



Claytonia

Newsletter of the John Clayton Chapter, Virginia Native Plant Society

Volume 27, Number 5

September-October 2011

www.claytonvnps.org

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Our Sept. 15 Annual Meeting: Teta Kain on "Butterflies of Eastern Virginia"



More than 700 different kinds of butterflies have been identified on the North American continent. Of that number, approximately 125 can be found fairly easily in the state of Virginia. Our speaker is **Teta Kain**, who will show some of the more common butterflies that occur in Eastern Virginia.

Like birds, butterflies prefer certain habitats, and Teta provides clues on where and how to find them. She also reveals many strange facts about butterflies. For instance, butterflies smell with their feet and have their own built-in drinking straws. Some butterflies even have a temper and fiercely guard their territories.

An amateur naturalist and wildlife photographer of more than 40 years, Teta Kain has studied butterflies in Virginia since 1978 and has built an extensive photographic collection of these colorful insects. She has participated in butterfly counts, scoured various habitats for rare species, and spent much time learning ways to attract them to her yard. Some species are so rare or elusive that it has taken her years to capture what she considers a satisfactory photograph. In pursuit of these beautiful creatures, Teta has had many exciting adventures and rewarding moments.

Teta is a member of the North American Butterfly Association, the Virginia Butterfly Society, and the Virginia Society of Ornithology. She is also actively involved with Friends of Dragon Run, a conservation organization dedicated to protecting and preserving the Dragon Run watershed located on Virginia's Middle Peninsula.

Members will vote on a new slate of officers at this meeting, and the recipient of the John Clayton Botany Award will also be announced. The meeting begins at **6:45 pm at the James City/Williamsburg Community Center, Rooms A and B**. The Community Center is located at 5301 Longhill Road, Williamsburg. Directions can be found on our website at www.claytonvnps.org, under meetings.

From the President

In this issue, I am so pleased to introduce some wonderful members, one of whom will be voted into office at our annual meeting. **Dr. Bruce Hill** is our candidate for Vice-President, and his wife **Claire Sink** will be presented to the board at our next meeting as Program Chair. Bruce gave us an interesting talk on Virginia's endangered plants, and Claire is very skilled with the kind of administrative work that organizing the speakers entails.

We will have a new Hospitality Chair—**Phyllis Putnam** will be helping with the socialization side of our chapter meetings, and the arrangements for our annual meeting. And **Charlie Dubay** (see related article) will be leading some plant walks for us.

A few weeks ago, Joan Etchberger led a very successful plant sale meeting with 9 attendees! She set up committees and made assignments—our plant sale has grown way beyond what Joan and Lucile can manage alone; last year was truly overwhelming! Joli Huelskamp hosted the meeting at her home, and new members are **Tim Costello** and **Gracie Sherman**.

Welcome to all the new (soon-to-be) board members, and many, many thanks to the present board members who will continue in their posts. Our chapter and the Northern Neck Chapter (one of our spin-offs) are the two fastest-growing in the state, all because of the dedication and diligence of everyone who currently serves on the board. My job is the easiest, because everyone else does theirs so well! Thank you all!

Helen Hamilton

New members

We welcome seven new members: **Rick Bauer**, **Celeste Dudley**, **Bruce Hill**, **Claire Sink** and **Judith Kator**, all of Williamsburg; **Joseph Brown** of Wake; and **Patricia Myles** of Toano.

Our July 21 meeting: The Chestnut Story

Our speaker was **Cathy Mayes**, a member of Piedmont Chapter and the VNPS board. She spoke to us as chair of the Virginia Chapter of The American Chestnut Foundation.

American chestnut (*Castanea dentata*), a member of the beech family, was a dominant tree in eastern forests until chestnut blight struck. Chestnuts were the tallest trees in the forest, reaching a height of 120–140 feet, and often lived for 300 to 400 years. In the mountains of Virginia, chestnuts were a significant part of the diet for humans as well as for wildlife, and were an important cash crop for mountain farmers. Chestnut was also valued as a timber tree, and its versatile lumber was used for buildings, fences and furniture.



American chestnut's natural range in North America
(Image: American Chestnut Foundation)

Chestnut blight is the most significant environmental disaster to have hit North America. It began in 1904 in New York, where native trees were infected from imported Asian chestnuts. The fungus (*Cryphonectria parasitica*) infects a tree's cambium (the water-bearing tissue just under its bark), eventually girdling the tree and killing off growth above the site. By 1930, chestnut blight had reached Virginia, and the entire East Coast was affected by 1950. (In Virginia, a few individuals survive along Route 29.) The blight also eliminated any animal life which relied on chestnuts for survival, including 5 species of chestnut moth.

The American Chestnut Foundation has been working tirelessly to interbreed Chinese chestnuts (which are hosts of the blight but not killed by it, and are not as shade-tolerant as the native species so cannot naturalize here) with American chestnuts to achieve resistant crosses. They use controlled pollination to fertilize, then save the fruit, which they plant and raise until 4 to 5 years old. At that point they inoculate the saplings with the fungus, and those which get infected are cut down, but the resistant ones kept and raised further. So far, their back-cross breeding program has produced blight-resistance in one out of sixty-four plants.

They are also approaching the problem from a second angle—learning more about a virus which attacks the fungus, and how it might be employed as a means of control.

For more reading about this subject, Cathy recommends two books: *American Chestnut*, by Susan Freinkel; and *Mighty Giants, An American Chestnut Anthology*, edited by Chris Bolgiano and Glenn Novak.

Louise Menges

A send-off party for Phillip

Treasurer Judith Kator hosted a get together in Phillip Merritt's honor at her home on Sunday, July 31. The group included a number of Phillip's colleagues and JCC friends.

Phillip, we send you off with our very best wishes and most affectionate regards—please stay in touch!



Pictured here, from left: Kathi and Mac Mestayer, Loren Council, Phillip Merritt, Judith Kator and Louise Menges. Attending but not pictured were Mary Hyde Berg, Cynthia and Bob Long, Lucile Kossodo, Ann and David Read and Kim Wheatley.



An old photo of a massive chestnut fallen across the Blue Ridge Parkway (source unknown).



An American chestnut in fruit
Photo: Todd Raterman
(at southeasternoutdoors.com)

July 16's excursion to Squirrel Point

The walk

At 9 o'clock we assembled in front of the College's Rec Center near William and Mary Hall, and then entered the College Woods from Compton Drive to walk along leafy paths through a beautiful hardwood forest. The walk culminated at Squirrel Point, from which we could see the old Common Glory amphitheater across Lake Matoaka.



Photo: Jan Newton

An *Amanita umbonata* (Caesar's Mushroom) button emerging from its white sac-like volva.

Along the way, our guides, **Gus Hall** and **Helen Hamilton**, pointed out interesting trees and understory plants, and Prof. Hall explained the College Woods' history to us as we walked along. Your writer confesses that she soon realized that prime mushroom season had commenced, and, nearly completely distracted by her search for fungi, missed a great deal of valuable information. She is most grateful for the fascinating account submitted by Gus Hall which follows, and for photos taken by other more attentive participants, which will have to provide much of the record of what we saw that morning (a number of which, she can't help from pointing out, were fungi)!

Louise Menges

You can see more photos taken during this walk and other recent John Clayton walks on our website at www.claytonvnps.org.

...and some history of the College Woods from our leader, Gustav Hall

Most of the land of the College Woods was acquired by William and Mary during the period 1923–1929. At one time, developing the large area not needed for campus expansion as a state park was considered. Log berms surviving along a few of the primitive internal roads are probably works of the Civilian Conservation Corps.

When I arrived as a new faculty member in 1963, the College was breaking out of a period of serious deterioration and inadequacy of its physical resources; this very critical change was due especially to the outstanding new leadership and political strengths of President Davis Paschall.



Left, leaves of a green ash; right, the distinctive bark of a persimmon at Squirrel Point. Photos: Jan Newton



Photo: Jan Newton



Photo: Louise Menges

A colorful *Lactarius indigo* (Blue Lactarius) and the brilliant blue latex its gills exude when cut.



Photo: Helen Hamilton

One small misstep, however, was President Paschall's attempt to squeeze out some funds by contracting for logging of part of the Woods. Opposition in the local community caused the President to phone Mitchell Byrd, Chairman of the Biology Department, pleading "Please get these garden club ladies off my back!" So, over lunch at the Williamsburg Inn, Mitchell, accompanied by one fresh green troop (myself), quickly raised the President's environmental consciousness level (including the importance of Pileated Woodpeckers) and he deftly worked out a compromise where the contractor would accept some acreage of pines instead of the ecologically more valuable hardwoods.

In 1968–9, one of my first Master's thesis students, Allene Barans, completed an intensive floristic inventory of the Woods, documented by specimens in the W & M herbarium: 565 taxa (distinct species plus a few named forms). Diversity was very impressive: these taxa belonged to 322 genera of 105 plant families! Allene's work was published in the March 1974 issue of *Castanea* (the Journal of the Southern Appalachian Botanical Club). Collecting in the Woods has continued, the most notable by an undergraduate, Virginia Crouch, in the 1980s; an especially notable find was Crested Coral-root Orchis (*Hexalectris spicata*).

Allene described the Woods as of about 900 acres with Lake Matoaka having a 50-acre surface area (some now lost to sedimentation). The overall area has now been reduced by campus expansion, the extension of Monticello Avenue and such. But the broader, more general challenges to the Woods as such come from the perpetual conflict of private vs. public ownership and subsequent management of public property.

For many years I, along with Martin Mathes and Stewart Ware, served on the Campus Landscape Advisory Committee. Periodic threats to the Woods, biological and political, were outbreaks of the Southern Pine Bark-beetle. On one particular occasion a well-meaning official of the State Division of Forestry expressed sympathy for the College's wish to preserve say, 150 acres in permanent natural condition. But he recommended the rest of the Woods become "a showcase of modern forestry," pine plantations here, lespedeza plantings there ... Fortunately the committee included Dick Mahone, the landscape supervisor of Colonial Williamsburg, who proclaimed that he himself had a degree in forestry and hence the College could quite well enough deal with the beetles and other problems in-house, which became the case.



Photo: Jan Newton

A view across Lake Matoaka from Squirrel Point.



Photo: Jan Newton

Rose Pink (*Sabatia angularis*)

No doubt conflicts continued long after I retired and left Williamsburg 19 years ago. One fairly recent one was the skirmish of two Georges, representing two opposing philosophies: Governor George Allen wanted lands such as the College Woods returned to private ownership. Professor George Grayson, a member of the Virginia legislature, succeeded with a bill to prevent the state from doing so. But as with so many environmental issues, each and every continuing battle has to be won: a single loss is often permanent.

Gustav Hall

Other recent JCC plant walks



Seig Kopinitz took this picture of Jan Newton, “Tour Leader and Habitat Lady”, during the June 16 tour of Stonehouse Elementary’s Habitat Garden, in front of a bed of coreopsis.



Jan's photo of a Mountain Mint (*Pycnanthemum* sp.) in the Stonehouse garden.



Photo: Helen Hamilton

Participants pose for a photo during the Colby Swamp walk at Freedom Park on July 23: From left, Cynthia Long, Jan Newton, Dave Gwaltney, Gus Hall, Chris Gwaltney, Bob Long and Edie Bradbury.



Rose Mallow (*Hibiscus moscheutos*) in a photo taken by Shirley Devan at Colby Swamp.

A shot taken along the boardwalk on the Greensprings Interpretative Trail during the August 19 plant walk there. From left are Dorothy Whitfield, Patty Kipps, Mary Lorenzen, Charlene Rother and Bill O'Connell. Not pictured is Lisa Wallin.

The walk began at 6 pm, and Helen writes that against her better judgement, the group decided to do the whole 2-mile loop. "We were about halfway by 7:30; at 8:00 when we emerged, it was dark, and the JC County vehicle was waiting by the gate to close. Nope, they do not close at the official sunset time, but 'when it gets dark,' said the driver to me as we slunk out the gate."



Photo: Helen Hamilton

New plant walks



Photo: Helen Hamilton

Charlie Dubay has agreed to lead some walks this fall focusing on trees. Newly retired from Jamestown High School, he taught field biology for 42 years, so Charlie knows the plants!

As coach of the Environthon Team for many years, he led them to the national competition last year. We hope his continued involvement with Jamestown High and the Environthon Team will not keep him away from our board and chapter meetings.

Charlie and I have known each other since his student teacher days at Blair High. I am very pleased and grateful that he will be working with our chapter—he has much to contribute to our activities, and will be a great plant walk leader!

Helen Hamilton

Check this issue's Calendar for walks planned for September and October!

Nasty non-natives!

Giant hogweed (*Heracleum mantegazzianum*), a member of the parsley family native to Eurasia

This large weed can cause rashes, burning blisters and even blindness. Giant hogweed can grow as tall as 15 feet and features clusters of small white flowers resembling Queen Anne's lace. In late summer, the flowers are replaced by small green fruit that turns brown.

Giant hogweed has been reported in Maine, Maryland, Michigan, New Hampshire, New York, Ohio, Oregon, Pennsylvania, Vermont, Virginia and Washington.

Contact with the plant's clear, watery sap can cause blindness, black or purple scars and burning blisters within 24–48 hours. If exposed to the sap, avoid sunlight and wash the sap off immediately. Using sunscreen on the affected area may help prevent further reaction. If you believe you have been burned by a giant hogweed, contact your physician. If you encounter a giant hogweed, do not touch it and do not attempt to mow or cut it down. Instead, report it to your state's department of invasive species. In Virginia, report suspected new invasive species to Kevin Heffernan, Natural Heritage Stewardship Biologist, 804-786-9112. For information on identifying the plant, see www.dec.ny.gov/animals/72766.html.



Giant hogweed in bloom

Photo: Donna R. Ellis, U. Conn, at www.invasives.org

Charlene Talcott, Belle Isle State Park

What's that smell? It wasn't me, it was the stink bugs!

By now, most people in the Chesapeake Bay watershed have heard of, seen, or battled the invasive **Brown Marmorated Stink Bug** (*Halyomorpha halys*), which arrived in packing crates in Allentown, PA about 13 years ago. The insects have no natural enemies in North America, and live by sucking plant juices from fruit trees, vegetable plants, soybeans, and corn, all of which are pretty valuable to people in this region. In 2010, some orchards and farms in Maryland reported over 25% crop losses due to stink bugs alone, and in 2011, many gardeners and homeowners are starting to see damage to vegetable gardens and landscape plants. The next notable damage may be their impact on sensitive plants and habitats throughout the watershed. In short, there is a sudden, big interest in getting ready of these pesky bugs.

The problem is that the Brown Marmorated Stink Bug (BMSB) is actually a very hardy critter. It is a “true bug”—heavily armored and resistant to virtually every known pesticide except dinotefuran, sold as Venom and Scorpion in the United States, where the EPA had previously banned the chemical from use on many types of crops. However, the chemical is



Brown marmorated stinkbug, in a photo from Kirk Mantay.

widely used in Japan to control stinkbugs—at higher concentrations and more frequent applications than are allowed in the United States, so the EPA is entertaining applications from farmers and orchard owners to use the chemical, as an emergency measure. Without measures of this scale, it is likely that some food prices in the Bay watershed will increase, as local crops become unreliable and grocery stores begin sourcing fruits, vegetables, and corn from states less affected by the BMSB.

One problem with this is that dinotefuran is extremely toxic to honeybees—an important resident of farms and orchards. And while studies show that freshwater aquatic invertebrates are not affected by the dinotefuran, EPA has registered its concern that the chemical could affect marine and estuarine invertebrates in coastal marshes. EPA is clearly not comfortable with a widespread use of this chemical under normal circumstances.

For better or for worse, the Brown Marmorated Stinkbug is here. And until food stocks can be protected by safe, sustainable methods (several are being researched), federal and state agencies will be compelled to allow the use of previously banned chemicals to control the invasive bug, despite the potential impacts to other species in the Bay ecosystem. The question becomes “How can we avoid this situation in the future?”

The answer is that we can't, without investing in more extensive inspection systems for international cargo. USDA typically inspects 2% of the 14 million shipping containers that arrive annually in the United States, finding around 400 species of insects classified as “dangerous.” Every year. Protecting the Bay's ecosystems from invasive species, and from the extremely powerful chemicals used to control them once each invasion begins, will have to start at our ports and borders.

Kirk Mantay

Kirk Mantay is a program officer with the Chesapeake Bay Trust. He can be reached at 410-974-2941, ext. 106 or at kmantay@cbtrust.org.

Purpletop grass, Wildflower of the Month for August 2011

Purpletop grass (*Tridens flavus*) is all over the roadsides in late summer, and easily recognized by its loose, open, purple spikelets and distinctive weeping form. Growing to 4 feet tall, the upper stem, branches and flower parts are covered with a waxy, greasy substance.

Purpletop is common in fields, roadsides, and edges of woods and is native to every county in Virginia.



Photo: Helen Hamilton

The range of this grass is from Massachusetts and southern Michigan and Nebraska south to Florida and Texas.

The species name comes from the Greek *trioudous*, “three-toothed”, referring to a tiny flower part with a 3-toothed tip. Birds eat the seeds, and wildlife use the plant for cover. Purpletop is the larval host for 4 species of butterflies.

Helen Hamilton

Pokeweed, Wildflower of the Month for September 2011

Although pokeweed (*Phytolacca americana*) is commonly considered a weed, birds love this plant. Growing over three feet tall, and branching almost as wide, the reddish stems carry loose columns of small white or pinkish flowers. In late summer drooping clusters bear glossy purple-black berries.

Preferring moist soil, pokeweed is found in damp thickets, clearings and roadsides in every county of the state of Virginia, and in most other states, blooming from July to September.

All parts of this plant are poisonous to humans, especially the roots, seeds and mature stems and leaves. However, the young tender leaves can be eaten, but only as thoroughly cooked greens, with two changes of water. American Indians found many medicinal uses for the plant and many folk remedies make use of parts of the plant. The berry juice was used as a dye by the early colonists and to improve cheap wine. The plant contains a highly toxic chemical that is being investigated for anticancer and anti-HIV potential.

Songbirds, fox, raccoon and opossum consume the berries, apparently immune to the toxic chemicals. These animals help distribute the seeds far and wide. Pokeweed is deer resistant because the foliage and stems are somewhat toxic to them and bitter, particularly when mature.

Helen Hamilton

More on insect sex!

Edie Bradbury listened to an August 15 interview on NPR with insect expert Marlene Zuk which she found really interesting. Below is an excerpt from NPR’s website:

Everything you wanted to know about bug sex (but didn’t bother to ask) is explained in a new book by insect expert Marlene Zuk. *Sex on Six Legs: Lessons on Life, Love and Language from the Insect World*



Photo: Helen Hamilton

describes a world of small—but surprisingly sophisticated—insect behavior.

Insects are not mindless robots; they can learn just like other animals, says Zuk, a biologist at University of California, Riverside. “An ant who finds a food source will come back to recruit others to go to the same food source,” she tells Fresh Air’s Dave Davies. The ant that knows where to go will show the others what to do. “It looks like a parent teaching a child how to ride a bicycle. ... They steer the other individual and will actually wait for them to catch up and make sure they’re going in the right direction.”

The book answers all sorts of questions about insect behavior, including how wasps recognize each other, why some crickets remain silent and how bees debate, and also details how insects reproduce—in every imaginable way.

Here is a link to that NPR site, where you'll also find a link to the original broadcast:

www.npr.org/2011/08/15/139554957/sex-on-six-legs-when-insects-go-wild

Calendar

**Saturday,
September 10**

9 am: A walk at New Quarter Park, led by Helen Hamilton. The beautyberries will be forming avenues of vivid color, the groundsel bushes will be in full bloom, as well as other fall-blooming grasses and herbs.

Contact Helen Hamilton, 564-4494 or helen48@cox.net to register and for more information.

**Thursday,
September 15**

6:45–8:45 pm: John Clayton Chapter meeting at the James City/Williamsburg Community Center, Rooms A and B: “Butterflies of Eastern Virginia”. Our speaker is **Teta Kain**, an amateur naturalist and wildlife photographer of more than 40 years, who has studied butterflies in Virginia since 1978. (See Page 1.)

The Community Center is located at 5301 Longhill Road, Williamsburg. Directions can be found on our website at www.claytonvnps.org, under meetings.

**Friday,
September 16**

9:30 am: A look at the trees of Chickahominy Riverfront Park. Charlie Dubay will lead an excursion around the park to look at the resident trees, distinguishing between several confusing oaks, and expects to see shortleaf pine.

To register, contact Charlie Dubay at 757/870-0284 or dubaycimm@verizon.net.

**Saturday,
October 8**

1 pm: Little Creek Reservoir, led by Helen Hamilton. Meet at the Visitor Center to walk the decking and the trails. Expect to see a late-blooming orchid (ladies-tresses), 3 species of meadow-beauty, and creeping rattlesnake master, as well as other aquatic and woodland fall plants.

Contact Helen Hamilton, 564-4494 or helen48@cox.net to register and for more information.

Check our website at www.claytonvnps.org for additional walks and events which may not have made this newsletter issue.

Membership Form for John Clayton Chapter, Virginia Native Plant Society

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

I am a **new member** of the John Clayton Chapter **renewing member** of the John Clayton Chapter

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