# A Publication of the Maryland Native Plant Society Volume 11, Issue 1



### .Marilandica

A Publication of the Maryland Native Plant Society



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### Our Mission

Promote awareness, appreciation and conservation of Maryland's native plants and their habitats. We pursue our mission through education, research, advocacy, and service activities.

### Letter from the Editor

Dear Members,

Things could be worse. We can go outside and enjoy our beautiful mid-Atlantic spring, which is unfolding reliably even in these uncertain times (uncertain for humans, that is). Although our spring field trips and programs are canceled, MNPS is fortunate as an organization in that our income is from dues and donations rather than program fees. We will resume our—always free—field trips and evening programs as soon as we can do so safely.

In the meantime, I was reminiscing recently about a road trip through New England last fall, which included a visit to the Harvard Museum of Natural History and its stunning collection of glass models of plants. Given the lighting and the angles of the cases, I had a hard time getting good photos. But still. Can you believe those models are made of glass? They were used as teaching aids in Harvard botany classes. The models were created from 1887 through 1936, first by German glass artisan, Leopold Blaschka and then by his son Rudolf Blaschka.

During the hours we spent with the glass plants, I thought about the importance and pleasures of direct detailed observation. Nineteenth century botany students had botanical illustrations to study. But as Professor Goodale, who commissioned the first glass models recognized, there is no substitute for a real three-dimensional thing. Talking of details, this year is the Year of the Grasses for MNPS. Please gather your hand lenses, study up on grass flower structure, and start identifying grasses. The ones featured by Kerrie Kyde in this issue would be a good place to start.

~ Kirsten Johnson





Displays at the Ware Collection of Blaschka Glass Models of Plants. Harvard Museum of Natural History.

### Welcome New Board Member, Lauren Hubbard



We're delighted to welcome Lauren Hubbard to the MNPS Board of Directors. Lauren is the owner of Native By Design, LLC. With a particular interest in the preservation of genetic diversity in native plant populations, Lauren has served on the founding board of the Long Island Native Plant Initiative and has launched a project called Butterfly Bandwagon to promote the use of native plants in home landscaping. Lauren is a certified Chesapeake Bay Landscape Professional, Weed Warrior, and Master Gardener. She has worked with Howard Ecoworks, Muddy Branch Alliance and Urban Ecosystem Restorations providing program support, community outreach, and grant writing and management services that support ecological restoration and stewardship.

Front cover: *Dichanthelium clandestinum*, Deertongue. Photo by Robert Warren Graphic design of Marilandica is by Marjie Paul, PaulDesignWorks.com

### Wildflower in Focus – Deertongue

Dichanthelium clandestinum (L.) Gould Deertongue Grass Family, Poaceae



eertongue is common throughout Maryland and the eastern United States, perhaps so common that we rarely stop to take a look. Bob Warren's photo (on the cover) shows why a close look pays off. Notice the red color of the flower parts. Because of its wide leaves, deertongue looks quite different from many

other grasses. But be sure you don't confuse it with another wide-leaved grass, the invasive, nonnative wavyleaf basket grass (*Oplismenus undulatifolius*). The leaves of deertongue are not wavy.

Like other members of its genus, deertongue blooms twice a year, in spring and fall; hence the name Dichanthelium, which comes from the Greek "dich" for "two" and "anthelium" for "flowering." The cover photo was taken in mid-June and therefore shows vernal flowers. Those flowers are wind pollinated. But the autumnal flowers are different. They can be found hidden in the sheaths of secondary panicles that grow during the summer. They are cleistogamous (kly-stog-a-mus), meaning they don't open, and each individual flower is self-pollinating. In this way, deertongue "covers all bases" reproductively each year. Even when the population density is low, it still produces seed by self-pollination. But when conditions are favorable, it can benefit from the adaptive advantages of cross-pollination.



Deertongue in December. Photo: Kirsten Johnson



Deertongue clone formed by rhizomes. Photo: Ashley Bradford

One study found that cleistogamous deertongue flowers produced much more seed than chasmogamous (kaz-mog-a-mus) flowers, and their seeds had a higher rate of germination (Bell and Quinn 1985).

Deertongue also employs a third reproductive strategy, one that is extremely common among plants. Of course, I'm talking about vegetative reproduction. Clones of deertongue often form from underground rhizomes, so that even a good-sized patch may have been formed from just one plant. Because of its ability to thrive and reproduce successfully in a variety of habitats and soils—even infertile acidic soils—and in both sun and shade, deertongue is used for reclamation projects such as mining sites.

You can observe deertongue throughout the year. After the summer and autumn growths die back, they are replaced by a low over-wintering rosette of basal leaves.

Kirsten Johnson

### Reference

Bell, Timothy J. and James A. Quinn, Relative Importance of Chasmogamously and Cleistogamously Derived Seeds of *Dichanthelium clandestinum* (L.) Gould. Botanical Gazette 1985, 146(2): 252-258.

## A View of Changing Plant Communities through Plant Surveys ~ MNPS Grant Project ~

It's not often that we have an opportunity to examine the comprehensive evolution of plant communities over two decades. In 2018, Adkins Arboretum was fortunate to receive a Maryland Native Plant Society grant to do just that.

Adkins Arboretum is a 400-acre native plant preserve and garden on Maryland's Eastern Shore. It is home to a variety of coastal plain plant communities and habitats including meadow, early successional deciduous forest, loblolly pine plantations, deciduous mesic slope forests, deciduous floodplain forests, riverine marsh, and mixed coniferous deciduous upland forests. Through those different habitats, Adkins Arboretum strives to serve as a model for land management to engage all people in conservation, appreciation, and enjoyment of the Chesapeake region's native landscapes.

In 1999, botanists Janet Ebert and Jack Holt conducted an extensive plant survey on the grounds, identifying 586 plant species. Almost twenty years later, the Arboretum is grateful to have had the help of the Maryland Native Plant Society to fund a plant survey of the grounds by naturalist Jim Brighton and botanist Wayne Longbottom. Adkins Arboretum's Science Advisor Sylvan Kaufman oversaw the project and ultimately compared the surveys, hoping to gain a picture of how the plant communities have shifted over the years. In this 2018 survey, Brighton and Longbottom identified 426 plant species, including 14 rare or unusual species that had

Viburnum rafinesqueanum, downy arrowwood, at the Arboretum.

Photo: K Thornton

previously not been known to grow on the property. One species, *Viburnum rafinesqueanum* (downy arrowwood), a member of Adoxaceae (Moschatel Family) along with elderberries and other Viburnum species, is found in the understory of slope forests and floodplains at the Arboretum. It has also been a focus of a native plant propagation initiative. Led by consulting horticulturist Leslie Cario, the propagation effort identifies native plants of unique value in the horticultural trade and seeks to sustainably collect local ecotype seed and propagate them. Plant surveyors and Arboretum staff were also thrilled with the cataloging of other species including *Platanthera flava* (palegreen orchid, S2S3 state rare), *Goodyera pubescens* (downy rattlesnake plantain), *Galearis spectabilis* (showy orchid), *Passiflora lutea* (yellow passionflower), *Endodeca serpentaria* (Virginia snakeroot), *Smilax pulverulenta* (downy carrionflower), and *Arisaema triphyllum* ssp. *pusillum* (small Jack-in-the-pulpit).

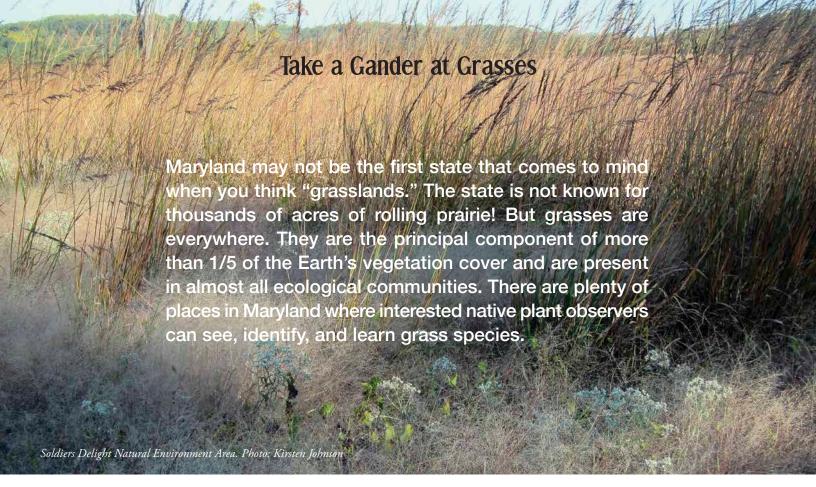
With the exciting news comes the sobering news as well: eleven species of invasive plants were identified as new to the grounds since the last survey. Nonnative invasives such as *Alliaria petiolata* (garlic mustard), *Microstegium vimineum* (Japanese stiltgrass), *Oplismenus undulatifolius* (wavyleaf basketgrass), and *Persicaria perfoliata* (Asiatic tearthumb) have been introduced by pedestrian, animal, and vehicular traffic along trails and paths. Invasive plants tend to produce prolific seed that travels easily and germinates extremely well in disturbed sites. While most invasive species stick to the edges, some of the most concerning to us at Adkins are those species that take up residence in the shaded forest. Invasives like wavyleaf basketgrass are not fazed by the lack of sunlight on the forest floor and can quickly outcompete native plants, thus changing the forest floor environment.

The changes in the species at Adkins Arboretum speak to several ecological phenomena. Plant communities are continually evolving through ecological succession. As farmland turns to meadow, meadow to young and then old forest, small clearings open up in the woods. The changing habitat conditions alter the mix of plants that can thrive in any given location. The Arboretum maintains some through burning, mowing, trimming, targeted goat grazing, etc., while other areas are left to natural succession. Natural events, such as flooding and climate patterns, could be the cause of the lack of certain species. For example, some fragile,

ephemeral plants that grow along Blockston Branch are particularly susceptible to washouts and changing stream beds. Invasive species and pressure from mammals (grazers and human visitors) also have a hand to play. Invasive species are an ever-increasing problem. Able to outcompete native plants, invasive plants have fewer predators, support less wildlife, and spread prolifically, especially in disturbed areas. Arboretum staff and volunteers continue the ongoing effort to assess, understand, and control invasive species.

This plant survey has helped to inform how we can steward the land and speak for the plants over the next twenty years and beyond. Information from this plant survey is available through the Maryland Plant Atlas, the Maryland Biodiversity Project, and Adkins Arboretum's Living Collections Database.

~ Kathy Thornton, Land Steward for Adkins Arboretum



Grasses are easier to identify when they are flowering, when all the tiny parts that make up a grass inflorescence (see drawing on page 6) are present and close to maturity. Depending on when you go "grassing," you may see cool season or warm season grasses. Cool season grasses start their growth early in the spring and grow until droughty conditions and high temperatures shift them into dormancy. They flower in spring or early summer. Some, such as the common lawn grass genus *Festuca*, even pause growth during summer's heat and resume in the fall. Cool season grasses generally use the C3 pathway to fix carbon. If you're out botanizing in the summer or fall, you'll see mostly warm season grasses. These grasses start growing when it starts to get hot, grow bountifully through the summer, flower in early fall and die back when average temperatures drop. Most warm season grasses are C4 photosynthesizers. Warm season grasses make good wildlife habitat, and include the genera *Andropogon* and *Panicum*.

Many of the Department of Natural Resources' Wildlife Management Areas (WMAs) include warm season meadows deliberately planted to provide wildlife habitat. If you live near a WMA, check the online maps to see whether it has meadow you can visit. Choose a time outside of hunting periods to visit.

### Here are some other great places to see and learn grasses.

### **Soldiers Delight Natural Environmental Area** (Owings Mills, Baltimore County)

Perhaps the best known of Maryland's grasslands, Soldiers Delight is a 1900-acre natural area underlain by serpentinite, a shallow, high-magnesium rock. The soil here has very few plant nutrients, and so creates a very demanding habitat for plants. Those that grow here, including at least 22 rare species and many grasses, are adapted to the high levels of magnesium. You'll see both big and little bluestem, Indian grass, as well as brome and panic grasses here.

Parkers Creek Natural Area (near Prince Frederick, Calvert County) Tucked inside Parkers Creek WMA, the largest contiguous forest tract in Calvert County, is Parkers Creek Natural Area. Named an Important Bird Area by the National Audubon Society due to the many forest-interior-dwelling species who call this forest home, the WMA contains miles of hiking trails offering broad views of the creek and its marshes. Parkers Creek empties into the western side of Chesapeake Bay, and so supports both fresh and saltwater marsh habitats. The best way to see the grasses – particularly *Spartina alterniflora* as well as, sadly, invasive *Phragmites* – is from a canoe, on a trip sponsored by the American Chestnut Land Trust, which manages the Natural Area.

### Selinger Marsh (near Flintstone, Allegany County)

In an oxbow of Town Creek, you will find this treasure of a Nature Conservancy preserve. It is unusual in that it is a wetland fed by springs in this very dry county. There are lots of sedge species here, but also grasses, as well as rare gentians, cardinal flower, blue lobelia and white turtlehead, the host plant of the Maryland state butterfly, the Baltimore checkerspot.

### Adkins Arboretum Meadows (Ridgely, Caroline County)

Adkins Arboretum is the only public arboretum that focuses on plants native to the Mid-Atlantic coastal plain. The 400-acre arboretum adjacent to Tuckahoe State Park is home to over 400 species of native plants. Two large meadow areas showcase grass species. See article page 3.

### Audrey Carroll Audubon Sanctuary (Mt. Airy, Carroll County)

The Audubon Society of Central Maryland owns and manages this 129-acre sanctuary of meadows, woods and wetlands. Free and open to the public, the sanctuary has active management activities to support avian species and other wildlife. No pets allowed.

~Kerrie Kyde

### **Common Maryland Grasses**

While grasses have a reputation for being hard to key out without a microscope, you can easily identify some commonly occurring grass species by being familiar with grass flower structure and by "gestalt" — knowing their general quality or characteristics.

The formal floras of Maryland, Virginia and Pennsylvania all include grasses. They are best used at your desk, while you're examining grasses under the microscope! Some good easy-to-carry field guides include: Agnes Chase's First Book of Grasses, by Lynn Clark and Richard Pohl; Grasses: An Identification Guide, by Lauren Brown; How to Identify Grasses and Grasslike Plants, by H.D. Harrington; and the newest addition to our grass libraries, Field Guide to Grasses of the Mid-Atlantic, by Sarah Chamberlain.

a little "box", dorsally compressed (flattened from the outside towards the rachis); after the spikelets fall off the plant (disarticulate) below the glume, the rachis will have a sinuous, somewhat zigzag appearance. Open woods, dunes, shores, brackish marshes.

Andropogon virginicus, Broomsedge bluestem. Inflorescence is made up of 2–4 rames (unbranched, with two single-floret spikelets attached at each node, one spikelet sessile, the other with a pedicel). 18" to 3' tall, leaf sheaths pilose (hairy) along the margins, rames partially hidden inside bronze-colored spathes (leafy bracts). Dorsally compressed (squashed towards the rachis) spikelets have a single floret and are paired at nodes. Sessile spikelet has a straight awn up to 1" long, much longer than the floret itself; pedicellate spikelet has







Here are some of the common species you will encounter in Maryland's grasslands.

Panicum virgatum, Switchgrass. Large, bunched grass 3 to 6' tall with numerous scaly creeping rhizomes. Inflorescence is a large, diffuse panicle. Spikelets contain two florets but the lower one is reduced to just a lemma, giving the appearance of three glumes: first glume (lowest bract) is pointed, ¾ as long as the spikelet and covers the base of the second glume, then the sterile lemma; fertile (upper) lemma is rigid, shining and has edges that roll around to cover the edges of the shiny fertile palea, so the that grass flower is contained in

long silky hairs with the floret missing. Foliage somewhat hairy, often reddish. The florets inside the glumes are very hard, with both lemma and palea being membranous. Plants have an overall feathery look to them, and are noticeable in old fields in the fall, when they turn a rich reddish-gold. Open woods and dry fields.

*Elymus virginicus*, Virginia wild rye. Inflorescence is a dense spike about 3–6″ long, with two parallel spikelets at each node, often partly tucked into the bract below it. The rachis is continuous, so when the spikelets fall away, a thin zigzag rachis is left. Both the lower and upper glumes, and the lemmas, have awns, much longer than the

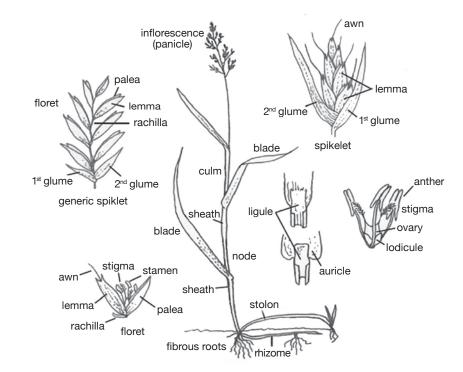
florets. The glumes are hard and pinched in at the base, so they are wider in the middle than at the bottom. They pull away from the florets and are bowed out at the base, and space is noticeable between the glumes and the base of the spikelet. Canada rye is similar but has drooping or nodding and longer spikes, with spreading rather than upright awns. Meadows, moist woods.

Elymus hystrix, Bottlebrush. Inflorescences similar in overall appearance to *E. virginicus*, but with a different flower structure. Spikes 2–7" long, with spikelets mostly in pairs, and as much as ½" separating the spikelets along the flattened rachis, so the spike is a very loose head. Glumes are very short bristles; the lower one may not be present at all. Lemmas have very long straight, often rough awns, as much as four times as long as the florets, and at maturity they spread out horizontally, giving the plant its common name. Hystrix is the Greek name for porcupine, alluding to the long awns. Forests, roadsides, C&O Canal.

Chasmanthium latifolium, Northern sea or river oats. Colony-forming grass about 3' tall; large open, drooping panicle, 8-9" long, with branches bearing a few, long-pedicelled large, very flattened (compressed laterally) spikelets. Spikelets with 8-12 florets, green maturing to golden tawny, Glumes and the empty first lemma about 2/3 as long as the elongated oval fertile lemmas. Fertile lemmas are pointed at the tip but do not have awns, with strong keels where they fold, the keels with soft ascending hairs; palea shorter than the lemma. These flowers are cleistogamous; they have only one stamen and self-fertilize inside the closed flowers. Forested floodplains, riverbanks, Olmstead Island.

Spartina alterniflora, Smooth or saltmarsh cordgrass. Inflorescense is a long tight panicle, as much as 1' long, with the spikes (2-6" long) appressed to the axis and with the spikelets all on one side of the rachis. The 1/2" long spikelets overlap each other like shingles, and are laterally flattened. Each spikelet comprises two glumes and one awnless floret. The first (lower) glume is pointed, narrow and shorter than the lemma of the floret. The second glume is wider and longer than the lemma. The floret can be smooth or slightly hairy. The naked tip of the rachis protrudes above the spikelets. Very large creamy anthers are noticeable during bloom. Saltmarshes on the Eastern Shore.

~Kerrie Kyde



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Native (left) and invasive (right) Phragmites australis in the Choptank River, MD

Phragmites australis, also known as the common reed, is one of the most widely distributed plant species in the world and can be found in wetlands on every continent. North America has several native types of *Phragmites* and it has also become the home of an invasive Eurasian type that has expanded aggressively in the United States over the last century. The spread of this invasive plant can affect the structure and function of wetlands, reduce their plant and animal diversity and change their hydrology.

*Phragmites* is predominantly a freshwater marsh species and while the native is restricted to low salinity habitats, the invasive is more tolerant to salt-stress and can colonize salt marshes. Previous studies

proposed that one possible reason why the invasive is more tolerant to salinity could be its potential associations with beneficial microbes (Soares, 2016). Therefore, my study set out to look for beneficial fungi to see if they have a role in salt tolerance of invasive *Phragmites* and determine whether these fungi could also benefit the native type.

I focused on a group of fungi called dark septate endophytes (DSE) that live inside of plant roots (Figure 1). DSE have been found to associate with over 6,000 different plant species, and can improve plant tolerance to several types of stress including drought and heavy metal contamination (Li et al. 2018; Wang et al. 2016).

Some of my preliminary studies found that both native and invasive *Phragmites* are colonized by DSE, and the invasive had more DSE in its roots at higher salinities. Based on this observation, I requested funding from the MNPS to evaluate whether DSE could promote

salt tolerance in native and invasive *Phragmites*. I pursued this research question under the guidance of my PhD advisors Dr. Stephanie Yarwood and Dr. Andrew Baldwin.

The first step was to isolate DSE from roots of *Phragmites*, grow the fungi in the laboratory and test their tolerance to salt stress. I then selected a subset of the most salt-tolerant DSE, inoculated native and invasive *Phragmites* seeds with those fungi, and assessed the seedling survival in a relatively high-salinity growth media in the lab (Figure 2). I found that one specific DSE (that I named GG2D) significantly improved the survival of both native and invasive *Phragmites*, (Table 1) so I decided to look at the effects of GG2D more closely in a

greenhouse experiment.

For the greenhouse experiment I focused on invasive Phragmites and evaluated its response to inoculation with the selected DSE (GG2D) under 3 salinities: low, intermediate and high. The results showed that DSE inoculation had beneficial effects at the intermediate salinity level and the plants inoculated greater had aboveground biomass and were taller than the non-inoculated control plants. Aboveground plant competition can be key in determining marsh plant community structure, so interactions with DSE that promote aboveground growth could potentially result in a competitive advantage.

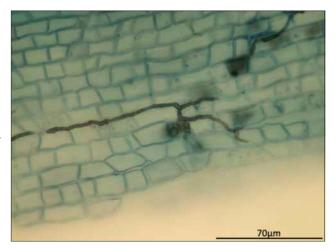


Figure 1: Microscopic image of Phragmites root cell (stained light blue) colonized by a dark septate endophyte (brown).

Overall, the results from these studies suggest that DSE can promote salt tolerance of native and invasive *Phragmites*. They show that these kinds of plant-fungal interactions are worth considering when study-

	Invasive Phragmites	Native Phragmites
No DSE	50% (2/4)	13% (1/8)
DSE-GG2D	100% (4/4)	86% (6/7)

Table 1: Percent surviving seedlings in non-inoculated and DSE-inoculated treatments for native and invasive Phragmites. Numbers in parenthesis indicate the number of surviving seedlings over the total seedlings grown under salinity stress.

ing the mechanisms behind invasive species' success. Furthermore, future studies could evaluate the role of fungal-mediated salt tolerance in the restoration of native plants given the threat posed by sea-level rise that could limit native plant distribution in marshes across the United States

Martina Gonzalez Mateu, Graduate Research Assistant Department of Environmental Science & Technology University of Maryland-College Park

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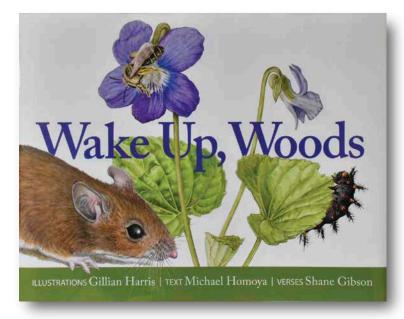
Li X, He X, Hou L, Ren Y, Wang S, Su F. Dark septate endophytes isolated from a xerophyte plant promote the growth of *Ammopiptan-thus mongolicus* under drought condition. Sci Rep Scientific Reports. 2018;8(1)

Wang J, Li T, Liu G, Smith JM, Zhao Z. Unraveling the role of dark septate endophyte (DSE) colonizing maize (*Zea mays*) under cadmium stress: physiological, cytological and genic aspects. Sci Rep Scientific Reports. 2016;6(1)



Figure 2: Example of laboratory-grown Phragmites seedling. Sterile boxes with artificial growth media were used to assess the effect of fungal endophytes (DSE) on plant survival to salt-stress.

The MNPS research grant program, started in 2013, relies for funds on member contributions and dues. Our website allows donors to specify that their contributions will be used for research. The members of the Research Grant Committee are Vanessa Beauchamp, PhD and Brett McMillan, PhD (co-chairs); Bill Hilgartner, PhD; Kerrie Kyde, MS; Marla McIntosh, PhD; and Kirsten Johnson.



Wake Up, Woods is available from the usual sources of books and can also be ordered from the publisher.

**Wake Up, Woods,** by Michael A. Homoya and Shane Gibson Illustrated by Gillian Harris ISBN-13: 9781947141469
Published by Rubber Ducky Press, October 1, 2019

Published through the efforts of the Indiana Native Plant Society, Wake Up, Woods offers children (and adults) a walk in the woods observing spring wildflowers and their associated insects. The beautiful, accurate illustrations are an outstanding feature of the book. And the descriptions of the plants include fascinating details about their unique characteristics. Children as young as three would enjoy the illustrations and the verses. Readers eight or nine years old could handle the descriptive text. This book is highly recommended as a gift for the children in your life.



### Wild Ones Chesapeake

In 1977, nine people attended a natural landscaping workshop offered by Schlitz Audubon Nature Center, Milwaukee, WI and became intensely interested in a new concept of home landscaping using native plants. Among them was well-known naturalist Lorrie Otto who had been greatly influenced by Rachel Carson's writings. The group's enthusiasm blossomed into Wild Ones®, "an anti-grass, grassroots organization" that eventually grew into many chapters and a mission to educate and share information with members and community at the "plants roots" level and to promote biodiversity and environmentally sound practices.

I feel that WOC can help MNPS reach many people who are interested in gardening responsibly. The missions of the two organizations compliment each other, and MNPS materials are made available at most of the Wild Ones gatherings. MNPS field trips and programs are also promoted regularly.

I will be leading field trips specifically for WOC members so they can see and appreciate native plants in their natural habitats. Wild Ones will work to get county codes and even state laws changed to favor conservation landscaping with native plants. Plant rescues are not out







Finally, Wild Ones now has a chapter in Maryland: Wild Ones Chesapeake (WOC). I have been a member of the national organization for about eleven years and I look forward to WOC and MNPS working together to cover the spectrum of protecting our native plants and their habitats. Our gardens aren't unspoiled, natural habitats but can certainly help with increased diversity, stormwater management, and educating our neighbors about the many benefits of native plants. WOC will serve as a resource for private individuals, schools, commercial property owners, and community decision makers as they move toward ethical choices in land use.

You have probably heard of Doug Tallamy, a Professor of Entomology from the University of Delaware, who has spent the last three decades studying the relationship between native plants and insects. We are fortunate that Tallamy is a Wild Ones Lifetime Honorary Director.

of the question and we have other big plans, such as urging garden centers to carry our local ecotype native plants.

I am a Weed Warrior and know that many of the invasive plants we battle escape from homeowners' yards. Through education and example, we hope to change how people landscape. That certainly has happened in Wisconsin and other areas where Wild Ones has chapters.

WOC has events on the second Saturday of each month from 10:30 - noon. In cold months, we have informational programs indoors and as the weather warms we will have garden visits and other outings such as walks at local sanctuaries and restoration sites. You can join WOC by becoming a member at WildOnes.org and choosing the Maryland chapter. Or send us an email at info@wildoneschesapeake. org to be notified of our activities.

Marney Bruce, Co-president of WOC
Past president of MNPS

# Congratulations and Thanks to New Directors Emeritus, Rod Simmons and Marc Imlay

Rod and Marc each served many years on MNPS Board of Directors. Rod was President in the early years. Also, he has been and we hope will continue to be, a popular field trip leader and speaker, as well as an expert resource on regional flora and ecosystems. Marc served as Vice President for several years, and as Habitat Stewardship Chair, he organized invasive removal outings and served as a resource and disseminator of information about invasive nonnative plants. After each of them let us know he was stepping down from the Board, they were unanimously elected to Emeritus status at the November Board meeting.

### **Upcoming Events**

Sadly, we've had to cancel all MNPS events this spring. Many of the evening speakers who were scheduled this spring and summer will reschedule when the time is right.

And let's hope for the conference.

MNPS Conference

# From Marshes to Meadows — Exploring Maryland's Grasslands —

Saturday August 29, 2020 Hood College

Plans for the MNPS conference are on hold for now because of the COVID-19 pandemic, but ...

### The conference will take place in some form.

Our wonderful speakers have agreed to a virtual conference. We are considering field trips throughout the state, if that is possible given the social distancing guidelines that may be in effect at the time. We will notify our members and contacts by email as soon as plans are in place. Stay tuned!

### **Speakers:**

**Dwayne Estes**, Executive Director Southeastern Grasslands Initiative

**Jorge Montero**, Stewardship Program Specialist: Natural Resources Anacostia Watershed Society

**Bill Hilgartner**, Environmental Restoration Lake Roland Nature Council

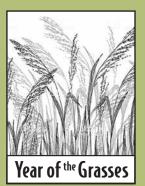
Marney Bruce and Jil Swearingen, Co-chairs

As of now, parks in Maryland remain open, which means hiking and botanizing can continue unabated, albeit solo or with one's household members. The Department of Natural Resources website has detailed guidance on maintaining outdoor activities during the pandemic.

This would be a good time to get familiar with iNaturalist and report your sightings. Also, it's always a good time to scout out locations for future MNPS group field trips.



A Publication of the Maryland Native Plant Society



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# Safe Botany!

### Maryland Biodiversity Project Partners with iNaturalist

Good news! Maryland Biodiversity Project (MBP) is adding support for sharing observations via iNaturalist. All Maryland records submitted to iNaturalist are now automatically added to the MBP "project" on iNaturalist and queued for possible addition to the MBP and Maryland Plant Atlas database. The volunteer editors will select photos based on accuracy of identification and photo quality. This means that, for Maryland, the benefits of iNaturalist's ease of upload is combined with the vetting and editorial process that makes MBP such a reliable source. MBP will continue to support Flickr-based submissions indefinitely, so for those accustomed to that method of contributing, no change is required. Please note that MBP will not publicly display exact locations for rare and vulnerable species for records that come in through iNaturalist, the same as records from other sources.

