

April 27, 2023

Honorable Kathy Hochul
Governor
New York State Capitol
Albany, NY 12224

Honorable Deborah J Glick
Chair, Assembly Envtl. Conservation Committee
New York State Assembly
Albany, NY 12248

Honorable Andrea Stewart-Cousins
President Pro Tempore and Majority Leader
New York State Senate
Albany, NY 12247

Honorable Peter Harckham
Chair, Senate Envtl. Conservation Committee
New York State Senate
Albany, NY 12247

Honorable Carl Heastie
Speaker
New York State Assembly
Albany, NY 12248

Honorable Brad Hoylman-Sigal
Chair, Senate Judiciary Committee
New York State Senate
Albany, NY 12247

Re: Protect New York’s Birds, Bees, Water, and People from Toxic “Neonic” Pesticides with the Birds and Bees Protection Act (A3226 Glick/S1856 Hoylman-Sigal)

Dear Governor Hochul, President Pro Tempore and Majority Leader Stewart-Cousins, Speaker Heastie, and Chairs Glick, Harckham, and Hoylman-Sigal:

On behalf of the 260+ undersigned health, farming, and environmental organizations, businesses, municipalities, and their hundreds of thousands of New York members, **we urge you to pass the Birds and Bees Protection Act (A3226 Glick/S1856 Hoylman-Sigal), a bill to eliminate unnecessary and harmful uses of neurotoxic neonicotinoid pesticides (“neonics”)**. As neonic pollution continues to worsen in New York, the state must act against the considerable threat that it poses to New York’s pollinators, ecosystems, and people—especially children.

Neonics devastate the bees, birds, and other pollinators critical to New York’s food security, agricultural economy, and environment. Pollinators provide an estimated \$1.2 billion worth of New York pollinator-dependent crops, including apples, squash, tomatoes, blueberries, and cherries, among others.¹ But just last year, the average New York beekeeper lost over 45% of their honey bee colonies—one of the worst years on record.² These unsustainable colony losses accompany findings by the Department of Environmental Conservation (DEC) and College of Environmental Science and Forestry that 40-60% of the state’s wild bees—which undergird New York’s ecosystems and contribute as much as half of state crop pollination—are at risk of local extinction.³ With apples, blueberries, and cherries commonly “pollinator-limited” nationwide,⁴ state farmers are already seeing lower yields due to fewer pollinators.

Overwhelming scientific evidence confirms that neonics drive these pollinator declines,⁵ including a state-commissioned Cornell University analysis of over 1,100 peer-reviewed studies (“Cornell Report”).⁶ **As potent neurotoxic insecticides, neonics have made U.S. agriculture 48-times more harmful to insect life since their introduction** in the mid-1990s.⁷ Designed to permeate plants—making their fruit, nectar, pollen, leaves, and other tissues poisonous to insects—neonics persist in soils for years, move easily in rain and irrigation water, and are widely used. As such, neonics now contaminate soil, water, and plant life across New York on a nearly unprecedented scale.⁸

New York water showcases this widespread contamination. **Neonics appear in roughly 30% of Long Island groundwater samples and frequently in state surface waters at levels expected to cause “ecosystem-wide damage”**⁹—ravaging aquatic insect populations that birds, fish, amphibians, and other wildlife depend upon for food. Research from the U.S. and abroad connects neonic levels commonly found in New York—harmful even in the low *parts-per-trillion*—to the collapse of fisheries,¹⁰ mass losses of birds,¹¹ and birth defects in white-tailed deer.¹² Extensive source water contamination threatens clean drinking water too, as conventional water treatment typically fails to remove neonics.¹³

Neonics also pose hazards to New Yorkers’ health, especially that of children. Neonics are neurotoxic, targeting nerve receptors prevalent in sensitive areas of our brain and central nervous system that play a critical role in early growth and development.¹⁴ Perhaps unsurprisingly, research links neonic exposures during pregnancy to developmental harms, including birth defects of the heart¹⁵ and brain,¹⁶ autism-like symptoms,¹⁷ and other neurological conditions.¹⁸ Adult exposures are also associated with decreased testosterone and sperm count,¹⁹ and animal studies link neonics to thinning of key brain areas, birth defects, and abnormal sperm and other reproductive abnormalities.²⁰

Alarming, New Yorkers’ exposure to neonics appears to be increasing. While CDC monitoring data from 2015-2016 found neonics in the bodies of about half the U.S. population,²¹ **a more recent study of 171 pregnant women from New York and several other states during 2017-2020, found the pesticides in over 95% of participants**, with the highest rates in Hispanic women. Researchers generally found neonic levels above those observed by CDC. Concerningly, both frequency and the level of neonic detections *steadily increased over the four-year study*,²² echoing other research showing a significant spike of neonics in the bodies of wild deer in just the last two years.²³

With neonic pollution and its impacts in New York only getting worse, every year of inaction leading to more bee and bird losses, more water contamination, and ever greater threats to New Yorker’s health and food security. Further, neonic-related health burdens and food security losses will be especially felt by communities already confronting disproportionate exposure other environmental hazards and unequal access to fresh, healthy, and affordable produce.

The Birds and Bees Protection Act—which has now passed the Assembly with bipartisan support—would address worsening neonic contamination by banning the harmful and unnecessary uses accounting for 80-90% of the neonics entering the states’ environment every year. Specifically, it targets neonic coatings on corn and soybean seeds—which the Cornell Report found provide “no overall net income benefit” to farmers²⁴—as well as unneeded non-agricultural lawn and garden uses that pose significant risks to pollinators and drinking water sources.²⁵ While stopping short of the European Union’s complete outdoor neonic ban,²⁶ the bill represents well-tailored and much-needed action on neonics in New York, especially in light of decades-long federal inaction.²⁷ It also represents needed *legislative* action: closing a loophole in the state’s regulation of neonic-treated corn, soybean, and wheat seeds—the largest and most wasteful neonic use in the state.

Action to rein in hazardous neonic pollution must not wait another year. **We strongly support the Birds and Bees Protection Act (A3226/S1856)** and urge its immediate passage. Thank you for your time and attention to this important issue.

Respectfully,

2 Queens Coffee
Adirondack Council

Adirondack Garden Club
Alley Pond Environmental Center
Alliance for a Green Economy
Allyn's Creek Garden Club
American Academy of Pediatrics, New York State Chapter
American Bird Conservancy
American Littoral Society
Amy's Acres
Animal Defenders of Westchester
Ardsley Pollinator Pathway
Astor Apiaries
AU Environmental Action Coalition
Audubon New York
Audubon Society of the Capital Region
Avian Welfare Coalition
Baildon Farm
Bedford 2030
Bedford Garden Club
Berry Brook Farm, LLC
Beyond Pesticides
Binghamton University Bees
Biophilia Organic Farm
Birth Defects Research for Children
Blue Mountain Growers, LLC
Burroughs Audubon Nature Club
Brooklyn Bird Club
Bronx River Alliance
Bronx River – Sound Shore Audubon Society
Catskills Agrarian Alliance
Catskill Mountainkeeper
Cayuga Bird Club
CCoHOPE Indivisible
Chestnut Creek Farm
Child Care Council of Orange County, Inc., Resource and Referral Services
Citizens Campaign for the Environment
Clean Air Action Network of Glens Falls
Clean and Healthy New York
Clearview Farm
Climate Reality Finger Lakes Greater Region NY Chapter
Climate Reality Project Capital Region Chapter
Climate Reality Project - Long Island Chapter
Climate Reality Project NYC Chapter
Climate Reality Project NYS Coalition
Climate Reality Project Western NY Region Chapter
Clover Bliss Farm
Coastal Research and Education Society of Long Island(CRESLI)
Cole Road Farms LLC
Comeback Farm
Common Roots Urban Farm
Common Thread CSA, LLC

Community Greenways Collaborative
Concerned Citizens of Wyandanch Civic Association
Cook Family Enterprises, LLC
Cottage Creek Gardens
Cross Island Farms
DADA Daily
Damascus Citizens for Sustainability
Delaware-Otsego Audubon Society
Dobbs Ferry Sustainability Task Force
D.I.G. Farm
Dropseed Native Landscapes
Drumlins End Farms
Earthjustice
Eastchester Environmental Committee
Eastern Long Island Audubon Society
Eastern Monarch Butterfly Farm
Edgar A. Mearns Bird Club
Edible Schoolyard NYC
Elderberry Pond Farm
Environmental Advocates New York
Environmental CHANGE
Et Cetera Farm
Farmer Pirates Compost, LLC
Federated Conservationists of Westchester County
Films on Purpose
Flower Scout
Food and Water Watch
For the Many
Four Harbors Audubon Society
Four Paws USA
Frank Melville Memorial Foundation
Friends of the Earth
Friends of the Georgica Pond Foundation
Friends of the Riverwalk Tarrytown
Frosty Morning Farm
Garden Club of Irvington
Gas Free Seneca
Genesee Valley Audubon Society
Glen Copack
Grace Fuller Design, LLC
Grassroots Environmental Education
Grassroots Gardens WNY
Great Neck Breast Cancer Coalition
Great Swamp Conservancy
Green Bites
Green Education and Legal Fund
Green Glen Cove
Green Guerillas
Green Ossining
Greenburgh Nature Center

Greenwich Audubon Center
Groundwork Hudson Valley
Group for the East End
Hastings Pollinator Pathway
Hawthorne Valley Association
Healthy Yards
Healthy Yards Rochelle
Herbicide Free Campus at Sarah Lawrence College
Hickory Hurst Farm, LLC
Horsetail Herb Farm
Horticultural Alliance of the Hamptons
Hudson Highlands Land Trust
Hudson River Audubon Society
Hudson River Sloop Clearwater
Hunt Country Vineyards
Huntington Breast Cancer Action Coalition
Huntington-Oyster Bay Audubon Society
Indivisible Mohawk Valley Climate Crisis Working
Group Irvington Pollinator Pathway
Justice and Peace Ministry of Catholic Charities
Tompkins/Tioga JSA Sustainable Properties
Lake and Valley Garden Club
Lazy Dirt Flower Farm
LC Environmental Club at Fordham University
League of Humane Voters of NY
League of Women Voters of New York State
Leave Leaves Alone
Lights Out Coalition
Linnaean Society of NY
Lloyd Harbor Conservation Board
Long Island Botanical Society
Long Island Conservancy
Long Island Progressive Coalition
Lovin' Mama Farm
Lower East Side Ecology Center
Lucky Dog Organic
Maitri Farm LLC
Massachusetts Avenue Project
Mayor's Alliance for NYC's Animals
Millbrook Garden Club
Moms for a Non-Toxic New York
Mothers Out Front New York
Mothers Out Front Westchester Rivertowns
MX Morningstar Farm
Nassau Hiking and Outdoor Club
Natural Areas Conservancy
Natural Resources Defense Council
New Castle Pollinator Pathways (Steering Committee)
New Paltz Climate Smart
New York Climate Advocacy Project

New York City Audubon
New York City Community Garden Coalition
New York League of Conservation Voters
New York Progressive Action Network
New York Public Interest Research Group
(NYPIRG) New Yorkers for Clean Power
New York Textile Lab
Non-Toxic Neighborhoods
North American Climate, Conservation and Environment(NACCE)
North Country Earth Action
North Country Garden Club
North Fork Audubon Society
North Fork Environmental Council
North Salem Conservation Advisory Council
North Shore Audubon Society
North Suffolk Garden Club
Northeast Organic Farming Association - New York (NOFA-NY)
Northern Catskills Audubon Society
Norwalk River Watershed Association
Norwich Meadows Farm LLC
NYCD16 Indivisible
NY4Whales
NYPAN Enviro Committee
NYPAN Greene
Obercreek Farm, LLC
Operation SPLASH
Orange County Audubon Society
Panther Rock Farm
Peacework CSA
Peconic Baykeeper
Perfect Earth Project
Philipstown Garden Club
Phoenicia Farm
Physicians for Social Responsibility – New York
Piermont Marsh Alliance
Piermont Pier Alliance
Plan It Wild
Pleasantville Garden Club
Pollinator Conservation Association
Pollinator Pathway Northeast
Pound Ridge Conservation Board
Pure Grown LLC
Quogue Wildlife Refuge
Ralph T. Waterman Bird Club
Residents Forward
Restoration Farm
ReWild Long Island
Richard A. McCoy Horticultural Services, Inc.
Rivers & Mountains GreenFaith
Riverkeeper

Rivertowns Pollinator Pathway
Rochester Birding Association
Rochester Garden Club
Rosewalk Farms LLC
RPI Sunrise Movement
Rusticus Garden Club
Rye Garden Club
Sane Energy Project
Save The Great South Bay
Save The Sound
Saw Mill River Audubon
Scenic Hudson
Seatuck Environmental Association
Seneca Lake Guardian
Shawangunk Hikers Club
Sierra Club, Atlantic Chapter
Sisters Hill Farm
Sisters of Charity New York
Sisters of St. Joseph
Skoog Farm
Soul Fire Farm Institute
South Bronx Unite
South Shore Audubon Society
Spadefoot Design and Construction
Stony Brook Environmental Club
Stony Brook University Cancer Center
Stony Brook Whole Hearted Foods
Stop the Algonquin Pipeline Expansion
Summit Farm
Surfrider Foundation
Sustainable Business
Sustainable Westchester
Sweetbriar Nature Center
Sweet Earth Co.
Teatown Lake Reservation
The Bee Conservancy
The Garden Club of Orange and Dutchess Counties
The Good of the Hive
The Good Home Company, Inc.
The Hiking Group - NY & CT
The Little Garden Club of Rye
The Native Plant Center
The North Shore Land Alliance
Three Harbors Garden Club
TIMBER
Tompkins County Coalition for Outreach, Policy, and
Education Town of North Salem
Transition Town Port Washington
Trout Unlimited
True North

Turtle Rescue of the Hamptons, Inc
Twin Lakes Civic Association
Two Thirds for The Birds
Untermeyer Gardens Conservancy
Upper Nyack Green Committee
Uproot Design Studio
Van Cortlandt Park Alliance
Village of Hastings-on-Hudson (Mayor and Board of Trustees)
Village of Irvington Board of Trustees
Village of Mamaroneck Committee for the Environment
Wallkill Valley Land Trust
Wallkill Valley Pollinator Pathway
WE ACT for Environmental Justice
Wellspring Farm
WESPAC Foundation, Inc.
Westchester for Change
Western New York Environmental Alliance
Westhampton Garden Club
White Feather Farm
Wild Ones Mohawk Valley
Wolf Conservation Center
Woodstock Environmental Commission
Woodstock Land Conservancy

¹ NYS Department of Agriculture and Markets (DAM) & NYS Department of Environmental Conservation (DEC), *New York State Pollinator Protection Plan Update* (Jun. 2018), <https://on.ny.gov/3NnZZp7>.

² See Bee Informed Partnership, Colony Loss Map, <https://bit.ly/2HpheoW>, and select “Annual” under the “Season” menu.

³ DEC & State University of New York College of Environmental Science and Forestry, *The Empire State Native Pollinator Survey 2017-2021* (June 2022), <https://bit.ly/3YHOBr1>; see also DEC & DAM, *New York State Pollinator Protection Plan Update*, 8 (Jun. 2018), <https://on.ny.gov/3ePM61F>; DEC & DAM, *New York State Pollinator Protection Plan*, 5-6 (Jun. 24, 2016), <https://on.ny.gov/2KcTtOQ> [hereinafter “NY Pollinator Plan”].

⁴ J.R. Reilly et al., *Crop Production in the USA Is Frequently Limited by a Lack of Pollinators*, Proceedings of the Royal Society B (July 29, 2020), <https://bit.ly/3CsPx7n>.

⁵ See also Lennard Pisa et al., *An Update of the Worldwide Integrated Assessment (WIA) on Systemic Insecticides*, *Envtl. Sci. Pollution Research Int'l* (Nov. 9, 2017), <https://bit.ly/2HqqHwB>; Thomas Wood & Dave Goulson, *The Environmental Risks of Neonicotinoid Pesticides*, *Envtl. Sci. Pollution Research Int'l* (Jun. 7, 2017), <https://bit.ly/2Hpn8T5>; 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* (Apr. 19, 2017), <https://go.nature.com/2Ir0o9Y>; Daniel Cressey, *Largest-ever Study of Controversial Pesticides Finds Harm to Bees*, *Nature* (Jun. 29, 2017), <https://go.nature.com/2sgJjDk>.

⁶ Travis A. Grout et al., *Neonicotinoid Insecticides in New York State*, Cornell University (June 23, 2020), <https://bit.ly/2XIB2cA> [hereinafter “Cornell Neonic Report”].

⁷ Michael DiBartolomeis et al., *An Assessment of Acute Insecticide Toxicity Loading (AITL) of Chemical Pesticides Used on Agricultural Land in the United States*, *PLoS One* (Aug. 6, 2019), <https://bit.ly/2Yr4Xc7>; Margaret Douglas et al., *County-level Analysis Reveals a Rapidly Shifting Landscape of Insecticide Hazard to Honey Bees (*Apis Mellifera*) on US Farmland*, *Scientific Reports* (Jan. 21, 2020), <https://go.nature.com/2SKhjHP>.

⁸ See, e.g., Minnesota Department of Natural Resources, *Preliminary Results from Pesticide Study Show Widespread Neonicotinoid Exposure in Minnesota White-Tailed Deer* (Mar. 1, 2021), <https://bit.ly/3cKxj5G>; Michelle Hladik & Dana Kolpin, *First National-Scale Reconnaissance of Neonicotinoid Insecticides in Streams Across the USA*, *Environmental Chemistry* (Aug. 2015), <https://bit.ly/3eR0bvU> (at least one neonic detected in 53% of streams tested across the U.S.).

⁹ Pierre Mineau, *Impacts of Neonics in New York Water* (2019), <https://on.nrdc.org/2lXsO0O> [hereinafter “Mineau 2019”].

¹⁰ Masumi Yamamuro et al., *Neonicotinoids Disrupt Aquatic Food Webs and Decrease Fishery Yields*, *Science* (Nov. 1, 2019), <https://bit.ly/34rKCSG>.

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¹³ Kathryn L. Klarich et al., *Occurrence of Neonicotinoid Insecticides in Finished Drinking Water and Fate During Drinking Water Treatment*, *Envtl. Sci. and Tech. Letters* (Apr. 2017), <https://bit.ly/2PMRunk>; Suffolk County Water Authority, 2022 Drinking Water Quality Report,

http://s1091480.instanturl.net/dwqr2022/AWQR_2022_FINAL.pdf (showing the neonics imidacloprid appears in tap water in some of Suffolk County's largest water distribution areas).

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¹⁵ Carmichael SL, Yang W, Roberts E, Kegley SE, Padula AM, English PB, Lammer EJ, Shaw GM. Residential agricultural pesticide exposures and risk of selected congenital heart defects among offspring in the San Joaquin Valley of California. *Environ Res*. 2014 Nov; 135:133-8. <https://doi.org/10.1016/j.envres.2014.08.030>.

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¹⁹ Hafez EM, Issa SY, Al-Mazroua MK, Ibrahim KT, Rahman SMA (2016) The Neonicotinoid Insecticide Imidacloprid: A Male Reproductive System Toxicity Inducer-Human and Experimental Study. *Toxicol open access* 1:109. doi:10.4172/2476-2067.1000109

²⁰ See Elise Berheim et al., *Effects of Neonicotinoid Insecticides on Physiology and Reproductive Characteristics of Captive Female and Fawn White-tailed Deer*, Scientific Reports (Mar. 14, 2019), <https://go.nature.com/3bEghEG>; Jennifer Sass, *Neonic Pesticides: Potential Risks to Brain and Sperm*, NRDC (Jan. 6, 2021), <https://on.nrdc.org/30V4Lku>.

²¹ Maria Ospina et al., *Exposure to Neonicotinoid Insecticides in the U.S. General Population*, *Envtl. Res.* (Jun. 24, 2019) <https://bit.ly/2q11yRf>.

²² Buckley JP, Kuiper JR, Bennett DH, et al. Exposure to Contemporary and Emerging Chemicals in Commerce among Pregnant Women in the United States: The Environmental influences on Child Health Outcome (ECHO) Program. *Environ Sci Technol*. 2022;56(10):6560-6573. <https://doi.org/10.1021/acs.est.1c08942>.

²³ Dan Gunderson, Data Show Increasing Insecticide Levels in Minnesota Deer, MPR News (Aug. 23, 2022), <https://bit.ly/3RYEcCR>.

²⁴ Cornell Neonic Report at 236-37; Pierre Mineau, *An Assessment of Neonicotinoid Insecticides with Emphasis on New York: Use, Contamination, Impacts on Aquatic Systems, and Agronomic Aspects*, 49 (2019), <https://on.nrdc.org/35GRiPY>.

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²⁶ European Commission, *Protecting Bees: EU Set to Completely Ban Outdoor Use of Pesticides Harmful to Bees* (Apr. 27, 2018), <https://bit.ly/2HwtNee>.

²⁷ For example, on January 22, 2020, EPA issued proposed regulatory decisions for all five major neonic chemicals that would allow continued widespread and wasteful use, despite numerous unaddressed ecological and human health risks. See Lucas Rhoads et al., *Comments on the Proposed Interim Registration Review Decisions for the Neonicotinoid Insecticide Class* (May 4, 2021), <https://on.nrdc.org/3cH2M8F>.