Claytonia

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

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From the President

What an exciting trip to the tallgrass prairies in Kansas! Five of us John Clayton Chapter members traveled to our home base in Council Grove, where we bedded down in a lovely guest house and nearby motel during most of our stay in early June. (See a nice



article about our tours by Ralph Will, in this issue.)

We saw buffalo only on one very windy day, the only day of the trip when I failed to lug my telephoto lens, so this one is by our trip co-leader Larry Wilcox. The day of the bison sighting was a really windy day, even for Kansas... up to 50 mph, as estimated by a docent.

I functioned mostly to take photos of the 110 species that everyone else struggled to identify, scribbling names into my notebook while they consulted various texts and each other. Larry and others with really serious cameras have vast amounts of spectacular photos of the prairie wildflowers, which I anticipate they will edit and send for publication in the VNPS Bulletin.

Check out the website of the Kansas Tallgrass Prairie Preserve for further information. This quote is from that site:

Tallgrass prairies are an extremely complicated web of life. At first sight, one sees a landscape dominated by grasses. Eighty percent of the foliage is indeed made up of grasses, from 40 to 60 different species. The other 20% of the primary vegetation is made up of over 300 species of forbs or flowers. The prairie also has over 100 species of lichens and liverworts as well as numerous species of woody trees and shrubs along creeks and protected areas.

Well, we saw the grasses in their emerging state; other than Junegrass, which was everywhere in the landscape, and in the pathways, the main prairie grasses now are no more than one foot tall—they will be heading up later in the summer and reaching heights of over 8 feet in the fall. We



Junegrass (Koeleria macrantha)

did hear tour leaders reinforce what we saw underfoot, that 80% of the vegetation was indeed prairie grasses, dominated by 4–5 species only. Driving home, observing fields from the highway, we got a small taste of what the "waving fields of grain" must look like in the fall, now showing some slight color variations as the wind pushes the short stems and leaves of prairie grasses this way and that.

Mark your calendars! John Clayton Chapter annual meeting is set for **Friday, September 19**, from 7–9 pm, in the Waterman's Auditorium and lobby of VIMS, at Gloucester Point. At the last meeting, the JCC board suggested a slideshow/powerpoint presentation by members of the best of their best photos, and food and socializing in the lobby. More later.



Prairie with bottomland and rocky outcrops

The Flint Hills prairie landscape is rocky, grassy, and dotted with the dominant wildflowers of the prairie in June: Prairie Larkspur, Prairie Rose, *Penstemon cobaea* (Beardtongue), Missouri Evening Primrose and other primroses, spiderworts, and especially Old Plainsman, a tall cream-colored relative of the sunflower. Very occasionally we found what we thought is *Tradescantia virginiana*; more commonly we could identify Bracted Spiderwort, with hairy sepals and maybe *T. ohioensis*. And many of these spiderworts have been hybridizing and therefore are difficult to identify positively. Our chapter meeting July 17 will feature the 5 of us who toured the Kansas tallgrass prairies with a PowerPoint presentation of the plants, animals, people and landscapes that we so thoroughly enjoyed. We hope to see you there!

Helen Hamilton

Here are more of Helen's photos from the trip...



Prairie Larkspur (Delphinium carolinianum)



Missouri Evening Primrose (Oenothera macrocarpa)



Cobaea Beardtongue (Penstemon cobaea)



Prairie Wild Rose (Rosa arkansana)



Old Plainsman (Hymenopappus scabiosaeus)



Prairie landscape with Beardtongue



Catclaw Sensitive Brier (Schrankia nuttallii)



Clammy Ground Cherry (Physalia heterophylla)



Prairie landscape with Old Plainsman

2008 Kansas Tallgrass Prairie trip: a travelogue by Ralph Will



The John Clayton Chapter contingent: Edith Bradbury, Helen Hamilton, Ralph Will, Carolyn Will and Dorothy Geyer.

The Virginia Native Plant Society-sponsored trip to the Kansas tallgrass prairie region was extremely interesting and satisfying. To begin with, it was completely different from all preconceptions that I had formed. I thought Kansas was flat—a tabletop; this region was rolling, grassy, rocky hills several hundred feet high, never very steep, but scenic in its vistas and panoramas. From the title of the trip, I really expected the grass to be tall. Actually, it was only about a foot to eighteen inches, having been burned a month earlier. This was fortunate because otherwise we would never have been able to find the numerous species of herbaceous plants which grow in the grass. We would probably have lost a few of our group since they tended to dive right into the flora without regard to ticks and snakes. Thirdly, I was somewhat disappointed not to have seen a tornado (from about 20 miles away) as advertised on the evening news prior to our departure.



Ralph, Dorothy and Carolyn identify prairie plants with the help of reference texts.

The trip turned out to be much, much more than a botanical field trip. Set up and led by Larry and Linda Wilcox of Virginia Beach, it comprised a multi-faceted view of the entire area and ecosystem from several perspectives, each tied to the environment and the flora. Native prairie grasslands are the rarest and most threatened of all our ecosystems and are currently under intense scrutiny to determine how they work and how they can be restored and sustained. This area of Kansas, the Flint Hills, is unique in that it has very shallow rocky soil, underlaid with alternating layers of limestone and shale. It could not be farmed; breaking plows defeats crop farming and breaking mowers deters having; it could only be grazed. So most of the early settlers quickly moved further west. This fortunate situation is the reason that it exists today in a condition so near to its natural state - otherwise, the settlers would have transformed it beyond recognition.

Larry and Linda configured the trip to include six separate and distinctive venues, each presenting a different perspective on how the prairie ecosystem functions and why it is important to preserve it. The vegetation is dominated by four perennial, warm-season native grasses; Big Bluestem, Little Bluestem, Indiangrass, and Switchgrass. The remainder is made up of hundreds of species of other grasses, composites, legumes, and forbs. Average annual precipitation is 33 inches with 75% falling during the growing season. The various groups did not always agree on the best mix of the various plants or how to achieve it. We were treated to each group's opinion and approach and it became apparent that no one currently knows the complete answer. This is an ongoing investigation with two main variables: burning and grazing. The issues are: how often to burn and how often and how heavily to graze. The objectives range from providing maximum plant diversity, represented as the key to prairie ecosystem sustainability, to producing the best beef at the cheapest price.

There are six prairie venues:

Overland Park Arboretum and Botanical Garden We toured a section of this facility where they are beginning to restore the grasslands which have grown up in scrubby trees such as Eastern Cedar and Osage Orange. If the prairie grasslands are not burned periodically, trees take over and shade out the grass. These people are tearing out the trees (a strenuous task) and monitoring what plants come back from the seed bank, supplementing these with various plantings to achieve the level of diversity they think is required. They are also studying the effects of dif-

ferent burning intervals on the resulting plant mix. They were having a real struggle with invasive species and were actively trying to eradicate those resistant to the burning. This represented the earliest and most basic phase of prairie restoration and it graphically illustrated the difficulty presented by an ecosystem which had been allowed to diverge too far from prairie grassland. They have a long way to go, but will be the source of the enabling methodology to permit the recovery of the extensive scrublands which have resulted from widespread neglect of these grasslands.

Coblentz Prairie We were accompanied and greatly aided in plant identification here by members of the Kansas Native Plant Society. This site is being restored to a natural state from a grazing application. It contained an extremely diverse inventory of plants, so that, with the help of the Kansas people, we were able to really move our plant identification skills to a level of semi-literacy—a factor which greatly aided us on later tours. The Kansas Native Plant group included a Native American who brought a unique perspective and knowledge base to the plant information we were gathering. Many of his plant names were different; he cited uses for most plants, and many of his opinions of the white man's methods of using and trying to restore the prairie ecosystem were not very positive.

National Tallgrass Prairie Preserve This extensive cooperative effort between the Nature Conservancy and the National Park Service is an 11,000 acre preserve dedicated to depicting and interpreting the tallgrass prairie. It includes almost 400 species of plants, 150 species of birds, 31 species of mammals, and 39 types of reptiles and amphibians. It is a ranch built by a rather well-todo family in the 1870's. It includes a large stone house, a large stone barn, a stone chicken house, and a large stone outhouse. It contains two distinct ecosystems; the upland prairie, and the bottomland floodplain. This was the first time we encountered the bottomland which has deep soil, was the only place which was farmed extensively, and has a distinctly different plant community. The National Preserve is restoring the bottomland to native prairie grasses and wildflowers. Here again, there is a real struggle with invasives due to man's presence. We toured the upland prairie, reinforcing our newly learned plant identification skills and struggled through the bottomland trying to identify all the new species. The preserve will soon be introducing a herd of bison to part of its upland prairie to study differences in the grazing of bison compared with the grazing of cattle.

Mushrush Registered Red Angus Ranch Here we heard a discussion with the local extension agent and a rancher involved in Angus breeding and beef cattle grazing operations. Their comments went deeply into the financial considerations and ecological practices involved in beef production. The Kansas grasslands accept cattle from Texas in April each year, graze them for approximately 90 days on the native grasses, then ship them to feedlots to be fattened for slaughter. These grasslands are burned each March just prior to the arrival of the cattle, and are left to lie fallow throughout the fall and winter seasons. The beef industry is experimenting with variations on that scenario to improve the quality of both the land and the beef. For example, plants not eaten by cattle such as wild alfalfa, were once sprayed as "trash"; now the ranchers have learned that these plants add nitrogen to the soil, thus feeding the grass. Their interests now are: will even more diversity in the grassland plants further benefit their grass or beef? I was impressed by the strong desire on the part of the ranchers to keep the prairie ecosystem sustainable and to not do anything to disturb that. If only we could foster a bit of that sentiment in the commercial fishermen on the Chesapeake Bay.

Grandview Ranch This was a small private ranch used by its owner to promote public understanding of the need to burn the native grasses. He sponsors a demonstration burn in the spring to actually get people involved and participating. He offered insights into the practical logistics of staging a burn, such as the need to coordinate with neighbors and the actual mechanics of setting the fires and backfires in order to produce a controlled burn.

Konza Prairie Biological Station This is an 8,600 acre native tallgrass prairie field research facility operated by Kansas State University and the Nature Conservancy. The facility hosts over 100 students and other researchers throughout the year who use dozens of test plots which are burned at various intervals and sequences for comparative studies of plant populations. They have a herd of approximately 300 bison which are used in comparative studies of various grazing treatments involving bison, cattle, and ungrazed sections. The flora of Konza Prairie includes more than 600 species and the docents which accompanied our tour were extremely helpful in identifying things we had not encountered or figured out by that time.

The group managed to identify and photograph about 110 species during the week and it was impressive to observe how adept and comfortable they became with the new environment after only a few days, particularly with all the other information they assimilated in the short time. Council Grove, Kansas was the jumping-off

place for the Santa Fe Trail, a major trading route to the southwest. There was considerable history to absorb and we spent an afternoon on a guided tour of the town with stops at all the historic landmarks. The Kaw Indian mission provided an interesting video and lecture on the Native American history and culture. A lunch at the Chase County Lake and a tour of their nature trail provided a look at a riparian environment offering a new set of plants. These streamside/wooded floodplain plants were also encountered during a hike at the Kaw Memorial trail—yet another identification challenge successfully surmounted by the group.

Finally, we ate extremely well. Council Grove and neighboring Cottonwood Falls offered some outstanding restaurants and breakfast cafes. This was local fare—not chain or fast food—which contributed significantly to the overall feeling of total immersion in the local culture, from ecological to gastric. In retrospect, this concept of sampling all perspectives of a natural environment constitutes a major factor in developing an appreciation for the plants found there. We were able to study not only the "what", but the "how" and the "why". This, along with the congenial company and exemplary weather, made the trip something I would definitely do again. I also developed a strong desire to go back in the fall when the grasses are eight feet tall and in the spring when the grasses are being burned. That is a truly worthwhile trip.

Ralph Will

Some upcoming events

Native Plants in the Landscape, Wed, June 25 at 10 am Jan Newton will lead a walk through the Habitat garden at the Stonehouse Elementary School, located at 3651 Rochambeau Drive in Williamsburg. The Habitat features plants that attract birds and butterflies. Expect to see Sweet Goldenrod, Bee Balm, Meadow Beauty, Green-headed Coneflower, Lance-leaf Coreopsis, Blanket Flower, Brown-eyed Susans, and more. Wheelchair accessible. Free and open to public. Please call 757/566-3646 or email jnewton110@cox.net to register.

Clothed Tree Walk, Saturday, June 28 at 9 am

Now that trees aren't bare any more, come see what they look like "with their clothes on" as dendrologist Dr. Stewart Ware helps us identify trees by looking at their leaves, bark and overall shape. The nude tree walks in the winter have been extremely popular, so be sure to sign up early for this "clothed" tree walk. The event takes place in Williamsburg and is free and open to the public. Please register at 757/566-3646 or jnewton110@cox.net.

Native Plants in the Landscape, Thurs, Aug 21 at 10am

Jan Newton leads a walk through the Habitat garden at the Stonehouse Elementary School located at 3651 Rochambeau Drive in Williamsburg. The Habitat contains over 70 species of native small trees, shrubs, perennials and ferns. Expect to see New York Ironweed, Soldier Mallow, Cardinal Flower, Joe-pye Weed, Cup Plant, Sweet Goldenrod, Obedient Plant, Blue Vervain, and more. Wheel-chair accessible. Free and open to the public. Please call 757/566-3646 or email jnewton110@cox.net to register.

A Must Read!

For those of you who make book lists knowing that there is not time enough in this world to reach the end of the list, here is a volume to move toward the top of the list. On cold, dark winter nights it will set you to dreaming of your dormant garden and searching for nursery catalogs with unusual offerings. Lawrence Griffith, curator of plants at Colonial Williamsburg, and photographer Barbara Lombardi worked their magic in a Colonial Williamsburg test garden behind the Lewis House on Francis Street to create *Flowers and Herbs of Early America*, which will be published in October 2008.

Griffith used a grant from the Mars Foundation for a three-year study of species familiar to Virginia colonists, but less well known today. His extensive research documents the presence and uses of the plants between 1607 and 1820. According to Griffith, "The book will provide the reader with a vocabulary of plants that are suitable for historic sites, that are demonstrably easy to grow, and have an inherent historical interest." The photographs by Lombardi simply glow with light that carves color and shape.

The eyes feast on seldom seen beauties such as Scarlet Pentapetes, Job's Tears, Indian Shot and Love-in-a-Mist. Other reproductions from the 1771 publication *Figures of the Most Beautiful, Useful and Uncommon Plants*, by Philip Miller, and the seventeenth-century watercolors of Alexander Marshal's *Florilegium* also illustrate the text.

For an advance peek at the Lombardi photographs, see the slideshow at www.colonialwilliamsburg.org/foundation/journal/Spring08/flowers.cfm.

Amazon is currently selling this volume at a very special pre-publication price so I may be doing some Christmas shopping before July 4th this year.

Patti Gray

Williamsburg Botanical Garden can use your help!

The Garden has been very attractive all spring and early summer, thanks to the efforts of our part-time grounds-keeper and the 3-5 hours weekly grooming by John Clayton Chapter members Carolyn and Ralph Will and Donna Ware. But they can always use another pair of hands! Since there is no water on the site (we have been promised a water line soon), all new installations must be hand-watered using the water tank, hoses, and 5-gallon buckets. Many, many thanks to Donna and the Wills for monitoring the native plant areas throughout the year. This two-acre area in Freedom Park features a very large percentage of native plants, chosen originally to withstand low watering, spotty maintenance, and whatever Mother Nature provides.

Photos on the www.williamsburgbotanicalgarden.org website feature What's Blooming throughout the season.

Carolyn, Ralph, and Donna are in the Garden every Thursday morning pulling weeds, moving some of the natives after determining they would be happy elsewhere in the Garden, and adding a few new plants from the Wills' rescue efforts.

Perhaps John Clayton Chapter would consider adopting the two-acre Ellipse Garden in Freedom Park. Our chapter has donated plant labels for nearly everything in the Garden; this is an ongoing effort as Donna finds new sprouts from the seed banks in the native pine woodlands. With the exception of some of the butterfly-attracting plants in the butterfly garden, the herb garden, and some non-natives around the patio, this is largely a demonstration garden showing the survival and ornamental value of native trees, shrubs, perennials and grasses.

Donna, Carolyn, Ralph, and Helen are on the Horticulture Committee; call any one of us for more information.

Helen Hamilton

Helen took these pictures in the Botanical Garden in June.



Ralph Will waters wetlands (alliteration Helen's).



Lizard Tail (Saururus cernuus)



Coneflower (Echinacea purpurea)



Downy Skullcap (Scutellaria incana)

From...

Cynthia

Free to a good home: plastic pots, all sizes—call Cynthia Long at 757-259-9559.

Jar

Jan suggests a nice, cool way to see native plants while the weather is so hot—take a virtual fieldtrip through our Photo Gallery and check out "What to See Now" and the fabulous photos taken by Phillip Merritt and other members. For a "virtual tour", visit www.claytonvnps.org ("Photo Gallery").

Also, the Stonehouse Elementary School Habitat has been designated a "Certified Wildlife Habitat" by the National Wildlife Federation, and has received its fifth "Conservancy Award" from the Williamsburg Land Conservancy. The student Habitat Helpers worked with Jan Newton to dig and pot seedlings from the garden and will each take home a native plant as a thank-you for their efforts in maintaing the Habitat during the school year. The children are really excited about this!

...and an admonition from Mary Hyde

Mary reminds us to watch for wildflowers we value and would like to preserve, and to collect seeds and seedheads (starting *now* for some species), because to ensure a supply of native plants you need *native seeds*! Good places to look are along roadsides and power company rights of way.



Membership Form for VNPS (Place checks in the boxes below next to your selections.)

Yes, I want to join renew my membership	in the John Clayton	Chapter.
Name		
Address		
City	State	Zip
email	Phone	
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	t of \$	
to VNPS to John Clayton Chapter		
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 a It is used only by the officers and chairperso		o information to other organizations
	Membership Chair andy Farm Lane, Uni VA 22610	t 2

Calendar

Wed, June 25	10 am: Native Plants in the Landscape Jan Newton will lead a walk through the Habitat garden at Stonehouse Elementary School. Please call 757/566-3646 or email jnewton110@cox.net to register. See Page 6 for details.		
Sat, June 28	9 am: "Clothed" Tree Walk in Williamsburg led by Stewart Ware; call 757/566-3646 or email jnewton110@cox.net to register. More on page 6.		
Sat, June 28	10 am: VNPS Fieldtrip to Blackwater Ecological Preserve in Isle of Wight County, which has two of Virginia's rarest plant communities—longleaf pine-turkey oak flatwoods and longleaf pine savannas. Led by Preserve Steward Darren Loomis. Limited to 20; easy to moderate. More info and register at VNPS website at www.vnps.org.		
Sat, July 12	Byron Carmean will lead a Big Tree Drive-Around through western Gloucester Co. Please call Mary Hyde Berg (804/693-3568) for details, or check your newspaper and/or our website.		
Sat, July 26	8 am-noon: John Clayton Chapter's drought tolerant native plant display at the Farmer's Market in Merchants Square on Duke of Gloucester Street, Williamsburg		
Thurs, Aug. 21	10 am: Native Plants in the Landscape A second walk through the Stonehouse Elementary School Habitat Garden led by Jan Newton. Please register at 757/566-3646 or email jnewton110@cox.net. See page 6 for details.		

Welcome to some new members!

We welcome new members Barbara Baker, Charles and Barbara Ewing, Elizabeth Rogers—all from Williamsburg—and Susan Glascock, from Seaford, to the John Clayton Chapter, VNPS.

As I did for the last issue, I am sending a pdf of this one to all members for whom we have a current email address.

Please let me know if you decide to receive your copy electronically from now on.

Louise Menges