

SUMMER

# POTOWMACK NEWS

*Potowmack Chapter of the Virginia Native Plant Society*

VOLUME 36, No. 3, JUNE-AUGUST, 2018

## Focus on Sassafras

By Margaret Chatham



NOVEMBER COLOR DEVELOPING IN SHADED SASSAFRAS LEAVES. ALL PHOTOS IN THIS NEWSLETTER BY MARGARET CHATHAM.

When you think of *Sassafras albidum*, our native Sassafras, your first thought is likely to be of its three leaf shapes: ovate and entire, or with one lobe, mitten-shaped, or two lobes. *The Flora of Virginia* says it may have up to five lobes, though I haven't come across such a leaf myself. Sassafras is not the only tree to vary the number of lobes on its leaves: Red Mulberry (*Morus rubra*) follows the same pattern with the addition of a toothed edge, and non-native White Mulberry (*Morus alba*) may have five or more lobes. The books I've looked at say Tuliptrees (*Liriodendron tulipifera*) can have two to six lobes, but I just stepped out to look at a low Tuliptree branch in my yard and spotted several leaves with eight.

The photo above was taken in an attempt to illustrate another characteristic of Sassafras leaves: they "suntan." Those that are exposed to direct sunlight develop anthocyanins that show up as red color when the leaves' chlorophyll breaks down in the fall, while those leaves that have spent the season in the shade of another leaf turn yellow.

CONTINUED ON PAGE 3

## Upcoming

**Matt Bright:** Conservation Walk at Marie Butler Leven Preserve  
*Saturday, May 26, 1-3 pm*

**Zoya Baker:**  
**Cranberry Lake: film and talk**

*Thursday, June 14, 7:30-9 pm*  
*Horticulture Center, Green Spring Gardens*

Cranberry Lake is a 17-minute documentary by Zoya Baker on immersive field courses in the Adirondacks for forest ecology students, connecting experiential learning and environmental stewardship.

**Sarah Chamberlain:** Grass ID Walk—location TBA  
*Saturday, June 23, 9am-1 pm*

**Carl Taylor:** Fern Walk at Scott's Run  
*Sunday, June 24, 8:30-11:30 am*

**Sarah Chamberlain:**  
**Grasses: the good, the bad, and the just plain ugly**

*Thursday, July 12, 7:30-9 pm*  
*Arlington Central Library*

Botanist and grass enthusiast Sarah Chamberlain speaks on the grasses of the Mid-Atlantic region: natives useful for growing in your yard, naturalized non-natives, and the invasive exotics that pose a threat to native landscapes; how to tell who's who, and what we know about how to get rid of the bad actors.

*All events are free and open to the public. Walks require preregistration. Join our listserve at <http://groups.yahoo.com/group/vnps-pot> to receive notices with walk registration links.*

**VNPS members can now manage their membership accounts online** at: <http://vnps.org/membership-management/>. You can update your VNPS profile information, renew your membership, or change your preferences, for example, to receive this chapter newsletter and state *Sempervirens* newsletter by email:

1. Go to the VNPS Membership Management page: <http://vnps.org/membership-management/>.
2. Enter your VNPS login name and password. If you don't know your credentials, click on the "Forgot Password?" link to send a recovery email. If the system does not recognize your email address, please contact us at: <http://vnps.org/about/contact/>
3. After logging in, look at the "What would you like to do?" drop-down box on the right-hand side of the page.
4. Select "Update my Profile Information" from the drop-down list. On this page you can change your contact information and request Electronic Distribution (email) for your newsletters.

## WHERE YOU CAN WHACK SOME INVASIVE EXOTIC PLANTS

### Falls Church Habitat Restoration Team



Help restore the local ecosystem in city parks. Remove invasives and plant natives that will benefit local birds and butterflies. For more information contact Melissa Teates at 703-538-6961 or [melanite@verizon.net](mailto:melanite@verizon.net)

### Arlington County's Remove Invasive Plants (RiP) Program

Help Rescue Arlington parks from alien plant invaders! Please bring your own tools. For more information, contact Sarah Archer at 703-228-1862 or [sarcher@arlingtonva.us](mailto:sarcher@arlingtonva.us)



### Reston Association's Habitat Heroes Program



Help restore local wildlife habitat through invasive plant removal and replanting with native plants. For more information, contact Ha Brock at 703-435-7986 or [ha@reston.org](mailto:ha@reston.org)

### Fairfax County's Invasive Management Area (IMA) Program

Help remove invasive plants and learn about new invasive species. For more information, contact Erin Stocksclaeder at 703-324-8681 or [erin.stocksclaeder@fairfaxcounty.gov](mailto:erin.stocksclaeder@fairfaxcounty.gov)



## Potowmack Chapter Board Officers

### President

Alan Ford 703-732-5291

### Vice President

vacant

### Secretary

Pat Salamone

### Treasurer

Scott Knudsen

## Committee Chairs

### Botany

Cris Fleming

### Conservation

Rod Simmons

### Education

vacant

### Membership

David Gorsline

### Newsletter

Margaret Chatham

### Programs

Donna Murphy

### Propagation/Plant Sales

Laura Beaty

### Publications

Roberta Day

### Publicity

Michael Reinemer

### Site Registry

Rod Simmons

### Social Media

vacant

### Technology

Mark Murphy

### Walks

Dean Arkema

### Member-at-Large

Marty Nielson

Submissions to *Potowmack News* may be sent to The Editor at [vnps.pot@gmail.com](mailto:vnps.pot@gmail.com)

**Potowmack Chapter  
Virginia Native Plant Society**

**P.O. Box 5311**

**Arlington, VA 22205**

**<http://www.vnps.org/potowmack>**



FEMALE FLOWERS OF SASSAFRAS

Sassafras is dioecious: it grows female flowers on separate trees from male flowers, at least most of the time. It also often forms clonal colonies, so you may come upon a crowd of smallish Sassafras trees, all with flowers of the same sex. Above are the female flowers, where I hope you can make out the central style and ovary. At the top of the next column are the male flowers, each with nine stamens, which gives them a puffer appearance. Both of these were seen at Marie Butler Levin Preserve in April. And at the bottom of the page are the fruits the female flowers grow into, as seen in late August hanging over the VNPS potted plants holding area at Green Spring Gardens. The ones that look to be red with a white center are actually just the cups the blue-black fruits sat in before they fell out or were eaten.

Sassafras is a member of the laurel family. Only four genera in the laurel family occur in Virginia, and of these only two are likely to be seen in our area. The other is *Lindera*, represented here solely by Spicebush, *Lindera benzoin*. If you look closely at Spicebush flowers, you will see that it also is dioecious, and has the same arrangement of nine stamens in the male flowers. Both Sassafras and Spicebush are fragrant plants, and their chemistry is similar enough that the Spicebush



MALE FLOWERS OF SASSAFRAS

Swallowtail butterfly can use either as a larval host. Birds relish the fruits of both, though the Spicebush with its later time of ripening may contribute more to preparing birds for the rigors of migration.

Early European visitors to our shores took the fragrance of Sassafras to be medicinal, and sent shiploads back to Europe. Sassafras failed to cure any diseases, but we still use it to make root beer (after removing the carcinogens). Young Sassafras leaves are dried and



powdered to make gumbo file to thicken and flavor gumbo soup.

We generally think of Sassafras as a small tree of hedgerows or forest edges, but under the right circumstances it can grow pretty large. Virginia's state champion Sassafras measured 65 feet tall and over 13 feet around at breast height in 2010. Rod Simmons has shown off a canopy-reaching Sassafras at Chapman Forest on one of his winter solstice walks. So enjoy your Sassafras!

## The Cedars Natural Area Preserve

By Margaret Chatham.



### SMALL SINKHOLE IN THE CEDARS NAP

Usually in this newsletter we feature local natural areas, but I'm just back from far southwest Virginia, and I have to share. VNPS contributed to purchasing land to join together some of the disparate tracts of The Cedars, and in appreciation, Rob Evans, Natural Areas Protection Manager, Virginia Natural Heritage Program in the Virginia Department of Conservation and Recreation (DCR), organized a wonderful two day event for VNPS members May 4 & 5: an opportunity I couldn't pass up.

The Cedars is in Lee County, the farthest west bit of Virginia, in a karst region, where the limestone and its erosion create special conditions that make homes for rare plants and animals. On the surface, some spots are very dry even though the area gets more rainfall than DC, because the water drains directly down into caves and underground streams. Elsewhere, the underground streams pop up in karst windows, supporting very moist, rich flora. The caves themselves host rare, endemic species; and the Powell and Clinch Rivers that drain the area are home to an array of darters, freshwater mussels, and more.

The event actually started Friday morning at Natural Tunnel State Park, with a walk led by Virginia's Chief Biologist, Chris Ludwig, to see Canby's Mountain Lover, *Paxistima canby*, which was not looking its best. Some of the slightly less rare plants were glorious, however: petite Canada Bluets, *Houstonia canadensis*, growing right out of the rocks, Devil's Bit orchids, *Chamaelirion lutea*, with markedly different male and female plants, and more spurred *Viola rostrata*, Lyre-leaf Sage, *Salvia lyrata*, and Robin's Plantain, *Erigeron pulchellus*, than you could shake a stick at.



### HOUSTONIA CANADENSIS, CANADA BLUETS

Then it was into vans to drive to Dry Creek in the Cedars, where we saw a forest floor covered with Goldenseal, *Hydrastis canadensis*, walked up a trail where you couldn't avoid stepping on Yellow Star Grass, *Hypoxis hirsuta*, while looking at Hoary Puccoon, *Lithospermum canescens*, to reach dry, open glades where White Blue-eyed Grass, *Sisyrinchium albidum*, Yarrow-leaved Ragwort, *Packera millefolium*, and Running Glade Clover, *Trifolium calcaricum* grew among Little Bluestem *Schizichyrium scoparium* and other native warm-season grasses. (Among all the treasures, for me the biggest treat was seeing actual native barberry, *Berberis canadensis*, after all the time I've spent pulling Japanese Barberry, *B. thunbergii*.)

Back to the vans, to drive to Surgener Cave, where the group split up. Some went into the cave itself with Wil Orndorff, DCR's cave and karst specialist. Some went down the creek a bit with Mike Pinder of Virginia Department of Game and Inland Fisheries to look at life in the water. And a few of us stuck with Chris Ludwig to bushwhack for Wild Hyacinth, *Camassia scilloides*, and come across blooming Giant Cane, *Arundinaria gigantea*, Dwarf Larkspurs, *Delphinium tricorne*, Green Violet, *Hybanthus concolor*, and Two-leaved Toothwort, *Cardamine diphylla*, on the way.

Another van trip to reach a karst window, where the two Batie Springs bring water out of low caves into



HOARY PUCCOON AND YELLOW STAR GRASS

the daylight, past the lushest Twinleaf, *Jefferson diphylla*, I've ever seen, to flow through Daniel Boone Natural Bridge under the road, and off toward the Powell River.

Then back to Natural Tunnel State Park for dinner and evening talks by Chris Ludwig: "The Cedars: its natural communities, rare animals, and botanical treasures;" and Wil Orndorff: "Little Blind Beasts of Lee County: cave life along the Wilderness Road."

On Saturday (events open to the public, and many VNPS members had gone home), we started with a series of talks. Doug Ogle, professor emeritus, Virginia Highlands Community College, described "The Remarkable, Special, Singular, Exceptional. Noteworthy, and Extraordinary Cedars of Lee County." His specialty is biogeography: why things are where they are.

Mike Pinder "Amazing and Awesome Water Critters (Aquatic Diversity of Powell River)" The calcium in the water from the limestone is particularly good for growing freshwater mussels, which are harvested downstream for mother-of-pearl beads to form the cores of cultured pearls. I found the ploys mussels use to insert their young into the gills of a host fish so that they can disperse upstream as well as down most interesting.

Wil Orndorff "What's in That Hole? Life Underground" told some of his wildest cave experiences, including the time he was called in to trace an underground stream because someone had set his sinkhole (well, the material he'd dumped into it over the years) on fire, and the fire department was concerned about where all the chemicals would be going. He also emphasized that all the cave mapping in and around The Cedars has been done by volunteer spelunkers.

More talks: Rob Evans "Saving the World, One Natural Area Preserve at a Time," Steven Grayson on the vegetation management of Lee County NAPs (many of the rare plants live in open, SW-facing glades, that must be managed to keep the cedars from shading them out), the Lambert Ladies, mother & daughter, lifelong residents of the area who needed to learn what biological treasures it holds, and formed the Friends of the Cedars to spread the word and support the preservation efforts, and finally Delegate Terry Kilgore, who lives closer to six other state capitals than to Richmond.

Then lunch and back to vans to see Williams Prairie Glade where a formerly open area, long maintained as a horse pasture, has been completely overgrown with cedars. Steven Grayson led us to see where Rattlesnake Master, *Eryngium yuccifolium*, and other rare species have returned after manual removal of trees & shrubs (too slow), forestry mulcher, (faster, but more needed), and fire (can cover more ground, but doesn't remove larger cedar trees) have opened the canopy. More needs to be done, including acquiring land that will open access to the Glade, so that forestry munchers and fire engines can get in there. Then we walked back through the forest, seeing more karst features and spring wildflowers.

Does this make you wish to visit The Cedars? Unfortunately, lack of parking & trails leaves it not-yet-open to the public, but watch for notice through Nancy Viers of the Conservation Partners Float Trip on July 19, or possible future repeats of this special event in a year or two. Of course, Natural Tunnel State Park is open to the public, and you can visit other Natural Area Preserves not too far afield with their own, different treasures: Pinnacles, Cleveland Barrens, The Channels, and Buffalo Mountains. And if you want to contribute (tax-deductibly!) to the Natural Area Preserve program beyond what VNPS does as a group, write to [NAPF@dcr.virginia.gov](mailto:NAPF@dcr.virginia.gov).

## ***Field Guide to Grasses of the Mid-Atlantic Region***

Sarah Chamberlain couldn't find this rigorous but approachable book to support the workshops in grass identification that she taught, so she wrote it herself. She is a botanist and curator of the PAC Herbarium at Penn State University. As curator, Ms. Chamberlain manages the collection, teaches workshops, conducts tours, facilitates research, and aids in plant identification. She has taught over 20 workshops in plant identification - specializing in grasses, sedges and rushes - for non-profit groups, consultants, agency personnel and students within the Geography and Ecology programs at the University. Want a copy? Order it from <http://www.psupress.org/books/titles/978-0-271-07869-4.html#> and use the code SC18 to get a 30% discount off the \$30 price.

POTOWMACK NEWS  
Virginia Native Plant Society  
P.O. Box 5311, Arlington, VA 22205



Please verify your address and your renewal date on the mailing label

Printed on recycled paper

## Word of the Month: **Silique**



**Silique:** dry, dehiscent fruit of Brassicaceae, typically more than three times as long as wide. I first learned the word while worrying about Garlic Mustard spreading its seeds, but nicer plants grow them, too.

Shown here, siliques of Purple Cress, *Cardamine douglassii*.

Photo by Margaret Chatham

If you would like to receive this newsletter (in full color!) electronically, set up your account at <http://vnps.org/membership-management>. Complete directions on page 2.