# Marilandica

Summer/Fall 2014

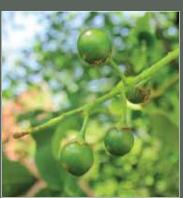
A Publication of the Maryland Native Plant Society

Volume 5, Issue 2











# . Marilandica

A Publication of the Maryland Native Plant Society



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Our mission is to 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,

What a pleasure it is to publish a profile of Cris Fleming, our field botany teacher extraordinaire, author and former MNPS president. Please note that the writer is Melanie Choukas-Bradley, no slouch herself when it comes to leading trips, writing and teaching about our local flora.

As a teacher, Cris knew when to impart knowledge, and she knew when to hold back. Let me tell you a story. During the field trips with her spring wildflower class, I kept noticing a particular basal rosette, not in bloom. The plant seemed to be quite common, so I asked Cris what it was. She refused to tell me! Absolutely would not disclose that plant's name! So what's a girl to do? I found some of the rosettes out on the Cabin John Trail, watched them until they bloomed, and then Newcomb came to the rescue. Since then I think of Cris with affection every time I see *Geum canadense*. I would never have studied that little rose so closely—or cared that it was a rose—had it not been for Cris.

Clark DeLong's article in this issue provoked reflection on the role of horticulture in conservation. Our mostly native garden behind a Baltimore City rowhouse sits amid the non-native flora of neighbors' yards and back-alley weeds. In no way have we reproduced the historic flora of this Piedmont quarter acre. We have whatever appealed to us at sales: species that would never be seen together in the wild. I just hope I'm doing something right, whatever 'right' may be. In the meantime, I can closely observe those plants and their insect predators throughout their life cycles. (Helps a lot with ID on field trips.)

Please register for the conference if you haven't done so already. Northeastern Maryland and the adjoining sections of Pennsylvania and Delaware feature some of the most interesting geology and flora reachable within less than 2 hours from most of our homes. See details on pages 7-8.

Kirsten Johnson

# Plant ID QuiZ Win a free trip to the 2014 conference!

1. This hairy, herbaceous, and common member of the Rose Family has pinnately compound leaves, each with more than 11 toothed leaflets varying greatly in size, with large and small leaflets interspersed along the rachis. The small yellow flowers, in a terminal raceme, appear mid to late summer.

- 2. Whether or not in bloom, this Aster Family member is easily recognized by the distinctive purple veins in the leaves of its basal rosette (photo right). The yellow flowerheads are born on wiry stems rising up to 30" above the basal rosette.
- 3. MNPS field trippers at Loch Raven Watershed and at the McKeldin area of Patapsco State Park exclaimed at the tropical look of these trees, which seemed out of place in oak-hickory-tulip forests. This species is indeed native, but uncommon, ranked S3 (state watch list). This tree is far from the tallest in the forest, but it has the largest simple entire leaves of any native plant in Maryland—often exceeding 20 inches in length. These huge deciduous leaves are in whorl-like clusters at the ends of branches. The big white flowers appear in May.



Basal leaves, quiz plant #2, with flowers of Houstonia caerulea (Bluets).

CONTEST RULES: Submit your entry to info@mdflora.org or to MNPS, PO Box 4877, Silver Spring, MD 20914. Answers must be received by 6:00 PM August 29. Include your name, email address and/or telephone number. The winner will be selected at random from among the correct entries and will be notified by phone or email by September 5. Failure to respond within 3 days of notification results in forfeiture of ticket and another winner will be chosen. YOU MUST GET ALL THREE ANSWERS CORRECT TO WIN, AND YOU MUST BE A MEMBER OF MNPS AS OF AUGUST 29. Previous winners, board members and their immediate families are not eligible.

On the Cover: Black Cherry, *Prunus serotina* Ehrh. Upper left to right: Leaves (May), flower buds (May), bark, fruit (mid-June). *Photos by Kirsten Johnson* 

# Wildflower in Focus – Black Cherry

Prunus serotina Ehrh Family Rosaceae



hat is that big beautiful tree with the white flower clusters that point every which way? It must be a black cherry. The individual flowers are

obvious roses. There are lots of them-at least 20—on each raceme. The leaves? Simple, bluntly and shallowly toothed, and a little bit shiny. The twigs are reddish brown, while the bark is deep gray with lenticels and reddish underbark. Bark and twigs are aromatic when scratched, with a distinctive almond-like odor. Like most pioneer species black cherry grows rapidly, thrives in full sun and is shade intolerant. Most abundant in old fields and woodland margins, it is also found in forests, possibly because its height (to 100 feet) and long life (to 250 years) enable its continuing survival well into the reign of the next trees in succession.

What a useful tree this is! Black cherry was the original main ingredient of wild cherry cough syrup, and it makes a fine jelly. Its timber is prized for furniture. Birds and other animals feast on the fruits. Doug Tallamy, in *Bringing Nature Home*, touts its value as food for Lepidoptera, including ten species of giant silk moths such as cecropia, polyphemus, imperial and io moths; five species of butterfly such as tiger swallowtail, and red spotted purple; 63 species of inchworms, and eighteen species of dagger moths. In fact, by mid-June, insects will have left few leaves untouched on the typical black cherry,



while the tree continues to thrive. Ants feed on the nectar produced by glands in the leaf stalks; they then attack caterpillars and other leaf-feeding insects. Cherry trees are notorious for harboring the eastern tent caterpillar (Malacosoma americanum). But the usual infestation consists of only a few tents, and the eastern tent caterpillar is a major food source for bats and birds, especially cuckoos. Black cherries are also notorious for toxicity to humans and domestic animals, especially farm animals. All parts of the tree except the fruit pulp contain compounds that cause the release of hydrogen cyanide when crushed (or chewed). Hence the almond odor.

The word 'serotina' means 'late' in Latin, so I wondered, "Later than what?" The German botanist Jakob Ehrhart, a pupil of Linnaeus, named the species in 1788. By that time, P. serotina (originally imported from North America) had been grown as an ornamental in France, Germany and other countries for over 100 years. Ehrhart chose the name because the flowers appear later than those of the native European, Prunus padus. Currently, P. serotina is considered invasive in some European countries, where ecologists note that it displays the characteristics typical of an invasive plant: its numerous seeds are widely dispersed by animals, it grows fast, tolerates a wide range of environmental conditions, and lacks the parasites and pathogens that inhibit its spread in its American home territory.

- Kirsten Johnson Left: Flowering Black Cherry (mid-May)



Left to right: Insect damaged black cherry leaves, coral hairstreak (butterflies), and red spotted purple, io moth. Photos: Beth Johnson

# Cris Fleming, Botanist and Teacher Extraordinaire

## Fleming Favorites

Tree: Sugar Maple, Acer saccharum
Shrub: Spicebush, Lindera benzoin
Woody Vine: Virgin's-Bower, Clematis virginiana
Wildflower: Fringed Gentian, Gentianopsis crinita
Fern: Goldie's Wood Fern, Dryopteris goldiana
Maryland Native Plant Habitat: Soldiers Delight
Rose Family Member: Canada Burnet, Sanguisorba canadensis

On a summer day in the early 1970s, Cris Fleming and her husband went canoeing on Lake George in the Adirondacks, where they were vacationing with their three young children. "We paddled across the lake

to climb around a rockslide on a mountain called Deer Leap," Cris recalls. While scrambling up the rocky shoreline, Cris spotted a delicate plant with nodding bell-shaped flowers. She had brought along Peterson's *Field Guide to Wildflowers* which she had found in the cottage her family was renting from a friend. Cris retrieved the book from the canoe and methodically flipped through the section on "Violet, Blue" flowers until her eyes rested on a page headed "bell-like flowers." There at the top of the page, she found her wildflower: Harebell (*Campanula rotundifolia*).

"It was magic," she says with her gentle smile, while sitting near her native wildflower garden at her Chevy Chase home on another summer day many years later. Cris had always loved nature: She had climbed the maples in her backyard and swung on the willows in a nearby park as a child, swooned over Thoreau's Walden while in high school, and written a poem for the Bethesda-Chevy Chase High School literary magazine entitled My Trees to protest a threatening construction project. However, the harebell moment is the one she identifies as the moment when the plant world first became the focus of her passion as a naturalist.

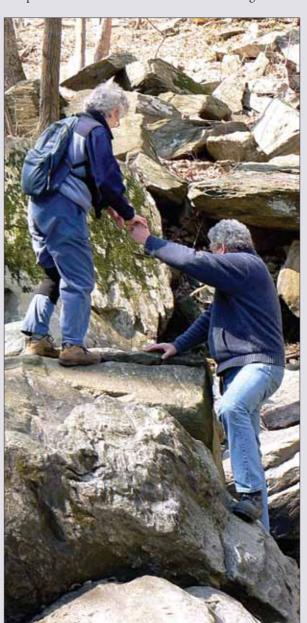
"That summer on Lake George with the Peterson field guide was a few years pre-Newcomb," Cris says of the wildflower guide published in 1977 with the accessible key that she would later introduce to hundreds of field studies students. It may surprise some of those students to learn that the accomplished and revered botanist who is a past President (2007–2008) and long-standing

Board Member of the Maryland Native Plant Society, who received a Faculty Excellence award in the Graduate School/ ANS Natural History Field Studies Program in 1998, who was the main author of the authori-

tative Finding Wildflowers in the Washington-Baltimore Area, and who worked as a field ecologist for Maryland's DNR Natural Heritage Program, majored in literature and minored in psychology at Bennington College in Vermont. Or that this legendary master of plant ID and popular MNPS field trip leader didn't ID her first plant until she was in her thirties.

When the Fleming family returned to Chevy Chase after the summer Cris ID'ed the Campanula, she resumed teaching preschool at the nearby Green Acres School, where she also served as Preschool Director. In 1975, Cris went on to found, teach and administer the Children's Education Programs at the Audubon Naturalist Society and ultimately to become Education Director during her 15 years on the ANS staff. While at ANS she began taking courses in the Natural History Field Studies Program that ANS co-sponsors with the Graduate School (then the USDA Graduate School). She also took a plant taxonomy course at the University of Maryland. Soon Cris had begun teaching adults as well as children, quickly becoming one of the most popular teachers in the Natural History Field Studies program.

When asked if she uses different techniques to teach children and adults, Cris replies, "There's not much difference. Since I taught children for most of my professional life, when I started teaching adults I just used the same hands-on techniques." She adds, with a warm laugh, "I'm lucky to teach subjects that people of all ages can ooh and ah about—and get their hands dirty during the process."



Cris and Rod Simmons scale the rocks at Great Falls Park.
Photo: Liz Jones

Joy Shindler Rafey, administrator for the Maryland Master Naturalist program offered through the University of Maryland Extension Service, received her Master Naturalist training at Woodend (ANS headquarters) in Chevy Chase. Says Joy, "As a trainee in the Maryland Master Naturalist class of 2012 at the Audubon Naturalist Society, I had the great fortune of meeting and learning from incredible instructors. One of the most outstanding was Cris Fleming. Her session made a distinct impression for many reasons, but it was Cris herself that left the most indelible mark. Despite a quiet demeanor, Cris's passion shone through and engaged us immediately. Her love of botany was almost palpable, and

The praise of Cris's botany colleagues is no less effusive than the praise she's received from her students. In the words of Gary Fleming, one of the region's most revered botanists and the Vegetation Ecologist for the Division of Natural Heritage, Virginia Department of Conservation and Recreation (DCR), who is not related to Cris but describes her as "a friend, kindred lover of plants, and collaborator in field work" for thirty years. "Cris is a patient and utterly thorough field botanist who leaves no stone unturned when working an area and identifying plant specimens. For decades, she has repeatedly inventoried many of the important natural areas in Maryland, northern Virginia, and eastern West Virginia,



incited others to approach the study of plants with profound curiosity and near-religious fervor. When the opportunity arose to have her inscribe her book to me, I was giddy as a schoolgirl. I prize the book both as a part of my Master Naturalist toolkit and as a totem to approaching nature and lifelong learning with enthusiasm and pure joy."

While continuing to teach adult natural history field studies courses, Cris has devoted much of the second half of her career to botanical field work. In 1995, the Johns Hopkins University Press published Finding Wildflowers in the Washington-Baltimore Area, which Cris authored with Marion Blois Lobstein and the late Barbara Tufty. In the summer of 1994, Cris began work as a field ecologist for the Maryland Natural Heritage Program of DNR. She spent five years on the staff doing botanical surveys for Rare, Threatened and Endangered Plants (RTE) in Charles, Montgomery, Baltimore and Harford Counties. From 2000 to the present day she has worked as a contract botanist on many projects, including RTE surveys of the Harpers Ferry National Historical Park, the University of Maryland Campus, the Monocacy National Battlefield in Frederick County, Maryland and Turkey Run and Great Falls Parks in Fairfax County, Virginia. In addition to serving as President of the Maryland Native Plant Society and an active long-time member of the Board, Cris has been Botany Chair for the Potowmack Chapter of the Virginia Native Plant Society since 1995.

giving her an encyclopedic knowledge of their floras and unusual or rare plants. Cris's work has also provided valuable data and insight on changes in local plant life that can only be obtained through long-term study."

Gary adds, "In addition to her skill as a field botanist, Cris has a legendary ability to impart her enthusiasm and knowledge to others as a



teacher and field trip leader. Over the years, she has probably been responsible for leading hundreds of people to an interest in plants; and many of her students have become first-rate botanists themselves."

Gary and Joy speak for many of us who have been lucky enough to benefit from Cris's exacting botanical skills, her passionate and intuitive love of plants, and her unparalleled ability to share her knowledge.

~ Melanie Choukas-Bradley

# Selecting Native Plants For Use On Mid-Atlantic Green Roofs

The goal is to integrate human land use

with natural systems by increasing the

land area that serves as habitat space.

The urban ecosystem is gradually changing in the Mid-Atlantic region. Green roofs, bioswales and rain gardens are becoming increasingly common as local governments provide incentives for their installation. While the primary goal of these new regulations is to manage storm

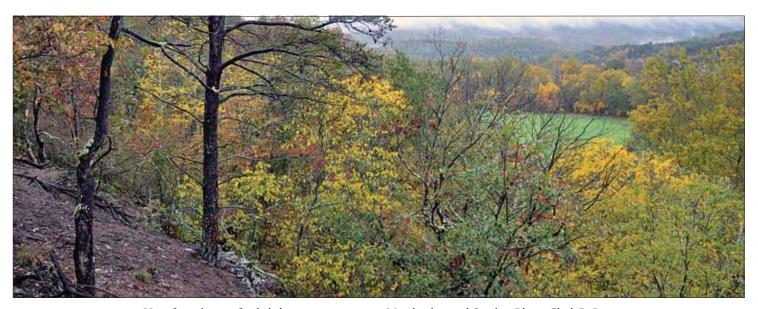
water to reduce environmental damage, they also provide an opportunity for conservation. Green roofs can provide *ex situ* conservation space for plant species native to the Mid-Atlantic that require extreme

drought and porous growing media. In my view, *ex situ* conservation is an important component of global species conservation. Populations maintained in cultivation can comprise the only bastion for species that would otherwise be lost, and thus can represent the only hope for reintroduction to natural areas. In an ideal world we would protect enough habitat to prevent the loss of any species. However, human use

step is to identify the characteristics of the environment. Green roofs are engineered systems designed primarily to capture storm water and reduce the temperature extremes experienced by the roofs (Obendorfer et al., 2007). They are composed of layers on top of waterproof

membranes. The layers can take various forms, but they comprise four basic categories: a drainage layer, a root barrier, a mineral-based substrate and plant material. Green roofs fall into two classes based on the depth of

the substrate layer. "Extensive" green roofs are those with a substrate depth generally less than 6 inches. Green roof systems with greater depth are generally considered "intensive" green roofs. Extensive green roofs are more common due to lower installation and maintenance costs; thus they have potential to be used as conservation space for native xerophytes (Peck et al., 1999).



View from the top of a shale barrens site in western Maryland in mid October. Photo: Clark DeLong.

already dominates most formerly natural areas, and is not likely to decline. We cannot rely on preservation of remaining natural areas to sustain biodiversity. We must pursue novel methods of conservation, and the use of regionally native species in gardens and landscapes can mitigate the effects of habitat destruction. That is why scientists like Doug Tallamy propose that we cultivate our urban and suburban areas with native plants. The goal is to integrate human land use with natural systems by increasing the land area that serves as habitat space. By doing so, we provide space for dependent insects, birds, and other organisms to utilize new and reclaimed environments.

My research focused specifically on green roofs. While research had been done in other regions on native plants for green roofs, no study has focused on the Mid-Atlantic region of North America. A portion of my research has focused on finding native plant species that can utilize green roofs as *ex situ* habitat space. When selecting new plant species for use in a man-made environment the first, and perhaps most important,

Green roofs are tough environments. The conditions plants must endure to survive on an extensive green roof can differ greatly from those of the prevailing regional environment. Modern extensive green roofs are usually xeric environments, meaning they experience very low levels of plant-available water (Obendorfer et al., 2007), often for long periods of time. This is, in part, due to the light-weight substrates used to construct green roofs. These engineered media differ greatly from natural soils, generally having higher porosity, lower bulk density and less organic material. These substrate properties, combined with the shallow substrate depth of extensive green roof systems, limit the amount of plant-available moisture at any one time, and in turn, also limit the water retention capacity of the green roof. Drought conditions are therefore common on green roofs. To be considered viable candidates for use in these systems, plants must be able to tolerate very low water availability, often in addition to temperature extremes.

continued facing page

Today many green roofs in the Mid-Atlantic are planted with a selection of non-native hardy succulents, *Sedum* and *Delsosperma* being the most prominent genera. These tough species can tolerate drought and cover a roof densely enough to suppress most weeds. While the use of these species is not in itself ecologically harmful in our region, their use represents a missed opportunity. Most Mid-Atlantic native plants are not adapted to the type of substrate and water regime experienced on green roofs; however, there are habitats in the region with similar conditions. Two habitat types in particular stand out: shale barrens and serpentine barrens. There are also a number of cosmopolitan species that occur across a broad range of habitat types that I suspect would also be able to persist on green roofs.

With permission from The Nature Conservancy, I explored several shale barren habitats, observed a number of species with potential for use on green roofs, and collected a limited amount of propagative material. There was one clear candidate that eventually proved to survive well on green roofs: the Aster Family member, *Packera antennarifolia* (Syn: *Senecio antennarifolius*), shale barren ragwort. This species is a beautiful, diminutive relative of *Packera aurea*, golden ragwort, a native species common in moist and shaded environments. *P. antennarifolia* only pushes foliage 2-3 inches above the ground. The leaves are covered completely in dense trichomes (plant hairs), lending its appearance a grey cast, much like the related, but non-native, dusty miller (*Senecio cineraria*). Leaves are evergreen to semi-evergreen and the undersides of







otos: Clark DeLong.

Packera antennarifolia.

Antennaria parlinii.

Experimental 'green roof.'

After identifying habitats with conditions similar to those on green roofs, I examined the traits of the species known to occur in them. A common adaptation to drought is to form roots that penetrate to deeper soil layers where water remains available through prolonged periods without rainfall. Species with deep roots or taproots are not suitable for use on green roofs because of this very trait. Extensive green roofs, with only 6 inches of substrate, don't have deep water reserves for plant species to tap.

Adaptations to low levels of available water that do lend themselves to survival on green roofs include: thick succulent leaves, pubescent leaves and/or stems and succulent corms or bulbs. A prostrate growth habit is also desirable as it limits exposure to the desiccating effects of wind. This list of traits allowed me to review the literature of known species that occur in shale barrens and serpentine barrens to select promising candidates.

Shale barrens are found throughout the central Appalachian Mountains. They form when a south-facing ridge of shale is under-cut by a stream and then erodes to form a steep slope of small shale particles. This slope continues to erode, its soil does not accumulate organic matter, and it experiences very high soil temperatures. The challenging shale barrens environment has spurred the evolution of a group of endemic or near endemic plant species.

the leaves on young plants are a deep purple. Flowers are bright yellow in mid-spring, with sterile ray flowers and fertile disc flowers. The heads are held on upright stems 8-16 inches above the ground in a loose umbel. I have found *P. antennarifolia* is quite capable of surviving the drought conditions present on a green roof, as they closely resemble those of the shale barrens to which they are adapted.

Another species that I have found does well on green roofs is the Pink Family member, *Cerastium arvense*, field chickweed. I first recognized this species from a rare botanical variety found on serpentine barrens, *Cerastium arvense var villosissimum*. I worked with the more common straight species, which still has much of the adaptability of the barrens variety.

This species grows quickly in early spring, blooms, and functionally goes dormant until fall. It maintains some foliage but largely just persists through summer drought. Flowers are white and held 4-6 inches above the foliage. Leaves are narrow lanceolate and light green in color. Absent competition and in full sun it forms a dense habit and spreads 8-12 inches in a single growing season. It maintains some foliage throughout the winter allowing it a head start in spring.

Antennaria parlinii, Parlin's Pussytoes, also in the Aster Family, is another of my prime candidates for use on green roofs. The strain that I

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# **Maryland Native Plant Society Annual Conference 2014**

Co-sponsored by Cecil College . Cecil College, North East, MD





# Saturday, September 20<sup>th</sup>

8:30 am – Registration 9:15 am – Welcome The Silent Auction will be open during breaks, lunch, & dinner

- Morning

World-class Ecosystem with a Heart of Stone: What the Piedmont Serpentine Barrens Reveal about Continental Collision, Extinct Megafauna, Ancient customs, and Much More Roger Latham, Research Ecologist and Conservation Biologist.

#### Restoration at a Local Serpentine Barren

Mike Bertram, Friends of the State Line Serpentine Barrens

#### Flora and Ecology of Cecil County and its Environs

Wesley Knapp, Eastern Region Heritage Ecologist/Botanist Maryland Department of Natural Resources

#### **Enhancing Urban Biodiversity with Native Plantings**

Anna Johnson, PhD Candidate, University of Maryland-Baltimore

— Afternoon

12:00 pm – Lunch Buffet 1:00 pm – Field Trips

Evening -

5:00 pm – Cash Bar, Appetizers, Silent Auction

6:00 pm - Dinner Buffet

7:00 pm – Flora and Ecology of Delmarva Seasonal Ponds

William MacAvoy, Botanist, Species Conservation and Research Program, Delaware Division of Fish and Wildlife

Sunday, September 21st

Field Trips. Meet at the site. Directions provided on Saturday.

# **Field Trips**

# Saturday, September 20

#### Pilot Serpentine Barren, Nature Conservancy Preserve, Cecil Co.

Leaders: Wes Knapp & Roger Latham

An excellent example of how geology determines a natural community's character. Thin soils that are nutrient poor and rich in minerals result in an unusual plant community.

#### Mt Cuba Center, Hockessin, DE.

Leaders: Carole Bergmann and Mt Cuba Staff

A renowned botanical garden with a focus on native plants of the eastern Piedmont in a naturalistic setting.

#### Cecil College campus and nature trails.

Leaders: Cecil College Horticulture Club

#### Elk Neck State Forest, Cecil Co.

Leader: Rod Simmons

Explore the unique oak-heath-pitch pine sand hill forests of this park at the cusp of the piedmont and the coastal plain.

#### Susquehanna State Park, PA.

Leaders: Janet Ebert & Jack Holt

This botanically rich piedmont park along the river is a favorite destination for field trips. This trip will explore the Deer Creek and floodplain areas.

#### Nottingham Serpentine Barren, Nottingham, PA.

Leaders: Cris Fleming & Matt Bazar

Serpentine rock outcrops support unique vegetation communities and rare species occurring in these habitats.

#### White Clay Creek, PA/DE.

Leaders: Brett McMillan & Dwight Johnson

Explore areas of this renowned botanical hotspot on the PA-DE border.

#### Lum's Pond State Park, DE.

Leader: Karyn Molines

Explore wetland and coastal plain flora around the largest freshwater pond in

## Sunday, September 21

#### Susquehanna Lock 12 Park, PA.

Leader: Tim Draude.

Explore ice-scoured riparian bedrock terraces of this section of Susquehanna State Park, on the east side of the river.

#### Elk Neck State Forest, Cecil Co.

Leader: Rod Simmons.

Explore the unique oak-heath-pitch pine sand hill forests of this park at the cusp of the piedmont and the coastal plain.

#### Lum's Pond State Park, DE.

Leader: Karyn Molines.

Explore wetland and coastal plain flora around the largest freshwater pond in Delaware.

#### Rocks State Park, Harford Co.

Leader: Dwight Johnson.

Located only one hour from Baltimore, this park is home to spectacular rock formations and waterfalls. Optional side-trip to Eden Mill if time permits.

#### State Line Serpentine Barrens.

Leaders: Friends of the State Line Barrens.

Located along a 20-mile stretch of the MD-PAa border, the State Line Serpentine Barrens, contain some of the last major remnants of serpentine grassland and savanna in eastern North America.

Field Trip Leaders: Matt Bazaar, Cecil Co Forestry Board & MNPS board member; Carole Bergmann, M-NCPPC Forest Ecologist & MNPS board member; Tim Draude, Muhlenberg Botanical Society, regional field trip leader & consultant; Janet Ebert and Jack Holt, botanical/ecological consultants & regional field trip leaders; Cris Fleming, author of Finding Wildflowers in the Washington-Baltimore Area & MNPS board member; Dwight Johnson, regular field trip leader for MNPS & other organizations; Wes Knapp, Botanist/Ecologist, Maryland DNR; Roger Latham, Research Ecologist; Brett McMillan, botanist & MNPS board member; Karyn Molines, MNPS board member & regular field trip leader; Rod Simmons, MNPS board member & regular field trip leader.

# THE DIVERSE FLORA & HABITATS OF CECIL COUNTY AND THE TRI-STATE AREA

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<ul><li>☐ Members: \$65 before 8/1/13</li><li>☐ Non-members: \$75 before 8/1/13</li></ul>	<ul><li>☐ Members: \$75 after 8/1/13</li><li>☐ Non-members: \$85 after 8/1/13</li></ul>	<ul> <li>□ Students: \$15</li> <li>□ Saturday Social &amp; Dinner: \$30</li> <li>□ Saturday Social &amp; Dinner, Student: \$20</li> </ul>	
Name:	Sat. Field Trip:	Choice 2:	
Address:	Sun. Field Trip:	Choice 2:	
We will try to accommodate your field trip request but cannot guarantee availability. You will receive registration confirmation that indicates which trip you are registered for.			
Checks payable to MNPS. Mail form and payment to: Maryland Native Plant Society, PO Box 4877, Silver Spring, Maryland 20914			

Information on accommodations in the area can be found on our website.





# For work and pleasure, field trips are the lifeblood of the Maryland Native Plant Society.

Upper left: Mapping team at Flag Ponds St Park (leader Karyn Molines, center) April 11. Upper right: Leader Mary Pat Rowan (in red) at Fort Dupont, June 1.

Lower left: Dehisced fruit of Viola sototia, common blue violet, at Patapsco St Park, McKeldin area, June 7.

Middle: Saxifraga virginia, early saxifrage, at Flag Ponds St Park, April 11. Lower right: Staphylea trifolia, bladdernut, at Patapsco St Park.







continued from page 4

am working with has foliage covered in dense hairs, similar to *P. antennarifolia*, giving the foliage a reflective blue-grey cast. Like other species in the genus *Antennaria*, it is stoloniferous and forms dense rosettes of foliage along the length of the stolons. *A. parlinii* tends to form short stolons resulting in a dense circular clump that gradually migrates away from the center. The foliage is the main ornamental feature of this plant. Flowers are an inconspicuous grey-white in mid-spring.

The final and more complete results of my research will be published in the near future. An additional part of my research, which will be published as a scientific article, was dedicated to determining how different plant species contribute to the function of green roofs. I am also in the process of getting the species I discussed and a number of others introduced to the regional green roof trade. I hope more researchers in other regions will evaluate native plant species of their xeric habitats for use on green roofs, as they represent an opportunity to claim urban areas as *ex situ* conservation space for some of our native species.

~ Clark DeLong

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Clark DeLong is a passionate advocate for the conservation of native plants through horticulture. He recently completed a Masters Degree in Plant Science at University of Maryland where he taught woody plant identification and researched plant performance on green roofs. He is currently the assistant nursery manager at Environmental Concern Inc on the eastern shore of Maryland.

# **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.

#### July 29, Tuesday - 7:30 PM, doors open at 7:00 The Maryland Amphibian Reptile Atlas

Silver Spring, Silver Spring Civic Center (note location) Speaker: Sue Muller, Howard Co. Coord for MARA. A state-wide 5-year reptile/amphibian survey, begun in 2010, ends this year. Sue Muller will discuss the goals and the findings of the project and show how MNPS members can help with the study.

#### August 19, Tuesday - 7:00 PM

#### Wildflowers of Mountain Maryland

MNPS Western Mountains Chapter Meeting Appalachian Laboratory, 301 Braddock Rd, Frostburg, MD Speaker: Liz McDowell, Coordinator, Western Mountains Chapter Take a closer look at the native flowering herbs, shrubs and vines of Allegany and Garrett Counties. They provide esthetic and practical value for wildlife and people. Program follows a brief chapter business meeting.

#### August 26, Tuesday - 7:30 PM, doors open at 7:00 Herbal Uses for Native Plants ... and a few Pioneers

Silver Spring, Silver Spring Civic Center (note location) Speaker: Holly Shimizu, former Ex. Dir. U.S. Botanic Garden Holly Shimizu will discuss some of the interesting ways that native plants qualify as "herbal." Some are already huge in the herb industry and need to be protected and cultivated to avert wild collecting. Others remain undervalued and are worthy of recognition.

## September 30, Tuesday - 7:30 PM, doors open at 7:00 The Over-abundance of White-tailed Deer in Maryland:

How bad is it, and what can we do?

Kensington Library, Knowles Ave, Kensington, MD Speaker: Charles Rhodehammel, VP Envtl. Mgt, Columbia Assoc. Deer are profoundly affecting MD's plant and animal communities, from forests to suburban gardens.

#### October 21, Tuesday - 7:00 PM

#### MD's Invasive Ornamental Plant Ban Law

MNPS Western Mountains Chapter Meeting Appalachian Laboratory, 301 Braddock Rd, Frostburg, MD Speaker: Kerrie Kyde, Ecologist, MD Natural Heritage Program The Invasive Plant Advisory Committee, est. 2011, advises on invasives whose production and sale should be limited in MD. Kyde will discuss IPAC and the system it uses to assess invasiveness. Program follows a brief chapter business meeting.

#### October 28, Tuesday - 7:30 PM, doors open at 7:00 A Year in Rock Creek Park: The Wild, Wooded Heart of Washington, DC

Kensington Library, Knowles Ave, Kensington, MD Speakers: Melanie Choukas-Bradley and Susan Austin Roth The speakers will discuss their forthcoming book and share Susan's photographs of the park through the seasons as they discuss the woody and herbaceous plants of Rock Creek Park.

# 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 for trips, see mdflora.org. Unless otherwise indicated, MNPS field trips are generally geared to adults.

# July 26, Saturday - 10:00 AM — 12:00 PM

#### Exploring Elk Ridge in Summer

Leaders: Liz McDowell and Ron Boyer

This is the second in a series of field trips exploring the Elk Ridge

Native Plant Preserve through the seasons.

#### July 27, Sunday - 10:00 AM — 1:00 PM Wetland Plant ID, Jug Bay Wetlands Sanctuary

Cosponsored with Jug Bay Wetlands Sanctuary

Leader: Karyn Molines

Explore diverse tidal wetlands in southern Anne Arundel County. July is the month when the marsh is in full bloom. There is a \$6 vehicle entrance fee into the sanctuary.

#### September 7, Sunday - 10:00 AM — 2:00 PM

Fort Slocum, a Civil War Fort Site in NW Washington, DC

Leaders: Mary Pat Rowan and Lou Aronica

#### October 5, Sunday – 10:00 AM — 2:00 PM

Fort Totten, a Civil War Fort Site in NE Washington, DC

Leaders: Mary Pat Rowan and Lou Aronica

#### October 18, Saturday, 10:00 AM — 12:00 PM

#### Exploring Elk Ridge in Autumn

Leaders: Liz McDowell and Ron Boyer

This is the last in a series of field trips exploring the Elk Ridge Native Plant Preserve through the seasons.

# November 2, Sunday - 10:00 AM — 1:00 PM

#### Sugarloaf Mountain Field Trip

Leader: Melanie Choukas-Bradley

Author of two books about Sugarloaf Mountain, Melanie will highlight the rose family. This will also be a chance to view autumn foliage and fruit of many woody plant species, including table mountain pines at the summit.

#### November 2, Sunday - 10:00 AM — 2:00 PM

Fort Stanton, a Civil War Fort Site in SE Washington, DC

Leaders: Mary Pat Rowan and Lou Aronica

#### November 9, Sunday - 10:00 AM — 1:00 PM Rock Creek Park Field Trip: Boundary Ridge area

Leader: Melanie Choukas-Bradley

Explore the park with the author of A Year in Rock Creek Park: the Wild, Wooded Heart of Washington DC.

# Become a member, join online: www.mdflora.org.



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

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