



## Protect our Pollinators: Amend Pesticide Applicators' Act in Sunset Review to Restrict Use of Neonics, a Dangerous Class of Bee-Killing Pesticides

**Our bees and other pollinators are dying off at alarming rates.** Between April 2020 and 2021, U.S. beekeepers [lost nearly half of their managed honeybee colonies](#) -- the second-highest loss rate ever recorded and considered unsustainable. [Colorado hosts 946 native bee species](#), ranking 5th nationally for bee diversity and, according to compiled data from the U.S. Department of Agriculture, fifth for the [rate of bee die-offs](#) too. In a study of more than 1400 native bee species across the country, [more than half are declining](#).

A major cause of bee die-offs is a class of pesticides [called neonicotinoids](#) (or neonics).

**We need pollinators.** A U.N. report found that almost 90 percent of wild plants and 75 percent of all food crops [need animal pollinators](#) to some extent. Without them, flowering plants will sharply decline, with dangerous consequences for all ecosystems. Bees are [particularly important](#) pollinators.

Just 100 crops provide 90 percent of the world's food, and we rely on [bees to pollinate 71 of them](#). Bees are responsible for [one in every three bites of food](#) we eat. This includes [apples, almonds, avocados, blueberries, blackberries, cashews, cherries, coffee, cranberries, cucumbers, melons, nutmeg, pears, peppermint, potatoes, pumpkins, sesame, strawberries, sugar cane, tea, tomatoes, vanilla](#), Colorado's Palisade peaches, the alfalfa that feeds our dairy cows, and so much more.

Pollinators' ecological service is valued at [\\$200 billion annually](#). In the United States alone, honey bees pollinate an estimated [\\$15 billion](#) worth of crops every year.

### What we know about neonics:

Known [neonics](#) include imidacloprid, thiamethoxam, clothianidin, thiacloprid, dinotefuran, acetamiprid, nitenpyram, and sulfoxaflor. We have found them in [more than 30 products](#) in Colorado stores. Many consumers are unaware of the dangers of neonics or can't identify them in products.

- According to a study in National Geographic, neonics are [1000 times more toxic](#) to bees than DDT: [sublethal doses cause](#) immune deficiencies and disorientation, making it [hard to forage, fly, return to their hive](#), and complete other essential tasks like [ridding themselves of parasitic varroa mites](#)
- [Studies suggest](#) that neonics can be addictive, and bees prefer plants with [neonics](#)

### Other impacts of neonics:

- Neonics are [systemic and water-soluble](#), diminishing [water quality](#) and [soil health](#), harming [aquatic invertebrates](#) and [birds](#)
- They can also [impact human health](#) at high exposure levels, and cause [developmental defects, heart deformations, muscle tremors](#), and [liver and kidney impairment in fetuses](#)



**We want to create and maintain safe pollinator habitats. Reducing pesticide use in urban areas can be particularly good.** Recent data shows that [cities and suburbs support a high level of richness and abundance](#) for bees.

To protect bees in urban areas, we can restrict the *consumer* sale and use of neonics in Colorado by amending the Pesticide Applicators' Act during its sunset review. According to the [Department of Regulatory Agencies Sunset Review](#), the **Pesticide Applicators' Act** governs the use of pesticides by licensed or registered entities, individuals, and the general public in Colorado. This regulation aims to minimize pesticide's adverse effects on people, wildlife and property. **Coloradans expect that a reauthorized Pesticide Applicators' Act would have appropriate protections for pollinators.**

**Policy proposals:** Neonics should be added to the state's [Restricted Use Pesticide \(RUP\) list](#), limiting the use of this pesticide to licensed or private applicators. This will go a long way to keeping neonics out of the hands of untrained users and reducing application in urban areas.

Licensed applicators (landscapers, commercial-use) and "private applicators" (many farmers) will still be able to acquire and use neonics if they need them, just like they can with other pesticides presently on the RUP.

This would also be a good time to **lift pre-emption** and allow municipalities and counties to go beyond the minimum standards for controlling pesticides in the Act.

Given the intent to reduce the consumer sale and use of neonics in bee-friendly urban areas, it is common to exempt neonic use for indoor pests, pet or veterinary care, and personal care products for lice and bedbugs from the restriction.

#### **What's the current Restricted Use Pesticides (RUPs) system:**

- **Regulation-** RUPS are [regulated by the Department of Agriculture](#). There are presently seven pesticides on this list
- **RUPs' criteria-** "RUPs have the potential to cause unreasonable adverse effects to the environment and injury to applicators or bystanders without added restrictions"
- **Buying and using RUPs-** Any person attempting to buy RUPs must be a [Certified Pesticide Applicator](#) licensed under a Private Applicator or Qualified Supervisor.
- **Selling RUPs-** Any person distributing or [selling RUPS must be licensed as a pesticide dealer](#). Businesses only selling pesticides that are *not* RUPs, do not require licensing

**Bottomline:** Pollinators are critical for the health of our ecosystems and food supplies but are dying at alarming rates. Neonics are toxic to bees and other pollinators. We should restrict the use of these dangerous pesticides, especially in urban areas where we can create abundant and rich pollinator-friendly ecosystems. Adding neonics to the Restricted Use Pesticides list is a simple way to reduce the ability for untrained Coloradans to obtain and use neonics in ways that exacerbate bee die-offs.



### **What have other states done?**

In 2016, [Maryland became the first state](#) to restrict the private sale of neonics. Since then, [Connecticut](#), [Vermont](#), [Maine](#), [Massachusetts](#), [New Jersey](#) and [New York](#) have joined in curtailing neonics for the sake of pollinator health. [Minnesota](#), [Oregon](#), and [California](#) are also taking steps against neonics to protect their bee populations.

Beyond the state level, retailers including [Lowe's](#) and [Home Depot](#), have made steps to phase out these harmful pesticides. The [European Union and Canada](#) have also significantly restricted or banned the use of neonics to protect pollinators and other wildlife.

### **Public support for protecting bees:**

Environment Colorado has [gathered nearly 24,000 petitions](#) from residents across the state, and built a coalition of support among [more than 200 local farmers, beekeepers, business owners, and nonprofits \(and counting\)](#) to tackle bee-killing neonic pesticides. On November 30, we [delivered that support](#) to the Governor's office.

### **What alternatives exist for consumers if they cannot access neonics?**

[In a study published by Environment International](#) on alternatives to neonics, it found that "In 96% of cases, neonicotinoids can be replaced by effective and directly usable alternative pest control methods." Furthermore, in approximately 4 out of 5 instances, its use can be replaced by non-chemical alternatives. Often when the general public buys pesticides, they may not even be aware that the product they're buying contains bee-killing neonics. We can help them avoid accidentally contributing to community wide bee die-offs. Pesticides that don't contain neonics, would still be on the market.

**Tips for consumers:** *Remember* - many insects and plants are beneficial to the environment, and using a pesticide may not be the best place to start. However, there are many simple and inexpensive chemical-free alternatives:

- [Horticulture Soap](#) to deal with grubs and mites
- [10 Non Toxic Pest Control Solutions That Really Work](#), including most fly papers as they are just paper with adhesive on them and bed bug traps
- [Pesticide-Free Landscaping Methods and Alternatives](#)
- [7 Methods to Control Weeds Naturally, Without Commercial Herbicides](#)
- [4 Chemical-Free Pest Control Tricks for Your Home](#)