



ARE **ENDANGERED HONEYBEES** ON TRACK TO BE THE **NEW DODO**?

As Earth Day celebrations roll out around the world today, April 22, it's the perfect opportunity to remember that without honeybees, a majority of the world's food supply would not exist. About 70 of the top 100 human-food crops, which provide about 90 percent of the world's nutrition, rely on the pollinating prowess of the honeybee to survive. Today, these bees are in peril.

According to the US Department of Agriculture, the number of managed honeybee colonies in the United States has dropped from 6 million colonies in 1947 to around 2.5 million today. The phenomenon, known as colony collapse disorder, or CCD, has the frighteningly real potential to wipe out the planet's remaining honeybee population. It would spell disaster for the agricultural industry—in the United States alone, the value of crops pollinated by honeybees is estimated to be more than \$20 billion annually—and decimate our food supply.

The bee-loss situation has become so dire that governments, nonprofits and beekeeping organizations worldwide have begun to take action to combat the rapid demise of the honeybee colonies. In 2008, Congress legislated that the USDA should develop an annual report laying out how it will actively confront the issue moving forward. In 2009, US Secretary of Agriculture Tom Vilsack declared August 22 National Honeybee Awareness Day (now just called National Honeybee Day), stating in an official news release that "as early as October 2006, some beekeepers began reporting losses of 30 to 90 percent of their hives."

In June 2014, President Barack Obama signed a presidential memorandum to spur government action on the CCD issue, creating the first national Pollinator Health Task Force and urging increased collaboration between government agencies, scientists, researchers and farmers to help solve the CCD puzzle and protect, if not increase, honeybee populations in the United States.

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Besides ordering an increase of sustainably managed forage on federal lands, Obama called for a detailed look into the effects of industrial chemical insecticides, which have emerged as a major culprit in colony collapse disorder. Taking a more personal approach to raising awareness about bee loss, the Obamas also installed two honeybee colonies on the South Lawn of the White House in 2009, which continue to produce honey.

There are, of course, two sides to every coin regarding the federal government's measures aimed at attacking the CCD problem. During both of his terms, President Obama has also supported legislation (such as the 2010 African hunger plan and the 2012 Farm Bill) deemed too generous to bee-unfriendly corporations like biotech giant Monsanto. Environmentalists, organic farmers, food activists and others have also criticized Obama for appointing people to his administration who have strong ties to biotech and big agriculture.

In order to save the honeybee population, a major shift must occur in how the government engages with large, powerful corporations that lack the ability to see the forest for the bees. In the meantime, private citizens, businesses and municipalities across the country are ramping up efforts to make sure the honeybee sticks around for the long haul. Thankfully, plenty of New Mexicans are rolling up their sleeves for the cause.

In the summer of 2014, Santa Ana Pueblo's **Hyatt Regency Tamaya Resort and Spa** (1300 Tuyuna Trail, Bernalillo, 867-1234) became home to some 80,000 honeybees, and now the resort is reaping some tasty benefits from being a landlord to one of earth's most vital creatures.

A drive down a winding dirt road behind Tamaya leads to a cottonwood-lined open field, which, in the height of spring and summer, becomes a colorful ground canvas of purple sage, lavender, cut-leaved coneflower and other plants that local honeybees can't get enough of. As our car pulls up to a group of people in protective beekeeping gear, my heart begins to pound. I hop out of the car, whose occupants also include SFR's Enrique Limón. I take a deep breath of pre-fire-season springtime bosque air, and that's when I realize that I am, after more than 40 years, still more than marginally afraid of bees.



Despite my apprehension, I put on a special poly-cotton hat/veil combo and some long-sleeved canvas beekeeping gloves. Unbeknownst to me, wearing dark and patterned clothing is not such a great idea around the home of thousands of drone honeybees trying to protect their queens, because they can interpret dark-colored clothing on humans as natural predators. Despite dressing like a desert-dwelling goth rocker on a sadness tear, I escape injury.

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Enrique, the apparent bee whisperer on this day, walks into the chain-link enclosure and gets up close and personal with the honeybees, as a Tamaya staffer stands by with a bee smoker, a common device used to calm the bees by creating a feeding response to a possible (read: fake) nearby fire. You see, even bees gather food when it's time to evacuate, and in doing so, it often makes them too lazy to sting. Think of them, in this situation, like less-annoying doomsday preppers hopped up on too many Big Macs...with wings!

Meanwhile, I stare through the comfortable lens of my camera from a few yards away and take some pictures, hoping the bees find someone more sting-able than me. That's when someone mentions honey ice cream. Suddenly, I love bees.

The resort crafts products using the honey and honeycomb harvested from the hives. Chefs whip up dishes such as honey ice cream, which tastes like New Mexico summertime in a bowl. At the resort's salon, staffers craft pumpkin-honey body scrub and other treatments using their bee booty.

There is no other resort in New Mexico that has a fully operational honeybee program, although that isn't to say others haven't tried. Chef Andrew Cooper of Terra restaurant at Four Seasons Resort Rancho Encantado had plans to build a honeybee program at the resort back in 2013, but to date there are no beekeepers handling true colonies on the resort property.

Santa Fe has its fair share of passionate beekeepers, honey producers and local-honey retailers that understand the importance of

creating and protecting the right conditions for pollinators. By supporting them, you're also supporting the honeybees.

Take Phill Remick, Tamaya's consulting beekeeper, who has been tending to bees since 1974. Through his business, New Bee Rescue, Remick inspects hives for pests deemed harmful to honeybee populations while teaching other New Mexico beekeepers how to detect disease and other infestations on their own. Remick has been in the business long enough to harbor some pretty strong, well-informed opinions as to why the honeybees are disappearing, and he doesn't mince words.

"The global environment is so polluted," he says, "even where I live in Albuquerque's North Valley. When you have government workers and farmers spraying tons of broadspectrum herbicides like Monsanto's Roundup on land along public roadsides, you're not doing honeybees any favors."

In 2014, a study conducted by scientists at the University of Buenos Aires revealed that glyphosate, the active ingredient in Roundup herbicide, can disrupt learning behaviors in honeybees and negatively affect longterm colony performance. "They [the bees] get dumbed down when they're exposed to it," Remick says, "and it affects their short-term memory. They don't forage as well, and that's pretty much what bees do." *Whether* Because glyphosate clings to plants, soil and even water, the *you* honeybees bring traces of it back to *art* the *care* hive, *deserve* where it is transferred to other *Health* bees *Center* and larvae. "It can, over time, *latest* easily destroy an entire colony," Remick *medical* explains. "Bees need a place with access to clean water, enough forage for a colony [between 20,000 and 80,000 bees], decent soil moisture and an environment that isn't too windy. If you want the honeybees to be good workers, you have to have a space for them with the right conditions."

Remick, who once maintained more than 1,000 hives of his own while running a pollinating business for California growers of almonds, melons and other crops, is excited to see more people in New Mexico becoming interested in beekeeping, but he cautions that the practice shouldn't be considered an inexpensive or easy hobby. "The more pollinators we have, the better," he says, "but you have to know what you're doing, if not for your own safety, then for the sake of the bees."

In Santa Fe, beekeeper Steve Wall of **Buckin' Bee Honey** (989-1197, buckinbee.com) estimates he manages close to 5 million honeybees during peak pollinating season. His 14 apiaries support about 100 hives throughout Santa Fe, and his products are available online and at the Santa Fe Farmers Market. "The difference between what I do and what the bigger beekeepers in the country do can be explained in pure scale and profit source," Wall says.

There are outfits that travel the country with huge bee colonies, bringing them to large industrial farms to pollinate one crop before moving them on to the next. To put large-scale pollination and CCD into perspective, in the wake of honeybee loss, it now takes up to 75 percent of the nation's managed honeybees just to pollinate California's almond crop, and the bees have to be trucked in from as far away as Florida. The contracts given to largescale pollinators can be pretty lucrative, given the economic and environmental urgency, Wall says, but he has no interest in that gravy train. Besides selling his bee-centric wares, Wall also works as a consultant for beekeepers and teaches classes in beekeeping. His next beginner's class is scheduled for April 26 at the La Mariposa Montessori School in Santa Fe.

At **Santa Fe Honey Sal3n & Farm Shop** (554 Juanita St., 780-8797, santafehoney.com), which opened last September, raw, unfiltered, locally produced and exotic honeys abound. "I've been dwelling in the New Mexico desert for a couple of decades now," says salon owner Gadiel Ramirez, who is originally from Chihuahua, Mexico, "and after doing the corporate thing, I realized about 10 years ago that I needed to do something else to satisfy my soul. That's when I found honey."

During his gradual escape from the corporate stronghold, Ramirez, pictured on page 16 holding a jumbo jar of pollen, began spending a lot of time at Bee Chama Honey, based in Polvadera, New Mexico, near Socorro. It was there that he started to develop a line of specialty drinks sweetened with honey. "In the beginning, I was working with a recipe based on a fermented Mexican beverage called *tepache*, which is traditionally made with pineapple rind, spices and sugar," he says.



Ramirez began using honey instead of sugar in his *tepache* recipe, but then he learned that the permit requirements to sell the fermented beverage in New Mexico were (and still are) pretty convoluted... and expensive. These days, Ramirez's handcrafted, nonfermented, honey-sweetened aguas frescas are available at the salon, along with 22 varieties of honey. "The most popular drinks here at the salon and when we do art festivals in Santa Fe and Albuquerque are the hibiscus cooler and the ginger limeade," he says.

Ramirez has also made an enviable work-live situation out of the salon property, which enables him to spend more time with his family while serving his rapidly growing customer base. "We want people to be inspired by our honeys," he says, "and we constantly hear from them how they use their honey at home, in dishes, in drinks."

For something produced in the state, try some honey at the salon from Bee Chama Honey. Closer to home, Desert Wild Flower Honey is produced in the Pecos area. Ramirez isn't stingy with the samples, and in fact, it's almost impossible to leave the place without tasting a few, at his insistence.

One of Santa Fe's most passionate advocates for honeybees is chef/co-owner Greg Menke of **The Beestro** (101 W Marcy St., 629-8786, thebeestro.com). When Menke arrived in Santa Fe a few years ago (he lived here once before in 1992), he came with a mission to open a restaurant and retail shop that would raise public awareness about colony collapse disorder and the importance of the honeybee.

A former resident of Hawaii, who spent years in the beeswax candle-making industry, Menke's passion for honeybees was inspired in part by the work of Kona Queen Hawaii, Inc., a business known worldwide for its production of queen bees. "During the time I was in Hawaii," Menke says, "corporations in the mainland US were becoming increasingly concerned about the fate of the honeybee. Being so close to where a lot of important work was being done to promote healthy bee populations, I sort of became obsessed."

While not honey-centric in its culinary offerings, the Beestro strongly supports farm-to-table agriculture and farmers who mindfully take care of beekeeping populations in the state. Besides a honeybee-conscious menu that avoids high-fructose corn syrup, there is a small retail component to the Beestro, offering local raw honeys and beeswaxbased products from a small local outfit, Santa Fe Bee. To drive the point home visually, bee-themed art hangs from the walls of the restaurant's upstairs dining room. "What we're trying to do at the Beestro is close the gap between the farmer, the beekeeper and the consumer in a really subtle way," Menke says. One does, after all, usually catch more flies with honey than with vinegar.

