Honey Bee Health Coalition

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HEALTHY BEES, HEALTHY PEOPLE, HEALTHY PLANET.™

WHY the Honey Bee Health Coalition?



THE WORLD RELIES ON THE HONEY BEE

Honey Bees Are a Key Component to Sustainable Agriculture, Healthy Diets, the Global Food Supply, and the Economy

A Healthy Diet

of global food production volume relies on pollinators to some degree Source: Klein, 2007

of flowering plants are pollinated by honey bees and other insects

Source: Calderone, 2012

Almonds Apples Broccoli Strawberries Alfalfa **

*Significant to beef and diary industries as cattle feed

U.S. Agriculture

\$~18 Billion Per year

The amount of dollars of U.S. agricultural production supported by honey bee pollination

Source: USDA

Canadian Agriculture

\$∼4 Billion

The annual value of honey bee pollination in Canada.

Source: Agriculture and Agri-Food Canada

The future security of America's food supply depends on healthy honey bees

Tom Vilsack, Agriculture Secretary



THE CURRENT CHALLENGE

Factors that Pose a Challenge for Honey Bee Health

The Challenge



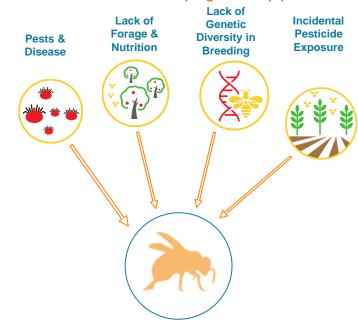
APPROX. **29%**

Of honey bee population lost each winter, compared to 10-15% historically

Agriculture, healthy lifestyles, and worldwide food security depend on honey bee health. U.S. overwintering losses for managed honey bees between 2006 and 2015 ranged from approximately 23-36%, compared to a historical rate of overwintering losses of 10-15%.*

Stress Factors

Impacts on bee health have been linked to a variety of factors, including those influenced by the activities associated with both beekeeping and crop production.



^{*}Source: Survey data generated by USDA

MANY STAKEHOLDERS, ONE AGRICULTURE

Producers Agribusinesses Farming Inputs (seeds, Beekeeper fertilizers, crop s, honey chemicals. producers, and honey equipment) bees Trading Processing **Manufacturers Consumers** & Brands Shopping 00 Restaurants Consumption Consumer brands Retail

Researchers, Government Agencies, & Academia
Research, Education, Extension,

Research, Education, Extension, Regulation

WHAT'S AT STAKE FOR MEMBERS OF THE COMMUNITY?

If a diversity of stakeholders in public, private, non-profit sectors across the food value chain do not effectively collaborate on this issue, through research, communication, project implementation, and other mechanisms, we risk:

What's at Stake?

A decline in the health of honey bees and other managed and native pollinators, and an increase in overwintering losses of honey bees

Economic impacts on the beekeeping industry and on growers and producers whose crops are pollinated by bees

Impacts to our global food supply and healthy ecosystems

Decisions that lack multi-stakeholder support and are not based upon good science, which could limit growers' ability to manage crops and support our global food supply

Continued confusion across sectors about what the root causes of the problems are – and a **lack of focus on solutions that work** for multiple parties

WHO and WHAT is the Honey Bee Health Coalition?



HONEY BEE HEALTH COALITION

Brings together a broad array of stakeholders 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.

HONEY BEE HEALTH COALITION MEMBERSHIP

Coalition members work across the full food value chain:

Beekeepers and Honey Producers
Crop Producers
Agribusinesses
Manufacturers and Brands
Agencies and Universities
Conservation Groups and Bee-Focused NGOs



HONEY BEE HEALTH COALITION MEMBERSHIP

























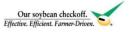












































CropLife

















Principles

Cross-sector Collaborative



Test potential solutions

Outcome-oriented

Science-based outcomes







WHAT is the Coalition doing?



OVERVIEW OF ACHIEVEMENTS

Examples of Coalition deliverables

- Tools for Varroa Control guide and videos
- The Bee Understanding Project documentary
- Incident Reporting Quick Guide
- Beekeeper and farmer roles fact sheets
- MP3 Symposium and resources
- Recommendations and comments to the Pollinator Health Task Force, EPA and USDA
 - National Strategy
 - Pollinator forage in USDA conservation programs
 - Pesticide registration review
- Bee Healthy Roadmap
- Tech Transfer team fundraising
- New varroacide screening

Coming soon:

- Beekeeper insights on nutrition supplements
- Bee Integrated Demonstration Project ND
- CAST paper summarizing bee health issues
- Soybean BMPs



Visit our tools + resources page at www.honeybeehealthcoalition.org

BEE HEALTHY ROADMAP



Shares the Coalition's mission, vision, and strategic goals

Identifies 4 top
priorities that need
collective action and
collaboration

www.honeybeehealthcoalition.org

HONEY BEE HEALTH COALITION PRIORITIES

The Coalition is focusing on accelerating collective impact to improve honey bee health in four key areas.



Nutrition & Forage

Ensure honey bees

– especially those in
and around
production
agriculture – have
access to a varied
and nutritious diet.



Hive Management

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



Crop Pest Management

Control crop pests while safeguarding pollinator health.



Outreach, Education and Collaboration

Work together to improve honey bee health; develop outreach materials; and develop future research and demonstration projects.

FORAGE AND NUTRITION

Goal: Ensure honey bees – especially in and around production agriculture – have access to a varied and nutritious diet throughout their lives

Activities:

- Providing recommendations to improve and increase forage in USDA conservation programs
- Engaged in demonstration projects to get forage on the ground
- Conducting beekeeper interviews to identify recommendations for nutrition supplement research and development



CROP PEST CONTROL

Goal: Control crop pests and safeguard pollinator health

Activities

- Supporting BMP development, training and adoption
- Supporting State MP3 conversations
- Developed an incident reporting guide for incidental pesticide exposure



HIVE MANAGEMENT

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

Activities:

- Developed a guide to Varroa control methods and accompanying educational videos
- Research and testing into new varroacides
- Support of Bee Informed Partnership's Tech Transfer Teams



Outreach, Education, and Collaboration

Goal: Work together to improve honey bee health, develop outreach materials; and develop future research and demonstration projects.

Activities:

- Promoting public-private education, communications, outreach, and collaboration across diverse stakeholders, through experiential learning and other platforms
- Develop outreach materials and opportunities



Bee Integrated Demonstration Project

 Demonstrate how honey bee health can be improved using a portfolio of tools together in the same agricultural landscape to address multiple factors.



- Forage establishment
- Varroa monitoring and treatment
- Crop pest management BMPs
- Outreach and education



COMING SOON...



- Implementation and deliverables in each of the 4 priority areas
- Continued engagement of new partners and coordination with related efforts
- Increased communications and outreach (newsletter, website, conferences)

IN SUMMARY

- Created a Collaborative network of diverse stakeholders to unpack these complex issues and find solutions to honey bee health
- The Honey Bee Health Coalition is engaging a variety of public-private partners throughout agriculture, research, government, and conservation to promote multifactor solutions for honey bee health.









MORE INFORMATION

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'To go fast, go alone. To go far, go together.'

- African Proverb