Pollinator News

Working for Beekeepers! *We support you; please support us!*

Pollinator Stewardship Council provides services to our members and works on their behalf. This map shows our outreach from January through September this year. Our Program Director has traveled to and presented at forty (40) different groups and conferences this year. *We have provided strategic planning to our members, presentation support, research support, bee kill reporting support, legislative support at the state and national level, and more.* This week before travelling to the Tennessee Beekeepers Association Conference, we participated in the day-long EPA meeting on Environmental Modeling: Assessing Exposure and Risk to Pollinators and Plants. 

*Your funding support is important! Your membership is important! We work for our members! Please join today or make a tax-deductible donation to support our work for you!*  
http://pollinatorstewardship.org/?page_id=3603

Thank you, Joe!

The October issue of the *American Bee Journal* brought the news of editor, Joe Graham’s retirement. For 43 years Joe has dedicated his life to making the ABJ a “world class publication.” He began his beekeeping as a 21 year journalism graduate, and, as he said “took to beekeeping and a love of all things beekeeping right away and never looked back.” Thank you Joe for your contributions to beekeeping. Read the full article in the October 2017 issue of the *American Bee Journal*.

Welcome, Kirsten!

Kirsten Traynor is the new editor of the *American Bee Journal*. She was previously the editor of *Bee World* magazine. She has authored articles for the ABJ, other beekeeping magazines, and is the author or her own books, *Simple, Smart Beekeeping* and...
EPA and States' Collective Efforts Lead to Regulatory Action on Dicamba

EPA Press Office (press@epa.gov)

WASHINGTON (OCTOBER 13, 2017) - EPA has reached an agreement with Monsanto, BASF and DuPont on measures to further minimize the potential for drift to damage neighboring crops from the use of dicamba formulations used to control weeds in genetically modified cotton and soybeans. New requirements for the use of dicamba "over the top" (application to growing plants) will allow farmers to make informed choices for seed purchases for the 2018 growing season.

"Today's actions are the result of intensive, collaborative efforts, working side by side with the states and university scientists from across the nation who have first-hand knowledge of the problem and workable solutions," said EPA Administrator Scott Pruitt. "Our collective efforts with our state partners ensure we are relying on the best, on-the-ground, information."

In a series of discussions, EPA worked cooperatively with states, land-grant universities, and the pesticide manufacturers to examine the underlying causes of recent crop damage in the farm belt and southeast. EPA carefully reviewed the available information and developed tangible changes to be implemented during the 2018 growing season. This is an example of cooperative federalism that leads to workable national-level solutions.

Manufacturers have voluntarily agreed to label changes that impose additional requirements for "over the top" use of these products next year including:

- Classifying products as "restricted use," permitting only certified applicators with special training, and those under their supervision, to apply them; dicamba-specific training for all certified applicators to reinforce proper use;
- Requiring farmers to maintain specific records regarding the use of these products to improve compliance with label restrictions;
- Limiting applications to when maximum wind speeds are below 10 mph (from 15 mph) to reduce potential spray drift;
- Reducing the times during the day when applications can occur;
- Including tank clean-out language to prevent cross contamination; and
- Enhancing susceptible crop language and record keeping with sensitive crop registries to increase awareness of risk to especially sensitive crops nearby.
Manufacturers have agreed to a process to get the revised labels into the hands of farmers in time for the 2018 use season. EPA will monitor the success of these changes to help inform our decision whether to allow the continued "over the top" use of dicamba beyond the 2018 growing season. When EPA registered these products, it set the registrations to expire in 2 years to allow EPA to change the registration, if necessary.

For more information: https://www.epa.gov/ingredients-used-pesticide-products/registration-dicamba-use-genetically-engineered-crops

---

**Might dicamba be affecting pollinators?**

*Beekeepers among those claiming problems with dicamba-tolerant crops*

David Bennett | Sep 26, 2017 | Delta Farm Press

Since Xtend crops have been planted in the Mid-South, the focus of off-target damage from dicamba has largely been on soybeans. But what about some of the damage to more peripheral, but no less vital, players in the agricultural chain?

Before getting to that, it’s important to know that Richard Coy isn’t a man afraid to take a stand for his farming partners. Coy, Vice President of Coy’s Honey Farm, manages some 13,000 bee hives scattered throughout Arkansas, Mississippi, Missouri, and California. The family honey business is the largest in Arkansas.

“I know what it means to operate a ‘family business’ and I know the pressures of operating a large-scale farm,” Coy recently testified before the Arkansas Dicamba Task Force. “During my 26 years as a commercial beekeeper, I have developed and maintained good relationships with many of the agriculture industry leaders in Arkansas and throughout the nation. Within the past two years, I have written letters on behalf of cotton, and grain sorghum producers requesting Section 18’s for Transform. I recently met with EPA officials in Memphis, Tenn., and voiced my support for neonics as a seed treatment. Also, I have worked closely with the University of Arkansas Division of Agriculture Research and Extension along with various aspects of the USDA.”

**Dicamba and bees**

Coy says he first began noticing issues with increased dicamba use and its relationship with his hives in 2016.
“I was finally able to pinpoint it this year. But I began noticing the problem last year when my production was off in the area around (northeast Arkansas’) Monette and Leachville. That’s where the major controversy and shooting over dicamba took place in 2016.”

He didn’t know what the problem was and assumed it was weather-related or maybe involved an insecticide.

In 2017, “just like the past 10 years, we placed bees on our locations in Mississippi and Crittenden Counties. Production in these counties this year has been dramatically reduced.

“We began noticing lower than normal bee population the last week of June. The hives stopped building population and we could not understand what the problem might be. We looked at all of our management practices and found nothing out of the ordinary.”

In retrospect, Coy says what happened was pollen had stopped coming into the beehives. “Pollen is the protein source for the hive. Without it, the queen will not lay eggs because there’s no protein to feed the larvae. That has a tipping effect that negatively impacts honey production.”

It takes 21 days for eggs to mature into adult bees. Therefore, “you don’t really notice what’s going on for a few weeks. There’s a lag time and so it was deep into July before we knew there was a major problem. Another reason it took so long to get a grip on this is we have about 13,000 hives and we run them about every three weeks.”

So, from middle to late July the Coys knew there was “a major problem. The hive-check rotation takes about three weeks since the hives are scattered all over the Delta. My younger brother, David, and I began going to different areas and really looking closely at the hives. We determined in areas without dicamba drift our honey production had not decreased. We dug deep into the hives and found we had a lot of pollen available in non-dicamba use areas and very little, to no, pollen stored where there were dicamba-tolerant crops.”

**Research**

Even without dicamba-tolerant crops, how would Coy describe this year for making honey?

“This year, the weather has been conducive for an average crop. We had too much rain in August to have an above-average crop.

“However, there are hives set up where apparently little dicamba was used because there are pigweeds in the fields and the vines also show no damage. The hives in those areas have average to above average production.

“When you’re trying to put together the pieces of a puzzle together it can take a while.”

Around the last week of July, Richard and his brother “went to check our bee locations around Webb and Tutwiler, Miss. We run about 1,600 (hives) in that area. Chris said ‘We have some locations that have filled every box full. But, I have found an area where they haven’t made any honey since the first of July.’ He checked into it, and sure enough, where the honey production had stopped was also where the farmers had planted (dicamba-tolerant) soybeans.”

That spurred Richard to do some more research to “see if I was reading too much into the situation. Well, I found a study from Penn State University that shows where there is widespread dicamba use in
an area there would be enough visible drift and volatility to damage all the vegetation. The study found it would decrease pollinator habitat by 50 percent and pollinator visits by 50 percent.”

At that point, in late July, Coy called the Arkansas Plant Board and explained what he’d found and had been seeing. “They sent out some inspectors a couple of weeks later and they took some pictures of the vegetation. They verified what I was seeing.”

**Symptomology**
What was Coy observing?
“In fencerows and ditches, vegetation like wild grape, red vine and even ragweed were damaged. All that unwanted vegetation for farming is something that bees use to make honey. Those plants had curled leaves and had stopped growing prior to the blooming process.

“I went south of I-40 to an area I know there hadn’t been a lot of dicamba sprayed. There was a bunch of the (aforementioned) plants that were growing and blooming and the bees had produced a tremendous honey crop.”

What are other beekeepers saying?
“I’ve spoken with others in this region and they’d been seeing the same symptoms in their hives where there are dicamba-tolerant crops and drift complaints are the highest. Healthy hives had stopped collecting nectar and pollen and the population hadn’t grown enough to produce a good honey crop.”

**Cut-off date**
What about the April 15 dicamba-spraying cutoff date urged by the task force?
“I think it’s a good idea. If you look at all the data put out by university weed scientists it looks like there isn’t an issue with dicamba and volatility until temperatures get hotter. Most of the vegetation our bees rely on isn’t really up and going by mid-April. For example, red vine doesn’t start putting on leaves until sometime in May.

“I think beekeepers would be happy to live with an April 15 cut-off.”


**Research**

**What’s New on Neonics?** (from the David Suzuki Foundation)

EVIDENCE OF HARM In 2015, the Task Force on Systemic Pesticides (tfsp.info) — an international group of independent scientists convened by the International Union for Conservation of Nature — produced a comprehensive meta-analysis of the science on the ecological effects of neonicotinoids. This landmark review, which considered more than 1,100 peer-reviewed studies, as well as data from manufacturers, identified clear evidence of harm to honeybees, along with a large number of other beneficial species, including aquatic insects at the base of the food chain, soil arthropods such as earthworms and common birds.
In 2017, the Task Force updated its meta-analysis to take into account hundreds of new peer-reviewed studies on systemic pesticides in the environment and their ecological effects. The new meta-analysis reveals broader impacts and reinforces the conclusions of the original 2015 review: neonics represent a major worldwide threat to biodiversity and ecosystems / ecosystem services.


How cracks in the US pesticide approval process put biodiversity at risk

To find out how often new products are approved that have associated data on synergistic effects, we conducted an intensive search of patent applications for pesticide products containing two or more active ingredients approved by the EPA in the past six years from the four major agrochemical companies – Bayer, Dow, Monsanto and Syngenta. Our report, Toxic Concoctions, found that 96 out of 140 products approved over that period – 69% – had at least one patent application that claimed or demonstrated synergy between the active ingredients in the product. http://pollinatorstewardship.org/wp-content/uploads/2017/10/Donley-and-Burd_2017_How-cracks-in-the-US-pesticide-approval-process-put-biodiversity-at-risk_Biodiv-002.pdf

Monarch butterfly population decline in North America: identifying the threatening processes,

The monarch butterfly (Danaus plexippus) population in North America has sharply declined over the last two decades. Despite rising concern over the monarch butterfly’s status, no comprehensive study of the factors driving this decline has been conducted. Using partial least-squares regressions and time-series analysis, we investigated climatic and habitat-related factors influencing monarch population size from 1993 to 2014. Potential threats included climatic factors, habitat loss (milkweed and overwinter forest), disease and agricultural insecticide use (neonicotinoids). While climatic factors, principally breeding season temperature, were important determinants of annual variation in abundance, our results indicated strong negative relationships between population size and habitat loss variables, principally glyphosate use, but also weaker negative effects from the loss of overwinter forest and breeding season use of neonicotinoids. Further declines in population size because of glyphosate application are not expected. Thus, if remaining threats to habitat are mitigated we expect climate-induced stochastic variation of the eastern migratory population of monarch butterfly around a relatively stationary population size. READ MORE http://rsos.royalsocietypublishing.org/content/4/9/170760
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 bbbseed. The Plant for Pollinators Project, developed by bbbseed, offers a discount on their pollinator mixes. Go to their website, find and enter the discount code, and Plant For Pollinators! 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.
We are member supported! The Pollinator Stewardship Council is a nonprofit organization; donations are tax deductible.

Old Mill Honey Co.  Geauga County Beekeepers  
Foothill Honey Farm  http://www.geaugacountybeeknees.org/
Wind River Honey Co.  Nature’s Own Designs Apiary Products  
Miksa Honey Farms  http://nodglobal.com/
California-Minnesota Honey Farms  Essex County Beekeepers’ Assn.  
Rick Smith  http://www.essexcountybeeknees.org/index.shtml
Bob McDonell  Los Angeles County Beekeepers Assn.  
Samuel Hall  http://www.la countybeeknees.com/
Headwaters Farm  Pennsylvania State Beekeepers Assn.  
Hiatt Honey, LLC  http://www.pastestatebeeknees.org/
South Dakota Beekeepers Assn.  The Studio Digital  
Bret Adee  http://www.thestudiodigital.com/
Indian Run Apiary  Beekeeping Insurance Services  
California Apiaries, LLC  http://www.beekeepingms.com/
Harmony Honey Co.  Red-Headed Honey  
Sunrise Feed & Supply  http://redheadedhoney.com/  
http://sunrisefeed.com/  Crop Pollination Association of Australia  
Kentucky State Beekeepers Association  Michigan Commercial Beekeepers Assn.  
http://www.ksba-beekeeping.org/
Together we make a difference for beekeeping, for pollinators, for a sustainable and affordable food supply.

Your membership and donations support our work to protect managed and native pollinators from the adverse impact of pesticides. Please become a member or make your tax deductible donation today!

A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE APPLICABLE REGULATORY DEPARTMENT/DIVISION WITHIN EACH STATE (LISTED BELOW) BY CALLING TOLL-FREE WITHIN THE STATE. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL, OR RECOMMENDATION BY THE STATE. For more information go to http://pollinatorstewardship.org/?page_id=5048

Beekkeepers 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.