NEPMA
NEW ENGLAND PEST MANAGEMENT ASSOCIATION, INC.

H. 688 - Outdoor Ban of Neonicotinoid Pesticide Applications for Pest Management Professionals; a Hindrance to Protecting Public Health in Vermont

February 6, 2018

Representative Carolyn W. Partridge, Chair
Representative Richard Lawrence, Vice-Chair
State House
115 State St
Montpelier, VT 05633-5301

Chairwoman Partridge, Vice-Chairman Lawrence, and Members of the Vermont House Agriculture and Forestry Committee:

The New England Pest Management Association (NEPMA) appreciates the opportunity to testify on House Bill 688—An act relating to pollinator protection, as this legislation would designate neonicotinoid pesticides as restricted use pesticides (RUPs) and would prohibit the use of neonicotinoids outdoors after June 30th, 2018, but would exempt farmers from this ban. By prohibiting outdoor neonicotinoid applications for pest management professionals (PMPs), as written, H. 688 would likely have a negative impact on protecting public health, adversely impact local businesses that rely on pest management professionals to remediate pest problems, and hinder the ability for structural pest management businesses to operate in Vermont.

NEPMA member companies manage pests including rodents, ants, cockroaches, bed bugs, mosquitoes, spiders, stinging insects, termites and other pests in countless commercial, residential and institutional settings. NEPMA members are committed to providing quality pest management services that protect public health, food and property.

NPEMA acknowledges the importance of pollinator health and the rationale behind H.688 but stresses the impact that the structural pest management industry has on pollinators is nominal. Pesticide risks to pollinators are not only focused on the toxicity of a chemical, but also the potential for exposure. Structural pest control is very unlikely to lead to exposure. Similarly, exterior treatments applied to the structure or to the soil and other areas around the structure are also unlikely to result in significant exposure. NEPMA members support, teach, and implement Best Management Practices (BMPs) developed by the National Pest Management Association; which greatly increases the ability of our members to safely use pesticides in a manner that doesn't impact pollinators.[1]

[1] http://www.multibriefs.com/briefs/npma/PollinatorBMPsFINAL.pdf

Pesticide Approval, Evaluation, and Registration in the United States

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is the statutory framework that enables EPA to regulate the use, sale and distribution of pesticides throughout the U.S. The objective of FIFRA is to provide federal control of pesticide distribution, sale, and use. All pesticides used in the U.S. must be registered by EPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to human health and the environment.

EPA approves pesticide registration and usage only after each product has met extensive and specific health and environmental impact standards. During the registration process, EPA revises comprehensive human health and ecological risk assessments. EPA then opens the process up to the public for comment and further analysis. EPA exhausts immense resources on the registration and review of pesticides and uses the most current science-based information and peer-reviewed scrutiny. Additionally, EPA is continuously studying and re-evaluating products after approval. To date, EPA is reviewing noenicitinoids but have not issued any, final or interim decisions, or even guidance that would implicate structural use patterns of noenicitinoids has having an adverse impact on pollinators.

HB 688 Increases the Difficulty of Protecting Public Health in Vermont

Ticks

H. 688 would remove neonicotinoids from our toolbox for managing ticks outdoors. It is essential to have access to a variety of products to reduce resistance to pesticides and ensure that we control tick populations efficiently. According to the Centers for Disease Control and Prevention (CDC):

> "Tick-borne pathogens can be passed to humans by the bite of infected ticks. Ticks can be infected with bacteria, viruses, or parasites. Some of the most common tick-borne diseases in the United States include: Lyme disease, babesiosis, ehrlichiosis, Rocky Mountain Spotted Fever, anaplasmosis, Southern Tick-Associated Rash Illness, Tick-Borne Relapsing Fever, and tularemia."[2]

Vermont structural pesticide applicators take great pride in protecting their customers from these dangerous and deadly pests, and while there are many tickborne diseases, for brevity in this written testimony we will illuminate the Powassan virus and Lyme disease because of the potentially devastating consequences and prevalence of both tickborne diseases in Vermont.

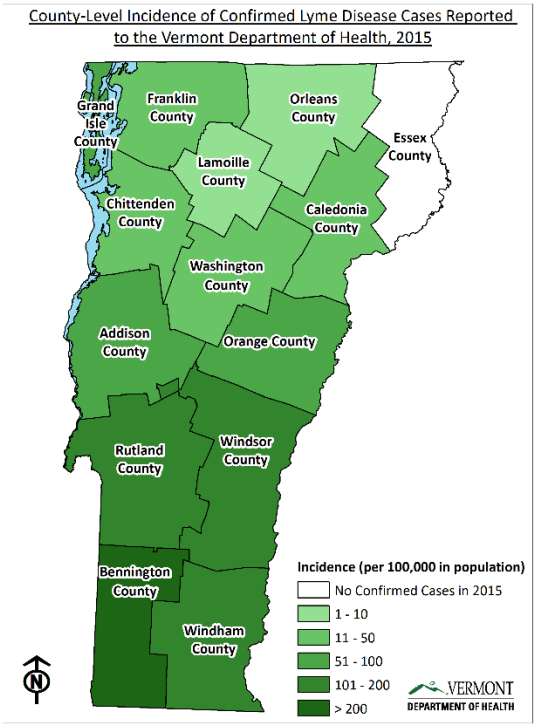
Ticks – Powassan virus

"[The] Powassan virus, can cause dangerous inflammation in the brain and may be transmitted to humans much faster than Lyme… The virus causes encephalitis, or swelling of the brain, and it kills about 10% of people who become sick, according to the Centers for Disease Control and Prevention (CDC). About half of people are left with permanent neurological problems."[3]

[2] "Tick-borne Diseases," Centers for Disease Control and Prevention, March 09, 2017, https://www.cdc.gov/niosh/topics/tick-borne/default.html.
[3] "Powassan Virus Is the Scary New Reason to Avoid Ticks," Time, http://time.com/4767290/powassan-virus-ticks/.

"According to Vermont's infectious disease epidemiologist Bradley Tompkins, the ticks that tested positive for Powassan were found in Chittenden and Windsor counties in the spring of 2016."[4]

Not only, is the deadly Powassan virus found in Vermont, and transmitted by ticks, but there is another tick-borne disease that you probably are all too familiar with—Lyme disease.



Ticks – Lyme disease

According to the Vermont Department of Health, "Lyme disease is the most commonly reported tickborne disease in Vermont and in 2016, Vermont had the second highest rate of reported Lyme disease cases in the U.S."[5] "When Lyme disease is accurately diagnosed and properly treated patients often recover completely. However, some individuals experience long-term, debilitating effects, even after completing standard treatment."[6] Please see the map to the left, from the Vermont Department of Health, illustrating the intensity of confirmed Lyme disease cases for each county in Vermont in 2015.[7]

Negative Impacts of H. 688 on Tick Management

For PMPs, it is their job is to protect public health and property. As written, if H. 688 becomes law then, their jobs will become more challenging, as will the battle to manage tick-borne diseases, such as Lyme disease and the Powassan virus.

H. 688 would only allow farmers to apply neonicotinoid pesticides outdoors. Therefore, under this prohibition, PMPs won't be able to perform residential tick management and treat the likely harborage areas for ticks along paths, tall grass, other vegetation, and larval breeding hot spots. Additionally, PMPs may establish a barrier around a customer's home with a neonicotinoid pesticide perimeter treatment. In addition to applying pesticides, PMPs would incorporate integrated pest management (IPM) into their service of the customer's home, including educating the property-owner to remove brush, plants and leaf litter around the home, aiming for at least a 6-inch-wide clean area, as this would help eliminate hiding places for deadly ticks.

[4] Rene Thibault and Lesley Engle, "Ticks Carrying Powassan Virus Found in Vermont," MYCHAMPLAINVALLEY, May 03, 2017, http://www.mychamplainvalley.com/news/ticks-carrying-powassan-virus-found-in-vermont/705066874.
[5] "Lyme Disease," Vermont Department of Health, November 09, 2017, http://www.healthvermont.gov/disease-control/tickborne-diseases/lyme-disease.
[6] Vermont Lyme, http://vtlyme.org/.
[7] "Lyme Disease," Vermont Department of Health

When applying neonicotinoids in this manner and to commercial and residential properties PMPs do not pose a threat to pollinators. PMPs should continue to be allowed to apply neonicotinoid pesticides outdoors.

Various Fly Species

Flies are much more than a buzzing annoyance, in fact, the threats they pose are serious. According to the Penn State Department of Entomology, flies carry a plethora of harrowing diseases because they feed on fecal matter, discharges from wounds and sores, and excrete and vomit on food among other causes:

> "House flies are strongly suspected of transmitting at least 65 diseases to humans, including typhoid fever, dysentery, cholera, poliomyelitis, yaws, anthrax, tularemia, leprosy and tuberculosis. Flies regurgitate and excrete wherever they come to rest and thereby mechanically transmit disease organisms."[8]

Additionally, a 2013 National Institute of Health (NIH) published study titled, "Role of Flies as Vectors of Foodborne Pathogens in Rural Areas" has shown that various species of flies not only carry harmful bacteria such as, Campylobacter, E. coli, Salmonella, and Shigella, but also multiple viruses and contribute to the resistance of antibiotics across the world. This study found that regarding anti-biotic resistance, "…the carriage of antibiotic resistant bacteria by flies in the environment increases the potential for human exposure to drug-resistant bacteria."[9]

Negative Impacts of H. 688 on the Management of Various Fly Species

For fly management in many residential settings, PMPs apply baits containing neonicotinoids to garbage receptacles and lids, refuge containers, under tables and benches, recycling bins, dumpsters, under bars, eave areas, walls and/or areas where flies are likely to congregate or infest. When used in this manner, fly baits containing neonicotinoids pose no threat to non-target organisms, pollinators, and are effective in preventing the at least 65 diseases that flies are known to transmit to humans. Compliance with sanitation standards required under the recently enacted Food Safety and Modernization Act would be incredibly difficult without pesticides that include neonicotinoids.

Negative Impacts of H. 688 on Outdoor Barrier/Perimeter Treatments for Various Pests

When treating for a wide-variety of pests that have the potential of entering a structure from the outside, PMPs will typically apply a neonicotinoid concentrate formulation to surfaces on buildings, porches, patios and other structures, around doors and windows, eaves and attic vents, utility entry points, soffit areas and other exterior openings where outdoor/perimeter pests enter the structure or where they have been seen or found, or can find shelter. PMPs will also treat the outside of a structure to include walls to a height of 2 to 3 feet and treat the soil, turf, or other ground covering adjacent to the structure in a band up to 10 feet wide. By using neonicotinoids for barrier/perimeter treatments dangerous and deadly pests are kept at bay, while there is little to no threat to pollinators.

[8] "House Flies (Department of Entomology)," Department of Entomology (Penn State University), January 2013, Accessed July 17, 2017, http://ento.psu.edu/extension/factsheets/house-flies.
[9] Barreiro, C., Albano, H., Silva, J., & Teixeira, P, (2013), Role of Flies as Vectors of Foodborne Pathogens in Rural Areas. ISRN Microbiology, 2013, 718780. http://doi.org/10.1155/2013/718780

Negative Impacts on the Structural Pest Management Industry

The structural pest management industry safely and routinely uses neonicotinoid pesticide products to protect businesses, homes, and people where they work and live. NEPMA would also like to reiterate that any restriction of the structural use patterns of neonicotinoids could make it increasingly difficult to protect public health in Vermont.

Designating these products as restricted use will certainly add a financial burden to the companies operating in Vermont. Restricted use usually leads to additional requirements, training credits, and less time in the field for a product that would seem impossible to affect pollinators when used for structural pest control.

Conclusion

NEPMA urges the State of Vermont to continue allowing both indoor and outdoor applications of neonicotinoid pesticides for certified and trained structural pest management professionals. By allowing outdoor applications of neonicotinoids for structural pest management, the State of Vermont will continue to allow PMPs to protect their customers from flies, ticks, and countless other dangerous and deadly pests. Thank you for your time.

Sincerely,

Ted Brayton
President
New England Pest Management Association