

Newsletter of the John Clayton Chapter of the Virginia Native Plant Society

Our November meeting on Thursday, Nov. 18:

Claytonia www.claytonvnps.org

Volume 26, Number 6

Virginia Natural Area Preserves on the Eastern Shore:

Exploring the Flora and Natural Communities of the

November–December 2010

### Officers

President	Helen Hamilton
	757/564-4494
	helen44@earthlink.net

virginica

### Vice-Presidents

Charlotte Boudreau	757/596-2524
djba	oudreau@cox.net
Bharati Lakshmi	757/728-9096
Treasurer	open
Secretary	Mary Turnbull
	757/229-4046
petalpo	wer@verizon.net

#### **Committee chairs**

Awards/Historian	Pat Baldwin 757/838 2064
Field Trips (Middle Mary Hyde Berg	e Peninsula) 804/693-3568
<b>Field Trips</b> (Lower Phillip Merritt	
Outreach	open
Plant List ediebra	Edith Bradbury 804/725-2650 dbury1@aol.com

### **Plant Sale**

Joan Etchberger	757/566-1884				
Lucile Kossodo	757/565-0769 lkossodo@cox.net				
Newsletter	Louise Menges				
	757/229-4346				
lt	meng@verizon.net				
Membership	Patti Gray				
•	757/645-4164				
patricia	igray67@juno.com				
Publicity/Website	Jan Newton				
-	757/566-3646				
jne	ewton110@cox.net				

**Conservation** open

### **Plant Rescue**

Carolyn and Ralph Will 757/565-0306 sail@widomaker.com



The Eastern Shore of Virginia encompasses exemplary coastal natural communities containing a diverse array of native plants. From beach strand to maritime forest, these plants have developed unique mechanisms for survival in harsh environments. The influence of wind, saltwater, and frequent disturbance determine the location of plant communities and result in the formation of natural communities found only on the outer coastal plain. This presentation will take listeners on a "guided" tour of the State Natural Area Preserves of the Eastern Shore, with a focus on the native flora they were established to protect.

Dorothy Field with the tools of her trade.

Our speaker, Dorothy Field, is Eastern Shore Region

Steward for the Virginia Natural Heritage Program, and arrived on the Shore in 2002 from Richmond, where she was employed as an Instructor in Biology at Virginia Commonwealth University. She received her BS and MS in biology from VCU, with a concentration in coastal plant ecology. Her thesis work was accomplished on Hog Island, one of the Atlantic barrier islands off the coast of the Eastern Shore.

Currently, Dorothy is a happy empty-nester, living idyllically on the Eastern Shore with her husband Richard and Labrador non-retriever Shelly.

The meeting begins at 7 pm at the Yorktown Public Library at the intersection of Battle Road and Route 17 in Yorktown.

## From the President:



Whether or not we are on scheduled plant walks, October is too nice to stay inside! Leaves are turning, the sky is blue, the air is crisp, and there is nothing to compare with shuffling through a path of dry leaves. The asters and goldenrods bloom into November, while all the perennials are using the diminishing sunlight to store energy for next

year's growth. And now is a good time to practice tree-identification skills, with the fruits available along with fading leaves.

For gardeners, fall is the ideal time to plant shrubs and trees, so they make some root growth during the mild days of our winters. And as we prepare gardens for winter, we should leave the dead vegetation standing wherever possible, to furnish homes for insects—many insect mamas lay their eggs in the stems of plants, especially goldenrods. Woody trimmings can be placed in a brush pile which becomes cover for small mammals and birds and incubation sites for beneficial insects.

And please pot up the extra perennials that have started from seed or ground runners. They can live in pots in a sheltered place over the winter and will be ready for our plant sale in April. See Lucile's article on Page 6. Helen Hamilton

### **New members**

We welcome new members Diana Tennis of Williamsburg and Susan Walton of Newport News.

### **Our September meeting:** What does bird food look like? (and should we even be watching? Oh my! (20)

Helen Hamilton, the speaker at our September 23 meeting, focused on relationships between birds, native plants and the native insects which rely on those plants for food and shelter.

Birds feed their young caterpillars, bugs, grasshoppers, worms—protein, not plant material. But many insects are plant-eaters, birds prefer native insects as food, and native insects prefer native plants for their food source.

The talk showed the importance of gardening with native plants to feed birds and butterflies. Alien ornamentals take the space needed to grow plants that feed insects that feed birds and butterflies. Developments and industrial agriculture have removed lands that supported larger populations of wildlife, now with no place to hide other than patches of woods and meadows. Homeowners can help by removing invasive species and installing the native plants preferred by songbirds and butterflies.



Damselflies should get special recognition for athleticism!



task.

A praying mantis, probably digesting her last partner.

As her slides illustrated. humans have nothing on insects when it comes to adventure-Soldier beetles multisome sex!

mates while

copulating.

Helen urged homeown-

ers to look more closely at garden plants to learn

about insect habits, and

of interesting courtship

behaviors among groups

of insects, including

showed several examples

**Louise Menges** Photos (and much of the text): Helen Hamilton

### **Cemetery trees**

### living and, well...eternal

One day in mid-September my husband and I traveled to Richmond's Hollywood Cemetery to join a 10 am guided walking tour of this 163-year-old landmark. Finding its entrance in an old neighborhood of narrow streets wasn't easy, and when we arrived later than we would have liked, we didn't see any evidence of a tour in progress. My brief venture down the road into the cemetery revealed a sprawling, hilly expanse on bluffs overlooking the James along the fall line, stretching as far as the eye could see and crisscrossed by a network of winding paved roads. Discouraged and about to leave, we followed a group into what resembled a stone chapel just inside the entrance, to discover that we were the only customers for that morning's tour! When the guide, who was associated with the Valentine Museum, suggested giving us a driving tour using our car, we gratefully accepted.

It was a trip through Virginia history. Many of you probably know that James Monroe, John Tyler and Jefferson Davis are buried here, as are 25 Confederate generals and more than 18,000 Confederate enlisted soldiers. Among the cemetery's more than 60,000 graves are those of many noted Virginians, including historian Douglas Southall Freeman, novelist James Branch Cabell and oceanographer, scientist and educator Matthew Fontaine Maury.

What about trees, you ask? Hollywood was named for the many American hollies already growing on the site, and plenty of large specimens were in evidence. We noticed many big old trees during our visit, including an American sycamore (Platanus occidentalis) our guide identified as a state champion (although it isn't listed in Remarkable Trees of Virginia), but missed seeing the blackgum (Nyssa sylvatica) whose photograph graces pp. vi-vii in that volume.



The sycamore—maybe not a champion, but impressive.

But it was the "eternal" trees which fascinated me most. Our guide explained that these grave memorials, usually depicting tree stumps, were provided by Woodmen of the World as an insurance benefit to members of that fraternal organization until sometime in the 1920s, when it became too costly. There are many of them scattered throughout this cemetery, each incorporating elements symbolic of

Woodmen ceremonies or rituals. Some are quite elaborate, and one "grove" of these memorials is even enclosed within a fence of stone tree trunks!



Text and photos: Louise Menges

One of my favorites was this mossy Woodmen of the World memorial of 1912, with ferns, vines and what look like arums carved into its base.



The grove of WOW memorials, the last burial a simple headstone dating from the 1940s. The large tree stump in the center of the plot is especially intricately carved.

## JCC's Flower of the Month for September and October

### September: Partridge-pea

Partridge-pea (*Chamaecrista fasciculata*) is a straggly annual plant, growing 6–30 inches tall, with large yellow flowers tucked in the leaf axils. The five petals are broad and unequal, each with a dark spot at its base; the dark anthers droop. Each dark green leaf consists of 6–15 leaflets, each tipped with a tiny bristle, and are sometimes sensitive to the touch. The 3-inch seedpods are linear and flat.



This native plant grows in a wide variety of open, sandy soils, often in disturbed habitats. Ranging from Massachu-

setts to southern Minnesota, south to Florida and west to Texas and Mexico, Partridge-pea is found in nearly every county in Virginia, blooming July through September.

Attracting bees and butterflies, the flowers are a nectar source and larval host for several species of butterflies. Seed pods are eaten by gamebirds and songbirds, and the plant provides excellent cover for gamebirds. Like other members of the pea family, Partridge-pea requires the presence of microorganisms that inhabit nodules on the plants root system and produce nitrogen compounds necessary for the plant's survival.

### **October: Strawberry bush**

Strawberry-bush (*Euonymus americana*) is a shade-loving shrub that goes unnoticed much of the year. Leaves are narrow, long-pointed with fine teeth. In early summer, 1–3 small greenish-purple flowers on slender pedicels lie on top of each leaf. They are followed later with a warty fruit covering, somewhat resembling a strawberry. In the fall, the fruits turn orange-red and burst open to reveal 5 shiny red arils, each of which envelopes a seed—a very attractive display among the leaves now turning yellow.



Although it will tolerate full shade, strawberry bush fruits best when provided light shade or full sun. This shrub grows in mixed deciduous forests, low woodlands, and swamp forests, across eastern U.S. and most counties in Virginia. The distinctive green twigs are "deer ice cream"—heavily browsed by white-tailed deer. The plant must be protected with fencing.

The common name "hearts-a-burstin" attempts to describe the appearance of the fruits in the fall. The genus name "Euonymus," means "good name."

Strawberry-bush was attractive to early colonists, and was taken back to England in 1663. The fruit and bark of this shrub and its relatives contain glycosides that cause severe diarrhea in humans; the berries may also affect the heart, possibly causing cardiac arrest, and are especially dangerous for children. Native Americans used the roots of Strawberrybush to make a tea for stomach and urinary problems.

Text and photos: Helen Hamilton

## VNPS takes a stand on the proposed Cypress Creek Power Station

Efforts to build the large coal-fired power plant in Dendron, Surry County, Virginia are still in the works. The Old Dominion Electric Cooperative (ODEC) has delayed their application for an air permit from the Virginia Department of Environmental Quality, but the Army Corps of Engineers is moving full steam ahead in its analysis for an Environmental Impact Statement (EIS). The EIS considers whether or not this plant is necessary, what alternatives may be better, as well as its potential impact on air quality, water quality, historic resources, wildlife, and non-tidal wetlands.

Cypress Creek Power Station, the proposed coal-fired power plant, is only 18 miles from Williamsburg, and the pollution, including mercury, sulfur dioxide, nitrogen oxide and microscopic particles, would have a negative impact on the health of the Chesapeake Bay, State Parks and other natural areas, as well as negative health impacts on the flora and fauna in Hampton Roads, including humans. Mountain top removal used to obtain the coal for this plant adds to the destruction of our mountains and their biodiverse habitats in southwest Virginia (see photo below).



Acting on the pleas of Chris Llewellyn, director of Williamsburg Climate Action Network, chapter member Jan Newton contacted state board members of our Native Plant Society and the following letter was drafted and sent to the Army Corps of Engineers:

Melissa Nash US Army Corps of Engineers 803 Front Street, Norfolk VA 23510

This letter is in reference to the current plan by the Old Dominion Electric Cooperative (ODEC) to build a 1500MW coal fired electric plant in Surry County, Virginia. The Virginia Native Plant Society is opposed to this proposal for the following reasons:

- The proposed coal-fired power plant would exacerbate mountaintop-removal coal mining in Southwest Virginia, a practice that permanently destroys mountains, forests, and headwater streams—treasured and irreplaceable parts of Virginia's natural heritage that provide clean water to communities, harbor a diversity of plants and animals unequaled in other regions of the United States, and enrich the lives of residents and visitors alike.
- Carbon dioxide, caused by the burning of fossil fuels such as coal, is the leading cause of global climate change which will have a significant impact on all living biota, including humans.
- Carbon sequestration technology is currently experimental and unproven for large scale coal fired electric plants and is not being anticipated for the future in this proposal.
- Sulphur dioxide is the leading cause of acid rain, which has lasting detrimental effects on the ecology of our forests and rivers.
- The microscopic particles emitted from the smokestacks of power plants and other industries are a major cause of asthma, cancer, and heart attacks.
- Mercury is a potent neurotoxin that can cause brain development defects in fetuses and impede intellectual development in children.
- Nitrogen oxide emissions cause smog, which leads to respiratory health effects and can have major environmental impacts on the Chesapeake Bay, national and state parks, and other natural and wilderness areas.
- Data on prevailing winds suggest that pollutants from the coal plant will drift over a region with a population of over 1.7 million people.
- American Council for an Energy Efficient Economy concluded that with medium level policy and program choices, Virginia can meet 8% of its energy needs by 2015 and 19% by 2025.

The Virginia Native Plant Society, based on the conditions described above, believes that the construction of a coal-fired power plant in Dendron, Surry County, is not in the best interest of Virginia's residents or its natural heritage. We respectfully urge the Corps to deny all permits requested by ODEC with regards to this coal plant and to rigorously investigate environmentally preferable alternatives to the plant.

### Sincerely, Sally Anderson, President

If you are opposed to the building of this coal plant, please write a letter, send an email and/or add your name to the petition found at this website:

http://wiseenergyforvirginia.org/sign-the-letter-to-thearmy-corps-of-engineers/.

More information about the proposed coal-fired power plant and mountain top removal can be found at <u>http://wiseenergyforvirginia.org/surrycoalinfo/</u>.

Jan Newton

# Grasses— a most unappreciated family of flowering plants

### (from Shenandoah Chapter's October 2010 newsletter)

The grass family (*Poaceae* or *Graminae*) is one of the largest flowering plant families with over 10,000 species in over 600 genera worldwide. In terms of economic importance as human food crop species, it is the most important flowering plant family. In Virginia, we have almost 270 species in over 80 genera, with just under 150 of these species in 50 genera found in Northern Virginia. Recognizing grasses as flowering plants is not very obvious to most people. Once you understand grass flower structure, however, grasses are a really interesting and beautiful family to recognize and enjoy. The other two families that are often confused with grasses are the sedges (*Cyperaceae*) and rushes (*Juncaceae*). The sedges generally have triangular edges (sedges have edges) and rushes are round with solid pith in the stem. Grasses have round stems, but



the stems are hollow between the points of the leaves attaching. In grasses, unlike rushes, the leaf base forms a sheath surrounding the stem before the blade of the leaf expands into the structure easily recognizable as a leaf. The stem of a grass plant that forms the flowers is called a culm. Roots of grass plants are fibrous, with particular species being either annuals or perennials.

Grasses are herbaceous except for the bamboos, the only woody members of this family.

The flowers of grasses are wind pollinated and therefore do not have petals or sepals. The basic flower has three stamens and an ovary with two styles that can be quite showy. At the base of the ovary are two small structures called the lodicules that are modified perianth (combined petal and sepal) tissue. There are also other modifications that make grass flowers a bit different. Enclosing each flower is a pair of modified leaves or bracts called the lemma and palea (the lemma is closer to the flower than the palea). This combination of a flower enclosed by the lemma and palea is called a floret. The florets are further arranged in structures called spikelets. A spikelet consists of one or more florets with two modified leaves called the first and second glumes beneath the floret or florets. The spikelets are then arranged in inflorescences of spikes, or racemes, or panicles. Once you can visualize these modified structures of spikelets and florets, identifying the grasses becomes possible.

Additionally, the veins in the lemmas and glumes may be elongated to form bristle-like structures called awns, which are important in identification. The fruit of grasses is the caryopsis or grain. Many taxonomists divide grass genera into tribes. The Flora of West Virginia has good diagrams of the structure of grasses and good identification keys to tribes, genera, and species of grasses. It places grasses into eleven tribes with a separate identification key to these tribes, then another key to the genera within each tribe, and then each genus will have a key to species. Grasses: An Identification Guide, by Lauren Brown, is another good book with which to begin to enjoy the grasses. The grasses, as mentioned before, are the most important family economically to humans, with major grain crops such as corn, wheat, rice, barley, rye, oats, sorghum, and millet. Countless other animals rely on grasses for their food sources. Bamboo is used as building material in many parts of the world. More and more grasses are being used for ornamental purposes. Of course, we are all familiar with the use of grasses for lawns. Our native grasses are especially beautiful in the late summer and fall. Deep Cut and other sites in Manassas National Battlefield Park are particularly good sites for Indian grass (Sorghastrum *nutans*) and the little blue stem (Andropogon scorparius [editor's note: syn. *Schizachyrium scoparium*]) in the fall.

This article by **Marion Lobstein**, Professor, Northern Virginia Community College, first appeared in the January-February 1996 edition of *Wild News*.

## JCC contributes photos to display in DC

The National Children's Museum at National Harbor, Maryland (www.ccm.org/) has included some of Jan Newton's native plant photos in a children's display of ways to go green at home. The display, part of the Museum's Launch Zone, is about native plants and naturescaping.



Jan's photos are among those in this display, and all the photos on the magnet board at bottom right are hers.

## **Phillip branches out**

Phillip Merritt will soon be doing a radio show on the college station, WCWM 90.9 FM. His program, "Flipnotica," will air on Sundays at noon, and he expects to be playing a wide range of music. Since a certain number of public service announcements on the air are required, he has suggested including the JCC Wildflower of the Month, and, if someone is willing to record a promo for VNPS, he will keep it on hand and play it from time to time, also.

## Preparations are under way for our Spring 2011 Plant Sale

The plant sale this coming year will be on April 30, 2011, and will be held outdoors in the parking lot near the children's playgarden of the Williamsburg-James City County Rec Center on Longhill Road. Master Gardeners and Native Plant Sales will be separate, but held at the same time.

Set-up will be the late morning of Friday, April 29, and we will accept plant deliveries in the early afternoon. There will be a members-only plant sale in the late afternoon as there was last year.

The times for the sale will be earlier, from 9 am to 3 pm (hopefully the weather will cooperate for us), and we will need to use more tents as we will all be outdoors. We are looking forward to this new setting and hope for good success with help from our great volunteers!

## A potting party at Stonehouse Elementary

Terri Cuthriell took these photos at the Stonehouse Elementary Habitat potting party on Oct. 2nd. The group dug and potted purple muhly grass, Joe-pye weed, New York ironweed, soldier mallow, meadow beauty, blue star and cup plant for next Spring's plant sale.

Below left, Lucile Kossodo, Nancy Carnagie and Shaune Reams are ready to get to work. At right, Jan Newton and Shelby Cuthriell dig up muhly grass.



# To have a successful sale we need more potting parties...

We have lost one of our great volunteer potting party hostesses this year, and we need your help. We need potting parties in the Williamsburg-James City area and in the Gloucester area. Charlotte Boudreau has agreed to host a potting party at her home in Newport News. More details will follow.

The person who hosts a potting party needs to offer those who come to work a place to pot and some plants, if available. Members come and bring plants they are donating. Soil and pots are provided as needed by Lucile Kossodo or Joan Etchberger. Often the host holds the plants and cares for them until the sale. If this is not possible for you, Joan Etchberger and Lucile Kossodo will take the plants to a holding site. Sometimes transportation to the sale is needed and Joan Etchberger or Lucile Kossodo will help. To volunteer, please call Lucile Kossodo at 757/565-0769 or email her at *lkossodo@cox.net.* She is eagerly awaiting your call.

### ...and more plants!

We need plants from you, our wonderful gardening members, so that we can sell more plants from our gardens and spend less on buying plants. Do you have any of the following plants which you would be willing to donate to our plant sale? Please let Lucile Kossodo know at the following email address: *lkossodo@cox.net*.

- \* Butterfly Weed
- \* Swamp Milkweed
- \* Purple Milkweed Fern-Leaf Bleeding Heart
- \* Joe-Pye Weed Cardinal Flower Wild Bergamot
- Horsemint
- \* Ironweed Black Eyed Susans
- Jacob's Ladder
- D 1 C 1
- Purple Coneflower
- Sneezeweed

Smooth Beardstongue

- Aster (please identify the kind you would like to donate) Ferns(please identify the kind you would like to donate) Heartleaf Alexander Wild Blue Phlox
- Foam Flower
- Virginia Spiderwort
- Virginia Bluebells
- Red Switchgrass
- Blue Switchgrass
- Bluestem Grass
- Native Azaleas
- Any other interesting natives you would be willing to donate.
- \* These plants need to be potted now as they emerge too late in Spring.

Lucile Kossodo, Plant Sale Co-chair

# **Membership Form for John Clayton Chapter, VNPS**

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

I am a		new member	of the John Clayton Chap	ter	renewing member		of the John Clayton Chapter		
Name									
Addres	s							-	
City		State		Zip					
email			Phone						
Membe	ersh	ip dues							
Ind	livid	ual (\$30)	Family (\$40) Patron (	(\$50)	Sustaining	(\$100)	Life (\$50	00)	
Stu	ıdent	t (\$15)	Associate (\$40) —for group	os who desi	gnate one p	oerson as de	elegate		
I wish to	o ma	ke an additional o	contribution in the amount o	f \$		to Joh	n Clayton (	Chapter 🗌 to VN	íPS
Thi	is is a	gift membershij	; please include a card with	my name as	donor.				
I have		time a litt	le time 📄 no time to help	p with activ	ities.				
I do	o not	t wish to be liste	d in a chapter directory.						
Please N	ote:		Chapter does not distribute a by the officers and chairpers	,	-	informatior	n to other or	rganizations.	
Make yo	our c	heck payable to	VNPS and mail to: VNPS 400 B	Membersh landy Farm		t 2			

Boyce, VA 22610



# Cynthia's Corner

On October 23 Phillip Merrritt led a merry band of more than 35 tree huggers on a beautiful fall day in downtown Williamsburg. We started at the Scotland Street side of the library, looking at a charming

garden that Phillip designed and planted, although he did not mention his own role. He held up an huge Osage orange fruit and talked about the dinosaurs and other prehistoric beasts that possibly fed on these bountiful fruits. The large group continued to grow as we made our way to the Campus and crowded DOG Street, bustling with the Farmer's Market and the remnants of William and Mary's homecoming parade. Members of the Williamsburg Bird Club joined us, having already finished a 2-hour bird walk, and we also had visitors from out of state.



Flowering witch hazel (Hamamelis virginiana), growing along the path between the Governor's Palace and Matthew Whaley School. Photo: Louise Menges

Thank you, Phillip, for a job well done—everybody was smiling and feeling most grateful for our urban arboretum. For details about the species we saw and more photos, visit Phillips's blog at <u>www.howitgrows.com</u>. **Cynthia Long** 

## Thank you from Jan

John Clayton Chapter received this note of appreciation from Jan Newton for our gift of a tree in memory of her father, who passed away not long ago.

### Helen and all,

I wanted to thank the John Clayton Chapter for the serviceberry tree (Amelanchier arborea) in memory of my father. I hope to plant it on the campus of my church, the Williamsburg Unitarian Universalist, which is in the process of getting certified as a Green Sanctuary (doing various activities and sustainable projects toward being more eco-friendly on campus and at



A serviceberry in fruit Photo: Jan Newton

the homes of its congregants). The church also has a memorial garden to honor deceased friends and members.

*I* am truly honored to be able to plant this tree in the memory of my father, Phil Harris.

Thank you so much, Jan Newton and Family

# A few more pictures







Above, a vista down a path in Hollywood Cemetery. Above right, the fall line of the James River, seen from the cemetery's edge.

Right, Phillip is completely obscured by our large group as he points out a white ash (*Fraxinus americana L.*) behind the Brafferton on w&M's campus.

# Calendar

There are no John Clayton Chapter walks scheduled for the remainder of the year, but if that should change, we'll send you a notice via email.

Thursday, Nov. 18

7–9 pm: John Clayton Chapter meeting at Yorktown Public Library. Dot Field, Eastern Shore Region Steward for the Virginia Natural Heritage Program, will talk about "Exploring the Flora and Natural Communities of the Outer Coastal Plain". (See Page 1.) The Library is located at the intersection of Battle Rd. and Rt. 17 in Yorktown.