

EDITORIAL: Struggling bees need allies beyond the almond industry



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AP FILE

California's almond industry is a colossus. Gushers of water, tons of farm chemicals and fleets of equipment go into the care and feeding of those miles and miles of beautiful and lucrative trees.

But each winter, the whole \$6.4 billion enterprise comes down to one tiny, vulnerable component: bees.

Without bees, there would be no boom in California almonds. No other method of pollination could possibly meet the world's exploding demand.

That's why billions of European honeybees spent much of the past month in the Central Valley, the first and biggest stop on a cross-country circuit that pollinates produce from here to Maine to the Pacific Northwest.

This year, the bees made possible an anticipated 1.85-billion-pound almond harvest which will be shipped all over the world, lining the pockets of California farmers and investors. But as they have for at least the past decade, beekeepers predicted that a third or more of their colonies would be dead before the season's end.

No industry comes close to almond growers in their concern for bee health. But it's not enough, given the disregard in the rest of the food system for bees.

Even here, knee-deep in their favorite kind of pollen and nectar, hazards beset bees. Fungicide cocktails sicken adults and kill larvae. Insecticide-laced fertilizers in neighboring fields taint nearby plants with poison.

Herbicides and drought kill the wildflowers and weeds that bees need for diversity in their forage, so that when the almonds stop blooming, the landscape goes literally from feast to food desert. Then there are the bloodsucking mites that attack at the first sign of weakness.

By all accounts, this year was better than past years. Still, the complex of factors known as "colony collapse disorder" continues to plague bee populations.

"It's death by a thousand cuts," said Bret Adee, a Bakersfield beekeeper whose operation deployed some 50,000 hives this year to almond orchards throughout California.

In the last 20 years or so, Adee said, he has gone from losing about 10% of his bees each year to considering himself lucky at the end of the season if half of his colonies survive.

So what can be done?

The question is critical, and not just for almonds. According to the Washington, D.C.-based nonprofit Center for Food Safety, every third bite of our food, from apples to zucchini, comes from a crop that's been pollinated by bees.

Broadly speaking, the culprit is modern industrial farming. Particularly in the Midwest, bee habitat has been all but eradicated by crops like corn and soy, which have replaced once-diverse landscapes with monocultures.

Even amid crops that, unlike corn and soy, require bees for pollination, herbicides are wiping out the milkweed, mustard and other wild food that pollinators rely on. Meanwhile, systemic pesticides engineered into plants' very seeds appear to be sickening bees and encouraging parasites and diseases.

Bees are far from the only casualty; the situation has brought Monarch butterflies close to endangered species status. But there are only so many ways that farmers can feed 7.2 million people.

That leaves working within the existing agricultural system. Here, whatever the complaints about almonds in arenas such as water or land use, the industry is a leader.

It has spent, for example, \$1.6 million since 1995 on bee health research, more than any group of commodity growers. Last year, the Almond Board of California published a list of best management practices for bee safety.

And recently, one of the state's largest and wealthiest almond growers, Lynda and Stewart Resnick's Paramount Farming Co., announced it would be launching its own in-house bee business.

Though the latter move clearly was to cut costs and ensure bee supply in an increasingly cutthroat market, Paramount's interest is expected to bring even more cutting-edge science to the realm of bee health.

That would be welcome, and little enough to expect from billionaires like the Resnicks. But even with the example

they've set on the bee issue, the almond folks could do more.

For instance, the Almond Board's other members could underwrite more bee research. Even with university labs leveraging its investments, \$1.6 million over 20 years is pretty bare-bones.

Similarly, best practices are great, but only if they're followed by all the growers. Stragglers this year still reportedly sprayed blooms in the mornings when bees were working, or used "tank mixes" of insecticides and fungicides, which, when combined, can be toxic.

Cultivating hedgerows and other bee forage around orchards also would make a huge difference. The fear, beekeepers say, is that bees will neglect the almond blossoms if given other choices. But one reason bees are vulnerable is that monocultures starve them; they need diverse food sources to be strong.

Here's the thing, though: Massive though it is, the almond industry is just one player in a continent full of farmers and consumers. Its contributions are literally fruitless if everyone isn't on board.

The U.S. Environmental Protection Agency is reviewing the safety of neonicotinoid pesticides, which appear to be impairing bee health, and updating pesticide labels to include the impact on developing bees as well as adults.

The White House has a task force on pollinator safety, and lawmakers in California and other states have taken steps to make public lands more available to bees, and less pesticide-ridden.

But the EPA moves slowly. And working bees still get turned away from public lands by managers and park rangers who cling to the canard that European honeybees compete with native insects.

Meanwhile, the rest of us, frankly, take bees for granted.

Pushing for change, rethinking corn subsidies, buying organic, even planting bee-friendly gardens — all of it adds up. That's why we all need to pitch in.

Everyone who eats has a stake in this issue. Bees cannot live on the self-interest of California almond farmers alone.