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United States Department of Agriculture
Natural Resources Conservation Service

USDA NRCS

Pollinator Policy: Motivation, Legislation, and On-going Efforts

Various Global Pollinator Policy Efforts

- **September 1996** Subsidiary Body on Scientific Technical and Technological Advice of Convention on Biodiversity, Montreal, met to establish an “International Pollinator Conservation Initiative”

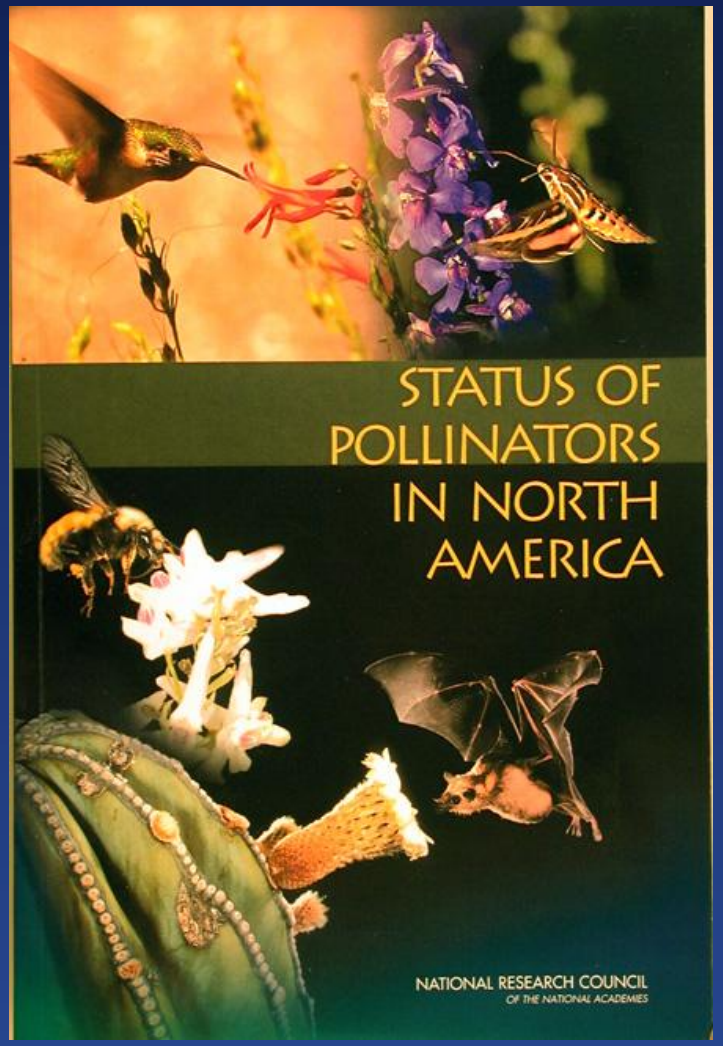
- **October 1998**, International Workshop on Conservation and sustainable use of pollinators in Agriculture, “Sao Paolo—Declaration”

- **May 2000**, Kenya, Fifth meeting of Conference Of the Parties, International Initiative for the conservation and sustainable use of pollinators—Food and Agriculture Organization-sponsored International Pollination Initiative

North American Efforts

- CY 2000, Creation of the North American Pollinator Protection Campaign (NAPPC) with mission, “To encourage the health of resident and migratory pollinating animals in North America.”
- CY 2002, NAPPC approached the National Academies of Science, National Research Council to undertake a study of the status of pollinators in North America.

The U.S. Department of Agriculture and U.S. Geological Survey in 2004 funded a study by the National Academy of Sciences, National Research Council to examine data on pollinator status in North America.



Study Scope

- To what degree, if any, are pollinators experiencing serious decline?
- Where decline can be established by available data, what are its causes?
- What are the potential consequences of decline in agricultural and natural ecosystems?
- What research and monitoring are needed to improve information?
- What conservation or restoration steps can be taken to prevent, slow, or reverse decline?

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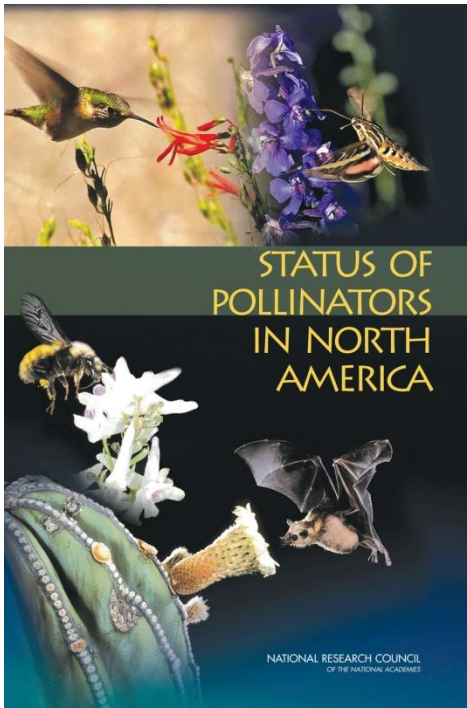
Status of Pollinators in North America

Report Briefing October 2006

Committee Membership

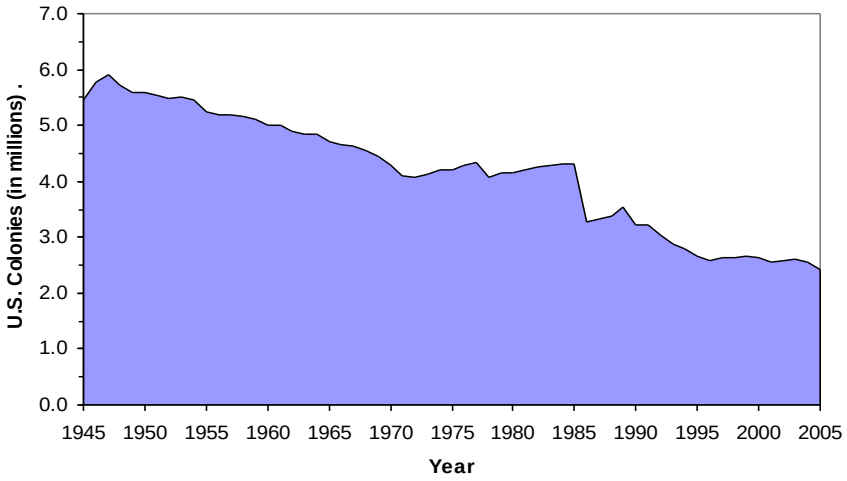
- May Berenbaum (chair)
- Peter Bernhard, St Louis University'
- Stephen Buchmann, The Bee Works
- Nicholas Calderone, Cornell University
- Paul Goldstein, Florida Museum of Natural History
- David Inouye, University of Maryland
- Peter Kevan, University of Guelph
- Claire Kremen, University of California-Berkeley
- Rodrigo Medellin, University of Mexico
- Taylor Ricketts, World Wildlife Fund
- Gene Robinson, University of Illinois Urbana-Champaign
- Allison Snow, Ohio State University
- Leonard Thien, Tulane University
- F. C. Thompson, U.S. National Museum
- Dr. Scott Swinton, Michigan State University



Managed Pollinators

Status

- Long-term population trends for honey bee in the United States are demonstrably downward.
- Similar data are not available for other managed pollinators.



U.S. honey bee colonies, 1945-2005. Data compiled from USDA-NASS

Wild Pollinators

Status

- There is evidence of decline in the abundance of some pollinators: bumble bees and some butterflies, bats, and hummingbirds
- For most pollinator species the paucity of long-term population data and the incomplete knowledge of even basic biology make definitive assessment of status difficult.

Report Suggestions

- Made recommendations for a number of USDA and DOI agencies concerning their pollinator-related activities including - -

* Expand basic research on the systematics of pollinators and on development of rapid identification tools.

* Develop management protocols, for pollinators and landscapes, for non-*Apis* and wild species as alternatives/supplements to pollination by honey bees.

* Conduct discovery surveys for crop pollinators in North America to determine pollination services contributed by wild/native pollinators.

Additional Report Suggestions

* Conduct discovery surveys in non-agricultural systems for pollinators of rare, threatened, and endangered plant species.*

* Establish a network of long-term pollinator-monitoring projects that use standardized protocols and joint data-gathering interpretation among the U.S., Canada, and Mexico. *

* Expand economic incentives for pollinator conservation with land managers and landowners to encourage adoption of pollinator-friendly practices..

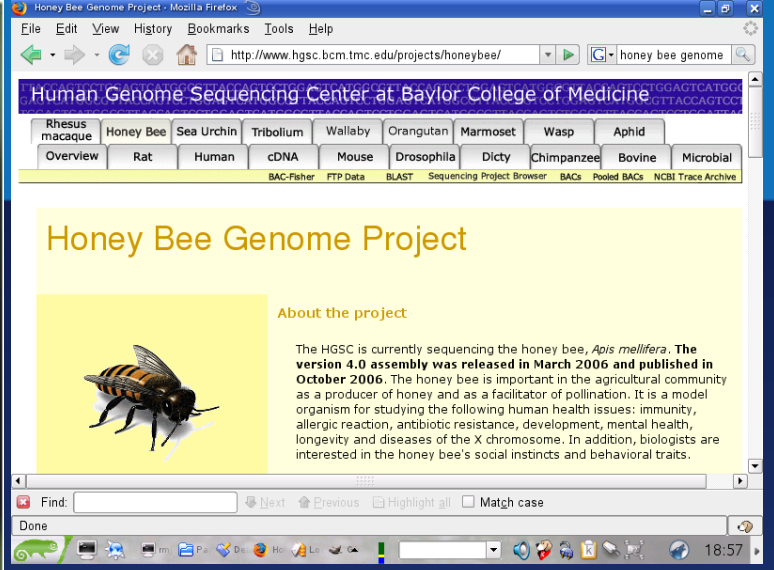
October 2006 Reports of Mysterious Honey Bee Disappearances

Coined the condition of

"Colony Collapse Disorder"

"Colony Collapse Disorder"

- TV and newspaper news reports
- CBS and CNN Specials
- Congressional inquiries
- Colony Collapse Disorder Steering Team
- PUBLIC AND CONGRESSIONAL INTEREST IN HONEY BEES AND POLLINATORS !



October 26, 2006: release of the honey bee genome

Pollinator Legislation Motivation

- “Status of Pollinators in North America”
- “Colony Collapse Disorder”
- Honeybee Genome Sequencing
- Attention from Congress and the Public
- Increased NGO services to the Public and influence upon Congress regarding pollinators

The 2008 (2009) “Farm Bill”

2008 Farm Bill Conservation Title

- **Administrative Requirements for Conservation Programs** (P. 161)
- ***"(h) ENCOURAGEMENT OF POLLINATOR HABITAT DEVELOPMENT***
- ***AND PROTECTION.—In carrying out <u>any</u> conservation program administered by the Secretary, the Secretary may, as appropriate, encourage—***
- ***"(1) the development of habitat for native and managed pollinators; and***
- ***"(2) the use of conservation practices that benefit native and managed pollinators.***

2008 Farm Bill
Conservation Title

Review of Conservation Practice Standards (p. 157)

"(B) ensure, to the maximum extent practicable, the completeness and relevance of the standards to local agricultural, forestry, and natural resource needs, including specialty crops, ***native and managed pollinators,*** *bioenergy crop production, forestry, and such other needs as are determined by the Secretary; and…"*

Responsive NRCS National Actions

- Strengthened our relationship with two NGOs through creating Memoranda of Understanding with the North American Pollinator Protection Campaign and the Xerces Society for Invertebrate Conservation

- Established a Cooperative Agreement with Xerces to provide needed technical support and training to our NRCS State and Field Offices

Responsive NRCS National Actions

- Solicited and received support from Secretary of Agriculture for creation of a USDA multi-agency Pollinator Protection Committee
- Established a multi-faceted “NRCS Pollinator Initiative”

USDA Pollinator Protection Committee Members

Mission Areas and Agencies

* Deputy Secretary for **Farm and Foreign Agricultural Services**
  * Foreign Agricultural Service
  * Farm Service Agency
  * Risk Management Agency

* Deputy Secretary for **Marketing and Regulatory Programs**
  * Agricultural Marketing Service
  * Animal and Plant Health Inspection Service

* Deputy Secretary for **Natural Resources and the Environment**
  * Forest Service
  * Natural Resources Conservation Service

* Deputy Secretary for **Research, Economics, and Extension**
  * Agricultural Research Service
  * National Agricultural Statistics Service
  * National Institute for Food and Agriculture
  * Economic Research Service

NRCS Pollinator Initiative Intent

- Respond to pollinator-related requirements of the 2008 Farm Bill, the "Status of Pollinators in North America" recommendations, and what we learn about CCD.
- Bring more attention to, and knowledge about, pollinators and their needs within NRCS and among our partners.
- Encourage the creation and maintenance of quality pollinator habitat across the U.S.
- Implement a multi-faceted Pollinator Initiative that draws upon existing agency pollinator materials and expertise and facilitates new materials and knowledge.

NRCS Pollinator Initiative Strategy

- Address pollinator needs through conservation programs and conservation practice standards;
- Utilize research and expertise of NRCS Plant Materials Centers and partners to improve pollinator habitat;
- Develop and implement needed policy changes;
- Inform the public and private landowners of the importance of pollinators and how to sustain them;
- Develop and execute communications plans for internal and external audiences.
- Expand partnerships for improved coordination and collaboration on pollinator issues.

NRCS Pollinator Initiative
Example Specific Accomplishments

- NRCS liaison with beekeepers and the U.S. beekeeping industry to better address honeybee requirements
- Draft NRCS Pollinator Policy in review
- Review and revision of all conservation practice standards as appropriate to better address pollinator and pollinator habitat protection and enhancement
- Creation and implementation of the NRCS Plant Materials Centers' Pollinator Action Plan
  - Region-specific pollinator-friendly seed mixes
  - Pollinator demonstration gardens

NRCS Pollinator Initiative
Example Specific Accomplishments

- Creation and implementation of the NRCS Programs Pollinator Habitat Action Plan

  - More specifically addressing pollinators in all possible conservation programs

  - Pollinator protection category in the EQIP Conservation Innovation Grants

  - Pollinator habitat points in FSA's CRP Environmental Benefits Index

NRCS Pollinator Initiative
Example Specific Accomplishments

- Creation and implementation of the NRCS Pollinator Communications Plan

  - Enhanced NRCS Pollinator Web presence
  - Collaboration with the “USDA Peoples’ Garden”
  - “MonarchLive” Distance Learning
  - Monarch Joint Venture
  - “Pollinator Live” Distance Learning
  - Syngenta “Operation Pollinator”

NRCS Pollinator Initiative
Example Specific Accomplishments

- Expanded collaboration with existing and new Federal partners

  - Improved USDA/EPA collaboration
  - Improved USDA/USGS collaboration
  - Meeting of interested Federal partners

New Collaboration Opportunities

March 4, 2010, meeting at USDA among 32 staffs representing 16 different Federal agencies interested in collaborating on pollinator protection endeavors.

- DoD
- DOI
  - BIA, BLM, FWS, USGS
- EPA
- NASA
- Smithsonian Institution
- USDA
  - APHIS, ARS, FS, FSA, NASS, NIFA, NRCS, RMA

National Biological Information Infrastructure

Wednesday, June 16, 2010

USGS Pollinator Research and Bioinformatics Showcase on the National Mall

U.S. Geological Survey (USGS) Scientists Steve Hilburger (Program Analyst, USGS Wildlife Program), Sam Droege (Wildlife Biologist, USGS Patuxent Wildlife Research Center and Coordinator of the USGS Native Bee Inventory and Monitoring Laboratory), and Elizabeth Sellers (Manager, Pollinators Project of the USGS National Biological Information Infrastructure) will showcase examples of USGS pollinator research and biological informatics tools at the Inter-departmental National Pollinator Week Exhibit hosted by the U.S. Department of Agriculture (USDA) beside the National Mall (adjacent to the USDA People's Garden) in Washington D.C. on June 21, 2010. This event builds on the cooperative energy initiated at an inter-departmental pollinator collaboration meeting hosted by USDA

PARTNERS FOR SUSTAINABLE POLLINATION

Pursuing collaborative approaches between farmers, growers, beekeepers and scientists develop ways to improve health of honey be in pollination services and support native pollinators.

"POLLINATOR TOOLKIT" FOR BEE-BENEFICIAL PLANTINGS

- **Mussen Guide** - To Honey Bee Plants for California.
- **Calfora** - Key resource on wild plants in California.
- **Urban Bee Gardens** - Guide to creating a great bee garden!
- **Pollinator Resource Center** - Regional plant lists, etc.
  - *Now includes links to native seed producers!*





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  - dairy
  - deer (venison) ranching
  - elk

bees

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Overview

According to USDA reports, 2.3 million honey-producing colonies in 2008 (down 6% from 2007) generated 161 million pounds of raw honey (up 8% from 2007). The states producing the most honey in 2008 were (in order) North Dakota, South Dakota and California. The average price for domestically produced honey was a record high $1.41 per pound, up 31 percent from 2007. Honey prices for 2008 were up for all color classes and in all markets. (NASS 2009) February 2010 ... Bees

related l

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Honey Coll
Inventory,
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POLLINATOR PARTNERSHIP

NAPPC

Your Source for Pollinator Action and Information.

FREE POLLINATOR FRIENDLY PLANTING GUIDES

Invite pollinators to your neighborhood by planting a pollinator friendly habitat in your ga farm, school, park or just about anywhere!

These guides were funded by the National Fish and Wildlife Foundation, the C.S. Fund, the Plant Con Alliance, the U.S. Forest Service, and the Bureau of Land Management with oversight by the Pollinator Partnership, in support of the North American Pollinator Protection Campaign. To learn more about w planting for pollinators is important, **click here**.

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