

## **Boxer's push to protect honeybees They're essential to state crops but are disappearing**

Edward Epstein, Chronicle Washington Bureau

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**(07-06) 04:00 PDT Washington** -- In addition to representing her 36 million human California constituents, Sen. Barbara Boxer wants to serve the nation's billions and billions of hardworking honeybees.

U.S. populations of pollinating honeybees are mysteriously collapsing, and that could cause irreparable damage to crops worth billions of dollars a year across the nation. That in turn could mean higher food prices, and because all kinds of wildlife depend on pollinated plants for food, the decline of pollinators could spell trouble for other animals.

The cause of the decline -- estimated to be as much as 25 percent of the honeybee population -- is a matter of scientific debate. But it is mirrored by rapid population loss among such native pollinators as butterflies, bats, birds and bumblebees.

The condition has a fancy name, Colony Collapse Disorder, and has already drawn the attention of numerous state and federal agencies, scientific studies and farming and environmental groups.

Boxer, who chairs the Senate Environment and Public Works Committee, and her bipartisan House and Senate allies want to authorize \$89 million over five years for more research and grants to help reverse the decline, which is estimated to have cut the nation's honeybee population by 25 percent in recent years.

"California's almond crop alone is worth \$2 billion per year and requires nearly one-half of all the honeybees in the country," Boxer said in introducing her bill recently. "The future of that crop and other important crops such as avocados, apples, berries and soybeans is in jeopardy if there aren't enough bees to pollinate them for harvest."

Beekeepers, whose busy little pollinators are essential to crops across the nation worth at least \$15 billion, are increasingly alarmed about the deaths of their insects. Such collapses have happened before, but researchers say the current situation is the most serious they have ever faced.

"The fragmentary information already available is alarming and suggests we must move quickly and act now to avoid serious and possibly irreversible damage to pollinator populations and ecosystems," Daniel Weaver, president of the American Beekeeping Federation, said in recent testimony before the House Natural Resources Committee.

Weaver, a fourth-generation Texas beekeeper, operates businesses that truck honey-producing bee colonies around the country to do their vital work for farmers. His colonies are active in California, where Eric Mussen, a UC Davis bee expert, has come up with a list of more than 130 native California plants pollinated by honeybees.

Other nonnative plants and big agricultural crops such as almonds, apples and other tree fruits also depend on the bees.

Peter Sinton, a longtime backyard beekeeper in San Francisco's Richmond District, said that for some reason the city's honeybees have been spared the worst.

"Most beekeepers in San Francisco and the Bay Area are doing reasonably well," said Sinton, president of the San Francisco Beekeepers Association. Some colonies have been hit by disease, he said, and other hives have died off "for no apparent reason at all. But most hobbyists are doing all right.

"Maybe we on the San Francisco Peninsula (with water on three sides) are somehow protected from some calamities."

Honeybees themselves aren't native to North America. They were brought over from Europe by settlers in the 17th century, originally for their honey, the main sweetener available to the settlers, and for their wax, which was used in candles. But it soon became apparent the bees were invaluable for agriculture and could work together with man because bee colonies -- intricate insect societies centered on a single queen -- could be managed by putting them in movable boxes.

Scientists say the first sign of Colony Collapse Disorder is dramatic and final. A beekeeper will put out boxes containing colonies, leave the bees alone to do their work, and upon returning discover that almost all the worker bees have vanished. They leave behind their queen and brood, the young bees. The missing bees never return.

Penn State University researchers say the list of possible causes, on which Boxer and her supporters want to intensify research, includes a return of periodic infestation by mites and associated diseases that have hit bee colonies before, an unknown fungus, contamination from pesticides, poor nutrition brought on by swings in weather or a combination of all or some of these factors.

The U.S. Interior Department says the population loss among all pollinators could be tied to such other factors as continued loss of habitat to the spread of human sprawl and competition from such non-native species as Africanized killer bees that are spreading north from the southeastern United States.

In addition to more research money, federal authorities are considering other ideas for fostering recovery of pollinator populations. These include setting aside pesticide-free land on the government's vast holdings of hundreds of millions of acres, especially in the West, for colonies of bees and butterfly gardens.

The government has also started working with Canada and Mexico on a North American effort at preserving habitat and combatting invasive species.

The Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, the Defense Department and the Bureau of Land Management have signed agreements with San Francisco's Coevolution Institute to educate the public about the problem.

The institute, which was a driving force behind the recent first National Pollinator Week, has endorsed Boxer's bill, said spokesman Thomas Van Arsdall. "It's a challenging budget situation," he conceded, saying money for the pollinators will have to compete with lots of other interests when Congress passes its agricultural spending bill.

But he said the honeybees' plight has drawn attention to the overall issue of pollinators' decline. "We too often take pollinators' services for granted. They're just there. But now we're starting to recognize that the value of these honeybees far exceeds the value of their honey."

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*E-mail Edward Epstein at [ee Epstein@sfchronicle.com](mailto:ee Epstein@sfchronicle.com).*