

March 12, 2019

House Committee on Agriculture and Forestry  
Vermont State House  
115 State Street  
Montpelier, VT 05633

Dear Chair Partridge and Members of the House Committee on Agriculture and Forestry:

**We urge your support for H. 205**, a bill that would classify the neonicotinoid class of pesticides as “restricted use” in Vermont. This change in classification is significant because it means these pesticides could only be used by trained applicators.

Restricting the use of these widely-used pesticides to trained applicators is vital to healthy soils, clean water, resilient communities, and vibrant ecosystems:

- Neonicotinoids are much more toxic to pollinators than other insecticides; one teaspoon is enough to kill 1.25 billion bees.<sup>1</sup>
- Neonicotinoids are systemic; rather than remaining on the surface of the treated foliage, neonicotinoids are transported to all of the plant’s tissues, including pollen and nectar.<sup>2</sup>
- Neonicotinoid insecticides have been found in treated drinking water.<sup>3</sup>
- Neonicotinoids disorient and sicken migrating songbirds.<sup>4</sup>
- Neonicotinoids are long-lasting in the environment (months or years) and are known to contaminate surface and groundwater.<sup>5</sup>
- Neonicotinoids have widespread, chronic impacts on global biodiversity and negatively impact ecosystem services, such as pollination, that are critical to food security.<sup>6</sup>
- Neonicotinoids are toxic to earthworms, which are considered to be ‘ecosystem engineers’ because of their important role in soil health.<sup>7</sup>

Numerous studies have documented the widespread and cumulative impacts neonicotinoids have on the environment. One review of 73 historical reports on insect declines found that “systemic insecticides [neonicotinoids] reduce populations of ladybirds and butterflies in gardens and nurseries, inflict multiple lethal and sublethal effects on bees, . . . and have a devastating impact

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<sup>1</sup> University of Sussex Goulson Lab, *Neonicotinoids and bees; what is the fuss all about*, <http://www.sussex.ac.uk/lifesci/goulsonlab/blog/neonicotinoids-and-bees>.

<sup>2</sup> Pesticide Action Network UK, *What are Neonicotinoids?* [http://www.pan-uk.org/about\\_neonicotinoids/](http://www.pan-uk.org/about_neonicotinoids/).

<sup>3</sup> Klarich, Kathryn L., Pflug, Nicholas C., DeWald, Eden M., Hladik, Michelle L., Kolpin, Dana W., Cwiertny, David M., and Gregory H. LeFevre (2017) Occurrence of Neonicotinoid Insecticides in Finished Drinking Water and Fate during Drinking Water Treatment. *Environ. Sci. Technol. Lett.* 4, 168-173.

<sup>4</sup> Audubon, *Two Widely Used Pesticides Found to Disorient and Sicken Migrating Songbirds*, <https://www.audubon.org/news/two-widely-used-pesticides-found-disorient-and-sicken-migrating-songbirds>.

<sup>5</sup> Bradford BZ, Huseth AS, Groves RL (2018) Widespread detections of neonicotinoid contaminants in central Wisconsin groundwater. *PLoS ONE* 13(10): e0201753. <https://doi.org/10.1371/journal.pone.0201753>.

<sup>6</sup> Van der Sluijs, J.P., Amaral-Rogers, V., Belzunces, L.P. et al. (2015) Conclusions of the Worldwide Integrated Assessment on the risks of Neonicotinoids and fipronil to biodiversity and ecosystem function. *Environ Sci Pollut Res*, 22, 148-154.

<sup>7</sup> The Xerces Society for Invertebrate Conservation, *Beyond the Birds and the Bees* (2013) [https://www.xerces.org/wp-content/uploads/2013/09/XercesSociety\\_CBCneonics\\_sep2013.pdf](https://www.xerces.org/wp-content/uploads/2013/09/XercesSociety_CBCneonics_sep2013.pdf).

on aquatic insects . . . with cascading effects on fish survival.”<sup>8</sup> On the heels of this study, the Food and Agriculture Organization published a report warning that the state of the world’s biodiversity threatens our food security, nutrition, health, livelihood and environment.<sup>9</sup>

Limiting the use of neonicotinoid insecticides comports with Vermont’s goal of “achieving an overall reduction in the use of pesticides.”<sup>10</sup> Moreover, the legislatively-appointed Pollinator Protection Committee strongly supported the restricted-use designation for neonicotinoids.<sup>11</sup> This recommendation is particularly timely given that pesticide use in Vermont continues to increase,<sup>12,13,14</sup> resulting in a heightened and unacceptable risk to people and ecosystems.

Vermont is not the first state to consider limiting the use of neonicotinoids. Maryland and Connecticut have already enacted laws to designate neonicotinoids as restricted-use pesticides. In the European Union, 28 countries have adopted a total ban on the outdoor use of neonicotinoids. Part of the challenge in the United States is that many retail neonicotinoid products have no warning about their extreme toxicity to bees.<sup>15</sup> As a result, gardeners can unintentionally use neonicotinoid products in a way that causes harm to pollinators and other insects. For example, residue levels of neonicotinoids toxic to bees can be present in *Rhododendron* shrub blossoms three to six years after soil applications.<sup>16</sup> Moreover, homeowners often overuse neonicotinoid products, with some research demonstrating consumer application rates up to 120 times higher than what is approved for agricultural uses.<sup>17</sup>

Neonicotinoids have already been found in Vermont honey, pollen, soil, and water. We recognize H. 205 as a minimum and necessary first step in a far greater effort to reduce the production and use of pesticides and other toxins in our communities. **We urge this committee to act now to protect our environment and communities by supporting H. 205**, and we look forward to ongoing collaboration to ensure a safe environment for all Vermonters.

Sincerely,

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<sup>8</sup> Sánchez-Bayo, F. And Kris A.G. Wyckhuys (2019) Worldwide decline of the entomofauna: a review of its drivers. *Biological Conservation*. 232, 8-27.

<sup>9</sup> Food and Agriculture Organization of the United Nations, The State of the World’s Biodiversity for Food and Agriculture (2019) <http://www.fao.org/3/CA3129EN/CA3129EN.pdf>.

<sup>10</sup> 6 V.S.A. § 1102(d)(6).

<sup>11</sup> Vermont’s Pollinator Protection Committee (2017)

<https://agriculture.vermont.gov/sites/ag/files/pdf/apiary/Pollinator%20Protection%20Report-FINAL.pdf>.

<sup>12</sup> Vermont Agency of Agriculture, Food & Markets, *Commercial Applicator Pesticide Usage Host Group Summary* (2014) <https://ja3ga476chj1nc6csy2j81c7-wpengine.netdna-ssl.com/wp-content/uploads/2018/02/rptPesticideUsage2014.pdf>.

<sup>13</sup> Vermont Agency of Agriculture, Food & Markets, *Commercial Applicator Pesticide Usage Host Group Summary* (2015) <https://ja3ga476chj1nc6csy2j81c7-wpengine.netdna-ssl.com/wp-content/uploads/2018/02/rptPesticideUsage2015.pdf>.

<sup>14</sup> Vermont Agency of Agriculture, Food & Markets, *Commercial Applicator Pesticide Usage Host Group Summary* (2016) <https://ja3ga476chj1nc6csy2j81c7-wpengine.netdna-ssl.com/wp-content/uploads/2018/02/rptPesticideUsage2016.pdf>.

<sup>15</sup> Environmental Protection Agency, *Pollinator Protection Labeling for Nitroguanidine Neonicotinoid Products* (2013) <https://www.epa.gov/sites/production/files/2013-11/documents/bee-label-info-ltr.pdf>.

<sup>16</sup> The Xerces Society for Invertebrate Conservation, *How Neonicotinoids Can Kill Bees* (2016) [https://www.xerces.org/wp-content/uploads/2016/10/HowNeonicsCanKillBees\\_XercesSociety\\_Nov2016.pdf](https://www.xerces.org/wp-content/uploads/2016/10/HowNeonicsCanKillBees_XercesSociety_Nov2016.pdf).

<sup>17</sup> *Id.*

Vermont Chapter of the Sierra Club	Conservation Law Foundation
NOFA-VT	Friends of the Earth
Toxics Action Center Campaigns	Jon Turner, Wild Roots Farm Vermont
Rural Vermont	Nancy and John Hayden, The Farm Between
Ross Conrad, Dancing Bee Gardens	Vermont Natural Resources Council
Cat Buxton, Grow More, Waste Less - Food Systems Consulting LLC	Judith D. Schwartz, Environmental Journalist and Author
Peggy Newfield, Newfield Herb Farm	Mike Bald, <i>Got Weeds?</i>
Lake Champlain Committee	Audubon Vermont
Vermont Conservation Voters	Charles E. Mraz, Champlain Valley Apiaries
Timothy O'Dell, Corinth	Rori Kelleher
Catherine Lowther, Calais	Jennifer Zollner, East Montpelier
Liz Guenther, The Three Cow Creamery	Doug Reaves, Fairfax
Diana Senturia, Peacham	Gerry Hawkes, Woodstock
Hilarie Gade, New Haven	Carolyn Davis
Margi Wood, Dummertson	Sylvia Perera, Burlington
Matthew Ennis, Winooski	Mark Catlin, Beekeeper
Heidi Simkins, Hinesburg	Dan Simkins, Hinesburg
Karen Burke, Master Gardener	Linda Scrivens
Kep Taylor, Bethel	Scout Palmedo Proft, Someday Farm
Josh Carter, Shelburne Farms Market Gardener	Chris Gray
Anne Cary Dannenberg, Huntington Public Library Director, Pollinator Habitat Specialist	Sue and John Morris, Marshfield
Sydney Goldberg, UVM Beekeepers	Marisa Hebb
Amy Ziobron, UVM Beekeepers	Eugenie Doyle, Last Resort Farm
Katherine Meyer, Warren	Melissa Masters, Brookline
Kyle Doda, Farmer	Caitlyn Bain, UVM Beekeepers
Mackenzie Bolas, UVM Beekeepers	Lindy Biggs, East Montpelier

Betsy Rosenbluth, Shelburne Farms Vermont FEED Director	Hinton Putnam, Guilford
Dave Chapman, Long Wind Farm, Real Organic Project Executive Director	Bill and Loretta Gaidys, Barre
Martin Bell, Barnard	Whitney Fitzgerald, UVM Beekeepers
Gail Holmes	Sabina Ernst, Jericho Underhill Land Trust
Megan J. Humphrey, Burlington	Bryn Meadow Farm, Charlotte
Gail Holmes, Burlington	Rose Wilson Consulting LLC
Martha Hammond, Shoreham	John Pimental
Clarissa Sprague, Burlington	Christyn and Matthew King, Cabot
Suzanne Mckenzie, Shaftsbury	Sara Meling, Ira
Sharon Newman, UVM Beekeepers	Sister Regina Cochran, UVM Catholic Center
Knox Johnson, Hartland	Danielle Morris, Burlington
Ann S. Levy, St. Albans	James L. Levy, St. Albans
Theresa Martin, Essex	Elizabeth W. Anderson, Cornwall
Miles N. Peterle, Cornwall	Linda Sukop, Burlington
Carla Fitzgerald, Hyde Park	Valerie Woodhouse, Milton
Keir A. Schofield, UVM Beekeepers	Jim Corven, Fenn Farmstead and Gardens
Marc Pavlick, West Burke	Joan Klappert
Patricia Lancaster, Mendon	Jean Palmer, Essex Junction
Sarina Gulisano, Warren	Karen Manix, Walker Farm
Carlene Lindgren, Weston	Chrisman Kearn, Jamaica
Jesse Poe, Snowberry Farm	Wendy Burkewitz, Irasburg
Tom Grant	Kristen Livingstone, UVM Beekeepers
Ben Freeman, Londonderry	Eli Hersh, Fairfax
Caroline Persson, Jamaica	Kaya Rifenberg-Stempel, UVM Beekeepers
Alyssa Smolensky, UVM Beekeepers	Lauren Young, Richmond
Ruby Perry, Burlington	Maria Berger, Hinesburg

Susan Johnson, Duxbury	Mary Stoddard, Sharon
Sam Burr, Last Resort Farm	Carol Johnson Collins, South Duxbury
Erik Waring, Maple Producer and Beekeeper	Amy Stringer, Norwich
Jaan Laaspere, Norwich	Stephanie Walker, Granville
John Cushman, Maple Producer	Sue Clarke, Brattleboro
Tom Kruk, Marble Rose Farm	Chani Waterhouse, Worcester
Casey Cutkomp	Helen Prussian, Master Gardener, Hartland
Jessica and Kevin Breault	Tim King, Honey Dew Homestead
Leslie Rowell, St. Albans	Helen Lons, Master Gardener, Franklin
Sarah White, Hedgerow Flowers	Terese Retondo, Manchester
Jyles Yates, West Berlin	Adena Rose Bright
Todd Murray, S. Reading	Elizabeth Henderson, Farmer
Lynn Clohessy, Shallow Rock Farm	Kathryn Perkins, Charlotte
Charlotte Sullivan	Abby Foulk, Charlotte
Geo Honigford, South Royalton	Elizabeth Bancroft, E. Barre
Lynn Clohessy, Shallow Rock Farm	Mara Hearst, Levy Lamb, Dorset
Shona Sanford-Long, N. Tunbridge	Helen Deeley, Manchester
Matthew Reeve, Everett Springs Farm	Joseph Roy Ward, Thetford Center
Susan Losinger-Odegard, Westminster	Kristian Moore
David and Kate Cadreact, Organic Dairy Farmers, Milton	Mary Beth Poli, Center Rutland
Ruth E. Uphold, Charlotte	Winston Rost, Richmond
Ellen Malona, Second Nature Herb Farm, Wells	Susan Lybeck, Fair Haven
Sheri DeFlavio, Waitsfield	Sallie Mack, Beekeeper
Gretchen Saveson, UVM Beekeepers	Karen Bufka, St. Johnsbury
Emily Lanxner, Honeybee Steelband	Valerie Johnson, Burlington
Brenda Hedges, Waterbury	Susan Lybeck, West Haven

Ralph Corbo, East Wallingford	Fletcher Dean, East Calais
Nichole Wolfgang, Artesano Meadery	John and Ellen Bodin, WillowBee Apiaries
Ethan and Erin Bodin, WillowBee Apiaries	Jesse and Tahira Bodin, WillowBee Apiaries
Erika Bodin, WillowBee Apiaries	Jan Enthoven, Barnet
Anna Fleishman, Hartford	Jaymie LeVine
Martha Seyler, Vermont Cookie Love LLC, North Ferrisburgh	Julian Post, Starksboro
Brigid Sullivan	Rob Kurth, Essex Junction
Mark Starrett, UVM Beekeepers	John Benjamin, Fairlee
John Lyons, Norwich	Alice Starr Dworkin, Montpelier
Paul Kervick, Ferrisburgh	Jason Crooks, Beekeeper, Westford
Kerry Kenny	Jake Jacobs, Salisbury
Rafael Salomon, Brattleboro	Brian Tokar, Institute for Social Ecology
Erin Buckwalter, Starksboro	Chris Sharp
Emily Press, UVM Beekeepers	Chelsea Frisbee, Burlington
Marion W. Farrell, Rutland	Leigh Steele, Burlington
Diane Imrie, UVM Medical Center Director of Nutrition Services	Vera Simon-Nobes, Charlotte
Jess Rubin, MycoEvolve, Essex Junction	Carrie Finkelstein, UVM Beekeepers
Christine Anderson, Healthy Environment- Healthy Children, Manchester Center	Ben Gordesky, Renewable Energy Manager, North Hero
Emma Forsythe, UVM Beekeepers	Michelle A. Devost, St. Johnsbury
Joan Allen, Conservation Consultant, South Randolph	Guy Maguire, Burlington
Christine Bahlinger	Elizabeth Ferry, Barnard
Becky Herrington, Sunderland	Sarah Routhier
Jameson Flaherty	Tom McCleary, White River Jct
Anne D'Olivo, Earth Matters, Manchester Center	Tatiana Schreiber, Westminster West

Kathleen and Wayne Krevetski, Rutland	Carolann Hawkins
Nancy Wood, Charlotte	Heike Meyer, Fairfax
Caitlin Burlett and Jesse Kayan, Wild Carrot Farm, Brattleboro	Katherine Schubart
Katelyn Lipton, UVM Beekeepers	Chelsea Blackwell, East Montpelier
Barrie and David Bailey, Whippoorwill Hill Farm	Francis McGill
Laura Braasch, Organic Farmer, Norwich	Siobhan Eddy Young, Stratton
Rev. Barnaby Feder, Middlebury	Brendan Lalor, Poultney
Christopher Andres, Salisbury	John Herrington, Sunderland
Bill Mares, Mares Apiaries, Burlington	Rosalie Fox
Nathaniel Stratton, S. Royalton	Nate Lewis, Waterbury Center
Elizabeth Champagne, St. Johnsbury	Paul DeFlavio, Waitsfield
Aimee Braxmeier, Weston	Peter and Elin Sternberg, Shaftsbury