Committee: Committee: Education, Energy, and the Environment Testimony on: SB915 "Agriculture - Invasive Plant Species - Regulation (Biodiversity and Agriculture Protection Act)"

Hearing Date: March 5, 2024

Position: Favorable

By: Dr. Robert Soreng

I am a research botanist trained in plant ecology, wildland management, taxonomy, and biodiversity: BS (1978) and MS in Rangeland Science (1980), PhD Biology (1986), Research Associate, Department of Botany, United States National Herbarium, Smithsonian Institution, member of the Botanical Society of Washington and of the Washington Biologists' Field Club (WBFC).

A case study of plant invasions: When the WBFC began their long-term research on Plummers Island (Mather Gorge, Potomac River, Montgomery Co., Maryland) in 1901, the founding concept of their research activity was to follow transformations through time of the island's flora and fauna from an agrarian pasture and woodlot system that was relatively recently cleared of much of the original natural forest communities. The successional transition was predicted to return to natural forest communities of native plants and animals similar to, and of comparable diversity to, pre-agrarian status. Over the years, researchers made over 40,000 collections of specimens, many observations, and published over 400 scientific papers, documenting some 4000 species on this 12.25 acre island (known as "The most thoroughly studied Island in North America" <u>https://wbfc.science/</u>). What the club's founders did not anticipate were incursions and dominance of invasive species from other parts of the World. However, our research has documented the first occurrences and spread of hundreds of invasive organisms over the ensuing 123 years as forest communities reestablished. Japanese and Amur honeysuckles, Asian Bittersweet, Gill-over-the-ground, and various knotweeds are so pervasive on the island that removing them would be impossible. These crowd-out and outcompete native species, many of which are rare in the region. These invasions could have been prevented had society understood the impacts of introductions in advance. Numerous other invasive species are in early stages of colonization of the island and we discover newcomers almost every year. But we have seen what they can do where they have had more time to establish. Fig Buttercup and Japanese Stiltgrass are notable for carpeting forest floors and open spaces around Maryland over the last 2 decades. Invasive plant management is hugely expensive and overwhelming agencies' and private property owners' capacities to control or eliminate the invasions. Asian Foxtail Fountian grass is still being planted along our roadsides and is now spreading rampantly. Older introductions of English Ivy, Pachysandra, Periwinkle, and Wintercreeper have also cover our urban and suburban forest floors and parks.

The lessons learned from our research on Plummers Island teach us that we need to do everything we can to limit the spread of known and potentially invasive species.

Time to take action: HB979 provides a model framework for halting the sale, nursery production, and commercial landscaping use of invasive plant species in Maryland.

I urge the committee to provide a favorable report on the bill.