Pollinator News

Celebrating Ohio Monarchs to Bees ‘N Aull

Celebrating Ohio Pollinators, June 17-25, 2017 continues for a second year. The Ohio State Beekeepers Association partnered with Pollinator Stewardship Council and Scotts MiracleGRO Foundation to present his collaboration of beekeepers and destination venues in Ohio. A fourth destination venue was added this year, all featuring honey bee and native pollinator activities. Celebrations will be at:

- **Cleveland Botanical Garden**
  Sat., June 17, from 11:00 a.m. to 3 p.m., at 11030 East Blvd, Cleveland

- **Majestic Monarch at Krohn Conservatory**
  Sun., June 18, from 10:00 a.m. to 5 p.m., at 1501 Eden Park Drive, Cincinnati

- **Pollinator Palooza at Franklin Park Conservatory and Botanical Garden**
  Sat., June 24, from 11 am to 3pm, at 1777 E. Broad St., Columbus

- **Bees ‘N Aull at Aullwood Audubon Center and Farm**
  Sun., June 25, from Noon to 5 p.m., at 9101 Frederick Pike., Dayton

This year three drawings will be held at each event site for visitors to win one of five:

- family memberships to each event site
- Scotts groables with garden tool gift baskets
- Ohio honey/bee product gift baskets.

Exhibitors at each venue from local and state pollinator supportive groups will feature interactive activities, and present “how to’s” so everyone can learn how to protect pollinators. And, the Ohio Pollinator Health, Protection, and Conservation Plan will be released during Pollinator Week, informing Ohioans about steps they can take to protect pollinators.

**American Honey Queen**
The American Beekeeping Federation Honey Queen, Maia Jaycox will be at each venue during the week speaking about the importance of honey bees to the public’s daily lives and how the diverse flightpath of honey bees extends from food to fiber. She will also share the information on how honey can enhance everyone’s natural beauty. Maia is the daughter of Scott and Julie Jaycox of Webster City, IA.
She is a sophomore at Iowa State University in the open option program with an interest in biology. She is a member of the Kappa Alpha Theta sorority at Iowa State. Maia began beekeeping with her family about four years ago and currently tends to seven hives of bees.

The beekeeping industry touches the lives of every individual in our country. In fact, honey bees are responsible for nearly one-third of our entire diet through the pollination services they provide for a large majority of fruits, vegetables, nuts and legumes. This amounts to nearly $30 billion per year of direct value from honey bee pollination to United States agriculture.

**Pollinator Habitat Land Dedicated**

As part of Celebrate Ohio Pollinator Week, Scotts Miracle-Gro Foundation will be dedicating two acres of land at their corporate headquarters in Marysville to pollinator habitat. The American Honey Queen, Maia Jaycox, and Michele Colopy, Program Director for Pollinator Stewardship Council will help dedicate this land for pollinator habitat.

Habitat created previously through the Pollinator Stewardship Council and Ohio State Beekeepers showed that corporate properties can be pollinator havens, reduce land management / maintenance costs, support local beekeepers and native pollinators, reduce storm water run-off, and reduce carbon emissions. Thirty-three acres of habitat were created during 2015 in a partnership with the Dayton Veterans Affairs Medical Center, Fairborn Cement Company (formerly Cemex), and Professional Service Providers.

Celebrate Ohio Pollinator Week is sponsored by The Scotts Miracle-Gro Foundation in partnership with the Pollinator Stewardship Council and Ohio State Beekeepers Association. Mark your calendar today to Celebrate Ohio Pollinators June 17-25.

### See us at

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Reducing Varroa

Talking with beekeepers in Massachusetts, Missouri, and Ohio who purchase packages of honey bees from outside their state, the question has arisen, “If we are to start backyard beekeepers, new beekeepers, with healthy bees why are packages not treated for varroa at the assembly apiary?”

The State of Virginia requires a mite treatment at the location out of state where the packages are put together. “During transit, all packages shipped to Virginia locations must receive preventative treatment with an EPA approved miticide for Varroa mite. Treatment must be in accordance with approved label directions to retard spread of the Varroa mite.” (Read the entire Virginia Rule at http://pollinatorstewardship.org/wp-content/uploads/2017/06/Virginia-bee-pck-rule-to-treat-first.pdf) The Georgia Dept. of Agriculture states, “Although not required by Georgia regulations, many states will not permit the entry of bee hives unless they have been inspected by the Plant Protection Section and found free of pests.” (http://agr.georgia.gov/honey-bees.aspx) Rhode Island law (http://www.dem.ri.gov/pubs/regs/regs/agric/varroa.pdf) states, “No honey bees in hives, nuclei or brood comb, including domestic bees that have been transported across state lines for pollination services or honey production, may be imported into Rhode Island from outside the State unless proper steps have been followed to insure against the introduction of Varroa Mites.”

Talking with a queen breeder, who is also a dog breeder, she states, “I believe all states require animals to have a health certificate issued by a licensed vet before the animals are able to be transferred or shipped. It is customary to have them checked by a licensed vet to insure they are healthy. Anytime animals of any type are shipped by the airlines, owners are required to have a vet issued health certificate two days old or less.”

“I think it would be a great idea that packaged bees are treated or the bees used to make the packages be treated before they have the queen introduced to them,” said Peggy Garnes. “I really think that the public buying the packaged bees would rather pay a small up charge, $5 for example, to have a dribble (oxalic acid) on the bees before they receive them. If you are paying $135.00 for a package of bees - who wouldn't pay an extra fee to have them treated before shipping and then start off mite-free? Why would you buy healthy animals/pets, but not buy mite-less bees?” Actually, her experience with animals was never to sell or transport any animal not properly vaccinated or a certificate of good health issued by a veterinary doctor- ever. Honey bees are a beekeepers’ livestock. How is your state protecting your livestock?
Our Outreach in May

During May the Pollinator Stewardship Council secured 22 exhibitors for four venues for Ohio Pollinator Week in partnership with Scotts Foundation and Ohio State Beekeepers Association. The 2017 American Honey Queen will be in attendance at each event, including an advocacy day in the state capital where we will meet with 21 state legislators, and one Congressman. Working an average of 59.26 hours per week the Program Director gave two presentations in May to beekeeping associations, including at the Crop Pollination Association Conference in Ballina, Australia.

Additional outreach included:

- Strategic planning for a member group
- Mail the last of the Quick Guides to Reporting a Bee Kill to beekeepers
- Provide PSC info to Wisconsin beekeeper advocate
- Connect partner NGO with Missouri beekeeper for media
- Provide research for Colorado law student: SFX, Chlor. New Rule
- Create slide show for member in Massachusetts
- Send info. concerning bee ordinances to Utah Beekeeper
- Collect 3 bee kill incident reports
- Attend conf. call of NGOs with EPA
- Attend EPA/PPDC workgroup
- Provide pollinator habitat resource information
- Work with beekeeper toward a meeting with city officials concerning pollinator habitat
- Provide research information on fungicides for local seed bank
- Submit comment to EPA concerning Regulations review
- Connect with NGO advocate in Massachusetts
- Respond to media concerning BIP survey results
- Honey Bee Health Coalition workgroup participation
- Provide information on nonprofit development to a Tennessee Bee Club

Our Program Director works for beekeepers, for our members. Please join us and support our work for honey bees, native pollinators, for beekeepers, for you. Become a member today at www.pollinatorstewardship.org
**Research**


**Summary**

1. Neonicotinoid insecticides are routinely used as seed treatments on most grain and oilseed crops in the USA, yet the extent and likelihood of spread of insecticide residues during planting has not previously been quantified.

2. Honey bees, Apis mellifera, are highly mobile and highly sensitive to neonicotinoid residues, presenting an opportunity to estimate non-target exposures to neonicotinoids in mobile insects. We measured neonicotinoid dust drift during maize sowing and used sites of maize fields, apiary locations and honey bee foraging radii to estimate likelihood of forager exposure. We performed a concurrent multi-year field assessment of the pest management benefits of neonicotinoid-treated maize.

3. Our results indicate that over 94% of honey bee foragers throughout the state of Indiana are at risk of exposure to varying levels of neonicotinoid insecticides, including lethal levels, during sowing of maize. We documented no benefit of the insecticidal seed treatments for crop yield during the study.

4. Synthesis and applications. We demonstrate movement of neonicotinoid residues well beyond planted fields occurs during maize sowing in Indiana. Based on locations of maize fields and apiaries in the state, the likelihood of neonicotinoid exposure for foraging honey bees is high. Other non-target organisms are also likely to encounter neonicotinoid residues; we conservatively estimate that deposition of neonicotinoid residues on non-target lands and waterways will occur on over 42% of the state of Indiana during the period of maize sowing. However, we also demonstrate that the risk to pollinators and other non-target organisms may be rapidly and dramatically reduced without yield penalties, by aligning use rates of neonicotinoid insecticides with pest incidence.


**Spray Toxicity and Risk Potential of 42 Commonly Used Formulations of Row Crop Pesticides to Adult Honey Bees (Hymenoptera: Apidae)**, YU CHENG ZHU, JOHN ADAMCZYK, THOMAS RINDERER, JIANXIU YAO, ROBERT DANKA, RANDALL LUTTRELL, AND JEFF GORE, J., Econ. Entomol. 1–8 (2015); DOI: 10.1093/jee/tov269

**ABSTRACT**

To combat an increasing abundance of sucking insect pests, >40 pesticides are currently recommended and frequently used as foliar sprays on row crops, especially cotton. Foraging honey bees may be killed when they are directly exposed to foliar sprays, or they may take contaminated pollen back to hives that maybe toxic to other adult bees and larvae. To assess acute toxicity against the honey bee, we used a modified spray tower to simulate field spray conditions to include direct whole-body exposure, inhalation, and continuing tarsal contact and oral licking after a field spray. A total of 42 formulated pesticides, including one herbicide and one fungicide, were assayed for acute spray toxicity to 4–6-d-old
workers. Results showed significantly variable toxicities among pesticides, with LC50s ranging from 25 to thousands of mg/liter. Further risk assessment using the field application concentration to LC1 or LC99 ratios revealed the risk potential of the 42 pesticides. Three pesticides killed less than 1% of the worker bees, including the herbicide, a miticide, and a neonicotinoid. Twenty-six insecticides killed more than 99% of the bees, including commonly used organophosphates and neonicotinoids. The remainder of the 13 chemicals killed from 1–99% of the bees at field application rates. This study reveals a realistic acute toxicity of 42 commonly used foliar pesticides. The information is valuable for guiding insecticide selection to minimize direct killing of foraging honey bees, while maintaining effective control of field crop pests.


We are a member of the Honey Bee Health Coalition


HBHC Varroa videos:
Varroa mite PSA - https://www.youtube.com/watch?v=p4titRjZuOQ
Video 1 - IPM - https://youtu.be/aFlLPZ5KbgU
Video 2, 3 - Sampling methods - https://youtu.be/IpIT9FQxLc
Video 4 - Essential oils - https://youtu.be/fsn0RurGz10
Video 5 - Using Apivar - https://youtu.be/pCq_Pu1iFeo
Video 6 - Using Apistan or Checkmite+ - https://www.youtube.com/watch?v=nsbY1nuUReY
Video 7 - Formic acid - https://www.youtube.com/watch?v=6PK5BTjexSs
Video 8 - Using HopGuard - https://www.youtube.com/watch?v=rOlafuIBBF0&t=8s
Video 9 - Using Oxalic Acid - https://www.youtube.com/watch?v=Sp-9eD3Sgw
Video 10 - Using sanitation, screen bottoms - https://www.youtube.com/watch?v=U7Axpy5JVDc
Video 11 - Using drone brood removal - https://www.youtube.com/watch?v=j17ASztxxEgs
Video 12 - Using requeening - https://www.youtube.com/watch?v=GnPB1StvC60

Tools for Varroa Management  http://honeybeehealthcoalition.org/varroa/

Quick Guide to Reporting A Bee Kill  http://pollinatorstewardship.org/?page_id=3292

Beekeeper Guide  http://honeybeehealthcoalition.org/tools-and-resources/#hm

Grower Guide  http://honeybeehealthcoalition.org/tools-and-resources/#hm


The Bee Understanding Project- View the first film at this link  https://vimeo.com/149238870
Seeds for spring flowers for honey bees!

Pollinator Stewardship Council has partnered with Ohio Prairie Nursery in support of pollinator habitat. You can get native seeds for eastern U.S. planting zones here. Select “Support our Cause” (http://www.ohioprairienursery.com/?ref=pollsteco) to view featured seed selections to benefit pollinators. A portion of sales generated from our website will help support our work.

Seeds for honey bees WEST of the Mississippi

To increase plant biodiversity, improve gardens yields, and make a positive difference for the future, plant for pollinators WEST of the Mississippi with bbseed. https://www.bbbseed.com/articles/plant-for-pollinators-project/

Betterbee Has Seeds for Pollinator Habitat

Betterbee was at the Massachusetts Beekeepers Assn. Spring Meeting offering a variety of seed mixes for beekeepers to plant. You can find seven seed mix varieties at their website.

Planting forage for our bees is important; and beekeepers can lead by example!

Pollinator Stewardship Council
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832-727-9492 www.pollinatorstewardship.org

We are also on facebook
We are member supported! The Pollinator Stewardship Council is a nonprofit organization; donations are tax deductible.

Butterfly Pavilion
https://www.butterflies.org/

A.H. Meyer & Sons, Inc.
http://www.ahmeyerandsons.com/

People and Pollinators Action Network
http://www.peopleandpollinators.org/

Selb’s Hoosier Honey
http://www.selboosiehoney.com/

Strachan Apiaries
https://www.strachanbees.com/

Sunshine Apiary, Inc.
https://www.facebook.com/sunshineapiary

Tennessee Beekeepers Assn.
http://www.tnbeekkeepers.org/

Empire State Honey Producers Assn.
http://www.eshpa.org/

Smith Farm Pure Honey
www.smithfarmpurehoney.com/

Randy Oliver
http://scientificbeepkeeping.com/

Old Mill Honey Co.
Foothill Honey Farms
Wind River Honey Co.
Miksa Honey Farms

California-Minnesota Honey Farms
Rick Smith
Bob McDonell
Samuel Hall

Headwaters Farm
Hiatt Honey, LLC
South Dakota Beekeepers Assn.
Bret Adee

Indian Run Apiary
California Apiaries, LLC
Harmony Honey Co.

Red-Headed Honey
https://redheadedhoney.com/

Sunrise Feed & Supply
http://sunrisefeed.com/

Kentucky State Beekeepers Association
http://www.kybeekkeepers.com/

Browning's Honey Co., Inc.
Wilson County Beekeepers Assn.
Hackenberg Apiaries
Nashville Area Beekeepers Assn.
Delta Bee Club
Colorado State Beekeepers Assn.
Heartland Apicultural Society
Portage County Beekeepers
Beekeepers of Middle Tennessee
Northern Kentucky Beekeepers Assn.

Geauga County Beekeepers
Nature’s Own Designs Apiary Products
Essex County Beekeepers’ Assn.
Los Angeles County Beekeepers Assn.
Pennsylvania State Beekeepers Assn.
The Studio Digital
Beekeping Insurance Services
Crop Pollination Association of Australia
Beekeepers Working for Beekeepers

The Board and Program Director are all beekeepers. We work to:

- Raise awareness about the adverse impact of pesticides on pollinators critical to the supply of food and the ecosystem.
- Provide advocacy, guidance, and tools to document the detrimental effect of pesticides on pollinators.
- Affect regulatory processes of pesticide risk assessment, label, and enforcement.