Fears Come True

Varroa mite quickly spreading

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West Hawaii Today
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Sunday, March 21, 2010 7:28 AM HST

Beekeepers of all sorts know they must find a way to coexist with the destructive parasite as varroa mites continue to spread across the Big Island.

"I'm just waiting for the first mites to arrive. It's inevitable and it will be devastating," said Pohakea Mauka resident Debbie Chang. "We're going to have to learn how to coexist with these mites because it can't be eradicated. We'll have to help the bees survive and manage the inevitable."

With three hives in Paauilo, more than 50,000 honey bees strong, Chang said she can produce enough honey to share with family and friends. While mites have yet to infest her hives, she said she has been to many lectures and workshops to educate herself on varroa destructor prevention, treatment and maintenance.

For Chang, beekeeping is a hobby; for others it's a means of living.

Volcano Island Honey Co. founder and owner Richard Spiegel found the mites in a few colonies on Jan. 1 at his farm in Ahualoa. The organic honey company, which produced more than 18,000 pounds of organic, never-heated or pressure-filtered honey in 2009, is currently experimenting with organic, toxin-free ways to get rid of the pests.

"They came a lot earlier than anyone expected. They are moving across the island faster than expected," Spiegel said. "I just went into shock. All the fear of the mite is now a reality. ... I'm in a very difficult position and I don't have an answer to the problem."

Varroa mites arrived on the Big Island in 2008, about a year after the mite was found on Oahu, Spiegel said, noting the mites haven't been found on any other Hawaiian Island. The mite weakens a bee's immune system, allowing it to fall prey to diseases such as deformed wing virus, which stunts the development of a bee's wings making the insect essentially useless to a hive.

About 20 people, mostly members of The Kohala Center, spent Saturday morning at Ahualoa's Volcano Island Honey Co. learning the ins-and-outs of beekeeping from Spiegel as well as sampling the fruits of thousands of bees' labor.

Waikoloa residents Gladyc and Ralph Quistoroff attended the four-hour workshop to increase the couple's knowledge of honey bees. They have a garden at their Waikoloa home, which she said is well pollinated by feral bees, but would like to add a bee hive to a Waimea-area garden that would allow children to learn more about the social insect.

"We want to incorporate this into a school garden project," said Gladyc, a volunteer at Waimea Elementary School's garden. She said that while it may be a challenge to incorporate a hive into a school garden because of safety concerns it would provide children with a new learning experience. "Kids can learn to respect insects and how important they are to everything in life."

Bees are responsible for pollinating nearly a third of the world's food supply, Spiegel said, adding that humans have collected honey from bees for more than 8,000 years. Without bees in Hawaii, produce such as avocado, lilikoi and macadamia nuts will be affected.

"Whatever is pollinated by bees in Hawaii will change. We're all dependent on these wild bees and when they go down all of it changes," he said. "It is everyone's projection that they will all die, but a few might survive and they may come up with some immunities or resistance to the mite."

Spiegel said worldwide bee numbers will continue to decline as the insect is exploited for monetary gain. Chemicals used to deter pests and the loss of open land, he said, will only make the matter worse.
"These are symptoms of abusing the Earth and the creatures on the Earth that we humans have been abusing for a long time," Spiegel said. "You can't keep abusing a system before it finally starts to show the results -- the consequences of what we're doing."