Colony Collapse Disorder: The Honey Bee Epidemic?

Key Points:

- Beginning in 2006, beekeepers in the U.S. experienced a sharp, mysterious increase in honey bee hive losses. This problem has persisted and has come to be known as Colony Collapse Disorder (CCD).

- Agriculturalists are greatly concerned about CCD. Nearly one out of every three bites of the American diet is the result of a pollinator’s handiwork.

- U.S. producers rely heavily upon commercial migratory honey bees to ensure adequate crop pollination. Experts estimated that pollination contributed $17.1 billion to the U.S. agricultural economy in 2009.

- The exact cause or causes of Colony Collapse Disorder are still unknown; however, scientists believe that CCD occurs due to a combination of factors that ultimately compromise the health and productivity of honey bees.

- Armed with key new findings from the latest research, beekeepers and farmers are enhancing colony management practices in order to promote wellness among the honey bee population and keep CCD at bay.

- Media hype has likely fueled added interest in the subject and ultimately helped to promote the cause of honey bees. The research and funding targeted to combat CCD has arguably provided a greater insight into the overall health and well-being of honey bees.

- Keen interest in CCD may result in widespread knowledge and improved management practices that will conserve, and perhaps even promote, the honey bee population for years to come.

The Mystery of the Missing Bees

When beekeepers in the U.S. noticed a sharp increase in honey bee hive losses in 2006, they became concerned. As the elevated number of colony losses persisted over the next few years the apiary community mobilized to search for the cause of this unprecedented phenomenon, which was dubbed Colony Collapse Disorder (CCD). Since then, CCD has been a hot topic in the headlines, and the media have broadcast the problem to an audience well beyond the beekeepers and farmers that are directly impacted by the syndrome. The objectives of this report are to provide an overview of CCD and its significance to agriculture, and to determine whether the disorder is truly the environmental catastrophe that is depicted in the headlines.