And when researchers return to a hive after two weeks, about half the bees they studied on their first visit will be dead, replaced by new ones in the natural life cycle of bees.

Making detective work even harder, these busy insects fly up to two miles away from their hive in search of pollen and nectar from flowers. So when bees pick up diseases or get exposed to poisons in their environment, it is hard to know exactly where that happened.

"It isn't like studying a large animal like a cow that doesn't move around much and is easy to find out in the cow field," says Pettis.

Researchers do have some ideas about what could be affecting bee health. They could be sick from poisons widely used to kill insects, or they might not be getting enough good food to stay strong. Also, tiny insects called mites feed on bees. "Any or all of these things could be weakening the honey bees," explains Pettis, "and then a virus or bacteria could be doing the killing."

Pettis is hoping for a solution, because bees are so important. "Here's a good example of what pollinators like bees give us," he says. "You can eat plain oatmeal every day and get by, and oats are pollinated by the wind. But if you want to add some blueberries or strawberries or nuts to your daily oatmeal, those are the things you have to thank pollinators for. Bees are worth protecting because their work adds so much to our diet."


Text by Catherine Clarke Fox

[« Previous](#) [123Next »](#)



**A Parents' Choice
Recommended
Winner 2008**



 NATIONAL GEOGRAPHIC © 1996-2010 National Geographic Society. All rights reserved.

[Kids Home](#) | [Animals](#) | [Games](#) | [Stories](#) | [Activities](#) | [Videos](#) | [People & Places](#) | [Photos](#) | [My Page](#) | [Site Map](#)

[GeoBee Challenge](#) | [NG Explorer Classroom Magazine](#) | [NG Kids TV](#) | [NG Little Kids](#)

Parents, Students, and Educators:

[nationalgeographic.com](#) | [Kids Privacy Policy](#) | [Contact Us](#) | [National Geographic Kids Media Kit](#) | [Customer Service](#) | [Subscriptions](#) | [Education Guide](#) | [Email Newsletters](#) | [Shopping](#) | [Advertisers' Contests](#)