Feb 5, 2024

To: Subcommittee on Water Policy 020624

Chair Weber and members:
Please support Lucas Rhodes, Sr. Project Attorney for NRDC: Neonicotinoid impacts on surface and ground water

I am an entomologist with research experience in studying the aquatic insects that are bioindicators of water quality, in particular, the mayflies, stoneflies, and caddisflies.
In a healthy body of water, be it in lakes and ponds or flowing waters in creeks and rivers, there should be not only an abundance of insects but also species richness or diversity.

The pervasive use of the systemic neonicotinoids is most often discussed because of their their accumulation in soil and terrestrial vegetation. Neonicotinoids are the most commonly used pesticides in the US and worldwide, and the declines in populations of some species of beneficial insects is related to the loss of healthy habitat for pollinators.

We all need to be able to eat nutritious food to be healthy ourselves, but what is becoming more apparent, is how the neonicotinoids run off into adjacent aquatic habitats and seep into ground waters.

Insect are the foundation for the food web, and If there is not an abundant and diverse population of aquatic invertebrates in our lakes and rivers, there will no longer be the fish, reptiles, amphibians, birds, and other animals that depend on them. In the past few years, more and more research has reported the decline in abundance of aquatic insects in chemically impacted waters leading to caution in consuming fish. We are all connected to these often overlooked species, yet we, too depend on them for our diverse food crops and clean water for aquatic birds and invertebrates to thrive, and for our drinking water supply.

There are numerous research studies that have revealed the impacts of the neonicotinoids in MN and other states and they are registered in over 120 countries. It is important that we take these studies seriously and the implications in an already uncertain climate. I expect that there will be bills this session that will deal with the neonicotinoids, and I hope you will give them your careful consideration in light of their impacts on the integrity of our soils, waters, and so our own health.

Thank you,
Margot Monson, entomologist, beekeeper
22 Ludlow Ave
St Paul, MN 55108

References:

Neonicotinoid contamination of global surface waters and associated risk to aquatic invertebrates: A review
Author links open overlay panelChristy A. Morrissey [a] [b], Pierre Mineau [c], James H. Devries [d], Francisco Sanchez-Bayo [e], Matthias Liess [f], Michael C. Cavallaro [b], Karsten Liber [b] [g]

Victory! Fish and Wildlife Service to Phase Out Neonicotinoids
JULY 14, 2014
Following Center for Food Safety Petition, Government Agrees to Eliminate Bee-Toxic Pesticide in NW Wildlife Refuges

Neonicotinoids in the Canadian aquatic environment: a literature review on current use products with a focus on fate, exposure, and biological effects

J C Anderson [1], C Dubetz [2], V P Palace [3]
Sci Total Environ
.2015 Feb 1:505:409-22.
doi: 10.1016/j.scitotenv.2014.09.090.Epub 2014 Oct 21.

The neonicotinoid imidacloprid shows high chronic toxicity to mayfly nymphs

Ivo Roessink [1], Lemessa B Merga, Hans J Zweers, Paul J Van den Brink

Environ Toxicol Chem
2013 Apr;32(5):1096-100.doi: 10.1002/etc.2201. Epub 2013 Apr 3

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