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www.honeybeehealthcoalition.org

November 21, 2014

OPP Docket
Environmental Protection Agency
Docket Center (EPA/DC), (28221T)
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001
Attention: Docket ID No. **EPA-HQ-OPP-2014-0806**

The Honey Bee Health Coalition appreciates the attention that President Obama and the Pollinator Health Task Force are giving to pollinator health. The Coalition respectfully submits the enclosed comments in response to the Pollinator Health Task Force's request for stakeholder input (Federal Register Notice, **EPA-HQ-OPP-2014-0806**).

The Coalition is a diverse public-private partnership focused on implementing solutions to achieve a vision of **Healthy Bees, Healthy People, Healthy Planet**. The Coalition's efforts focus on collaborative solutions to improve the health of honey bees and other pollinators in the context of productive agricultural systems and thriving ecosystems. The Coalition is focused on four strategic priorities: hive management, forage and nutrition, crop pest control, and cross-industry outreach, education, and communication.

The Pollinator Health Task Force's request notes that it is 'particularly interested in hearing about opportunities for public-private partnerships to augment actions on research, education, and habitat expansion and improvement.' As one of the largest and most diverse public-private partnerships already working to address honey bee health, the Honey Bee Health Coalition is well positioned to assist in these capacities, and we welcome the opportunity to coordinate directly with the Task Force.

The Coalition's input on specific activities for inclusion in the National Pollinator Health Strategy is summarized in the executive summary below. Additional details and context for this feedback, along with additional information about how the Honey Bee Health Coalition is working collaboratively through public-private efforts in each of these areas, is found following the executive summary. Finally, attached, please find the Coalition's October 2014 *Bee Healthy Roadmap*, which outlines shared strategic priorities for improving honey bee health through collective action that will accomplish more than any one group can achieve on its own.

The Coalition welcomes the opportunity for further discussion with the Task Force. I can be reached at (970) 513-5830 or jshapiro@keystone.org.

Sincerely,

The Honey Bee Health Coalition Steering Committee

p.p.

Julie Shapiro
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Executive Summary: Honey Bee Health Coalition Input to the Federal Pollinator Health Task Force

The Coalition encourages the Pollinator Health Task Force and the National Pollinator Health Strategy to prioritize the following public-private efforts:

- 1. HIVE MANAGEMENT AND VARROA MITE CONTROL: Put the best available tools, techniques, and technologies in the hands of beekeepers so they can better manage their hives and address stressors such as the *Varroa destructor* mite.**
 - Support efforts of Technology Transfer Teams and other state and federal extension programs to provide essential extension, education, and monitoring to beekeepers at all scales.
 - Work in partnership with industry to prioritize and accelerate the identification and registration of products to effectively control *Varroa destructor* mites.

- 2. FORAGE AND NUTRITION: Ensure honey bees – especially those in and around production agriculture – have access to a varied and nutritious diet.**
 - Increase the acreage and nutritional value of forage plantings in the US Department of Agriculture’s conservation programs specific to honey bees, including the Conservation Reserve Program (CRP), by adopting science-based and stakeholder-informed seed specifications and technical guidelines that encourage planting more affordable, varied forage for honey bees.
 - Support science to identify appropriate specifications and engage diverse stakeholders – including beekeepers, crop producers, conservation interests, seed producers, researchers, and other stakeholders– in the identification of appropriate seed specifications for USDA conservation programs.
 - Support and engage in public-private demonstration projects that show and quantify the agronomic, economic, and ecosystem service co-benefits of honey bee forage for a variety of stakeholders, building the ‘win-win’ case for bee forage on private lands.
 - Increase forage opportunities and the nutritional value of forage for honey bees on other private and public lands. Work with government agencies, NGOs, and other stakeholders to coordinate expansion and maintenance of new foraging landscapes in key beekeeping regions of the country.
 - Support research and development for nutritional supplements to support commercial honey bees when forage is lacking.

- 3. CROP PEST MANAGEMENT: Improve communication and education across diverse stakeholders regarding science-based best management practices for crop pest management that controls crop pests while safeguarding pollinator health.**
 - Support State-based and other programs for bringing together beekeepers, agricultural producers, crop advisors, University extension, and other stakeholders in the discussion and implementation of science-based best management practices that are appropriate for the given regions, crops, and other contexts.



- Create better access to key information by growers and beekeepers for decision making. For example, create an online, 'one-stop shop' through which stakeholders can easily access information on best management practices by region and crop.
 - Encourage State programs for pesticide applicators and other stakeholders to incorporate and provide continuing education credits for trainings on crop pest control and pollinator health. Work with state governments and federal agencies to provide support to stakeholders for the dissemination of knowledge and training.
 - Work through appropriate agencies to improve incident reporting mechanisms; where possible, reduce barriers to reporting; increase the utility of reported data in preventing future incidents.
- 4. COLLABORATION and COMMUNICATION: Promote collaboration, outreach, education, and communications to raise awareness of honey bee health challenges and opportunities and to encourage collaboration to improve honey bee health.**
- The Task Force's public education campaign should create awareness of the multiple factors that impact honey bee health, the need to improve bee health through a diversity of approaches, the need for public-private collaboration across all stakeholders, and the message that beekeepers and farmers are part of 'One Agriculture' system supporting global food security.
 - The National Pollinator Health Strategy should promote collaborative, private-public partnerships for collective impact. Collaboration is essential to finding solutions that will work for all stakeholders. It enables stakeholders to achieve greater impact than any one stakeholder could achieve on its own, and to achieve mutual goals with more impact and more cost-effectively.



Introduction

The Honey Bee Health Coalition™ is pleased to submit these comments in response to Federal Register Notice EPA-HQ-OPP-2014-0806, Pollinator Health Task Force: Notice of Public Meeting.

The Task Force has specifically requested input on actions that the Task Force should consider in developing a Federal strategy to reverse pollinator losses and help restore populations to healthy levels. The Federal Register Notice states, 'The Task Force is particularly interested in hearing about opportunities for public-private partnerships to augment actions on research, education, and habitat expansion and improvement.' As one of the largest and most diverse public-private partnerships already working to address honey bee health, the Honey Bee Health Coalition is well positioned to assist in these capacities, and we welcome the opportunity to coordinate directly with the Task Force.

Like the Pollinator Health Task Force, the Honey Bee Health Coalition is focused on developing collaborative, public-private solutions for pollinator health issues. These solutions include best management practices for both beekeepers and crop producers, including pesticide risk mitigation, research, education opportunities, and pollinator habitat improvements. The Coalition's comments to the Task Force describe the purpose, composition, priorities, and activities of the Coalition and their alignment with Task Force priorities. The comments also provide input on specific activities for incorporation into the National Pollinator Health Strategy, including opportunities for public-private partnerships to augment actions on research, education, and habitat expansion and improvement.

It is the Coalition's hope that we can work together with the Pollinator Health Task Force, as appropriate, to achieve our shared goal of reversing pollinator losses and helping restore populations to healthy levels. By coordinating together on key priorities we can include a broader set of stakeholders and achieve our mutual goals faster, with greater impact, and do so more cost effectively. Together we can collaboratively implement solutions among food, agriculture, government, and conservation partners. Together we can achieve a healthy population of honey bees as well as healthy populations of native and managed pollinators. Together we can ensure sustainable agriculture, healthy ecosystems, and healthy ecosystem services for years to come. The Coalition's Facilitator, Julie Shapiro, Senior Associate, The Keystone Center, can be reached at (970) 513-5830 or jshapiro@keystone.org to provide further information.

About the Honey Bee Health Coalition (www.honeybeehealthcoalition.org)

As the Pollinator Health Task Force already knows, global food production and North American agriculture depend on honey bees. Commercial honey bees support billions of dollars in North American agriculture annually, and pollinators support one-third of global food production volume to some degree. It is for this reason that more than 30 diverse organizations and agencies from across food, agriculture, government and conservation have formed the Honey Bee Health Coalition with the goal of reversing recent declines in honey bee health and ensuring the long-term health of honey bees and other pollinators.



Launched in June 2014, the Honey Bee Health Coalition is a public-private partnership that brings together beekeepers, growers, researchers, government agencies, agribusinesses, conservation groups, manufacturers and brands, and other key partners to improve the health of honey bees and other pollinators. Its mission is to collaboratively implement solutions that will help to achieve a healthy population of honey bees while also supporting healthy populations of native and managed pollinators in the context of productive agricultural systems and thriving ecosystems. The Coalition is focusing on accelerating collective impact to improve honey bee health in four key areas: forage and nutrition, hive management, crop pest management, and outreach, education, and collaboration. Through collective impact on strategic priorities, the Coalition is seeking to achieve its vision: **Healthy Bees, Healthy People, Healthy Planet.**

Through its unique network of private and public sector members, the Coalition fosters new partnerships, leverages existing efforts and expertise, and incubates and implements new solutions. The Coalition brings its diverse resources to bear in promoting communication, coordination, collaboration, and investment to strategically and substantively improve honey bee health in North America.

Honey Bee Health Coalition members currently include Agricultural Retailers Association, Almond Board of California, American Beekeeping Federation, American Honey Producers Association, American Seed Trade Association, Bayer CropScience, Browning Honey Company, Canadian Honey Council, Canola Council of Canada, CropLife America, CropLife Canada, Ducks Unlimited, DuPont, Eastern Missouri Beekeepers Association, Land O'Lakes, Inc., Florida Fruit and Vegetable Association, Monsanto Company, Oregon State Beekeepers Association, National Association of State Departments of Agriculture, National Corn Growers Association, Pheasants Forever, Pollinator Stewardship Council, Project Apis m., Saint Louis Zoo's WildCare Institute Center for Native Pollinator Conservation, Syngenta, Unilever, United Soybean Board, University of Maryland's Department of Entomology, U.S. Canola Association, and Western Apicultural Society. The Coalition also includes *ex officio* participation from U.S. Department of Agriculture and U.S. Environmental Protection Agency.

The Honey Bee Health Coalition's Bee Healthy Roadmap

In October 2014, the Honey Bee Health Coalition issued a ***Bee Healthy Roadmap*** outlining shared priorities for improving honey bee health through collective action that will accomplish more than any one group can achieve on its own. The Coalition is committed to developing explicit goals, milestones and metrics to measure improvements in honey bee health and to track progress toward achieving a vision of ***Healthy Bees, Healthy People, Healthy Planet.***[™]

The Coalition has set four priority areas that need collective, science-based action. These action areas correspond closely to the priorities set forward in the June 2014 Presidential Memorandum creating a federal strategy to promote the health of honey bees and other pollinators. Summarized below are the priority areas, goals and activities that the Coalition is pursuing within each, and Coalition input on activities for inclusion within the National Pollinator Health Strategy.



1. HIVE MANAGEMENT and VARROA MITE CONTROL: Put the best available tools, techniques, and technologies in the hands of beekeepers so they can better manage their hives and address stressors such as the *Varroa destructor* mite.

As noted in the Presidential Memorandum creating a federal strategy to promote the health of honey bees and other pollinators, we need ‘...expanded collection and sharing of data related to pollinator losses [and] technologies for continuous monitoring of honey bee hive health... and new cost-effective ways to control bee pests and diseases.’ The Coalition aims to support efforts already underway to provide beekeepers with monitoring and expert advice and analyses to best manage hive health, as well as to promote development of new products and use of best practices for varroa mite control.

The *Varroa destructor* mite is one of the most significant challenges for honey bee health. The Coalition is currently developing peer-reviewed, easy-to-use guidelines for beekeepers for the control of the varroa mite. However, the current tools and products available for varroa mite control are limited, and development and registration of new products is not always economically viable. Accordingly, Coalition members are also partnering to identify products that have the potential for use in the control of varroa mites and are exploring mechanisms to more expediently and cost-effectively make these products available to beekeepers.

The Bee Informed Partnership has also launched Technology Transfer Teams, teams of experts that provide monitoring and data for beekeepers across the country. Technology Transfer Teams fill a significant gap in the expert resources and monitoring available to beekeepers, and, consequently, the Coalition is working to increase support for tech transfer teams, including leveraging Coalition members and networks to increase funding.

RECOMMENDATIONS TO THE TASK FORCE: Hive Management and Varroa mite control

The Honey Bee Health Coalition encourages the Pollinator Health Task Force and the National Pollinator Health Strategy to specifically prioritize public-private research, education, and investment to put the best available tools, techniques, and technologies in the hands of beekeepers so they can better manage their hives and address stressors such as the *Varroa destructor* mite.

- Support efforts of Technology Transfer Teams and other state and federal extension programs to provide essential extension, education, and monitoring to beekeepers at all scales.
- Work in partnership with industry to prioritize and accelerate the identification and registration of products to effectively control *Varroa destructor* mites.



2. FORAGE AND NUTRITION: Ensure honey bees – especially those in and around production agriculture – have access to a varied and nutritious diet.

The Coalition's work aligns with the Pollinator Health Task Force's focus on pollinator-friendly seed mixes and habitats. The Coalition is working on how to prioritize where forage is needed, what plants are needed, and at what times – and on public-private strategies to meet nutritional needs.

The Coalition focuses on healthy honey bees in the context of productive agriculture systems and thriving ecosystems. Accordingly, the Coalition is focusing on defining and demonstrating the co-benefits of forage for honey bees, beekeepers and agricultural producers. These co-benefits can include forage for bees and other pollinators as well as agronomic, economic, and ecosystem service benefits for producers such as improved soil health, water quality, and water retention. Honey bee forage can also benefit other wildlife and biodiversity interests. While evidence of these co-benefits exists in anecdotal or pilot-study form, there is a need for better data and models to demonstrate and measure these positive outcomes and thereby motivate agricultural stakeholders to scale up forage projects. In addition to better data, there is a need to create and ultimately scale demonstration projects that illustrate these win-wins and provide the basis for strategic communication with key audiences.

A second focus of the Coalition is the identification and use of forage seed mixes and specifications that prioritize the nutritional needs of honey bees and that are nutritious and cost-effective. Cost of implementation is a key consideration for stakeholders considering planting honey bee forage, and many seed mixes are cost-prohibitive and/or may not optimize nutritional value for honey bees.

While the Coalition's focus is primarily on forage opportunities on agricultural lands, Coalition members also recognize the importance of increasing forage opportunities and the value of forage for honey bees and other pollinators on other private and public lands.

Finally, due to the migratory nature of commercial honey bees for pollination and honey production, commercial honey bees are frequently fed nutrition supplements to bridge temporal gaps in forage availability. As demonstrated at the recent USDA Honey Bee Forage and Nutrition Summit held in Washington DC on October 20-21, 2013, current research on honey bee nutrition has much to offer in the improvement of nutritional supplements. The Coalition is exploring pre-competitive opportunities to improve nutrition supplements.



RECOMMENDATIONS TO THE TASK FORCE: Forage and Nutrition

The Honey Bee Health Coalition encourages the Pollinator Health Task Force and the National Pollinator Health Strategy to specifically prioritize opportunities to ensure that honey bees – especially those in and around production agriculture – have access to a varied and nutritious diet.

- Increase the acreage and nutritional value of forage plantings in the US Department of Agriculture’s conservation programs specific to honey bees, including the Conservation Reserve Program (CRP), by coordinating government agency support and adopting science-based and stakeholder-informed seed specifications and technical guidelines that encourage planting more affordable, varied forage for honey bees.
 - *There is wide agreement across many stakeholders and researchers that improved nutrition on CRP land, particularly in the upper Midwest, would have an immediate, beneficial impact on reversing colony losses. Further, stakeholder input into seed mixes that are most nutritious and cost-effective will improve these programs.*
- Support science to inform seed specifications and engage diverse stakeholders in the identification of appropriate seed specifications for USDA conservation programs.
 - *Beekeepers, crop producers, conservation interests, seed producers, researchers, and other stakeholders all have valuable input into topics ranging from honey bee forage preferences, to cost and production considerations, to co-benefits of seed specifications for additional ecosystem services. Seed specifications should also be supported by strong science.*
- Support and engage in public-private demonstration projects on agricultural lands that demonstrate and quantify the agronomic, economic, and ecosystem service co-benefits of honey bee forage for a variety of stakeholders, building the ‘win-win’ case for bee forage on private lands.
 - *These projects should be designed and implemented in partnership with beekeepers, farmers, University extension, conservation groups, and other stakeholders in order to demonstrate the efficacy of seed specifications and quantify agronomic, economic, and ecosystem service benefits. The results of such a project can be used to scale programs by providing the data and strategic messaging needed to encourage stakeholders to partner on forage projects. Real data to demonstrate the positive outcomes and ‘win-wins’ of honey bee forage projects are needed to make the business case for adoption of pollinator habitat improvements.*
- Increase forage opportunities and the nutritional value of forage for honey bees on other private and public lands. Work with government agencies, NGOs, and other stakeholders to coordinate expansion and maintenance of new foraging landscapes in key beekeeping regions of the country.
- Support research and development for nutritional supplements to support commercial honey bees when forage is lacking.



3. CROP PEST MANAGEMENT: Control crop pests while safeguarding pollinator health.

The Coalition is promoting science-based best practices to safeguard honey bee health and exploring opportunities to promote and improve reporting of honey bee health incidents related to crop pest control. The Coalition includes major national and regional beekeeper associations, major agricultural companies, and major commodity and minor crop producer organizations, such as almonds, citrus, corn, soy, canola. This participation facilitates communication between beekeepers and crop producer communities to promote adoption of science-based, regionally appropriate and crop-specific practices to control crop pests while safeguarding pollinator health. These activities align with the Task Force's work toward 'identification of existing and new methods and best practices to reduce pollinator exposure to pesticides.'

Many Best Management Practices (BMPs) and programs for crop pest management and pollinator health already exist. The Honey Bee Health Coalition is reviewing existing programs that have been designed for various crops and geographies. The Coalition's aim is to translate those BMP programs into educational pieces for Continuing Education Credits for applicators, to improve awareness of pollinator health as part of applicator education programs and curricula, and to further focus on science-based crop pest management BMPs that are important for reducing overall risk to pollinator populations.

Key among BMP programs are practices that encourage productive conversations between growers and beekeepers on topics related to crop pest control and bee health. The Coalition is working to highlight and promote examples of mutual benefits and successes of effective multi-stakeholder communication and collaboration. Programs such as those currently implemented in the States of Mississippi, Florida, and North Dakota as well as other programs that bring together beekeepers and crop producers address the heart of one key area in need of improvement: two-way farmer-beekeeper communication about crop production and beekeeping practices, including improving farmer awareness of bee colonies present in or near agricultural areas.



RECOMMENDATIONS TO THE TASK FORCE: Crop Pest Control

The Honey Bee Health Coalition encourages the Pollinator Health Task Force and the National Pollinator Health Strategy to specifically prioritize public-private efforts to improve communication and education across diverse stakeholders regarding science-based best management practices to control crop pests while safeguarding pollinator health.

- Support State-based and other programs for bringing together beekeepers, agricultural producers, crop advisors, University extension, and other stakeholders in the discussion and implementation of science-based best management practices that are appropriate for the given regions, crops, and other contexts.
- Create better access to key science-based information by growers and beekeepers for decision making. For example, create an online, 'one-stop shop' through which stakeholders can easily access information on best management practices by region and crop.
- Encourage State programs for pesticide applicators and other relevant stakeholders to incorporate and provide continuing education credits for trainings on crop pest control and pollinator health. Work with state governments and federal agencies to provide support to stakeholders for the dissemination of knowledge and training.
- Work through appropriate agencies to improve incident reporting mechanisms; where possible, reduce barriers to reporting; increase the utility of reported data in preventing future incidents.



4. COLLABORATION AND COMMUNICATION: Work together to improve honey bee health.

In alignment with the Task Force’s emphasis on public-private partnerships, the Coalition is promoting public-private collaboration across diverse stakeholders, including State and local governments, farmers, corporations, and nongovernmental organizations.

The Coalition’s primary outreach, education, and communications efforts focus on engagement with honey bee health stakeholders. The Coalition is focused on involving all stakeholders in the discussion of feasible and effective solutions.

The Coalition also recognizes the importance of education and awareness among the general public regarding the factors impacting honey bee health and the need to improve honey bee health. These communications need to emphasize, among other things, the role of honey bees in agriculture and the message that beekeepers, along with crop producers, ranchers, and other agricultural stakeholders, are all part of ‘One Agriculture’ system, working toward common goals related to food production and food security.

RECOMMENDATIONS TO THE TASK FORCE: COLLABORATION AND COMMUNICATION

The Honey Bee Health Coalition encourages the Pollinator Health Task Force and the National Pollinator Health Strategy to promote collaboration, outreach, education, and communications to raise awareness of honey bee health challenges and opportunities and to encourage collaboration to improve honey bee health.

- Leverage state and federal communication channels to maximize public education on pollinator issues and problem solving. The Task Force’s public education campaign should create awareness of the multiple factors that impact honey bee health, the need to improve bee health through a diversity of approaches, the need for public-private collaboration across all stakeholders, and the message that beekeepers and farmers are part of ‘One Agriculture’ system supporting global food security.
- The National Pollinator Health Strategy should promote collaborative, private-public partnerships for collective impact. Collaboration is essential to finding solutions that will work for all stakeholders. It enables stakeholders to achieve greater impact than any one stakeholder could achieve on its own, and to achieve mutual goals with more impact and more cost-effectively. Federal support would serve as an important catalyst to move these educational campaigns and collaborative partnerships forward expeditiously.