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THE NATURALIST

THE HISTORIC RIVERS CHAPTER OF VIRGINIA MASTER NATURALISTS



The President's Message

By Adrienne Frank

The VMN program invites us to continue learning and to foster stewardship of others. We are learning continuously in our CE activities and volunteer service projects. I strive to be engaged in lifelong learning.

Lifelong learning is the "ongoing, voluntary, and self-motivated"^[1] pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, as well as competitiveness and employability.^[2] The term recognizes that learning is not confined to childhood or the classroom but takes place throughout life and in a range of situations.

When teaching others, we often need to learn it first for ourselves. When I was working, my co-workers would always say, 80% of the presentation is preparation. The day before our HRC Picnic, Gary and I walked the trail, took photos, and looked up species. Creating a list of species was a great educational opportunity for me, and it made me a better leader. It was just one step in my personal goal to learn more about plants.

Continued on page 2



It was delightful to see so many people at the picnic, on such a beautiful fall day. Thank you to the Picnic Team for such an outstanding job of coordination and presentation. The hours of planning, buying, hauling, setting up, and clean up seemed so effortless. Big thank to Judy Sargent for breakfast and to all of the food contributions for the day.

See more photos from the Annual Picnic on page five.

The President's Letter, continued...

A strategy for promoting adult learning is using Study Circles, and I think we do.

In Sweden the successful concept of study circles, an idea launched almost a century ago, still represents a large portion of adult education. The concept has since spread, and for instance, is a common practice in Finland as well. A study circle is one of the most democratic forms of a learning environment that has been created. There are no teachers and the group decides on what content will be covered, scope will be used, as well as a delivery method.

Monday wildlife mapping at York River State Park has been wonderful strategy for group learning, to increase knowledge about flora and fauna. Recently, a few mappers talked about bringing a field guide and learning about one topic at a time. For example, we could learn about ferns one week and mushrooms another week. Wildlife mapping is typically for recording fauna, but why not flora, too.

Being a Master Naturalist is also good for staving off Alzheimers.

According to the Alzheimer's Society, it is estimated that more than a million Canadians will suffer from Alzheimer's diseases by 2030. "Exercising the brain may preserve it, forestalling mental decline" (Grady, 2012). https://en.wikipedia.org/wiki/Lifelong_learning

Join in and keep your brain working.
Adrienne

"Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young."

— Henry Ford

Holiday Party!
Wednesday, December 11
6:00 – 9:00 p.m.
Legacy Hall, Williamsburg

All Master Naturalists and Guests are welcome to attend!

Cost is \$5.00 per person.

Please bring a covered dish to share and a beverage.

Contact Barbara Neis at b.neis15@gmail.com to register.

We will have many raffles.
All proceeds from the raffles go to the Nancy Norton Scholarship Fund.

New Christmas Bird Count!

The Middle Peninsula Audubon Christmas Bird Count is set for Sunday December 29, 2019, 8 am to 2 or 3 pm. This is a NEW count circle that includes parts of Gloucester, Middlesex, and King and Queen counties. Map of the circle is attached.

There are eight sectors and sector leaders have been assigned. Now they need people to help the sector leaders count birds on December 29. Sectors 1, 2, and 3 need more spotters. All levels of birders needed!!

This is an approved Historic Rivers Chapter project — "C2a Christmas Bird Count"

Please contact Susan Crockett at 804-693-6381 or email at scrocket@cox.net if you are available to help.





Helen Hamilton focusing close at a liverwort.



Gary Driscoll, Adrienne Frank, John Bunch

Bryophytes are small, non-vascular plants, such as mosses, liverworts and hornworts. They play a vital role in regulating ecosystems because they provide an important buffer system for other plants, which live alongside and benefit from the water and nutrients that bryophytes collect.

CANOEING FOR BRYOPHYTES

BY ADRIENNE FRANK WITH HELP FROM HELEN HAMILTON

What a delight to go out with Helen on a collecting adventure! At 87 years, Helen has more determination and energy than most of the people I know. In the past year, she held a class on mosses and liverworts and generated several followers. John Bunch, a master naturalist from the Southside, attended her class and has been collecting for Helen ever since. Gary and I sat next to him and realized that we knew a few people in common.

John invited Helen to go canoeing on a remote part of the Nottoway River, because he found a liverworts on the banks of the river. Helen did not want to go alone nor did she know if she could get in and out of the canoe, so Gary and I went along to help. John brought 2 canoes, and it was much easier than we envisioned.

October 31st was a beautiful, warm day and the river was gorgeous. The water was clear and shallow with a sandy bottom. There were old growth Bald Cypress and large Sycamores. John says that he paddles there often and has collected quite a few fossils along the river.

Continue on next page...



Horned Liverwort
Anthoceros laevis

Left and above left, Indian Heliotrope

Liverworts and mosses were clinging to the shaded banks with small streams of water seeping out. We helped Helen collect several species, some of which were newly recorded for the state and/or the county. The Horned Liverwort *Anthoceros laevis* was a favorite for me; I'd never seen anything quite like it.

Helen said, "We beached the canoes at a seepy bank festooned with the liverwort, *Porella pinnata* and Thalloid liverwort *Dumortiera* were plentiful. John showed us *Fossombronia foveolata* (a state record that John had collected earlier). We found *Pallavicinica lyellii*, another thalloid liverwort that is common in wet areas and *Fissidens bryoides* that does not grow in our area.

"Not all the collections have been processed, when completed the specimens will be deposited in the herbaria at Virginia Tech and a duplicate set at Duke University, as a record of "what's here now."

Helen has numerous specimens that she has not recorded yet. If you are interested in helping her to look at liverworts under a microscope, Helen would be able to teach you and set you up with whatever you need.

Lastly Helen said, "It was a very exciting botanical day with good friends."



John Bunch using a loop



Porella pinnata



*Fossil : Chesapeakea
jeffersonius*





HRC ANNUAL PICNIC!

BY JUDY JONES

Saturday, October 26th, began sunny and cool as intrepid HRC birders rose early and drove to the home of Ted and Judy Sargent to begin the morning with a bird walk. Led by Nancy Barnhart, the 90-minute ramble allowed all of the folks to see, hear, and enjoy the birds of the area. Following an incredible breakfast, members and their families then were able to enjoy a plant and mushroom walk with Teta Kain and Adrienne Frank as well as kayaking. The day ended with a huge pot luck dinner at sunset, featuring steamed crabs and blackened rockfish. Sixty-two of us partied, visited, pounded on crabs, and gobbled down sweet desserts. Making the evening even more memorable, the Nancy Norton Spirit Award was presented to a very surprised but very well chosen Les Lawrence.

Many thanks to Ted and Judy for opening their home to us, to organizing this incredible day, and for allowing us to experience first hand the nature by the river.

Photos continue on next page...



Meet the HRC VMN Nature Camp Scholarship Recipients



By Judy Jones

Great news! Our three HRC VMN Nature Camp scholarship recipients have been selected. We have three students this year, two of whom have attended Nature Camp before. The three are Asher Sohoni, Katie Gentry, and Sadie Teer. Let me tell you a little about each student:

Asher is a sixth grader at Berkeley Middle School and is excited about the opportunity to attend Nature Camp. He is interested in geology and entomology and is described by his teacher as having a 'passion for science as evidenced in his intense participation in all STEM activities. Asher writes, "I would like to attend Nature Camp because I adore science. My parents think I ask a lot of questions. My teachers think I ask a lot of questions. Almost everyone I meet thinks I ask a lot of questions. I guess I ask a lot of questions. I ask things like 'how can black holes have infinite mass if they were formed from less than infinite matter?' I guess my parents would like a break from my questions. I once refrigerated a cocoon over the winter and then in the summer put it in a mesh tent and saw it hatch. I think Nature Camp could help explain to me how the butterflies know when it's time. Why do the caterpillar's stripes change as it ages? How come swallowtails like parsley but no other caterpillar will eat it? If I get to go to Nature Camp, I promise to ask a lot of questions."

Sadie is a seventh grader at Hornsby Middle School. She hopes to study limnology and is excited about the opportunity to attend Nature Camp. She is described by her teacher as having a 'passion for science and the natural world.' Sadie writes, "This year I would love to take limnology. I have always been fascinated by rivers and creeks and the animals that live within them. Last year, I took limnology as a minor and learned that if you see multiple macroinvertebrates in the water, the stream is healthy. I thought this was extremely interesting so I hope to learn more by having it as my major."

Katie is a returning camper. She is a tenth grader at Bruton High School. She hopes to study herpetology or mycology this summer. Her teacher wrote, "Katie is currently in my chemistry class and is totally engaged in our discussions of how chemistry issues impact the environment. Her experiences in Nature Camp will ensure connections as she experiences different science content in her upper level courses." Katie writes, "Nature Camp has impacted my life immensely. I had no idea what I wanted to do for my future until I went to Nature Camp last year. The passion I have for nature and conservation has made me plan to go to college for Environmental Science and possibly mycology. From knowing how to identify birds to explaining how mycelium works, to even the fact that lichen is a symbiotic relationship, my knowledge has gotten me the nickname Nature Girl. Although it was supposed to be an insult, I think it's true. Any opportunity that I get in which I can share what I have learned, I take it."

Our three scholarship recipients will be coming to our general membership meeting in May so we can connect a name with each face. They will also attend our September meeting to report back on their experiences. I know you'll be as excited as I am to meet them firsthand and to learn about their joy in nature.

FUN FIELD NOTES

New Bluebird Trail Coordinators!

Hi there HRC members,

We just want to let all the Chapter know that you have a new team of coordinators for the bluebird trail project. Cheryl Jacobson, Connie Reitz, and Judy Jones will be sharing duties to coordinate materials and information, all the while trying desperately to try to fill the huge shoes left by Jan Lockwood and Lois Ullman. Their ten years of dedicated service to the project has helped develop a powerful program for monitoring our little blue buddies and we'll do our best to maintain the successes.



We will be continuing the tradition of meeting in the early spring (Sunday, February 9th, 2020 if you want to be specific) to talk about the bluebird project and to encourage Chapter members to join our bluebird teams, helping to monitor the 328 boxes on the 20 trails in our area. Until then, have a great Thanksgiving and come spring, THINK BLUE!!!

— Judy Jones

Volunteers Needed for Freedom Park Crafts, Saturday, December 14, 10 a.m. to 1 p.m.

If you enjoy making crafts and enjoy working with families, we need your help on December 14 at Freedom Park inside the Interpretive Center. Families will make ornaments from a variety of natural items. It is all gluing and pretty easy, but we need four or five volunteers to help at the tables. Last year, the program was pretty quiet, but two years ago, it was busier. Terry Martin, Cohort XIV, will be the staff person in charge and she will be boosting our advertising. I will not be there this year because of a family commitment.



Please let me know if you are available to help. It does count as VMN volunteer hours. If you have told me you could volunteer, please respond to my email, kinshawellis@gmail.com, to confirm. The five ornaments are on the tree to the right.

— Judy Kinshaw-Ellis

Clean Up Crew!

On November 3rd, five members of the JCC Marina bluebird team picked up bags of trash, floating bottles, a cooler, and even a pair of long, wooden oars as they tidied up the marina and bluebird trail. This site is one that has been adopted by our Chapter and is cleaned monthly by members of the team. From L-R: Keith Navia, Judy Jones, Christina Clarke, Joni Carlson, and Connie Reitz.



Les Lawrence Receives HRC 2019 Nancy Norton Spirit Award

By Judy Jones and Shirley Devan

With great pride the Historic Rivers Chapter awarded the second annual 2019 Nancy Norton Spirit Award to Les Lawrence, at the HRC Annual Picnic in October. Sadly, we lost Nancy in 2012, but her legacy lives on with the Spirit Award given out every year to a member who exemplifies Nancy's "spirit."

You've probably heard the expression, "Less is More." We are very proud that Les Lawrence lives up to that motto. When we begin to list all the activities he's involved with in our chapter, he has definitely proved that Les is truly more!

Les was a member of Cohort IV Basic Training which he completed in Spring 2010 – with Nancy Norton, for whom the award is named. Just like Nancy, Les always wants to learn and teach, always is eager to help, always welcomes new Master Naturalists to every Chapter event, and always has a smile.

Les has volunteered over 5000 hours since joining the Chapter. He served on our chapter board for six years and led Monday morning Wildlife Mapping at York River State Park for over eight years.

All of these activities and volunteer hours don't capture the essence of our incredible volunteer. Les is more than an active member...he engenders a sense of family and community, a climate of trust, and exhibits the joy of membership in our Historic Rivers Chapter every time he arrives at an event.

We are fortunate indeed to count Les Lawrence as a member of our Historic Rivers Chapter. He's a treasure who gives so much to our natural world, our community, and our Chapter.

Thank you, Les!



Les Lawrence second from right with selection committee, left to right, Judy Jones, Shirley Devan, Ted Sargent

In just the last few years, Les has participated in these Chapter Projects:

- Camera Trap Wildlife Survey
- York River State Park
- Spotted Skunk survey at Highlands near Charlottesville
- Virginia Birding & Wildlife Adopt-a-Trail Phase I
- Butterfly Counts (3 or more per year)
- Annual Bird Counts
- Project Feeder Watch
- Great Backyard Bird Count
- Virginia's Second Breeding Bird Atlas
- Big Tree Project
- Osprey Watch
- Bluebird Box Monitoring at York River State Park and Freedom Park
- Mastodon Project
- Colonial Marsh Bird Monitoring Project
- Wildlife Mapping at:
 - Jamestown Island
 - New Quarter Park
 - Greensprings Trail
 - York River State Park
- Oyster Restoration Project
- New Quarter Park Archeology Project
- New Kent Forestry Center field trips for school groups
- Freedom Park Nature Camps
- Outreach Events at:
 - James River School Nature Club
 - Family Fun Fest
 - Estuaries Day
 - James River Fest
 - Williamsburg Farmer's Market
 - Williamsburg Botanical Garden's Butterfly Festival

Mental Health and the Climate Crisis

By Madeline Vann, NCC, M.Ed., RYT200

Trauma, PTSD, anxiety, guilt, and grief are only a few of the emotions people may be feeling as a result of the climate crisis. In early November, I attended a workshop at the Virginia Counseling Association annual conference in Hot Springs, Virginia, speaking with other counselors about the role our profession will be playing to help individuals and communities cope with the implications of and the discussion about climate change.

As a Master Naturalist and also resident in counseling seeking to better serve families, especially children, I was struck by the call for counselors to actively engage in this arena. The workshop, led by Debbie Sturm, assistant professor of counseling at James Madison University, highlighted the value of working with groups to address anxiety, motivate change and solutions, express grief and learn more about conservation. And, Sturm observed thoughtfully, the problem is that while we know that spending time outside in biodiverse spaces is an antidote to climate change anxiety, most counselors aren't properly trained in outdoor etiquette.

"Can you wade into the middle of a stream and just turn over a bunch of rocks? Can you roll over a log just to take a look at what is underneath?" Sturm queried. The audience muttered vaguely, (I said no, of course!) and she went on with the correct answer: "No! It's a habitat."

And that, she said, simply means that counselors who want to work on climate change or at least begin exploring group and individual sessions outside ought to be partnering with naturalists and others who can help the public encounter the natural world respectfully and safely.

Twice during my brief time at the VCA conference I hiked up into the Allegheny Mountains around the Omni Homestead Resort which hosted us. Each time I thought about how



A photo from one of the hikes I took in the mountains around Hot Springs, VA

precious the opportunity to be in beautiful wild spaces is – and how important the work of Master Naturalists and Master Gardeners is in helping the public engage and appreciate nature.

I also learned a new word at the workshop: solistalgia. This refers to the nostalgia and yearning we have for the wild places we once knew, that are now gone. This is a word that acknowledges how profoundly we are tied to our sense of place, and how those changing places can deeply impact our wellbeing.

I hope to be learning more about the intersection between counseling and being a naturalist in the coming years, and for us all to increase our awareness of the mental health impact of climate change.

Here are a few resources if you are interested in learning more:

Mental Health and Our Changing Climate. <https://ecoamerica.org/wp-content/uploads/2017/03/ea-apa-psych-report-web.pdf>

International Transformational Resilience Coalition. <http://www.theresourceinnovationgroup.org>

4th National Climate Assessment: Human Health. <https://nca2018.globalchange.gov/chapter/14/>



Matoaka Mud: Full Of Information!

By Kathi Mestayer

This summer, the *Daily Press* ran two stories (one on June 17, one on Aug 15) about recent discoveries by William and Mary geologists, based on their core samples in Lake Matoaka. It puzzled me a bit that the *Gazette* never ran the story (I still am not finding it on their web site, but I'm not the greatest online searcher), so I decided to share it with the Master Naturalists.

The best account I found was on the College's web site, here:

<https://www.wm.edu/news/stories/2019/decoding-lake-matoakas-sedimental-history-of-the-anthropocene.php>

It gives a good overview of the work, which they say "offered no less than a sedimental journey" to geologists Jim Kaste and Nick Balascio, who led the team of geologists. The study has been published in the journal *Anthropocene*, and the authors include Randy Chambers, director of the Keck Lab, Meredith Meyer, a research/lab expert at VIMS, and two students -- Madison Renshaw and Kassandra Smith.

One of the things that was discovered in the sediments is evidence of coal burning, which peaked in the Revolutionary War, the Civil War and World Wars I and II. The story on the College Web site (link/url above) concludes:

"And the 1977 enacting of clean air legislation and the advent of unleaded gasoline were duly noted by a rather sudden disappearance of certain lead isotopes in Lake Matoaka sediment.

"When I teach introductory environmental science and policy, I like to use this as an example of legislation that worked," Kaste said. "You can see this in ice cores, you can see this in lake sediments. Once we made the lead illegal to put in gasoline, the atmosphere got cleaned up pretty quickly."

Quite an interesting read. Check it out!

HRC MEMBERSHIP MEETINGS

Due to renovations at the Kitzinger Room at the Upper County Library, we will be meeting at the Stryker Center. Because the room is being used until 6 pm, we will need to begin our meetings at 6:30 pm.

Here are the dates for General Meetings until the end of 2019. I have also posted these dates on the Volunteer Management System calendar. Hope to see you all there.

Adrienne Frank
HRC President

- **December 11 – Holiday Party – Legacy Hall, New Town Avenue**

Holiday Party!
Wednesday, December 11
6:00 – 9:00 p.m.
Legacy Hall, Williamsburg

All Master Naturalists and Guests are welcome to attend!
Cost is \$5.00 per person

Please bring a covered dish to share and a beverage.

Sign up tonight or contact Barbara Neis at b.neis15@gmail.com to register.

We will have many raffles. All proceeds from the raffles go to the Nancy Norton Scholarship Fund

- **January 8 - General Meeting** at Stryker Center, room 127
- Speaker is Stephen Kuehl, VIMS, Kepone in the James River



The Naturalist is the monthly newsletter of the Historic Rivers Chapter of Virginia Master Naturalists. It is a membership benefit for current members of HRC.

Newsletter contributions are due by the 15th of the month for inclusion in the issue distributed to the HRC Google Group by the middle of the month.

Send your ready-to-publish photos, notices, stories, or reports to The Naturalist's newsletter editor, Lisa Reagan, at HRCnewsletter@gmail.com

Make sure your work is formatted and labeled properly. Please make sure your copy is error-free. Lisa is happy to help you if you have questions!

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