

Oppose H.4650 “An Act to Mitigate Arbovirus in the Commonwealth” Unless Significant Changes Are Made

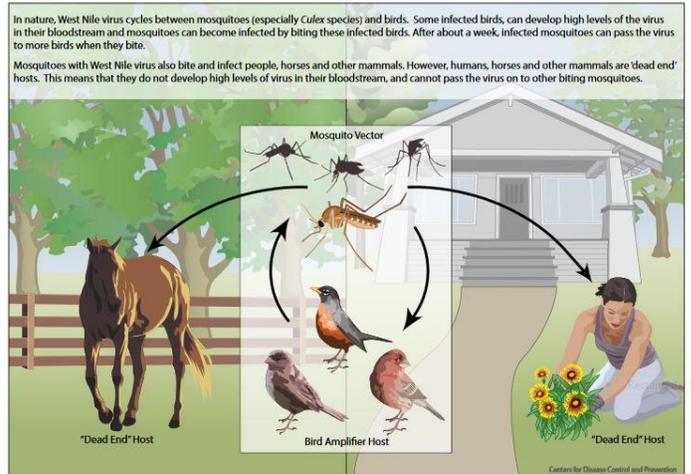
Summary

H.4650 “An Act to Mitigate Arbovirus in the Commonwealth” permits the unrestricted spraying of mosquito pesticides by the State Reclamation and Mosquito Control Board (SRMCB). The legislation exempts SRMCB from state laws and statutes, allows it to override pre-existing private opt out agreements, and forgo input from local communities. The bill does nothing to incentivize a science-based, integrated, ecological mosquito-borne disease management strategy – the most effective route of control that will have the dual result of protecting public health and the environment. Unrestricted spraying of toxic pesticides raises serious health concerns, especially during a pandemic as these chemicals are known to elevate risk factors to our immune and respiratory systems, which Covid-19 attacks. **Lawmakers are urged to reject this measure unless significant changes are made to require science-based decision making, increase funding for mosquito monitoring and surveillance, and improve transparency and accountability.**

Effective Mosquito-borne Disease Management is Science-Based

- ❖ Mosquito-borne diseases such as Eastern Equine Encephalitis and West Nile Virus, are spread through the bite of infected mosquitoes that feed on both birds and mammals, also known as “bridge vectors”.¹
- ❖ Proper mosquito-borne disease management emphasizes increased monitoring and surveillance, elimination of breeding sites, enhancing habitat for mosquito predators, biological controls of mosquito larvae, and public education.²
- ❖ Attempting to kill adult mosquitoes in the air through ultra-low volume (ULV) pesticides is the least effective means of management.^{3,4}
- ❖ Mosquitoes may also develop resistance when pesticides such as Sumithrin are commonly used.³

West Nile Virus Transmission Cycle



Mosquito Pesticides Are Not Natural, and Not Safe

- ❖ Products containing synthetic pyrethroids are not natural, they are synthetic chemical formulations that also contain other or “inert” ingredients. Neither Massachusetts agencies nor the Environmental Protection Agency test the health or environmental impacts of mixtures of active and inert chemical ingredients.⁴
- ❖ Sumithrin can result in lung irritation, and has been documented to cause asthmatic responses in those exposed.⁵
- ❖ Piperonyl-butoxide, a synergist intended to magnify the toxicity of synthetic pyrethroids, has not been tested in combination with these active ingredients, and is considered a possible human carcinogen by EPA.⁶
- ❖ ULV applications of Resmethrin have been found to kill pollinators, particularly adult and larval monarch butterflies,⁷ of which Eastern monarch populations have declined by 80% since the 1990s.⁸

- ❖ Bird populations have also declined by thirty percent since 1970, and scientists point to pesticides as a potential driver.⁹
- ❖ Most ULV mosquito pesticides will not make contact with a target mosquito; the remaining pesticide will run-off into the environment and contaminate groundwater and local waterways.¹⁰

Require H.4650 Include these Common-Sense Provisions

- ❖ Require state agencies follow a defined science-based, integrated, ecological mosquito-borne disease management plan with prioritized criteria and a public health emergency spray authorization based on pre-defined thresholds of disease-carrying mosquitoes set by the Commissioner of public health.
- ❖ Increase funding and capacity for mosquito monitoring, surveillance, and public education efforts.
- ❖ Provide full transparency and accountability within any mosquito-borne disease management program, including publicly available notification around larviciding and adulticiding applications, honoring local opt out agreements.

Eliminate Mosquito Breeding Sites Where You Live



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2 Xerxes Society. 2014. Help Your Community Create an Effective Mosquito Management Plan. https://xerxes.org/sites/default/files/2018-05/14-005_01_HowToCreateAnEffectiveMosquitoMgmtPlan_web.pdf

3 Cox, Caroline. 2003. Insecticide Factsheet: Sumithrin. Journal of Pesticide Reform. Volume 23 #2. <https://d3n8a8pro7vhm.cloudfront.net/ncap/pages/26/attachments/original/1428423460/sumithrin.pdf?1428423460>

4 Donley, Nathan. 2016. Toxic Concoctions: How the EPA Ignores Dangers of Pesticide Cocktails. Center for Biological Diversity. https://www.biologicaldiversity.org/campaigns/pesticides_reduction/pdfs/Toxic_concoctions.pdf

5 National Pesticide Information Center. 2020. Sumithrin. <http://npic.orst.edu/factsheets/archive/dphentech.html#references>

6 EPA. 2018. Chemicals Evaluated for Carcinogenic Potential. http://npic.orst.edu/chemicals_evaluated.pdf

7 Oberhauser, Karen, et al. 2009. Impacts of ultra-low volume resmethrin applications on non-target insects. Journal of the American Mosquito Control Association. Volume 25, #1. <https://experts.umn.edu/en/publications/impacts-of-ultra-low-volume-resmethrin-applications-on-non-target>

8 Center for Biological Diversity. 2017. Iconic Butterfly Has Declined by More Than 80 Percent in Recent Decades. https://www.biologicaldiversity.org/news/press_releases/2017/monarch-butterfly-02-09-2017.php

9 Greenfieldboyce, Nell. 2019. North America has lost 3 billion birds, scientists say. NPR. <https://www.npr.org/2019/09/19/762090471/north-america-has-lost-3-billion-birds-scientists-say>

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