CONNECTICUT LEAGUE OF CONSERVATION VOTERS EDUCATION FUND

Neonics

PROBLEM STATEMENT

Neonicotinoids or “neonics”, the most widely used insecticides in the US, have been linked to massive losses of bees and other pollinators, declining bird populations, threats to aquatic insects and fish, and human health harms, especially in children.

IMPACTS

- **Rivers:** Neonics are found in Connecticut rivers at levels deadly to aquatic life.
  - US Geological Survey studies show they are in 53% of US streams including 56% of the CT rivers tested.
  - USGS data shows the presence of neonics in CT groundwater, which is concerning in a state that relies heavily on well water.
- **Economic:** Some Uses are ineffective and provide no net economic benefit.
  - Studies show seed treatment on row crops (corn, soybean) does not increase yields and provides no economic benefit to farmers (Cornell).
  - Studies show use on lawns to control grub is ineffective.
- **Human Health:** Neonics affect the human neurological system.
  - Studies show harm to heart and brain development in prenatally exposed children; decreased sperm quality and quantity, and decreased testosterone.
  - The CDC found neonics in 50% of the population with the highest concentrations found in children.
- **Animals & Wildlife:**
  - One neonic-coated seed is enough to kill a songbird and sublethal effects include interference with metabolism, migration, and reproduction.
  - A 2023 EPA study shows neonics are jeopardizing over 200 threatened and endangered species.

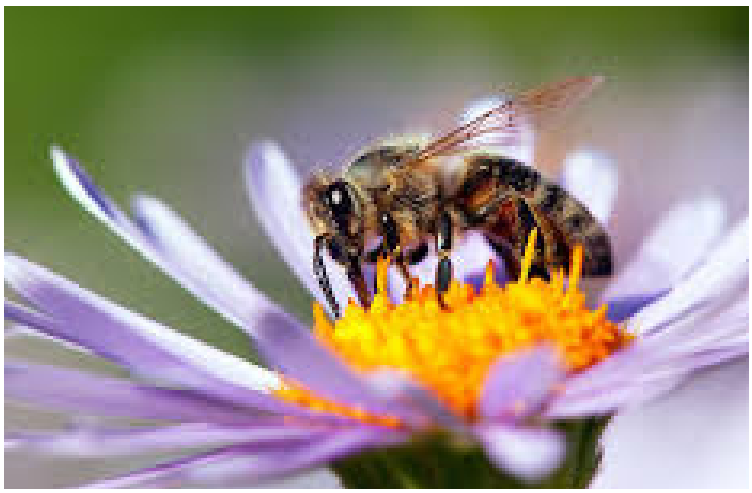
REGULATORY GAPS

- The EPA does not have resources to address known harmful impacts of neonics in a timely manner (5% of annual reviews done).
- EPA insecticide program does not regulate non-agricultural uses (e.g., turf grass, ornamentals).
- EPA does not regulate neonic-coated seeds, despite widespread contamination from their leaching into waterways.

LEGISLATIVE SOLUTION

Require a ‘verification of need’ and a permit or a waiver for uses that cause significant harm and provide little-to-no economic benefits- uses on lawns and ornamental landscaping and row crop treated seeds (corn, soybean, etc).

“Of all the uses of neonics, coating of seeds planted on large acreages (corn, rapeseed, soybean) are the most objectionable. It is equivalent to baiting birds with poison bait.”
-Richard Cowles, CAES



FAST FACTS - HUMAN HEALTH

- USDA testing found 63% of fruit and vegetable samples contained at least one neonic, and 57% contained more than one. Neonics work systemically, throughout the plant, so they can't be washed off.
- A 2022 peer-reviewed study from the University of Illinois found neonicotinoids in 95% of the pregnant women who participated in the study.
- Nicotine-like, neonicotinoids (neonics) affect the neurological ystem. Studies show harms to heart and brain development in prenatally exposed children, decreased sperm quality and quantity, decreased testosterone, altered insulin regulation, and changes in fat metabolism.

FAST FACTS - INSECTS & WILDLIFE

- One square foot of lawn treated with neonics at EPA-approved levels can kill a million bees (NRDC)
- Neonics are 7000 times as toxic to insects as DDT (NRDC)
- In CT, beekeepers now lose on average 47.2% of their colonies each year and some native bumblebee populations are down by as much as 99%
- Sharp declines in bee and other insect populations have been linked to neonics in hundreds of studies reviewed in a 2020 Cornell University report.
- Neonics have made U.S. agriculture 48 times more harmful to insects since the mid 1990's. (Cornell)
- USGS testing shows neonics in Connecticut rivers at levels lethal to aquatic insect life and warns of resulting threats to the health of river ecosystems
- A 2024 peer-reviewed study pinpoints neonics as a critical factor pushing monarchs to extinction.
- Bird declines of more than 2.9 billion in the last 50 years are linked to neonics both directly and indirectly through insect declines.

FAST FACTS - GENERAL USE & REGULATION

- A 2020 Cornell study supports previous findings that using neonic-coated corn, soy, and wheat seeds offers "no overall net income benefits" to farmers.
- A 2014 study co-authored by CT Agricultural Experiment Station scientists shows neonics are ineffective at controlling white grub on turf grass - a major use in CT lawns and golf courses.

MORE INFORMATION

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