Our September Meeting on Thursday, Sept. 17: 
John Hayden will speak via Zoom on 
“Adventures with Skunk Cabbage”

John Hayden, with a Ph.D. in Botany from the University of Maryland, has been a member of the Biology Department at the University of Richmond since 1980, serving as Chair from 1997 to 2002. His interests include the morphology, anatomy, and systematics of plants. His research concerns plants of the family Euphorbiaceae, Virginia flora, and, most recently, Yucatan ethnobotany and floristics. In addition to his regular duties as a faculty member, he curates the University of Richmond Herbarium (URV) and is primary care provider for the plants in the Department of Biology greenhouses. His hobbies include gardening, photography, classical guitar, and restoring Bruno, his 1952 International Harvester pick-up truck.

From the President

Exciting news—the John Clayton Chapter will hold its first Zoom Meeting on Thursday, September 17 at 7 pm. We hope you can tune into this meeting. We will have a learning session and practice on Zoom on Monday, September 14 for those of you who are not familiar with Zoom and how it works. Before that date, we will send you a link by email that will allow you to click in and join us to learn about the features of Zoom. We are excited to be able to do this and become more active with our native plant chapter. We hope you can join us, and look forward to having meetings again. My one experiment in growing vegetables was not a great success. Although there is abundant sunshine on my native plant area, I had not realized the amount of shade that the native plants would generate on each side of the vegetables by their tall stature. I moved the plants so they would have more sun but that brought additional problems. The voracious appetite of herbivores reduced the green peppers and eggplants to tiny central stems. I realized that with-
out a cage nothing could succeed in growing in Williamsburg. In other parts of the yard, constantly I have had to use many stinky rabbit repellant granules to have the Milkweeds, Asters, Blazing Stars, Sneezeweed, Great Blue Lobelias and Cardinal Flowers grow. I tried a Have-a-heart cage to trick the rabbits to come inside so that I could release them outside the fenced front yard. I had zero success. Two rabbits live outside the fenced front yard and two inside.

Damian Carrington wrote in the Guardian on July 10, 2020 that there is an interesting new development projected for the Kent, England, area. Four steppe European bison (one male and three females) will be released in early 2022. Conservationists expect that each female will bear one calf per year. The country of origin for these bison will be Poland or the Netherlands; those two countries have had safe and successful releases. These steppe European bison are descended from a species that was abundant 6,000 years ago in the UK. They are no longer there because of hunting and ecological changes. Paul Hadaway from the Kent Wildlife Trust stated: “Bison kill selected trees by eating their bark or rubbing against them to remove their thick winter fur. This creates a feast of dead wood for insects, which provide food for birds. Tree felling also creates sunny clearings where native plants can thrive. Nightingales and turtledoves are to be among the beneficiaries of the bison’s “ecosystem engineering.” Bison also naturally regenerate a pine woods plantation as they kill off trees. “They’re enormous,” said Stan Smith of Kent Wildlife Trust. “But what is amazing is how they blend into their background, and they’re quite docile, really.” Who knew?

I love hummingbirds, which were very plentiful when I grew up in Peru. It was with pleasure that I read about an “ashram for hummingbirds” in Trinidad in the Maracas Valley. Today there are 19 species of hummingbirds in Trinidad and Tobago; they are the size of a man’s thumb. There are about 345 species in the Americas, many in the Andes. Yvonne Singh wrote this article in the Guardian on July 10, 2020. This land in Trinidad was called Iere (“the land of the hummingbirds”) by the Amerindians who lived there. There, by the sprawling area of La Brea Pitch Lake, considered a bitumen wonder, was the home of the Chima natives. To protect the birds, there was a legend that hummingbirds represented the soul of the dead. The tribe must have forgotten this because, after they dined on the birds in a celebratory feast, the sulphurous lake of pitch consumed the village and its entire people. The legend could not protect the hummingbirds because the European conquerors who came later killed them to use their feathers for jewelry. This devastation lasted until the Migratory Bird Act of 1918.

Enter an admirable couple 34 years ago, Theo and Gloria Ferguson. They live on a property located near the entrance to the Maracas Valley. It has a “champion Silk
Tree” at the entrance of their property which is admired by everyone. They transformed their garden into a tropical oasis of vivid, trumpet-shaped blooms to attract the hummingbirds. Visitors to the garden can hear as “the air beats with the frenzied wings of these tiny creatures, which flit, zoom, and shimmer among the scarlet feeders like miniature rainbow-colored strobes.” To honor the hummingbirds, they named their property Yerette, Amerindian for “home of the hummingbird.” Theo says, “You cannot see these behaviors with the naked eye, but when you view the bird through the long lens, you see behaviors that are unimaginable. You see its agility in the air. You see the uniqueness of each bird. Each bird has its own personality.” The indigenous people linked these birds from the earthly world to the spiritual world. “Hummingbirds are true biological wonders: they are the only birds that can hover in mid-air and fly in multiple directions, including backwards and upside down. The speed at which they beat their wings, anything from 25 to 200 times a second, allows them to create vortices that enable spectacular movements such as aerial suspension and plummeting dives.” They also have incredibly beautiful colors. Look at Yerette on Facebook—it has 61K followers. The garden is open to visitors and is now on my bucket list.

Remember that you can grow plants for the native plant sale and for your own yards. You can harvest seed and look them up to see if they need to have cold stratification before they will emerge. A good source for information is the native plant webpage of “Prairie Moon.” Yes, you can purchase plants as bare root or as plants, but the joy of growing your own is very rewarding.

**Revisiting Greenhaven**

On July 30, I accompanied Donna Ware in revisiting Greenhaven Farm, the home of Wayne Moyer. Greenhaven received a registry site plaque from the John Clayton Chapter on September 16, 2000. We went to see if the site still included the many plants that were visible and growing in the original visit. It was hot and humid, even in the early morning, as we set off masked into the woods down to the ravine. It is an area in which two streams flow, with the property line in the middle of the streams. The plants seemed to continue to grow undisturbed. We observed many *Hepatica Americana* (Round-lobed Liverleaf) plants growing along the creek, along with many Jack-in-the-pulpits. Helen Hamilton joined us, but went on her own to wander in the woods looking for samples of mosses to add to her list. It was just Donna, Wayne, and I who hiked to the streams where the interesting plants were found in 2000. The terrain we traversed was hilly, muddy, and sometimes rather boggy, but we trudged up and down to find the plants. Suddenly, in front of me I discovered beautiful samples of Club Moss (*Huperzia*...
lucidula). I had never seen it before and there were two stands of it, one next to the other. We passed many crawfish tunnels in the soft soil. We then came upon a beautiful stand of Broad Beech Fern (*Phegopteris hexagonoptera*). We also saw Royal Ferns (*Osmunda spectabilis*), Sensitive Ferns (*Onoclea sensibilis*), Interrupted Ferns (*Osmunda claytoniana*), Cinnamon Ferns (*Osmundastrum cinamomeum*), Christmas ferns (*Polystichum acrostichoides*), and Cut-leaf Grape Ferns (*Sceptridium dissectum*). Donna decided it would be more interesting to walk in the middle of the stream. In so doing, we saw many examples of Bellworts (*Uvularia sessilifolia*) just hanging over the water. The one I photographed was bigger and was in the woods nearby. Then we saw Indian Cucumber-root (*Medeola virginiana*), a plant that was new to me. We walked past many shrubs such as Mountain Laurels and Spicebushes, and saw some Spicebushes with fruits. One plant we noticed that Donna had not seen before on this property was Wild Geranium (*Geranium maculatum*), our 2020 VNPS Plant of the Year. I hope to return next spring to see both the Round-lobed Liverwort and the Indian Cucumber-root in bloom. It would have been a celebration were it not for the long-range plan to have a highway built near this area, cutting the stream off from the main property.

An hour and a half later, we were ready to come back into air conditioning, but happy to find that the plants we had found were thriving, along with some new ones growing on the property.

Lucile Kossodo

Donna Ware, botanizing

Bellwort

Round-lobed Liverleaf

Here are some photos Lucile took during the walk…
New Members
We welcome new members Wayne Moyer of Norge and James and Madonna Webb of Williamsburg to the John Clayton Chapter.

From Out in Left Field
A surprise vine at the pool!
There it was, creeping up the old chain-link fence at the diving-board end of the neighborhood (Indigo Park) pool. Was it kudzu? It had three-lobed leaves, but not leaflets. What the heck? I kept an eye on it, and then thought I recognized the leaves from a purple passionflower vine in my back yard many years ago. It just disappeared one year—I hate when that happens!
So, I looked it up, and it started to make little buds, and then I remembered that Louise had told me she had a bunch of yellow passionflowers in her back yard, only a few blocks straight up the street from the pool! It was exciting, keeping an eye on it, waiting patiently for it to bloom, and mentioning to a couple of the pool’s Board Members that it is a cool native plant, not an invasive vine, so we should enjoy being its host fence.
Then, after I got home from a trip to Pennsylvania, it was blooming like crazy! The flowers are exquisite, as you can see in the photo. I don’t think I had ever seen one before. Now, there are little fruits on it.
My homework is to continue to mention it to the pool bosses, show them the flowers (!), and consider bringing a bit of it home for the front yard. The *Flora of Virginia*, p. 773, says it is “Frequent in the Piedmont, infrequent in the Coastal Plain.”
Wildflower of the month for August:  
**Blue Mistflower (Conoclinium coelestinum)**

This is one of the native perennials highly regarded as nectar food for monarch butterflies. The typical life cycle of monarchs includes four flights each year, the third in July–August, and the last September–October that produces a different butterfly, capable of the long migration south. Monarchs lay their eggs on milkweed, the leaves furnishing food for the growing caterpillars.

The adult butterflies get their energy and maintenance food from the flowers of milkweed as well as many other late summer flowers, such as Cardinal Flower, Blue Vervain, Wild Bergamot, New York Ironweed, goldenrods, and bonesets. Plants with massive heads of tiny flowers are favorites of butterflies, since they can easily collect nectar from the closely packed blossoms, not using energy to fly to other nearby plants.

Mistflower is an ideal candidate, blooming from July through October to feed insects from late summer into fall. This native perennial is topped with masses of soft, fluffy violet-blue flowers. It’s a member of the Aster family, but there are no rays on the flowers. Each flowerhead has as many as 50 little florets, each with 5 tiny lobes and a long style that gives the flowers a fuzzy appearance. Other asters like black-eyed susans, dandelions, and sunflowers have both ray and disk flowers.

This plant grows 3–4 feet tall and spreads by creeping roots. It can take over an entire border, but the roots are shallow and easy to pull out. The plant grows best in full sun to light shade, in moist conditions—it does not handle drought well but requires little attention.
A cultivar ‘Wayside’ is somewhat shorter, but there is little information about butterfly visits to this plant. “Gregg’s Mistflower” is native to Texas, Arizona, New Mexico, and south and is a good pollinator plant in that region. Our native Mistflower can sprawl and become weedy in appearance by late fall, but it is a butterfly magnet, and is the only mistflower that should be planted here. Deer do not typically browse on the bitter-tasting leaves.

It is also known as Wild Ageratum because the flowers resemble those of the shorter (6–12”) annual Dwarf Ageratum (Ageratum houstonianum) sold in garden centers as bedding plants. Blue Boneset is another name; the eupatoriums were thought to cure broken bones since the stems of some species grow through the leaves.

Mistflower grows wild in woods edges, stream banks, ditches, meadows, and fields in nearly every county in Virginia. The leaves grow opposite on the stems with soft toothed edges, 3” × 2”.

**Wildflower of the month for September:**

**Joe-pye weed (Eutrochium dubium)**

These tall, majestic plants are real butterfly magnets. Blooming in late summer until frost, they range from 3 to 10 feet tall with dense heads of fluffy pinkish flowers that are usually covered with butterflies, bees, beetles and wasps, all feeding and pollinating. When in flower, Joe-pye-weeds can be the star of the garden, but a little rough for a formal garden. Long blooming (from July–October) and deer resistant, these plants can grow very large and are great in a wild garden or placed to the rear or where a strong accent is needed.

Joe-pye-weeds are meadow plants; most require full sun, acid, rich soil, and moist drainage, although some can tolerate shade, less moisture, coastal conditions and clay soil. Clump-forming, they will not form extensive drifts. Before blooming, these plants are easy to recognize by their leaves, which are generally in whorls of 3–6 leaflets that are lance-shaped to oval and with teeth on the edges. At the top of each stem clusters of tiny flowers appear in rounded groups, terminating in a large dome of blossoms, as much as 18 inches across. Members of the Aster Family, Joe-pye-weeds have no rays (petals), only disk flowers, and they are tiny, allowing small insects easy access to nectar. Also visiting these tightly packed flowers are many butterflies, including tiger swallowtails, monarchs, and viceroy.

Three species of Joe-pye-weed are native to the Coastal Plain; the shortest is Coastal Joe-pye-weed, growing 5 feet tall. The leaves of this plant have 3 conspicuous veins extending from the petiole, whereas the leaves of other species have only one main vein. ‘Little Joe’, a popular cultivar, is only 3 feet tall and compact and is an excel-
lent choice for a small butterfly garden. The flowers are mauve purple in a rounded terminal group. Also a good choice for a rain garden, Coastal Joe-pye-weed grows naturally in bogs, swamps and wet clearings, usually in acidic, poor soils.

Purple Joe-pye-weed (*E. purpureum*) grows to 7 feet tall and Hollow-stem Joe-pye-weed (*E. fistulosum*) can be over 11 feet tall. The flowers of both species are pale pink to purplish, in rounded domes or in loose clusters at the tops of stems.

“Joe-pye-weed” comes from a tale about a North American Indian called Joe Pye, who walked the streets of Boston selling a cure for typhus using an elixir of this plant to induce profuse sweating, thus breaking the fever (although this story is in some doubt among authors). This plant is also called Gravel root because it has the ability to remove and to a certain degree dissolve kidney stones or gravel.

**Helen Hamilton**

**Two adventures with Bryophytes**

An unusual group of granite outcrops exists in Brunswick County in Virginia’s Piedmont region. Tom Wieboldt, Retired Curator of the Massey Herbarium at VPI, had read an article about granite outcrops in the southern Piedmont and encouraged Master Naturalist John Bunch to do some collecting there. Previously I had asked John to look for bryophytes in that county and neighboring Dinwiddie, both undercollected.

So off he went, and returned with 35 moss and liverwort specimens that he sent to me for identification. What fun that was—14 had never before been collected in Brunswick County. Two of the 14 were new to me and after many hours of struggle I gave up and consulted professional botanists. Tom identified one species as *Grimmia laevigata*, not *G. pilifera* that was my guess—I missed a few important characters.

I sent photos of the second specimen to Paul Davison at University of Alabama, who said it was probably *Campylopus*, a notoriously difficult group, but he had no experience with this genus. Tom also suggested *Campylopus* and encouraged me to send this one to Bruce Allen at Missouri Botanical Garden. Bruce responded with a careful deliberation of his microscopic examination and named it *Campylopus taliulensis*, collected in only 5 other Virginia counties, none in the Coastal Plain.

The second exciting area is Greenhaven Registry Site, established as such by the John Clayton Chapter/VNPS in the early 2000s. Donna, Lucile, and Wayne Moyer (property owner) walked a trail down to a stream bed, but shortly after leaving the house I spotted a ravine and down I went.

On a large hardwood just off the trail near the house there was a lot of green growing in the cracks of the bark, so I started scraping, and under the microscope saw...
several different species. One was completely unknown to me, and after many hours of trying I gave up and sent photos to Tom, who suggested it might be *Homalotheciella subcapillata*. This is a really tiny plant growing in the cracks of hardwood bark, the leaves less than 0.5 mm wide and less than 1.0 mm long. A few collections of *Homalotheciella subcapillata* are scattered across Virginia—only six in Coastal Plain counties.

One of my favorite liverworts is *Bazzania trilobata* that grows in several locations in James City and York Counties. I found it in Greenhaven as I was returning up the ravine slope. It’s always fun to see it—the leaves that end in 3 points (“trilobata”) fold down, so the stem looks like a millipede.

The ravine slope and swamp yielded unusual bryophytes—4 county records for James City. One moss I had seen only once before in Westmoreland County, so it was exciting to find it here. *Tetraphis pellucida* has tiny oval leaves with rounded cells and two ways of asexual reproduction. The long cylindrical capsule (sporophyte generation) ends with only 4 teeth—nothing else is like this; usually mosses have many more teeth. In the field I saw what looked like tiny cups that hold gemmae, a mass of cells that become new plants. I had never seen these in *Tetraphis*. This plant appears to be a disjunct, since populations are found in the mountains and the Coastal Plain of Virginia, but mostly absent from the Piedmont.

A lot of my collections in the Coastal Plain have been what are known as “weedy” mosses—they grow in lawns, roadsides, on roofs, in asphalt paths. So it was exciting to find species new to me and/or those that I do not see often.

From Sue…

**Additional Boy Scout Project at Stonehouse Schoolyard Habitat**

In spite of requirements for social distancing and wearing masks, Boy Scout Rudy Lampitt of Troop 414 was able to complete his Eagle Scout project in August.

Rudy is the 5th Boy Scout to build raised beds and other garden structures to enhance the schoolyard habitat at Stonehouse Elementary School. Rudy’s project to build two new beds around native planting areas was approved by the school administration, in spite of the school having been closed to students for several months due to the COVID pandemic. Su-
san Voigt, Habitat Garden Coordinator, met his team of 8 Scouts at the garden on August 12, when they enclosed the end bed along the entry walk into the garden and also created a bed around the Shadbush (Serviceberry tree). On August 18, they returned to spread mulch on the new beds and other parts of the garden with the help of Troop leader John Dereix and Rudy’s family, who helped weed garden pathways.

In 2005, Boy Scout Cody Johnson built the original wooden beds in the Stonehouse Habitat, while Jan Newton, former VNPS/JC Chapter member, created and planted the native plant garden. In the last 3 years 3 other Boy Scouts from Troop 300 (Ryan Rivas, Bailey Dye, and James Packer) with Eagle projects have rebuilt and added more beds.

Meet the Trees and Shrubs of the Williamsburg Botanical Garden

Have you ever walked through the Williamsburg Botanical Garden wondering about the many interesting woody plants growing there? Have you wanted to identify a shrub, learn about its uses, and consider whether to invite its species home to your own garden?

Members of the 2020 Tree Steward class designed a project to identify, inventory and label woody plants at the garden. In late January, the team began meeting with other Tree Stewards and members of the Williamsburg Botanical Garden Board to plan their project.

Work on the inventory continued over six weeks, with members working together in the garden to identify, photograph, record, take GPS coordinates, and measure trees. The group was just finishing the first draft of the inventory when concerns over the Covid-19 virus suspended all in-person Master Gardener projects, but team members have continued to work together remotely and individually in the garden to complete several components of the project.

A $900.00 grant from the Virginia Department of Forestry funded purchase of nearly 120 metal identification tags, with QR codes embedded in each. Additional QR tags have been added over the past several months, thanks to a donation to cover additional expenses of the project. More than 140 species of trees, shrubs, and woody vines will be labeled by summer’s end.

When scanned with a smart phone, each QR tag links the visitor to an information page about that species, hosted by Plants Map. Each page includes photos from
the WBG of that plant in different seasons, and additional information about the species. The supporting information indicates whether or not it is a North American native plant, its wildlife value, and provides some cultural information. Team members are still adding information to these files, including information about the species’ ecological value.

A digital tour guide to the garden is available both on the garden’s website and by scanning a QR code posted at the garden’s entrance. The guide gives a little background information on each area of the garden and lists some of the labeled species found in that area. The guide was developed in cooperation with Dr. Donna Ware, who is an expert on the native plant areas of the garden.

Donna has collaborated with the Tree Steward group throughout the project, helping with proper identification and insuring that the native woody collection at the WBG is fully catalogued.

You can preview the digital garden guide before your visit to the garden or use it during your visit to find trees and shrubs of interest to you. Plants Map allows us to highlight specific collections of plants, including collections by genus. Both native and non-native woody species are labeled and included in the tour.

The Tree Steward team includes Bill Dichtel, Stephanie Lamb, Jayce Griffin, Marion Guthrie, Robert Howell, Harry Fahl, Jerry Woodson, and Elizabeth McCoy. All members were able to qualify as Tree Stewards by the end of March through work on this project.

This has been a tremendous team effort and was possible thanks to the generous assistance given by experienced Tree Stewards, members of the WBG community, Trees Virginia, and Plants Map. We look forward to sharing information about this diverse collection of woody plants with the community and invite all members of the Virginia Native Plant Society to visit the Williamsburg Botanical Garden this fall.

Elizabeth McCoy
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

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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
400 Blandy Farm Lane, Unit 2
Boyce, VA 22610