Pollinator Working Group Meeting

Date: Thursday January 5, 2016
Time: 4:00 p.m. – 6:45 p.m.
Location: NRCS Conference Room
Minutes

Call to order at 4:05 PM

Attendees:
Working Group Members: Meg Kerr, Joel Tirrell (Absent), Shannon Brawley, David Brunetti, Gary Casabona, David Gregg, Rafael Nightingale, Don Joslin, Robert Mann, Lyn Spinella (Absent), Ken Payne (Absent), Lisa Tewksbury, Ken Ayars
Guest: Clarkson Collins, Azure Giroux, Amanda Freitas, Nyssa Sky, Tim Faulkner, Billy Wilson, Nancy Parker Wilson, John Besnahn, Julia Bancroft, Howard Ginsberg, Hope Leeson.

Minutes: December 8 minutes: Motion by David Brunetti, second by Gary Casabona. Edits: Rafael was not in attendance. David Brunetti has grammatical changes. All approve.

Announcements:
Date of Next Working Group Meeting: Thursday January 12, 2016, RIDEM, Conference Room 300, 235 Promenade Street, Providence, 4:00 p.m. – 6:30 p.m. Presentation by Howie Ginsberg and DEM Fish & Wildlife are invited. Allison Hamel from DOT has also offered present to the group.

Gary Casabona announced that Kelly Gill from Xerces will be doing a workshop with Gary. February 28 and March 1 from 9 AM – 4:30 PM at the South Kingstown Land Trust barn. These are the same workshop offered on 2 dates. Cost is $45. Registration not yet open, but Gary will share when it is.

Saturday Feb 25, Connecticut College. Sam Drogie from USGS, native bee taxonomist. Gary will share information with the group.

Ken announced that DEM will be doing a bee survey this year, looking at pesticides and pathogens at 24 locations (need to have 8 hives each).

RINLA annual meeting January 25 will include a discussion of the preliminary finding of the working group.

March 11, Land & Water Summit will also include workshops on pollinators.

Reflection.
Dave was struck by Frank Drummond's recommendations about spraying at night harms bees because they stay on the flowers. This goes against the EPA recommendations.
Gary said that the recommendation to spray at night and when dry is a best management practice, but not perfect.

David said that he is pleased that the group is approaching DOT. Roadside habitat is good bee habitat and the traffic impacts are not detrimental to the bees. So there are good opportunities on road sides. There is good research on road side habitats – there is a NE management plan for DOTs.

Hope said that John Campenelli at U Conn would also be a good presenter.

Meg told the group that Julia Bancroft will be looking at GIS data, exploring whether we can document our hypothesis that RI's small farms provide better access to pollinator habitat.

Ken said that DEM has just put all their organic farms on GIS.

Nancy Parker Wilson reported that her vineyard has planted an insectory (pollinator garden) and have seen increases in pollinators.

Meg said that at the next meeting we will have an outline of the draft report to share with the group.

***Caydee Savinelli, Syngenta Pollinator and IPM Stewardship Lead* - An overview of Syngenta's leadership concerning issues relating to stewardship, pollinator health and pest management.**

Obama's presidential memorandum June 20, 2014 created a federal strategy to promote the health of honey bees really started Syngenta's work on pollinators.

Obama's memorandum establishes goals:
Honey Bees – goal to reduce colony losses during winter to no more than 15% in 10 years.
Monach Butterflies – increase the Eastern population of the monarch butterfly to 225 million butterlies on 15 acres of overwintering grounds in Mexico.
Pollinator habitat acrage – restore or enhance 7 million acres of land for pollinators over the nxt 5 years through federal actions and public-private partnerships.

Syngenta Pollinator strategy includes product stewardship and operation pollinator. The company is concerned about bee health – they are a seed company and need pollinators. Syngenta does a lot of research on chemicals before releasing them for sale.

Syngenta good growth plan includes six commitments to grow more food using fewer resources.

Syngenta has 2 public publications: Pollinators and Pesticide Stewardship and Guide to Seed Treatment Stewardship. These guides will be added to the working group drop box. Key points include communication and outreach (know your farmer, know your bees), Integrated pest management, using good pesticide stewardship (proper rates, timing, application), seed handling, storage and disposal.

Operation Pollinator
A global program that started in 2000 in the UK. Putting insectory areas back on farm fields and golf courses. Key components – Evaluate, Demonstrate, Communicate, Collaborate.
Evaluate. Look at bee abundance and diversity to tailor pollinator habitats and multiple farms. Also looking at pollinators in turf settings and best practices for monarch butterflies. This work is done in cooperation with universities.

Demonstrate. Demonstration sites show customers what the gardens look like and showcase different flowers for different regions of the county.
Communicate. The gardens are multifunctional landscapes (eg. Could be in buffer areas needed for water quality or field margins).
Syngenta has a separate website focused on golf courses.
Collaborate with multiple stakeholders who have mutual interests in pollinators.

Work especially with Applewood Seed Co, Arvada, CO. They have seed mixtures especially for pollinators.

Marriott has embraced pollinators and has planted pollinator gardens.

Site prep – you need a clean seed bed in order to be successful planting. Syngenta uses glyphosate. Gary also mentioned cover crops and smother crops as ways to prepare sites.

Syngenta projects include:

- MN potato farmer who has 950 acres planted for pollinator habitat. The plantings get a lot of public enthusiasm so neighbors are now interested.

- Bee and Butterfly Habitat Fund. Purposefully links farmers and beekeepers.

- Trees Forever – IL and Iowa. Voluntary conservation getting land owners to plant trees and create pollinator habitats.

- Project Apis – CA. Provide seed mixes to almond growers for food for honey bees.

Good resources
Pollinator Partnership – http://pollinator.org
Honey Bee Health Coaliton – http://oneybeehealthcoalition.org
Monarch Collaborative: www.keystone.org/our-work/agriculture/monarch-collaborative
Grow Wise, Bee Smart: http://growwise.org

Good MP3 – North Dakota, New York includes information on DOT, Wisconsin includes information on beekeepers, landscape and agriculture.

Q. Any other recommendations?
A. Need to address youth. Syngenta is working with NC State on a 4H program. Also hope to get the FFA involved.

Q. Do you have any data showing the impacts of these plantings?
A. Neal Williams, UC Davis, published a paper looking at data related to pollinator investments.
Integrated crop pollination group also has collected data.
Difficult to see improvements in crops.

Q. Do you consider climate change?

A. Not really. There are data showing that there are concerns about bumble bees as they are not as adaptable.

***Jim Lawson, R.I. Dept. of Environmental Management, Plant Industry Unit (Apiary Inspector)* - An overview of the apiary regulation in the state of Rhode Island.**
Bee regulations were established after the introduction of the bee disase foul brood. Verroa mites are now causing major problems with hives. If not treated, the hive can infect neighboring hives.

State law requires all beekeepers register with state. No bees on comb can come into the state without a certificate of inspection. There is a $50 hive entry payment required, but this actually dissuades people from registering their hive. DEM is working to eliminate this requirement.

Inspection involves pulling out frames and looking at the brood for signs of disease and mites. A big effort is being made to educate new beekeepers on how to sample for verroa mites. If they are readily seen, the infestation is too big to control.

Best practice is to have a screen bottom board. As mites fall off, they have less access to the bees. Keepers then put a tray of food grade mineral oil under the screen to capture the mites.
How to monitor:
1) 3 day mite drop on a plate put in above the mineral oil.
2) pull a full frame of bees and gather ½ cup of bees (about 300 bees). Take mason jar with 8 mesh screen top, add isopropyl alcohol (kills bees) or powered sugar (dislodges mites). Mites are dislodged. Count them.

Verroa mites weaken the bees and create wounds that make them more susceptible to viruses. Bee parasitic mite syndrome significantly shortens the life span of the bees.

Bees don't hibernate, they create clusters to create heat to stay warm. Bees will begin producing brood in the winter and the temperature needs to be 95 degrees.

Recommend that keepers have at least 2 hives so they can have a frame of reference and ask beekeepers to inspect the hive every couple of weeks and collect samples.

Q. What regulatory authority does DEM have? A. If hive is severely infected, DEM can have the hive burned.
Q. Do most states have beekeeper?
A. No.
Q. What state has the best program?
A. MA has an excellent program with 5 staff.
Q. I heard of a new bacterium that is infecting bees.
A. Not sure.
Q. What is the treatment for mites?
A. Oxalic Acid and Formic Acid are the treatments for mites. These are very hazardous and can cause irreversible damage to eyes.
Q. Are these regulated use pesticides?
A. No

Q. If mites are such a big problem, why test? Why not just treat?
A. You don't want to create resistance.
Q. What % of hives reach a treatment threshold for mites?
A. About 90%.
Q. Do you have recommendations that the committee should consider?
A. DEM has addressed some of the problems with recent grants. Part of beekeeping is requeening and DEM is working to get more genetically robust stock. DEM is also trying to get beekeepers accustomed to requeening a hive.
Q. Are there major things people are doing that are making things worse?
A. Yes, beekeepers who are not treating for mites are spreading mites.

Comments
USF&W has a school yard habitat program that are well funded. NWF also have a similar program. Lesson plans available on pollinator.org.

Homeowners need education – how to not be afraid of insects and how to use them correctly.

DEM is underfunded and doesn't have the full capacity to do the necessary work for managing beekeepers.

Beekeepers can no longer apply antibiotics without a prescription from a veterinarian.

Golf courses. We have a lot of golf courses and there may some opportunities for pollinator enhancement. Does the green certification include pollinator habitat? We don't think it does.

6:50 p.m.: Adjourn Meeting