

# Neonicotinoids: Time for Action

OBA Summer Meeting: July 6, 2013

# Today's presentation:

- An overview of neonics: what the research tells us
- What Ontario's experience has been (2012 and 2013)
- The OBA's position on NNI's
- OBA's broad strategy
- Progress so far
- Next steps: moving forward
- What you can do

# Research - Neonics in general:

- **Widespread:** Registered in mid-1990's, now the most widely use pesticide in the world.
- **Systemic:** absorbed into plant, and transferred through the vascular system, making the plant, itself, toxic.
- **Persistent:** Can persist in soil for months or years after a single application. Untreated plants may absorb chemical residues in the soil from the previous year.

# Neonics in general:

- **Prevalent:** It's not just field crops, neonics applied to crops can contaminate adjacent weeds and wildflowers.
- **Synergistic:** When neonics are mixed with fungicide their toxicity is greatly increased.

# Impact on bees

- **Compelling:** More than 150 peer-reviewed independent scientific studies indicate negative impact.
- **Poisonous:** Because they leach into soils, groundwater and waterways and can persist for years, they not only kill bees, but also other pollinators, amphibians, crustaceans and fish.

# Impact on bees

- **Impaired foraging:** Honey bees exposed to sublethal levels of neonics can experience problems with flying and navigation, reduced taste sensitivity, and slower learning of new tasks, which all impact on foraging ability and hive health.
- **Not just honey bees:** Bumble bees exposed to sublethal amounts exhibit reduced food consumption, reproduction, worker survival rates and foraging activity.

# Ontario's experience: 2012

- Thousands of colonies throughout the province experienced massive bee deaths after strong spring start.
- PMRA confirmed that planting of corn seeds treated with NNI's contributed to the majority of bee mortalities. (70% tested positive)
- Beekeepers reporting poor wintering of surviving affected colonies over 2012/13.
- Slow spring build-up.

# A frequent and sorry sight





# Experience so far in 2013

- Beekeeper reports to PMRA were up 25% from 2012 (June figures).
- PMRA analysis of colony loss isn't in yet, but seems to be similar to 2012 overall.
- Seeing more sub-lethal effects from 2012.
- What we are hearing from beekeepers:

# Our concern if nothing is done:

- Serious effect on agricultural systems and food supply as a result of decreased pollination.
- Significant reduction in honeybees, bumble bees and other native pollinators as well other wildlife.
- A reduction in pollination of wild plants, altering ecosystems.

# If nothing is done..

- Long term pollution of soil and groundwater
- Job loss upstream and downstream in agriculture.

# And to beekeeping...

- The loss or decimation of a viable commercial beekeeping industry in Ontario.

# Response: The OBA Position:

1. Regulators immediately suspend all conditional registrations until bee safety of all neonicotinoid pesticides is reassessed.
2. Compensate beekeepers for losses to crops, bees and equipment caused by deaths, chronic disease or toxic residues.
3. Undertake independent research to determine the threats of long-term soil, water and pollinator toxicity.

# OBA's broad strategy:

- **Focus on Ontario Govt. for NNI suspension.**
- Pressure federal government to accelerate its review of NNI registration.
- Build public awareness through media and other means.
- Build support from agriculture as well as other sectors such as environment, academia, scientific and food.
- Build alliance with Quebec beekeepers (and other provinces) for national impact.
- Track and promote peer-reviewed independent research.

# Progress

- On-going meetings with officials and key policy advisors in OMAF, and MOE to discuss concerns.
- Premier Wynne to raise issue of bee mortality at Agriculture Minister's meeting.
- Major media response to press releases and other media outreach.
- Formal alliance with Quebec: press release and joint letter.

# Progress

- Growing public awareness of the issues.
- Gained support from Sierra Club, Ontario Organic Growers, approached by United Church of Canada and others.



# Next steps:

- Continue government advocacy.
- Develop materials for government, membership and public.
- Solidify alliances with agriculture and others.
- Get others to speak out.
- Encourage public action.
- Increase resources promote BeeCause.

# What *you* can do.

- Be informed: read OBA newsletter and website.
- Meet with or contact your MPP to support a suspension of neonicotinoids.
- Spread the word.
- Share your stories with us so we can share with media and others.
- Donate to BeeCause.
- Buy a T-shirt.
- JOIN OBA

Thank you!

bee**cause**

*...because bees are at the  
center of life*

