Marilandica

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.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 President

Dear Members,

This year, 2019, is my last year as MNPS President. My first year was 2009, President Obama's first year in office and a time of optimism for many of us.

My years as President have been extremely rewarding for me personally and I've been gratified to see the organization thrive and grow during the last ten years. While giving due credit to the quality of our various offerings, I think in that period there has been a general awakening among many members of the public about the importance of conserving our few remaining natural areas, and the critical role of native plant landscaping to support our declining insect and other animal populations. The world is changing, and we can make a difference to how it changes.

A few MNPS statistics:

Membership: Membership was about 600 in 2009, now it's about 1200.

Field trips (other than at the conference): We sponsored 25 field trips in 2009, and we'll end 2019 at about 55.

Annual Conference: In 2009 there were 80 registrants, this year the conference was full at 117 registrants.

Programs: Records are spotty, but it's surely true that attendance at evening programs in Montgomery County has about doubled over the years and it isn't unusual for 75 or more to attend a program. Programs in Frostburg also show an increase in attendance.

With success come challenges. As an organization grows, the planning and administrative tasks have become more burdensome. We need to grapple with where we should put our efforts, given our available resources, a problem unquestionably faced not only by MNPS, but by other native plant societies and volunteer organizations.

I'll continue as a Board member, helping out where I can, and I'll keep on editing Marilandica. See you in 2020.

~ Kirsten Johnson, President

SPOTTED LANTERNFLY QUARANTINE



The Maryland Department of Agriculture has issued a quarantine for Harford and Cecil Counties because of sightings of spotted lanternfly (*Lycorna delicatula*), an invasive Asian insect that poses a grave threat to agricultural products such as grapes, apples, peaches and others. It lays its eggs preferentially on tree-of-heaven (*Ailanthus altissima*). Spotted lanternfly is spreading in Pennsylvania, where it was first discovered, as well as New Jersey and Virginia. The quarantine requires businesses and government agencies to obtain a permit before moving certain items, including landscaping, remodeling, construction and packing waste, among others. **Those of us who spend time outdoors, paying attention to**

plants and insects, can help. If you see this pest, please capture it, and report it. For details, see the Department's website.

Front cover: Aureolaria laevigata, entire-leaf yellow false foxglove. Photo: Mark Eanes

Back cover: Flowers bloom even in the dead of winter. In early January, start looking for skunk cabbage, *Symplocarpus foetidus*, blooming in wet areas. What is the meaning of that name? "Foetidus" is obvious: it's the Latin word for foul-smelling or fetid, and refers to the skunky smell of the crushed leaves. "Symplocarpus" is a Latinized word derived from two Greek words: "symploce" for "connection" and "carpos" for "fruit," thus describing the ovaries that are connected to form a compound fruit. Photo: Jared Satchell

Wildflower in Focus – Entire-leaf Yellow False Foxglove

Aureolata laevigata (Rafinesque) Rafinesque, formerly, Gerardia laevigata Rafinesque Entire-leaf Yellow False Foxglove, Appalachian Oak-leach Orobanchaceae (Broomrape Family)



n the spring issue we featured a holoparasitic plant, *Conopholis americana* (squawroot). This month, it's a hemiparasitic plant, *Aureolaria laevigata* (entire-leaf yellow false foxglove). This must be one of the longer, if not the longest, common names I've encountered, so I'll use the scientific name. One of

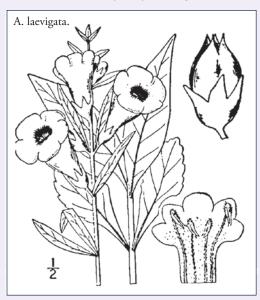
four *Aureolaria* species native to Maryland, *A. laevigata* is native to the southern Appalachian Mountains and surrounding areas. Mark Eanes's beautiful cover photo is from Mt. Nebo Wildlife Management Area in Garrett County. There are also known populations in Allegany County and in the Potomac gorge of Montgomery County.

Aureolaria species are facultative hemiparasites on oak tree roots. Hemiparasites are plants that have chlorophyll and therefore can photosynthesize, but they obtain some nutrients from a host plant. "Facultative" as opposed to "obligate" means the plant not only photosynthesizes, but it may be able to survive without parasitism. Mistletoe (*Phoradendron* spp) is an example of an obligate hemiparasite. (See "Parasitic Plants – What are they?" in the Spring issue for a description of various kinds of plant parasitism.)

If you're ID'ing a false foxglove for the first time, you might think it's in the Figwort Family (Scrophulariaceae) because of its irregular flowers and its opposite leaves and branches. You wouldn't be completely wrong. At one time, all the hemiparasites now in the Broomrape Family were assigned to the Figwort Family, while the Broomrape Family was confined to obligate holoparasites. But that isn't so today.* As Richard Olmstead, one of the researchers responsible for the reclassification, wrote, "For many years, the Orobanchaceae has been accepted somewhat reluctantly as the bastard stepchild of the Scrophulariaceae. It was no secret that they were related to the scrophs and probably derived from them, but the distinctive suite of traits associated with being a holoparasite seemed sufficient to merit their own taxonomic designation. However, recent molecular systematic studies legitimize the Orobanchaceae and reunite them with their rightful siblings, the hemiparasites" (Olmstead 2002). Molecular



October fruit of A. laevigata.



USDA-NRCS PLANTS Database/ Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. 3 vols. Charles Scribner's Sons, New York. Vol. 3: 207.

evidence has further shown that the expanded Orobanchaceae are a monophyletic group, meaning they are derived from a common ancestor. Parasitism evolved only once during the evolution of this group, but the loss of chlorophyll occurred a number of times among the descendants of that first parasitic species. All those descendants—both holo- and hemi-parasites—form the currently recognized

Orobanchaceae.

The Wildlife Heritage Service's list of Rare, Threatened and Endangered Plants of Maryland shows the state rank of *A. laevigata* as Status Uncertain (SU). What does this mean? State Botanist Chris Frye explains that in these cases, the Service has insufficient records to support the assigning of a rank, and the SU designation is the Service's way of asking for assistance from the botanizing community to locate populations and report them. So please take note! If you see any false foxgloves, be sure to identify them to species level, take some photos, note the exact location and communicate your findings to Chris Frye.

~ Kirsten Johnson

*Our old friends, Newcomb's Wildflower Guide and Brown and Brown's Herbaceous Plants of Maryland, put the false foxgloves in the Figwort Family, and Newcomb used the older genus name, Gerardia, neither of which were errors when those books were published. Despite this and many similar examples of outdated taxonomy and nomenclature, I think those books are still very useful.

References:

Bennett, J.R. and S. Matthews. 2006. Phylogeny of the parasitic plant family Orobanchaceae inferred from phytochrome A, Am. J. Bot. 93:1039-51.

Maryland Wildlife & Heritage Service 2019. Rare, Threatened and Endangered Plants of Maryland. https://dnr.maryland.gov/wildlife/ Documents/rte_Plant_List.pdf.

Olmstead, R.G., C.W. dePamphilis, A.D. Wolfe, N.D. Young, W. J. Elisens, and P.A. Reeves. 2001. Disintegration of the Scrophulariaceae. Am. J. Bot. 88:348-361.

Olmstead, R.G. 2002. Whatever Happened to the Scrophulariaceae? Fremontia 30:13-22.

Keystone Plants

Editors' note: This article appeared in the Spring 2019 issue of Notes, the publication of the Pennsylvania Native Plant Society. It is reprinted with their permission and that of Dr Tallamy.

If nearly all terrestrial birds in North America rear their young on insects (96% in fact), and if most of those insects are caterpillars or the adult moths they turn into (recent studies show that they are) then to support our breeding birds we need to use plants that serve as hosts for the most caterpillar species. But which plants are those? Fortunately, we now have an answer to this tough question. We have recently compiled a list of lepidopteran host records for every county in the U.S. ("Native Plant Finder;" National Wildlife Federation http://www.nwf.org/NativePlantFinder/). In addition to providing a valuable resource for people nationwide who are interested in raising the ecosystem viability of their property, these host records have revealed a striking pattern. Wherever one looks—be it in the north,



Native willows are keystone plants throughout North America.

south, east or west; the plains, deserts, forests, or mountains—just a few plant genera are producing most of Lepidoptera so important to food webs. We knew from our previous work in the mid-Atlantic states that not only were native plants far superior to introduced species in their ability to generate caterpillars, but native plants themselves varied by orders of magnitude in their production of caterpillars. Some genera like oaks, cherries and willows host hundreds of caterpillar species, while for others like yellowwood and crowberry, there are no records at all of caterpillars using them. This is interesting itself, but when we assembled data for each county in the country, we saw that this pattern held everywhere and we could quantify it: wherever we looked, about 5% of the local plant genera hosted 70-75% of the local Lepidoptera species!

I like to call such hyper-productive plants "keystone genera" because they so closely fit the meaning of Robert Paine's classical terminology. While studying predator /prey interactions in west coast tidal pools, Paine found what he called keystone species to have a disproportion-



Evening primrose, Oenothera biennis, hosts 19 species of caterpillars in eastern Pennsylvania.

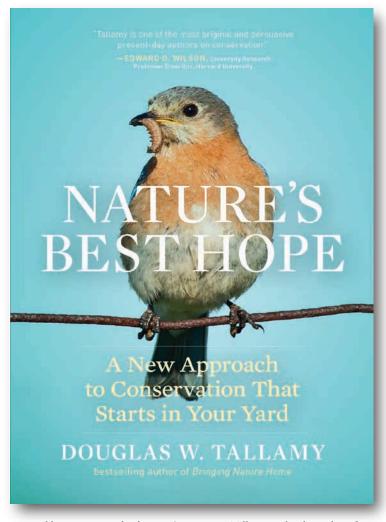


Black cherry, Prunus serotina, is one of the best plants in Pennsylvania for supporting caterpillars.

ately large effect on the abundance and diversity of other species in an ecosystem. He likened such species to keystones, because like the center stones in ancient Roman arches, they enabled other species in the ecosystem to coexist. Remove the keystone and the arch falls down. Keystone genera function in the same way: as in Roman arches, keystone genera are unique components of local food webs that are essential to the participation of most other taxa in those food webs. Without keystone genera, the food web all but falls apart. And without some minimal number of keystone genera in a landscape, the diversity and abundance of the many insectivores—the birds and bats, for example, that depend on caterpillars and moths for food—are predicted to suffer.

The implications of this phenomenon for homeowners, land managers, restoration ecologists, and conservation biologists are enormous: to create the most productive landscapes possible—that is, landscapes in which the most plant matter is turned into edible insects—we have to include species that belong to keystone genera. This is a nuanced but extremely important extension of our knowledge about how native plants contribute to ecosystem function. Before discovering the existence of keystone genera, we over-estimated the degree to which most native plants contribute to food webs and assumed that if a plant was native it contributed a lot. We now know that a few native genera contribute so much more than most others that we cannot ignore them if we are to produce complex, stable food webs. A landscape without keystone genera will support 70-75% fewer caterpillar species than a landscape with keystone genera, even though it may contain 95% of the native plant genera in the area. This runs contrary to the age-old maxim that the more diverse a planting is, the more productive it will be. On one level this is certainly true; a diverse plant community will support more caterpillar species than a monoculture. But now we know that to be richly productive, plant communities must contain at least some keystone plants.

> - Douglas Tallamy Professor of Entomology and Wildlife Ecology University of Delaware



Publication expected February 4, 2020. Dr. Tallamy is also the author of Bringing Nature Home, How You Can Sustain Wildlife with Native Plants, and co-author of Rick Darke's The Living Landscape, Designing for Beauty and Biodiversity in the Home Garden.



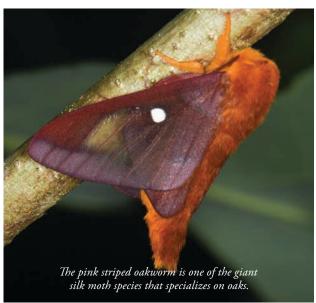
White oaks support more species of caterpillars in Pennsylvania than any other tree.

Examples of Keystone Genera

Keystone genera have a disproportionately large effect on the abundance and diversity of other species in the ecosystem.

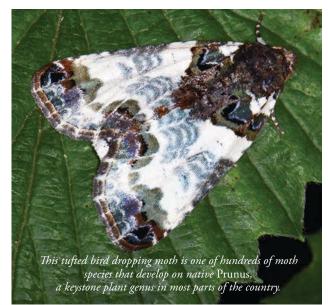












A Meadow Grassland in Sligo Creek's Powerline Corridor

On a late winter day in 2008, along with two other members of the Friends of Sligo Creek (FOSC), I headed through Sligo Creek Park toward the powerline corridor. With us was Pepco's new forester. Our goal was to reduce the mowing of the right-of-way near the creek from six times a year to once, so that a meadow habitat could be established. But we were pessimistic. Three years earlier, the forester's predecessor had rejected the same request from our organization, claiming it would violate the state's noxious weed laws and provoke complaints from homeowners along the powerline. The new forester seemed impatient as we escorted him toward the powerline. But after briefly viewing it in its lawn-like condition, and to our great surprise, he promptly agreed to mow only in October (his contractor's last

mow of the season). A meadow management project was thus launched in the Pepco powerline along a quarter-mile stretch extending northeast from Sligo Creek in Hyattsville.

With Pepco's agreement in place, we prepared the neighbors living alongside the powerline by distributing a flyer illustrated with photos of butterflies and wildflowers. It explained that the meadow wouldn't increase the risk of deer ticks, since deer generally prefer edges and woodlands to open areas. We had an important ally in the Wildlife Habitat Council, a national organization that encourages better habitat management by large landowners. The Council certifies Pepco for this project every two years.

In the ten years since mowing was reduced, FOSC volunteers have documented sixty native wildflowers and shrubs, ten native grasses, and (with the help of Sam Droege's bee lab at the US

Geological Survey) eighty-nine species of native bees. During one three-year period, Pepco didn't mow at all, and the meadow became a shrubby meadow-grassland, attracting nesting pairs of American kestrels and indigo buntings and a visit by a ruffed grouse. More recently, wild turkeys have been reported. A footpath through the meadow provides an escape from the surrounding suburbs. I worried that dog owners would resent losing the open space to play fetch with their dogs, but they've said their pets love rummaging around in the brush.

Butterfly weed, Asclepias tuberosa.

The quarter-mile length of meadow traverses an undulating topography, with several ridges separated by wet gullies, creating a variety of habitat zones. The dry ridgetops and west-facing slopes produce a blanket of azure bluets (*Houstonia caerulea*), scattered pussytoes (*Antennaria* species) and butterfly weed (*Asclepias tuberosa*), along with

a few flowering spurge (Euphorbia corollata) and Carolina cranesbill (Geranium carolinianum). The wet gullies support reliable growths of New York ironweed (Vernonia noveboracensis), deer-tongue grass (Dicanthelium clandestinum), blue-flag iris (Iris virginica), American germander (Teucrium canadense), and, in the very wettest spot, two patches of purple-stemmed aster (Symphyotrichum puniceum).

Other areas support plenty of northern dewberry vines (*Rubus flagillaris*) as well as cinquefoil (*Potentilla* species), blue toadflax (*Linaria canadensis*), Indian tobacco (*Lobelia inflata*), and Venus' looking-glass (*Triodanis perfoliata*). The summer's profusion of Indian hemp (*Apocynum cannabinum*) and common milkweed (*Asclepias*



syriaca) is followed by an explosion of goldenrods, asters, and Eupatorium species. Large areas of the meadow are covered with almost impenetrable patches of tall blackberry (Rubus pensilvanicus) and common greenbrier (Smilax rotundifolia), with some winged sumac (Rhus copallina)—all providing excellent cover for wildlife. The long north border of the meadow is packed with tall blackberry and common greenbrier, and from above can be heard many a singing eastern towhee in summer.

Of course, the powerline meadow is not a Garden of Eden. Our worst enemy is Chinese pear (*Pyrus pyrifolia*). It first appeared directly under the powerlines and towers, presumably from seed dropped by perching birds. When left alone, it forms dense stands in which almost nothing else grows. Herbicides would kill the robust blackberry stands, so annual bush-hogging keeps it in check. We have at least sixty nonnatives, including invasives such as

Japanese honeysuckle (*Lonicera japonica*), Chinese bushclover (*Lespedeza cuneata*), and the more recently arrived mile-a-minute (*Persicaria perfoliata*) and Himalayan blackberry (*Rubus bifrons*). At the same time, the annual mow seems to recreate a level playing field each year, so that any progress by the invasives is cut back in fall and the natives have an even chance against them come spring.

The powerline meadow is accessible from the 16th Place dead end near Drexel Street, or from the paved hiker-biker trail along Sligo Creek between New Hampshire Avenue and East-West Highway. For more information on FOSC and the plants of the Sligo Creek watershed, including John Parrish's 2003 plant inventory, visit http://fosc.org/Plants.htm.

~ Michael Wilpers, Natural History Committee Friends of Sligo Creek

The Spread of Beebee Tree and Its Impact at Two Sites

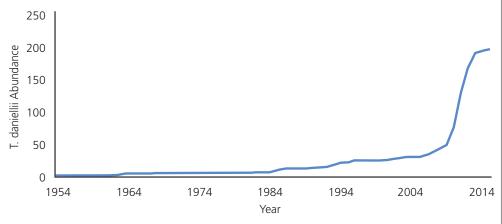
Editors' Note: Towson University graduate student, David Grow, received a research grant from MNPS in 2017.

As global connectivity continues to advance, plant species are being introduced to new areas. Plants may be introduced for various reasons including utility, aesthetics, or even by accident as seeds hitch a ride on clothing. Many of these introduced species cannot proliferate in introduced regions. However, some introduced species may 'escape' and spread in natural areas where they may displace native species and potentially have negative impacts on forest structure, soil chemistry, soil microbiota, leaf litter decomposition rates, and other ecosystem characteristics (Ashton et al. 2005; Buzhdygan et al. 2016; Camarillo et al. 2015). When non-native plants outcompete the native flora, we witness scenes like a forest floor covered in Japanese stiltgrass (Microstegium vimineum) or roadsides lined with tree-of-heaven (Ailanthus altissima). These non-native invasive monocultures are extremely difficult to remove or to successfully manage. Therefore, the best management practice is to understand a non-native species' invasive potential and control it before it negatively affects or even dominates the native ecosystem. Unfortunately, this is not a simple task. Many factors influence the invasive potential of a non-native species, including the dispersal distance, seed production, and the length of its 'lag phase'. The term 'lag phase' refers to a time period when population growth of an invasive species is minimal (Crooks and Soule 1999). During this time, environmental conditions may not be ideal for the species to rapidly reproduce, or it may take the species some time to become reproductively mature. Once these conditions are met, the lag phase is broken, and population size begins to increase exponentially. Understanding a species' lag phase helps predict the invasive potential of a species as it gives insight into how quickly a species may spread.

My thesis project at Towson University was designed to understand the invasive timeline and ecological impacts of beebee tree (Tetradium daniellii). Beebee tree is in the Citrus Family (Rutaceae) and was first introduced from Asia to North America in 1905, when it was planted in arboreta across the mid-Atlantic region for its aesthetic beauty. Beebee trees produce large white inflorescences which are particularly attractive to bee pollinators; many people have first noticed the tree by hearing the buzz of bees swarming its flowers. The trees fruit in early fall and the infructescence may disperse short distances in the wind or the fruits may be dispersed further distances by birds. Beebee tree provides a unique research opportunity because of its relatively recent naturalization in forests across the mid-Atlantic region (Maryland Department of Agriculture, 2017). My goal was to document the lag phase of beebee tree and to describe the ecological impacts the species may have across different levels of invasion intensity. I was particularly interested in investigating whether native plant



Beebee tree (Tetradium daniellii) in fruit at Mount Pleasant Woods Park Baltimore.



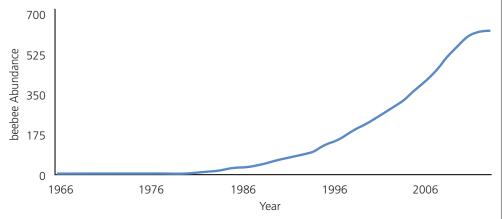


Figure 1. Timeline of Beebee invasion at Cylburn Arboretum (top) and Blandy Experimental Farm (bottom).

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communities were responding to invasions. With funding from the Maryland Native Plant Society, I was able to pursue these questions under the guidance of Dr. Vanessa Beauchamp and Dr. Laura Gough. I hypothesized that beebee tree would have an observable and short lag phase, followed by swift geographic expansion. I also hypothesized that beebee tree would change forest structure by increasing canopy cover and reducing leaf litter depth. Finally, I hypothesized that intense invasions of beebee tree would decrease diversity and native plant cover.

In fall 2018, I used tree cores and slabs to age populations of beebee trees along a hedgerow in Blandy Experimental Farm, Clarke County, Virginia and the entire beebee population within Cylburn Arboretum, Baltimore, Maryland. I used these data to create population timelines to visualize the length of the lag phase of beebee tree at each site (Figure 1). Since the hedgerow at Blandy is a straight line and the original tree was planted at the base of the hedgerow, I was also able to measure the distance that the population dispersed from the previous year, the maximum of which was an alarming 408 meters. Lag phases varied from 25 years at Blandy Experimental Farm to 55 years at Cylburn Arboretum. Differences in lag times could be driven by the distance beebee needed to disperse from tree collections in curated lawns to reach ideal forest environments. Nevertheless, my data demonstrate the ability of this species to rapidly populate an area and continue to increase in density.

In the summer of 2017, in order to investigate how beebee tree may impact native plant species, I established study sites in heavily beebee-invaded forests within Penn State University's Mont Alto Arboretum in Mont Alto, Pennsylvania; Blandy Experimental Farm; and a private land holding in Washington County, Maryland. Within each site, I surveyed understory and woody plant communities and variables including canopy cover and leaf litter cover at 20 random locations in differing intensities of invasion. Across all of my sampled areas, the highest density I found was 82 individuals in just 100 square meters. However, there was no reduction in native canopy species diversity in heavily invaded sites. Leaf litter cover was significantly lower in areas with a high intensity of beebee tree invasion (Figure 2).

The effect of beebee tree stands on the understory plant community was site-dependent. At the Washington County site, invasive Japanese stiltgrass percent cover was lower in dense beebee tree stands when compared to areas with fewer beebee trees. However, at the Pennsylvania site, dense beebee tree stands had lower native spicebush (*Lindera benzoin*) cover compared to areas with fewer beebee trees. The relationship between beebee tree and site-specific dominant species should be considered on a site-to-site basis to develop best management plans.

My studies are only the beginning in attempting to understand the invasive ecology of the beebee tree. Since this species has only begun to break the lag phase in the last 25 years, it should continue to be monitored, as some of its impacts may be long term and need more time to be observed.

~ David Grow

References

Ashton, I.W., L.A. Hyatt, K.M. Howe, J. Gurevitch, AND M.T. Lerdau. 2005. Invasive species accelerate decomposition and litter nitrogen loss in a mixed deciduous forest. Ecological Applications 15(4):1263-1272.

Buzhdygan, O.Y., S. Rudenko, C. Kazanci, and B. Patten. 2016. Effect of invasive black locust (*Robinia pseudoacacia L.*) on nitrogen cycle in floodplain ecosystem. Ecological Modelling 319:170–177.

Camarillo, S.A., J. Stovall, and C. Sunda. 2015. The impact of Chinese Tallow (*Triadica sebifera*) on stand dynamics in bottomland hardwood forests. Forest Ecology and Management 344:10–19.

Crooks, J.A., and M. Soule. 1999. Lag times in population explosions of invasive species: Causes and implications. Invasive Species and Biodiversity Management:103–125.

Maryland Department of Agriculture. 2017. Weed risk assessment for *Tetradium daniellii* Benn. (*Rutaceae*) – Beebee tree. Maryland Department of Agriculture, Annapolis, MD 22 pp.

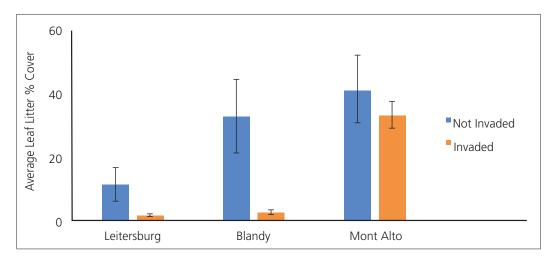


Figure 2. A comparison of average leaf litter % cover between Beebee invaded and Beebee non-invaded areas at the three study sites.

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, MNPS President.

Conference August 2019

Ancient Forests & Peatlands of Western Maryland



Field trip at the 15 Mile Creek area of Greenbrier State Forest, led by Maryland State Botanist Chris Frye

A conference in Frostburg is always a special treat. Maryland's western mountains harbor many of our state's rarest species and richest and most unspoiled ecosystems. Many thanks to Dr. Sunshine Brosi of FSU and our Western Maryland coordinator, Liz McDowell for taking the lead to organize another great conference. Registration was full at 117 attendees.

Saturday morning talks featured Kevin Dodge of Garrett College taking us on a tour of Maryland's mountain peatlands, followed by Dr Brosi describing the old growth forests of Allegany and Garrett Counties. Finally, Dr Joan Maloof of the Old Growth Forest

Network gave us an overview of the organization and the importance of its conservation work in Maryland and elsewhere.

After a morning of talks and an afternoon of field trips, most of us met for food and drink on Saturday evening, and enjoyed an inspiring documentary about Lucy Braun, a prominent early twentieth century botanist.

Saturday afternoon and Sunday field trips, many led by knowledgeable locals, took us to some of the most botanically interesting sites in Maryland. (For a complete list, see the Spring 2019 issue.)











Left to right: MNPS President Kirsten Johnson, MNPS Vice President Karyn Molines, and speakers Kevin Dodge, Sunshine Brosi, and Joan Maloof



Wondering whether a plant is native to Maryland? Would you like to see a few photos, and a map of where in Maryland it's been found? Go to marylandplantatlas.org. Their information, based on Knapp and Naczi's checklist of Maryland's plant species (accepted for publication), is as up to date as it gets.

Upcoming Events

All MNPS sponsored events are free and open to the public unless otherwise noted. Pre-registration is required for many field trips, and early registration is usually offered to members. Unless otherwise indicated, MNPS field trips are generally geared to adults. New field trips and programs are continually being scheduled. See our website, mdflora.org, for up to date listings and details.

Programs

November 14, Thursday, 7:00 PM The "Dirt" on Soil

Western Mountains Chapter Meeting and Program Compton Science Center, Rm 327 Frostburg State University, Frostburg, MD Speaker: Mitch Hall, Director of Sustainable Landcare Services, Fourth River Workers Guild

November 26, Tuesday, 7:30 PM, doors open at 7:00 Update on Emerald Ash Borer

Kensington Library, Kensington, MD Speaker: Colleen Kenny, Forest Health Watershed Planner, MD Forest Service

December - No program. Happy Holidays!

January 28, Tuesday, 7:30 PM, doors open at 7:00

Kensington Library, Kensington, MD Speaker: To be announced

February 25, Tuesday, 7:30 PM, doors open at 7:00 Introduction to Maryland's Grasses

Kensington Library, Kensington, MD Speaker: Christopher Frye, Maryland State Botanist

March 31, Tuesday, 7:30 PM, doors open at 7:00 Native vs. Non-native Plants, An Insect's Perspective

Kensington Library, Kensington, MD Speaker: Karin Burghardt, Asst. Professor, Dept. of Entomology, University of Maryland

April 28, Tuesday, 7:30 PM, doors open at 7:00 Maryland's Native Grasslands and Meadows

Kensington Library, Kensington, MD Speaker: Rod Simmons, MNPS Board member

Field Trips & Other Outdoor Events

November 8, Friday, 10:00 – 2:00 PM Trees at Blockhouse Point

Blockhouse Point Conservation Park, Montgomery Co Leaders: Marney Bruce and Allen Browne

November 16, Saturday, 10:00 – 1:00 PM Autumn at Little Bennett – Hyattstown Mill Trails

Little Bennett Regional Park, Montgomery Co Leaders: Marney Bruce and Anne DeNovo

November 17. Sunday, 10:00 – 1:00 PM Tree ID in Rock Creek Park

Rock Creek Nature Center Area, Washington, DC Leader: Matt Cohen

Rare, Threatened & Endangered Plants of Maryland - 2019 Online Revision

The revisions from the 2017 version are not extensive, but it's worth visiting the Department of Natural Resources website, http://d-nr.maryland.gov/wildlife/Pages/plants_wildlife/rte/rteplants.aspx, and downloading the revised list. Not only will you have a handy

reference, but you will be communicating to DNR that you care about Maryland's threatened flora. There are two versions, one is a simple list; the other is annotated with habitat, taxonomic, and conservation information.

As an example, here is the entry for the fern, wallrue spleenwort.

Asplenium ruta-muraria Linnaeus Wallrue Spleenwort

G5

S3

Aspleniaceae (Spleenwort Family)

Taxnote: North American plants are var. cryptolepis (Fernald) Wherry

Cons/Econote: Occurring in scattered locations on mafic outcrops, this species may be affected by competition

with invasive species, particularly exotic honeysuckles, Lonicera maackii and L. japonica.

Habitat: Limestone bluffs or other mafic outcrops. Distr. AP, RV (Allegany, Garrett, Washington). Phenology: Best identified in April.

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Even in the dead of winter, there are flowers in bloom. Skunk cabbage, *Symplocarpus foetidus*, will be in bloom as early as January. Read more about skunk cabbage on page 1.