



FIVE REASONS WE SUPPORT RESTRICTIONS ON NEONICS

1. Neonics kill bees

In 2014 Ontario beekeepers reported overwinter losses of 58 per cent, more than three times the average for all other provinces that winter.¹ Health Canada's Pest Management Regulatory Agency has determined that neonicotinoid pesticides are a contributing factor to bee mortalities.² Scientists estimate that some neonics are 5,000 to 10,000 times more toxic to bees than DDT, in terms of acute effects alone.³ Ontario's native wild bees are also at risk.⁴ Many of our wild bumblebees — even those that were once common — are in steep decline. Declining pollinator health has an impact on food production and food security.

2. At sub-lethal levels, neonics can harm bees and many other species

Long-term (chronic) exposure to neonicotinoids even at low levels of less than 3 parts per billion are associated with impaired navigation, learning, memory, food collection, resistance to disease and fertility. Based on a systematic review of more than 1,000 published scientific studies (including industry-sponsored ones), the international Task Force on Systemic Pesticides concluded that neonics can harm terrestrial and aquatic invertebrates and birds, as well as insect pollinators: "Overall, a compelling body of evidence has accumulated that clearly demonstrates that the wide-scale use of these persistent, water-soluble chemicals is having widespread, chronic impacts upon global biodiversity and is likely to be having major negative effects on ecosystem services such as pollination that are vital to food security and sustainable development."⁵

3. Neonics are a persistent environmental contaminant

Neonics persist in the environment for months, or even years,⁶ resulting in near-continuous and increasing exposure from one agricultural season to the next. They are also water-soluble. These two characteristics point to the potential for large-scale contamination of soils, sediments, ground water and surface water, as well as vegetation. Researchers in Quebec identified neonic residues in 100 per cent of 25 water samples from puddles in fields where neonic-treated corn seeds were planted, at levels that could harm bees drinking from the puddles.⁷

4. Current use of neonic seed treatments is inconsistent with recommended farm practices

Integrated Pest Management (IPM), as recommended by OMAFRA, requires that pest-control strategies target identified pest threats, with a view to minimizing the adverse effects of pesticides on the environment.⁸ Instead, neonic seed treatments have become indiscriminate and routine, whether or not a pest problem is present. In Ontario, virtually all corn and 60 per cent of soybean seeds are treated with neonics.⁹ This means close to four million acres planted with neonic-treated seeds. A recent U.S. Environmental Protection Agency study of neonic seed treatments in soybean production concluded that they were of little or no overall benefit to overall crop yield in most situations.¹⁰

5. Other jurisdictions have banned neonics to protect pollinators

After a thorough review by the European Food Safety Authority, The European Commission placed a two-year moratorium on certain agricultural uses of neonics to protect pollinators. European Commission countries nevertheless experienced record yields of grain corn last year, the first year the moratorium was in place.

Despite the strong scientific evidence of harm, North American governments have been slower to act. We welcome **Ontario's leadership on this issue. New regulatory restrictions to reduce the use of neonicotinoid-treated corn and soybean seeds in Ontario by 80 per cent are necessary to protect pollinators and the environment.**

March 16, 2015

Contact:

David Suzuki Foundation: Lisa Gue, 613-914-0747, lgue@davidsuzuki.org

Registered Nurses' Association of Ontario: Doris Grinspun, 416-408-5600, dgrinspun@rnao.ca

Ontario Beekeepers' Association: Dennis Edell, 416-918-4448, dennisnedell@gmail.com

Ontario Nature: Anne Bell, 416-444-8419 ext. 239, anneb@ontarionature.org

Canadian Association of Physicians for the Environment: Gideon Forman, 416-306-2273, gideon@cape.ca

Environmental Defence: Tim Gray, Executive Director 416-323-9521 ext. 288, tgray@environmentaldefence.ca

Sierra Club Canada Foundation: John Bennett, 613-291-6888, jb@sierraclub.ca

Ecojustice: Pierre Sadik, 613-562-5225, psadik@ecojustice.ca

Friends of the Earth Canada: Beatrice Olivastri, beatrice@foecanada.org

Beyond Pesticides Canada: Jodi Koberinski, 519-998-4992, jodikoberinski@gmail.com

Pollination Canada: Kimberly Fellows, kim@pollinationcanada.ca

Canadian Environmental Law Association: Kathleen Cooper, 705-341-2488, kcooper@cela.ca

¹ CAPA Statement on Honey Bee Wintering Losses in Canada (2014) (Canadian Association of Professional Apiculturists, July 24, 2014), <http://www.capabees.com/content/uploads/2013/07/2014-CAPA-Statement-on-Honey-Bee-Wintering-Losses-in-Canada.pdf>.

² Evaluation of Canadian Bee Mortalities in 2013 Related to Neonicotinoid Pesticides - Interim Report (Pest Management Regulatory Agency, September 26, 2013), http://www.hc-sc.gc.ca/cps-spc/pubs/pest/_fact-fiche/bee_mortality-mortalite_abeille-eng.php.

³ Worldwide Integrated Assessment of the Impacts of Systemic Pesticides on Biodiversity and Ecosystems (Notre Dame de Londres: Task Force on Systemic Pesticides, January 9, 2015), http://www.tfsp.info/assets/WIA_2015.pdf.

⁴ Dave Goulson, Elizabeth Nicholls, and Ellen L. Rotheray, "Bee Declines Driven by Combined Stress from Parasites, Pesticides, and Lack of Flowers," *Science*, February 26, 2015, <http://www.sciencemag.org/content/early/2015/02/25/science.1255957.abstract>.

⁵ WIA.

⁶ Ibid.

⁷ Olivier Samson-Robert et al., "Neonicotinoid-Contaminated Puddles of Water Represent a Risk of Intoxication for Honey Bees," *PLoS One* 9, no. 12 (December 1, 2014): e108443.

⁸ "What Is IPM?," *Ontario Crop IMP*, October 27, 2009, <http://www.omafra.gov.on.ca/IPM/english/index.html>.

⁹ Ontario, *Pollinator Health: A Proposal for Enhancing Pollinator Health and Reducing the Use of Neonicotinoid Pesticides in Ontario* (Toronto: Ontario, November 25, 2014), <http://www.omafra.gov.on.ca/english/pollinator/discuss-paper.pdf>.

¹⁰ *MARS Bulletin Vol.22 No.13 (Crop Monitoring in Europe)* (European Commission Joint Research Centre Institute for Environment and Sustainability, December 15, 2014), <http://mars.jrc.ec.europa.eu/Bulletins-Publications/MARS-Bulletin-Vol.22-No.13-Crop-Monitoring-in-Europe-15-December-2014>.