

Maryland Native Plant Society APPRECIATION CONSERVATION EDUCATION

Testimony: HB701, Gasoline-Powered Leaf Blowers - Purchase, Use, and Sale - Prohibitions (Clean Air Quiet Communities Act) Committee: Economic Matters Hearing Date: February 11, 2025 Position: SUPPORT

Chair Wilson, Vice Chair Crosby, and honorable members of the Committee,

The Maryland Native Plant Society (MNPS) urges a favorable report on House Bill 701 because of its importance to the health of the environment, native plants, and native animals.

MNPS is a 501(c)(3) non-profit that focuses on education and conservation because we care deeply about the health of Maryland's natural communities. These consist of native plants, native animals, and beneficial microbes all working together to provide important ecosystem services, such as pollination, oxygen generation, erosion control during storms, pollution control, cooling, and CO₂ absorption. Healthy natural communities help maintain biodiversity and limit climate change. With the State's wild habitats under duress from many stressors, MNPS would like to see the state's native species subject to less pressure from the pollution and noise that come from gasoline-powered leaf blowers.

I serve as Vice President of MNPS and am the founder of EcoPlant Consulting. In addition, I am a Board member on the Mid-Atlantic Invasive Plant Council, Chair of the Committee on Invasives Lists for the Maryland Invasive Species Council (MISC), and an expert witness on invasive plant legal cases. In addition, I co-authored the 2022 *Plant Invaders of Mid-Atlantic Natural Areas, Field Guide*.

Gasoline-powered leaf blowers produce a stunning amount of air and noise pollution. They spew out large, unfiltered quantities of toxic chemicals including dangerous particulate matter (PM2.5 and PM10), hydrocarbons, nitrogen oxides, benzene, butadiene, and formaldehyde. This alphabet soup of poisons contributes to climate change, creates ground level ozone, and causes many human and wildlife health problems. At the same time, sound levels range from 90 to 112 decibels(dB). To put this painful noise into context, human hearing damage can occur after 15 minutes at 100 dB, according to the National Institute on Deafness and Other Communications Disorders.

Ground-level ozone is extremely harmful to plants. It decreases flowers and fruits, tree height and canopy, and crop yields. Due to impaired water use efficiency and other functions, ozone-weakened plants are probably more susceptible to destructive insects, diseases, and our frequent droughts.

Plant populations are reduced when gasoline-powered leaf blowers harm beneficial insects. Research has shown that, starting at pollution levels below clean air limits, wild and managed insect pollinator counts were up to 70% lower and their flower visits declined by as much as 90%. These reductions occurred in various pollinator groups, including bees, flies, moths, and butterflies.

According to the Xerces Society, air pollution exposure can weaken bees' immune systems and make breathing more difficult by damaging their circulatory systems. Polluted air can disorient pollinators and cause memory issues, thereby lengthening the time for pollinators to learn to smell and find specific

Testimony: HB701 Position: SUPPORT Page 2

plants. PM2.5 sticking to bees can make flight and other movements more difficult. Pollutants can mask the pheromones for mating or alerts to threats. To summarize, fewer and less healthy pollinators will hurt plant populations in particular and ecosystems in general.

Birds are also important for maintaining a healthy native plant population because they eat fruits and spread seeds far and wide. Animal behavior changes with noise pollution. Studies show that high noise levels can make it more difficult to find a mate, delay nesting, lead parents to abandon their nestlings, and interfere with listening for predators. High noise levels mean that young birds are less healthy and able to survive, as indicated by smaller chicks with reduced feather growth. Even scarier is that bird chromosomes can show changes associated with reduced lifespan.

Many birds avoid nesting in areas with frequent or chronic loud noise, thereby degrading entire ecosystems. In a New Mexico study area, there were far fewer tree seedlings after 15 years because loud noise caused a dozen key avian species to avoid the location.

Native plants, many beneficial insects, and a majority of birds are completely dependent on one another. Loud noises negatively impact all of them directly. Due to the complex interactions among them, impacts are magnified and can affect entire natural habitats. As a result, we humans also see significant hits to our health and wellbeing.

We need to help the State's native plants and animals survive. Not only do they deserve our support, but the citizens of Maryland need the services that healthy natural habitats provide. The Maryland Native Plant Society urges a favorable report on HB701.

Respectfully, Judy Fulton Vice President, Maryland Native Plant Society Jfulton5@gmail.com

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