

September 12, 2023

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

Re: Protect New York's Birds, Bees, Water, and People from Toxic "Neonic" Pesticides with the Birds and Bees Protection Act (A7640/S1856A)

Dear Governor Hochul:

On behalf of the more than 350 undersigned health, farming, and environmental organizations, farms, businesses, municipalities, and their hundreds of thousands of New York members, **we urge you to sign the Birds and Bees Protection Act (A7640/S1856A) into law by the end of this year's Climate Week (Sept. 17-24).**

The bill eliminates unnecessary and harmful sources of neurotoxic neonicotinoid pesticide ("neonic") pollution, which continues to worsen in New York, threatening the state's pollinators, ecosystems, and people—especially children.

Neonics devastate the bees, birds, and other pollinators critical to New York's food security, economy, and environment. New York pollinator-dependent crops—such as apples, squash, and cherries—provide an estimated \$1.2 billion annually to the state's agricultural economy.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 "pollinator-limited" nationwide,⁴ and global production of fruit and vegetables down 3-5% for the same reason,⁵ state farmers are already seeing lower yields due to fewer pollinators.

Overwhelming scientific evidence confirms that neonics drive these pollinator declines,⁶ including a state-commissioned Cornell University analysis of over 1,100 peer-reviewed studies ("Cornell Report").⁷ **As potent neurotoxic insecticides, neonics have made U.S. agriculture 48-times more harmful to insect life since their introduction,**⁸ injuring species critical to soil health and carbon storage, such as earthworms, beneficial nematodes, soil decomposers, and beneficial bacteria.⁹ 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.¹⁰

New York water showcases this widespread contamination. **Neonics are the most commonly detected insecticides in Long Island groundwater and frequently appear in state surface waters at levels expected to cause "ecosystem-wide damage"**¹¹—ravaging aquatic insect populations that birds, fish, amphibians, and other wildlife depend upon for food. Extensive source water contamination threatens clean drinking water too, as conventional water treatment typically fails to remove neonics.¹²

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,¹³ mass losses of birds,¹⁴ and birth defects in white-tailed deer.¹⁵ And the U.S. Environmental Protection Agency recently predicted that continued neonic use is likely to push over 200 threatened and endangered species toward extinction¹⁶—including

the once-common New York species like the rusty patched bumble bee, which hasn't been seen in the state since the early 2000s.¹⁷

Neonics also threaten New Yorkers' health, especially that of children. As neurotoxic chemicals, neonics target nerve receptors prevalent in sensitive areas of our brain and central nervous system that play a critical role in early growth and development.¹⁸ Perhaps unsurprisingly, research links neonic exposures during pregnancy to developmental harms, including birth defects of the heart¹⁹ and brain,²⁰ autism-like symptoms,²¹ and other neurological conditions.²² Adult exposures are also associated with decreased testosterone and sperm count,²³ and animal studies link neonics to thinning of key brain areas, birth defects, and abnormal sperm and other reproductive abnormalities.²⁴

Alarmingly, 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,²⁵ **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*,²⁶ echoing other research showing a significant spike of neonics in the bodies of wild deer in just the last two years.²⁷

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 and Senate 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 farmers²⁸ and which have been successfully phased out just over the border in Ontario and Québec²⁹—as well as unneeded non-agricultural lawn and garden uses that pose significant risks to pollinators and drinking water sources.³⁰ While stopping short of the European Union’s complete outdoor neonic ban,³¹ the bill represents well-tailored and much-needed action on neonics in New York, especially in light of decades-long federal inaction.³² 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 (A7640/S1856A) in its current form and urge you to sign this bill into law by the end of Climate Week (Sept. 17-24)**. 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
A Stone's Throw Bed and Breakfast
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
Big Rock Farm
Binghamton University Bees
Biophilia Organic Farm
Birdsfoot Farm
Birth Defects Research for Children
Black Farmers United – NYS
Blue Mountain Growers, LLC
Brooklyn Bird Club
Brookside Farm
Bronx River Alliance
Bronx River – Sound Shore Audubon Society
Buffalo Niagara Waterkeeper
Burnett Farms
Burroughs Audubon Nature Club
Capital District Pollinator Allies
Capital Native Plants
Catskills Agrarian Alliance
Catskill Mountainkeeper
Cayuga Bird Club
CCoHOPE Indivisible
Center for Agricultural Development and Entrepreneurship (CADE)
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 Crisis Working Group of IMV (Indivisible Mohawk Valley)
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
Devine Gardens LLC
Dobbs Ferry Sustainability Task Force
Doce Lume Farm
D.I.G. Farm
Dirt Rich Farm
Dropseed Native Landscapes
Drumlins End Farms
Earthjustice
East Brook Community Farm
Eastchester Environmental Committee
Eastchester Pollinator Pathway
Eastern Long Island Audubon Society
Eastern Monarch Butterfly Farm
Edgar A. Mearns Bird Club
Edible Schoolyard NYC
Elderberry Pond Farm
Energy21 LTD
Environmental Advocates New York
Environmental CHANGE
Essex Farm
Et Cetera Farm
Evans and Evans Farm
Farmer Pirates Compost, LLC
Farview Farm
Federated Conservationists of Westchester County
Fern Valley Forest School
Films on Purpose
Flower Scout
Food and Water Watch
Food Systems Consulting
For the Many
Four Harbors Audubon Society
Four Paws USA
Frank Melville Memorial Foundation
Friends of Buttonhook Forest Inc.

Friends of the Bay
Friends of the Earth
Friends of the Georgica Pond Foundation
Friends of the Riverwalk Tarrytown
Frosty Morning Farm
Fruition Seeds
Full Circus Farms
Garden Club of Irvington
Garden of Eve Farm
Gas Free Seneca
Genesee Valley Audubon Society
Glen Copack
Glynwood Center for Regional Food and Farming
Good Farmers Guild of Western New York
Go Native! Perennials
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 Heron Growers
Green Ossining
Greenburgh Nature Center
Greenwich Audubon Center
Groundwork Hudson Valley
Group for the East End
Hastings Pollinator Pathway
Hawkeye Farm
Hawthorne Valley Association
Healthy Yards
Healthy Yards Rochelle
Hemlock Grove Farm
Hepatica Farm LLC
Herbicide Free Campus at Sarah Lawrence College
Here We Are Farm
Heritage Herd Farm
Hickory Hurst Farm, LLC
Horsetail Herb Farm
Horticultural Alliance of the Hamptons
Hoyer Capital, LLC
Hudson Highlands Land Trust
Hudson River Audubon Society
Hudson River Sloop Clearwater
Hudson Valley Young Farmers Coalition
Hunt Country Vineyards
Huntington Breast Cancer Action Coalition

Huntington-Oyster Bay Audubon Society
iEat Green, LLC
Indian Creek Farm
Indivisible Mohawk Valley, Climate Crisis Working Group
Irvington Pollinator Pathway
Jamesport Farmstead
Jim Owles Liberal Democratic Club
Juniper Hill Farm
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
Liberation Farm, LLC
Lights Out Coalition
Linnaean Society of NY
littleGrasse Foodworks
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
Lucky Moon Farm
Maitri Farm LLC
Marion Gardens, Organic Herbs
Marlow and Daughters
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
Muddy Fingers Farm
MX Morningstar Farm
NAACP New York State Conference
Nassau Hiking and Outdoor Club
Natural Areas Conservancy
Natural Borders Farm
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
News from the Neighborhood
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
Oatka Creek Farm
Obercreek Farm, LLC
One of a Kind Orchard
Operation SPLASH
Orange County Audubon Society
Organic Insights, Inc.
Orkestai Farm
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
Possible Rochester | Possible Planet
Pound Ridge Conservation Board
Progressive East End Reformers
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
Road's End Farm
Rochester Birding Association
Rochester Garden Club
Rockland Coalition to End the New Jim Crow, Environmental Committee
Rocky Top Acres LLC
ROCSPOT
Rosewalk Farms LLC
RPI Sunrise Movement
Rusticus Garden Club
Rye Garden Club
Saratoga Apple, Inc.
Sane Energy Project
Save The Great South Bay
Save The Sound
Saw Mill River Audubon
Scenic Hudson
Schul Farmstead
Seatuck Environmental Association
Seneca Lake Guardian
Serenity Silos
Shawangunk Hikers Club
Sierra Club, Atlantic Chapter
Sisters Hill Farm
Sisters of Charity New York
Sisters of St. Dominic of Blauvelt, NY
Sisters of St. Joseph
Skoog Farm
Slow Food North Shore
Soil & Souls Native and Medicinal Plant Nursery
Soul Fire Farm Institute
South Bronx Unite
South Shore Audubon Society
Spadefoot Design and Construction
Sprouting Dreams Farm LLC
Stony Brook Environmental Club
Stony Brook University Cancer Center
Stony Brook Whole Hearted Foods
Stop the Algonquin Pipeline Expansion
Summit Farm
SunRunner Farm LLC
Surfrider Foundation
Sustainable Business
Sustainable Westchester
Sweetbriar Nature Center
Sweet Earth Co.

Sweet Flag Herbs
Symposium on Energy in the 21st Century
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 H.O.G. Farm, LLC
The Little Garden Club of Rye
The Marlow Collective
The Montauk Seaweed Company
The Native Plant Center
The North Shore Land Alliance
Three Harbors Garden Club
Thunderhorse Hollow Farm LLC
TIMBER
Tompkins County Coalition for Outreach, Policy, and Education
Toad Hollow Farm
Town of Bedford
Town of North Salem
Transition Town Port Washington
Trout Unlimited
True North
Turtle Rescue of the Hamptons, Inc
Twin Oaks Dairy, LLC
Twin Lakes Civic Association
Two Thirds for The Birds
Untermyer Gardens Conservancy
Upper Nyack Green Committee
Uproot Design Studio
Van Cortlandt Park Alliance
Veery Song Farm
Village of Ardsley (Mayor and Board of Trustees)
Village of Hastings-on-Hudson (Mayor and Board of Trustees)
Village of Irvington Board of Trustees
Village of Mamaroneck Committee for the Environment
Village of New Paltz
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 - Capital Region
Wild Ones Habitat Gardening in Central New York
Wild Ones - Hudson Valley

Wild Ones - Long Island Chapter
Wild Ones - Mohawk Valley
Wild Roots Farm
Wildlife Conservation Society (WCS)
Windborne Orchard
Windfall Farms
Wolf Conservation Center
Women in Hospitality United
Woodstock Environmental Commission
Woodstock Land Conservancy
Zero Waste Ithaca

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>.

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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/3YHObrT>; *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 Matthew Smith et al., *Pollinator Deficits, Food Consumption, and Consequences for Human Health: A Modeling Study*, Envtl. Health Perspectives (Dec. 14, 2022), <https://ehp.niehs.nih.gov/doi/10.1289/EHP10947>.

⁶ *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>.

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⁸ 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>.

⁹ Beatriz R. Bradford et al., *Neonicotinoid-Containing Insecticide Disruption of Growth, Locomotion, and Fertility in Caenorhabditis Elegans*, PLoS ONE (Sep. 9, 2020), <https://doi.org/10.1371/journal.pone.0238637>; Kai Wang et al., *Biological Response of Earthworm, Eisenia Fetida, to Five Neonicotinoid Insecticides*, Chemosphere (Aug. 2015), <https://pubmed.ncbi.nlm.nih.gov/25828917/>; Kirsten A. Pearsons & John F. Tooker, *Preventive Insecticide Use Affects Arthropod Decomposers and Decomposition in Field Crops*, 157 Applied Soil Ecology 103757 (Jan. 2021), <https://doi.org/10.1016/j.apsoil.2020.103757>; Mona Parizadeh et al., *Neonicotinoid Seed Treatments Have Significant Non-target Effects on Phyllosphere and Soil Bacterial Communities*, Frontiers Microbiology (Jan. 13, 2021), <https://doi.org/10.3389/fmicb.2020.619827>.

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¹² 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 neonic imidacloprid appears in tap water in some of Suffolk County’s largest water distribution areas).

¹³ Masumi Yamamu et al., *Neonicotinoids Disrupt Aquatic Food Webs and Decrease Fishery Yields*, Science (Nov. 1, 2019), <https://bit.ly/34rKCSG>.

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¹⁷ See U.S. Fish and Wildlife Service, *Rusty Patched Bumble Bee (Bombus affinis)*, ECOS Environmental Conservation Online System (last accessed Jul. 3, 2023), <https://ecos.fws.gov/ecp/species/9383>.

¹⁸ Houchat J-N, Cartereau A, Le Mauff A, Taillebois E, Thany SH. An Overview on the Effect of Neonicotinoid Insecticides on Mammalian Cholinergic Functions through the Activation of Neuronal Nicotinic Acetylcholine Receptors. *International Journal of Environmental Research and Public Health*. 2020; 17(9):3222. <https://doi.org/10.3390/ijerph1709322>.

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²⁷ Dan Gunderson, Data Show Increasing Insecticide Levels in Minnesota Deer, *MPR News* (Aug. 23, 2022), <https://bit.ly/3RYEcCR>.

²⁸ 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>.

²⁹ Letter from Louis Robert, Retired MAPAC Agronomist, and Geneviéve Labrie, Researcher, Centre de Recherche Agroalimentaire de Mirabel, to Governor Kathy Hochul re: Lack of Benefit of Neonic-Treated Corn and Soybean Seeds (Aug. 7, 2023), <https://tinyurl.com/4hm3a2z5>.

³⁰ See Cornell Neonic Report at 244-45.

³¹ European Commission, *Protecting Bees: EU Set to Completely Ban Outdoor Use of Pesticides Harmful to Bees* (Apr. 27, 2018), <https://bit.ly/2HwtNee>.

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