HEALTHY BEES, HEALTHY PEOPLE, HEALTHY PLANET.™
A diverse, collaborative, private-public partnership addressing the multiple factors impacting honey bees
THE CHALLENGE
**WE ALL RELY ON HONEY BEES**

**Honey bees are a key component** to sustainable agriculture, healthy diets, the global food supply, and the economy.

“Most farmers and consumers have no better friends and few harder workers than the honey bee.”

- SONNY PERDUE, USDA SECRETARY

“The future security of America’s food supply depends on healthy honey bees.”

- TOM VILSACK, FORMER USDA SECRETARY

**APPROXIMATELY 1/3 OF GLOBAL FOOD PRODUCTION RELIES ON HONEY BEES AND OTHER POLLINATORS.**

Source: Klein 2007
Honey bees support billions of dollars in North American agriculture.
Compared to historical rates, more honey bee colonies die and must be replaced each winter and each year. Bee health is affected by pests and disease, poor nutrition and forage, and pesticide exposure.

**Past Winter Mortality Rate**
Source: USDA

**Present Winter Mortality Rate**
Source: Lee et al, 2015
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.

- Crop Pesticide Exposure
- Honey Bee Pests & Disease
- Poor Nutrition & Forage
Honey Bees play a foundational role in our food value chain.

**Producers**
- Farming
- Beekeepers, honey producers, and honey bees

**Agribusinesses**
- Inputs (seeds, fertilizers, crop chemicals, and equipment)
  - Trading
  - Processing

**Consumers**
- Shopping
- Consumption

**Manufacturers & Brands**
- Restaurants
- Consumer brands
  - Retail

**Researchers, Government Agencies, & Academia**
- Research, Education, Extension, Regulation

**A SHARED FOOD CHAIN**
WHAT’S AT STAKE?

If a diversity of stakeholders do not effectively collaborate on this issue to identify solutions that work, we risk:

- A decline in the health of honey bees and other managed and native pollinators
- Economic impacts on the beekeeping industry, growers and producers whose crops are pollinated by bees, rural economies, and North American agriculture
- Impacts to our global food supply, biodiversity and healthy ecosystems
THE COALITION
MISSION:
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.
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
MANY STAKEHOLDERS, ONE AGRICULTURE
How does the Coalition operate?

- Launched during Pollinator Week in June of 2014
- Governed by a charter and ground rules
- Every member organization has an equal voice in the Coalition’s consensus-based decision-making process.
- Member funded; level of financial support does not influence an organization’s role in decision making
- Third party, independent facilitation by Keystone Policy Center, a nationally recognized nonprofit
THE APPROACH
The 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
THE COALITION PRIORITIES

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

### Hive Management (Pests & Diseases)
To ensure honey bees, especially those in and around production agriculture, have access to a varied and nutritious diet.

### Forage and Nutrition
To put the best available tools, techniques, and technologies in the hands of beekeepers so they can better manage their hives.

### Crop Pest Control and Management
To control crop pests while safeguarding pollinator health.

### Outreach, Education, and Collaboration
To enhance awareness, outreach and partnerships to improve honey bee health.
FORAGE AND NUTRITION

ACTIVITIES:

• Provided recommendation on the upcoming Farm Bill and to USDA regarding improving forage in USDA conservation programs

• Conducting supply chain outreach to integrate pollinator practices into sustainability programs supporting habitat, pesticide stewardship, water quality, soil health, etc.

• Conducted beekeeper interviews to identify recommendations for nutrition supplement research and development

• Developed the *Bee Nutrition Challenge* to seek creative, practical solutions to accelerate and pioneer the field of honey bee nutrition (selected 4 proposals to fund in 2018)

GOAL: To ensure honey bees, especially in and around production agriculture, have access to a varied and nutritious diet throughout their lives.
CROP PEST CONTROL & MANAGEMENT

ACTIVITIES:

• Developed BMPs for pollinator protection for soybean growers
• Developed pollinator-focused continuing education module for crop pest consultants and advisors (piloting winter 2018)
• Developed an incident reporting guide for incidental pesticide exposure
• Supported State MP3 conversations by convening a national symposium

GOAL: To control crop pests and safeguard pollinator health.
The recommendations identify potentially negative impacts of soybean agricultural practices on bees at each stage of soybean production and suggest strategies to mitigate these impacts.
This CEU module is for pesticide applicators and consultants to gain a better understanding of:

1. The importance of beekeeping in agriculture and the challenges beekeepers face
2. The relationship between pesticide exposure and bee health
3. How they can help positively impact bees, beekeepers, and the agricultural landscapes that rely on them
HIVE MANAGEMENT

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

ACTIVITIES:
• Developed a set of Varroa resources for beekeepers, including:
  – The Tools for Varroa Management Guide
  – Varroa monitoring and control videos
  – Bee club presentation on the importance of Varroa monitoring and control
• Research and testing into new varroacides
• Developed a clearinghouse of vetted high quality hive management resources
• Developing a Hive Management Best Practices Guide in 2018
VARROA RESOURCES

• Tools for Varroa Management Guide (downloaded 12,239 times since August 2015; on the 6th Edition)

• 12 videos demonstrating how to test as well as how to treat using chemical, non-chemical and cultural practices

• Bee Club evening presentation on testing and treating for Varroa Control
Recently recommended for grant funding to screen and test varroacides through the FFAR Pollinator Health Fund
ACTIVITIES:

• Proposed and funded the newly released CAST paper for federal policy makers, “Why Does Bee Health Matter and What We can Do about It”
• Promoted public-private education, communications, outreach, and collaboration across diverse stakeholders, through experiential learning and other platforms
• Provides outreach to federal agency leadership to promote pollinator health
• Interacted with thousands of beekeepers, farmers, and crop consultants and pesticide advisors at conferences and tradeshows and other events

GOAL: To enhance awareness, outreach and partnerships to improve honey bee health.
The *Bee Integrated Demonstration Project* brings together beekeepers and producers to show how a suite of best practices can be implemented together in agricultural landscapes to support honey bee health. This innovative strategy provides a blueprint for supporting pollinator health across North America.
Beekeeper-producer pairs partner to address these stress factors contributing to the loss of honey bees and other pollinators:

**Pair**
beekeepers and producers to apply best management practices

**Support**
the pairs with expertise, training and resources

**Measure**
the impact on bee populations for three years

**Share**
the results with beekeeping and agricultural communities

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Participating beekeepers and producers visit each other’s operations in “job swaps” to learn and exchange ideas.

- **Honey Bee Pests/Diseases**
  - Tools for Varroa Management guide
  - [Honey Bee Health Coalition]

- **Forage & Nutrition**
  - Planting optimal flower mixes for forage areas
  - [Bee & Butterfly Habitat Fund]

- **Crop Pest Management**
  - Training on North Dakota Pollinator Plan
  - [North Dakota Department of Agriculture, Syngenta, DuPont Pioneer]
IN SUMMARY

- A Collaborative network of diverse, private and public sector stakeholders to unpack these complex issues and find solutions to honey bee health.
- The Honey Bee Health Coalition is engaging a variety of stakeholders throughout agriculture, research, government, and conservation to promote multi-factor solutions for honey bee health.
'TO GO FAST, GO ALONE. TO GO FAR, GO TOGETHER.'
-AFRICAN PROVERB

HONEY BEE HEALTH COALITION

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