Honey bees are dying by the millions!

In the last few years, have you noticed fewer and fewer honey bees foraging flowers in your yard or garden? Did you have poor fruit and vegetable crops that could have been related to the lack of insect pollination? The rest of this article will explain why there has been a serious loss of domesticated honey bee colonies across the U.S. Some researchers have estimated that 90% of the wild honey bee hives have been wiped out and colonies of domesticated bees have been reduced by 40-60% in many states.

The major contributor to failing colonies are parasitic mites that attack and weaken the honey bees and cause them to be more susceptible to disease and cold weather. The mites that have been implicated in this problem are the varroa mites.

Varroa mites originated in southeast Asia, where they were a natural parasite of the Indian honey bee. Indian honey bees were able to tolerate the varroa mite; the mite was a pest, but not a fatal one. However, when European honey bees were moved into Asia, the mite found a new host to feed upon. The European honey bees, the species imported into the U.S. for honey production, did not have any resistance to the varroa mite. This problem has completely spread across the North America in a decade; the varroa mite was first discovered in the U.S. in 1987.

The varroa mites are external parasites that suck the blood from both adults and brood, and weaken and shorten the life span of the infested individuals. Emerging brood may be deformed with missing legs or wings.

Mites spread easily from colony to colony by drifting workers and drones or when workers rob honey from infested colonies. Beekeepers who capture wild swarms should examine them for mites before placing them in an apiary as this is another way to get a mite infestation started.

Detection can be done by examining drone brood for the presence of varroa mites or by examining workers. The mites are easily seen without the need of a microscope. It is important for beekeepers to check for varroa from mid-March to May 1 and again in August.

When varroa mites are detected in the spring, colonies should be treated prior to the main honey flow and drone rearing period. Apistan® is the only treatment that is legal in the U.S. It is important to treat all colonies in an apiary at the same time to minimize reinfestation.

The presence of this important parasite means that beekeepers must do a better job managing their colonies. Domestic hives that are well managed will continue to be productive, but poorly managed hives will likely only survive a few years. Wild hives will also die out.

Unless they work with a beekeeper, serious fruit and vegetable producers can no longer rely on wild bee populations for pollination. To learn everything you need to know about keeping bees, come to a 12-hour *Beginner's Beekeeping Workshop*, taught by Marion Ellis, UNL Extension Apiary Specialist. This workshop will be held Monday, March 16; Tuesday, March 17, 6:30 to 9:30 p.m. and Saturday, April 4, 10:00 a.m. to 4:00 p.m. At the six-hour lab session, participants will examine working hives, learn how to install package bees and put together hive equipment. The cost of this workshop is $15, that includes reference books. For more information, call Barb Ogg, 441-7180. (BO)

Boxelder bugs and the cluster fly

The warming sun in late March and early April awakens several insect species that invaded dwellings last fall seeking suitable habitat for a winter snooze. They will also wake up during warm spells in January/February and be most noticeable on southerly exposures. Most noticeable, at this time, will be boxelder bugs and cluster flies.

Boxelder Bug

Boxelder bugs are found throughout southeastern Nebraska wherever boxelder trees occur. They are found on or in close association with seed-bearing, female boxelder trees. The adult is 1/2" in length, and the black and red cross pattern on its back makes this insect easy to distinguish from related species (stinkbug and milkweed bug). They move to structures in the fall seeking hibernation sites in buildings (cracks, crevices, attics, under shingles, etc.). When a boxelder bug becomes active in the spring it will often find its way into your home. They cause no harm other than occasional spotting of windows and curtains. Control with insecticides in the dwelling is not usually necessary. A fly swatter or a paper towel will help get the job done. For long-term control you must deny access to your home. Careful inspection of your home to determine points of entry and repair of these areas is necessary. A second alternative is to remove seed-bearing boxelder trees.

Cluster Flies

Cluster flies are similar in appearance to house flies. Side by side, the cluster fly is slightly larger. Behaviorally, cluster flies are sluggish compared to house and other flies. They begin to appear on windows on the sunny side of the building in early spring. Cluster flies are parasites of earthworms. Their presence is an indirect indication that you probably have a fairly healthy local earthworm population. They are so named because of their clustering behavior in overwintering sites. They seek out protected areas such as wall voids and other suitable areas in the structure that the flies can access from the outside. Removal of cluster flies is easy because they are sluggish. Remove the flies by vacuuming. For long-term control you must deny access to your home. Careful inspection of your home to determine points of entry and repair of these areas is necessary.

Minor, routine maintenance of the external structure of a dwelling will discourage many, if not all, fall invading insects. Besides boxelder bugs and cluster flies, several other species of insects also attempt to grab a winter nap in dwellings. This list includes some wasps and hornets, elm leaf beetles, and ladybird beetles.

Source: Landscape Crop Advisory Team Newsletter-MSU. (SE)

Pesticides and child safety

A report by the National Research Council of the National Academy of Sciences concerning pesticides in the diets of infants and children has generated renewed interest in protecting our children from harmful pesticide residues.

While we need to ensure that pesticide residues on food do not harm our children, an even greater danger exists with the storage and use of pesticides in our homes. While pesticides are useful in managing pest problems, they must be stored and handled properly.

A U.S. Environmental Protection Agency (EPA) report regarding pesticides used in and around the home revealed some significant findings:

• Almost half of all households with children under 5 years of age had at least one pesticide stored in an unlocked cabinet less than 4 feet off the ground (i.e., within the reach of children).

• Approximately 75 percent of households without children under 5 also store pesticides in an unlocked cabinet, less than 4 feet off the ground. This number is significant because 13 percent of all pesticide poisoning incidents involving children occur in homes other than the children's own.

• Bathrooms and kitchens were cited as the areas in the home most likely to have improperly stored pesticides.

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Environmental Focus

Congratulations!

Students from around Nebraska participated in the America Recycles Day poster contest. The theme was Keep Recycling Working: Buy Recycled. Members of the Coalition on Recycling in Nebraska selected the winners.

Ms. Bev Cram's fourth grade class at Messiah Lutheran School in Lincoln was awarded first place in the grade four through grade six competition. Jacob Thomas, Holmes School received an honorable mention. Winners were given monetary awards, certificates, t-shirts and products made from recycled materials. Arlene Hanna, Cooperative Extension and Harry Heafer, Clean Community System presented the awards. (ALH)

Fourth graders at Messiah Lutheran School, Lincoln, are awarded first place in poster competition.

Jacob Thomas, Holmes School, Lincoln, is awarded honorable mention.

Environmental and natural resources on the Internet

Do you enjoy this page? If so, and if you have access to the internet, find Lancaster County Extension information at the following address: http://www.ianr.unl.edu/ianr/lanco/enviro/

We have put fact sheets and information related to solid waste management (biosolids, compost, recycling), insect and wildlife control, soil and water conservation, water quality and youth environmental education. We will continue to update this page, adding articles, fact sheets and pictures as we can. Let us know what you think by sending us e-mail. (BPO/SE)