

US EPA ARCHIVE DOCUMENT

PPDC Pollinator Protection Workgroup Meeting

October 11, 2011, 1-5 PM

1 Potomac Yard, South Building

4th Floor

Rooms 4370-80

2777 S. Crystal Drive,

Arlington, VA 22202

Meeting attendees: Attached as Appendix 1

Minutes from PPDC WG on Pollinator Protection on Tues., October 11, 2012

- Welcome and Roll:
- Rick Keigwin, Director of Pesticide Re-evaluation Division, OPP welcomed the group and reminded everyone of the charge from the PPDC (April, 2011).
The workgroup will provide advice to EPA on pollinator protection related to the following themes:
 - *Initial, science-based risk management approaches, including appropriate labeling restrictions and training;*
 - *Development of information on state approaches and authorities;*
 - *Transfer of lessons learned by various stakeholders to improve existing management practices;*
 - *Continuing international communication;*
 - *Other issues the Agency wishes to bring to the workgroup's attention.*

Review Objectives of the Workgroup, Review Subgroups formed at last meeting/identify co-chairs; Identify key issues corresponding to each of the subgroups

- After a brief discussion on the scope of the focus of the WG, and a brief update on the status of the SETAC Pellston workshop on Pesticide Risk Assessment for Pollinators, the subgroups were asked to report out to the whole WG.

Group One: Management Strategies

Marylou Verder-Carlos volunteered to initiate the first meeting of Group One. Points raised during the initial meeting of this subgroup are highlighted below. Summary notes are attached as Attachment 2.

- The group discussed the importance of information on the residual toxicity to bees
- Some members of the subgroup indicated that pesticides with residual toxicity to bees for more than 5 days present a real conundrum for applicators that have a need to spray within a [pest pressure] window
- Participants discussed bee registries and whether they represent an effective management option since because beekeepers cannot always move their hives. Other members noted that registries do not necessarily mean that they will be used to ask beekeepers to move their hives.

- Some participants noted that repellents may offer some hope of a way to keep bees and other non-target insects from dangerously toxic pesticides when they are tank mixed with the chemical.
- Participants discussed the need to have information (on the label) regarding the inert ingredients of products.

Group Two: Communication

While Group Two did not meet in advance, the participants noted that reporting incidents is made difficult due to the costs associated (financial and otherwise) and certification and training are important components of communication.

Group Four: Enforcement

Group Four also met in advance of the meeting. Below are comments made by this subgroup. Meeting notes are attached as Attachment 3.

- The group noted an online IPM tool available on the Cornell University website captured in the article on Environmental Impact Quotient (based on data in EXTOXNET) <http://nysipm.cornell.edu/PUBLICATIONS/eiq/default.asp>
- One participant stated that USDA is not the ideal body to handle enforcement. There should be an arms-length between reporting and decision making.
- Commentators noted that enforcement is not working on a state level, and that EPA regional offices may be able to lend help. Landowners, leasers, and sublesers must be notified. A loss must occur “according to the label” which is hard to prove. States are not willing to investigate, and perhaps EPA should investigate. Commentators also noted that there should be an arms-length between reporting and decision making.

General thoughts shared by meeting participants

The following general remarks were made throughout the subgroup report-outs.

- Many people use pesticides that are not certified applicators, such as homeowners which may have no training. From an evaluating of sales data and use data and it is clear that a significant amount of pesticide use is not reported, this is interpreted to be the volume used by homeowners. This makes the label language critical. Members commented on how best to reach homeowners.
- The North American Pollinator Protection Campaign (NAPPC) is working on a publication for pesticide applicators and consumers to educate them on ways to protect pollinators.
- Certain members commented that bee registries have a high value; that applicators can work with beekeepers to protect pollinators. Some states have moderately successful registries. Key factors of success are communication and cooperation between beekeepers. A registry, if used properly can facilitate this. It was also noted that bees are everywhere, and a registry does not tell you where the native/wild bees are.
- The comment was made that usage information is very important so that everyone knows what and when a pesticide product is applied.
- Beekeepers often have to discover, by trial and error, how long pesticide products are toxic. This information (residual toxicity or RT) could be printed on the label to save everyone time and money. Night applications could be done for worker protection as well

as pollinator protection. Knowing the habits of the bees and the nature of the chemicals is important.

- Timing for reentry of a bee into a treated field is very important.
- Certain “win-win” examples exist (Syngenta/apple trees), but it took years to develop and reach this point. Subgroup members commented that it needs to create and promote these situations quickly.
- Members commented that a resource with comparative toxicity information to different kinds of bees would be very useful. Similarly, information on foliar half-lives would also be useful.
- One commenter noted that all stakeholders are engaged in these issues. Crop advisors also need to be involved early and often. NRCS resources such as outreach materials should be used. Extension and crop advisors use the NRCS materials.
- Stakeholders should be informed about the status of the SETAC Pellston conference.

Preparation for Presentation to the Full PPDC on Wednesday October 12, 2012

Members of the WG discussed primary points and issues that should be consolidated for presentation to the full PPDC. Members of OPP volunteered to help draft slides for presentation to the full PPDC (attached as Attachment 4). Four members of the WG volunteered to present, one for each of the four identified topic areas (best management practices; labeling; training and communication; and, enforcement).

Next Steps Identified for the PPDC WG on Pollinator Protection

Members of the PPDC WG on Pollinator Protection presented to the full PPDC. Next steps for the WG was then discussed and decided upon.

Four Topic Areas Identified

- 1) Labeling
- 2) Best Management Practices (BMP's)
- 3) Communication/Training/Education
- 4) Enforcement

Below are Action Items identified for each subgroup. These are not intended to limit the subgroup, but provide a point of departure for each group to begin work.

1 Labeling

- Survey current label statements
- Assess difficulties/shortcomings of the current label language(s) to protect
- Investigate other interpretations of pesticide label language (Minn. court case)
- Identify gaps in the label language
- Intersect with the Enforcement subgroup

2 Best Management Practices (BMP's)

- Draw Together Existing BMP Materials and Efforts
 - Identify, and gather existing BMP resources (CDPR, Washington State, others)
 - Look into current efforts such as through NRCS, or the Xerces Society

- Consolidate, update and vet existing materials
- Integrate international BMP or risk management efforts (OECA, NAFTA or others) into this effort.
- Find and examine case studies of BMPs
 - Case study where the crop is dependent upon pollinators
 - Case study where the crop is not dependent upon pollinators
- Investigate Bee Registries
 - Suggested to form a separate group to look into the different Registry models
 - Pros/cons/costs, etc.
 - Identify case studies to examine costs, mechanics, etc.

3 Communication/Training/Education

- Identify existing training and education materials (NAPPC, CDPR)
- Perform a gap analysis of between what is existing, and what may be considered model training material.
- Link to BMP Subgroup

4 Enforcement

- Identify systems of enforcement
 - State
 - Federal
- Create a survey of guidance on investigations.
- Look into models for rapid dissemination of information (CDC, others)
- Reach out for OECA participation and guidance
- Reach out for SFIREG participation and guidance

Next Meeting of the PPDC WG on Pollinator Protection

- A meeting of the Full WG will be scheduled in advance of Thanksgiving.
- The purpose of that meeting will be to:
 - (i) discuss the next steps (actions and timing)
 - (ii) confirm subgroup composition,
 - (iii) identify subgroup co-leaders,
 - (iv) other items raised by the WG members

Attachment 1

Attendees of PPDC WG on Pollinator Protection, Meeting September 8, 2011

Marylou Verder-Carlos

Julie Schlekau

Bret Adee

Rick Smith

Mark Seeting

Rich Bireley

Peter Egan

Dave Epstein

Rich Bireley

Darren Cox

Gabriele Ludwig

Ray McAllister

Ken Nye

Scott Black

Thomas Smith

Tim McPherson

Lily Negash

Ian Kelly

Darren Cox

Dave Biddinger

Mace Vaughan

Susan Kegley

Lori Berger

Erik Johansen

Thomas Moriarty

Mary Clock-Rust

Richard Keigwin

Thomas Steeger

Attachment 2

Notes from October 5, 2011 Conference Call of Group One: Management Strategies

Attending the Call:

- Marylou Verder-Carlos, California Department of Pesticide Regulation (PPDC member)
- Julie Schlekau, Valent
- Bret Adee, Adee Honey
- Rick Smith, Smith Honey
- Mark Seeting, US Apple
- Rich Bireley, California Department of Pesticide Regulation
- Peter Egan, Department of Defense
- Dave Epstein, USDA – Office of Pest Management Policy (OPMP)
- Thomas Moriarty, Pesticide Re-evaluation Division Team Leader
- Mary Clock-Rust, Biologist, Environmental Fate and Effects Division

Topics Discussed:

1. Voluntary Notification/Registration of Colonies – Bee Registry
 - a. label should protect bees not extra label regulations
 - b. the beekeepers dominated the discussion and felt that the bee registry was not a useful management strategy
 - c. moving the bees is rarely a practical option and is expensive with often no safe location to move bees to
2. Label Language- Residual Toxicity
 - a. temperature and humidity impact on residual toxicity
 - b. placement of temperature and humidity information on product label
 - c. extrafloral nectaries produce nectar long before the crop blooms
 - d. **Recommendation:** residual toxicity time should be included on the product label

3. Repellents
 - a. repellents recommended as a solution to protect bees from pesticide exposure
 - b. permethrin was cited as an example
 - c. **Recommendation**: further research is needed to determine timing and choice of repellent

4. Synergism
 - a. inert ingredients should be listed on the product label
 - b. tank mixes may provide synergism challenges and some combinations
are actively advertised as increased or extended toxicity based on presence
of inert ingredients
 - c. **Recommendation**: include this information be researched and provided where it is known

5. Adjuvants
 - a. adjuvants are not federally registered and some have increased or extended
toxicity once the product is sprayed
 - b. **Recommendation**: the aforementioned information should be made generally available

6. Pollinator Training
 - a. **Recommendation**: training and certification should be included in the appropriate categories

Attachment 3

Notes from Subgroup Four: Enforcement, Conference Call on October 5, 2011

-Rich Bireley
-Darren Cox
-Gabriele Ludwig
-Ray McAllister
-Ken Nye

Issues for PPDC discussion:

1. **Voluntary Notification/Registration of Colonies**

Background – several states have programs, both voluntary and required whereby a beekeeper notifies the local agency of the location of managed hives. In a few states, when an applicator intends to apply a pesticide toxic to honey bees, the applicator must call the local agent prior to the application, get the phone number of a registered beekeeper with hives in the area, and call the beekeeper to inform the beekeeper of the impending application.

Recommendation – The group feels the PPDC should recommend EPA discuss the pros and cons of various voluntary registration/notification programs, evaluate the pros and cons of each program, and consider the effectiveness of the programs at protecting honey bees. Drift watch was suggested as a model as well as the registration/notification program in California.

2. **Foliar Residual Toxicity**

Background – EPA requires foliar residue toxicity data from registrants. The studies indicate how long the pesticide's residues are toxic to honey bees and other pollinators. Some registrants put the residual toxicity time (length of time a pesticide's residues are toxic to honey bees) on the labels, while some labels simply state that the pesticide and its residues are toxic to bees. In addition, some labels have foliar residual toxicity statements with times longer than 8 hours. There is inconsistency in how States are interpreting these statements. Some states believe label statements of residual toxicity greater than 8 hours can be interpreted to mean the product cannot be applied to blooming crops.

Recommendation – EPA should consider adding foliar residual toxicity times to labels if the data supporting the length of time is acceptable, and it is helpful to growers and beekeepers.

3. **Incident Reporting/Investigations**

Background (Investigations) – Bee kill investigations are not handled consistently in all states and some states either do not investigate bee kills or do not have the resources to do so. In addition, even where the local agency has the authority to investigate bee kills, the lack of use reporting limits the scope of the investigation. In states where bee kills are investigated, there is not a uniform way to move the report beyond the local investigation authority.

Recommendation – Recommend EPA determine if the local enforcement agency investigating a bee kill has the authority to request pesticide application information from growers in the area of the kill. How does this vary from state to state? How is it affected by national, state, and local laws and regulations?

Incident Reporting – Currently, EPA has an incident reporting portal. Beekeepers feel the portal is not user friendly.

Recommendation - EPA conduct outreach to beekeepers on the portal and update/upgrade to make it more accessible and user friendly to beekeepers.

4. Training and Continuing Education

Recommendations: a) Update National Applicator/Advisor Manual to improve pollinator protection.

b) Train local enforcement agencies and others likely to be involved in investigation of reported bee kill incidents on how to conduct such an investigation.

c) Have Marylou Verder-Carlos provide PPDC members with California K.E. pollinator protection upgrades to the Pest Control Advisor category for distribution to and consideration by PPDC members.

d) Include information from beekeepers on common bee losses/incidents/issues to be incorporated into K.E.s. Details from a range of representative incidents where pesticide use has adversely affect managed bee populations can be particularly useful in a training and education context.

e) Recommend training for extension agents, land grant universities, local agencies, and U.S. EPA on pollinator protection.

f) Include objective and quantitative information on the benefits of managed bee populations and native pollinators to crops that are not necessarily dependent on pollinators for pollination, but benefit when bees are present.

g) Include USDA to assist in training.

Attachment 4

Slide Presentation of the PPDC WG on Pollinator Protection to the Full PPDC, Wednesday, October 12, 2012 (in Word format)

Slide 1:

Work Group Charge

- Explore initial, science-based risk management approaches including appropriate label restrictions and training;
- Develop information on State approaches and different authorities
- Transfer of lesson learned by various stakeholders in order to improve existing management practices [across multiple factors affecting pollinator declines]
- Continuing international communication; and,
- Consider other issues the WG wishes to bring to the PPDC's attention

Slide 2:

Meetings

- Initial meeting of the WG on September 8th
 - Discussed ground rules and Work Group charge
 - Discussed ideas and identified major themes
- WG meeting on September 28th
 - Subgroups are formed around major themes
 - Discussed subgroups holding their own meetings to further explore their respective themes
- Subgroup meetings during the week of October 3rd

Slide 3:

WG Composition

- 45 WG members, representation from:
 - Grower groups; agro. industry; beekeepers; applicators; State Lead Agencies; academia; cooperative extension; non-governmental groups; and USDA

- ❑ WG members formed into subgroups around themes
 - 28 members in management strategies
 - 5 in communication
 - 5 in enforcement
 - 7 in data and databases
- ❑ In WG meeting on Oct. 11th, subgroups reported out and the WG slightly redefined its focus areas.

Slide 4:

Theme 1: Best Management Practices

- ❑ WG to explore information that currently exists or what works now for growers and beekeepers
- ❑ WG to explore voluntary registries
 - What models are out there, what works, what doesn't, an opportunity for communication and information exchange.
- ❑ WG to explore case-studies where stakeholders worked together for successful protection of pollinators and crops – what worked in these cases.

Slide 5:

Theme 2: Training and Education

- ❑ WG will look into what training information currently exists
 - Current effort underway by The North American Pollinator Protection Campaign
- ❑ WG to explore ways for parties to communicate and get information between stakeholders
 - Through co-operative extension, information bulletins, websites, journals, farmer to farmer
- ❑ Explore what information or training could be made available amongst stakeholders that will lead to win-win situations
 - Toxicity information on products - - information that may be beyond the label
 - Information on inerts, etc.

Slide 6:

Theme 3: Enforcement

- ❑ Understanding the difference between an incident and an investigation
- ❑ Explore whether there is, or can be a standard processes
 - How to report
 - What to report
- ❑ Explore information sharing between the State and EPA

Slide 7:

Theme 4: Labeling

Short-term

- ❑ WG to explore what exists today and how EPA currently determines what goes on the label
- ❑ Commercial agricultural products vs. Home owner products
 - What information is available on each type of product
 - Is the label information clear and easy to read
- ❑ WG to explore whether label language to protect bees can be made simpler/clearer for both commercial products and homeowner products

Long-term

- ❑ Risk-assessment based - - after data requirements and a risk assessment process is defined