USDA Pollinator Efforts Underway and an update on CCD

Kevin Hackett and Jeff Pettis
USDA-ARS

Doug Holy
USDA-NCRS
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Kevin Hackett and Jeff Pettis USDA-ARS
Doug Holy USDA-NRCS

- 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
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
- Secondary Pathogens
- Viruses
- Management
- Nutrition
- Pesticides
- Nosema
- Fungi
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
QUESTIONS