



Maryland Native Plant Society

APPRECIATION CONSERVATION EDUCATION

Testimony: HB1342 Pesticide and Pest Control – State-Owned Property – Pesticide Use Restrictions and Pollinator Habitat

Committee: Environment and Transportation

Hearing Date: March 5, 2025

Position: FAVORABLE

Chair Korman, Vice Chair Boyce, and honorable members of the Committee,

The Maryland Native Plant Society supports HB1342, which requires the Department of Agriculture to develop model pesticide plans for state owned and managed properties and requires the use of “listed pesticides” with ingredients recommended by the National Organic Standards Board on state properties for pesticide applications with certain exceptions.

Insects serve as pollinators in both natural and agricultural ecosystems for more than 80% of crops and other flowering plants. These insect pollinators include bees, beetles, flies, butterflies, moths, and ants, and they help in moving pollen within and between flowers.¹ Today, these pollinators are in danger, and 40% of insect species in temperate climates like our own may face extinction over the next few decades.² This extinction crisis is being driven by “human-induced factors such as habitat loss, pesticide use, climate change, and pollution”.^{3 4 5}

The approximately 4,000 native bee species in the United States are some of the most effective pollinators for both wildflowers and agricultural crops due to their specialized hairs for collecting pollen and their wide-ranging foraging behavior. Many plants have evolved in step with native bees and only certain bee species can pollinate them. According to the Center for Biological Diversity’s “Pollinators in Peril” report, 1 in 4 native bees is in danger of extinction.⁶ One of the greatest threats to native bees comes from pesticides, especially systemic pesticides like neonicotinoids, which spread throughout an entire plant, poisoning even the pollen and nectar. Many bees die right away from consuming the pollen and nectar from treated plants, and those that don’t die outright become weak and disoriented and often don’t survive for long.

Pollinators are crucial to biodiversity and maintaining our food supply, and they play a vital role in controlling pests, pollinating plants, and serving as food for other wildlife. **Pesticides are designed to control unwanted pests, but rarely are these chemicals designed to distinguish between harmful pests and highly valuable pollinators.** Further, pesticides often cause unintended consequences that disrupt the natural ecosystems sustaining us.⁷ As we begin to restore native plant and pollinator habitats on state and private lands, we need to give pollinators the best chance to return to previous population levels and survive. We need to use pesticides only when absolutely necessary and then select the least lethal and most sustainable option.

Increasing native plant habitats on state lands provides many benefits, including supporting a broad range of native pollinators, stabilizing the soil, and reducing and filtering runoff. Additionally, native plants can contribute to reduced maintenance needs and therefore cost. The state's effort to take the lead in restoring native habitats can also serve as a valuable educational opportunity to the general public. As we restore native plants to more of our state and private lands, we will begin to reconnect fragmented habitats, thereby giving our vital pollinators the best possible chance to survive and to provide the many ecological services that lead to our own survival.

For all these reasons, the Maryland Native Plant Society requests a favorable report on HB1342.

Respectfully,
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Resources:

- ¹ Haldhar S., Kumar R., Samadia D., Singh B., and Singh H., Role of insect pollinators and pollinizers in arid and semi-arid horticultural crops, *Journal of Agriculture and Ecology*. (2018) 05, no. 01, 01–25, <https://doi.org/10.53911/jae.2018.5101>.
- ² Basset Y. and Lamarre G., Toward a world that values insects, *Science*. (2019) 364, no. 6447, 1230–1231, <https://doi.org/10.1126/science.aaw7071>, 2-s2.0-85069005199.
- ³ Chowdhury S., Dubey V. K., Choudhury S., Das A., Jeengar D., Sujatha B., Kumar A., Kumar N., Semwal A., and Kumar V., Insects as bio indicator: a hidden gem for environmental monitoring, *Frontiers in Environmental Science*. (2023) 11, <https://doi.org/10.3389/fenvs.2023.1146052>.
- ⁴ Kruess A. and Tscharntke T., Habitat fragmentation, species loss, and biological control, *Science*. (1994) 264, no. 5165, 1581–1584, <https://doi.org/10.1126/science.264.5165.1581>, 2-s2.0-0028450625.
- ⁵ Sánchez-Bayo F., Indirect effect of pesticides on insects and other arthropods, *Toxics*. (2021) 9, no. 8, <https://doi.org/10.3390/toxics9080177>.
- ⁶ Kelsey K. and Burd L.A., Pollinators in Peril, Center for Biological Diversity. (2017), https://www.biologicaldiversity.org/campaigns/native_pollinators/pdfs/Pollinators_in_Peril.pdf
- ⁷ Xerces Society, Reducing Pesticide Use & Impacts. (Accessed 2025), <https://www.xerces.org/pesticides>