

# The Leaflet

Calmes Neck—Marjorie Prochaska

SUMMER 2014

Spring began for me this year with our chapter's annual walk to Calmes Neck, an enclosed neck of land formed by a loop in the Shenandoah River in Clarke County, sheltering an amazing array of spring ephemerals. I had missed this walk for several years, and it was wonderful to catch up again with Gary Fleming, vegetation ecologist with Virginia's Division of Natural Heritage. Gary led us into the slopes of a rich mesic forest covered with Virginia Bluebells (*Mertensia virginica*). We all knew that spring was late this year, and we could see it in the sparseness of the bloom. The flowers were coming, but we were seeing them in their infancy, it seemed, except for Twinleaf. We were treated to the most amazing display of *Jeffersonia diphylla* any of us had ever seen. This is truly an ephemeral, and a week later, it was gone,



Twinleaf (*Jeffersonia diphylla*)

but its sweet white flower and distinctive paired leaflets were a real treat for us on April 12.

Originally part of the Lord Fairfax grant, Marcus Calmes bought the land we were walking through in 1747, and his family kept it until the end of the 19<sup>th</sup> century. The entire area is underlain with limestone, which dissolves, forming sinkholes. The resulting high Calcium content produces a fertile soil in which Columbine (*Aquilegia canadensis*), Rue Anemone (*Thalictrum thalictroides*), Bloodroot (*Sanguinaria*

*canadensis*), Wild Ginger (*Asarum canadense*), Spring Beauty (*Claytonia virginica*), Toothwort (*Cardamine* spp.), Trout Lily (*Erythronium americanum*) and more thrive. On one small rock outcrop alone, we were able to identify four ferns: Walking Fern (*Asplenium rhizophyllum*), Maidenhair Spleenwort (*A. trichomanes*), Wall-rue (*A. ruta-muraria*), and Purple Cliff-brake (*Pellaea atropurpurea*).

Harbinger-of-Spring (*Erigenia bulbosa*) lived up to its name, flowering everywhere. It was well worth the deep kneel required to look at its red-brown anthers through an ocular. These plants are so precious and so well suited to where they live and bloom, they have to be appreciated where they grow naturally.

A VNPS Registry Site, Calmes Neck remains in private hands, and the landowner is free to develop it. On Calmes Neck, multiple landowners are involved, and we have watched over the years as the property has been staked, and now one of the lots is soon to be built upon. The new gravel road was ominous indeed, but we are hopeful that the best parts of Calmes Neck can be saved from needless foot traffic. At least one pair of neighboring property owners hiked with us, eager to identify plants and to discover what they might have growing on their land.

We ended with a picnic along the river bank, where we thanked Gary and toasted him for leading the hike for the Piedmont Chapter for the 21<sup>st</sup> year. Hopefully our interest in the property and gentle oversight will protect the bluffs, slopes, and ravines of Calmes Neck in the years to come.



Walking fern  
(*Asplenium rhizophyllum*)

*The Virginia Native Plant Society (VNPS), founded as the Virginia Wildflower Society in 1982, is a non-profit organization of people who share an interest in Virginia's wild plants and habitats and a concern for their protection.*

*The Piedmont Chapter is a geographically defined subgroup of VNPS in the northern point of Virginia east of the Blue Ridge Mountains. It includes Loudoun, Fauquier, Culpeper, Rappahannock, Warren, Clarke, and Frederick counties.*

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#### **The Leaflet**

### **Abrams Creek Wetlands Preserve—Sally Anderson**

In the City of Winchester is an approximately 25 acre preserve along a part of Abrams Creek that is fed by a spring on the west side of town. Known as Pennypacker Spring and forming White's Pond along the Winchester and Western Railroad, Abrams Creek is a tributary of Opequon Creek, which eventually turns north and joins the Potomac River. Although Winchester is usually considered part of the Shenandoah Valley, it is in fact not a part of the Shenandoah River drainage. The Preserve was dedicated in 2001.

This wetland has been studied for many years by students from Shenandoah University under Environmental Sciences professor Woodward Bousquet. Two of his students led a walk along the very popular hike and bike path through the Preserve. Ashley Landes is a senior at SU and is specializing in the rare plants of the Preserve, which are primarily wetland species. Danny Cooper has graduated and works for Wetland Studies and Solutions in Gainesville, and is mainly interested in water quality improvements and a technique known as the Floristic Quality Assessment Index. All seniors in the Environmental Studies department must participate in the Capstone class that includes community outreach to help us understand water quality and the wetlands, and their protection.



The students brought pressed specimens to show as the plants were not far along in mid-April. The plant studies are based on levees, 50 to 100 square meter circular or rectangular plots. The wetlands have hummock and hollow topography: high and low areas where plants can find the water level where they grow best. Over the years, the wetlands were kept free of woody vegetation, initially by fires but more recently by grazing. This stopped after the area was developed and the Preserve established, so keeping the sycamore trees and other woody plants from drying up the wet ground is an issue in the Preserve.

Currently, a three year floristic analysis by Dr. Bousquet, his students, and Virginia Natural Heritage is collecting herbarium voucher specimens of the plants of the Preserve to be housed at Shenandoah and George Mason Universities. 600 plants have been pressed from an estimated two-thirds of the area.

The student projects and lots of other information, including studies at the new Cool Springs campus on the Shenandoah River are available at the BRIES (Blue Ridge Institute for Environmental Studies) website at <http://www3.su.edu/cf/su-bries/index.html>.





## Annual Walk among Trilliums at Thompson WMA—Cindy Blugerman

We were at G. Richard Thompson Wildlife Management Area (WMA), in Fauquier County, for the chapter's annual Trillium walk on April 27, but, alas, the majority of the Large-flowered Trillium (*Trillium grandiflorum*) plants did not bloom until about a week after our visit. This WMA, frequented by birding enthusiasts in search of spring migrant birds and known for its Trillium slopes also contains an exceptional diversity of other native wildflowers. Thus, we commenced to seek out the local botanical treasures and to learn more about the ecosystem that graciously permits them to survive.

Sally Anderson provided a checklist of the plant species and led us along the Marjorie Arundel trail within this VNPS registry site, one of about 30 sites (some are private property) within the state. The elevation starts around 2100 feet and descends to about 1800 feet at the seep (essentially, a discharge wetland where the groundwater emerges over a larger area and has no well-defined origin as a spring does). Greenstone underlies the soils in this area, which are somewhat acidic and contain many calcium ions.

Yellow Lady's Slippers (*Cypripedium parviflorum*) and Showy Orchis (*Galearis spectabilis*) orchids grow here. Violets displayed yellow or purple blooms. Also in bloom/bud were Star Chickweed (*Stellaria pubera*), Mayapple (*Podophyllum peltatum*), Slender Toothwort (*Cardamine angustata*), Rue Anemone (*Thalictrum thalictroides*), Early Meadowrue (*Thalictrum dioicum*), Wild Ginger



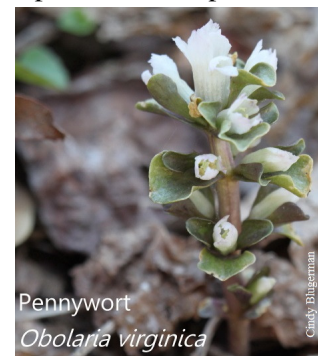
Yellow Trout Lily  
*Erythronium americanum*

(*Asarum canadense*), Jack-in-the-pulpit (*Arisaema triphyllum*) and at least one specimen of Yellow Trout Lily (*Erythronium americanum*). A few Bloodroot (*Sanguinaria canadensis*) plants still had their solo flower blooms but many had already developed their oblong seed pod. Plants that were identified by their leaves included Virginia Waterleaf (*Hydrophyllum virginianum*), Solomon's Seal (*Polygonatum biflorum*), Skunk Cabbage (*Symplocarpus foetidus*) and Swamp Saxifrage (*Saxifraga pensylvanica*).



Early Meadowrue  
*Thalictrum dioicum*

Of special note to this ecology and botany enthusiast was a small plant that was difficult to find among the leaf litter. A few of us had separated from our group to start the return walk back uphill when we passed Alonso Abugattas, of the VNPS Potowmack Chapter, who was there leading his own group of participants on a native plant walk. Alonso had just finished discussing Pennywort (*Obolaria virginica*) and he mentioned to us that just uphill, under some overarching fallen tree limbs, there was a small population of the species. We scoured the leaf litter at that specific shady spot for a few minutes and were about to give up the search just before we found the three pennywort plants. This species, the only species of its genus, only grows to a height of about six inches. As we discovered, its short stature and somewhat nondescript appearance (with small, stiff, grayish leaves) make it difficult to spot in the springtime forest. Pennywort, a member of the Gentian family, is fleshy and mycotrophic (has symbiotic associations with fungi).



Pennywort  
*Obolaria virginica*

On the return incline trek, we saw a population of golden ragwort (*Packera aurea*) with buds. The leaves of this plant can be mistaken for those of the invasive plant garlic mustard (*Alliaria petiolata*), but golden ragwort has a yellow composite (multiple petals) flower whereas garlic mustard has a white four-petaled flower. Thankfully, due to the Piedmont Chapter's garlic mustard control efforts here, we did not see too much of that invasive plant today.



## How's Your habitat?—Marjorie Prochaska

Our highly successful winter speaker series concluded March 23 with a talk from Charles Smith, Fairfax County Natural Resources Manager. Smith, known to many of us through his activities with the Prince William Chapter, is primarily a forest ecologist, and the habitat he asked us to consider was the forest.

He pointed out that the healthy forest is a complex ecosystem, and we considered what healthy looks like. Certainly air and water quality are important, but the soil, containing the nutrients and minerals produced by the degrading bedrock below, is the ecological memory of the place. Not only does it harbor the seed bank, but it is filled with a complex array of microorganisms which decompose, nourish, and catalyze. When we disturb the soil, when we displace the biomass of the earth, we are removing its biological memory. Sadly 95% of the earth's surface has been altered by humans. When an area is distressed, it cannot go back to what it was before—it doesn't have the materials.

What to do? A mature forest has trees of good size and diversity. However, deer browse is removing species, and the plants cannot recover. If we could concentrate our efforts to remove the deer, the forests would regenerate themselves. It turns out that grasses actually put more carbon in the soil than trees do (trees lock up carbon in their leaves.) It therefore makes sense to build up soils before planting climax species. There are certainly a fair number of projects in the Piedmont designed to naturalize our fields by planting warm season grasses, but Smith reminded us that it is the larger tracts of land which will be able to support the species diversity we are looking for.

He urged us to choose our battles carefully and to think broadly into the future. If it takes 250 years for a forest to reach climax conditions, then think in those terms. Look at what we have and decide what we are managing for. Assess, record, and use data to build our case. Think of restoring function. Think not only of restoring plants, think of insects and water quality.

We were pricked by the idea of our beloved Luna moth, which pupates in the leaf litter of a forest. We need a forest ecosystem to produce a Luna moth. Good woods and rotting leaves provide habitat for many larvae. Smith pointed out that 75% of birds nest within fifteen feet of the ground, and that they need caterpillars to feed their young. The Imperial moth produces a huge larva to feed to nestlings, while the adult is a generalist feeding on oaks, maples, pines, basswood and elm. Charles Smith's talk was a delightful reminder of the beauty in diversity which motivates us not only to preserve, but to seek out and enjoy.



Luna moth (*Actias luna*)



Imperial moth (*Eacles imperialis*)

## Cedar Creek Battlefield—Sally Anderson

Our May 11 Second Sunday Walk was held at the woodlands part of the Cedar Creek Battlefield. This well hidden trail is a few miles south of Middletown on U.S. 11, and although there is a large stone monument where the old drive turns in, it can be difficult to spot. Located near a large quarry operation, the area is relatively dry limestone with plants unusual for our chapter area in general.

One of the favorites is the Hoary Puccoon (*Lithospermum canescens*) in the Borage family. According to Wikipedia, puccoon is a name derived from the Powhatan language that refers to plants used by Native Americans for dyes made from plant roots. Hoary refers to the plant's hairiness, (continued on p. 5)





## Cedar Creek Battlefield (continued)

As does the epithet *canescens* (specifically off white or ashy gray). *Lithospermum*, or stone seed, describes the hardness of the seeds. The flowers are a golden yellow to almost orange yellow. From the website [illinoiswildflower.info/prairie/plantx/hry\\_pucconx.htm](http://illinoiswildflower.info/prairie/plantx/hry_pucconx.htm):

The flowers attract bumblebees, digger bees (*Synhalonia spp.*), cuckoo bees (*Nomada spp.*), mason bees (*Osmia spp.*), bee flies (*Bombylius spp.*), butterflies (*Vanessa spp.*, *Papilio spp.*), skippers (*Erynnis spp.*), and other insects (Robertson, 1929; Reed, 1993; Macior, 1967). The larvae of a long-horned beetle (*Hemierana marginata ardens*) feeds on *Lithospermum spp.*, probably by boring through the stems and/or roots (Yanega, 1996). Because the foliage of Hoary Puccoon contains pyrrolizidine alkaloids, it can be considered toxic to many herbivores.



Rock Twist  
(*Draba ramosissima*)



Hoary Puccoon  
(*Lithospermum canescens*)

Another plant that was very showy for our visit was Rocktwist or Branched Draba (*Draba ramosissima*). This Mustard family plant has a rosette of bluish-green leaves with a six inch tall bouquet of white blossoms. It grows out of the limestone rock outcrops overlooking Cedar Creek. The epithet *ramosissima* means much branched, accounting for the large bunch of blossoms held up by each plant.

The diversity at this site is noteworthy. There was much, much more to see, although with the weather starting to heat up most of the blooms will be finished soon.

## Happy Spring—Richard Stromberg

Happy to see all the spring flowers. Happier to see species I seldom see. Happiest to see a new one. I was happy to see the flowers Cindy Blugerman listed in the third paragraph on page 3. I envy her seeing Pennywort. I know it grows along the fire road in Thompson WMA, but I didn't find it. I also know where Nodding Trillium (*Trillium cernuum*) and Green Violet (*Hybanthus concolor*) grow in Thompson, and I was glad to find them. I was happy to go with Sally Anderson to Cedar Creek to see Hoary Puccoon, which I had only seen once before. Like Marjorie Prochaska (page 5), I was happy to see Painted Trillium (*Trillium undulatum*), which I had only seen flowering on a trip in Tennessee. I saw it while walking down Laurel Prong in Shenandoah National Park, and then, while coming up Mill Prong, I was delighted to see Eastern Twisted Stalk (*Streptopus lanceolatus*) for the first time in my life.



Eastern Twisted Stalk  
(*Streptopus lanceolatus*)



<b>Sunday</b>	<b>June 7</b>	<b>8am-3pm</b>	<b>Garden Fest</b>
<b>Frederick County.</b> Master Gardeners Garden Fest at Belle Grove Plantation, Middletown, Virginia: plant sale, specialty vendors, Second Hand Rose shop, children's activities, workshops, talks. For more information visit <a href="http://www.nsvnga.org">www.nsvnga.org</a> or <a href="http://www.bellegrove.org">www.bellegrove.org</a> or call 540-869-2028.			
<b>Sunday</b>	<b>June 8</b>	<b>1pm</b>	<b>Second Sunday Walk-Ice Mountain</b>
<b>Hampshire County, WV.</b> Ice formed in the winter in the thick talus of Ice Mountain creates a refrigeration effect providing habitat for plant species usually found in sub-arctic regions. Join Kristin Zimet for a walk through these plants unusual for our region. To reserve a space, contact <a href="mailto:piedmontvnps@gmail.com">piedmontvnps@gmail.com</a> .			
<b>Sat-Sun</b>	<b>June 28-29</b>	<b>noon-noon</b>	<b>Sky Meadows State Park BioBlitz</b>
<b>Fauquier County.</b> Help scientists to identify species to create a biodiversity inventory of the Park. Contact John Harris ( <a href="mailto:johnharris@hla-llc.com">johnharris@hla-llc.com</a> or 703-431-2232).			
<b>Sunday</b>	<b>July 13</b>	<b>10am-noon</b>	<b>Second Sunday Walk-Compton Peak</b>
<b>Warren County.</b> See the flora, geology, and scenery of Compton Peak in Shenandoah National Park. Meet at Dickey Ridge Visitor Center in the North Section of the Park at 10am. See magnificent columnar jointing and, with luck, the massive inflorescence of Broad-leaved Bunchflower ( <i>Veratrum hybridum</i> ). Some rough, rocky, and steep sections: 2.4 miles, elevation change 800 feet. For more information, email <a href="mailto:piedmontvnps@gmail.com">piedmontvnps@gmail.com</a> .			
<b>Friday</b>	<b>Aug 8</b>	<b>10am-noon</b>	<b>Invasive Removal</b>
<b>Loudoun County.</b> Help remove Mile-a-minute vines from Northern Virginia Blue Ridge Regional Park with the Friends of the Blue Ridge Mountains. For more information, email <a href="mailto:piedmontvnps@gmail.com">piedmontvnps@gmail.com</a> .			
<b>Sunday</b>	<b>Aug 10</b>	<b>10am-Noon</b>	<b>Second Sunday Walk</b>
<b>Loudoun County.</b> Emily Southgate will lead a walk in the Blue Ridge Center for Environmental Stewardship. We will be looking for species to add to the BRCEs plant list. Limited to 20 people. To RSVP and get driving directions contact <a href="mailto:piedmontvnps@gmail.com">piedmontvnps@gmail.com</a> .			
<b>Tuesday</b>	<b>Aug 12</b>	<b>9-11:30am</b>	<b>Reading Trees: An Introduction to Identification</b>
<b>Clarke County.</b> Carrie Blair, Virginia Native Plant Society. Learn to identify trees using simple keys, books, and memory tools developed by Carrie. Wear comfortable shoes, and bring cameras, notebooks, field guides, hand lenses, and a mystery branch or leaf. Foundation of the State Arboretum members \$10, nonmembers \$12. Reservations Required—Space is Limited. Call 540-837-1758 Ext. 224 or visit <a href="http://www.blandy.virginia.edu/our-foundation/online_payments">www.blandy.virginia.edu/our-foundation/online_payments</a> .			
<b>Sunday</b>	<b>Sep 14</b>	<b>TBA</b>	<b>Chapter Annual Meeting &amp; Second Sunday Walk</b>
Piedmont prairie walk, details to be announced. Contact <a href="mailto:piedmontvnps@gmail.com">piedmontvnps@gmail.com</a> for information.			

### Old High Acre Farm Walk—Cathy Mayes

The Chapter's March Second Sunday walk strolled down an old country road in Fauquier County. We started at Old High Acre Farm, a beautifully restored brick home outside The Plains, and meandered along Bust Head Road. Maybe because we were so tired of winter, the walk attracted nearly 40 people from several counties, some new faces and some very familiar. We were accompanied by special guest Alisa Booze Troetschel, a reporter from the *Fauquier Times*. Her pictures can be seen at [http://fauquiertimes.smugmug.com/Other/Week-in-Photos-3-12-14/37699023\\_kJ7qWG#!i=3122267572&k=SdSkHqc](http://fauquiertimes.smugmug.com/Other/Week-in-Photos-3-12-14/37699023_kJ7qWG#!i=3122267572&k=SdSkHqc).

Chapter President Sally Anderson and Mary Keith Ruffner led the walk, with additional tree identification expertise contributed by Chris Lewis and Carrie Blair. The road passes through oak-hickory woods on one side with a stream meandering through; on the other side the hedgerow is home to some huge oaks and sycamores. The road has a wide variety of trees, shrubs, ferns. We were too early to see spring wildflowers, and of the trees, only the slippery elms were blooming. After the walk, the hardy group enjoyed cider and cookies on the stone wall.





## Another Wildflower Weekend— Marjorie Prochaska

I first heard about West Virginia's Wildflower Pilgrimage last year and determined I'd try to go this year. It turns out that the West Virginia Garden Club and the WV DNR have been doing a wildflower weekend for 53 years! So I went. Based at Blackwater Falls State Park, there were a dozen full-day trips to choose from each day of the tour. I, who have difficulty choosing an ice cream flavor, had to seek advice from WV native Shirley Gay. I spent my first day along Dry Fork Road out of Parsons with husband & wife team Tom and Dawn Fox who knew birds, herbs and ferns. They were joined by Liam McGranaghan, a biology teacher who specializes in raptors, amphibians and reptiles. Every day I went out one particular blooming plant stood out above all others. This day it was the Painted Trillium (*Trillium undulatum*). They were everywhere along the road, not in dense clusters, but spread throughout, dotting logs and rock crevices alike. Also growing up in abundance was Great Angelica (*Angelica atropurpurea*), which doesn't grow in Virginia. One fun thing our leader did was uncover without damage the roots of Squirrel Corn (*Dicentra Canadensis*) to show the plump tuber which looks exactly like a fat corn kernel.

Where the water was slow along the edges of Dry Creek, Liam showed us where American Toads were collecting, and a smaller male would climb up on a female's back and not let go, claiming her as his own until such time as she would decide to mate. I also watched as a water snake claimed at least one of the toads for his meal. Later, in a well-watered drainage ditch, Liam pointed out fist-sized cases of spotted salamander eggs in various stages of hatching. Later it was a Green Frog. This was a lush area—it was hard to stick to just plants. Tom identified about 39 different avian species. Dawn pointed out a dozen or so ferns to us, and what stands out are the Bulblet fern (*Cytospteris bulbifera*), the Narrow-leaved Glade fern (*Diplazium pycnocarpon*), and the Silvery Glade fern (*Deparia acrostichoides*).

The second day I joined Bryologist Sue Studlar on a trip to the old growth hemlocks in Cathedral State Park. I didn't think I was ready for mosses yet, but Professor Studlar was so easy to know and so gentle in her approach, that she soon had us repeating after her and identifying Brocade moss (*Hypnum imponens*) and Rusty Nowellia (*Nowellia curvifolia*), a liverwort. I never thought I'd ever be able to identify a liverwort. It turns out that historically common names for mosses has been somewhat obscure (and somewhat British), and so she has given to her students the privilege of giving common names to the mosses. So our memories were helped by Poodle Moss (*Anomodon attenuates*), Yellow Yarn Moss (*Anomodon rostratus*), Crispy Broom Moss (*Dicranum montanum*), and Medusa Moss (*Hedwigia ciliata*). I was happy to run into Rose Moss (*Rhodobryum ontariense*) again after being introduced to it by Gary Fleming. Our ranger guide pointed out that many grand trees have come down in storms the past few years so the canopy has opened up, and there are now grouse and turkey nesting in the woods, the salamander population is exploding, and you can see the warblers.

When I returned home and walked through my own woods, I was amazed at all the mosses I saw. I hadn't really paid attention to them before. I am persuaded now that I need to order the guide Prof. Studlar recommends: Common Mosses of the Northeast and Appalachians, by Karl B. McKnight.







**Painted Trillium**  
(*Trillium undulatum*)

Richard Stromberg



**Squirrel Corn**  
(*Dicentra Canadensis*)

Richard Stromberg



**Green Violet** (*Hybanthus concolor*)

Richard Stromberg



**Nodding Trillium**  
(*Trillium cernuum*)

Richard Stromberg