

USDA Pollinator Efforts Underway and an update on CCD

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- ***USDA Coordination of Response to Pollinator Decline***
- ***Federal Coordination of Response to CCD***



USDA Pollinator Protection Committee

- *Mission: To more effectively mitigate pollinator decline by coordinating pollination research, conservation, and education among USDA agencies and their partners.*

USDA Pollinator Protection Committee

- Agricultural Marketing Service
- Agricultural Research Service
- Animal and Plant Health Inspection Service
- Cooperative State Research, Education, and Extension Service
- Economic Research Service
- Foreign Agricultural Service
- Farm Service Agency
- Forest Service
- National Agricultural Statistics Service
- Natural Resources Conservation Service (chair)
- Risk Management Agency
- USDA Invasive Species Coordinator

USDA Pollinator Protection Committee Activities

- Identified agency roles
- Raising awareness of importance of pollinators within the administration
- Coordinating response to NAS recommendations
- Sharing data
- Exchanging information on conservation programs
- Developing opportunities for collaboration with NGOs

CCD Response

CCD Steering Committee

- *Mission: To lead the federal and land grant university effort to find the cause(s) of and mitigate CCD with state, university, and private research cooperators.*

CCD Response

CCD Steering Committee

- Federal Agency
 - Department of Defense
 - EPA
 - USDA Agricultural Research Service (co-chair)
 - USDA Animal and Plant Health Inspection Service
 - USDA Cooperative State Research, Education, and Extension Service (co-chair)
 - USDA Natural Resources Conservation Service
- Land Grant University
 - Pennsylvania State University
 - Purdue University

What is CCD?

- Colony collapse disorder is a syndrome in which:
 - Sudden loss of colonies
 - Bees disappear
 - Laying queens & attendants remain
 - Pollen stores and brood in cells

Status of CCD: Occurrence in 2007 & 2008

- Losses* nationwide were ~35 percent of managed hives between September 2007 and March 2008, compared to a 31 percent loss during the same period a year earlier.

*All causes, not just losses from CCD.

- About 10 percent loss from CCD by self-reporting.

Survey and Analysis and Our Understanding of the Cause(s) of CCD

- Chemicals
 - Pesticides
 - Toxins
 - Nutrients
- Pathogens
- Migratory Stress

Major Migratory Routes of Honey Bee Colonies



California almonds require 1.2 million honey bee colonies from January through March each year; that represents almost half of all managed colonies in the U.S.

Working Hypothesis for CCD

Migratory Stress



Varroa Mites



Management
Nutrition
Pesticides



Nosema

Secondary Pathogens



Viruses



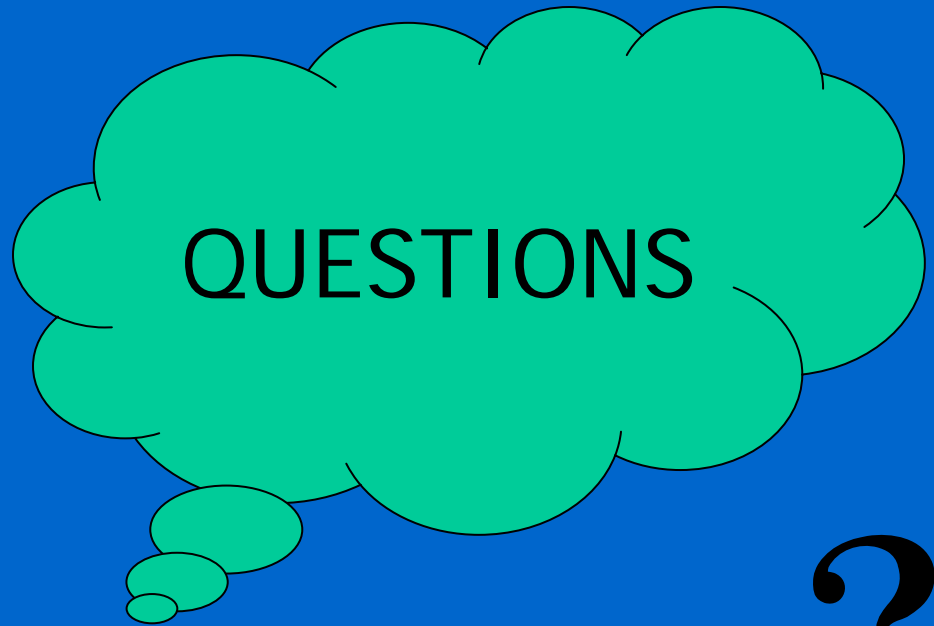
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Future CCD Efforts

- Research and Demonstration Projects
 - CAP
 - Areawide
- Best Practices Guides
- Pesticide Sampling Protocol
- Websites, e.g., e-Xtension
- Develop Alternative Pollinators
- Revise Standards to Protect Pollinator Habitat
- Conduct a National Bee Health Survey

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