Our November 21 meeting: “Parasitic Plants”

Lytton John Musselman is the Mary Payne Hogan Distinguished Professor of Botany at Old Dominion University, where he also served as Chair of the Department of Biological Sciences. Recipient of three Fulbright Research awards to study parasitic plants in Sudan, Palestinian Territories, and Jordan, he has also held university positions in Lebanon, Syria, Iraq, and Brunei Darussalam.

He has taught courses during the past four decades in the use of local plants at his home institution as well as the State University of New York School of Environmental Biology and Forestry at the Cranberry Lake Biological Station in the Adirondacks, Au Sable Institute of Environmental Studies in Michigan, and the University of Virginia Mountain Lake Biological Station.

His ethnobotanical research has focused on two broad geographical regions. The first is the Middle East, where he has lived in four countries studying the uses of plants in ancient times and resulting in three published volumes: *Jordan in Bloom, Flowers of the Holy Land*, commissioned by Queen Rania of Jordan and published by the Jordan River Foundation in 2000; *Figs, Dates, Laurel, and Myrrh Plants of the Bible and Quran*, published by Timber Press in 2007; and *A Dictionary of Bible Plants*, published by Cambridge University Press in 2011.


The meeting begins at **7:00 pm** in **Room A** of the **James City County Recreation Center**, 5301 Longhill Road, Williamsburg 23188-2700.

**See you there!**
From the President

Not a minute too soon, we are back to cooler temperatures and less humidity. If you are like me, you are busy planning and executing changes to your yard. We all like to dream of what we would like to add and remove from our landscaping. I know that I made a mistake by planting *Eutrochium purpureum* (Purple Joe-Pye Weed) next to my path. I had not paid attention to the difference in height (about 3 feet) between it and *Eutrochium dubium* (Three-nerved Joe-Pye Weed). The Purple was almost menacing in its height in that position, in spite of its great beauty. Therefore, I moved it to another place further back. I also moved my *Pycnathemum tenuifolium* (Narrow-leaf Mountain Mint) from where it was to the front of the border. Therefore, the plant moves continue. I wish I could believe it will all be perfect next year, but it never is. There is always room for more moves next fall.

At our last meeting, we elected our officers for next year. I continue as President and will continue to fill the Vice-president slot since it is unfilled. I plead with you, if you can be in charge of our meetings, please volunteer. I know many of us will help you find speakers and tell you how to secure locations for our meetings. Cortney Will is going to continue as secretary, Louise Menges will continue to put together our newsletter, Cathy Flanagan will continue to be our Publicity, Web chair, as well as our Treasurer! Sue Voigt and Adrienne Frank will continue as plant sale chairs. Sue Voigt will also continue to be in charge of the Stonehouse Habitat Garden. To all those who continue, thank you sincerely for your devotion and hard work.

The long road to the Plant Sale has now paused for the winter. We had two days of potting parties, the first at Dorothy Geyer’s home. We potted many beautiful and big *Asarum canadense* (Wild Ginger), *Sambucus canadensis* (Common Elderberry), *Itea virginica* (Sweetspire) and other plants. The next day we potted many perennials at Stonehouse Habitat Garden. The following Monday eight of us worked for over three hours placing the plants into the Etchberger’s wooded area and organizing them so that they would be ready to take to the sale. We took all of the milkweeds near where the greenhouse will be rebuilt to help us easily find them and place them inside later in the winter. We hope they will all shine next spring.

I would like to wish all of you the best for the upcoming holidays. May you have a happy and peaceful New Year!

Lucile Kossodo
In Review: Longleaf Pine Restoration

If you missed the Rebecca Wilson’s talk at the September meeting at the Yorktown library, you missed a very lively presentation. She is the Long Leaf Pine Restoration Specialist, the Prescribed Fire Manager, and the Regional Supervisor for the Virginia Department of Conservation and Recreation’s Natural Heritage Program. Her PowerPoint included an exciting video of her performing a prescribed fire!

Rebecca is an engaging and energetic speaker and my notes were skimpy as I listened more than I wrote. She began by listing the eight species of pine in Virginia: Longleaf (*Pinus palustris*), Virginia (*P. virginiana*), Loblolly (*P. taeda*), Pond (*P. serotina*), Shortleaf (*P. echinata*), Table Mountain (*P. pungens*), Pitch (*P. pungens*), and Eastern White (*P. strobus*).

The Longleaf pine is a long lived and fire adapted species. It is adapted to survive—and thrive—in an environment with frequent, but low-intensity fires. Some of the distinguishing features of Longleaf pine are what make it fire adapted. For example, the Longleaf needles are two times longer than those of Loblolly and are thicker and waxier. The life cycle is also clearly different. The Longleaf seedling looks different from the start. It has no branching and looks like a tuft of grass. It continues to grow in this grass-like manner, developing into a larger clump instead of looking like a little pine tree. At this stage it is putting its energy into developing a strong tap root. When fire rolls across the land, the long waxy needles protect the robust bud that grows in the center. The deep and strong taproot keeps the young tree anchored and prepared for its rapid growth or “bolt” when it grows disproportionately taller than wider without any side branches. The name given to this stage is “bottlebrush.” Only much later does it develop side branches with the long needles clustered at the ends of the branches.

Prior to European settlement, there were over one million Longleaf pines in Virginia. Individual trees lived 250 years or more. By the year 2000, though, only about 200 still existed. Factors contributing to its near extinction include the importance the Longleaf played in shipbuilding. It was one of the reasons Tidewater succeeded as a region. The Longleaf is tight grained with lots of sap that served well as a sealant for boats. It was also used as a lubricant for wagon wheels. Land clearing and suppression of fires further threatened the trees as did the introduction of feral hogs. The hogs eat the large central bud.

Preservation efforts include the Nature Conservancy’s Piney Grove, where they are preserving open pine woodland and savanna habitat which includes Longleaf pine and a number of rare species such as the Red Cockaded Woodpecker, Mabee’s salamander, pale grass pink (*Calopogon pallidus*), common pyxie moss (*Pyxidanthera barbulata*), yellow pitcher plant (*Sarracenia flava*), and purple pitcher plant (*Sarracenia purpurea*). Restoration efforts have included collecting cones and sending them to North Carolina where the seeds are extracted but now the VA Department of Forestry is growing their own successfully.

Cathy Flanagan
Upcoming Plant Walks

周五，11月8日上午10:00：Blackwater Ecological Preserve
我们有一个机会去Blackwater Ecological Preserve/Antioch Pines Natural Area Preserve for a field trip in November, led by Natural Heritage Southeastern Land Steward Darren Loomis and Longleaf Pine Restoration Specialist Rebecca Wilson. The site is about 1.5 hours from Williamsburg and 1 hour from Newport News, so carpooling is advised.

We will meet at the main gate for the preserve located near 24326 Thomas Woods Trail, Zuni, VA. Be advised that field trip attendees should dress in long pants and sturdy shoes and that there are no facilities at the preserve. Packing a snack and water is recommended.

Please contact Meegan Wallace for more information: clm003@verizon.net.

Recent Plant Walks and Other Events

2019 Newport News Go Green Expo on Sept. 7
The annual Newport News Go Green Expo at Brittingham Midtown Community Center on September 7th was a big success if measured by the number of seed packets given away. During the 6-hour event we went through about 100 envelopes and ended up making envelopes out of torn paper for the last half hour or so (lesson learned—you can never have too many envelopes). We had an assortment of 15+ native seeds that people could choose from to bag up and take home.

This is always such a great opportunity to talk to lots of people who might not otherwise consider natives for their gardens. Thanks so much to Joanne Sheffield, Claudia Kirk, Tammy Smith, and Chuck Deffenbaugh for helping out. Next year’s Expo is tentatively scheduled for September 12th, so mark your calendars. Meegan Wallace

Butterflies and Native Plants at the Warhill Tract on September 14
In late summer, the Warhill Tract is a wonderful place for butterflies. County staff limit mowing here, allowing wildflowers to bloom. Tickseed Sunflower, Late-flowering and Hyssop-leaved Thoroughwort, goldenrods, and other late summer flowers are blooming. Among the sea of yellow and white, you can also find orange garden Coreopsis, Downy Lobelia, Field Thistle, and Purple Passionvine. Cloudless Sulphurs, Monarchs, and Eastern Tiger Swallowtails fly just above the plants.
showing moving colors of lime green, orange, and yellow. Several butterflies are seen more often in late summer, including the Cloudless Sulphur, Monarchs, Common Checkered-skippers, and Ocola and Clouded Skippers.

Close to the ground, numerous small butterflies such as Eastern Tailed-Blues, Pearl Crescents, and grass skippers (e.g., Fiery, Ocola, Sachem, and sometimes a Common Checkered Skipper) are nectaring on non-native Sericea Lespedeza, asters, and other plants with tiny flowers. Each species of butterfly has a different preference for flowers, depending on the length of its proboscis and its ability to reach the nectar.

The Warhill Tract is also home to community gardens, where individuals and school groups grow vegetables, herbs, and flowers. Several butterfly species find nectar and host plants in gardens. The Black Swallowtail lays its eggs on parsley, dill, and/or carrots. Pearl Crescents, Silver-spotted Skippers, and Grass Skippers nectar on vegetable and seeded flowers such as zinnias, Lantana, and sunflowers.

If you walk up the slope toward Warhill High School, you can see into the retention pond, which is full of Pickerelweed, cattails, and willows. During the summer, 100s of skippers (e.g., Fiery Skippers) nectar on the blue Pickerelweed. Willows are a host plant for the Viceroy, which is a mimic of the Monarch butterfly. Since the colors of a Monarch indicate poison, the Viceroy can fly without fear of most predators.

During the walk on Saturday, one area hidden from view containing beehives was the highlight of the day. Here the Fireweed, Goldenrod, Passionvine, and other plants were full of insects. Variegated Fritillary caterpillars (red-orange with little spikes) were found eating their host plant—Maypop/Purple Passionvine. One participant discovered a caterpillar hanging upside down in a J shape, indicating that it was ready to turn into a chrysalis. A small group of Eastern Tailed-Blues were puddling together on damp compost and getting nutrients to help jump start the next generation. Other sightings included finding a Wolf Spider with babies all over its back, finding a watermelon among the tall grasses, and getting a brief update on the beehives from the beekeeper.
The two-hour tour had 14 participants from the community, master naturalists, and our JCC of the NPS. It started off as a cool, cloudy morning, but by noon the sun was out, and we found 20 species of butterflies and hundreds of individuals. Here are some approximate numbers.

- Black Swallowtail 8
- Eastern Tiger Swallowtail 3
- Eastern Tailed Blue ~100
- Red-banded Hairstreak 1
- Cloudless Sulphur 50
- Sleepy orange 6
- Variegated Fritillary ~15
- Common Buckeye ~10
- Pearl Crescent ~10
- Painted Lady 2

- Red Admiral 1
- Viceroy 1
- Monarch 10
- Silver-spotted Skipper 3
- Common Checkered-skipper 1
- Fiery Skipper ~20
- Sachem 2
- Least Skipper 2
- Clouded Skipper 3
- Ocola Skipper 8

Adrienne Frank

Saturday, Oct. 5th’s Botany Blitz at Nissen Property, Suffolk

Thanks to Maria and David Nissen for inviting the John Clayton Chapter out to their property in Suffolk to explore and identify plants. Shortly after arriving, Helen Hamilton and John Bunch went their own way to collect bryophytes and came up with about 20 species, including a liverwort (*Riccardia palmata*) that had not been documented in Suffolk in the *Flora of Virginia*.

The rest of the group focused on vascular plants on the 7-acre wooded property that abuts Bennett’s Creek, which is a tributary of the Nansemond River. Although the creek itself was recently dredged to reduce flooding in a nearby neighborhood, the surrounding forest is relatively intact with good diversity and surprisingly few invasive species. This wet flatwood forest has the typical overstory of swamp chestnut, cherrybark and water oaks, loblolly pine, red maple, sweetgum, and blackgum. Small trees include musclewood and sweetbay magnolia, while the shrub layer had sweet pepperbush, sweetleaf (horse-sugar), and switch cane, as well as three species we don’t see here on the Peninsula—coastal dog-hobble, redbay, and sweet gallberry.
Sweet gallberry (*Ilex coriacea*) is ranked S1 in Virginia and is only known from Suffolk, Chesapeake, and Virginia Beach.

We also found a baby bald cypress trying to get a foothold. In the drier areas numerous remnant leaves of pink lady’s slipper were also hanging around, indicating a spring trip might be very enjoyable. Many Eupatoriums, goldenrods, and asters were in bloom along the roadway, providing great habitat for bees and butterflies. Near their house, the Nissens have planted a variety on native species such as green-headed coneflower and butterfly weed that add to the diversity of the property. All totaled, we came up with over 80 species with only four invasives. Of course a little wildlife watching was also conducted, with one garter snake and one cricket frog observed.

**Meegan Wallace**

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**Freedom Park Walk on October 19**

**Helen Hamilton** graciously extended to our Cohort XIV Historic Rivers Chapter, Virginia Master Naturalists, the opportunity for a Native Plant walk at Freedom Park. Many of our Cohort Members were able to join her as she embarked on the Living Forest Trail. The natural surface trail winds through the forest and features interpretive signs for young forest explorers. The Living Forest Trail was built in cooperation with GoApe, the Historic Rivers Chapter of the Virginia Master Naturalists, and the Zeta Mu Mu Chapter of Omega Psi Phi Fraternity, Inc.

After a quick introduction in the parking lot to vascular and non-vascular plants, the assembled group followed Helen as she pointed out various mosses, ferns, and lichens. *Leucobryum glaucum* (Pincushion Moss) and *Anomodon attenuatus* (Tree-skirt Moss), *Polystichum acrostichoides* (Christmas Fern), and Helen’s favorite liverwort, *Nowellia curvifolia* (Rustwort) were just a small sampling of the various ferns, mosses, and liverworts seen along the trail. Naturally, Helen did not stick to the
trail and wandered down into a ravine to point out other interesting plants. As we returned to the parking area, Helen pointed out some native wildflowers which were no longer blooming but still had colorful leaves, including the *Tipularia discolor* (Cranefly Orchid) and *Elephantopus tomentosus* (Elephant’s Foot).

Always the educator, Helen took the opportunity to point out the differences between grasses, sedges and rushes as we came to the end of our trek; grasses have joints, sedges have edges, and rushes are round. Nature provided an example of all three in one small section. What a great way to spend a beautiful, fall Saturday morning, with much appreciation to Helen Hamilton, Master Botanist!

Karen Grass

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**From Helen…**  
**Goldenrods Galore**

A few years ago Donna Ware led a walk in the Williamsburg Botanical Garden to see “goldenrods galore”—the many species of *Solidago* that grow in the garden. Very quickly she dispelled the myth that goldenrods cause hay fever—they do not! The culprits are wind-pollinated plants like ragweed, grasses, sedges, oaks, pines, and others with very abundant, light-weight pollen. Goldenrods have relatively large pollen, heavier than air and designed to be carried by flies, bees, and butterflies, not by the wind.

Goldenrods are commonly seen along roadsides, in fields, and woods edges from August through November. The flower heads of most species are shaped like pyramids; a few have arching branches with clusters of flowers along the stem. The Digital Atlas lists 20 species of goldenrod (*Solidago*) that grow in our area, and two species of goldenrods with flat-tops (*Euthamia*).

Here are brief notes about species that grow in every county in Virginia (well, maybe one or two omitted in the southwestern area), and a few species found primarily in the Coastal Plain.

Tall Goldenrod (*Solidago altissima*) can grow to 8 feet tall, but the height can be controlled by cutting the stems by 1/3 in early summer or later. These plants are very resilient and will quickly recover from cutting by forming new shoots that produce the same flowers. The downside of this species is its very aggressive colonization...
by rhizomes. All goldenrods are rhizomatous, but most form clumps that will spread slowly. Tall Goldenrod spreads rapidly and vigorously—the solution is to pull the young plants from where they are not wanted.

Blue-stemmed Goldenrod (*Solidago caesia*) is well-behaved, forming clumps that spread slowly. Clusters of flowers appear on arching stems that have a bluish tinge. This species grows well in dry shade, found in nature in upland forests, woodlands, and clearings. It never gets too tall, growing 1–3 feet in height.

Late or Giant Goldenrod (*Solidago gigantea*) can grow tall, 3–7 feet, and prefers a moist environment, growing in swamps, riverbanks, old fields, and wet meadows. Flowers are profuse in a branched pyramid (panicle). This species resembles Tall Goldenrod, will form dense colonies, and self-seeds aggressively. It blooms earlier than Tall Goldenrod, which it resembles, and can form dense colonies. Both these species can be considered weedy and may be too aggressive in the home garden.

Early Goldenrod (*Solidago juncea*) starts blooming in July, continuing through September. Flowers are in open panicles that arch up and out from the stem like a fountain. This is a shorter plant 2–4 feet tall and adaptable to moist or dry conditions in sun or part shade.

Gray Goldenrod (*S. nemoralis*) is another short species, not more than 4 feet tall, named for its fuzzy gray stems. Gray Goldenrod grows in dry soils like fence rows, sand dunes, gravel, and railroad right-of-ways but will tolerate the occasionally wet and dry hardpan soils of the Coastal Plain. Flowers are formed in narrow wand-like panicles.

Sweet Goldenrod (*S. odora*) blooms early and late, from July through October. Plants are upright and short, to 4 feet tall, with downy stems that can be reddish. Flowers are in a wide spreading pyramid. The plant self-seeds but is mostly clump-forming and is a good choice for dry shaded gardens. When crushed the leaves have an anise or
licorice scent. American colonists made a tea from the leaves to replace the British tea that was heavily taxed—it was called “Liberty Tea” during Revolutionary times.

The names Rough-stemmed Goldenrod or Wrinkle-leaf Goldenrod (S. rugosa) describe its leaves that are rough to the touch, wrinkled, and edged with teeth. The cultivar ‘Fireworks’ was discovered in a population of the coastal plain of North Carolina and introduced to the nursery trade in 1993. This is a compact, clump-forming perennial with sturdy stems that are long, arching and very showy with clusters of golden flowers. It thrives in forests, swamps, meadows and in sunny, well-drained average soils.

While all the species above all grow naturally throughout Virginia, Seaside Goldenrod (S. sempervirens) is a plant of Virginia’s Coastal Plain in beaches, dune grasslands, and in our area, sandy shores of tidal rivers. Ranging from Canada to the Great Lakes region and coastal states to Texas, the plant is frequent along the Atlantic Coast. The leaves are distinctive—smooth and fleshy, and the flowers are in pyramids or club-shaped.

Another goldenrod with limited distribution is Sandhill Goldenrod (S. tarda), recorded from only 5 counties in southeastern Virginia and listed in the Flora of Virginia as “rare.” Donna found this plant growing from the seed bank in the Williamsburg Botanical Garden where there is now a labeled specimen in the Goldenrod Garden, located across from the meadow area.

Two species of flat-topped goldenrods are coastal species—Euthamia caroliniana and E. graminifolia. The first species, Slender Flat-top Goldenrod, grows in masses with soft yellow flowers and fine-textured leaves. Blooming from September through November, it is a nice addition to a perennial or meadow garden along with asters and grasses. The second species, E. graminifolia, is also scattered in the piedmont and mountain regions.

All goldenrods provide nectar and pollen for native bees, wasps, monarchs and other butterflies, moths, beetles, and pollinating flies. Caterpillars feed on the leaves and songbirds eat the seeds. The importance of these late-blooming plants for wildlife preparing for winter cannot be overemphasized. The flowers are tiny in dense clusters, allowing insects easy access to food, and many insects lay their eggs in the hollow stems. All are perennials, returning each year to brighten the fall garden, along with white and purple asters, beautyberry, and grasses.
**Made in 1919!**

On October 14, 2019, **Dorothy Whitfield** celebrated 100 years of life, appreciating how lucky she is—no meds, no metal parts, no eyeglasses or hearing aids. Feels fine, if a little frail. She lives alone in a lovely cottage she had constructed on a beautiful wooded lot near a pump station.

For many years she attended meetings of our chapter and the Williamsburg Bird Club. She was a regular on plant walks and bird walks and pulled weeds in the Botanical Garden with a regular work crew. Last year she was still hauling her recycling bin along the asphalt roadway and up her gravel driveway, grinning as she entered her garage—“you don’t use it, you lose it!”

Photos below show a little party in her house and Dorothy working in the botanical garden a few winters ago.

*Helen Hamilton*

![The Birthday Girl](image1.png)

![A birthday gift from Helen](image2.png)

![Some celebratory balloons](image3.png)

![At work in the Botanical Garden](image4.png)
### John Clayton Chapter Calendar

**Friday, November 8**

**10:00 am: Blackwater Ecological Preserve Field Trip**
We have an opportunity for a field trip to Blackwater Ecological Preserve/Antioch Pines Natural Area Preserve led by the Natural Heritage Southeastern Land Steward **Darren Loomis** and Longleaf Pine Restoration Specialist **Rebecca Wilson** in November. The site is about 1.5 hrs from Williamsburg and 1 hr from Newport News, so carpooling is advised.

Please contact **Meegan Wallace** for more information: clm003@verizon.net.

(Details on Page 4)

**Thursday, November 21**

**7:00 pm: Our November Meeting—“Parasitic Plants”**
Our speaker, **Lytton John Musselman** of Old Dominion University, has received three Fulbright Research awards to study parasitic plants in Sudan, Palestinian Territories, and Jordan, and has also held university positions in Lebanon, Syria, Iraq, and Brunei Darussalam.

We will meet in **Room A** of the **James City County Recreation Center**, 5301 Longhill Road, Williamsburg, Virginia 23188-2700.

(See Page 1.)

Keep a lookout for announcements about additional walks and other events in the local newspapers and on our website at [www.vnps.org/john clayton](http://www.vnps.org/john clayton).
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