

Blogs » Notes from the Panther Lounge

Let's talk about the birds and the bee-killing pesticides

By Lisa Gue, Environmental Health Policy Analyst

The Birds:

In the 1960s, <u>Rachel Carson's</u> book *Silent Spring* exposed the unintended but far-reaching consequences of <u>DDT</u> pesticides that were decimating American bird life. Ornithologists were receiving reports of drastic declines in bird populations in connection with DDT spray programs — despite the pesticide industry's claim that these sprays were harmless to birds. It turned out that earthworms were consuming pesticide residues on decomposing plant matter, and birds were receiving lethal doses of DDT when they ate the earthworms.

Carson's work helped launch the environmental movement and led to the creation of the U.S. Environmental Protection Agency and a ban on DDT.

The Bees:

Five decades later, beekeepers are raising alarms about unusually high rates of honeybee deaths coinciding with the spring corn-planting season. Investigation by Health Canada's Pest Management Regulatory Agency (PMRA) determined that neonicotinoid pesticides used on corn seed contributed to the bee die-offs. Neonicotinoids (or "neonics") are a newer class of insecticides that function by attacking the central nervous system of pest insects. Widely used in agriculture and horticulture, neonics are also found in some home and garden pesticides.

Neonics weren't around when Rachel Carson was writing, but chances are she would have had something to say about them. These chemicals are known to be highly toxic to bees. Sub-lethal doses can interfere with honeybees' flying and navigation abilities, among other neurological effects. (See the 2012 review of evidence published by the Xerces Society, a non-profit wildlife protection organization in the U.S.) Although the pesticide industry claims that "realistic" levels of neonics should cause no adverse effect on bee colonies (sound familiar?), a recent study found that bees exposed to even low levels of these pesticides are significantly less efficient at foraging for pollen.

Beyond what this means for bee populations, there are broader implications. As Rachel Carson pointed out, humans are part of nature and we too are vulnerable to the ecological damage we cause. The foraging activities of bees and other <u>pollinators are critical to food production</u>. Moreover, concerns have been raised that neonics could have adverse effects on the human nervous system. European regulators have <u>pointed</u> to possible effects on the developing brain connected to memory, learning ability and motor skills.

In light of these serious concerns, the European Commission has imposed a two-year ban on certain agricultural uses of neonicotinoids while more research is conducted on their health and environmental impacts. Canada has also announced plans to assess the risks that these pesticides pose to pollinators, with results expected in 2016. Here, however, neonicotinoids are still in use, even though the PMRA acknowledges critical data gaps concerning chronic toxicity to bees and environmental impacts. (Regrettably, this is not the only case where Canadian pesticide standards are less protective than leading international standards. The David Suzuki Foundation, in collaboration with Équiterre and Ecojustice, has identified some 23 pesticides in use in Canada that have been banned in Europe for health or environmental reasons. The PMRA has at last agreed — after we initiated legal action — to conduct special reviews of these pesticides.)

In September 2013, the David Suzuki Foundation and other groups <u>formally objected</u> to the PMRA's proposed re-approval of the neonicotinoid clothianidin. Six months later, we are still waiting for the health minister to respond to our objection. (Lawyers at the Canadian Environmental Law Association and Ecojustice recently sent the minister a reminder on our behalf.) Canadian regulators should stop dragging their heels on meaningful action to protect the bees. Canada should follow Europe's lead and suspend approvals for neonicotinoid pesticides.

<u>Click here</u> to read the Notice of Objection filed by Ecojustice lawyers on behalf of the David Suzuki Foundation and other groups protesting the proposed re-approval of clothianidin.

Wondering how to pronounce neonicotinoid? It's a tongue-twister! Click here for an audio guide.

March 27, 2014

http://www.davidsuzuki.org/blogs/panther-lounge/2014/03/lets-talk-about-the-birds-and-the-bee-killing-pesticides/