

Marilyndica

Winter 2015

A Publication of the Maryland Native Plant Society

Volume 6, Issue 1



Marilandica

A Publication of the
Maryland Native Plant Society



www.mdflora.org
P.O. Box 4877 Silver Spring, MD 20914

CONTACTS

Membership & Website

Karyn Molines, membership@mdflora.org
Marilandica Co-editors
Carolyn Fulton, FultonCarolyn0@gmail.com
Kirsten Johnson, kh.johnson@ymail.com
General Inquiries
info@mdflora.org

MNPS CHAPTERS

Eastern Shore

Info@mdflora.org

Greater Baltimore

Kirsten Johnson, kh.johnson@ymail.com

Montgomery County

info@mdflora.org

North East

info@mdflora.org

Prince George's/Anne Arundel Counties

Matt T. Salo, mtsalo1@gmail.com

Southern Maryland

Karyn Molines, info@mdflora.org

Washington, DC

Mary Pat Rowan, blair-rowan@starpower.net

Western Mountains

Liz McDowell, lmcndnativeplants@hughes.net

EXECUTIVE OFFICERS

Marney Bruce, President, marneyb@earthlink.net
Kirsten Johnson, Vice President and Past President
Liz Jones, Vice President
Ginny Yacovissi, Secretary
Matt Cohen, Treasurer

BOARD OF DIRECTORS

Ken Bawer
Carole Bergmann
Cris Fleming
Carolyn Fulton
Jane Hill
Marc Imlay
Beth Johnson
Brett McMillan
Karyn Molines
Christopher Puttock
Mary Pat Rowan
Roderick Simmons
Tenley Wurglitz
Lou Aronica, Emeritus
Joe Metzger, Emeritus

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,

I am honored to become president of the Maryland Native Plant Society and humbled to follow in the footsteps of such former presidents Rod Simmons, Karyn Molines, Carole Bergmann, Cris Fleming and Kirsten Johnson. I joined the board in 2007 and among other activities, I've been in charge of lining up presenters at our monthly programs in Montgomery County.

I was introduced to the wonderful world of our native plants by Cris Fleming and Stephanie Mason on walks for the Audubon Naturalist Society. Cris showed me the Carderock area in Montgomery County between the C & O Canal and the Potomac River, where I've spent countless hours as a weed warrior for the Park Service. I now consider that area my wild home. Thank you, Cris!

I want to thank our past president Kirsten Johnson for the many ways she strengthened the Society and for smoothing the way for me. Some of my goals as president are to reinvigorate chapters throughout Maryland, and to raise awareness about non-native invasive plants and actions that are being taken to combat them. This is the 'Year of the Vine' for MNPS and we will have speakers and field trips focusing on vine identification and ecology. We have many native vines here Maryland and we'll learn about them as well as the non-native invasives.

Board member Matt Salo recently resigned for personal reasons and the board appointed Jane Hill to fill his term. She has been the administrator of our Facebook page for some time. I also welcome new board member, Tenley Wurglitz, who brings impressive knowledge and a sunny disposition to our lively board. And I thank retiring board members Melanie Choukas – Bradley and Matt Bazar for their contributions. It was Matt who facilitated the conference last year in Cecil County. Planning for our 2015 conference in Salisbury has already begun!

~ Marney

Native Plant & Ecological Research Grants Awarded

Once again, MNPS received a number of worthy grant proposals, and equally fortunately, we received enough generous donations in 2014 that the Board decided to fund three of them.

Lauren Hull, a graduate student at Frostburg State University, is analyzing mountain bugbane (*Actaea podocarpa*), a species threatened by ecological and human pressures. The MNPS grant will provide equipment for surveying and documenting the plant populations, as well as outreach to increase public awareness of the importance of conserving this and other species. Additional funding is providing by FSU's Department of Biology.

The impact of deer and non-native invasive plants on forest ecology is well known to our members. We awarded a grant to Andrew Landsman, a PhD student at the University of Delaware and a biologist with the National Park Service (NPS). The multi-year project examines the cascading ecological effects of overabundant herbivores and invasive plants on the structure, composition and nativity of forest understory vegetation, with a particular focus on web-building spiders that are highly dependent on vegetative diversity for web placement and availability of insect prey. The MNPS grant will cover the costs of a pilot study and preliminary analyses, as well as equipment that will continue to be used in future years. Support is also provided by NPS, U Del, Hood College and other sources.

We awarded a grant to Tamara Heiselmeyer, a graduate student at Hood College, for her work on the effects of insects on wavyleaf basketgrass (*Oplismenus undulatifolius*) (WLB). Her objectives are to determine if insect herbivory is occurring on WLB and to study ground-dwelling insects in invaded and non-invaded stands. The MNPS award, along with a Hood Research Grant, will pay for equipment for the project.

Your membership dues and donations help support projects like these. Contributions from members and friends make a real difference to botanical and ecological research and to all of the Society's activities.

On the cover: Yellow passion flower (*Passiflora lutea*), McKee-Beshers Wildlife Mgt Area, Poolesville, MD.

Courtesy of photographer and MNPS member Janice Browne. For more of her work, see www.janicebrowne.com.

Wildflower in Focus

2015 is the Year of the Vine for MNPS

What is a vine?

The word “vine” is inherently vague. It can refer to any plant with a trailing or scandent (climbing) growth habit. Botanists use the word “liana” to refer to woody climbers that have their roots in the ground, like grapes and greenbriers. Botanists’ narrow definition of a “vine” is an herbaceous, relatively thin-stemmed climber such as members of the Morning-glory Family. Then we have plants like raspberries, sometimes considered vines, whose habit could be described more as clinging than climbing. Thus, there is a gradation from plants with lax branches to vines and lianas that cannot support upright shoots and depend entirely on other means of support. For the Year of the Vine, we’ll welcome all reasonable applicants without getting too fussed about definition. As US Supreme Court Justice Potter Stewart said in a completely different context: “I know it when I see it.”

Climbing species have evolved independently in many plant families. In my attempt to list all the vines found in Maryland’s natural areas, I found representatives of 24 families. Given the advantages that vining confers on a plant—the ability to seek sunlight, water or nourishment at a distance—this isn’t surprising.

Trailing plants seem simple. Their stems just need to be weak enough to fall down and long enough to extend some distance. Climbing requires special equipment. Here are the main strategies:

- Tendrils, which are often spring-like and cinch the vine to its support, e.g., grape, green brier. The tendrils of Virginia creeper and crossvine are adhesive at the tips.
- Twining stems or petioles, e.g., wisteria (stems), clematis (petioles).
- Adventitious roots, e.g., poison ivy, trumpet creeper.
- Spines or prickles, e.g., greenbrier, rose.
- Attachment to young trees with which the vine then grows, e.g., grape.

Climbing plants often have other characteristics, which most of us are familiar with, once we stop to think: flexibility and tensile strength; rapid growth in response to contact with a structure; and delay in enlargement of leaves until the stem wraps around a support.



Passiflora incarnata L. (*P. lutea* is on the cover).



Photos by Carole Bergmann, annotated by Kirsten Johnson

When we’re out in the field in 2015, let’s look closely at native and non-native vines, noticing their climbing strategies and other special qualities. Please take photos that show these qualities, and send them to info@mdflora.org. We can display them in our next issue, on our website, and on our Facebook page.

Maryland’s showiest vines: yellow and purple passionflowers.

We have two species in Maryland of this mainly tropical genus that climbs with tendrils. The fruit of most members of the genus, including *P. incarnata*, is edible, but the passion fruit widely eaten in the tropics comes mainly from *P. edulis*, native to South America.

Passionflowers are easy to study because of their large size. The pistils and stamens are elevated on a structure called an androgynophore. The petal-like “feathers” that lend the flower its beauty are not petals, but a set of structures called the corona. Our species have two corona layers. The petals are beneath the corona.

Their ecology is interesting too. A number of *Passiflora* species have extrafloral nectaries, which are nectar-producing glands not associated with pollination and not located in the flower. They benefit the plant by attracting ants that prey on insect herbivores. *P. incarnata* has pairs of extrafloral nectaries in two places, on the petioles and on each of the three bracts. Ants defending *P. incarnata* nectaries against incursion by a beetle can be seen in a video produced by Georgia State Botanical Garden. <http://vimeo.com/34448448>. *P. lutea* lacks nectaries and this is one way of distinguishing the two species when not in flower.

~ Kirsten Johnson

Lichens: Our Neglected and Imperiled Natives

Dr. James Lendemer is a Researcher at the Institute of Systemic Botany, The New York Botanical Garden, Bronx, New York. For the last three years he has led a large project funded by the National Science Foundation to document the lichens of the Mid-Atlantic coast from southern New Jersey to northern Florida. His research in Maryland largely focused on the lichens of the eastern portions of the state, especially Delmarva. Dr. Lendemer was a featured speaker at our 2013 Annual Conference in Frostburg.

Take a moment to think of your favorite native species. Images of pitcher plants, orchids, lilies, maybe even a rush or sedge probably come to mind. For most avid naturalists and native plant lovers, thinking about natives probably does not conjure up images of lichens. This may be because many think there are only a few kinds: the green leafy one, the gray leafy one, rock tripe and the old man's beard that used to be common but is now rarely seen. In fact, in Maryland alone there are hundreds, probably even close to one thousand, species of lichens. Some of them are tiny and difficult to identify, but many are easy to see once you know what to look for, and more importantly all of them are native. It's true! Just like the Swamp Pink or Slender Lady's Tresses, all those tufts, crusts, spots and dots are part of our native landscape.

But let's take a step back. What are lichens? Lichens are species of fungi that have evolved a unique lifestyle wherein they form a symbiosis with a species of algae or cyanobacteria. When we talk about lichen species we are referring to species of fungi, not the algae or cyanobacteria, which belong to other domains of life and have their own names. Nor are we referring to the symbiosis itself (i.e., the collaboration formed by the fungus and the algae) because across the range of a lichen species the same fungal species can associate with different types of algae or cyanobacteria. The thallus, or body, of the lichen is a collaborative effort that looks nothing like the individual parts of the symbiosis. If



Parmotrema hypoleucinum, a common foliose lichen in eastern Maryland.
Photo by Jason Hollinger & Nastassja Noell

you grow the fungus or the alga in the lab it will look like a carpet of green or white in a petri dish. That's a much less spectacular image than the beautiful, colorful mosaics that paint the trees and rocks in the forest.

Lichens may be diverse, and they may be beautiful, but they are also very important. They serve critical functions as ecosystem pioneers that break down rocks and form soil; they contribute significantly to nutrient cycling; and they are even used by animals for food and shelter. On a smaller scale, invisible to our eyes, each individual lichen hosts a tiny universe populated by unique forms of life that occur nowhere else: multitudes of bacteria, fungi, algae and even microscopic invertebrates.

Across Maryland, from the highest mountains to the eastern shore, there are hundreds of lichens performing critical tasks for our ecosystems and for us. At least there should be. Lichens are highly sensitive to pollution and environmental degradation. Thus, after centuries of human changes to the natural landscape there are now evident declines in many lichen species, even regional extinctions. The lichens we see today are a small remnant of what once was. (The comparison photo depicts the visible impact of lichen loss in eastern forests.) Sadly, recent research shows that rising sea levels are likely to inundate the major lichen biodiversity hotspot of the Atlantic Coastal Plain. That means the loss of the last place in the Mid-Atlantic where one can see the lichens as *(continued on facing page)*



Lobaria quercizans, a macrolichen that is now rare in Maryland and restricted to mature forests. Photo: Nastassja Noell & Jason Hollinger



Haematomma persoonii, a subtropical crustose lichen whose northern distributional limit is found in eastern Maryland. Photo: James Lendemer

(Lichens continued)

they would have been centuries ago. It also means the loss of the last refuge for many rare species, and even some species that occur nowhere else. Unlike with plants and animals, there are few if any non-native and invasive lichens. A native orchid species lost can be replaced by one or more non-native herbs, but a lost native lichen leaves only a bare surface that may (or may not) be colonized by one of the few hearty species that can survive disturbance and pollution.

Despite the native lichens we have lost, we should celebrate and protect what we have left. Just like plants, there are lichens throughout Maryland that I believe deserve our attention. The next time you are out botanizing, stop and observe the lichens. Maybe you'll feel the same way too.

- James Lendemer

Further reading:

Brodo, I.M., S.D. Sharnoff, S. Sharnoff. 2001. *Lichens of North America*. Yale University Press, New Haven, CT and London, England. 795 pp.



Comparison of two mature forest stands in eastern North America, one with healthy lichen diversity, cover and abundance (right: Craggy Mountains, NC. Photo: Erin Tripp) and one where lichen diversity has been lost and degraded as a result of human influences on the environment (left, Fairmount Park, Philadelphia, PA. Photo: Kate Deregis)

Answers to the Quiz

Answers to the Quiz in the summer issue:

1. *Agrimonia* spp., Agrimony species
2. *Hieracium venosum*, Rattlesnake plantain
3. *Magnolia macrophylla*, Cucumber magnolia

Answers to the Quiz on the back cover of this issue.

1. *Toxicodendron radicans*, Poison ivy
2. *Cuscuta* spp., Dodder species
3. *Parthenocissus quinquefolia*, Virginia creeper

Hope and Reality for Urban Ecosystems

*The world is too much with us; late and soon,
Getting and spending, we lay waste our powers;
Little we see in nature that is ours;
We have given our hearts away, a sordid boon!*

From *The World Is Too Much With Us* by William Wordsworth

EDITOR'S NOTE: Our last issue (Summer 2014) included Clark DeLong's article on the use of green roofs as ex situ conservation space. We invited Rod Simmons to share his perspective on conservation of rare and uncommon plant species.

Years ago, I served on Maryland's Plant Reintroduction Task Force, which was largely convened to address the merits, legal ramifications, and biological soundness of reintroducing rare taxa "recently lost from its historic range" or to enhance dwindling populations that remained in their historic natural settings (PRTF 1999). This involved a proposal to dig up for propagation the three dwindling survivors of Box Huckleberry (*Gaylussacia brachycera*) from a sandy hillside in Oak-Pine-Heath Forest along the upper Magothy River in Pasadena, Maryland. Box Huckleberry is a globally rare, highly clonal, ice-age relict. Its natural range is essentially the Mid-Atlantic region (Pooler et al. 2006). The Magothy River site was Maryland's last and only known station for this plant.

The Task Force ultimately decided that those few plants would likely be lost in the near future and that the best way to conserve this Maryland genome was to remove the plants from the wild and propagate them *ex situ* at the USDA tissue culture lab at Beltsville, Maryland. Horticulturists are usually good at finding ways to successfully grow finicky plants, and this was no exception. USDA's only condition for participating in the project was a stipulation that allowed propagated Box Huckleberry clones from the plants to be made available to the nursery industry. Apart from this stipulation, this project met the principles of ecological restoration by safeguarding identical plants to be planted in exactly the same documented location and situation where they originally grew—or very near, if there was disturbance to the original site. So this was not a case of *ex situ* conservation, but rather an example of ecological restoration and rare plant reintroduction.

Odd things have been afoot regarding Box Huckleberry since those days. Last year the *New York Times* and *The Washington Post* reported that the National Arboretum intends to hybridize together Box Huckleberry material from all of the known, remaining wild sites in the world. The National Arboretum stated correctly that harboring a collection of propagated plants from Box Huckleberry sites in a museum-like setting at the arboretum is "preserving a genetic resource for the future" (DePalma 2014). However, this remains true only so long as the plants are not cross-pollinated or hybridized with each other. It is against the principles of ecological restoration to reintroduce or plant hybridized

Box Huckleberry (or other artificial taxa) into natural areas where man-made diversity did not formerly exist, as this practice is as unnatural as the entity that was artificially created. As to National Arboretum plans to develop, through cross-breeding, Box Huckleberry traits "that nursery growers need in garden plants" (Higgins 2014), I strongly agree with now-retired scientist Jim Long that this is an irrelevancy at best and a serious blurring of the separate and distinct worlds of cultural landscapes and conservation biology.

For further examples of misguided conservation or restoration efforts, take Longleaf Pine (*Pinus palustris*), which is wholly artificial planted well outside its native range in northern Virginia and the piedmont (VDOF 2014); Gulf Coast pitcher plants and other deep south flora illicitly planted in Maryland and Virginia seepage bogs; Sweet Pepperbush (*Clethra alnifolia*), Inkberry (*Ilex glabra*), and other "BayScape" plantings at the Sideling Hill Visitors Center in the Maryland Ridge and Valley; unnecessary "pollinator garden" plantings of imported wildflower seed into natural areas at the exceptionally diverse Manassas Battlefield Park; introducing southern species northward to preempt assumed climate change effects; and so on. To my mind, these well-intentioned but misapplied practices also include the almost fanatic efforts to "restore" the once-dominant American Chestnut (*Castanea dentata*) to Appalachian forests and other natural lands through the introduction of 94% Asian-American Chestnut backcross hybrids. None of these examples meet the criteria of conservation biology or ecological restoration, nor in my opinion do they further the future of the species they seek to preserve. Sometimes there are consequences to our folly and we simply have to live with the results.

As far as conservation biology and ecological restoration are concerned, a taxon should not be considered native if it is the product of hybridization, genetic alteration, and other human manipulations. Once a species is artificially moved out of its niche—whether introduced beyond its natural range or denatured to be more plastic in its adaptability or usefulness—it ceases to be a natural entity or truly functioning component of the ecosystem.

This is not a "purist" point of view—as contrarians are quick to claim—but a centered, realistic alignment with the natural world supported by decades of empirical evidence and a deep appreciation for leaving things natural and causing as little disturbance as possible.

(continued facing page)



*Naturally occurring Box Huckleberry (Gaylussacia brachycera) at Nanticoke State Wildlife Area, Delaware.
Photo by David G. Smith, www.delawarewildflowers.org*

(Hope and Reality continued)

A native plant society, by definition, should be preeminently concerned with the sustainability of native flora, wildlife, and natural communities of the particular region it represents. The same inherently applies to the conservation biologist. Expressing this sentiment at a time when there was much more of the natural world around us and far fewer threats, are Smithsonian botanist Lester Ward's comments on the effects of urbanization: "In many ways the botanist looks at the world from a point of view

society faces from a lack of exposure to the natural world and meaningful understanding of it. More inexcusable, though, is the apparent paucity of quality science education and mentorship at academic institutions that were renowned for such not long ago. This seeming ignorance of basic conservation biology principles has even extended to esteemed scientific and geographic journals. These are the folks with authority and responsibility to instruct the next generation of those open to learning



*Arlington Regional Master Naturalist Daniel Elmer, left, and Matt Bright of Earth Sangha in December 2013 planting a 100% pure American Chestnut (*Castanea dentata*) sapling along an Oak-Heath Forest ridge at Dora Kelley Nature Park in the City of Alexandria, Virginia where scant, remnant populations of American Chestnut naturally occur. Earth Sangha sourced and successfully propagated a hundred or so saplings from heavily fruiting American Chestnut thickets along the summit of the Northern Blue Ridge Mountains in Virginia. No existing native vegetation at the park was displaced or disturbed during the plantings; saplings were planted in old tree throws and other open areas. All of these plantings may not grow to produce fruit in the coming years, but at least they are real! Photo by R.H. Simmons*

precisely the reverse of that of other people. Rich fields of corn are to him waste lands; cities are his abhorrence, and great open areas under high cultivation he calls 'poor country'; while on the other hand the impenetrable forest delights his gaze, the rocky cliff charms him, thin-soiled barrens, boggy fens, and unreclaimable swamps and morasses are for him the finest land in a State. He takes no delight in the 'march of civilization', the ax and plow are to him symbols of barbarism, and the reclaiming of waste lands and opening up of his favorite haunts to cultivation he instinctively denounces as acts of vandalism." (Ward 1881).

It is disturbing that in this age of supposed scientific advancement there are so many manipulations and poor management practices of natural lands and wildlife. This surely speaks to the increasing disconnect our

such principles. How many academics, professors, and land managers today consider it indispensable to teach a "Do No Harm" ethic to those working with the natural world? How many of them even know what it means, let alone its importance?

We should never lose sight of the fact that large-scale natural land conservation is the only effective means of preserving biodiversity and natural communities. According to Smithsonian Botanist Emeritus Stan Shetler (2003), "there are only three rules for saving species—save habitat, save habitat, save habitat!" Eloquently underscoring this is a statement from a letter to conservation activist Bonnie Bick from world renowned biologist E.O. Wilson during the campaign to save Chapman Forest: "Chapman Forest has great importance for its (*continued page 7*)

(continued from page 6)

biodiversity content, magnified many times over in its humanitarian value due to its proximity to the large urban and suburban populations of the DC area. To save a remnant of America's natural heritage of this nature would be a gift to future generations unmatched by any other that could be provided in the same place, on the same land."

As to the "hope" part of this diatribe, I would suggest a "dance with the one that brought you" regimen where natural land restoration is concerned: simply use the common, native successional plants of the appropriate local region, whether for green roof projects, highway medians, parking lots, infill development, whatever. Another method more closely aligned with nature is to refrain from planting and allow the existing native seedbank to re-emerge and naturally revegetate a site (with an accompanying non-native invasive plant removal program). This is what nature has always done with tough, disturbed sites and bare ground, and we sure have produced a ghastly legacy of land-use disturbance over the years. Nonetheless, the outgrowth of these naturally healed lands, as well as the tens of thousands of acres of remarkable, remnant wild areas in and around most cities, are what most of us have grown up with and love and appreciate, mainly because they are real and natural!



Rugged, calcareous forest along the Potomac River bluffs at Chapman State Park. This exceptional site preserves a diversity of globally-rare natural communities and rare species 20 miles south of the Nation's Capital. Photo by R.H. Simmons.

Healing the land with common, native successional and "foundation" plants restores functionality to natural systems; carpeting areas with mass-produced rare and endangered species does not. Rare taxa find their niche and relevancy in the context of stable, functioning, non-degraded communities and the particular native habitat to which they belong. This is one of many reasons rare species are not recommended for use in general ecological restoration plantings, let alone ornamental landscaping.

To my way of thinking, preserving large tracts of natural land; minimizing disturbance; providing quality stewardship (mostly entailing non-native invasive species control); and using appropriate native flora when planting is needed are the best means to improve and hopefully restore conditions in the natural world. What I hope is that nature's conventions, and not human designs, always lead the way.

- Rod Simmons



Rod Simmons and Scouring Rush (Equisetum sp.) at Medicine Rocks State Park, Carter County, Montana. Photo by Dianne H. Simmons.

Literature Cited:

Bright, C. and R. Simmons. Earth Sangha's Chris Bright interviews Rod Simmons. Capitol Hill Restoration Society (CHRS) News, July/August 2011. <http://chrs.org>.

Bright, C. and R. Simmons. Where does ecological restoration fit? The Acorn, November 2012. <http://www.earthsangha.org/texts/acorn123offprint.pdf>

DeLong, C. 2014. Selecting native plants for use on Mid-Atlantic green roofs. *Marilandica* 5(2): 5-9.

DePalma, A. An 800-year-old shot of youth. *New York Times*, August 19, 2014. <http://mobile.nytimes.com/2014/08/19/science/an-800year-old-shot-of-youth.html?ref=science&r=4&referrer>

Higgins, A. The U.S. National Arboretum is breathing new life into an old plant. *The Washington Post*, July 30, 2014. http://www.washingtonpost.com/lifestyle/home/breathing-new-life-into-a-very-old-plant/2014/07/29/ff654c22-14e6-11e4-98ee-daea85133bc9_story.html

Horton, T. 2010. Revival of the American chestnut. *American Forests*, Winter 2010. <http://www.americanforests.org/magazine/article/revival-of-the-american-chestnut/>

Plant Reintroduction Task Force. (PRTF) 1999. Guidelines for the reintroduction of rare plants in Maryland. Maryland Department of Natural Resources, Annapolis, Maryland. <http://www.pitcherplant.org/Papers/reintroguidelines.pdf>

Pooler, M.R., R.L. Dix, and R.J. Griesbach. 2006. Genetic diversity among accessions of the endangered box huckleberry (*Gaylussacia brachycera*) based on AFLP markers. *Journal of the Torrey Botanical Society* 133(3): 439-448.

Shetler, S. 2003. Role of native plant societies in grassroots conservation. *Marilandica* 11(1): 22-23. http://www.mdflora.org/Resources/Publications/Marilandica/marilandica_win_spr_03.pdf

Virginia Department of Forestry (VDOP). 2014. The effort to restore Virginia's native longleaf pine: 2014 status report. Charlottesville, Virginia. <http://ww2.odu.edu/~lmusselm/blackwater/longleaf-pine-restoration-d2-1.pdf>

Ward, L.F. 1881. Guide to the Flora of Washington and Vicinity. Bulletin of the U.S. National Museum No. 22. Washington, D.C.

Book Review

The Living Landscape

by Rick Darke and Doug Tallamy

Timber Press; First Edition (July 1, 2014)

In February 2003, I attended my first Rick Darke lecture. His book, *The American Woodland Garden: Capturing the Spirit of the Deciduous Forest*, had just been published, and Darke's lecture began with the theme of the "palimpsest," comparing the woodland landscape to an ancient scroll or vellum that has had many layers of history written, scraped away, and rewritten. I was spellbound! Since that day, I have heard Darke speak on at least a dozen occasions, followed his field work, and read his books, articles, and recommended reading on his website.

A few years later Ann Lundy, my friend and mentor, recommended *Bringing Nature Home* by Doug Tallamy. I've since heard Tallamy speak compellingly about biodiversity in the landscape almost as many times as I have heard Darke. The two often present at the same venue, and it's exciting to see their ideas develop side by side as they encourage and enrich each other's point of view. Ann and I were thrilled when we found out that they were writing a book together and we both purchased advance copies. One of her last requests to me shortly before she died was that I write this review to let all of you know about the system of gardening she taught, in her words: "not no-maintenance, but full of common sense and beauty."

The Living Landscape is a strong, well-structured collaboration. It begins with a preface from each author describing his contribution: Darke's from the perspective of a "plant ecologist, horticulturist, and landscape designer," and Tallamy's from the point of view of "an entomologist, behavioral ecologist, and ornithologist." To distinguish the two voices, different page colors and initials let the reader know which author is speaking. Vibrant photographs with accompanying captions are as powerful as the text; most photographs are Darke's, but Tallamy provides a significant number of close-ups of birds and insects. The book conveys a balanced visual-verbal experience to promote the creation of beautiful landscapes that are ecologically functional.

The first chapter takes the reader through the layers of the natural landscape from top to bottom and side to side. First the vertical layers are well-described: canopy, understory trees, shrub, herbaceous, and organic layer. Next come the cross-sections: dynamic and wet edges, wetland, meadow and grassland. Tallamy reviews the birdlife within each layer. Darke introduces the more abstract concepts of cultural

layers—the "palimpsest" of human interaction with the land. Even in so-called natural areas, the impact of human activity is visible in the form of old roads, rail beds, and former agricultural cultivation. He also notes the effects of changes over time, "temporal layers", due to natural events like storms, and human impacts such as the introduction of non-native invasive species.

The next two chapters, primarily in Tallamy's voice, cover topics of biodiversity, ecosystem productivity, and stability in the wild as well as the ecosystem services that can be provided by gardens for the benefit of both humans and wildlife. The shortest chapter of the book, *The Art of Observation*, "presents a variety of short essays and visual tools useful as observational models" to instruct readers in ways to practice seeing color, scale, and activity in the natural world.

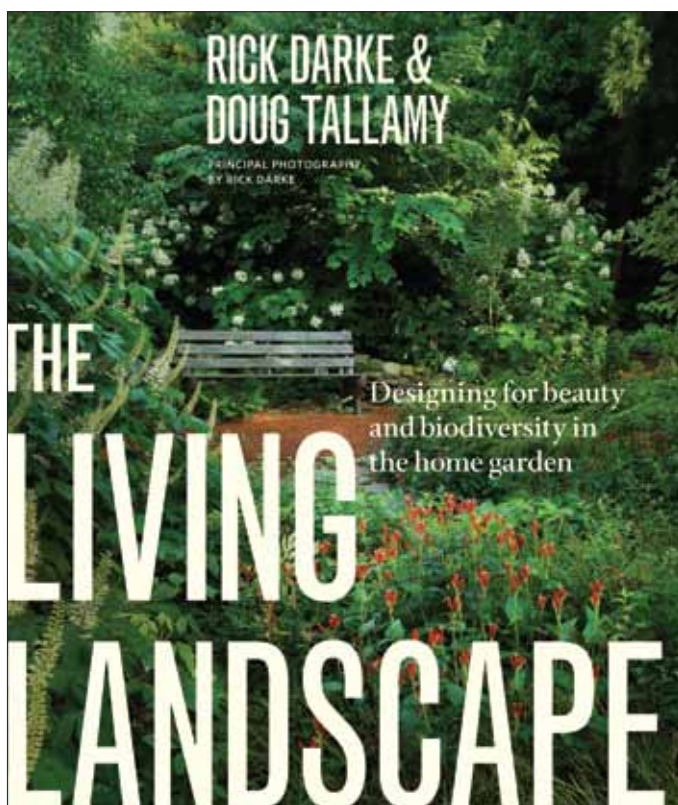
The floodgates open in the fifth chapter as information from the previous pages is applied to the home garden. In a pleasing symmetry, the authors reverse the order of the layers of the first chapter and go from the organic layer up through

mosses and seedlings, herbaceous plants, shrubs, vines, and understory and canopy trees. Strategies for creating and managing new gardens are covered in sections called "Creating Edges" and "The Layering Process." Examples of wet and moist gardens and meadow gardens and a final reminder of the cultural layer complete the discussion of concepts set up in the first chapter.

The book ends with lists of plants and their ecological functions, first for the Mid-Atlantic (aren't we lucky to live in the same region as the authors!) as well as selected plants for the Southeast, Southwest, Pacific Northwest, Midwest and Mountain States, and New England.

One of my favorite passages is Doug Tallamy's anticipation of spring. He poses rapid-fire questions: When will plants bloom? When will birds and insects appear? When will toads sing...? "Cindy and I find comfort and hope in the dependability of natural cycles: to us they are the fulfilled promises of a vibrant landscape." I am hopeful that many people, especially the next generation of gardeners, will read and embrace the philosophy and practices of this book.

~ Kay McConnell



Ann Lundy In Memoriam

Ann Lundy, former MNPS Board member and for many years the chair of our Baltimore chapter, died on September 28. Ann was a passionate advocate for native plants. She inspired and taught many others, through her landscape design business, Landscapes by Design, writing for Chesapeake Magazine, and volunteering for Irvine Nature Center, Cylburn Arboretum, and many other organizations. Along with Kay McConnell whose book review appears in this issue, she was instrumental in bringing native plant gardens to Friends School in Baltimore. This photo shows a bit of the extensive native plant garden she and Kay created there. Ann's family designated Maryland Native Plant Society as a charity to which contributions in Ann's memory can be made.



Native plant garden at Friends School, Baltimore. Photos by Katy McConnell

Book Announcement

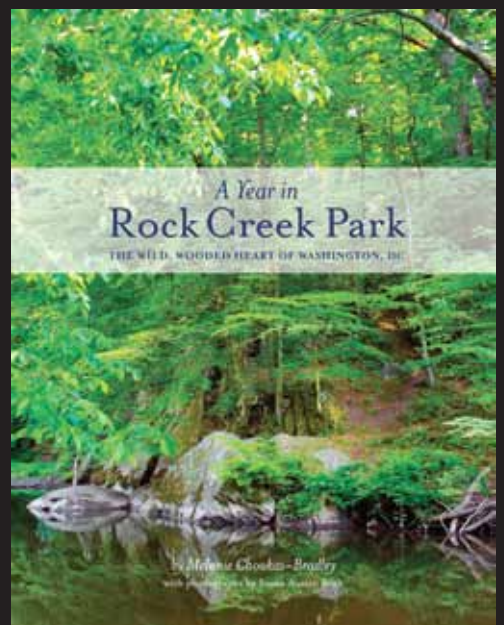
A Year in Rock Creek Park: The Wild, Wooded Heart of Washington, DC

by Melanie Choukas-Bradley

with photographs by Susan Austin Roth

George F. Thompson Publishing (December 12, 2014)

Melanie Choukas-Bradley, Maryland naturalist, writer, and teacher, and for many years a MNPS Board member, spent a full year in Rock Creek Park recording her observations. She walked and skied its trails in all weather conditions, observing and recording natural events. The reader is her companion throughout the year, sharing her thoughts and feelings inspired by the natural beauty of the park as well as events in her own life. Thus she connects the natural cycles of life within the park with her life as a naturalist and writer and as a wife and mother. Woven into her writings is an enthusiasm for the restorative powers of Nature and a yearning for better stewardship of our earthly home. The book is greatly enhanced by the beautiful photographs of Susan Austin Roth.



PROGRAMS

All MNPS programs are free and open to the public. Programs known at press time are listed here. For details and up to date listings, see mdflora.org.

February 17, Tuesday, 7:00 PM

The Brief Blooms of Alaska; Inúpiat Above the Arctic Circle

Western Mts Chapter, Frostburg St U, Compton Science Center, Rm 327

Speaker: Dr. Sunshine Brosi, Biology Dep't, Frostburg St U

February 24, Tuesday, 7:30 PM, doors open at 7:00.

The Ecology of Vines

Montgomery County, Kensington Library, Kensington, MD

Speaker: Karyn Molines, MNPS Board Member

March 31, Tuesday, 7:30 PM, doors open at 7:00.

Statewide Eyes Program: A Citizen Science Contribution to Protecting Maryland Diversity

Montgomery County, Kensington Library, Kensington, MD

Speaker: Kerrie Kyde, Invasive Plant Ecologist, DNR Natural Heritage Program

April 21, Tuesday, 7:00 PM

Recent Nat'l Natural Landmark Designations at Nottingham Serpentine Barrens and Ice Mountain

Western Mts Chapter, Frostburg St U, Compton Science Center, Rm 327

Speaker: Katia Englehardt, Research Assoc. Prof., UMD, Appalachian Lab

April 28, Tuesday, 7:30 PM, doors open at 7:00.

Non-Native Earthworms

Montgomery County, White Oak Library, Silver Spring, MD

Speaker: Katalin Szlavecz, Assoc. Research Prof., Johns Hopkins U

May 26, Tuesday, 7:30 PM, doors open at 7:00.

Montgomery County, White Oak Library, Silver Spring, MD

Speaker: Dr Michael J. Raupp, Entomologist, UMD

June 16, Tuesday, 7:00 PM

Focus on Finzel

Western Mts Chapter, Finzel Swamp Parking Area

Leader: Joe Metzger

June 30, Tuesday, 7:30 PM, doors open at 7:00.

Montgomery County, White Oak Library, Silver Spring, MD

Speaker TBA

July 28, Tuesday, 7:30 PM, doors open at 7:00.

Silver Spring Civic Building, One Veterans Place, in the Spring Room

Speaker TBA

FIELD TRIPS

MNPS field trips are free and open to the public. Pre-registration is required for some, and early registration may be offered to members. For up to date listings and details, and to register, see mdflora.org. Unless otherwise indicated, MNPS field trips are generally geared to adults.

February 21, Saturday, 1:00 – 4:00 PM

Hug a Tree – Maryland's Biggest Plus a Few Other Champs

Leader: Ralph Buglass

March 1, Sunday, 10:00 AM – 2:00 PM

National Arboretum, Washington, DC – Wild Washington Walk #130

Leaders: Mary Pat Rowan and David Culp

March 20, Friday, time tba

Equinox Walk at Goldmine Tract, Great Falls, Maryland

Leader: Marney Bruce

March 25, Wednesday, 4:30 – 7:00 PM

Mid-Week Welcome Spring Hike at Little Bennett Regional Park

Leader: Carole Bergmann

April 4, Saturday, 9:00 AM – 12:30 PM

Carderock, C&O Canal, Montgomery County

Leader: Cris Fleming

April 5, Sunday, 10:00 AM – 2:00 PM

Roosevelt Island, Washington, DC – Wild Washington Walk #131

Leaders: Mary Pat Rowan and David Culp

April 23, Thursday, 1:00 PM – 4:00 pm

Flag Ponds Nature Park, Lusby, Calvert County

Leader: Karyn Molines

April 25, Saturday, 10:30 AM – 2:30 PM

Snyders Landing, Washington County

Leader: Cris Fleming

May 2, Saturday, 10:00 AM – 3:00 PM

Gunpowder State Park May Wildflower Hike – Hereford Area

Leader: Dwight Johnson

May 2, Saturday, time tba

Carderock and Marsden Tract – C&O Canal NHP

Leader: Marney Bruce

May 3, Sunday, 10:00 AM – 2:00 PM

Fort Chaplin, Washington, DC – Wild Washington Walk #132

Leaders: Mary Pat Rowan and David Culp

May 9, Saturday, 10:00 AM – 3:00 PM

2nd Annual Mountain Maryland Native Plant Festival

New Germany State Park

May 30, Saturday, time tba

Northwest Branch

Leader: Marney Bruce

July 10 and 17, Fridays, 9:00 AM – 12:00 PM

Wildflower ID for Beginners, Elk Ridge Native Plant Preserve

Leader: Liz McDowell

Become a member. Join online: www.mdflora.org.

Marilandica

A Publication of the Maryland Native Plant Society



Maryland Native Plant Society
PO Box 4877
Silver Spring, MD 20914

PRSRT STD
U.S. POSTAGE
PAID
BALTIMORE, MD
PERMIT NO. 4315

In this Issue

Letter from the President	pg 1
Grants Awarded	1
Wildflower in Focus – Vines	2
Lichens	3
Answers to Quiz	4
Hope and Reality	5
Book Review	8
Ann Lundy	9
Book Announcement	9
Programs	10
Field Trips	10
Plant ID Quiz	back cover

Plant ID Quiz

1. Identify the species in the photo. This very common woody vine (or “liana”) may have a shrub or a climbing habit. When climbing, it clings to bark with aerial rootlets, and the leaves hang away from the trunk on long petioles. Each glossy leaf has three variably toothed leaflets that turn a striking yellow or red in the fall. The small white fruits are quickly consumed by animals, but every part of the plant is toxic to humans.
2. It’s hard to distinguish individual species but quite easy to recognize the genus of these weedy, twining, climbing plants. They are parasitic, non-photosynthetic annuals whose thin stems are whitish or pale orange and whose leaves are greatly reduced. This genus has recently been moved to the Morning-glory Family.
3. This woody vine (or “liana”) is common in Maryland, sometimes trailing on the ground, and sometimes climbing by means of tendrils. Its compound leaves have 5 leaflets, making it easy to distinguish from other members of the Grape Family and from poison ivy. The deep blue fruits—berries—provide food for birds and other animals but are toxic to humans.