

Neonics: The New DDT

Protect Birds, Bees, Food & Water From Neonicotinoid Pesticide Contamination

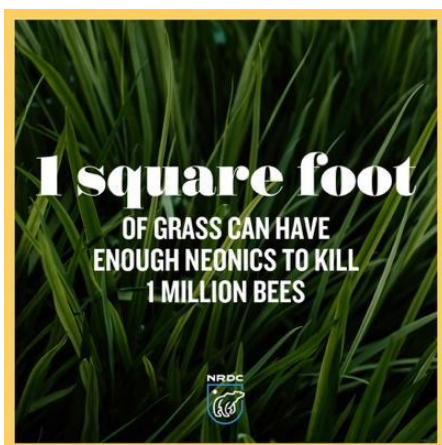
You may know that the nerve-toxic pesticides called neonicotinoids (neonics) pose serious risks to bees, birds, and butterflies, as well as to water resources, and soil health. You probably do not know that seeds for much of our food, including most of US corn, soy beans, and wheat are being coated with neonics. You also may not know:

- State Departments of Agriculture are not required to track how much of our food is grown from neonic-coated seeds because, thanks to a generous loophole, this pesticide seed coating has been exempted from government regulation on the odd grounds that it is not labeled a pesticide when on a seed.
- **Only 5% of that pesticide coating is taken up into the plant, according to the pesticide industry's own research. The remaining 95% moves through soil and air into waterways.**¹
- This huge non-regulated “escape” of a toxic pesticide poses severe risks to whole ecosystems and human health.
- Several studies including a recent one by Cornell University reports that using neonic-coated seeds most often offers “*no overall net income benefits*” to farmers.²
- Plants grown from neonic-coated seeds contain systemic pesticides; they are force multipliers creating 24-hour pesticide dispersal from seedling through final disintegration. The pollen, fruit, and even the dew on the leaves of these plants are poison.
- The pesticides on the seeds are being used preventively, whether or not the plant faces a pest problem.

You Are Probably Eating Corn Grown from Neonic-Coated Seed



The Pesticides Cannot Be Washed Off They Become Part of the Plant



species list.³

Does it matter? Is any real harm being done by neonics whether applied in a spray across lawns and golf courses or coated on a seed?

Much of the world thinks so. New York just banned most treated seed and non-agricultural uses with passage of the Birds & Bees Protection Act. **Ten states** have some restrictions already in place. Most neonic uses are banned in Europe and parts of Canada.

The EPA predicts that the three most commonly-used neonics likely jeopardize the continued existence of *over 200 threatened and endangered species*—or about 11% of the entire endangered

¹ Bayer CropScience AG, 2003; <http://www.bulletinofinsectology.org/pdfarticles/vol56-2003-035-040sur.pdf>

² Cornell University, 2020: <https://cornell.app.box.com/v/2020-neonicotinoid-report>

³ EPA, 2023; <https://www.epa.gov/pesticides/epa-takes-next-step-endangered-species-act-review-three-neonicotinoids>

It's time to halt wasteful uses of these dangerous pesticides on lawns and gardens and ban their use as seed coatings.

Why Do Scientists Believe Neonics Are So Dangerous?

- Nicotine-like, they affect the neurological system. Research shows harms to heart⁴ and brain⁵ development in prenatally exposed children.



- They are in our water. USGS studies show they are in over 50% of American streams⁶
- And in drinking water. For example, a study on Long Island found neonics in 30% of drinking water.⁷
- 89% of food samples collected in the US contained at least one neonic, and 57% contained more than one.⁸
- The CDC found neonics in 50% of the population with the highest concentrations found in children.⁹
- A recent study of 171 pregnant women in the U.S. found that over 95% had neonics in their bodies.¹⁰

Neonics Destroy Food Chains Hollowing Out Ecosystems

- Sharp declines in bee and other insect populations have been linked to neonics in hundreds of studies compiled by Cornell University¹¹ and others.
- Neonics have made U.S. agriculture 48-times more harmful to insects since the mid-1990s.¹²
- The loss of 3 billion birds in the last 50 years has been linked to neonics, with the sharpest declines seen in birds that eat insects.¹³ Just one coated seed is enough to kill a songbird.¹⁴
- Neonics also affect mammals. They have been linked to gross congenital defects in white-tailed deer¹⁵
- Data on surface water contamination show concentrations of several neonics high enough to be causing impacts in aquatic food chains, i.e. killing the insects that feed the fish, frogs, birds, and other animals, hollowing out our ecosystems.¹⁶

Since the EPA has not taken action to curtail wasteful uses of neonics—for example, to achieve a grub-free lawn or to kill insects that may not even be present—states are taking matters into their own

⁴ NIH Library, 2014; <https://pubmed.ncbi.nlm.nih.gov/25262086/>

⁵ NIH, Library 2014. <https://pubmed.ncbi.nlm.nih.gov/24553680/>

⁶ USGS; 2015:

https://www.usgs.gov/programs/environmental-health-program/science/first-national-scale-reconnaissance-neonicotinoid?qt-science_center_objects=0#qt-science_center_objects

⁷ NRDC, 2017; <https://www.nrdc.org/sites/default/files/impacts-neonics-in-ny-water-report.pdf>

⁸ Chensheng (Alex) Lu; <https://researchfeatures.com/wp-content/uploads/2022/07/Chengshen-Lu.pdf>

⁹ CDC, 2019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6710140/pdf/nihms-1044628.pdf>

¹⁰ Beckman Institute, 2022,

<https://beckman.illinois.edu/about/news/article/2022/05/10/long-term-study-of-pregnant-women-finds-increasing-chemical-exposure>

¹¹ Cornell, 2020 <https://cornell.app.box.com/v/2020-neonicotinoid-report>

¹² Michael DiBartolomeis, 2019. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0220029>

¹³ Cornell Ornithology Labs, 2022.

<https://www.allaboutbirds.org/news/neonic-nation-is-widespread-pesticide-use-connected-to-grassland-bird-declines/>

¹⁴ American Bird Conservancy study, 2013.

<https://abcbirds.org/news/birds-bees-and-aquatic-life-threatened-by-gross-underestimate-of-toxicity-of-worlds-most-widely-used-pesticide-2/>

¹⁵ 2019, <https://www.nature.com/articles/s41598-019-40994-9#citeas>

¹⁶ American Bird Conservancy study, Pierre Mineau, 2013.

hands. [Check here](#) to see what your state is doing, and start a movement on your own if one is not yet happening in your state.