

Birds and Neonic-Coated Seeds

Hardy Kern, Director of Government Relations, Pesticides and Birds Campaign ehardykern@abcbirds.org

72 MILLION

Birds Killed by Pesticides Every Single Year

138 MILLION

Acres of Corn and Soybeans Planted with Coated Seeds in 2021



4301 Connecticut Avenue, Suite 451 Washington, D.C. 20008 202-234-7181 • info@abcbirds.org abcbirds.org Neonicotinoids are a systemic class of neurotoxic insecticide; chemicals which are grown into every part of a plant and interrupt nervous system function. These "neonics" are the most widely used insecticides in the world and are mainly used as seed coatings in agriculture.

When neonics are used as seed coatings, as much as 97 percent of the pesticide leaves the seed. Once in soil and water, it indiscriminately kills beneficial insects and non-target organisms such as birds.

Neonics Kill Birds: A single seed coated with a neonic is enough to kill a songbird. When neonics leach into waterways and soil, they kill invertebrates birds rely on for food, shrinking populations and brood sizes due to lack of resources.

Neonics are Mobile: Neonics are highly water soluble, allowing them to easily leach off of seeds. The three most used neonics — thiamethoxam, clothianidin, and imida-cloprid — have been found in drinking and freshwater systems across the U.S.

Neonics are Persistent: Labels claim neonics on seeds are only active for 30 days, but studies have found neonics to persist in soil for as long as 1,000 days (3 years) after use. Remaining in the soil, they have potential to still impact birds and pollinators.

Neonics Go Untracked: Due to exemptions from federal regulations, we don't know how much pesticide is used to coat seeds, where it is used, or which growers use it.



DOUBLE TROUBLE: Birds are negatively impacted by neonics from ingesting the coated seeds, and from losing the insects they eat and feed their growing chicks.

Excessive, Expensive, No Benefit

Neonic-coated seeds are prophylactic pesticide applications, usually used in areas where the target pests are not present or at times of the year when target pests are not active. Consequently, the accompanying environmental damage comes with no benefit to farmers. The EPA has recommended that seed treatments do not benefit soybean crop yield, yet their use continues and grows annually.

Much the same is true for corn; in a small handful of cases, neonic seed treatments may benefit corn survival. However, other insecticides and methods with much lower toxicity exist and can be used in place of neonic seed treatments. In short, there is no justification for their continued use. "In comparison to the next best alternative pest control measures, neonicotinoid seed treatments likely provide \$0 in benefits to growers and at most \$6 per acre in benefits (i.e., a 0%-1.7% difference in net operating revenue)."

> — EPA, October 15, 2014: Benefits of Neonicotinoid Seed Treatments to Soybean Production

The addition of a pesticide coating on a seed comes at a huge markup to growers. Many farmers may not even realize the seeds they are planting contain a neonic — 32 percent of soybean farmers surveyed were unaware the seeds they were planting had neonic insecticides on them. Uncoated seeds are not usually available and require a special order ahead of the growing season.

More Neonics = Fewer Birds Over Time

Graph A shows bird trends in the Netherlands from 1984-1995, a period before the neonic imidacloprid was used.

Graph **B** shows bird trends from 2003-2010, after and during a time when imidacloprid was used.

There is a statistically significant decline in bird species trends from 2003-2010 which is explained by the increased concentration of imidacloprid.

Read more: https://doi. org/10.1038/nature13531





What You Can Do

Talk to Your Legislators and ask them to support the Saving Americas Pollinators Act and Protect America's Children from Toxic Pesticides Act.

Call Your State Representatives and voice your concern about pesticide-coated seeds.

Buy Organic Produce which supports farmers who avoid using toxic pesticide seed coatings.

Email the EPA to tell them you support tighter regulations of pesticide-coated seeds. Send your comments to: pesticidequestions@epa.gov