Our July 20th meeting: “All About Rain Gardens”

Our speaker, Master Gardener Carol Fryer, will discuss the use of native plants in local rain gardens. Carol has been a Virginia Cooperative Extension Master Gardener in JCC/Williamsburg since 2006. She is also a VCE water steward and tree steward, a volunteer in Colonial Williamsburg gardens and at the greenhouse/nursery, and a member of the Herb Society. During her water steward training at Virginia Tech/Master Gardener College, she participated in the installation of a rain garden in Blacksburg, and after that experience, decided she would like to do more. Since then, she has designed over 60 rain gardens in James City County for homeowners and Homeowner Associations and has guided participants throughout the installation process. The Rain garden program, called Garden Love, is supported by James City County Stormwater Division and offers homeowners a rebate for rain garden installations.

The meeting begins at 7:00 pm in Room A at the James City County Recreation Center, 5301 Longhill Road, Williamsburg. See you there!

From the President

I have just returned from a visit to my family in Geneva and the upper Provence. The weather was so clear and warm, not humid at all. We did many long walks along small roads accompanied by frequent bikers, and I saw a tree that is a Swiss champion. Yes, they also care about that, and the tree has a special place. In the Geneva Botanical Garden, I saw a section about our native plants. As all of the villages near Geneva and in Provence belong...
to wine regions, most of our walks were along vineyards. I noticed the beauty of numerous native plants along the small roads and the olive groves. Some of those groves produce olive oil for sale here in Williamsburg. In the French villages, many houses had St Johnsworts, all in bloom. All that made me think about our natives and it brought our chapter’s problems to my mind again.

It is time to talk about the continuing existence of the John Clayton Chapter of VNPS. We have a great, active chapter with many enthusiastic volunteers. We send students to Nature Camp; give a scholarship to William and Mary students to do research on native plants; donate plants to support schoolyard gardens; make donations to support such causes as purchasing land for conservation, and the creation of the Digital Atlas of Virginia Flora. The only way to continue these activities is through the money from our plant sale. We now have enough cash on hand to sustain for three more years with careful budgeting, but that is all. After that, the chapter’s existence is in danger. Our last sale was financially successful but we need to have sales each year to be able to continue our mission to promote and support native plant causes. We need a leader (or a pair of leaders) who will volunteer to organize our 2018 Plant Sale (both of our previous Plant Sale Chairpersons have decided to take a well-deserved break after many years of working on this effort). The need is now, and it is urgent.

What is involved? You do not need to think you are starting from scratch. The date (April 28, 2018) and the location of the plant sale (the Williamsburg Community Building) are already set. The model for organizing the Plant Sale is already in place. The volunteer leader(s) of the plant sale need to take care of renting tables for the Williamsburg Community Building, securing volunteers for the setup and loading of plants to go to the Sale and the Sale itself, making a master list of on which table each of the plants is placed, working with Tim Costelloe (the transportation leader) to organize the transport of plants to the sale, and

Lucile took these photos during her trip:
Left, the champion largest and oldest walnut tree in Switzerland; Right, a grove of olive trees in Provence
doing the publicity for the sale. We already have a map of how the Building is organized and have information on doing many of those items on the list.

You will have my continuing help and support. As in the previous years, I will organize potting parties, purchase plants that are natives and create the native plant list for our customers. I am confident that someone will step up to the plate and lead the effort to keep our chapter going. In the past 30 years, this chapter has worked so hard to support the cause of Virginia’s native plants—we cannot let it go down. If you can help, please contact me at lkossodo@cox.net.

Lucile Kossodo

In Review (our May meeting)

If you missed the May meeting, Deborah Green, psychologist and Professor Emerita at the College of William and Mary, tackled a hot topic and got the audience talking until well after her prepared remarks. Her presentation entitled “Native Plant Communities and Deer Management: Strategies for Peaceful Co-existence” was a thoroughly researched summary of the problems and potential solutions. Here are some of the highlights—

First, a note about Professor Green’s background. Although currently a resident of Black Mountain, North Carolina, she lived here for 30 years. She is a Master Gardener and passionately interested in native plants. She has wedded her work as a psychologist with her passion for the environment and is currently a consultant on the human dimensions of natural resource management. Her work is research focused and published in both biological and sociological journals.

The problem:
Due to the availability of plentiful food from suburban landscapes and no natural predators, how to manage the overpopulation of deer is of vital concern. It is not just about our ornamentals or individual gardens. At a population of 10 deer per square mile, serious damage can occur to the forest ecosystem. The last time an estimate was done (as deer per square mile), the figure for Virginia was over 30.

Impact on the ecosystem:
Referring to the Virginia Native Plant Society’s 2015 Statement, Dr. Green explained that the threat to the ecosystem is very real. Deer eat most native plants within five feet of the ground. This loss of understory also means loss of natural habitat for small mammals, which impacts the bird populations that feed on those small mammals and the bird species that rely on the understory for cover. The loss of native species also leads to infiltration of non-native and invasive species such as the particularly difficult Japanese stiltgrass (*Microstegium vimineum*) and the Japanese barberry (*Berberis thunbergii*) that harbors the ticks that carry Lyme disease. Sadly, the understory is not easily recovered. Many species of invasive plants are readily spread on the hooves, hair, and feces of deer. Additionally, forests damaged most by deer browsing are young, such as those in our area that
are recovering from past logging. The threat goes further, in that deer browsing changes the composition of hardwood seedlings and saplings thus slowing secondary succession and altering the seed bank.

Viable and non-viable options:
As one can expect, discussing lethal options is difficult. The Virginia Department of Game and Inland Fisheries monitors public opinion and has settled for “stabilizing” the population as a palatable goal for most counties. Ideally, non-lethal options are preferred, but many of them are not effective. For example, the idea of letting nature take its course is of no help at all, as it would lead to the deer population exceeding carrying capacity with a resultant crash in population—all at great expense to the ecosystem. Trap and Transfer is ineffective, as every county in Virginia has deer and no county wants more. Fertility control agents have possibility but are expensive and have not proven effective unless used on an island population. There is also concern about the quality of meat from hormone treated animals. Currently, the only truly effective option is culling of the population through hunting. As Dr. Green put it, we have to be the predator. Although costly ($600/deer), sharpshooters and archery hunting is an option for some communities. There is also a program called Hunters for the Hungry that donates the meat to those in need.

While the deer are the main threat, Dr. Green concluded by saying that we need to continue to focus on managing invasives with an emphasis on multi-layered design, which is key to helping our natives regenerate.

Author’s note: My review is brief. Professor Green has stated she is more than happy to provide research sources.

Also, while writing this review, I found a most interesting and relevant study that advocates high percentage initial culling followed by birth control to maintain population: [http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0143122](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0143122)

Cathy Flanagan

New Members
We welcome **Ricklin Brown**, **Catherine Elder**, and **Lenore Teske** of Williamsburg; **Allison Watts** and **Ben Davis** of Newport News; and **Diana Weaver**, **Dottie Weaver**, and **Jason Portel** of Hayes.

Recent walks and other events
**May 6 Spring Flower Walk at Newport News Park**
We had a good-sized group for our May 6 walk. We met at the Newport News Park Discovery Center to take the White Oak Trail. I normally walk the trail clockwise, but since some of the walkers had taken the trail with me in the past, we decided to walk it counterclockwise this time. It’s surprising that can often lead me to notice things I haven’t seen before. As we started off, we remarked
that the water level of the reservoir was low, probably because of work being done on one of the dams.

Pink Lady’s-slipper seemed to bloom pinker than usual this spring. I had wanted to show off two colonies of it, but we had missed the bloom period, so what we found were just spent or fading blooms. Disappointed, we moved on to ferns and Pawpaw, but photographer Roger Neil stalked Lady’s-slippers until he found the very last bloom still in good condition and got a good shot of it before rejoining us. The ferns did not disappoint, however. I bent to get a closer look at some smallish ferns in a mass of some rather nondescript leaves, and realized I was standing in a carpet of immature Jack-in-the-Pulpit. In their midst we identified New York Fern. Elsewhere along the trail we encountered Royal Fern, Ebony Spleenwort, Lady Fern, Christmas Fern, and Broad Beech Fern. We also found a Jack in full bloom and took a look down its purplish-brown-striped throat.

I had hoped to find Early Violet (*Viola palmata*) in bloom, but that had finished blooming, too. Early Violet (aka Wood Violet) is not common in the Coastal Plain and has a very short bloom season. We found the colony and admired its incised leaves. We did find plenty of Partridge Berry in bloom and several cheery patches of Yellow Stargrass. A Tulip Tree dropped a blossom to give us a close-up look. Mayapple was in the fruiting stage.

As we meandered across the Swamp Bridge (always my favorite part of the walk), we saw beaver signs and masses of Arrow Arum. There was one Arrow Arum just beginning to open the first bloom, but at an angle that was impossible to photograph and nearly impossible to see. The beavers maintain several dams at different levels, giving the beaver impoundment a terraced look. From the safety of the bridge I always scan these dams and stumps eagerly for snakes, especially a cottonmouth, but this day we found none. The expected swamp flora thrive in this swammy end of the reservoir: Baldcypress, Wax Myrtle, Smooth Alder, Virginia Sweetspire and Cattail. Near the end of the swamp bridge, Meegan Wallace and I paused to gaze at a shrub I have been calling Black Hawthorn (*Viburnum prunifolium*), but just wasn’t convinced that was correct. As we contemplated, it occurred to me it might be a Dogwood—maybe Silky Dogwood (*Cornus amomum*). Meegan searched it on her phone, and we both felt more confident about that identification. Just off the end of the Swamp Bridge we came
upon a Serviceberry with a few fruits beginning to ripen, and we just had to taste.

We saw a couple blooming patches of Yellow Flag Iris, a non-native. It does not seem to be invasive at this point. Critters for the day included Fowler’s Toad, American Toad, a large millipede, turtles, of course, a small yellow moth, and the skeleton of a raccoon. Probably the prize find was a fallen bird nest. Containing no eggs but clearly the nest of a small bird, and deeper than wide, it was made of intricately woven oak catkins, lichen, cattail fluff, and a little bit of fine, dried grass. If anyone knows what kind of bird builds such a nest, do tell!

Susie Yager
May 20th’s delightful Plant Walk

If you missed the nature walk with Mary and Allen Turnbull on Saturday, May 20th, this account will give you just a small glimpse of what it is like to visit their garden.

The property is a picturesque landscape of fascinating vistas and secret gardens adorned with 73 native plant species, and 87 non-natives. I got those numbers from the four-page guide to the walk that listed the common and scientific name of every species. I can’t think of a nicer classroom for plant identification. Every native plant was labeled, and if it was not in bloom a large color photograph of the bloom—that at times seemed uncannily like the real thing—was placed by the foliage.

The afternoon was perfect—warm and breezy, and the first flowers that caught my eye when I arrived were the bright yellow Sundrops (*Oenothera tetragona*)—patches of them open in the sunlight. Truly a showy native plant. The “sign-in” table out in the driveway was decorated with a vase of freshly cut oak leaf hydrangeas. As the group gathered, we were asked to introduce ourselves and name our favorite flower.

We began the tour near the patches of Sundrops (*Oenothera*). Mary told us that they do “go to sleep” at night (unlike other species of evening primrose that open at night). Behind them was a towering Wax Myrtle hedge (*Morella cerifera*) and we crushed some leaves to release their strong spicy scent. Sniffing our way along, we noted that the Sweetshrub (*Calycanthus*) just happened to have one of its interesting brown flowers for us to see and smell. Many in the group were familiar with the story of its use as a perfume in colonial times in lieu of bathing. We admired the large coral honeysuckle (*Lonicera sempervirens*) draped over the mailbox, the butterfly weed (*Asclepias tuberosa*), the purple flowered Verbena canadensis 'Homestead Purple' and the Stokes’ Aster (*Stokesia laevis*). Down some stone steps near what the Turnbull’s call “Azalea Alley” there was mountain laurel (*Kalmia latifolia*), then as we climbed higher, entering the deeply wooded part of the lot, there were massive American Beech (*Fagus grandifolia*), Eastern Redcedar (*Juniperus virginiana*), Flowering Dogwood (*Cornus florida*), Redbud (*Cercis canadensis*), American Elm (*Ulmus americana*) and Sassafras (*Sassifras albidum*). The garden became more enchanting as we followed its twists and turns. We noted Mayapple (*Podophyllum pelatum*), Christmas Fern (*Polystichum acrostichoides*), Maple Leaf Viburnum (*Viburnum*), Black Highbush Blueberry (*Vaccinium fuscum*), Lowbush Blueberry (*Vaccinium pallidum*), and Bloodroot (*Sanguinaria canadensis*). Due to bad knees, I didn’t venture down to the creek where the guide tells me there is Broad Beech Fern (*Phegopteris hexagonoptera*), Lizard’s Tail (*Saururus cernuus*), Beechdrops (*Epifagus virginiana*), Common Persimmon (*Diospyros virginiana*), Jack-in-the-pulpit (*Arisaema triphyllum*), Pinxter Flower (*Rhododendron periclymenoides*), and Black cohosh (*Cimicfuga racemosa*). Instead, I admired the marvelous stonework, benches, sculpture, and even a waterfall, all framed by plants that
include many natives such as Dwarf Iris (*Iris cristata*), Virginia Bluebells (*Mertensia virginiana*), Virginia Creeper (*Parthenocissus quinquefolia*), and a special kind of native, *Chesapeake* *middlesexensis*—a 6-million-year-old scallop shell found on the property! As I looked down from the creek-view area (complete with chairs and small patio) I used my birds-eye view of the group to snap a quick photo. As they returned to the house we all met on the screened porch, where there were refreshments served on a table with a brass planter full of bright yellow Sunflowers—my new favorite flower.

**Cathy Flanagan**

**June 17th’s Stonehouse Habitat Garden Workday**

Here are some photos Sue Voigt took during that Saturday’s efforts. Many thanks to all who helped, including a Boy Scout who had just graduated from Stonehouse, and his mom!

**River Heroes**

The home of Patty Von Ohlen near the James River Bridge was the location of a recent event to celebrate James River Heroes, homeowners whose efforts protect local waters. The John Clayton Chapter’s display about native plants was staffed by Sally Young, Melanie Marois, and Helen Hamilton.

Helen took this photo of Sally and Melanie at the John Clayton Chapter’s booth.
Upcoming JCC Plant Walks

❖ Saturday, July 22, 10:00 am: Natives at Joan & Jim’s
The Etchbergers grow enormous native plants on their property in Woodland Farms at 100 Woodland Road in Williamsburg, and the adjoining forest is always interesting. Learn their secrets of successful summer gardening on a walk around the backyard and down to a little stream where there are some interesting mosses. Contact Joan Etchberger at 757-784-6870 for more information.

❖ Saturday, July 29, 10:00 am: Plants and Butterflies
Join butterfly experts Adrienne Frank and Gary Driscole with Helen Hamilton for a walk around the Warhill Tract (4725 Stadium Road, Williamsburg, Va 23188) to watch butterflies collecting nectar from native plants. From the meadow of dogbane and pearl crescents, the walk continues around the pond near the stadium with grasses, sedges, and skippers. Returning to the parking area, the meadow will be blooming with late summer perennials, sulphur butterflies, and many others. Park in the last area past the WISC center, in front of the community garden. Contact Helen at 757-564-4494 or helen48@cox.net for more information.

❖ Saturday, August 5, 9:30 am: Rare Natives
The undeveloped area of Gosnold’s Hope Park (901 E. Little Back River Road) in Hampton has many rare and unusual plants in the saltmarsh and upland pine forest. Environmental consultant Meegan Wallace expects to see a variety of late summer blooming plants, grasses, and sedges. Also, the rare Eastern Bloodleaf (Iresine rhizomatosa), seen in only three counties in Virginia’s Coastal Plain, should be in bloom. Park along the meadow past the playing fields. Contact Meegan at clm003@verizon.net to register and for more information.

❖ Saturday, September 9, 9:00 am: Ferns in Bloom
Meet Helen Hamilton in Freedom Park for a walk to see native ferns and a close look at the tiny plants that cover logs and stream edges—mosses and liverworts. Park near the Go Ape entrance and the playground. Contact Helen at 757-564-4494 or helen48@cox.net for more information.

From Cynthia
Free to a good home—plastic pots, all sizes!
If you would like to pick up a few (or many), please give Cynthia a call at 757-259-9559.
Fern Look-alikes

The main reason I wrote *Ferns & Mosses of Virginia’s Coastal Plain* was to help me remember the distinctions among some ferns that superficially resemble each other. Few people have trouble recognizing Christmas Fern and the similar, but very much smaller Ebony Spleenwort. And Cinnamon Fern is hairy all over; even when young there are tufts of hairs all along the rachis on the underside of the frond.

**Problem #1:** Two woodland ferns both have winged rachis, but the leaflets of Sensitive Fern have strongly scalloped edges and those of Netted Chain Fern have tiny teeth. These two ferns can be confused when young, before the leaflet edges of Sensitive Fern are truly scalloped. The frond segments are arranged opposite each other in Sensitive Fern, and alternate in Netted Chain Fern. The sporophytes of the two plants look completely different—Sensitive Fern produces a separate stalk with bead-like spores, while Netted Chain Fern makes chain-like sporophytes on the underside of smaller, fertile fronds.

**Problem #2:** Both Southern Lady Fern and New York Fern are tapered at the tips of the fronds, but the last leaflets of New York Fern are also tapered, whereas the last leaflets of Southern Lady Fern are bent backwards. Broad Beech Fern also as reflexed lower leaflets, but the frond is shorter, triangular in shape, and unlike the other two fronds that are much longer than wide. The fronds of Hay-scented Fern are larger and lacy; the tip is tapered, often bent downwards, and the last leaflets are neither tapered nor reflexed.
Problem #3: Cinnamon Fern, Virginia Chain Fern and Marsh Fern grow in wet habitats and when young, have similar appearances. All have stately fronds 2–4 feet tall, but Cinnamon Fern can usually be separated from the other two by the hairy petioles and tufts of hair, even when young, along the rachis. The pattern of the veins on the undersurface of Virginia Chain Fern is distinctive and when the narrow, fertile fronds develop, the rectangular, chain-like sporangia look like nothing else. The leaflets of Marsh Fern have simple, forked veins and the edges of the leaflets will fold over the developing clusters of sporangia on the underside.

Problem #4: Grape ferns are small, no more than 12 inches tall, with finely cut, triangular leaflets. Fertile fronds rise from the center of the plant, bearing small rounded clusters of sporangia at the tip, superficially resembling a group of miniature grapes. The fertile fronds of Rattlesnake Fern appear in the spring and the fertile fronds of Cut-leaf Grape Fern and Southern Grape Fern are formed in the fall. These last two are very common in our area but difficult to distinguish from each other. The general term “grape fern” describes all three species, which look like nothing else.

Helen Hamilton
### John Clayton Chapter Calendar

**Thursday, July 20**

7:00 pm: **John Clayton Chapter** meeting in Room A at the **James City County Recreation Center, 5301 Longhill Road**, Williamsburg.

Master Gardener **Carol Fryer** will speak on "All About Raingardens."

*(See Page 1.)*

**Saturday, July 22**

10:00 am: **Natives at the Etchberger’s**—a walk around **Jim and Joan Etchberger’s** property in Woodland Farms at 100 Woodland Road in Williamsburg to see native plants and mosses.

Contact Joan at 757-784-6870 for more information.

*(See Page 9.)*

**Saturday, July 29**

10:00 am: **Plants and Butterflies**—Join butterfly experts **Adrienne Frank** and **Gary Driscoll** with **Helen Hamilton** for a walk around the **Warhill Tract** (4725 Stadium Road, Williamsburg, Va 23188) to watch butterflies collecting nectar from native plants.

Contact Helen at 757 564 4494 or helen48@cox.net for more information.

*(Details on Page 9)*

**Saturday, August 5**

9:30 am: **Rare Natives** — **Meegan Wallace** expects to see a variety of late summer blooming plants, grasses, and sedges in **Gosnold’s Hope Park** (901 E. Little Back River Road) in Hampton, including the rare Eastern Bloodleaf (*Iresine rhizomatosa)*.

Contact Meegan at clm003@verizon.net to register and for more information.

*(More info on Page 9)*

**Saturday, September 9**

9:00 am: **Ferns in Bloom**—Meet **Helen Hamilton** in **Freedom Park** for a walk to see native ferns and a close look at the tiny plants that cover logs and stream edges—mosses and liverworts. Park near the Go Ape entrance and the playground.

Contact Helen at 757 564 4494 or helen48@cox.net for more information.

*(See Page 9.)*

Keep a lookout for announcements about additional walks and other events in the local newspapers and on our website at **www.vnps.org/johnclayton**.
Below is a membership renewal form. Please contact Membership Chair Fred Blystone at 757/229-4346 or at fredblystone@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 [ ] 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
400 Blandy Farm Lane, Unit 2
Boyce, VA 22610