



THE NATURALIST

The monthly newsletter of the Historic Rivers Chapter

Virginia Master Naturalist Program

<http://historicrivers.org>

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Chapter Board 2016-2017

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President's Message

by Judy Jones

If you're reading this newsletter, then you have met Doug Dwoyer—because this newsletter is his baby, at least until March of 2017! A member of Cohort VIII, Doug was drafted for this position about a year after his cohort graduation, expanding and building on the newsletter until it is a powerful message board for our chapter.

But Doug is much more than just the newsletter guy....he is a husband, a parent, a grandparent, a neighbor, and to us in the HRC, a friend, fellow naturalist, and a climate activist. He has spoken to us about climate change and helped us to better understand the ramifications of the world we've impacted. But many of you don't know the history and mystery that is our Doug. So, in his own words, here is Doug Dwoyer!

Notes from the Board

All meetings of the Board of Directors are open to members.

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Fill in a little background info please.....

I am originally from Linden, NJ and grew up there, eventually graduating from Linden High School. Linden is an industrial town about 25 miles south of New York City. I grew up smelling effluent from chemical plants and refineries and who knows what wound up in my body from all that junk. Not much of the natural world around where I grew-up for sure. I went to Virginia Tech in 1960 arriving at a military school of 4500 in a very small



town. A major change of environment and lifestyle for me! I eventually got my BS, MS, and PhD in Aerospace Engineering at Tech then went into the Air Force for five years. Following the Air Force I worked for United Technologies Research Center, was on the Tech faculty for a few years, and then got a job as a researcher at NASA Langley Research Center in 1977. I retired from Langley as Chief Operating Officer in 2007. Upon retirement I became a climate change activist, delivering public lectures on the impact of climate change on Hampton Roads and continue to do that. I also support the Citizens Climate Lobby. My increasing interest in environmental issues got me motivated to become a Master Naturalist.

Tell a little about yourself now....

My wife Nancy and I live in a 120 year old fixer-upper in Gloucester Courthouse with our three cats. We have two daughters who live in Blacksburg (how convenient for an avid Hokie). One is a Biology Teacher at Giles High School and the other a Guidance Counselor at Blacksburg High School. We have one grandson who is now eight months old.

Tell us one thing about yourself that is funny, quirky, unique, or really rather bizarre....

About six months after starting work at NASA Langley my officemate and I decided to hear a talk by John Houbolt, one of Langley's most renowned scientists who, among other things, invented the lunar landing technique used in the Apollo program. His talk was in a conference room that had two doors, both on the side of the room, one near the rear and one that entered right in front of the platform with the lectern. We were unsure if we would be interested in the topic so we sat next to the rear door of the conference room. About ten minutes in we decided we weren't interested and exited the rear door. Paying insufficient attention to where we were going we walked past the stairwell door and instead barged into the front conference room door right in front of Houbolt. All the front seats were full so we awkwardly found empty seats toward the back. When we got back to our office our supervisor called us into his office and informed us that Houbolt wanted to see us at 9AM the next morning. Houbolt's secretary's desk looked out on the hall outside the conference room and she saw what happened, recognized my officemate, and called our boss and they cooked up this ruse. We both stewed all night about our upcoming session with Houbolt, but the next morning our boss told us we really didn't have to see him, but everyone in our Branch got a good laugh at our expense.

Why did you choose to become a Master Naturalist?

As my concern about the developing global environmental crisis grew over the past 15 years or so, I felt I needed to contribute in some small way to dealing with it. When I learned about the Master Naturalist program from a Northern Neck chapter member, I did more research on what it was. I felt that becoming engaged in the citizen science aspects of the program would allow me to support the measurement and documentation of ongoing environmental change so I applied for Cohort VIII of HRC and got involved.

Final Question....which activity or activities in VMN have brought you joy?

I hesitate to say that being Newsletter editor brought me the most joy. Doing this job has given me real insight into ALL of the amazing efforts of our chapter members. My hesitation in admitting this stems from the thought that I don't want this misinterpreted that I want to continue as editor for a second two-year term! It's been fun, educational, and informative, but also a whole lot of work. I'd like someone else to experience the joy I have had after my term ends!

Please Welcome Cohort XI

By Janet Harper, HRC Basic Training Committee

We are pleased to announce that our newest cohort started Basic Training classes September 6, 2016 with 16 new cohort members. After a presentation on the basic training program and its requirements, the group received information on how to use the Dropbox to access course materials. Bill Williams' very informative presentation on the principles of classification and binomial nomenclature kicked off the first training session. Future basic training classes will focus on a variety of topics to prepare these trainees for volunteer work on citizen science, education and stewardship projects within our chapter. Graduation for Cohort XI members will be March 8, 2017.

If you see any of these new faces at an HRC event or meeting, a continuing education class, or while out and about volunteering, please introduce yourself and welcome them to our chapter.

HISTORIC RIVERS CHAPTER



Photo members:

Front row (left to right): Connie Reitz, Mary Haines, Cathy Flanagan, Mike Carruth, Maggie Coleman, Mary Barlow, Carol Ely, Judy Zwelling, Keith Navia.

Back row (left to right): Katie Johanson, Cindy Baker, Mary Jo Davis-Headley, Karen Grass, Larry Griffith, Jim Madden.

Not pictured: Mike Coyle

HISTORIC RIVERS CHAPTER

Cohort XI Training begins with Enthusiasm
by Cheryl Jacobson, Training Committee Coordinator

Cohort XI has begun their training and has already demonstrated that they are avid learners and that they will add a great deal to our Historic Rivers Chapter. One of the requirements for graduation is that they attend a Native Plant Walk. After attending just one class, thirteen of the fifteen trainees enthusiastically participated in a plant walk with Helen Hamilton, followed the next day by a Sunday field trip with Adrienne Frank on Butterflies. I am excited to be part of the training committee that gets to work and play with this new class. I am sure you will be seeing a lot of these new participants and as always will be extending a warm welcome. Helen asked one of the members to write a short article for the John Clayton Chapter. Without any hesitation, she complied and wrote the great article below. Also, attached is a photo taken just after the walk.

Several members of Cohort XI—the newest training class of the Virginia Master Naturalist Historic Rivers Chapter—joined Helen Hamilton and others for a native plant walk at Freedom Park. A focus on ferns was the intent of this walk. By the time we finished we could identify several ferns by shape, pinnae, color, and height. This was a great accomplishment for many since previously we could recognize a fern but not give it a name. The repetition of seeing these plants, being reminded of the characteristics of each one, and support from group members as well as Helen made this walk feel like we were actually learning and retaining information.

Although the walk was to focus on ferns, conversation and findings often strayed from the announced topic. Sightings of oyster mushrooms, paw paws, lichen, climbing hydrangea, and Elephant's Foot kept us looking both up and down for new sightings. Also, the 2016 Virginia Wildflower of the Year Downy Rattlesnake Plantain (*Goodyera pubescens*) was located in the woods on our walk

Thank you to the Virginia Native Plant Society John Clayton Chapter for sharing your time, talent, and knowledge with Cohort XI and our community.

Submitted by Connie B Reitz
Cohort XI training class member
VMN Historic Rivers Chapter



OUR ANNUAL FALL PICNIC AT TED'S HOUSE – OCTOBER 22ND



Every year, as the leaves start to change, one family steps up to create a Master Naturalist miracle....a day spent outside doing all the things we love to do, and doing them with family and friends. Yes, it's the HRC VMN Fall Picnic, sponsored by Ted and Judy Sargent. This year, on October 22nd, we'll be once again gathering at their place out in Toano on the Chickahominy River. It is a day filled with activity, beginning early in the morning with a bird walk, and ending in the evening with fellowship and good friends, chowing down on steamed crab and a smorgasbord of potluck delights.

More information is definitely heading your way as the picnic approaches, but two things need to be shared here and now. First and foremost, **SAVE THE DATE – OCTOBER 22ND!** Secondly, Ted has suggested that our approach be a little different this year. Instead of his being responsible for all the activities, he's delegating that to each cohort. So, your cohort's job will be to

select a great activity for the picnic, and then organize and implement it. Two cohorts

can choose to partner up if they want and share the load, or your cohort can do that canoe/kayak trip, swamp romp, or bird walk all on your own. Be inventive and creative....and have fun with it. Remember, this is a picnic for all members and their families so you can offer opportunities for all ages and stages.

See you at Ted's and Judy's house on Saturday, October 22nd!!!



Wildflower Spot – September 2016

John Clayton Chapter, Virginia Native Plant Society

New York Ironweed
Vernonia noveboracensis

These handsome plants can be really tall, to 10 feet, but the sturdy stems usually keep the plants upright during the blooming season, July through September. Brilliant, deep purple flowers at the top of the plants are regularly visited by nectaring insects, especially the Eastern Tiger Swallowtail and other large butterflies. Long, lance-shaped leaves have fine teeth all along the edges.

Occurring in nearly every county of Virginia, this native perennial occurs throughout the U.S. East Coast, in moist or wet areas of fields and stream banks. Preferring moist soil in full sun, it works well in a rain garden but will tolerate some dry periods. This plant requires little care in the home garden and will grow in somewhat drier sites in a border or native meadow garden with sunflowers, asters, and blazing star.

Like Joe Pye Weed, Ironweed has no ray flowers. The dense flower heads of composed only of disk flowers, where insects can gather much nectar in a short period of time.



The common name could refer to its tough stems, or the rusty colored older flowers and seeds. The genus was named for an English botanist who collected plants in Maryland in the late 1600s; *noveboracensis* means “of New York.”

For more information about native plants visit www.vnps.org.

By Helen Hamilton, past-president of the John Clayton Chapter, VNPS

Photo: Ironweed taken by Helen Hamilton

Nature Camp Scholarships Now Available by Judy Jones



It's finally time, HRC! Our Historic Rivers Chapter of the Virginia Master Naturalists is presently accepting applications from interested candidates for one of three Nancy Norton Nature Camp scholarships to the 2017 sessions of [Nature Camp, nestled in the Blue Ridge Mountains of Rockbridge County, VA](#). Students who will have completed fifth through twelfth grade next June are eligible to apply.

The Nancy Norton Nature Camp scholarships are intended to support students who truly have an interest in learning about the natural world and who can work and learn both independently and in groups. That's because Nature Camp is unique in its academic focus. Since it began in 1942, Nature Camp has emphasized hands-on, field-based, experiential education in natural history and environmental studies. Selected campers will be required to attend daily classes, to take notes and to maintain a notebook, to complete all written assignments, and to participate in outdoor activities in all types of weather. Campers will be expected to accept academic challenges with enthusiasm, commitment, and hard work. Those who have attended in the past have discovered the joy of learning about nature and have often returned the next year for more of what Nature Camp has to offer. The camp has taught students to love and protect the environment through its hands-on learning approach. The application can be found on the Historic Rivers Chapter website, <http://www.historicrivers.org/> and must be postmarked by October 31st, 2016!.

John Clayton Chapter of VNPS Plant Walk 9/17/2016 by Anita Angelone

Black Tupelo, Allegheny Chinquapin, Sassafras. They all sound pretty exotic, but these native Virginians populate forested areas throughout the middle peninsula. On a sunny Saturday in September members of the public, of VMN's Historic Rivers Chapter, and of the John Clayton Chapter of the Virginia Native Plant Society gathered around the edges of the parking lot at Wellspring United Methodist Church to get to know some of our tree neighbors a little better. The reader may protest: native plants in a parking lot? Well, it may not be the most bucolic-sounding locale, but anyone driving along this part of Longhill Road can't help but be dazzled by the dense forested areas that border it. The church parking lot provides perfect access to the trees along the forest edges, and therefore offered an ideal spot to stop and get up close and personal with a few of our native Virginia woodland species.

Leading the group was William and Mary Emeritus Professor Dr. Stewart Ware (biology), who taught attendees, this transplant to Virginia among them, how to spot (by my count) 22 different tree species. By the end of the walk, we had crushed the leaves of the Sweetgum to smell its distinctive scent, tasted the leaves of the sourwood, and could identify with ease sassafras, white oaks, loblolly pines, and Virginia pines, among others. And now I know that even that pesky, thorny "weed" persistently cropping up along my fence line has a pretty exotic name for itself as well, Devil's Walking Stick, and has been in Virginia far longer than I have.



Plant Walk Attendees



Joni Carlson brought live caterpillars and their host plants to the annual meeting on September 15 of the John Clayton Chapter, Virginia Native Plant Society. Her talk focused on the importance of providing native plants to provide nectar to adult butterflies, and specific host plants to feed growing caterpillars.



Going Crazy for Butterflies!

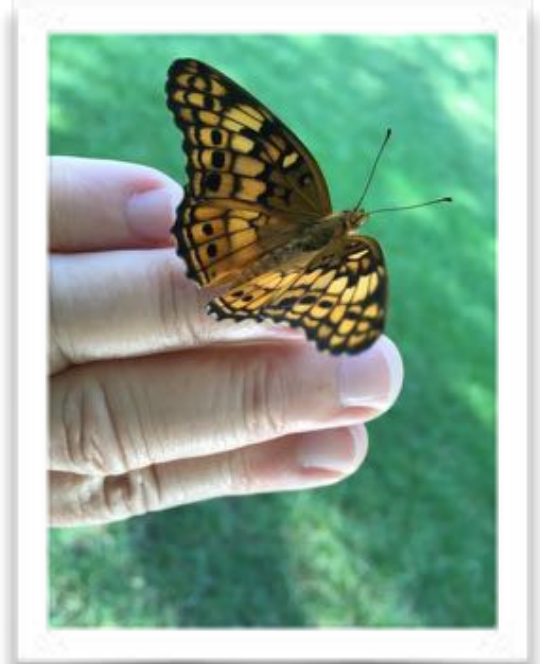
by Shirley Devan

HRC members Barbara Neis and Shirley Devan are raising 20 Black Swallowtail caterpillars in “butterfly pavilions” after Barbara found them devouring the parsley growing on her back porch. Barbara still has 14 caterpillars and Shirley has 6. Some will likely overwinter as they did last year.



HISTORIC RIVERS CHAPTER

I found the caterpillar of the Variegated Fritillary in the wild on the leaves of the passion flower, its host. I took it into my butterfly pavilion where it turned into a chrysalis and shortly turned into a



butterfly!

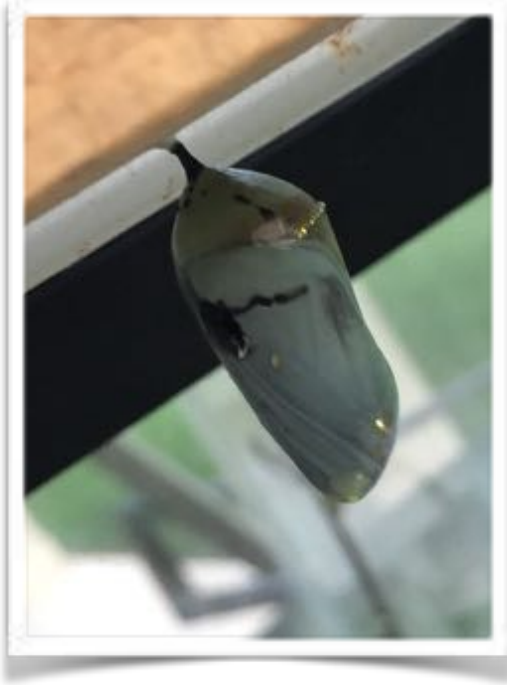
In early August I found several Monarch caterpillars on my Swamp Milkweed and Common Milkweed in my butterfly garden in my front yard. I immediately transferred them to my “butterfly pavilion” for safety. Then Joni Carlson gave me several to raise in advance of the Butterfly Festival.



July 24: Caterpillar on swamp milkweed blossom in garden



July 28: Caterpillar on swamp milkweed leaves in garden



August 11: Chrysalis attached to top of pavilion



August 12: Caterpillars after transfer to butterfly pavilion



August 20: Monarch just emerged from chrysalis



August 20: Monarch just before releasing

Care for Upland Oaks in Urban Environments by Rod Simmons, Virginia Native Plant Society

I and others have recently received inquiries regarding cases of oak decline and death throughout Arlington County and the City of Alexandria, Virginia – oak species (*Quercus* spp.) being the dominant and characteristic trees of the upland landscape in both jurisdictions.

In all cases over the years, I have not seen any evidence of disease as the primary cause of decline or death, such as Sudden Oak Death, etc., but rather a combination of factors that are new to the greater region since the mid-20th century as a result of urbanization and changing values.

Water Tables

Most of the mature oaks we see in yards and along old neighborhoods and sections of cities are remnants of native forested areas dominated by upland oaks that were present and mature when the houses and streets were built. Upland oaks can tolerate the successive periods of drought and heat likely associated with climate change, but they cannot tolerate significant water table drops and loss of groundwater infiltration around their root zones that result from the now-constant practices of digging, trenching, paving, over-building, burying underground utilities, etc., that are the hallmarks of our over-developed and highly fragmented suburbs and neighborhoods.

Climate Induced Effects of Drought

When one sees an oak with significant crown dieback or that is dead, almost always is evidence nearby of a recent curb or driveway paving, re-grading or re-contouring the ground near the roots, trenching into the root zone, chemicalizing of lawns, encroachment from infill construction (very little surface area is left for rainwater infiltration), etc. In short, the climate-induced effects of drought are the knock-out blows in the death of the tree. Consequently, these stressors make them susceptible to secondary effects such as the two-lined chestnut borer and various root rot organisms and canker diseases.

Water Trees During Drought

Water trees during seasonal droughts – we're in one now and have been each summer, usually accompanied by record heat, since the late 1990s. In effect, this recent pattern of summer and early fall drought has disrupted rainfall patterns, resulting in an approximation of a rainy season-dry season regime. Whether or not this phenomenon is normal for the region or is an effect of climate change is unknown.

Leave Native Lawns in Place

It's also important to leave areas in one's yard where oak seedlings and saplings are left to mature, or as areas planted with stock from nearby trees. Also, the care of "native lawns" will also greatly help sustain native oaks. Care of Native Lawns. <http://vnps.org/best-management-practices-for-lawn-care/#>

HISTORIC RIVERS CHAPTER

It is crucial that we greatly amend and improve inadequate existing tree preservation regulations at the legislative level if we are to effectively retain our native oak-dominated canopy and old-age remnant trees throughout the region. Otherwise, infill development will destroy most of them (take a drive along Williamsburg Blvd. and side streets in N. Arlington and see the recent and unnecessary losses of old-age Black, Southern Red, and White oaks – one healthy, giant Black Oak overhanging Williamsburg Blvd. was even in a “tree save area” and was still very recently cut down and stump-ground!).

The following frames from my presentation “How Ecology Influences How Trees Are Doing” for the MAC-ISA Annual Meeting in October 2013 attempt to illustrate the environmental stressors on remnant oaks in urban landscapes:

<http://vnps.org/wp-content/uploads/2016/09/Dirt-300x226.jpg>

Extensive construction and infill practices in urban areas severely fragment aquifers and lower natural water tables, creating virtual deserts and greatly reduced groundwater reserves for existing trees and vegetation.

<http://vnps.org/wp-content/uploads/2016/09/HOUSE-300x201.jpg>

Modern construction practices unnecessarily ruin existing soils by using much of the site as a staging area, importing large amounts of artificial and non-biodegradable material, burying construction debris and refuse on site, compacting soils, and destroying beneficial soil microorganisms.

<http://vnps.org/wp-content/uploads/2016/09/OAK.jpg>

Greg Zell, retired Arlington County Natural Resource Manager: “We have a series of environmental stressors occurring simultaneously in our local region, namely an increasing loss of ground water reserves (more impervious surface, less infiltration, lower water table) coupled with an artificial ‘heat island’ effect created by more development and canopy loss. These stressors alone are enough to ‘mimic’ global warming. Any measurable effects due to climate change would add to these problems. In addition, large trees (particularly during leaf season) are much more vulnerable to wind damage as a result of forest fragmentation and increased direct exposure to full force winds. Add to that the fact that a majority of our urban soils, with the exception of small intact forests, are highly disturbed with little organic material remaining.”

Tony Fleming, Licensed Professional Geologist: “Local environmental change is a well-documented culprit in plant and animal mortality, and it comes in a variety of packages, large and small. To my thinking, the most pervasive form of local environmental change is deforestation and urbanization: the Washington metropolitan area probably has considerably fewer forested areas now than 50 or 100 years ago.

Regional deforestation creates a hotter, drier, and more wind-prone microclimate, not to mention less overall soil moisture availability as forested areas are converted to urban land cover. For the large trees that remain, the cumulative effect of all these local environmental changes amounts to death by 1,000 cuts.

Any nominal effect caused thus far by ‘global warming’ (probably less than one degree F average temp rise in the Mid Atlantic over the last century, depending on whose data you use) pales in comparison to the tens of degrees of well documented ‘regional warming’ that routinely occurs via the urban heat island effect during the growing season. Here is an infrared image of the D.C. area on a typical summer evening--22 years ago! It speaks for itself.”

<http://vnps.org/wp-content/uploads/2016/09/MAP.jpg>

Old-age White Oak (*Quercus alba*) trees at the historic Alcova estate in Arlington County, Virginia exhibiting signs of severe crown dieback – likely the result of a fragmented and greatly diminished water table, numerous, consecutive years of extreme drought and heat, and possible damage to the root systems.

<http://vnps.org/wp-content/uploads/2016/09/DIEBACK.jpg>

Rod Simmons

All photos by author

More on Native Lawn Care and Oaks:

<http://vnps.org/best-management-practices-for-lawn-care/#>

<http://vnps.org/best-management-practices-for-lawn-care/#>

Trivia Challenge

How Fast can a wild turkey fly?
Answer on page 17

Continuing Education Opportunities

Please check the Chapter website for more information (<http://www.historicrivers.org>). Workshop registration may be required ahead of time.

- [CE] HRBC Bird Walk - October 2, 2016** from 7:00 am to 10:00 am at Newport News City Park
- [Class] Entomology - October 4, 2016** from 6:00 pm to 9:00 pm at James City County Law Enforcement Center, 4600 Opportunity Way, Williamsburg, VA
- [CE] Eastern Shore Birding & Wildlife Festival - October 6, 2016** all day at New Best Western Resort, at the tip of the Delmarva Peninsula
- [CE] NPS - Plant Identification Walk n' Talk n' Picnic - October 8, 2016** from 10:30 am to 1:00 pm at Wahrani Trail, Route 33 at Eltham, New Kent
- [CE] NPS - Denise Greene at Herb Society's meeting - October 11, 2016** from 1:00 pm to 2:30 pm at Our Saviour Lutheran Church, 7479 Richmond Rd. in Norge
- [CE] HRC Monthly meeting - October 12, 2016** from 6:00 pm to 9:00 pm at JCC Library, 7770 Croaker Rd., Williamsburg
- [Cohort XI Field Trip] Wetlands Ecology - October 15, 2016** from 9:00 am to 3:00 pm at York River State Park, 9801 York River Park Rd, Williamsburg
- [CE] WBG - ECOLOGICAL LESSONS PLANT AND INSECT INTERACTIONS - October 15, 2016** from 10:00 am to 11:00 am at Freedom Park Interpretive Center,
- [CE] HRBC Bird Walk - October 16, 2016** from 7:00 am to 10:00 am at Newport News City Park
- [Class] Plant Biology - October 18, 2016** from 6:00 pm to 9:00 pm at James City County Law Enforcement Center, 4600 Opportunity Way, Williamsburg, VA
- [CE] WBC Monthly Meeting - October 19, 2016** from 7:00 pm to 9:00 pm at Andrews Hall, Room 1127 at the W & Mary Campus
- [CE] WBC Bird Walk - October 22, 2016** from 7:00 am to 9:00 am at New Quarter Park, 1000 Lakeshead Dr., Williamsburg
- [CE] VIMS - After Hours Lecture - Eels - October 27, 2016** from 7:00 pm to 8:00 pm at VIMS - Watermen's Hall, McHugh Auditorium 1375 Greate Road Gloucester Point, VA 23062



Trivia Challenge

Answer: Up to 55 miles an hour for short distances. Domestic turkeys are unable to fly because they are bred to be much heavier and meatier than their wild cousins.