

Environment Committee Meeting

March 21, 2017 Pollinator Update

Metropolitan Mayors Caucus



# Which species are pollinators and why are they important?

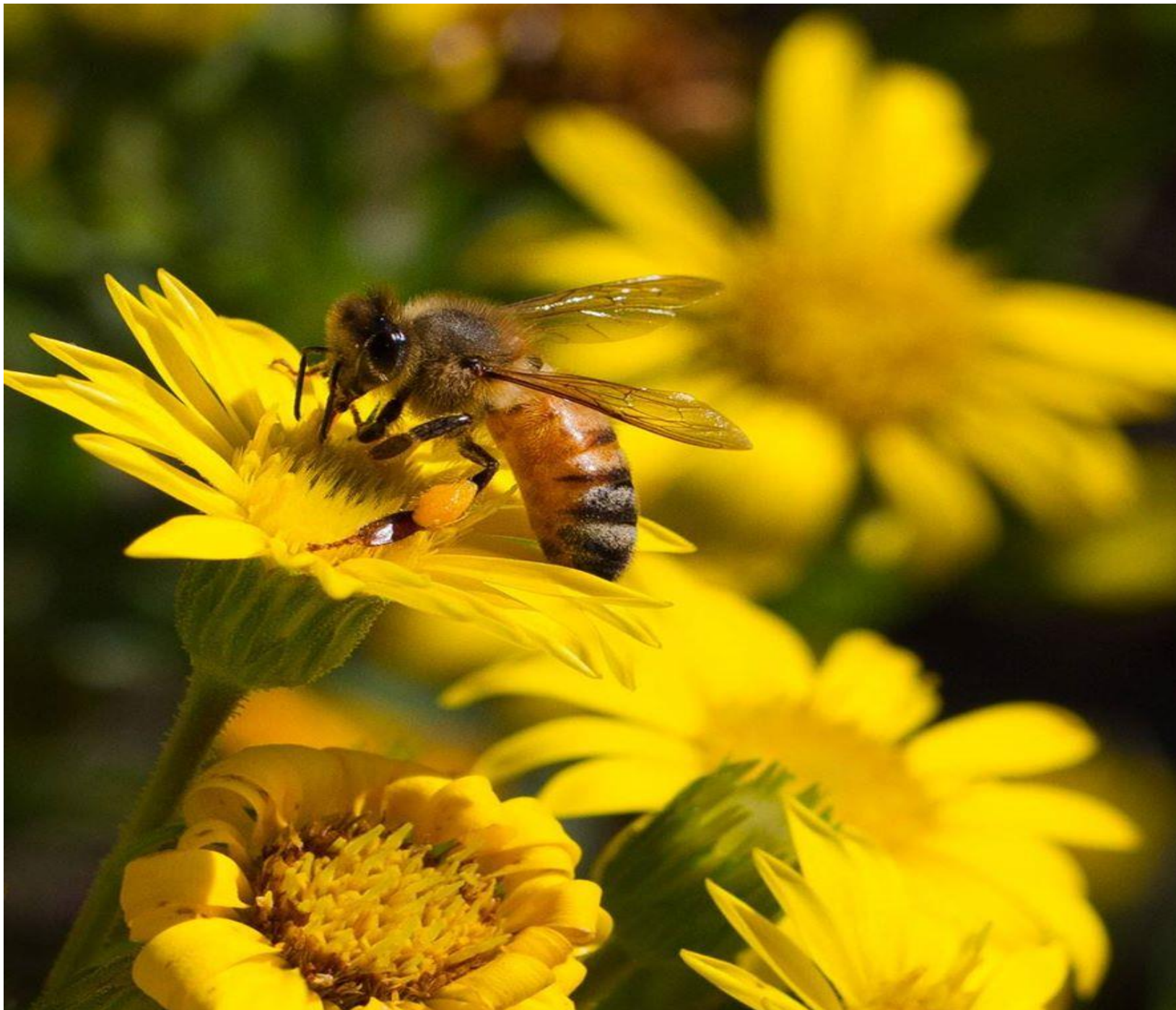
- Honey bees, native bees, birds (Ruby throated hummingbird) and Monarch butterflies are some common pollinators.
- Honey bees are important and efficient pollinators and native bees are roughly equal in importance.
- **1** in **3** bites of food need pollination.
- Pollination improves yield and quality of crops.



*Two bees visiting  
beard tongue: a  
small sweat bee up  
top and a bumble  
bee in flight.*

**Photos by Debbie  
Roos, Chatham  
County Cooperative  
Extension, North  
Carolina**





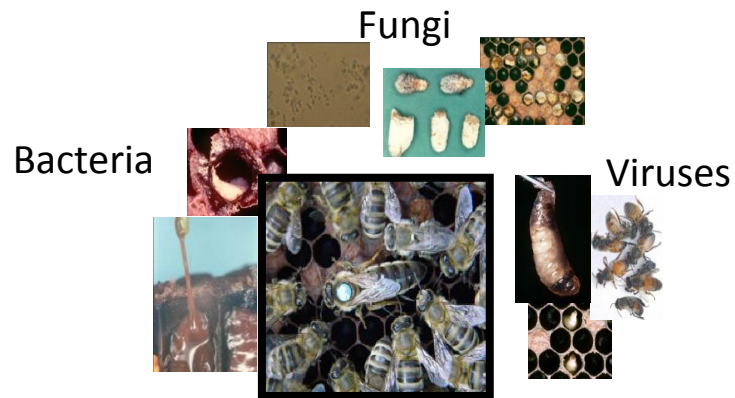
*Honey bee on Maryland  
golden aster.*

**Photos by Debbie Roos,  
Chatham County Cooperative  
Extension, North Carolina**

# Bee Health in the US and Globally

- USDA has identified multiple factors; no single factor identified as “cause”.

## Pathogens



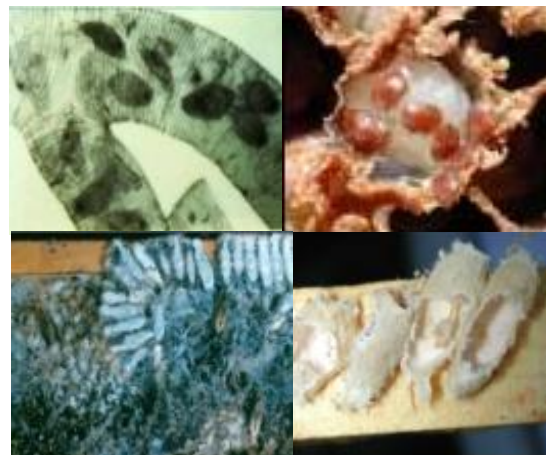
## Pesticides



## Poor Nutrition



## Pests/Parasites



## Bee Management Practices



# National Pollinator Health Strategy

## EPA Commitments include:

- Assessing the effect of pesticides on bees and other pollinators;
- Engaging State and Tribal partners in the development of pollinator protection plans and Best Management Practices (BMPs);
- Encouraging pollinator protection and habitat planting activities into green infrastructure and Superfund projects.

# Goal: Sustaining Beautiful Landscapes That Optimize Ecosystem Services

- Adopt an Integrated Pest Management approach: a site specific combination of pest prevention, pest avoidance, pest monitoring and pest suppression
- Gather BMPs for pesticide applicators, bee keepers, rights of way managers
- FieldWatch mapping can help pesticide applicators avoid bee colonies when making an application <https://il.driftwatch.org/map>



# Concrete Actions that Communities Can Take Related to Pesticide Use

Ensure pesticide operators are properly trained and certified, according to Illinois requirements;

- Pesticide Safety Education- Training manuals include principles of Integrated Pest Management
  - <http://web.extension.illinois.edu/psep/manuals.php>
- Carefully follow the pesticide label, which will include information on how to properly use a pesticide, and follow Environmental Hazard and Precautionary Statements
- Look for the “Bee Box” on certain pesticide labels;

Encourage consumers/homeowners to *Greenscape* their yard:

- Greenscaping tips [www.epa.gov/safepestcontrol/lawn-and-garden](http://www.epa.gov/safepestcontrol/lawn-and-garden)



# EPA's Monarch Strategy:

- Considering advisory environmental hazards language on pesticide labels in order to educate consumers on how to better protect Monarch butterflies;
- Finding potential partners and contacts for the Monarch protection effort;
- Collaborating with US FWS to determine pesticides of low toxicity to Monarchs;
- Web page is planned to provide information on conservation and ways to minimize Monarch exposure to pesticides;
- Monarch Risk Management Approach and related documents:  
<https://www.epa.gov/pollinator-protection/epa-actions-protect-pollinators>
- Outreach and communication with federal partners:
  - USFWS and USDA/NRCS ;
  - Information sharing and risk assessment;



*Monarch on  
blazing star*  
**Photos by  
Debbie Roos,  
Chatham County  
Cooperative  
Extension, North  
Carolina**

# Local organizations can be a good source of information

- Peggy Notebaert Nature Museum: gardening with native species
- The Morton Arboretum: caring for the urban and community forest
- The Field Museum: citizen science in Forest Preserves, collect seed, remove invasive plants, learn about plants
- The Chicago Botanic Garden: practices and promotes IPM
- Midwest Pesticide Action Center: Midwest Grows Green
- Chicago Wilderness: Native Landscape and Ecological Restoration Guide

# Links to information

- Pesticide Safety Education-  
<http://web.extension.illinois.edu/psep/manuals.php>
- Greenscaping tips-[www.epa.gov/safepestcontrol/lawn-and-garden](http://www.epa.gov/safepestcontrol/lawn-and-garden)
- Find Best Management Practices to Protect Pollinators-  
<https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators>
- FieldWatch- <https://il.driftwatch.org/map>
- Monarch Risk Management Approach and related documents-  
<https://www.epa.gov/pollinator-protection/epa-actions-protect-pollinators>
- Chicago Wilderness-  
<http://www.chicagowilderness.org/?page=publicationsnew>



# Links to Pollinator Protection Plans

- Indiana Pesticide Review Board-  
[http://www.oisc.purdue.edu/pesticide/p3\\_activities.html](http://www.oisc.purdue.edu/pesticide/p3_activities.html)
- Minnesota Department of Agriculture-  
<http://www.mda.state.mn.us/pollinators>
- Michigan Department of Agriculture, Trade and Consumer Protection, with Michigan State University- <https://pollinators.msu.edu/protection-plan/>
- Wisconsin Department of Agriculture, Trade and Consumer Protection-  
[https://datcp.wi.gov/Pages/Programs\\_Services/PollinatorProtection.aspx](https://datcp.wi.gov/Pages/Programs_Services/PollinatorProtection.aspx)
- Other plans with BMPs can be found at this link-  
<https://pollinators.msu.edu/protection-plan/mp3-links/other-state-pollinator-protection-plans/>

# Pollinator Week: June 19-25, 2017

Pollinator Partnership-

<http://www.pollinator.org/programs.htm>

<http://www.pollinator.org/brochures.htm>

<http://www.pollinator.org/brochures.htm#monarchs>

*Flight of the Butterflies* movie-

<http://www.flightofthebutterflies.com/home/>

## For More Information

Please contact

Margaret Jones, 312-353-5790,  
[jones.margaret@epa.gov](mailto:jones.margaret@epa.gov)