



Claytonia

Newsletter of the John Clayton Chapter, Virginia Native Plant Society

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www.claytonvnps.org

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Our Zoom meeting at 7 pm on November 18: Marion Lobstein on “The Fascinating Milkweeds and Relatives of Tidewater Virginia”



Marion Lobstein is a professor emerita of Northern Virginia Community College, where she taught biology for 36 years. Her academic degrees include a BSEd (Biology) from Western Carolina University, a MAT (with a concentration in botany) from UNC-Chapel Hill, and a MS in Biology from George Mason University. She currently lives in Warrenton, VA.

Marion, a VNPS life member, served on the original board of directors for VNPS and serves as the Botany Chair of the Prince William Wildflower Society chapter of VNPS. She was involved in establishing the Foundation of the Flora of Virginia Project and served for twenty years on the Project's Board of Directors. As well she is active in the Virginia Academy of Science and is a life member of the State Arboretum (at Blandy Experimental Farm) where she teaches as a volunteer. She and her husband have been active motorhome travelers for the last 31 years. In retirement, watercolor painting is another of her favorite activities.

In this Zoom presentation for the John Clayton Chapter, Marion will discuss the fascinating structure and lifecycles of the milkweeds and their relative. She will cover the species diversity in the John Clayton Chapter area, pollination, and historic medicinal and edible uses of these special plants. At the end of the program, she will also highlight the life and importance of John Clayton, for whom the chapter is named, as well as provide some interesting background on Spring Beauty, *Claytonia virginica*, the symbol of the chapter.

From the President



Today, October 9, 2021, we have our first real rain in a long time. Yes, it is a dark and dreary day but I am going to enjoy the drops falling on my plants. I have been busy removing stealth grass from the street area, as it is going to seed. I have also re-

moved branches that were giving too much shade and that awful chamber bitter from the stepping stone path along my ponds. Every time I turn around, I see more of them. They do sprout on a daily basis. From the blues in the garden due to the blooming Blue Mistplants, I am seeing yellows in the garden thanks to the blooming Narrow-leaved Sunflowers and the glorious Goldenrods.

Today, Oct 11, 2021, I decided to try a new bread recipe. It is unusual in that it uses $\frac{1}{4}$ cup of wild rice, which is cooked ahead



Narrow-leaved Sunflowers in
Lucile's garden



Lucile's freshly-baked bread
made with wild rice

of time, along with bread flour, whole wheat, oatmeal, and cornmeal.

This led me on this day celebrating native people to send a thought of thanks to the Red Lake Nation of Chippewa people from whom I order wild rice. A friend sent me an article in the fall *Nature Conservancy*, titled "Wild Harvest" and written by Kevin Abourezk. In this article Wesley Neerland tells how he went out on a canoe to teach Wesley Jr. how to collect wild rice. The

two were members of the White Earth Band of Ojibwe people. The son was 10 years old and he was pushing the canoe through the shallow lake's recently ripened stands of wild rice. The son was the "poler" responsible for pushing the boat through the water. Below him sat his dad who worked as the "knocker" using a pair of wooden sticks to guide the tall rice stalks into the canoe and knocking the grains into the canoe. If rice falls to the lake they let it fall to grow next year's rice stands from the bottom so that it will not be overharvested. To the son that day the falling rice sounded like sleet on a tin roof. The son, being a ten-year-old, was temporarily distracted and lost his balance so the canoe began to tip. To save their precious cargo, both father and son quickly jumped into the lake from the canoe. They were drenched but their cargo was intact. Wet, they continued ricing until they had a complete load. Now that the son is experienced, this is no longer a wet event. This harvest is not just about sustenance for tribal members but also it strengthens community bonds. Wild rice also provides an important habitat for waterfowl, fish and other wildlife species. The Ojibwe arrived to this area in the 1600s to find a place "where the food grows on water". In Ojibwe wild rice is *manoomin* or "good berry". It is a highly nutritious grain gathered from lakes and waterways in late summer and fall. While much of the wild rice is for the family's use, it is also a source of cash for members of the tribe. When the season begins, they leave for the northern lakes and work their way south. The next step is to parch the rice; they roast it over a fire and then they step on it or dance on it to loosen the hulls. The final step is tossing the rice in birch bark trays to

separate the hulls from the edible grains. When they have sold part of the harvest, they can go home and pay their bills. “Yes, it is hard and tedious work,” says Brandon Stevens, who rices on the Leech Lake Reservation, “but it’s all about keeping traditions alive.” As they work on the rice, they reconnect with the earth and to the food they eat as well as with their history and ancestor’s traditions. Wesley says, “I just like the feeling of being out there. I feel like I am more connected to myself.” Yes, wild rice has become a profitable crop but non-Native ricers have overharvested it, and some of them even began cultivating it in paddies. Climate change, pollution, development, changing water levels, and invasive species have seen the loss of about a third of the wild rice plants. The Ojibwe are making efforts to protect the wild rice by restoring lost wild rice stands and by establishing tribal non-profits that buy and sell wild rice. To help bring the younger generation into their traditions, they are hosting camps to teach ricing and processing to younger generations. Natives are not alone to protect wild rice. The Nature Conservancy is also involved in protecting the native pine forests in the wooded headwater area of the Mississippi. That area provides the clean water in which the wild rice can grow and provides a habitat to 350 species of mammals, birds, and other wildlife. It also provides 44% of Minnesota drinking water. It is restoring pine forests, re-introducing fire in areas that need it, and restoring wild rice to the Sauk River. In addition to restoring wild rice, wild blueberries, which are also part of the Native People’s diet, are being restored.

On Friday, October 8, 2021, Isabella Kaminski wrote an article in the *Guardian* on a tree that has a significant history. In Bath, England, there is an old Batheaston black pine that had been planted in 1909 by suffragettes Rose Lamartine Yates and Annie Kenney. They planted 47 trees on the land of nearby Eagle House. They planted hollies to celebrate women in the suffragette movement and black pines to honor those in prison because of their militant approach to seek the vote for women. It would be years before these women would get the right to vote. In the 60’s the developers of a housing project bulldozed the trees—the town had forgotten the history of those trees. Through the efforts of Mary Frayling, a lifelong resident, people rushed ahead and saved all the plaques naming the suffragettes honored. One tree, a black pine, survived the bulldozing. This surviving tree is in the garden of resident Eileen Paddock, so it continued to grow and her sons enjoyed climbing it. She now has put a protection order for the tree. It was a Canadian professor, Dr. Cynthia Hammond of Concordia University, fascinated with Bath and the voting movement, who discovered historic photographs of them. She wrote a booklet about the suffragettes and makes trips to see the tree. She is not alone; inspired by her efforts, a group of activists and artists have met under the tree yearly and planted seeds of the tree to restore them. They claim to have now 12 of them. They have also given seeds to people involved



A Batheaston Black Pine

in environmental movements for change. They formed the Walking Forest Project that combines art, environmentalism, and feminism. They want to plant an “intentional woodland” to celebrate women who work to protect the natural world. The universities of Bangor and Birmingham have a project to study how “trees hold cultural memory.” As Eileen Paddock says of the protected tree that she owns, “It is not my tree, it is everybody’s tree. I am just taking care of it like I would a baby.”



Today, October 12, 2021, I was weeding but I suddenly saw something so cute, I thought I would share it with you! Happy gardening!

Today is October 14, and we wish **Dorothy Whitfield** a very happy 102nd birthday. You are amazing, Dorothy.

Lucile Kossodo

Look closely to see the tiny frog inside this bromeliad!

New Members

We welcome new members **Alison Lynch** of Yorktown and **Dawn Hagan, Joe Glos-son, Emilia Godwin, and Deborah Bussert**, all of Williamsburg, to the John Clayton Chapter!

✿ **No plant walks are scheduled for November and December.**

Recent Walks...

September 18th's Plants with No Flowers

On a lovely morning in September in Freedom Park the ravine behind Go Ape presented a variety of ferns, mosses, and vascular plants to 8 plant walkers.

At the first stop three common mosses were growing in large clumps at the base of trees and along the stream bank: Tree-skirt Moss (*Anomodon attenuatus*), Worm Moss (*Bryoandersonia illecebra*), and Fern Moss (*Thuidium delicatulum*). Adrienne fingered the edges of a small fern, finding the small teeth along the leaflets of Netted Chain Fern (*Woodwardia areolata*). All these plants were seen throughout the morning in lowland swampy habitat along a small stream.



A group photo:
Adrienne Frank, Gary Driscoll, Bruce Glendening, Eric Beckhusen, Jan Lockwood, Sandy Liebler. Not shown are Mary Jo Davis-Headley and Andrew Holland.

It's a little late for the full growth of Cinnamon Fern (*Osmundastrum cinnamomeum*)—the fertile fronds with light brown sporangia appeared in late May—but we found young vegetative leaves that are distinctive with



New York Fern

tufts of hair where the leaves join the petiole. Young leaves of New York Fern (*Parathelypteris noveboracensis*) are throughout, forming drifts over the dead fronds of last spring.

Adrienne found Climbing Hydrangea (*Decumaria barbara*) on a hardwood tree, recognized by its leaves and aerial roots. This vine is growing up alongside another large bare stem with aerial roots that could be Poison Ivy.

At the next stop a large, downed log without bark is covered with

a green wash of color. Several species of liverworts, all tiny, inhabit these “decorticated” logs. While the stems of mosses are covered with leaves all around, there are only pairs of major leaves along the stems of liverworts. When the leaves have long extensions that billow and fold under, we are looking at Rustwort (*Nowellia curvifolia*); in winter the green turns a rusty color. Today we saw another liverwort (*Odontoschisma denudatum*) with short stalks ending in a fuzzy top of gemmae, little packets of nonsexual leaf buds.



Snakeskin Liverwort

Woolly Wort (*Trichocolea tomentella*) is an unusual liverwort, seen only occasionally along wet stream banks, but not uncommon in the bottomlands of James City County. This plant looks like a moss with branched rounded stems covered with tiny hairs that are actually finely dissected leaves.

Along the stream bank grow clumps of Snakeskin Liverwort (*Conocephalum salebrosum*), easy to recognize by large air holes on the surface of flat ribbons. Across the bridge we found another mat



Fern Moss



Climbing Hydrangea

of ribbon-like liverworts without visible airholes but reproductive. Male structures are in two rows along the center and the female is in a small cylinder—this is *Pallavicinia lyellii*. Returning to parking along the multi-use trail (watch for cyclists!) Downy Lobelia (*Lobelia puberula*) is in bloom. A group of leaves near



Helen Hamilton

Pallavicinia lyellii

Helen Hamilton

Hairy Elephant's-foot



Helen Hamilton

Brocade Moss



Helen Hamilton

Downy Lobelia

Last stop was a large bank of Fern Moss along with Brocade Moss (*Hypnum imponens*), with shiny, green-golden leaves. Around the base of many trees grows



Helen Hamilton

Broad Beech Fern

Cushion Moss (*Leucobryum albidum*). The ravines of Freedom Park are lush with all groups of plants, and rewarding for walkers to look and learn about our native vegetation.

Helen Hamilton

Notes from two attendees...

Helen Hamilton led the very informative “Plants with No Flowers” walk at Freedom Park. The goal of the walk was to see ferns, mosses, and liverworts. As advertised, a magnifier was necessary to see fern sporangia, moss leaves that are only a few millimeters long, and liverwort structures. The walk began behind Go Ape, continuing along a stream and back through upland woods.

Eric Beckhusen

Helen Hamilton's fern and moss walk through Freedom Park was my first plant walk with the Virginia Native Plant Society. Not only did it leave me more educated about plants that I rarely pay any mind, but I was able to meet many new

people that are as interested in ecology as me! We started on the trail and eventually found ourselves following a stream to maximize our chances of finding non-vascular plants. Helen showed us the differences between several species of mosses, liverworts, and ferns. Our group learned about moss reproduction and identified the male and female parts of several species. We found New York fern (*Thelypteris noveboracensis*), Cinnamon fern (*Osmundastrum cinnamomeum*), and Christmas fern (*Polystichum acrostichoides*), among others. I'm sure that I can speak for all of us when I say that I am more than grateful to have had her as a guide. She really knows her stuff! I can't wait to attend another plant walk. **Andrew Holland**

October 16th's Goldenrod Walk in the Williamsburg Botanical Garden

On Saturday morning, October 16th, a group of 24 goldenrod enthusiasts joined **Donna Ware** at the Williamsburg Botanical Garden (WBG) to explore its collection of goldenrod (*Solidago* and *Euthamia*) species native to the coastal plain of Virginia. First there was a brief discussion about the nature of the “composite head” in typical members of the aster family (strap-shaped ray flowers around the margin and tubular flowers in the center) and a comparison of the size of an individual head of the native Narrow-leaved Sunflower (*Helianthus angustifolius*), roughly 3 inches across, in contrast to a single head from the inflorescence of Tall G. (*Solidago altissima*), less than ¼ inch across.



Donna's large group of goldenrod enthusiasts

We visited wooded areas of the Garden to see goldenrods (hereafter referred to as “G.”) that typically grow in shaded habitats: Zigzag G. (*Solidago flexicaulis*), a mountain/coastal plain disjunct, in the calcareous ravine; Wreath G. (*S. caesia*) in the older pine/deciduous woodland; and Coastal Swamp G. (*S. latissimifolia*), as you might suspect, in the swamp. The first two of these species exhibited the axillary-cluster type of inflorescence; the latter, the “plumose” type.



Pat Murphy's photos of Coastal Swamp Goldenrod in the swamp exhibit, WBG, *left*; and a single composite head, *right*

The bulk of the goldenrod species at WBG were in the open area along the driveway east of the potting area. There, Late G., (*S. gigantea*) and Tall G. (*S. altissima*), dominated most of the area. The continued spread of these two strongly rhizomatous species (the former in full flower, the latter already spent) is being controlled by weeding. Late G. was overtaking Tall G., which already had crowded out Pinewoods G. (*S. pinetorum*). Clearly, the future success of other species in this garden display will require more use of pots, as has already been necessary for Silverrod (*S. bicolor*). Other Solidago species featured included Sweet G. (*S. odora*), Wrinkle-leaf G. (*S. rugosa* var. *celtidifolia*), the variety from which the horticultural “Fireworks” variety has been bred, Gray G. (*S. nemoralis*), Early G. (*S. erecta*), and Sandhills G. (*S. tarda*). Sandhills G. was of special interest because it was native to the wooded portion of the parcel on which the Garden was developed. Apparently it had persisted in basal rosette form from a previous time when this area was open and sunny.



Donna points out a goldenrod's identifying features as Meegan Wallace uses a magnifying lens for a closer look.

Sandhills G. is restricted to the coastal plain in Virginia and reported from only five counties. When transplanted from the wooded area to the sunny Goldenrod Garden site, only a few of its rosettes have bolted and bloomed. There is a plan to emend its soil with sand to see if better drainage will stimulate more reproduction.

In among the *Solidago* goldenrods were two *Euthamia* goldenrods (formerly in *Solidago*). Grass-leaved G. (*E. graminifolia*) and Slender, Sweet-scented G. (*E. caroliniana*) are characterized by their “flat-topped” inflorescences. They added a strong visual contrast to the cylindric, pyramidal, and plumose inflorescences of the *Solidago* goldenrods.

The Garden’s newest goldenrod acquisition, Seaside G. (*Solidago sempervirens*), was on display in a pot in the woodland. It was recuperating from being moved from its original location to WBG, and will soon be moved to a sunny spot. It was a gift to the Garden from Virginia Institute of Marine Science by way of Karen Duhring, Marine Scientist, and member of WBG. Several native Coastal Plain species of goldenrod that are not yet represented in WBG are currently being sought, including Pine Barren G. (*S. fistulosa*), Sharp-leaved G. (*S. arguta* var. *arguta*), Early G. (*S. juncea*), and Elm-leaf G. (*S. ulmifolia*).

Donna Ware

October 31st’s Potting Party at Stonehouse

Great turnout for the Halloween Potting Party at the Stonehouse Elementary Habitat Garden! Sixteen volunteers helped dig and pot up several trunk loads of plants, including Columbines, Narrow-leaf Sunflowers, Mistflowers, Christmas Fern, and at least one each of Beautyberry and Winterberry. A lot was accomplished in less than two hours!

Cathy Flanagan



Jeanette Navia took this group photo of the participants. They included Jennifer Nagle-Myers (member), Gay (Jennifer’s mom), Cathy Flanagan, Joan Etchberger, Shirley Devan, Camille Fisher, Michael Smith, Sue Voigt, Julia Smith, Andrew Holland, Joanne Sheffield, Keith Navia, Jeanette Navia, Amy Anderson, Justin Horton, and Eric Beckusen.



Pop-ups

In late September, my daughter called, excited to tell me that pink mushrooms had appeared in the woods surrounding her house! I googled “pink fungi,” and sure enough, they do exist, so I stopped by the next day to take a look.

Her “mushrooms” turned out to be clusters of Indian Pipes (*Monotropa uniflora*), parasitic plants without chlorophyll which are usually a ghostly white, but sometimes rosy pink like those on her property.

I asked my son-in-law to take some photos and send me one. Here it is—aren’t they lovely?

Louise Menges

More about Indian Pipes from Betsy Washington

In honor of the Halloween season, the October Plant of the Month is Ghost Plant (also called Indian Pipe)—a very unusual member of the Heath family (think blueberries, rhododendrons, and azaleas). This small native perennial is ghostly white, with waxy, translucent stems and flowers. It completely lacks chlorophyll (which gives plants their green color), so cannot photosynthesize or obtain energy from the sun. Instead, it obtains its nutrients by parasitizing fungi that have symbiotic relationships with trees such as oaks and pines. The mycorrhizal fungi attach to tree roots in a vast underground filamentous network, and provide the trees with nutrients and minerals, while the tree supplies the fungi with nutrients. Ghost Plant has other tricks up its ghostly stems and fools the fungus into thinking it will provide benefits in exchange for sugars, but instead it is a parasite in a one-way relationship. Because Ghost Plants don’t need sunlight for photosynthesis, they are often found in dark, “spooky” places where other plants can’t grow such as deep in the forest under dense thickets of mountain laurels.

Ghost Plant occurs over much of the U.S. and is found in every county in Virginia. Even though it is widespread, it is not commonly seen, and always a cause for excitement. *The Flora of VA* describes Ghost Plant as occurring in a variety of soils and vegetation types from moist to dry upland forests, but they are often found locally in rich, moist woods with lots of leaf litter. They can emerge and bloom in any month from June to November but are often seen in fall. I have observed dozens of them at Hickory Hollow NAP in Lancaster County this past month, particularly along the Aqua and White Trails as they parallel the stream on the west side of the preserve.

Indian Pipes are short plants, only about 4 to 8" tall, with waxy white stalks, vestigial leaves, and single flowers. Occasionally the stems and flower may be tinged pink or even red. Since Ghost Plants do not contain chlorophyll nor photosynthesize, their leaves are reduced to tiny scales pressed tightly against the stem and often flecked with black. The waxy white flowers occur singly, with one bell-shaped at the top of each stem. Their genus name, *Monotropa*, means "once-turned" referring to the nodding flowers that face down when they first emerge, and their specific name, *uniflora*, means "one flower", aptly describing this wildflower. Each waxy flower consists of five petals fused together into a cup. When the plant first emerges, the flower nods downward, but once the anthers and stigma are mature, the bell-shaped flower turns to face outwards. These unusual flowers are pollinated by bees and other insect pollinators seeking nectar. Once the flower has been pollinated and seeds begin to form, the seed capsule turns to face straight upwards. Each capsule is five-parted and releases the seeds from vertical slits in the capsule to be dispersed by wind. Afterwards, the plants gradually turn an "eerie" black and look more like a decaying fungus than wildflower and wither away, leaving the perennial rootstock to send up new plants the following year.

So, get out and have some ghostly fun in your local woodlands looking for ghost plants while enjoying the spectacular fall color. And while you are out, look for Ghost Plant's smaller cousin, Pinesap (*Monotropa hypopithys*) which also lacks chlorophyll and employs a similar strategy in obtaining its nutrients. You can recognize it by its multiple fuzzy nodding flowers atop each stem and yellow coloration which becomes reddish in fall. Enjoy! They are a real Halloween treat when you are strolling in the woods.

Betsy Washington, Northern Neck Chapter



Ghost Plant



Ghost Plant's upturned flowers

John Clayton Chapter Calendar

Thursday, 7:00 pm: Our November Zoom Meeting
November 18 Marion Lobstein on “The Fascinating Milkweeds and Relatives of Tidewater Virginia”
(See Page 1.)

There are no walks scheduled for November and December.

Keep a lookout for announcements about any additional walks or other events in the local newspapers and on our website at www.vnps.org/johnclayton.

Renew online at www.vnps.org or use the membership renewal form below.
Please contact Membership Chair **Cathy Flanagan** at 757-879-1997 or at flanagan.catherine@gmail.com
with questions about your membership.

Membership Form for John Clayton Chapter, Virginia Native Plant Society

(Place checks in the boxes below next to your selections.)

I am a ☐ **new member** of the John Clayton Chapter ☐ **renewing member** of the John Clayton Chapter

Name		
Address		
City	State	Zip
Email*	Phone*	

☐ I would like to receive my newsletters electronically at the email address above.

Membership dues

☐ Individual (\$30) ☐ Family (\$40) ☐ Patron (\$50) ☐ Sustaining (\$100) ☐ Life (\$500)

☐ Student (\$15) ☐ Associate (\$40) —for groups who designate one person as delegate

I wish to make an additional contribution in the amount of \$ ☐ to John Clayton Chapter ☐ to VNPS

☐ This is a gift membership; please include a card with my name as donor.

I have ☐ time ☐ a little time ☐ no time to help with activities.

☐ I do not wish to be listed in a chapter directory.

**Please Note:* John Clayton Chapter does not distribute any of our membership information to other organizations.
It is used only by the officers and chairpersons of our chapter.

Make your check payable to **VNPS** and mail to: VNPS Membership Chair
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Boyce, VA 22610