



March 12, 2019

House Committee on Agriculture and Forestry  
Vermont State Legislature  
115 State Street  
Montpelier, VT 05633-5301

**RE: Support – H.205— Agriculture; pollinator protection; neonicotinoid pesticides**

Dear Honorable Representatives of the Committee on Agriculture and Forestry,

On behalf of Friends of the Earth and our thousands of members and supporters in Vermont, we are writing in support of H. 205, which would classify the neonicotinoid class of pesticides as “restricted use” in Vermont so that only those trained are able to use them. This bill is necessary step to protect the environment, public health and the food system in New Hampshire.

With over 1.5 million members and supporters nationwide and many in Vermont, Friends of the Earth is an environmental organization that defends the environment and champions a healthy and just world. We’re part of Friends of the Earth International, a federation of groups working in 75 countries on today’s most urgent environmental and social issues. Our current campaigns focus on promoting clean energy and solutions to climate change, ensuring the food we eat and products we use are safe for our health and the environment, and protecting marine ecosystems and the people who live and work near them.

The way we manage our landscapes and grow our food is harming our bees, along with a host of other essential species—including wild bees, birds, bats, butterflies, dragonflies, lacewings, ladybugs, earthworms, small mammals, amphibians, and aquatic insects—based on an increasingly heavy use of ever more toxic pesticides, which is eliminating critical habitat and contaminating soil and water.<sup>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</sup> Some scientists are saying we are in the midst of a “second Silent Spring.”<sup>11</sup> Thousands of studies have been published identifying pesticide use, including neonicotinoids as a leading driver of bee declines based on a strong and growing body of science and are calling for immediate restrictions to avoid further declines. If unsustainable losses of bees and other essential pollinators continue, it could lead to irreversible harmful effects on our food system and the environment. Further, the U.S. estimates that forty percent of all invertebrate pollinator species are on the brink of extinction.<sup>12</sup> In addition to these studies, which convey human exposure to pesticides, a recent meta-analysis reports on the devastating impact agricultural pesticides have on insect populations and predicts the “collapse of nature.”<sup>13</sup> On the heels of this study, the Food and Agriculture Organization of the United Nations published a report warning that the state of the world’s biodiversity threatens our food security, nutrition, health, livelihood and environment.<sup>14</sup>

Neonicotinoids are the world’s most widely-used class of insecticides, they are used on over 140 crops.<sup>15</sup> The science is clear that neonicotinoids harm are having wide spread and long term impacts on our environment. In 2014, a comprehensive review of more than 1,121 peer-reviewed studies released by the *Task Force on Systemic Pesticides* – a group of global, independent scientists – confirmed neonics are a key factor in bee declines and are harming beneficial organisms essential to functional ecosystems and food production, including soil microbes, butterflies, earthworms, reptiles, and birds. The Task Force called for immediate regulatory action to restrict neonicotinoids.<sup>16</sup> In September 2017, the Task Force released a follow-up study on neonicotinoids and other systemic insecticides. The new assessment found even broader impacts than the 2015 conclusions. The scientists concluded that neonicotinoids represent a major worldwide threat to biodiversity and ecosystems and called for immediate action to prevent any further environmental destruction.<sup>17</sup>

Even at sub-lethal doses, these pesticides weaken the immune systems of bees making them more susceptible to pests and pathogens.<sup>18</sup> Research also indicates that neonicotinoids are contaminating waterways and harming aquatic organisms, including crabs.<sup>19</sup> Further, the neonicotinoid imidacloprid is toxic to at least seven species of bird and causes testicular anomalies and reduced fertility, reduced eggshell thickness and embryo size, and reduced hatching success and chick survival in birds.<sup>20</sup> Just one seed coated in neonics is enough to kill a songbird, according to a report by the American Bird Conservancy.<sup>21</sup>



Bayer and Syngenta, the companies that manufacture neonics, commissioned a study published in the journal *Science* that tested fields in Europe for contamination and the effects on both managed and native bee colonies. This landmark study found clear evidence that bees who fed on plants treated with these pesticides suffered terrible losses.<sup>22</sup> Another study, also published in the journal *Science*, found neonics used in agriculture are contaminating nearby bodies of water and being absorbed into pollinator attractive plants, exposing bees to neonics.<sup>23</sup> Another study found that bumblebee queens exposed to neonicotinoids were 26 percent less likely to lay eggs, compared to queens that were not exposed. Researchers found that this rate of decline could threaten extinction of wild bumblebee populations.<sup>24</sup>

Vermont is also experiencing significant pollinator decline. According to the Bee Informed Partnership, from 2017-2018 beekeepers in Vermont lost an average of 53 percent of their hives, which is higher than the national average.<sup>25</sup> This degree of loss is unsustainable (the beekeeping industry says annual acceptable losses are 14 percent or less).<sup>26</sup>

In addition, there is evidence that neonicotinoids may be associated with adverse developmental health outcomes, including congenital heart defects, neural tube defects, and autism spectrum disorder.<sup>27</sup> Research also indicates that neonicotinoids are potential endocrine disruptors and may alter estrogen levels in humans.<sup>28</sup>

This bill is consistent with action being taken by other states, cities and federal agencies in the United States. In April 2016, Maryland became the first state in the country to pass a bill to eliminate consumer use of neonicotinoids.<sup>29</sup> A few weeks later, Connecticut passed a bill restricting their use.<sup>30</sup> In August 2018, Minnesota's governor issued an executive order to restrict neonicotinoids, including creating a "Treated Seed Program," which would "provide the State with the authority to regulate seeds treated with pesticides, fund research to develop need-based recommendations for the use of seed treatments, and may require that untreated seeds and seeds treated at lower pesticide application rates are available in the market."<sup>31</sup>

More than 200 cities, states and universities across the U.S. have taken steps to restrict systemic insecticides, including neonicotinoids and plant pollinator friendly, native and drought tolerant plants that aren't pre-treated with these chemicals.<sup>32</sup> These entities include: Oregon, Minnesota, Atlanta, GA, Great Barrington, Marblehead, and Newton, MA, Seattle, Thurston County and Spokane, WA, Shorewood, St. Louis, Minneapolis, Andover, and Stillwater, MN, Ogunquit, ME, Eugene, Portland and Cannon Beach, OR, Boulder, CO, Warren County, NC, Skagway, Alaska, San Francisco, Palo Alto and Sacramento, CA as well as Emory University, Southern Oregon University and Vermont Law School.<sup>33</sup>

At the federal level, the Council on Environmental Quality released guidance in October 2014 recommending that federal facilities and federal lands not use systemic insecticides or acquire seeds and plants from nurseries that have been treated with systemic insecticides.<sup>34</sup> In 2015, the EPA announced a moratorium on new or expanded uses of neonicotinoids while it evaluates the risks posed to pollinators.<sup>35</sup> In September 2015, the 9th Circuit Court ruled to revoke EPA's approval for sulfoxaflor — a neonicotinoid — saying, "Leaving the EPA's registration of sulfoxaflor in place risks more potential environmental harm than vacating it."<sup>36</sup> At the end of 2017, EPA issued its aquatic and non-pollinator risk assessment which found that the majority of uses of neonicotinoids on currently registered crops resulted in risks to freshwater invertebrates that exceeded levels of concern — the threshold at which harm is known to occur. The agency also found that risks posed to certain birds from eating neonic-treated seeds exceeded the agency's level of concern by as much as 200-fold. The EPA's own assessment found that if neonic-treated seeds make up just one percent to six percent of a bird's diet, serious harms could result.<sup>37</sup> In response to growing scientific concern, the European Union recently voted to ban all outdoor uses of neonicotinoids and Canada has proposed following suit.<sup>38, 39</sup>

In the marketplace, more than 140 garden retailers, nurseries and landscaping companies, including the two largest home improvement retailers in the world, Home Depot<sup>40</sup> and Lowe's,<sup>41</sup> as well as Walmart,<sup>42</sup> Whole Foods company's,<sup>43</sup> True Value,<sup>44</sup> Ace Hardware,<sup>45</sup> and BJ's Wholesale Club,<sup>46</sup> have committed to take steps to eliminate neonicotinoids. Greenhouse Grower's 2016 State of the Industry Survey found 74 percent of growers that supply mass merchants and home improvement chains said they will not use neonicotinoid insecticides in 2016.<sup>47</sup>



We thank you for your leadership on this important issue and look forward to working with you, your staff and future committees to pass H.205.

Sincerely,

Tiffany Finck-Haynes  
Pesticides and Pollinators Program Manager  
Friends of the Earth-U.S.

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1100 15<sup>th</sup> Street, NW · 11<sup>th</sup> Floor · Washington, DC 20005  
202.783.7400 · 202.783.0444 fax · 877.843.8687 toll free · [www.foe.org](http://www.foe.org)

2150 Allston Way, Suite 240 · Berkeley, CA 94704  
510-900-3150 · 510-900-3155 fax · 866.217.8499 toll free

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