

## **Western Montana beekeepers take delivery of insects with interest buzzing**

Sunday, May 6, 2012

By: Rob Chaney



Rowan Welch dumps a package of bees into a colony box at Bee Alert Technology's facility at Fort Missoula on Friday. The new colonies are used for Bee Alert's scientific projects for clients like the U.S. Army, and for University of Montana professor Jerry Bromenshenk's research.

### **Buzzing to class**

Apprentice beekeeping classes start May 21 and run Mondays, Wednesdays and Fridays through June 11 at Fort Missoula. Students can receive academic credit. Participants must provide their own beekeeping supplies. Cost is \$325. For more information, call 541-3160 or email [beersearch@aol.com](mailto:beersearch@aol.com). For online information, check out [www.umt.edu/ce/programs/bee.aspx](http://www.umt.edu/ce/programs/bee.aspx).

Who'd have thought the biggest threat to honeybee existence could wind up being their rescuer?

The mysterious colony collapse disorder that pushed the world's honeybee industry to crisis also pulled dozens of Missoulians to Fort Missoula on Friday. There, they took delivery of more than 200 packages of Carniolan bees – roughly 1.5 million insects stacked on a single flatbed trailer.

"I just want to help the bees survive," said Dorothy Bayer as she held a three-pound package of bees close to her chest. The 11-year-old had driven down from Hamilton with her parents to pick up a starter colony from bee expert and University of Montana professor Jerry Bromenshenk.

Unafraid of stings, Bayer explained she hoped to get some honey out of her project. But she also wanted to establish a new foothold for the insects that pollinate crops, produce candlewax and form a critical link in any local ecosystem.

From a high of 11 million beekeepers in North America 40 years ago, the ranks had dropped to 2.5 million when people like Bromenshenk started sounding the colony collapse disorder warnings around 2006. Since then, beekeeper numbers have climbed to about 2.7 million, thanks largely to amateur interest like Bayer's.

"There's been a real resurgence," Bromenshenk said. "We have so many pests and pathogens, that now between the mites and the diseases, you can see a bee kill and not know what happened. You'll be keeping bees and suddenly you lose your hive and you don't know why. In the past, there had always been enough feral colonies around to serve the purpose of pollination. But the mites destroyed most of the wild feral colonies, and people started noticing there were no bees in their backyards."

UM's School of Extended and Lifelong Learning capitalized on that concern to develop an apprentice-level beekeeping class this spring. Starting May 21, the beginner, intermediate and master level courses should ensure the public interest doesn't fade into another fad.

"If they don't manage their bees properly, they'll be severely disappointed," Bromenshenk said. Tough as individuals, bees' social colonies face lots of challenges. For example, if a hive box gets too many bees, they'll swarm and fly away to a new home. An abandoned colony can become a disease vector that sickens other hives in the area.

Properly cared for, a home bee colony can produce about 100 pounds of honey for every Coleman cooler-sized hive they fill. As the summer goes on, a colony can expand to three, four or five of those hive boxes.

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**Once the private beekeepers** finished picking up their packages last week, Bromenshenk and his Bee Alert Technology co-workers started filling their own colonies.

Head beekeeper Scott Debnam used a pry-bar to lift out the can of sugar-water that doubled as a plug to the screened wooden boxes. Inside, locked in a little cell about the size of a pack of chewing gum, was the queen bee of the future hive.

While most spectators wore white pollination jackets with mesh helmets, Debnam relied on his attitude for protection from the thousands of stingers flying around him. And his attitude was: "I always respect my co-workers. I'd never slap a co-worker."

He also advised a watcher to ditch his dark-green raincoat. Turns out most bee predators are dark-colored and/or furry. Dark objects attract attention and perhaps aggression.

Debnam confessed he doesn't like honey, but loves working with bees. An Alabama transplant who was looking for work 10 years ago, he answered a want ad for Bee Alert with no prior experience with bees. Nevertheless, he found he had a gift for handling them.

With bare hands he grabbed a package, removed the queen's cage and gave the box a thunk on the ground. The thousands of bees inside all fell in a clump on the bottom – they were clinging to one another and not the walls of the box. Debnam attached the queen cage to a panel and put it in a colony box, and then dumped the worker bees in alongside her. The workers would eventually chew away the cork plug imprisoning the queen, releasing her to a life of egg-laying in the bottom of the hive.

Carniolan bees adapt well to Montana compared to other species, Debnam said. Lifting off the top of a hive of Italian bees, he pointed to the mass of workers crawling over blobs of wax. Italian queens start producing eggs as soon as the weather warms up, giving their hives a head start.

Carniolan queens use more caution. Debnam said they seem to sense the fickle nature of Montana springs, and don't lay so many eggs at first. So when the rains return and the temperature stalls new flowers, the Carniolans haven't overpopulated the hive and can wait out the hungry time. Italian hives may starve.

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**Several of the colonies** in Bee Alert's fenced-off work area had red bottles on their tops. Those were for the scientific projects Bromenshenk has been working on for clients like the U.S. Army.

Bees have proved adept at finding landmines and toxic chemicals. They also helped refine high-tech protein analysis the Army uses to identify poisons its troops might encounter on the battlefield. That work led to a new understanding of colony collapse last year, by using the Army's sensors to spot a unique combination of virus and fungus infection that broke up bee hives.

Bee Alert electronics technician Will Leishman helps outfit the company's "smart hives" with sensors that count the bees' comings and goings, temperature and other aspects. He's also working on a laser that can produce three-dimensional maps of bee activity in the wild. On Friday, he found loading new hives an enjoyable part of the job.

"I don't have much experience with bees, actually," Leishman said. "But they're a lot easier to work with than electrons."

The bees, packages and colony boxes came from Western Bee Supplies Inc. of Polson. The company manufactures "woodenware" for beekeepers all over the globe. Owner Rick Molenda said colony collapse disorder opened a new market for his business. After contracting from three shifts a day to one earlier in the decade, Western Bee is back to two shifts and 70 workers.

“When CCD first happened, we weren’t sure what to expect,’ Molenda said. “Then the new hobbyists started getting interested.”

The company still ships 45,000-pound loads of woodenware three times a week by semi truck, as well as containers to Australia, Europe and the Middle East. But it’s also added a showroom for small-time, walk-in customers.

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Target Range resident Kathy Armstrong was in the line waiting for a new package of bees. This was her fourth year raising them, although she still called herself a “newbie.” Her favorite part of the activity was showing kids how to use a 100-year-old spinner to fling the honey off the beeswax honey combs at harvest time.

“These guys are just phenomenal,” Armstrong said of the apprentice program. “They’ll teach you everything you need to know.”

One subject of persistent chatter in the line was how to protect hives from dark, furry predators like bears. Armstrong had invested in an electric fence only to find an unexpected vulnerability.

“When our hot tub broke, we had to turn off the power,” she said. “While we were fixing the tub, a bear got in and knocked over the colony. The queen got away.”

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Read more: [http://missoulia.com/news/local/western-montana-beekeepers-take-delivery-of-insects-with-interest-buzzing/article\\_01fd3a12-9717-11e1-8dd1-001a4bcf887a.html?mode=story#ixzz1uCI75N21](http://missoulia.com/news/local/western-montana-beekeepers-take-delivery-of-insects-with-interest-buzzing/article_01fd3a12-9717-11e1-8dd1-001a4bcf887a.html?mode=story#ixzz1uCI75N21)