CSI – THE CASE OF THE DISAPPEARING HONEYBEES

A puzzling and potentially catastrophic illness is devastating honeybee populations across the United States from California to Florida, claiming up to 80% of bee colonies in some areas. Beekeepers are finding once-healthy colonies abandoned in just a few days time. The absence of dead bees makes it difficult to determine what ails them and where they have gone. Without a definitive explanation, scientists are referring to the honeybee decline as Colony Collapse Disorder (CCD).

Finding the cause of the problem is vital for U.S. agriculture. The United States has long been blessed with an abundance of a great variety of affordable food. That luxury, taken so much for granted, may be coming to an end unless scientists can get to the bottom of the mysterious disappearance of these essential little insects. Most people give little thought to the role that honeybees play in our lives. However, considering the fact that every 3rd bite of food we eat has depended on bees for pollination, the crisis has grave repercussions for the world's agricultural supplies. A Cornell University study has estimated that honeybees annually pollinate more than 130 crops in the U.S. - worth more than $14 billion - mostly fruits, vegetables and nuts. In California, a million beehives containing over 40 million bees are required for the successful pollination of California's almond crop alone, which is valued at over $2 billion annually.

A consortium of researchers from universities, federal and state agencies, and industry representatives are working hard to identify the cause or causes of CCD and to develop strategies and solutions for managing the problem. Preliminary studies point to parasites and pesticides as the possible suspects. Of particular interest is a class of insecticides known as neonicotinoids, which have been widely detected on pollen in other countries experiencing die-offs. At certain levels these insecticides may impair the bees' memory, which would explain why virtually all exposed bees leave the hive, never to return. Sort of an Alzheimer's Disease for honeybees.