

# Native Bees Worth Billions of Dollars a year, Researchers Say

## But the bees are disappearing as California's rangelands are sold to developers

By [John Upton](#) on June 27, 2011 - 10:01 a.m. PDT

The collapse of honeybee colonies has been widely publicized, but not everybody knows that California's native bee species are also vanishing.

They are disappearing as pastures used for grazing are converted into vineyards, vegetable fields, and new residential neighborhoods, according to UC Berkeley researchers who published a story this month [in the journal Rangelands](#).

Native bee species pollinate between 35 and 39 percent of California's crops and contribute at least \$1 billion to its agricultural economy, the study found.

If California's landscapes were more hospitable for bumblebees and other wild pollinators, then the state's farmers could become less dependent on European honeybees, one of the researchers said.

California farmers increasingly rely on beekeepers who travel around the country with European honeybees and pollinate crops. But many of those those honeybee [colonies have collapsed](#), owing to a wide range of factors including pesticide use, disease and stress.

Many of the state's landscapes are becoming increasingly inhospitable to California's native bee species, because they have been paved over or planted with single varieties of crops. Such landscapes do not provide those species with enough "nutritional diversity" to remain strong and healthy, according to lead researcher Claire Kremen.

"A lack of nutritional diversity for the honeybees tends to weaken them. If you had nothing to eat but Big Macs all day and all night, you would get pretty ill," Kremen said. "We really need to think about making those landscapes more sustainable for native pollinators by bringing back some diversity into the landscape."

Rangelands provide some of the best habitats for native bee species, according to Kremen. Wildflowers often flourish on rangelands, in part because grazing cows chew away grasses but avoid eating flowers. Those flowers provide food for the bees.

But tens of thousands of acres of rangeland are lost every year in California, according to California Cattlemen's Association spokeswoman Stevie Ipsen. More than 1.3 million acres of California rangelands have been converted into non-agricultural land, over the past 24 years, association figures show.

Few people appreciate the full value of rangelands, according to Livermore rancher Darrel Sweet, who is involved with the [California Rangeland Conservation Coalition](#), a partnership of farmers and environmentalists that aims to conserve grazing land and improve their environments for wild species.

Sweet said it's not surprising to see so much of the state's ranching land gradually being converted into other uses.

"The temptation is to try to get more economic value," Sweet said. "I think what researchers and scientists are starting to understand widely is that these lands are valuable for what they are."

Mace Vaughan, Pollinator Program Director at the Oregon-based [Xerces Society for Invertebrate Conservation](#), said diseases spread by imported honeybees are also suspected of wiping out native bumblebee populations in some parts of the state

Vaughan said residents can help support native pollinator species by planting native flowering species, keeping pesticides off their gardens and avoiding buying plants from nurseries that use pesticides.

"Pesticide use in people's gardens is a huge problem," Vaughan said.

Source: [The Bay Citizen](#) (<http://s.tt/12JZh>)