NEWS

Facing a 'pollination crisis,' beekeepers swarm to aid hives

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BY RICK MONTGOMERY
The Kansas City Star

More than 150 people made a beeline earlier this year to an Independence workshop for beginning beekeepers.

So many, in fact, that Cathy Misko tapped Craigslist to buy 71 extra chairs.

And driving this heightened interest in the well-being of bees? Misko cited a mystery that has vexed scientists since 2006 — a worsening crisis called colony collapse disorder, or CCD.

"It's like when the town's on fire and you ring the bell," said Misko, president of the Midwestern Beekeepers Association. "Everyone comes to help."

Honeybees are vanishing for reasons that are unknown but passionately argued.

Much attention has focused on a parasitic mite with a menacing name, the Varroa destructor. A recent federal report, however, cites a consensus building to point to "no single silver bullet" but rather a cocktail of factors threatening the health of bees.

Many beekeepers blame farm chemicals, a concern that has driven European regulators to impose a two-year restriction on the use of some of the world's most popular insecticides. In America, a coalition of bee enthusiasts, ecologists and food-safety groups are suing the Environmental Protection Agency for failing to protect pollinators.

The phenomenon of colony collapse began to develop several years ago. Whole hives were found empty — every last bee, gone — and the absence of carcasses often mystified beekeepers.

In the ensuing flurry of studies, "At least 10 research papers claimed to have found the solution to CCD, and none of them did," said University of Kansas entomologist Chip Taylor, who noted that bee losses over the past winter were among the highest ever recorded.

"I think we're one bad winter from having a very serious pollination crisis in this country," he said.

A pollination crisis could devastate much more than honey production. Apples, almonds, tomatoes, berries, peaches and flowers would suffer. Said Taylor: "If you don't have pollinators, you don't have other organisms. You don't have plants."

Growing numbers of bee hobbyists, like lovers of a good mystery, are poring through research in a pursuit to save the bees one hive at a time.

For her part, Misko of Centerview, Mo., fills a quart jar with 300 buzzing bugs and sprinkles in two tablespoons of powdered sugar.

She rolls the jar until the bees are dusted in white. This triggers a nirvana of grooming in which the bees scrape off Varroa mites that can plague them. A

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Cathy Misko of Centerview, Mo., inspected frames in a hive last month before showing off her sugary method of ridding bees of the Varroa destructor, a mite.

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grooming in which the bees scrape off Varroa mites that can plague them. A half-dozen discarded mites might turn up in the jar, thus allowing Miska to determine how badly the colony is infested.

"Pepper with legs," she calls the mites' appearance.

But mites, though considered to be major players in the struggles of honeybees, are only part of "a complex set of stressors and pathogens" linked to colony collapse disorder, according to a much-anticipated report issued in May.

Based on the deliberations of a conference arranged by the U.S. Department of Agriculture, the report left experts as puzzled as ever. Environmentalists criticized that it emphasized mites but gave comparatively scant attention to pesticides' role.

Weird weather, depleted natural forage, breeding practices, poor nutrition, the shipping of hives –– all factored into the conference's conclusions. But no single culprit was highlighted to explain the government's alarming finding that one-third of honeybees were lost over the winter.

"I've had bees more than 35 years," said Cecil Sweeney of Heartland Honey & Beekeeping Supply in Spring Hill. "Back when I started, losing 3 to 5 percent of your bees during a winter was pretty typical. Losing 10 percent was really extreme. Now it's beyond 30 percent.

"I wouldn't say one thing or another has caused it. But I do know the whole world of insectides has changed. That's got to have an effect."

Given the 21st-century landscape — farms where bees buzz around plants treated with pesticides — "I don't know of anything I can do about it," Sweeney said. "Move to the most isolated place in the world?"

Ezekiel Amador III of Kansas City wonders if the opposite works: move to the city.

"Our bees are doing great," said Amador, 44, whose interest in bees surged two years ago on growing concerns about CCD.

He has since installed three hives at the Switzer Neighborhood Farm, a community garden surrounded by traffic at 20th Street and West Pennway.

"My theory is that being city bees helps them," Amador said. "We're not near large agriculture areas that would expose them to a heavy use of pesticides and chemicals."

Bayer CropScience disagrees. The chemical company, which employs 550 at a manufacturing plant in Kansas City, recently broke ground in North Carolina for a lab to study bee health.

"Enemy No. 1 is the Varroa mite" that first found its way from Asia to the American Midwest in the 1980s, said David Fischer, Bayer's director of environmental toxicology and risk assessment.

As for the class of pesticide known as neonicotinoids — which took off in the 1990s and which the European Union is now moving to restrict — "there's no evidence linking those products to colony collapse disorder," Fischer said. "And there probably has been more testing on this class of pesticide than any other."

He said if the United States took similar steps to limit the use of neonicotinoids, cornfields would suffer losses of 6 to 12 bushels per acre.

"We'd need to farm a couple million more acres of land to make up for that," he said, adding that replacing natural forage with corn crops would benefit neither bee populations nor the ecosystem.

As the mystery and debate intensify –– perhaps "disorder" is the wrong term, some argue, given the range of threats — local beekeepers likely will pour extra work into a hobby that once was simple and fret-free.

"They're having to constantly replace those hives, buying new queens," said Rick Miller of K-State Research and Extension in Johnson County. "It's a constant battle."

But a loving one, as Misko fills another jar of bees with sugar.

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