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Honeybees need you to eat organics

By REESE HALTER
Special to The Star

Honeybees are crucial pollinators responsible for every third bite on our dinner plate. A recent survey revealed that our humble honeybees are sicker than ever.

Honeybee deaths this year were much higher than last year.

And last year marked record-low honey production. Honey production dropped 12 percent, to 144 million pounds.

More than 50 billion honeybees have perished within the last year in the United States. Scientists call it Colony Collapse Disorder. When honeybees get sick, they will not return to the colony. Nature designed these social creatures not to infect one another when they get ill. The queen bee is the only insect left in the hive; helpless, she, too, dies quickly.

Worldwide, honeybees account for at least \$250 billion of commerce annually. Every continent except Australia is suffering badly from the decline of bees.

As early as 2005, a study found 66 different pesticides in one hive. Not only were three-quarters of these pesticides toxic to bees, but the combined effects multiply the toxicity by as much as 1,000 times. Research conducted in 23 states recently found 121 different pesticides in 887 samples of bees, wax, pollen and hives. Scientists believe that pesticides are a key component of Colony Collapse Disorder.

Even low-level pesticide exposure weakens bees' immune systems. Stressed bees are highly susceptible to mites that spread viruses and to fungal parasites that cause "bee diarrhea."

Of even more concern was that three out of five pollen and wax samples from the 23 states had at least one systemic pesticide — a chemical designed to spread throughout all parts of a plant.

Essentially, bees are harvesting pollen laced with lethal poison and feeding it to their young. In addition, many of these systemic pesticides are from a family of highly toxic chemicals called neonicotinoids. Bees exposed to these chemicals exhibit symptoms similar to humans afflicted with Parkinson's disease or Alzheimer's.

Although cellular phones and towers are not found in high concentrations on farmers' fields or in wild forests and meadows, recent studies have shown some disturbing results that impair any bees foraging near towns or cities around the globe.

A cellular phone placed in a bee hive, powered up twice daily for 15 minutes over a three-month period, caused honey production to cease during each 15-minute period. The queen laid only half as many eggs and the hive shrank dramatically. Cellular phone radiation in the frequency range of 900 to 1,800 MHz also disrupts the bees' ability to navigate.

Happily, a unique population of honeybees, *Apis mellifera*, isolated for perhaps 10,000 years, has been found living at an oasis in the northern Sahara Desert. This pathogen-free population is being studied for possible genetic traits that enable these bees to fend off the *Varroa* destructor parasitic mite and help beekeepers worldwide.

A colony of bees requires the equivalent of 20 football fields, each full of flowers, to make a living for 30 days. In the wild, about 40 full-sized maples, basswoods, apple and tulip trees per acre have about 1 million blossoms that can also support one colony of bees for part of their harvesting season.

Support organic farming and local beekeepers, eat locally and consider what Albert Einstein supposedly said: If bees disappeared from earth, man would have no more than four years to live.

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