

VOLUME 16 ISSUE 2 • FALL 2023

# FIELD NOTES

PENINSULA CHAPTER



Virginia Master  
Naturalists

## HORSESHOE CRAB PROJECT

By Maureen Zaino

Horseshoe crabs (HSC) have gathered on shores in massive mounds to spawn for millions of years, laying approximately 20,000 eggs for each female. Migratory birds, such as the endangered Red Knot, many shorebirds, and hungry fish feast together on the HSC green eggs. The coastal migratory travelers have come to rely on them as part of their springtime migration energy diet. There are four species of (HSC); the one we find on our shores is the Atlantic Horseshoe Crab and is considered a Keystone Species. The spawning range for the Atlantic Horseshoe Crab currently ranges from Maine to the Yucatan Peninsula, where they have been harvested many years for bait, fertilizer and food.

In the 1960's scientists discovered HSCs held a special blue blood that could be used to detect bacterial toxins. The HSC blood has a coagulating agent known as limulus ameocyte lysate (LAL). This special blood offered a system for ensuring sterile medical products and reduced contamination risk for patients. Soon the HSCs were collected to be sold and bled for medical purposes. The precious blue blood has been valued at greater than \$10,000 per quart and the bleeding process involves mounting the crabs on a mechanical device, piercing the crab, draining 1/3 of their blood and in some cases releasing them back to the ocean. It is unknown how many of the crabs survive this process. They are out of the water for extended periods of time and fall into a gray area of the fisheries regulatory process. In the 1990s harvesting depleted large numbers of HSCs. Conservationists and scientists began to put pressure on the industry to restrict the harvesting practice. Delaware and New Jersey are currently taking considerable action to restrict capture and protect the HSC, but large harvests continue in Maryland, Virginia, and the Carolinas along the coastal shores.

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### Autumnal Harvests

*This Fall issue of Field Notes is filled with articles and photos of nature, service & volunteering. This issue highlights three projects by PMN members.*

*Thank you to everyone who has contributed to Field Notes this year. Please continue to share your best photos and interesting articles with Meera Rao, Newsletter chair.*

*Email articles and photos (as separate attachments) to [pnmfieldnotes@gmail.com](mailto:pnmfieldnotes@gmail.com)*



Full Moon Lighting our Path -  
Photographer Maureen Zaino

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# HORSESHOE CRAB PROJECT

By Maureen Zaino

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A synthetic alternative, approved in Europe, was invented as an equivalent to the ingredient that requires harvesting horseshoe crabs for their blood. “But in the U.S., the blood harvest isn't shrinking. It's growing. Five companies along the East Coast — with operations in South Carolina, New Jersey, Massachusetts, Virginia and Maryland — drained over 700,000 crabs in 2021. That's more than any other year since officials started keeping track in 2004. Since then, the number of crabs bled by the industry has more than doubled. At least 80 million tests are performed each year around the world using the blood-derived ingredient”(Eisner, 2023)

The Peninsula Master Naturalist (PMN) Horseshoe Crab Project was inspired by Larry Niles, an independent Wildlife Biologist whose research was instrumental in the formation of the Horseshoe Crab Recovery Coalition (HCRC) in 2020. His work with HSCs, the Red Knot bird, and many other accomplishments have inspired many conservationists and scientists. Each year, Delaware and New Jersey survey teams now being led by Susan Linder, gather in the spring to count the spawning HSCs on the Delaware shores.



*Waiting for Sunset -  
Photographer Janet Tucker*

Following the guidelines provided by Susan Linder, and after project approval by both PMN and the City of Hampton, a small PMN team was formed to conduct a pilot project for the PMN. The City of Hampton approved access to [Grandview Nature Preserve](#) in Hampton for nighttime access for one month from the beginning of May through the beginning of June. The horseshoe crabs are sensitive to light, which made Grandview Nature Preserve a great place to conduct the survey.

Abbreviated guidelines for conducting a HSC survey provided by the HCRC were to survey the crab population at the evening High Tide, on the Full and/or New Moon when the water temperature reached at least 57°. Using a one-meter square quadrat constructed of PVC the observers should count the crabs along a measured 1000ft shoreline. Observers should tally the number of male and female crabs and note any outstanding features observed such as age or tags, being careful not to interrupt the spawning activity. It was suggested we do this in early May through early June.

*Counting out 1000 ft of  
Shoreline -  
Photographer Janet  
Tucker*



*Atlantic Horseshoe Crabs  
the team was hoping to see!  
stock photo*



*Searching for signs of  
Horseshoe Crabs -  
Photographer Janet Tucker*

Friday May 5th, with documented approval from the City of Hampton, the PMN pilot Horseshoe Crab Count started off without a hitch. The small pilot team consisted of Melody Avery, Janet Tucker, Linda Boone, Sandy Graham, Rich Knorowski, Jacalyn Frankiewicz, and Maureen Zaino. We entered the park at sunset wearing layers, hats, gloves, headlamps, with clipboards and two quadrats made by Sandy Graham's husband, Rich. The trek to Grandview Beach includes a nature trail, so Janet arranged for a golf cart to assist those who didn't feel like walking. Together we mapped out the 1000-foot surf line and waited patiently at the 1000-foot mark for high tide which coincided beautifully with the parting of the clouds and a gorgeous Full Moon! There was only one issue that night as we walked back to the beach entrance combing the surf line, there wasn't one horseshoe crab to be found! The full Moon was a treat, however, and made for great visibility.



# PROJECT: WRITING FOR NATURE”

BY  
PATTY VONOHLEN



## “WRITING FOR NATURE” .....A WORTHY PROJECT TO ENCOURAGE OTHERS TO VALUE AND APPRECIATE NATURE!

PMN Chapter members have another way to earn volunteer hours by participating in the Writing for Nature project. Have you ever seen something related to nature and wish others would notice and appreciate? Possibly a tree, shrub or plant that has benefits and helps our natural environment? Or it could be a bird, insect or other prevalent critter. Our busy and fast paced way of life has people moving quickly from one place to another and they often breeze right by some important aspects of our nature that they pass in their daily travels. Writing for Nature is a way to help educate and motivate people to notice and care.

The project focuses on short articles that can be posted on Facebook pages or neighborhood association media. Many neighborhoods have their own Facebook groups and/or are invited to join online groups like Next-door. Although Writing for Nature is generally a project for the various social media networks, it can also include another type of publication like a church or other organization newsletter, either print or online. I live in the Hilton area of Newport News, and we have several means of communication in our Greater Hilton neighborhoods. Along with Facebook groups, we have our monthly Greater Hilton News Network E-Newsletter. There are over 1500 subscribers who receive the e-newsletters into their email inboxes each month. When I submit a ‘*Writing for Nature!*’ article, along with photos and info links, I believe I’m spreading the word on the value and importance of the various nature features we have in our neighborhood. I call it PR for nature. Interested? Do you know of a social media network or publication that you might use to “write for nature”?

The following are basic directions and a sample of one of my recent submissions on Sweet Bay Magnolia:

### WRITING FOR NATURE PROJECT DIRECTIONS (SPEAKING UP FOR NATURE!)

Here’s an easy and worthy way to earn PMN volunteer hours. And your writing will help bring awareness and education on the value of our native flora and fauna to potentially hundreds of people who share your social media networks.

#### This project involves:

Choosing a feature or species of nature for which you know the value and benefit.  
Put together a short and written ‘infomercial’ that will bring attention and help others become educated and aware.

#### The following steps make it easy:

1. Take a photo of noteworthy feature of nature. Possibly a native tree or shrub or plant that is interesting and has environmental benefits.
2. Do some quick research to learn more about the species or topic you are presenting. Capture URL links that can be shared with your write-up so that those interested can ‘read more’.
3. Write a short paragraph (approx. 3-4 sentences) about your topic and Include benefits and/or important environmental information. (Possible benefits: Clean the air, absorb stormwater, provide for wildlife, serve as host species)
4. Send your write-up, photo and ‘more info’ links to your social media networks. Here are a few possible examples:  
Your neighborhood homeowner’s Assoc publications  
Facebook groups  
Next Door Neighborhood emails
5. Once you’ve completed your submission, you can post the number of hours you spent on the project on Better Impact.

For more details and info contact Patty VonOhlen [pattyvonohlen@gmail.com](mailto:pattyvonohlen@gmail.com)



On the following page is an example of ‘*Writing for Nature!*’ article by Patty VonOhlen that was submitted to the Greater Hilton News Network E-newsletter.



# PROJECT: WRITING FOR NATURE”

BY  
PATTY VONOHLEN

## Sweet.....

Sweet Bay Magnolia is a Virginia favorite. It's a native tree that is doing a great job filtering stormwater and preventing erosion on the Northwest side of the Hilton Ravine. Check it out! The white flowers have come and gone as its bloom time is late spring and early summer. Our ravine Sweet Bays are now showing off their cones that are tinged in red. This tree's real name is *Magnolia Virginiana* and is considered an understory tree (usually 12-20' tall but can grow up to 50'). If you visit the Hilton Ravine by starting on the path near the corner of Post and River, you'll see the 4 Sweet Bay Magnolia trees to the left of the path and along the top ridge of the stormwater holding area.



*Sweet Bay Magnolia is also a host plant for Sweetbay Silkworm caterpillar.*

*Photos: Patty VonOhlen*

*After munching on the Sweet Bay Magnolia leaves, the Sweetbay Caterpillar will cocoon in its chrysalis and transform into the Sweetbay Silkworm Moth*

All the trees, shrubs and plants in the Hilton Ravine are helping the James River by filtering and slowing stormwater along with erosion prevention. They add shade and green space to help clean our air and keep things cooler on these hot summer days. Many are providing for the needs of important critters in the ecosystem. Stop by to visit the Hilton Ravine Sweet Bay Magnolias and if you look closely, you'll see their cones and you might see their special Sweetbay Silkworm caterpillar.

[https://www.wildflower.org/plants/result.php?id\\_plant=mavi2](https://www.wildflower.org/plants/result.php?id_plant=mavi2)

Patty VonOhlen is a member of Peninsula Master Naturalist chapter <http://vmnpeninsula.weebly.com>



### Very Hungry Caterpillars



As many as 11 full-sized monarch caterpillars munched on my milkweed until it was reduced to a mere stick! At least 2 of them did not travel far to form chrysalis. Will be fun to watch!

Submitted by: Anne Owens  
Photos: Anne Owens



# BLUEBIRD GAP FARM BLUEBIRD NEST BOX PROJECT

## BY BILL BOEH



From April to August of this year PMN members monitored nest boxes at Bluebird Gap Farm. The objective was to support Eastern Bluebird breeding in order to continue the species' recovery from its steep population decline during the 20th century (largely due to the effects of DDT and being outcompeted for nesting cavities by invasive species--namely the European Starling and House Sparrow).

There were 5 volunteers: Bill Boeh, Becky Holliday, Sharon Neal and Jaime Joy, and Hilary Probst. Additionally, Melinda Webb, a non-PMN member, generously bought 8 boxes and mounted them throughout the park. Melinda also cut the grass "trails" each week which enabled the monitors to reach some of the more remotely located boxes (and reduced the risk of picking up ticks during box checks).

We initially started with 8 boxes; Melinda procured several more and we finished the season with 11. Below is an aerial view of the park with blue icons denoting a box location. Arrows, color-coded by species, point to boxes in which at least 1 egg was laid.



Box location image from report

**Volunteer effort:** Volunteers visited each box twice a week and utilized the NestWatch phone app to report nest presence, nest contents, adult bird activity, first egg date, hatch date, fledge date, and final results of each nesting attempt to the Cornell Lab of Ornithology. Volunteers also cleaned out the boxes after fledging (or failed attempts); they made over 50 visits to the park and volunteered for nearly 62 hours.

Breeding results by species are below.

### Results by species

Species	Total # nesting attempts	Earliest Egg Date	Earliest Hatch Date	Earliest Fledge Date	Total # eggs	Total nestlings	Total # fledglings	Attempts with at least one fledgling	Nesting success rate	Mean clutch size	Mean nestlings	Mean fledglings
Carolina Chickadee	6	2023-04-01	2023-04-14	2023-04-29	19	17	17	4	66.67%	4.8	2.8	2.8
Carolina Wren1	2	2023-07-04	2023-08-11	2023-08-25	6	2	2	1	50.00%	3.0	1.0	1.0
Eastern Bluebird2	4	2023-05-04	2023-05-20	2023-06-10	14	12	8	2	50.00%	4.7	3.0	2.0

**Notes:** 1) Adults apparently abandoned 1 nest before the eggs hatched; reason unknown.

2) All young disappeared from 1 nest before fledge date; the young were likely victims of predation (predator species unknown).

**Future plans:** Boost Eastern Bluebird breeding success by relocating boxes to more suitable habitat and installing additional predator protection.



Carolina Wren egg & nestlings



Chickadee nestlings



Bluebird nestlings



# COMMUNITY UTREACH & STEWARDSHIP



*Tree Walk with Daina Henry*



*Bird walk with Jane Frigo*



*Juvenile Cooper's Hawks*

## Birding and Treeing at Hillmeadow, the home property of Laurie Brunk

The morning of July 22, 2023, from 6:00 to 9:30 twenty-two people gathered at Hillmeadow for a bird walk led by Jane Frigo, followed by a tree identification walk led by Daina Henry. Thirty-two bird species were seen and/or heard and at least 35 varieties of trees and shrubs identified. We had beautiful weather and a fun time enjoying each other's company and expertise while experiencing the wonder of nature and wildlife. There were some extra bonuses as well. Several dolphins were spotted going up the Warwick River, a box turtle was observed laying her eggs, three juvenile Cooper's Hawks were very much present with their squeaky raucous voices and still somewhat awkward flight pattern, a doe with two fawns and a feral Bengal cat passed through the property.



*Box Turtle*

Submitted  
by  
Laurie Brunk



*Box Turtle Laying Eggs*

## Historic Endview Nature Trail Maintenance

Submitted by Daina Henry  
Photo: Daina Henry



Seven volunteers from CNU leadership program helped mulch the nature trail on Aug 17 in preparation for the paw paw fest. Many thanks to Jim Francis and Kate Schaller for their support.



Daina Henry and Shirley Chirch



## PAW PAW FESTIVAL AT HISTORIC ENDVIEW

Paw Paw Fest 2023 was a success. We had 1367 attendees (compared to last year's 1142). And our fundraising efforts were also successful - around \$2k (compared to \$480 last year)

We had 39 master naturalist volunteers for the event and prep; and 30 more volunteers from other organizations.

Many thanks to all of you for making this a success.



Jim Francis and Gina Ready to lead a tour



PMN Nathan Brauner(R) & 'Colonial Beekeepers'



Loye spencer, Phyllis Kohlman, Prafulla Patel at the Kids Activity table



Table with more games

Submitted by Daina Henry  
Photos: Sandra Roberson

Fun with corncob game boards



PMN David Lauthers 'Leave No Trace'



Music Provided by PMN Kevin Barry (R) & Roy Moats

## Did you know?



*Asimina triloba*, the American papaw, is a small deciduous tree native to the eastern United States and Canada, producing a large, yellowish-green to brown fruit. *Asimina* is the only temperate genus in the tropical and subtropical flowering plant family Annonaceae.

Paw paw trees are generally not self-pollinating and at least two trees are required for fruit production in most cases. However, the trees must be genetically different from each other to pollinate. In other words, you can't plant one paw paw tree and expect the offshoot trees that may grow from the tree's suckers to cross-pollinate.

[https://en.wikipedia.org/wiki/Asimina\\_triloba](https://en.wikipedia.org/wiki/Asimina_triloba)  
<https://www.thespruce.com/pawpaw-plant-growing-guide>

# PENINSULA CHAPTER

## 2023 Peninsula Chapter Board of Directors

President	Jim Frances
Vice President	Barbara Waring
Secretary	Christy Gardener
Historian	Maria Nissen
Treasurer	Sandy Kochersperger
Chapter Advisors	Megan Tierney & Stephen Living



**Virginia Master  
Naturalists**

## Member Meetings and Continuing Education

Day/Time: **Second Tuesday of every month, 6 PM - 8 PM**  
Location : Sandy Bottom Nature Park  
1255 Big Bethel Road, Hampton, VA 2366  
(Please check BI Calendar for Zoom link)

## 2023 Committee Chairs

Basic Training	Rex Holmlin
Better Impact Coordinator	Laura Marlowe
Continuing Education	Daina Henry
Community Outreach	Kimberly Prisco-Baggett
Fund Raising	Charlotte Boudreau
Hospitality	Sandra Roberson
Membership	Yukari Hughes
Newsletter	Meera Rao
Projects	Chris Gwaltney
Property Manager	Jeanette and Ray Yoh
Public Relations	Emily Grojean
Web Master	John Berry
Past President	Charlotte Boudreau

## Upcoming Meetings and CE details are listed in VMS-BI Calendar

Date: October 10 Chapter Meeting 6PM Zoom link in BI Calendar  
CE: Federal Water Regulations Time: 7:00 PM - 8:00 PM

Date: October 17, 2023. CE: Catch the King Tide Training  
Tuesday, 5:30 PM - 6:30 PM Link in BI calendar

Date: Saturday, October 21, 2023. CE: Ft Monroe Tree Tour  
Time and Location and POC in BI Calendar

Date: November 7, 2023. Chapter Meeting 6PM CE TBA

Date: November 9, 2023. Potluck Book Club Meeting.  
Time: 7:00 PM (Contact: meeragrao@gmail.com for zoom link)  
CE for presenting a review.

## FIND US!

Peninsula Chapter Website: <http://vmnpeninsula.weebly.com/>

Facebook: <https://www.facebook.com/VMNPeninsula/>

YouTube: <https://www.youtube.com/channel/UCTbIGR9RcDI62oxfJSLi3Ww>

Pinterest: <https://www.pinterest.com/VMNPeninsula/>

Instagram: <https://www.instagram.com/vmnpeninsula/?hl=en>

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Hampton, VA 23670



[www.ext.vt.edu](http://www.ext.vt.edu)

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