



ANNUAL REPORT

2022



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ABOUT US

The Honey Bee Health Coalition brings together beekeepers, growers, researchers, government agencies. agribusinesses conservation groups, manufacturers, and consumer brands to improve the health of honey bees.



Our mission is to collaboratively implement solutions that will help to achieve a healthy population of honey bees and other pollinators in the context of productive agricultural systems and thriving ecosystems.

WHAT WE DO

We create integrated, collaborative approaches to honey bee and pollinator health in agricultural systems:

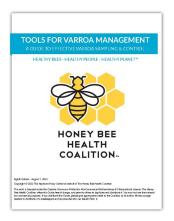
- We connect diverse sectors and stakeholders on key bee health science, practice, and policy issues
- We develop, distribute, and demonstrate tools, resources and best practices for growers, beekeepers, and agricultural stakeholders
- We catalyze collaboration and commitments toward positive changes for bees

ISSUES WE PRIORITIZE

We focus on the multiple and interrelated stressors on honey bee health:

- We need testing, treatment, and new tools for combatting pests and disease, including varroa
- We need approaches that control crop pests while safeguarding bee health
- We need more and better habitat for honey bees and all pollinators

2022 OVERVIEW







The Honey Bee Health Coalition had a very busy year as we continued to develop new tools and resources for beekeepers, farmers and agriculture stakeholders and conducted outreach with existing resources.

Initiatives were completed in all priority areas of forage and nutrition, hive management, crop pest control and outreach and education.

SNAPSHOT OF 2022 ACTIVITIES:

- Finalized and disseminated a comprehensive update to the Tools for Varroa Management Guide
- Continued facilitating the Varroacide Resistance and Testing Team which has grown to over 30 varroa researchers and is working to find the next varroacide
- Launched a new initiative to develop a nutrition supplement guide for beekeepers
- Published a report on lessons learned from the 2017-2021 North Dakota Bee Integrated pilot program
- Submitted updated recommendations to the USDA for improving pollinator outcomes in private land conservation programs
- Launched a new initiative to develop a pollinator habitat guide for utility-scale solar developers
- Published Apple Best Management Practices (BMPs) for pollinator health, developed with the U.S. Apple Association
- Held a ribbon-cutting ceremony for Bianca's Pollinator Pathway, an installation of interactive opportunities for youth to learn about bees and pollinators, at the Center for Maryland Agriculture and Farm Park
- Launched the "hot topic" video series with two video presentations on timely issues for beekeepers and farmers
- Generated 105,908 website views in 2022

HIVE MANAGEMENT

Goal: Put the best available tools, techniques, and technologies in the hands of beekeepers so they can best manage their hives.

8th Edition Tools for Varroa Management Guide

This guide explains practical, effective methods that beekeepers can use to measure varroa infestations in their hives and select appropriate control methods. Beginning in 2021 and completed in 2022, a thorough review and update of the prior edition was undertaken to reflect the current state of the science and available control methods. Published in August of 2022, the revised 8th edition was featured in major beekeeping media, as well as American Beekeeping Federation (ABF) and AHPA quarterlies. 1,900 hard copies were printed and distributed, with an additional 600 available for purchase at cost. The 8th Edition Tools for Varroa Management Guide is available online at this link.

Varroacide Resistance and Testing Team (VRTT)

The VRTT consists of over 30 researchers from 3 countries working on testing orphan compounds to find an effective miticide to kill varroa mites. The cross-sector team with government, academic, and the private sector, has been working for 7 years testing dozens of compounds in the lab and in the field. In 2022, labs continued to test new potential varroacides and refine the formulations of promising varroacides. The Coalition is also connecting USDA ARS researchers with commercial beekeepers for amitraz resistance trials. We are hoping to find additional funding in 2023.

Nutrition Supplement Guide

This guide will provide beekeepers with a central and accessible source of information on nutrition supplements. The content outline has been reviewed by the technical committee, which will reconvene in summer 2023 to review a first draft of the guide authored by Dr. Priyadarshini Basu.

"Hot Topic" video series

A video presentation from Dr. Kelly Kulhanek of Washington State University was produced for beekeepers in September of 2022. The presentation, entitled "What we know about robbing, mite bombs, and large scale Varroa spread" is available on the Coalition's YouTube channel at this link.



FORAGE & NUTRITION

Goal: Promote on-farm practices and policies to increase access to a varied and nutritious pollinator diet.



Bee Integrated Demonstration Project

This initiative's goal is to demonstrate how honey bee health can be improved by using a portfolio of tools together in the same agricultural landscape to address the primary risk factors affecting bee health. This began in 2017 in North Dakota with the pairing of six beekeepers with six growers to implement practices in crop pest control, hive management and the planting of supplemental forage. Control fields and apiaries were established, and data was collected on the practices to determine their efficacy. A final report on the North Dakota pilot program was released in January of 2022, and is available online at this link.

USDA private land conservation programs

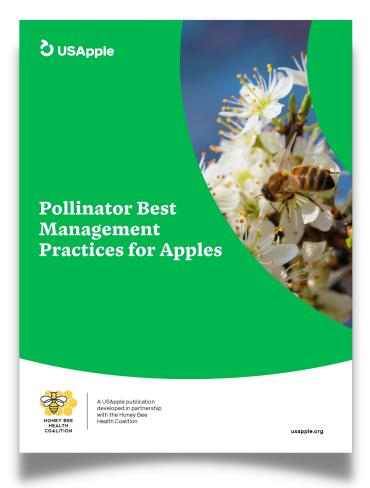
In collaboration with Farmers for Monarchs, we revised a detailed list of recommendations for enhancing pollinator habitat and forage in USDA private land conservation programs, focusing on two key priorities: 1) seeking and utilizing technical input from more diverse and representative organizations on strategies for pollinator conservation, and 2) improving USDA private land conservation program specifications to emphasize and incentivize high-quality, cost-effective pollinator forage on private lands. The final recommendations were sent to Secretary Vilsack's office in December 2022, accompanied by a request for a meeting.

Utility-scale solar guide

1.5 million acres of land are predicted to be used by ground solar installations in the near future. This guide will provide developers with the encouragement and practicable information for including pollinator-friendly forage in utility-scale solar projects. The content outline has been reviewed by the technical committee, which will reconvene in early 2023 to review a first draft of the guide authored by Pete Berthelsen.

CROP PEST CONTROL

Goal: Promote on-farm practices and policies to enhance pollinator stewardship and to control crop pests while safeguarding bee health.



Apple BMPs

Best Management Practice recommendations for pollinator health in apple orchards, developed in partnership with the U.S. Apple Association and the Northwest Horticultural Council, were released in March of 2022. Similar to the Coalition's soy, corn, and canola BMPs, these recommendations identify times during the production cycle that bees may be in harm's way and the mitigating activities that the grower can undertake. They also include recommendations related to planting supplemental forage adjacent to orchards. The Apple BMPs are available online at this link.

"Hot Topic" video series

A video presentation from Dr. Caydee Savinelli of Syngenta was produced for farmers in October of 2022. The video, entitled "How Farmers Can Protect Bees," is available on the Coalition's YouTube channel at this link.

OUTREACH & EDUCATION

Goal: Develop outreach materials; work with media outlets, maintain a high-quality website, participate in outreach events, and look for opportunities to raise awareness and education of bee health issues.



Bianca's Pollinator Pathway

Through generous donations received in honor of Bianca, a young girl who passed away suddenly in 2020, we are creating opportunities to support children in learning about bees and pollinators. At the 100-acre Center for Maryland Agriculture and Farm Park, a series of interactive and informative exhibits was developed, collectively called "Bianca's Pollinator Pathway". The Honey Bee Health Coalition will sponsor school field trips to the Ag Park.

A private ribbon-cutting ceremony was held in May of 2022 with Bianca's family, friends, and classmates. The ceremony included educational walking tours, bee hive viewings, pollinator habitat-building activities, and the installation of a memorial bench. In conjunction, a clearing house of youth-focused curricula on bees and other pollinators was compiled and published on a new section of the Coalition website, available at this link.

Pollinator Week

The Coalition was active on social media during June's Pollinator Week, promoting the importance of bees and resources for beekeepers and farmers. We sent out a social media toolkit for our members, published the Commercial Varroa Guide referenced above, and released this podcast episode about the Coalition.

Print and online media

- FoodBev magazine, "Queen of the Crop", February 2022
- Seed World magazine, "Bee Sure! About Stewardship," October 2022
- Bee Culture magazine advertising of beekeeper-facing resources

In-person meetings

- Attended the American Beekeeping Federation in Las Vegas, NV, January 2022
- Exhibited at Commodity Classic in New Orleans, LA, March 2022
- Coalition member meeting, Traverse City, MI, May 2022

OUTREACH & EDUCATION

(Continued)



Coalition newsletter

The Coalition sends out quarterly e-newsletters to our MailChimp list of 6,193 subscribers. These subscribers signed up for the newsletter by visiting our website and self-subscribing.

Website

In 2022, the <u>revamped Coalition website</u> received 105,908 page views. This is a slight decrease from the 119,479 page views in 2021; however the time spent on each page in 2022 increased by 54%.

Social media



Facebook

- 102 unique posts created and amplified on Facebook
- 6,111 total followers



Twitter

- 7,526 impressions on Twitter
- 19 new followers in 2022
- 813 total followers



YouTube

- 77,960 views on YouTube
- 3,677 hours watch time
- 1,033 new subscribers in 2022
- 5,734 total subscribers

APPENDIX A: MEMBER LIST

Coalition Members

Ag Retailers Association

Alberta Beekeepers Commission

American Beekeeping Federation

American Honey Producers Association

American Seed Trade Association

Apiary Inspectors of America

BASF

Bayer CropScience

Bee and Butterfly Habitat Fund

Bee Culture Magazine

Browning Honey Co.

Canadian Association of Professional Apiculturists

Canadian Honey Council

Canola Council of Canada

Conservation Technology Information Center

Corteva Agriscience

CropLife America

Eastern Apicultural Society

Eastern Missouri Beekeepers Association

FieldWatch

Florida Fruit & Vegetable Association

Foundation for the Preservation of Honey Bees

Heartland Apicultural Society

Hive Tracks

Honey Bee Veterinary Consortium

Michigan State University Extension

Mitsui Chemicals Agro

National Assoc. of State Depts of Agriculture

National Association of Wheat Growers

National Corn Growers Association

National Honey Board

National Pesticide Safety Education Center

PepsiCo

Pheasants Forever and Quail Forever

Project Apis m.

Propolis Projects/ Levin Family Foundation

Saint Louis Zoo WildCare Institute Center for Native

Pollinator Conservation (CNPC)

Syngenta

U.S. Apple Association

United Soybean Board

University of Maryland

US Canola Association

Veto-pharma

Western Apicultural Society

Ex Officio Members

U.S. Environmental Protection Agency
USDA – Office of the Chief Scientist
USDA – Agricultural Research Service
USGS, Northern Prairie Wildlife Research Center
Canada Bee Health Roundtable

We thank you for your continued support in improving the health of honey bees.

CONTACT:

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