

FINANCIAL POST

Bees, bans and bungling: How an anti-pesticide campaign may spell serious trouble



[Claire Brownell](#) | November 7, 2014 | Last Updated: Nov 7 7:27 PM ET
[More from Claire Brownell](#)



Rick Chard for National PostHugh Simpson owner of Osprey Bluffs Honey Co. at his farm in Grey Highlands resigned from the Ontario Bee Keepers Association to form the Independent Commercial neonic pesticides.

At the end of a long day in the field, Ontario beekeeper Hugh Simpson is on his way to a meeting, where he's looking forward to a packed agenda talking shop. Bee talk. Honey discourse.

And absolutely not about banning pesticides.

In March, Mr. Simpson was involved in forming the Independent Commercial Beekeepers. So far, the group has attracted about 20 members, based out of Ontario's Grey-Bruce region, who meet every so often to talk about the business of beekeeping — how much honey their hives are producing, the prices they're getting on the market and equipment they're eyeing.

And definitely not about banning pesticides.

Mr. Simpson has had enough of that. The debate over bees and crop pesticides, specifically neonicotinoids, has been everywhere. Beekeepers — *certain beekeepers* — have been all over the media beefing about massive bee die-offs, blaming neonic pesticides, and demanding bans.

Mr. Simpson was on the board of the Ontario Beekeepers Association for a couple of years. He resigned because he disagreed with the group's fixation with getting Ottawa to ban or severely restrict the use of neonicotinoids.

The agenda has really become overwhelmed by banning neonicotinoids, neonicotinoid advocacy, lawsuits

“The agenda has really become overwhelmed by banning neonicotinoids, neonicotinoid advocacy, lawsuits. That stuff is a distraction,” Mr. Simpson said. He and likeminded beekeepers “just have no tolerance for highly politicized, mostly focused on anti-agriculture, anti-crop protection, anti-science conversation.”

He and many other beekeepers are more worried that the anti-neonic beekeepers and the environmentalist groups eagerly lining up behind yet another campaign targeting pesticide makers, could be pushing the government down a dangerous path. Especially since just a few changes to the way neonics have been applied in recent years are already showing a rapid rebound in bee populations. Banning the chemicals now could do far more harm to agriculture in Canada than any trouble neonics may be causing.



Honeybee pollination (as opposed to wind) have been said to increase crop yields by double or triple.

Last year, the European Union banned neonics and Health Canada is considering doing the same, with the Ontario government pledging to severely restrict their use by next summer. The Canadian Association of Professional Apiculturists consider the “long term acceptable level” of winter bee deaths to be 15% of the population; it has been over 25% in six of the last eight winters, and as low as 15% just once.

The CBC, Global News, the *Toronto Star* and *The Globe and Mail* have all predictably gravitated to the panicky eco-message (“Honeybees in crisis: dying by the tens of millions. But it may be the human factor – our trust in science – that’s killing the species,” reads the description for an online video of the Global investigation). Bees, after all, are critical to Canadian agriculture, since they pollinate so many crops. Farmers often invite beekeepers to locate hives on their land. Honeybee pollination (as opposed to wind) have been said to increase crop yields by double or triple.

But while mistrust of new technologies and agri-business is a typical reflex in westernized cultures (see: genetically modified foods), logically, pesticide manufacturers and farmers have nothing to gain and much to lose from killing bees. Pollinating insects contribute an estimated \$2.3-billion to the agricultural economy every year, according to the Canadian Honey Council.

No one is arguing neonics are exactly a health food for bees. They’re pesticides. Bees are insects. The science is clear: neonics kill bees when administered in sufficient doses.

The science is less clear, however, on whether bees are exposed to anything like those doses in the field when farmers use neonics according to guidelines and recommendations.

And if neonics are banned, farmers will return to using spray and granular pesticides, which they say are less effective at protecting crops in the growth stage and even *more* harmful to human, bee and environmental health.

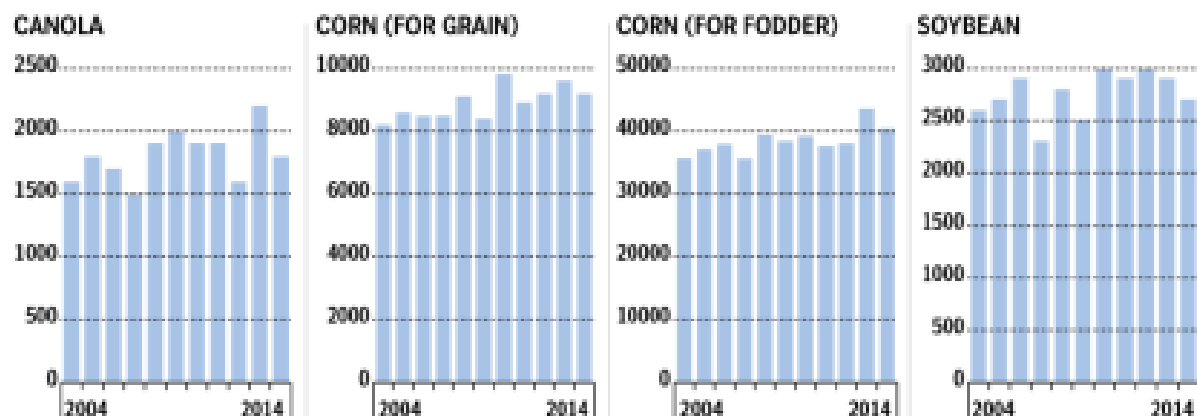
This is why the issue has become so divisive among Canadian beekeepers. The Ontario association has taken a confrontational approach, advocating for a near-total ban on neonics and slapping pesticide manufacturers Bayer AG and Syngenta AG with a lawsuit, currently awaiting certification as a class action.

Meanwhile, the national and Alberta beekeeping associations seem to want nothing to do with the Ontario Beekeepers' position and tactics. Alberta's bees, after all, are doing just fine, despite foraging for pollen among 20-million acres of canola crops treated with the same neonic pesticides as the ones used in Ontario for the last 10 years.

THE BUZZ ON NEONICOTINOIDS: CROPS UP; BEES INCONCLUSIVE

Crop yields have risen since the introduction of neonicotinoids in 2004

ESTIMATED CANADIAN CROP YIELDS IN KILOGRAMS PER HECTARE



Bee deaths have spiked in Ontario but not in Alberta's larger population

GROSS WINTERING LOSSES OF CANADIAN HONEY BEE COLONIES, BY PROVINCE

	NUMBER OF COLONY LOSSES (SPRING 2014)	NUMBER OF COLONIES WINTERED (FALL 2013)	WINTERING LOSS
British Columbia	5,858	39,047	-15.0%
Alberta	52,170	282,000	-18.5%
Saskatchewan	18,880	100,000	-18.9%
Manitoba	17,040	71,000	-24.0%
Ontario	58,010	100,000	-58.0%
Quebec	9,000	50,000	-18.0%
New Brunswick	2,700	10,282	-26.3%
Nova Scotia	4,200	18,500	-22.7%
Prince Edward Island	1,338	6,995	-19.1%

NOTE: Data unavailable for Newfoundland and Labrador.

SOURCE: STATISTICS CANADA, CANADIAN ASSOCIATION OF PROFESSIONAL APICULTURISTS

JONATHAN RIVAIT / NATIONAL POST

Additionally, while Ontario is home to almost half of Canada's beekeepers, they are smaller producers: only responsible for about 15% of the country's bees. Rod Scarlett, executive director of the national beekeeping organization the Canadian Honey Council, said most of Ontario's beekeeping operations are run by keepers with a lot less to lose in antagonizing relationships with farmers and pesticide makers.

Mr. Scarlett said he does believe the levels of bee mortalities seen in Canada and around the world are cause for concern, especially the recent spikes in Ontario bee deaths. However, bee

health is extremely complex. Occasional unexplained spikes in mortality are actually quite normal. And there simply is no neat and tidy correlation between neonic use and bee deaths — as the relatively healthy Alberta numbers show.

“Yes, Ontario beekeepers are being affected and yes we need to address that,” Mr. Scarlett said. But that doesn’t mean rushing to ban an otherwise extremely useful pesticide. “It’s still the belief of the Honey Council that we work with everybody involved.”

In the spring of 2012, Tibor Szabo, a Guelph-area beekeeper and incoming president of the Ontario Beekeepers Association, was looking in on his bees. He discovered a gruesome scene.

Dead bees were everywhere, spilling out of a hive he thought was a strong colony. He had seen similar carnage when a hive ran out of food and starved, but this time the feeder was full.

“If you could imagine a bee hive was like a living thing, it was like it threw up a whole bunch of dead bees out front. It was weird,” he said. “The remaining bees that were alive were trying to throw dead bees out.”

Mr. Szabo was one of 42 Ontario and Quebec beekeepers who reported similar incidents at 242 bee yards that spring, prompting an investigation by Health Canada’s Pest Management Regulatory Agency (PMRA) and the Ontario government. The following spring, about twice as many beekeepers in three provinces reported mortalities involving 322 bee yards.

The investigation found residues from neonic pesticides in 80% of the bee yards tested. Most of the affected bee yards were near cornfields, leading the PMRA to conclude that exposure to contaminated dust during planting “contributed to the majority of the bee mortalities.”

In response, Health Canada is currently reassessing its approval of neonic pesticides, which came on the market in Canada in 2004. Ontario Minister of Agriculture Jeff Leal has also pledged to restrict the use of neonic-treated seeds by next summer, only allowing farmers to use them if they can show the pesticides are necessary to address localized pest problems.

Planting corn seeds pre-treated with neonics generates a particularly large amount of pesticide-laced dust — far more than with other crops — which is one theory why bees foraging in Ontario’s cornfields were dying in large numbers, while bees in Alberta’s canola fields were not. The PMRA implemented guidelines for farmers for the 2014 planting season meant to reduce dust exposure. They appear to have been successful.

PMRA representative Scott Kirby told a senate committee in early October there was good news for Ontario bees last spring and summer, with the number of reported incidents dropping 70%. “We are not comfortable saying that our measures are causing that 70 per cent decline, but we’re hopeful that they at least contributed to it,” he said.



Health Canada is currently reassessing its approval of neonic pesticides, which came on the market in Canada in 2004.

That isn't good enough for the Ontario beekeepers and environmental groups. Neonics aren't like other pesticides: since they're applied to the seed, they're absorbed throughout the plant, distributed into every cell as it grows, and poison the neurological systems of insects that attempt to feed on them.

The concept of infusing pesticides into the crops we eat at the point of germination is easily perceived as creepy (the poison is coming from *inside the plant* and it's *messing with bees' brains!*). It's the antithesis of the current consumer obsession with whole, organic, natural foods. As a rallying issue for environmentalists, it plays directly into our fears about messing with nature's chemistry, and works wonders: During a public consultation on its reassessment of neonic pesticides, Health Canada found 89% of respondents supported "taking further action" to protect bees, including a ban.

It's so stupid I don't even know how anyone could take that seriously

In June, a task force of 50 scientists associated with the International Union for Conservation of Nature published an overview of the conclusions of 800 peer-reviewed articles on the effects of neonic pesticides. The scientists recommended governments introduce regulations to substantially reduce their use, finding the pesticides leach into water, disrupt the food chain and harm bees in concentrations comparable with those found in the field.

The report also noted a long list of things we still don't know about neonics. Those include what happens to them as they accumulate in the environment over time and how much of the pesticides are being applied in locations around the world.

Mr. Szabo said he thinks it's only a matter of time before repeated exposure from planting neonic-treated seeds year after year starts to kill Alberta's bees too. Making rules about dust exposure when planting crops is just fiddling at the edges of the problem, he said.

“To monkey around with the instance of application and think it's going to do something, it's a joke. It's so stupid I don't even know how anyone could take that seriously.”

Farmers who use neonic pesticides, however, don't see a cautionary tale about meddling with nature; they see a marvel of technology.

Crop yields in Canada have increased significantly since neonics came on the market 10 years ago; the Conference Board of Canada estimates banning them would cost Ontario corn and soybean farmers \$630-million per year. There's debate over how much of the yield increase is directly attributable to the pesticides, but the industry says they are particularly effective at fending off pests that attack the plant in the critical early growth stage.

Dave Baute, a Tilbury, Ont.-area farmer and president of the Canadian Seed Trade Association, said the idea that he's some sort of greedy corporate bee-hater intent on destroying the environment really gets under his skin. His livelihood depends on pollinators like bees, and the health of his local environment.

Mr. Baute said banning neonics would be “an attack on modern technology.” It would mean reverting to older spray and granular pesticides, which he said are more harmful to the environment and the farmers who work with them.

Part of the problem, Mr. Baute said, is that farmers and pesticide companies have a more nuanced message to deliver. Farming, by definition, means disturbing the life cycle of other things — and while the environmentalists may be right that bees and the environment would be better off if we just eliminated all pesticides entirely and went entirely organic, humans may not like the consequences: drastically reduced food production, economic losses and steeper food prices.

“It's stepping way back in the wrong direction. It's going backwards,” he said. “But how do you convey that without looking like we're turning our backs on Mother Nature and the humble bee?”

cbrownell@nationalpost.com