## **BEST MANAGEMENT PRACTICES (BMPs) FOR POLLINATOR HEALTH IN CANOLA**

#### **Guidance for Growers and Crop Consultants**







HONEY BEE HEALTH COALITION



## **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.

OM VILSACK, FORMER USDA SECRETARY

# **APPROXIMATELY**

#### **OF GLOBAL FOOD PRODUCTION RELIES ON** HONEY BEES AND OTHER POLLINATORS. Source: Klein 2007

## **THE CURRENT CHALLENGE** Compared to historical rates, more honey bee colonies die and must be replaced each year. Bee health is affected by pests and disease, poor nutrition and forage, and pesticide exposure. **28-33%**<sup>+</sup> 10-15%

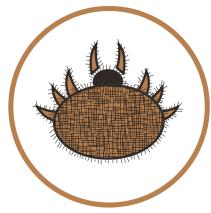
PAST WINTER MORTALITY RATE Source: USDA PRESENT WINTER MORTALITY RATE Source: Lee et al, 2015

## **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



## **BMP DEVELOPMENT PROCESS**

- 1. Review of existing BMPs for other crops, geographies and beekeeping
- 2. Technical committee working sessions, including identification of crop protection needs and practices
- 3. Stakeholder review
- 4. Source document publishing
- 5. Communications and training materials

#### **Technical Committee Members**

- Jay Bjerke (Lead Author)
- Brian Caldbeck, Caldbeck Consulting
- Barry Coleman, Northern Canola Growers Association
- David Crowder, Washington State University
- Caleb Dalley, North Dakota State University
- Dave Epstein, U.S. Department of Agriculture
- Joan Gunter, American Beekeeping Federation
- Chris Hiatt, American Honey Producers Association
- Shelley Hoover, Alberta Agriculture and Rural Development
- Janet Knodel, North Dakota State University
- Beth Nelson, Minnesota Canola Council
- Rachael Olsson, Washington State University
- Tom Royer, Oklahoma State University
- Dale Thorenson, U.S. Canola Association
- Tom Steeger, U.S. Environmental Protection Agency
- Randy Verhoek, American Honey Producers
   Association

**GOAL:** To creat and beekeepers

**GOAL:** To create resources for growers, their consultants, and beekeepers to protect honey bees and other pollinators.

## **CROP PEST MANAGEMENT BMPs**

One way to address pesticide exposure risk is to provide growers, their consultants (including crop advisors, pesticide applicators and others), and beekeepers with specific guidance related to actions to be taken on farmland.

This guidance is meant to help all achieve crop protection and pollinator health in production agriculture.

The **foundation of the BMPs is proactive, ongoing communication** between growers, consultants and beekeepers.



## CANOLA BMP HIGHLIGHTS

- Communication among beekeepers and growers. This is one of the most important factors in preventing acute poisoning of managed bee hives. When both parties are aware of each other's locations, concerns, and management practices, they can take steps to avoid pesticide exposure to hives and foraging bees.
- Integrated Pest Management. Growers should follow economic
   threshold and extension recommendations to guide pest management
   decisions and consider multiple strategies for control that include non chemical options (e.g., resistant varieties, cultural practices).
- Always follow label instructions. When insecticides or other pesticides are used (either by growers or beekeepers managing hive pests or forage), label instructions must be followed. Remember they are legally binding.



## CANOLA BMP HIGHLIGHTS

- Improve foraging areas for bees and other pollinators. Where
  possible, include flowering plants in non-crop areas. Avoid pesticide drift
  onto non-crop areas that include floral resources. Leave areas that
  include these resources intact whenever possible.
  - Practice good hive management. Poorly managed hives are more susceptible to stresses from parasites, pathogens, other pests, and poor nutrition. Healthy hives with access to plentiful forage are more resilient when confronted with additional stresses, including pesticides.



## **HBHC MEMBERSHIP**

## **WNCGA**



#### **MANY STAKEHOLDERS, ONE AGRICULTURE**

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http://www.uscanola.com/ https://honeybeehealthcoalition.org/

Mobile, print and training resources coming soon.



