

SB915, 2024 Biodiversity and Agriculture Protection Act
EEE Committee
Hearing Date March 5, 2024
Favorable

Dear Maryland Senators,

As trained scientists and science teachers, we are in support of the **2024 Biodiversity and Agriculture Protection Act (HB979)** because invasive plants cost tax payers millions of dollars each year, and many Marylanders are increasingly worried about the degradation of the environment due to invasive plants. Farmers waste time, money and resources ridding their fields of invasive plants to grow our food. Hunting grounds do not support wildlife. Recreation areas—both land and water—are being invaded and degraded. **U.S. losses from invasive plants from 1960 to 2020 was estimated to be \$1.13 trillion with annual costs of \$21 billion** from 2010 to 2020.¹ Farmers have been impacted the most spending \$510 billion, and resource damages and losses are estimated to be \$869 billion.¹

This has become a personal issue for us. We have been trying to remove invasive plants for the past several years in our yards, our children's school, and a Baltimore City Park. At the school, the woods is an ecological treasure with a meandering stream, shady beech trees and forested areas, wet meadow, and holly groves. It, however, has been infested with aggressive invasive plants—lesser celandine, porcelain-berry, multiflora rose, and Asian wisteria, garlic mustard, Japanese silt grass—which are **prohibiting the re-growth of the forest and wet meadow**. The school's woods is not alone. **One recent scientific study found that the forests of only one eastern US National Park (Acadia in Maine) were healthy and likely to regenerate out of 39 sampled.**² Intense storms are taking down canopy trees, overabundant deer are eating native saplings, and invasive plants are smothering flora and new seedlings that are present. Unfortunately, the only way to ensure that our forests are able to regenerate now is by managing them—specifically by removing unwanted plants and prohibiting deer when possible. Gone are the days when the wilderness should be left alone—especially in urban areas.² Below are some photos which show how the invasive vines totally cover trees (adding extra weight and stress to branches and prohibiting the sun to reach their leaves for photosynthesis) and **creating monocultures in our woods**. We all know biodiversity is important, and we want our forests to be here for our grandchildren which is why a group from the school has been working to manage parts of the woods.

Although invasive plants are still green and photosynthesizing, they do not support wildlife. The work of Doug Tallamy, an entomologist at the University of Delaware, highlights the importance of native plants for native insects and birds. In the U.S., oak trees support over 890 species of caterpillars³ compared maybe a handful for non-native species such as Japanese maple and Norway maple. Many of our native butterflies and pollinators need specific plants to gather food and reproduce. A well-known example is the monarch butterfly as it must have the milkweed plant to survive. We are learning that birds also rely on native plants. A recent study shows that Carolina chickadees need over 70% native plant biomass to successfully reproduce.⁴

Many of our neighbors and friends love the outdoors and want to help the environment. Many do not realize the problems invasive plants create. Maryland needs to step up and add invasive plants to our current list of prohibited plants from sale and propagation. We only have six with another 13 with a “Plant with Caution” sign at the point of sale!⁵ **We need to educate the public about the problems associated with invasive plants, ensure they are not being sold, and make the assessment process easier.** Invasive plants grow so densely that they out compete all other spring ephemerals and even prevent other seeds from germinating. Help us reclaim back native Maryland land and stop the invasive spread. Support SB915 Biodiversity and Agriculture Protection Act.

Sincerely,

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Porcelain berry in September 2023 in the school’s wet meadow area. Note, we had been cutting vines off of the trees during the late fall, winter and spring of 2022-2023. It’s hard to tell because the vines grow so quickly.

General overview of the wet meadow area with invasive vines and one of our volunteers in early autumn 2023. Note the mowed meadow and all the vines in the background.



A sycamore tree in the wet meadow after the Boy Scout project fall 2023. Note the mowed meadow and thick layer of mulch and cardboard around the tree to try to kill the invasive vines. Also note the vines in the background.

Close up of the invasive vines over a native holly.



Picture of Lesser Celandine Spring 2023



References

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