

Testimony submitted in response to:
Zoning Text Amendment (ZTA) 25-10, Landscaping Requirements – Native Plants
Date of Public Hearing: July 22, 2025
Submitter: Jeff Schloss, Rockville, MD

For context, I've lived in Montgomery County – in Rockville – for over 30 years. I am an active Montgomery Parks and Rockville weed warrior. My back yard includes a pollinator garden. I replaced my privets with spicebush and serviceberry, and replaced over half of the grass in my front yard with perennials – mostly native plants.

I begin with a quote that touches on the themes I am raising today. This is from the book: “Nature’s Best Hope” by University of Delaware professor Doug Tallamy.

“We have purposefully imported thousands of species of plants, insects and diseases from other lands, which have decimated many native plant communities on which local food webs depend, and we have carved the natural world into tiny remnants, each too small and too isolated to support the variety of species required to sustain the ecosystems that support us.”

[Douglas W. Tallamy. 2019. Nature’s Best Hope. A New Approach to Conservation That Starts in Your Yard. Timber Press, Inc., Portland OR.]

With that as background, I write in strong support of ZTA 25-10.

Native plants are those that occur naturally within specific ecosystems. They share an evolutionary history with the other species in that area. These relationships make them crucial for the health and productivity of that ecosystem. But local ecosystems are losing increasing numbers of species. Without them, ecosystem services collapse, threatening the outcomes of those ecosystems on which our communities depend to survive, namely, clean air and water, flood control, pollination for our food, pest control, and carbon storage.

Tallamy points out in his book that gardening for appearance alone, and ignoring the ecological role of our landscaping, is like cooking only for flavor while ignoring the amount of fat, sugar and salt, and overall nutritional value.

The Zoning Text Amendment that is the subject of today’s hearing gives Montgomery County a significant opportunity to mitigate and even to repair some of the harms caused by loss of our native flora.

I will touch on 4 topics and then speak directly to some of the ZTA language.

Topic 1: Native plants as host for insects at the base of the ecosystem.

Many insects are specialists. They eat and lay their eggs on only one or a few species of plants. If those plants don't exist in the environment, in sufficient quantity and distribution to support healthy populations of insects that can resist a changing environment such as climate change and pollution, then the insects don't exist. Without the insects, we have no pollinators which means no food, and we have no birds, and on up the ecosystem.

A totally native ecosystem will achieve a level of balance. But as stated, we have a fragmented and disturbed ecosystem, so we need to maximize the effects of our actions. While essentially all native plants provide some benefits to their ecosystems, some provide more benefits than others.

Dr. Tallamy and his team at the University of Delaware have identified 14% of native plants (the keystone species) that support 90% of butterfly and moth lepidoptera species. The research of horticulturist Jarrod Fowler has shown that 15% to 60% of North American native bee species are pollen specialists who only eat pollen from 40% of native plants. Information on these keystone species has been sorted by zipcode. For example, for 20850, goldenrod, sunflowers, flax and wild indigo are the native flowering plants that support the largest number of insect species. For shrubs, its serviceberry, sugarberry and possumhaw (a type of holly). And for trees, they are oak, native cherry, willow, hickory and pine.

I request that when this ZTA is adopted, references to information on keystone species should be made readily available to planners.

[Top Keystone Plant Genera in Eastern Temperate Forests – Ecoregion 8.
<https://www.nwf.org/-/media/Documents/PDFs/Garden-for-Wildlife/Keystone-Plants/NWF-GFW-keystone-plant-list-ecoregion-8-eastern-temperate-forests.pdf>]

[Native Plant Finder by Zipcode: <https://nativeplantfinder.nwf.org/>]

Topic 2: Cultivars

A cultivar is a plant selected for a certain trait, such as flower color, foliage color, fruit color, shape, size, pest resistance, growth habit, disease resistance, longer bloom times, or stronger stems. Sometimes the term 'nativars' is used to refer to cultivars derived from native plant.

Assuming that part of what the Council wishes to accomplish by requiring substantial use of native plants, is to provide plants on which native insects can feed to restore ecosystems, then it is important to consider whether cultivars will actually accomplish that goal. Dr. Tallamy's laboratory published a study that showed that many of the characteristics for which plant cultivars are developed do not interfere with either the variety or number of insect herbivores that will feed on that plant. However, when a cultivar is selected for a change in leaf color, this consistently reduced insect herbivory – both the number of species and the abundance of those

insects feeding on the plant. The results from this lab were consistent with those published by other independent scientists.

I request that the Council consider whether the requirement to use native plants refers to the form of the plants that occurs in nature, or if it is acceptable to use cultivars. If the latter, then I request that *cultivars that alter leaf color should not be allowed*. The language of the ZTA should reflect these considerations.

[EC Baisden, DW Tallamy, DL Narango and E Boyle. 2018. HortTechnology 28(5).
Do Cultivars of Native Plants Support Insect Herbivores?
DOI: [10.21273/HORTTECH03957-18](https://doi.org/10.21273/HORTTECH03957-18)]

Topic 3: Availability

This topic of cultivars raises the issue of whether one can purchase truly native plants. I can state unequivocally that the answer is yes, there are numerous commercial sources of true native plants. In addition, there are numerous plant sales throughout the year and throughout the county that make native plants available for reasonable prices, suggesting that such plants can be sourced. There are also commercial sources of cultivars. A requirement that native plants be used on developing property will increase the motivation to sell this material. I also note that this will likely have the secondary effect of making native plant material more readily available for individual homeowners whose property does not fall under the zoning amendment, to obtain native plants for their gardens.

Topic 4: Corridors

This is related to a concept known as Homegrown National Parks.

Montgomery County has invested over the decades in an extensive parks system that provides considerable habitat for insects, birds, small mammals, etc. But these habitats are fragmented and sometimes too far apart for their own local populations to move from one park to another and thus provide the biological flexibility to survive changes in temperature, moisture level, baking by the sun, and so forth. By providing additional habitat between the parks, we will be providing corridors for these insect populations to interbreed.

I haven't had a chance to study this in great detail, but I believe that the following is true. Many of our parks run along watersheds, so in that dimension they're fairly continuous, but the distances between, for example, the Muddy Branch and Watts Branch and Cabin John parks or between the Rock Creek and Northwest Branch parks, is 3-5 miles. And the land between these watersheds is largely developed with roads and buildings. If we have native plants located in many developments within the county, these little islands will form corridors between the parks, essentially making much of Montgomery County into a single, larger habitat, thus expanding the ecosystems available for species survival.

I suggest that this concept of providing corridors adds strong motivation/justification to passing the ZTA.

[Homegrown National Parks: <https://homegrownnationalpark.org/about-us/>]

The following comments are directed to the specific language of the Zoning Text Amendment.

- It is not clear I me, though I admit I'm not used to reading zoning ordinances, what is meant by "space must contain at least 50% native species." Is this by number of plants? By area planted? Does it apply equally to perennials, shrubs and trees – 50% of all perennials, 50% of all shrubs, 50% of all trees? **I request that this language be made considerably more specific to give appropriate guidance for those submitting, as well as those evaluating development plans.**
- Our native plants, and even non-native plants in our gardens, are being displaced by non-native invasive plants. I see, and try to mitigate this destruction, several times a week when I work as a weed warrior in county and city parks, and in my own yard. We simply must stop planting more non-native invasive plants!! I am concerned that, in the Zoning Text Amendment as currently written, the single sentence at the end of the paragraph about invasive plants seems lost. Might it therefore also get lost in submission and evaluation of applications? While I appreciate simple, straightforward language, **I request that the ZTA language give stronger, more prominent emphasis to the prohibition against the use of invasive plants.**
- I commend the choice of definition for native plants: "...Mid-Atlantic Region. The Mid-Atlantic Region is Maryland, Virginia, Delaware, New Jersey, New York, Pennsylvania, North Carolina, West Virginia, and the District of Columbia."
- I commend the choice of definition for invasive plants: "Species included on the Maryland Invasive Species Council's list of invasive aquatic or terrestrial plants must not be used for landscaping."