

October 5, 2018

Honorable Andrew Cuomo
Governor
New York State Capitol
Albany, NY 12224

Honorable John Flanagan
Majority Leader
New York State Senate
Albany, NY 12247

Honorable Carl Heastie
Speaker
New York State Assembly
Albany, NY 12247

Honorable Thomas O'Mara
Chair, NY Senate Environmental Conservation Committee
New York State Senate
Albany, NY 12247

Honorable Steven Englebright
Chair, NY Assembly Environmental Conservation Committee
New York State Assembly
Albany, NY 12247

Re: Protecting New York's Pollinators

Dear Governor Cuomo, Majority Leader Flanagan, Speaker Heastie, Chairmen O'Mara and Englebright:

On behalf of the undersigned organizations and businesses and our hundreds of thousands of New York members, we write to urge you to safeguard the state's bees, butterflies, and other critical pollinators—in particular, by taking action to reduce the use of pollinator-harming pesticides. Given the magnitude of the current crisis faced by pollinators, we believe the state must act quickly to: (1) prohibit unnecessary uses of harmful systemic insecticides, such as neonicotinoids (neonics); and (2) take comprehensive regulatory action to address other pollinator-toxic pesticide uses, including the use of neonic-treated seeds.

Recent collapses of pollinator populations, both here and around the world, have particular significance for New Yorkers and the state's environment. Pollinators are important or essential to more than \$360M of state agricultural products each year—including apples, squash, blueberries, and peaches—and provide benefits to hundreds of millions more.¹ Overall, the state estimates these pollination-dependent crops contribute \$1.2 billion annually to the local

¹ USDA, *2017 State Agriculture Overview: New York* (last visited Oct. 4, 2018), <https://bit.ly/2HpaXtE>.

agricultural economy.² Yet in the 2017-2018 season, New York beekeepers lost over 40% of their bee colonies, and the loss rate has hovered at or above that number for the past five years.³ These losses not only impose costs on farmers and beekeepers, but also suggest the potential for similar catastrophic losses for the state's 450 pollinating species, critical to the survival of native plants and wildflowers.⁴

While many factors contribute to the current pollinator crisis, the widespread and growing scientific consensus is that the overuse of neonics play a major and preventable role. The past two years alone have seen a tremendous growth in research confirming neonics' long-suspected harms to pollinators and the broader environment. This includes findings by the European Food Safety Agency (EFSA) that neonics "pose a risk to bees,"⁵ decisions by the Canadian Pest Management Regulatory Agency (PMRA) that several approved neonic uses fail to meet environmental safety standards,⁶ and assessments by the U.S. Environmental Protection Agency (EPA) identifying the direct and indirect risks that many neonic uses pose to pollinators, birds, mammals, fish, and other aquatic animals.⁷ These agency findings are supported by the most current academic literature, including comprehensive worldwide assessments of neonic impacts on pollinators⁸ and the largest pollinator field study to date—funded by the pesticide industry itself⁹—finding neonics caused measurable (and avoidable) harm to both honeybee and wild bee populations.¹⁰

² DEC & NY Dep't of Ag. and Markets (DAM), *New York State Pollinator Protection Plan Update*, 8 (Jun. 2018), <https://on.ny.gov/2nBYgPW>.

³ See Bee Informed Partnership, *2017/18 Total Annual Colony Loss Map*, (last visited Oct. 4, 2018), <https://bit.ly/2HphewW>, and select "Annual" under the "Season" tab.

⁴ Cf. DEC & DAM, *New York State Pollinator Protection Plan*, 5-6 (Jun. 24, 2016), <https://on.ny.gov/2KcTtOQ> [hereinafter "NY Pollinator Plan"].

⁵ EFSA, *Q&A: Conclusions on Neonicotinoids 2018* (Feb. 28, 2018), <https://bit.ly/2jsXsdN>.

⁶ See PMRA, *Proposed Re-evaluation Decision PRVD2018-12, Imidacloprid and Its Associated End-use Products: Pollinator Re-evaluation* (May 31, 2018), <https://bit.ly/2QILHVI>; PMRA, *Proposed Re-evaluation Decision PRVD2017-23, Clothianidin and Its Associated End-use Products: Pollinator Re-evaluation* (Dec. 19, 2017) <https://bit.ly/2LbpY0b>; PMRA, *Proposed Re-evaluation Decision PRVD2017-24, Thiamethoxam and Its Associated End-use Products: Pollinator Re-evaluation* (Dec. 19, 2018), <https://bit.ly/2wNo5DK>.

⁷ See, e.g., EPA, *Preliminary Terrestrial Risk Assessment to Support the Registration Review of Imidacloprid*, 8-9 (Nov. 28, 2017), <https://bit.ly/2s7spLK>; EPA, *Preliminary Bee Risk Assessment to Support the Registration Review of Clothianidin and Thiamethoxam*, 14-23 (Jan. 5, 2017), <https://bit.ly/2jfMFon>; EPA, *Preliminary Aquatic Risk Assessment to Support the Registration Review of Imidacloprid*, 8-9 (Dec. 22, 2016), <https://bit.ly/2r3Uuyy>.

⁸ See Chiara Giorio, *An Update of the Worldwide Integrated Assessment (WIA) on Systemic Insecticides. Part 1: New Molecules, Metabolism, Fate, and Transport*, *Envtl. Sci. Pollution Research Int'l* (Jul. 15, 2017), <https://bit.ly/2qVqciQ>; Lennard Pisa et al., *An Update of the Worldwide Integrated Assessment (WIA) on Systemic Insecticides. Part 2: Impacts on Organisms and Ecosystems*, *Envtl. Sci. Pollution Research Int'l* (Nov. 9, 2017), <https://bit.ly/2HqqHwB>; Thomas Wood & Dave Goulson, *The Environmental Risks of Neonicotinoid Pesticides: A Review of the Evidence Post 2013*, *Envtl. Sci. Pollution Research Int'l*, 24(21): 17285–17325 (Jun. 7, 2017), <https://bit.ly/2Hpn8T5>.

⁹ Daniel Cressey, *Largest-ever Study of Controversial Pesticides Finds Harm to Bees*, *Nature* (Jun. 29, 2017), <https://go.nature.com/2sgJjDk>.

¹⁰ B.A. Woodcock et al., *Country-specific Effects of Neonicotinoid Pesticides on Honeybees and Wild Bees*, *Science*, 356(6345): 1393-1395 (Jun. 30, 2017), <https://politi.co/2HrEnDI>.

This new evidence has prompted considerable action. Last April, the European Commission voted to ban all outdoor use of three major neonics,¹¹ and Canada’s PMRA recently recommended similar action given the widespread threat neonics pose to aquatic ecosystems.¹² In the U.S., states have led the charge, given EPA’s repeated and ongoing delays in its own scientific review of neonics¹³ and the Trump Administration’s unwillingness to prevent unsafe pesticide use.¹⁴ Connecticut and Maryland have passed laws that prohibit over-the-counter sales of neonic products, limiting their use to certified professionals,¹⁵ and earlier this year in California, the state Department of Pesticide Regulation put a freeze on any new pesticide approvals that would expand neonic use.¹⁶

New York—while an early leader in protections against harms from neonics¹⁷—has yet to respond to the new science. At the New York Department of Environmental Conservation (DEC), any major efforts to protect pollinators from neonics have stalled since publication of the 2016 New York State Pollinator Protection Plan, which found that scientific research at the time had produced “conflicting conclusions” regarding neonics’ environmental harms.¹⁸ This finding is now well out-of-date and at odds with subsequent research from the Cornell Department of Entomology, showing that the neonic thiamethoxam poses the “greatest total oral exposure risk” to bees in a study of New York apple orchards.¹⁹ The current scientific literature on the ecological dangers of neonic use is unequivocal and demands both immediate protections and longer-term comprehensive solutions.

In the short term, New York should act by prohibiting unnecessary uses of neonics and similar harmful systemic insecticides that threaten pollinators. These include certain treated crop seed, as described below, as well as neonic use on state public lands and in residential and commercial settings—except in rare circumstances (for example, where it is shown to be necessary to combat invasive species). Home and garden products pose particular dangers for pollinators because of their permissive labeling, with some approved for use at rates up to 120-

¹¹ European Commission, *Protecting Bees: EU Set to Completely Ban Outdoor Use of Pesticides Harmful to Bees* (Apr. 27, 2018), <https://bit.ly/2HwtNee>.

¹² See PMRA, *Proposed Special Review Decision PSRD2018-01, Special Review of Clothianidin Risk to Aquatic Invertebrates* (Aug. 15, 2018), <https://bit.ly/2x2MHGk>; PMRA, *Proposed Special Review Decision PSRD2018-02, Special Review of Thiamethoxam Risk to Aquatic Invertebrates* (Aug. 15, 2018), <https://bit.ly/2wZbYQZ>; PMRA, *Proposed Re-evaluation Decision PRVD2016-20, Imidacloprid* (Nov. 23, 2016), <https://bit.ly/2Ky4iu4>.

¹³ Friends of the Earth, *On Heels of Canada and EU bans, EPA Stalls Review of Bee-Killing Pesticides* (Aug. 21, 2018), <https://bit.ly/2x0qiJX>.

¹⁴ See, e.g., *Appeals Court Orders EPA to Ban a Pesticide Known to Harm Children*, Time (Aug 10, 2018), <https://ti.me/2N2V2UI>.

¹⁵ See C.G.S. § 22a-50; MD Code, Agriculture, § 5-2A-02.

¹⁶ California Dep’t of Pesticide Regulation, *Expanding Use of Pesticide Products under Reevaluation* (Jan. 3, 2018), <https://bit.ly/2GsOhvn>.

¹⁷ More than a decade ago, New York refused to register outdoor uses of two major neonic chemicals—clothianidin and dinotefuran—citing concerns over water pollution and harms to pollinator health. NY Pollinator Plan at 18; DEC, *Denial of Applications to Register the New Active Ingredient Dinotefuran Contained in the Pesticide Products Safari 20 SG Insecticide (EPA Reg. No. 33657-16-59639), Venom 20 SG Insecticide (EPA Reg. No. 33657-17-59639) and Venom Insecticide (EPA Reg. No. 59639-135)* (Jan. 7, 2008), <https://bit.ly/2qWrYAk>.

¹⁸ NY Pollinator Plan at 9.

¹⁹ McArt et al. 2017, *High Pesticide Risk to Honey Bees Despite Low Focal Crop Pollen Collection During Pollination of a Mass Blooming Crop*, Scientific Reports, 7:46554. doi:10.1038/srep46554 (Apr. 19, 2017), <https://go.nature.com/2Ir0o9Y>.

times higher than levels used on farm fields.²⁰ Prohibiting use of these products will protect New Yorkers, too, as new research raises concerns about neonics' adverse impacts on human health.²¹

DEC should also take comprehensive regulatory action to restrict pesticide uses where the risks to pollinators exceed perceived benefits, including neonic coatings on crop seeds, also known as “seed treatments.” Although seed treatments account for the bulk of neonics entering the environment,²² they often provide little to no crop protection value. For example, roughly half of soybean seeds are treated with neonics, despite EPA findings that those treatments likely “provide \$0 in benefits to growers.”²³ While existing research supports immediate legislative action to prohibit the use of certain neonic-treated seed, such as treated soybean and corn seed,²⁴ in general, DEC does not track or regulate treated seeds. This represents a major regulatory loophole that must be closed. DEC’s authority over treated seed should be clarified,²⁵ and DEC should be directed to create a comprehensive regulatory plan addressing all pollinator-harming pesticide uses—including treated seed—restricting or prohibiting those uses where appropriate.²⁶

Lastly, while meaningful reductions in the use of pollinator-killing pesticides are essential to reversing population losses, New York should also actively promote the planting of new pollinator habitat. To this end, the state should create a dedicated fund with incentives for private or utility landowners to convert turf or barren land into high-quality habitat. The New York Department of Transportation should also expand its program to create pollinator habitat across its 15,000 miles of highways, and similar programs should be adopted by the state Thruway Authority and Canal Corporation.

While we now better understand the severity of the current pollinator crisis and its causes, pollinator populations continue to crash statewide. The time for a comprehensive program to save these species—crucial to the state’s environment and agricultural economy—is well past due. Although, ultimately, additional protections may be necessary, we believe these actions mark a significant and necessary first step.

²⁰ Jennifer Hopwood et al., *How Neonicotinoids Can Kill Bees* (2nd Ed.), Xerces Society (2016), <https://bit.ly/2IqfO6h>.

²¹ See Elyse Caron-Beudoin et al., *Effects of Neonicotinoid Pesticides on Promoter-Specific Aromatase (CYP19) Expression in Hs578t Breast Cancer Cells and the Role of the VEGF Pathway*, *Envtl. Health Perspectives* (Apr. 2018), <https://bit.ly/2Bafc9B>.

²² See Sara LaJeunesse, *Rapid Increase in Neonicotinoid Insecticides Driven by Seed Treatments*, *Penn State* (Apr. 2, 2015), <https://bit.ly/2nB1cOZ>.

²³ EPA, *Memorandum: Benefits of Neonicotinoid Seed Treatments to Soybean Production*, 2 (Oct. 15, 2014), <https://bit.ly/2OKvnx1>.

²⁴ See *id.*; Adam Alford & Christian Krupke, *Translocation of the Neonicotinoid Seed Treatment Clothianidin in Maize*, *PLOS ONE* 12(10): e0186527 (Mar. 10, 2017), <https://bit.ly/2xZtEgS>.

²⁵ DAM exercises limited regulatory authority over seed inspection and sales, mainly related to quality assurance (e.g., to ensure seeds meet germination standards, do not contain excess impurities, and are labeled appropriately). See N.Y. Agric. & Mkts. Law §§ 136-142. It does not regulate the use of pesticidal seed treatments or control the planting of pesticide treated seeds. For all practical purposes, seed treatments are pesticides, and planting treated seeds constitutes a pesticide use, over which DEC has exclusive jurisdiction. See ECL § 33-0303 (DEC has jurisdiction over all matters pertaining to the distribution, sale, and use of pesticides, and responsibility to regulate to ensure pesticide use does not injure health, property, or wildlife, such as pollinators).

²⁶ DEC may regulate, restrict, or prohibit pesticides or particular pesticide uses in order to prevent damage to wildlife. ECL § 33-0303(3)(e). DEC should be directed to do so to protect pollinators from pesticide uses which continue to decimate their populations.

Thank you for your time and attention to this matter.

Respectfully,

Ana Paula Tavares
Executive Director
Audubon New York

Katherine Nadeau
Deputy Director
Catskill Mountainkeeper

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