

Honey Bees Facing Uncertain Future

By Tom Durkis, State Entomologist
Division of Plant Industry

Beekeeping in New Hampshire is an old and beloved form of agriculture. It is often considered a minor agricultural activity, but because of its relevance to other phases of agriculture, it is way more important than one would expect. There are several thousand colonies of bees in New Hampshire whose uses include pollinating a wide variety of agricultural crops and the production of honey and associated products.

The pollination of our crops is the greatest honeybee contribution. Without their services many of our crops would not produce fruit or set seed. Although other insects perform this service, honeybees are by far the most numerous and important pollinators. Agriculture is dependent on cultivated bees particularly since feral honey bee populations have been almost completely eliminated and native pollinating insects are in short supply.

Several conditions have contributed to the decline of cultivated honeybees and even more so in feral colonies. There was a time when even beginning beekeepers could, without much difficulty, expect to produce strong colonies of bees. Not so anymore. Our bees, over the past ten to fifteen years, have been plagued with a whole series of bee problems that have contributed to their decline. The problems in New Hampshire started in 1992 when we first found tracheal mite. Then Varroa mite was discovered in 1998 and with it deformed wing virus which is vectored by the mite. We had a hint of Small Hive Beetle trouble in 2000 and now in 2007 the focus is on Colony Collapse Disorder.

Beekeeping has always been a vocation of detail. You had your knowledgeable and your not so learned beekeepers. Both however in the past were able to have some success. The skilled beekeeper had strong colonies and the not so knowledgeable beekeeper had weak colonies. However in the advent of these new insect and disease pests it is becoming increasingly more difficult to be successful. Beekeepers need to be more careful in managing their bees but even so, skilled beekeepers can and are being affected by conditions beyond their control.

The newest problem termed Colony Collapse Disorder (CCD) has gained considerable national attention. Beekeepers around the US and right here in New Hampshire have reported problems with their hives. Colonies appear healthy and in a brief period of time simply collapse. The bees simply disappear, hence the name "disappearing disease."

The cause of CCD is still unknown, however scientists have identified several pathogens that may be causing the problem and several possibilities have already been ruled out. Since we still aren't sure of the causal agent of the malady then we can only base our claims of having it here in New Hampshire on symptoms that are expressed by the disorder.

The New Hampshire Department of Agriculture, Markets & Food, upon request, is investigating those hives that beekeepers suspect may have experienced CCD. The fact that it is being reported in 20 or more states indicates that it most likely will arrive here if it isn't already present. To date, our state beekeeping inspector hasn't encountered any documented cases but only a small number of hives have been examined. We've been fortunate to have had an extremely successful pollination year and fruit set is outstanding. But knowing that nationally there is a definite decline in honey bee populations, we're keeping a watchful eye on our important New Hampshire honey bees.

For more information about this topic and others, contact the Division of Plant Industry, NH Dept. of Agriculture, Markets & Food, PO Box 2042, Concord, NH 03302-2042, call us at (603) 271-2561, piera.seigert@agr.nh.gov, or visit our website www.agriculture.nh.gov.