WISCONSIN POLLINATOR PROTECTION PLAN STAKEHOLDER MEETING September 30th, 2015

UW Arlington Agricultural Research Station N695 Hopkins Rd, Arlington, WI

Stakeholders Present

Representative	Organization
Johanna Sievewright	American Transmission Company
Larry Cain	Butterfly Gardens of Wisconsin
Doug Hauke	Commercial beekeeper
John Manske	Cooperative Network
Amy Winters	CropLife America
Dan Hopkins	Environmental Protection Agency-Region 5
John Exo	Facilitator (UW Extension)
Thomas Green	IPM Institute
Erin Holmes	Pheasants Forever
David Flakne	Syngenta Crop Protection LLC
Kurt Waterstradt	US Fish and Wildlife Service
Steve Bertjens	USDA-Natural Resources Conservation Services
Christina Locke	UW-Madison
Mike Dummer	WI Agribusiness Association
Sara Ecker	WI Apple Growers Association
Liz Meils	WI Dept. of Agriculture
Mike Murray	WI Dept. of Agriculture
Jay Watson	WI Dept. of Natural Resources
Rich Henderson	WI Dept. of Natural Resources
Christa Wollenzien	WI Dept. of Transportation
Karen Gefvert	WI Farm Bureau
Gordon Waller	WI Honey Producers Association
Andy Wallendal	WI Potato and Vegetable Growers Association
Tom Lochner	WI State Cranberry Growers Association
Thelma Heidel-Baker	Xerces Society-Midwest region

Welcome and Overview

The group was given a brief overview of the first stakeholder meeting (held August 12, 2015) and reiterated the purpose of the planning process. The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) and the University of Wisconsin, Madison (UW) are listening to stakeholder concerns about the content of the pollinator protection plan (PPP) and how it will be used. The goal is to draft a plan that reflects and balances the needs of diverse groups. We want to be proactive with this plan by addressing relevant current issues. The

stakeholders were reminded how valuable their input is, and that they are at the table to fully participate in the day's conversations and the plan development process.

The group did brief introductions, with more time devoted to new stakeholders who were not present at the first meeting. The group was asked if any major items were missed or misrepresented from the meeting notes from meeting #1, which were shared among the group and are posted publicly on the DATCP Pollinator Protection web page. One stakeholder complimented the thoroughness of the notes and reported sharing the notes with professional contacts.

New developments since the first meeting were also briefly discussed, including:

- The launch of the new <u>DATCP Pollinator Protection web page</u>, containing PPP stakeholder meeting information, meeting notes, and basic pollinator info.
- Proposed legislation to designate the monarch butterfly as the official state butterfly.
- A <u>court decision</u> cancelling the approval of sulfoxaflor, an insecticide deemed highly toxic to bees.
- A <u>call on congress</u> from the National Association of State Departments of Agriculture (NASDA) to fund the development of state pollinator protection plans.

DATCP has agreed to speak about pollinator protection at upcoming events including the Horticulture Inspection Society meeting in October, the Wisconsin Honey Producers Association (WHPA) in November, the Wisconsin Crop Management Conference in January, and the Wisconsin Pest Control Association meeting in February.

Usefulness of the pollinator plan

Because the PPP is for the residents and stakeholders of Wisconsin, it is important to understand its intended uses early on in the plan writing process. The question, "How will your organization use the plan?" was met with many helpful responses from stakeholders:

- Cooperative Network can link to the plan on its website so that the plan can be shared with farm supply members, who can then share with producers.
- The plan can be distributed at the Wisconsin Potato and Vegetable Growers Association annual conference in February.
- The plan can be referenced to in manuals growers use, like the University of Wisconsin Pesticide Applicator Training manuals and Commercial Vegetable Production in Wisconsin and Pest Management in Wisconsin Field Crops manuals.
- The plan can provide a communication link between WI Honey Producers and researchers at UW.
- Representatives from the pesticide industry highlighted the importance of the planning process in facilitating communication among partners. One desired outcome would be increased participation in DriftWatch, Bee Check, and habitat projects like Operation Pollinator.
- Fish and Wildlife Service sees this effort dovetailing with national initiatives like Monarch Joint Venture and Dept. of Interior conservation programs for landowners.

- The plan as a tool for public education, a document that summarizes the best available science and can be shared by groups like the IPM institute with crop advisors and food companies, schools and municipalities. A question remains as to how frequently to make updates to the plan as science moves forward.
- Groups like American Transmission Company and land trusts can use the plan as a trustworthy reference document for landowners.
- The plan as a tool for internal agency education, a document that can be shared among different departments within organizations and agencies like American Transmission Company, DOT, and DNR to inform and guide land management decisions in right-ofways and state lands.
- The plan can be an advocacy tool for budgeting and a guide for future policy decisions.
- The plan can be a resource for national non-governmental organizations (NGOs) like the Xerces Society to disseminate nationally and locally. The plan can serve as a model for other states undertaking pollinator protection initiatives.
- Some agricultural groups prefer that the state plan provides general information to
 promote awareness and engagement on the pollinator issue, and that more detailed
 recommendations tailored for different industry specific stakeholder groups/crops get
 documented outside of the state plan. The thought is that the plan does not need to
 duplicate the multitude of crop specific resources that already exist.

Draft Goals and Survey Results

In advance of the meeting stakeholders were provided a link to an online survey asking for feedback on draft goals compiled after meeting #1. Liz Meils (DATCP), Mike Murray (DATCP), Christina Locke (UW), and John Exo (UW Extension) worked together to distill stakeholder feedback from meeting #1 into goal statements that encapsulated the conversations at meeting #1.

Christina Locke gave a presentation summarizing stakeholder feedback from the survey — <u>click here</u> to view the presentation slides. Thirteen of 21 respondents (62%) agreed the plan should contain recommendations and informational resources, rather than just informational resources. The general goal categories offered for the plan received almost unanimous stakeholder support, but some edits were suggested. For example, the group agreed that the distinction between agricultural and non- agricultural lands (Habitat Goal 1) was not a useful way to categorize land because many uses can occur within a single parcel.

The following table lists the goals as originally presented to the stakeholders in the online survey, and a second column showing modifications suggested by stakeholders.

Goal Category	Original Wording	Modified Wording
Habitat	Goal 1. Expand pollinator habitat by	Goal 1. Expand pollinator habitat.
	integrating BMPs into existing ag and non-	Objective 1. Integrate pollinator
	ag land management practices.	friendly BMPs into existing land
		management practices.

	Goal 2. Define "habitat quality" and increase awareness of what quality pollinator habitat is.	Objective 2. Identify settings appropriate for new habitat. Goal 2. Define "quality habitat" and increase awareness of what quality pollinator habitat is.
Pesticides	Goal 1. Minimize impacts of pesticides on pollinators. Goal 2. Increase awareness of IPM strategies that benefit pollinators.	Goal 1. Minimize impacts of pesticides on pollinators. Goal 2. Increase awareness of IPM strategies that benefit pollinators.
Managed Bees	Goal 1. Increase access to and use of tools to connect beekeepers with pesticide applicators. Goal 2. Increase hive health and survival by promoting BMPs, their understanding and use.	 Goal 1. Increase hive health and survival. Objective 1. Increase access to and use of tools to connect beekeepers with pesticide applicators. Objective 2. Promote BMPs, their understanding and use.
Evaluation/Research	Goal 1. Measure objectives/progress towards goals outlined in the pollinator plan. Goal 2. Keep track of gaps in knowledge for future research purposes.	Goal 1. Measure progress towards goals included in the pollinator plan. Goal 2. Keep plan current. Objective 1. Create a stakeholder group to convene regularly. Objective 2. Update plan with best available science. Goal 3. Document gaps in knowledge.

One question was posed that gets at the underlying motivation for the plan and its goals: Is the plan for maximizing pollination services (to crops and natural ecosystems) or is it for maximizing biodiversity? Pollination services and pollinator diversity can complement each other and the plan should be able to account for both purposes to some degree. This will be a continuing theme moving forward, along with the role of industry and concerns about regulatory restrictions.

Afternoon Session: "Open Space" Group Activity

During the afternoon the stakeholders broke into small, self-directed groups to discuss and record strategies, action items, proposals, disagreements, etc. for each goal area. Participants included all stakeholders, meeting organizers, and three members of the public. Stakeholders took turns stating topics they would like to discuss and setting an agenda for the afternoon discussions. Three concurrent discussions were scheduled for 20-30 minute time slots.

Discussion leaders used flip charts and note paper to record important points of each discussion. Results were posted on the wall for all to see in real time. During the sessions, participants were free to move among discussions at their discretion. Reports from each discussion session are summarized below. (Note: Several topics were proposed that were not able to be formally discussed due to time limitations. These included public education of pollinator issues and honeybee stings, and ways to measure baseline data from which to determine progress towards landscape-level goals.)

1. Management Resources for Beekeepers

Convener: Doug Hauke

Participants: Larry Cain, Liz Meils, Brian Kuhn, Dan Ziehli, Sara Ecker

Discussion:

- Internet: identify reliable help sites and videos, provide links on DATCP webpage
- Incorporate pollinator friendly habitat into Conservation planting help colonies
- No structure in place for beekeepers?
- No "short course" beekeeping classes currently being offered by UW
- Link BMP videos on state web site
 - Video for bees coming into WI for cranberries
- Flip book field guide for bee help
- App for bee help (submit photos to a specialist?)
- Mentors for beginning beekeepers
 - o Training for mentors? Get mentors on same page
- Limited funding for DATCP Apiary Inspectors
 - Definite need for more apiary inspectors
- Beekeepers want more inspections add small fee to help offset costs of an additional inspector?
- Link USDA Bee Lab sampling protocol on DATCP webpage
- DATCP develop flyers for Wisconsin beekeeper resources
- Tie into other groups like University of Minnesota Bee Lab, Project Apis m., NASA hive scale project, etc.
- Set up (DATCP? WHPA?)

 hard packets of resources and internet for beginning beekeepers
- Pest and disease information for WI beekeepers
 - Add WI specific BMPs to back side of inspection report
- Add Beekeeping column to DATCP Pest Bulletin (published May-August)
- Enforce State permits of importation of bee with fines for dumping bees
- National Honey Board for possible funding opportunity?
- Listing of educators/extension people for help

2. Cooperatives' roles and opportunities in pollinator protection

Convener: John Manske, Tom Green

Participants: Dan Hopkins, Mike Dummer, Sara Ecker, Robby Personette, Liz Meils

Discussion:

- Cooperatives have a big role to play including farm supply coops, most of which supply farmers with pesticides.
- Many/most beekeepers are coop members may be health care coop, food coops, coop bank, etc. Pollinator protection benefits all.
- Pesticide use ubiquitous Pesticides are used by many different users and for a wide variety of purposes, from homeowners to farmers to largescale land management.
 We need to identify high risk uses (ex: apples vs. potatoes) so we can prioritize those for education.
 - o How do we deal with continuous blooming plants?
- Are herbicides toxic to pollinators? They can impact habitat at least.
- Coops have multiple existing conduits for information.
- Many homeowners have planted/preserved milkweed in yards. Many coops reach homeowners.
- Many/most coops have proprietary counterparts, e.g., hardware stores, food stores, agricultural supply retail. They also use mass/targeted communications.
- Some coops have annual meetings with large crowds.
- Hardware stores include coops, have products that can help pollinators including seeds for plants that provide nectar/pollen resources.
- FieldWatch is umbrella for Bee Check and DriftWatch programs. Manages posting of bee hive sites. Applicators can see locations of hives on their phones/iPads.
 - Are GPS coordinates in FieldWatch in sync with [ex: John Deere] planters?
- Farm supply coops concerned about new/additional regulations. Useful information is appreciated.
- Broad bans on pesticide classes not the answer. Alternatives to neonicotinoids can have other consequences, e.g., toxicity to beneficial organisms that control other pests.
- Applying pesticides at night can reduce exposure to pesticides, but can also result in concentrated drift if an inversion layer or low wind speeds are present.
 - OR State has a good factsheet on inversion layer

3. Minimizing pesticide impacts to pollinators/ Protecting pollinators from pesticides and people, plants & crops from pests

Title: Identifying specific actions to minimize pesticide impacts to bees

Convener: Dan Hopkins

Participants: John Manske, Tom Lochner, Mike Dummer, Tom Green, David Flakne, Erin Holmes, Mike Murray, Amy Winters, Gordon Waller

Discussion:

- Accurate science should inform actions to protect pollinators from pesticides.
- Applicator should know timing, application rates and other conditions that may affect pollinators.
- Broad range of stakeholders should be aware of the PPP.
 - Suggest segregated messages for various stakeholder users of plan

- Follow the label suggest ongoing attention to pesticide labels used around pollinators.
- Encourage more use of DriftWatch Bee Check to identify hive locations, needed by both applicators and beekeepers.
- Suggestion that pollination services/honey production be promoted as an additional reason to encourage landowner participation in agricultural enterprise areas.
- Identify issues that are in pipeline (unresolved issues) for later resolution/research efforts.
- Identify resources, including non-pesticides, for addressing "problem" or unwanted bees. For example bees that are nesting inside a building or adjacent to a school playground. We must recognize that some people have allergic reactions to bees.
- Highlight biologic conditions that affect pollinator movement (risk of exposure).
- Promote responsible pesticide use to protect pollinators in a variety of venues e.g., flower shops and hardware stores.
- Master Gardeners and garden clubs are some of the most enthusiastic audiences and can be tapped for encouraging pollinator management practices.
- Clarify terminology: It is not widely understood that the term "pesticide" includes insecticides, fungicides, herbicides and other products intended to control a pest. Clear language can help identify how different types of pesticides pose different risks to native pollinators and honey bees.
- Give some perspective about risks to pollinators due to "pesticides" as well as other stressors including the interaction of stressors. This includes identifying that the sublethal effects of pesticide exposure in combination with other environmental factors can lead to pollinator declines.

4. Hive health stressors

Convener: David Flakne

Participants: Brian Kuhn, Gordon Waller, Larry Cain, Amy Winters, Doug Hauke, Tom Lochner Discussion:

- The many stressors were discussed, including diseases, mites, miticides such as formic acid and other pesticides used in the hive. Everyone agreed that a combination of stressors contributes to declines in pollinator health. Question on controls for mites: formic acid? Growth regulators?
- Are we overworking our bees? There was a long discussion on how some beekeepers are over working their hives on multiple crops until the hive collapses.
 Failure to rest hives causes stress on the bees. Transportation stresses hive – dehydration and temperature.
- Poor diet also causes hive stress, beekeepers that are not feeding with protein (protein patties) see declines.
- Habitat is critical diverse diet especially where hive is resting and rebuilding.

5. Creating more and connected habitat for all pollinators - "Habitat 1"

Convener: Kurt Waterstradt, Christa Wollenzien

Participants: Karen Gefvert, Dan Ziehli, Andy Wallendal, Rich Henderson, Erin Holmes, Johanna Sievewright, Jay Watson, Thelma Heidel-Baker, Holly McDonald, Steve Bertjens, Christina Locke, Mike Murray

Discussion:

- Beekeepers want more habitat.
- Define habitat proposed and existing.
- "Quality habitat"
 - Managed bees and native species
 - Good pollen and nectar sources
 - Temporally spaced blooming plants
 - Location
- Biodiversity temporal
 - Diversity of plants is key
 - Non- wind pollinated trees and plants
 - Bloom throughout growing season is necessary with a minimum of three species blooming at a time.
 - Native plants (adapted to Wisconsin climate) can be planted in rows or prairies
- Identify land uses
 - Strategies to benefit pollinators: mowing, leaving strips fo vegetation within cropland etc.
 - o Identify/maintain existing pollinator habitat
 - Educating about pollinator habitat
- Pollinator needs
 - O What are the basic pollinator needs?
 - Define production/non-production drift issues between the two
- Tiered strategies for farmers to create pollinator habitat What is the minimum set of actions that will help pollinators in agricultural settings? What is the ideal percent of pollinator friendly habitat to aim for?
- Land Stewardship is important to consider. The incentive to manage for pollinator habitat will vary based on who owns the land. The plan should consider land owned and managed by the same entity, rental land, and differences between public and private land.
- Partnership opportunities with corporate/NGO/government should be encouraged.

6. How to manage habitat / not all habitat is created equal / recommended BMPs for expanding pollinator habitat – "Habitat 2"

Conveners: Jay Watson, Thelma Heidel-Baker, Johanna Sievewright

Participants: Andy Wallendal, Christa Wollenzien, Rich Henderson, Kurt Waterstradt, Steve Bertjens, Christina Locke

Discussion:

Manage habitats differently

- Cropland
- New plantings
- Wild natural areas
- Contiguous habitat vs. linear
- Stream buffers shoreland zoning requirements
- Pollinators don't recognize parcel boundaries. Pesticide drift issues and buffers next to agricultural land – NRCS programs require 150 ft. buffer from enrolled land where no insecticides are used
- Consider whether *any* habitat is really better than no habitat. What makes good habitat?
 - Diversity of plant community is needed, but habitat is more than just plants
 - o Placement of habitat is crucial
 - Good habitat is not directly adjacent to land that is regularly sprayed
 - Varying types of habitat need to be managed in different ways
 - o Different strategies are needed for creating vs. enhancing natural habitat.
 - O What is the potential of roadside areas as habitat?
 - We must keep in mind that habitat often needs to meet other objectives of the landowner, such as erosion control, crop production, aesthetics, wildlife or others.
- Regionally specific plantings and how to incorporate into already existing natural rightof-ways
 - Curtis work from 1930s is county-specific (Curtis, John T. <u>Vegetation of Wisconsin</u>.)
- Other planting options for habitat
 - Low maintenance
 - Quick establishing
 - Good pollen/nectar source
 - Quick erosion control
- Roadside and natural habitat challenges
 - American view of clean, mowed areas is "better" and wildflower plantings are messy
 - DOT planting practices designed for fast green-up and erosion control (required by cn NR 151 Wis Adm Code). Invasive species control (required by ch NR 40 Wis Adm Code) guides DOT mowing practices before seed set. Pollinator habitat goals present a balancing act. Engineers put in roadside plantings (usually heavy on cover crop) and are not involved in follow-up maintenance. This presents long term management challenges.
 - Funding and education opportunities
 - Partnering
 - Education/funding for pollinator plantings next to natural areas for (DOT)
 - DOT will listen to agricultural community
 - DOT trying to launch sponsorship program \$/partnership for small highways

- Friends of the Monarch Trail were able to have the monarch mix planted at the DOT zoo interchange highway project in Milwaukee because one woman spent seven years advocating for this habitat.
- Mowing: some county and town road crews mindful of signs warning about pollinator habitat
- Establishing pollinator habitat is not easy passive seed mix that is quick to establish
 AND has a high enough concentration of pollinator plants?
 - DOT has four seed mixes with native plants
 - o Clover considered an attractant for deer and does not control erosion
 - o Utility lines: 70% revegetation is goal, establishment of natives is an issue
 - Interseeding/overseeding takes ~5 years to establish but you get better composition after 10-20 years
- What are the secondary benefits of pollinator habitat?
 - Pest control (habitat harbors insect predators that prey on crop pests)
 - Once established, perennial plantings provide erosion control
 - Aesthetics, habitat for other wildlife and other reasons also exist.
- Resources
 - o The Restoration Handbook
 - Wisconsin NRCS Biology Technical Note No. 8. Pollinator Biology and Habitat.
 - <u>USDA NRCS Agronomy Technical Note No. 9</u>. Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators Using Integrated Pest Management and Other Conservation Practices.
 - Seed mixes that are Wisconsin appropriate.

Next steps

The third meeting scheduled for November 24th

Prior to the next meeting we will:

- Write up meeting summary, send to group and post online.
- o Request group feedback on a plan outline.
- Present a draft plan to the DATCP Board on Nov 18, a draft will be ready by Nov. 11.
- o Consider options for the public comment period.