The Naturalist

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Historic Rivers Chapter of Virginia Master Naturalists

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A Message from the President

by Janet Harper

We wouldn't be Master Naturalists if we didn't all enjoy and appreciate nature, but are you aware of nature's many benefits to your health? According to U.C. Davis, being out in nature improves cognitive skills such as reasoning, creativity, and problem solving. Our physical health is also improved by reducing cortisol levels, heart rate, and blood pressure, and by increasing Vitamin D levels. These may lead to lower heart disease rates. Last, but certainly not least, nature enhances mental health by improving sleep and reducing anxiety, stress, anger, and depression! Doesn't this motivate you even more to get outside?

Some of our more seasonal activities like FeederWatch and Nature Explorer clubs have finished, but there are still many other activities to pursue. Wildlife mapping, trash pickup on trails, gardening help at the Botanical Garden, OspreyWatch and Bluebird monitoring will continue through the summer and beyond for some of these. The BioBlitz on July 20th will be a big event with a need for a lot of volunteers. Please sign up if you can help!! Check out the rest of the newsletter and the calendar posted in Better Impact to find some fun outdoor activities.

Remember that the nature photography contest is currently in progress. If you have photos that fit the theme, get those submitted before the deadline of June 17. See the informative email Judy Jones' sent after our last general meeting explaining the requirements.

Check out the Virginia Master Naturalist (VMN) site or Tiffany's newsletter around the middle of the month for more information about the Annual Conference. If you sign up, you'll have access to the recordings of all the sessions for CE credit.

As we get closer to the annual picnic date, I'm sure Marie Robertson and Donna Benson [Hospitality Co-chairs] will be asking for help planning activities and events for that. If you have ideas or want to lead an activity, please let them know.

An important reminder as we interact more with the public at outreach and community events over the next few months, please remember to use our Historic River Chapter's (HRC) photo release form if taking photos of non-HRC members. If the sponsoring organization (County, School, etc.) has asked participants to sign releases, this gives that organization permission, but does not give us permission to post those photos. We want to make sure that we have specific permission and that we have the signed form in our possession. If you submit photos for the newsletter or Facebook, please submit the release form if needed. Remember we all sign waivers as part of our annual reenrollment, so these are only needed for non-HRC members. The photo release form is posted on Better Impact. Please also remember our chapter's policy of not photographing children's faces, but rather taking photos from behind or of their hands holding an item.

As you venture outdoors, don't forget to stay safe!

On the Calendar

See Better Impact and HRC Google Group monthly Continuing education (CE) emails for more opportunities.

Saturday	June 10	Litter Pickup 9-10am at College Creek Beach *Reminders in Google Group
Wednesday	June 12	HRC General Meeting 6-7:45pm JCC Library or Zoom (CE speaker portion)

Weekly Wildlife Mapping: Check out the 8 upcoming June events on the Better Impact Calendar

Sunday	June 16	CE Bird Walk 7am with Hampton Roads Bird Club at Newport News Park				
Monday	June 17	HRC Photo Contest Deadline Contact Ted Sargent or Judy Jones for details				
Wednesday	June 19	HRC Ice Cream Social 5:30-7:30pm at Waller Mill Park *Please RSVP				
Thursday	June 20	CE VIMS AfterHours 7-8pm Topic: Illegal FishingUS Coast Guard *Register				
Saturday	June 22	CE Bird Walk 8-10am with Williamsburg Bird Club at New Quarter Park				
Monday	June 24	CE VMN Webinar 12-1pm "Leopold's Preserve: A Model for Wise Land Use"				
Wednesday	June 26	CE Williamsburg Bird Club Meeting 6pm at Chickahominy Riverfront Park				



HRC Summer Ice Cream Social

Wednesday, June 19

5:30-7:30 p.m. at Waller Mill Park (free parking)

HRC members and their families are invited for free Bruster's Ice Cream. Use the shelter's picnic tables for seating or BYO chairs. Please RSVP (Yes, No, or Maybe) to the Hospitality Committee sooner than later to let them know how many to expect. Our next social event will be our Fall Picnic on October 26th.

There's a New Scale in Town

by Tracy Melton

In October 2023, a neighbor forwarded me a bulletin on crapemyrtle (or crape myrtle) bark scale (CMBS) (*Acanthococcus* (=*Eriococcus*) *lagerstroemiae*) published by the Virginia Cooperative Extension. The bulletin describes CMBS as "an emerging invasive pest of crape myrtle in Virginia."

CMBS is a small pink scale insect that envelopes itself in a thick, waxy, white coat. It becomes sessile and feeds on the host crape myrtle. It produces honeydew, which feeds the growth of sooty, black mold. Crape myrtle growth and flowering are negatively impacted. Trunks, branches, and leaves are blackened. The popular tree loses much of its ornamental value. Immature ones (at least) may be killed.

Additional photos and information can be found on the University of Floria's Entomology and Nematology Featured Creatures webpage on crapemyrtle bark scale.

CMBS is native to Asia. It was first identified in the US in Richardson, Texas in 2004 and in Virginia in Chesapeake in 2014. Was it on the two crape myrtles in our front yard, which we acquired when we bought our house? Was it on the dozen or so mature ones in the common area landscaping around the neighborhood clubhouse and tennis court?

We inspected these trees and several others on neighbors' properties. I believe that every one of them was infested with the white, waxy insects, which are small but clearly identifiable on the bark. One neighbor had two small, blackened, dead ones. We had a small one similarly blackened on the edge of our property. CMBS can apparently spread to plants even hundreds of feet away, so all crape myrtles in the neighborhood are or likely will be infected. It is very difficult to remove (see bulletin).

Of course, an invasive, difficult-to-remove insect severely damaging large ornamental trees ubiquitous in our region is an aesthetic nightmare. Streets and roadways may be lined with large trees with

Photo above: Crapemyrtle Bark Scale

Photo above: Crapemyrtle Bark Scale (CMBS) on an American beautyberry, Williamsburg, VA, May 18, 2024.

blackened trunks and leaves and feeble flowering. Featured plants in residential and commercial landscaping will be compromised. I had already noticed that our crape myrtles were not flowering vigorously. After assessing our trees, we decided to cut them down and replace them with native plants, including American beautyberries (*Callicarpa americana*).

Then, in May, the story took another unfortunate turn. One of those beautyberries, planted last year, and seemingly thriving, was suddenly leaning severely. I examined it, and the bark was covered with what looked like 100+ CMBS. I googled and discovered that researchers are finding that beautyberries are also serving as hosts for the insect. Over the next couple of weeks, I observed the leaves shriveling up, and I removed the beautyberry and replaced it with an Eastern redbud. I also removed two CMBS that were on another beautyberry across the front yard. I will continue to monitor that one and a few others on our lot.

Now, though, our natural spaces, and landscaping, are facing invasion by another destructive, nonnative species. Beautyberries are a common and productive native shrub in our local woods. There were many, filled with bright purple berries, surrounding our gathering location near Taskinas Creek in York River State Park during our master naturalist certification training. Will CMBS spread beyond crape myrtles and beautyberries to other plant species?

I wrote up this piece so that HRC members are aware of these relatively recent developments and can address any infestation where they live and monitor for the insect while going about their environmental work. I began with a play on a hackneyed idiom, and, if I may, will end with one as well, because, for our plants . . . it's a jungle out there . . . in the forest.

Patches of Hope: Asimina triloba by Tracy Melton



Photo above: Papaws in the shallow ravine nearest Monticello Road on the northeast side of Compton Drive.

Pickin' up paw paws, put 'em in your pocket, Pickin' up paw paws, put 'em in your pocket, Pickin' up paw paws, put 'em in your pocket, Way down yonder in the paw paw patch.

—Traditional American Folk Song

The pawpaw tree (Asimina triloba) is a native gem. The pawpaw is a clonal understory tree that grows in patches. It is classified in the order Magnoliales and family Annonaceae, which consists primarily of tropical and subtropical plants. Of the dozen or so Asimina species—the only temperate Annonaceae genus—most are Floridian, or also native to Georgia, Alabama, and (three) South Carolina. Asimina parviflora (small-flowered pawpaw) reaches as far north as southern Virginia. A. triloba, though, ranges from Florida to Ontario, from Virginia to southeastern Nebraska and eastern Texas.

One of the most prevalent understory trees in forests across the eastern United States, including our own, is an adrift *Annonaceae* cousin from the tropical world! This tropical cousin, which produces the largest edible fruit indigenous to the United States, lives among our hickories, oaks, and pines.

I wanted to write about pawpaws because they have provided some of the most rewarding moments during our local efforts to remove wisteria and Japanese honeysuckle from local woods. I've worked with Keith Navia, Jeff Honig, Linda Morse and her W&M students, and other HRC members removing wisteria across College Terrace from the Alumni House. Keith and I were pretty thrilled to unencumber a small pawpaw patch there from dozens and dozens of vines strangling them. They were almost the only other plant life surviving in that area.

Lower down the slope, wisteria formed a mat six-feet deep, with several higher mounds. One of those mounds was the vines piled over a single plucky pawpaw with just a few leaves remaining. We freed the pawpaw and cleared the entire mat. On that slope, it remains a battered survivor.

Keith and I have worked hard to remove a very robust wisteria infestation in two shallow ravines along the northeast side of Compton Drive, toward Monticello. It has been some very hard work, but we've made great progress. It's been rewarding in recent weeks to see several dozen small pawpaws popping up in ravines where only a few dozen similarly battered ones barely survived amidst a thick tangle of wisteria. These ravines are fairly open because of the extensive tree damage but shaded by surrounding woods. Pawpaws will likely soon fill both. Linda Morse was passing by on a recent workday and stopped to say hello. Unprompted, she said, "Look at those pawpaws!" That was rewarding to hear.

Japanese honeysuckle vines also destroy pawpaw trees. Honeysuckle climbs smaller trees, and shoots are often present in the thousands per acre in local forests. In winter, they are often almost the only green on the forest floor.

Neighbors Kay Brown and Jerry Lelansky and I have pulled up tens of thousands of these lightly rooted shoots in the Port Anne woods directly across S. Henry Street from the Eastern State Hospital Cemetery in Williamsburg. We prioritize those climbing or surrounding pawpaws. Walking through these woods a few days ago, I was struck by the proliferation of pawpaws. A few patches had become a large, dense area of them. It was difficult to walk through and to find the trees of heaven that I was hunting. We have cleared many invasive species in these woods, and native ones are returning, not only pawpaws but also Jack-in-the-pulpits.

Invasive species are a significant threat to our natural world, locally, nationally, and globally. These incredible and plucky pawpaws are hopeful evidence that we can restore and revive our natural spaces. It can be done on a small scale and also needs to be done on a large scale. We are working on the former. How can we accomplish the latter?





Photos above: Top—Papaws in the shallow ravine <u>second</u> nearest Monticello Road on the northeast side of Compton Drive. Bottom—Papaws in the woods across S. Henry Street from the Eastern State Hospital Cemetery.

Diamondback Dashing

by Donna Benson, photos by Lisa Cumming



Lisa Cumming, myself, and Marie Robertson (pictured left to right) set out on Monday afternoon, May 20th to survey our Diamondback Dash Loop on the Pagan River near Smithfield, Virginia. We have this loop as well as another one at my river house on the Piankatank River in Gloucester. Last year, we saw zero Diamondback terrapins...not even the hint of a turtle nose breaking the water's surface. Pretty disappointing. Marie and I had already completed our Gloucester loop on May 16th and were thrilled to see fleeting glimpses of two turtle heads in the choppy water. But truthfully, we went into the day with low expectations.

We were a little concerned with the somewhat questionable forecast - possible showers with some gusty winds. Since we were hauling three kayaks with us, we had to drive separately in two vehicles and had timed our trip in order to start kayaking at low tide (supposedly, the best time to see terrapins). We lined up for the ferry with what appeared to be plenty of room to spare and couldn't believe it when only one of the vehicles made it onboard. The trip seemed cursed from the outset!

Both vehicles, with kayaks, finally arrived at our destination and we headed out, only a little behind schedule. We started following our route via the downloaded map on the Survey123 App, making our way to our first stopping point. Along the way, we use counters to record how many terrapins we spot as well as the number of crab pots we see. As I mentioned before, we were not expecting much. So you can imagine our surprise when we quickly spotted our first terrapin and then another and another! By the time we got to Point A where we stop for 5 minutes and observe we had seen a dozen little noses. It was so exciting!

By the time we finished our loop (including two more observation stops), we recorded a whopping total of 71 terrapins! What a great surprise after having seen none at that location the previous year. In addition to the turtles, we saw a large great blue heron rookery, many nesting ospreys, swallows, red wing blackbirds, great egrets and spotted sandpipers. There was also one large unidentified rodent...probably a muskrat, hopefully not a nutria! We are now enthusiastically looking forward to our next two sampling windows - in July and September. Who knows how many more we'll spot!







Red-cockaded Woodpecker Nestlings at Piney Grove

by Angier Brock

I had the good fortune to watch the banding of Red-cockaded Woodpecker (RCWO) nestlings at Piney Grove Preserve in Sussex County on Friday, March 24, 2024. The RCWOs, Virginia's rarest birds, were close to extirpation in Virginia in the late 1990s when The Nature Conservancy bought land and began working with the Center for Conservation Biology to manage their habitat by restoring longleaf pine—the trees the birds need for their cavity nests. So far, the efforts have paid off. Instead of a mere three families of woodpeckers, there are now twenty-two.

Pictured: Left, ladder used by climber to access tree cavity nests in pine trees. Below, clockwise—(1) banded adult Red-cockaded woodpecker on tree trunk, (2) two nestlings on towel—notice the red band on the leg, (3) nestling in palm of human hand.







Habitat Creation at Brickyard by Judy Kinshaw-Ellis



Photo caption: Panorama of Brickyard. Members of a Boy Scout troop and a few dads came out one Saturday morning and moved one giant pile of mulch into more than ten piles throughout the garden. It made it so much easier to place the mulch.

For those of us who have been spending time at Brickyard Landing Park, it appears that the planting of grasses, perennials, shrubs, and trees is already helping to increase the number of birds, butterflies, and other insects. Visitors to the park during the summer usually see eagles and ospreys near the water, but it seems as though there is more small bird and insect activity in the park because of all the new plants that have been installed. The observations are strictly anecdotal, and this park might be a good candidate for a BioBlitz or other event to formally document what animals are there now, so we can track how habitat creation increases species. For now, those who are working at the park are enjoying seeing birds and butterflies on the new plants.

The first phase of planting, which included trees and woody shrubs, was completed in November 2023. The second phase of planting, which included grasses and perennials, was mostly completed in April 2024. Because of availability, some larger plants were replaced by plugs. Not all of the plugs have been planted, but they will be planted in nursery areas to let them get a little larger before they are planted in a more permanent bed. Volunteers from both Master Naturalist and Master

Gardener organizations have been weeding, watering, and mulching to get the garden ready for some educational tours. Park manager, Josh Bew, arranged for a Boy Scout troop to move about 20 yards of mulch into smaller piles, so it was much easier to access.

The reaction to the plantings at Brickyard has been overwhelmingly positive. Volunteers talk to boaters and fishermen often, many who have been visiting the park since it was in private hands and when only the boat ramp was county property, and most people are very happy with the improvements.

Recently, we have had a setback with some vandalism where plants were pulled up. They were replanted as soon as they were discovered, but some of the plants were destroyed. The vandalism has been reported to the police and an investigation is underway. Needless to say, this kind of damage is disheartening, but we hope that the person or people responsible will be caught and prosecuted. In the meantime, our work continues.

We are grateful for the many people who have contributed to this project whether they are planting, weeding, watering, or moving mulch. We are happy to have volunteers work as much or as

little as they like. It is rewarding because you can see the impact of your efforts each day. This is a big project, and we are starting from the ground up! Come on out and create some habitat.

Volunteers will be working Mondays and Thursdays from 8 am to 11 am. We encourage people to work two hours within that time period because the work

is physically demanding. We have developed a Google Group for those who want to work on this exciting project. If you have not received any emails from the group, let Judy (kinshawellis@gmail.com) or Donna (mid520@mac.com) know and we will add you to our list.

Champion "Compton Oak" 10-year growth measured

by Alice Kopinitz, Cohort I



	Current (2024) measurements	Increase since 2014
Circumference	218 inches	28 inches
Height	66 feet	5 feet
Crown	130 feet	11 feet
Total Points	317 points	36 points

One of the HRC projects that Seig and I have enjoyed "since the beginning of time" is measuring trees. In 2007, Jeff Kerwin, (author of Remarkable Trees of Virginia) spoke at one of our monthly meetings. He told us of his project about remarkable trees in Virginia. He noted that trees needed to be measured every ten years to remain in the Virginia Tech database. There were some trees in Williamsburg that were in that category, and he wanted to know if our chapter might help measure these trees. Did we want to help!! Silly Question!!! Out we trooped into the library parking lot to learn to measure circumference, height, and crown. All the tree reports Jeff brought to the meeting had HRC teams assigned to measure and record the data. Larry Riddick, Cohort I and Virginia Master Gardener Tree Steward, was the leader for this project.

Fast forward to 2024...We learned that to remain in the Virginia Tech data base as a state champion, it was time to remeasure the Compton Oak, one of the iconic trees in Colonial Williamsburg. The premier tree measuring team was coming to do the job. Would we be interested in observing? Silly Question!! So, on a weather perfect afternoon, the elite tree measurers went to work remeasuring the Compton Oak. Eric Wisemen from Virginia Tech moved out on the green to measure the height. Byron Carmean and Dylan Kania proceeded to measure the circumference and lay down the tape to measure the crown. Gary Williamson faithfully recorded the important numbers.

Currently, this tree is a state champion with the following impressive statistics: circumference 218 inches, height 66 feet, crown 130 feet, and a total of 317 points. Those numbers indicate that the tree is doing well. The arborist and landscaping department intend to see that the tree continues to thrive.

Monitoring Prothonotary Warbler Nest Boxes in James City County and Chesapeake, Virginia by Shirley Devan

We first check the Prothonotary Warbler (PROW; *Protonotaria citrea*) boxes the first week in April—not because we expect to find the warblers nesting but because we should remove the insects that nested in the boxes over the winter. We usually find Carolina Chickadees nesting in quite a few PROW boxes. Chickadees nest early—often starting in early March so they often claim nest boxes before the warblers arrive. Of course, we leave the chickadee nests and let them complete their one and only clutch. But we remove paper wasps and their nests (*Polistes* genus), fishing spiders (*Dolomedes tenebrosus*) and their nests, and mud dauber wasp nests (*Trypoxylon* genus).

PROW boxes are smaller than bluebird boxes and the entry hole is 1.25"—small enough for Carolina Chickadees and Prothonotary Warblers but too small for cowbirds and bluebirds. Some PROW nest boxes host Tree Swallows.

Male PROWs return to this area of Virginia in mid-April. The males arrive before the females to establish their territories. The females arrive about a week or so later. They have their pick of the males. "The female always chooses." Which male sings the loudest and clearest? Which is the most brightly colored yellow? Which has chosen the best cavity (natural or nest box) and started the best nest?

The male looks for the best cavity—clear of wasps and spiders and in the best location for food access and protection. He lays about an inch of fresh moss in the bottom of the box hoping to impress a female with his nest-building skills. When the female choses the box and the male, she finishes the nest—adding more moss and finishing it off with a nest cup lined with cypress twigs or other small flexible twigs.

The female usually lays five eggs in the first clutch and incubates for 14 days. The nestlings are in the nest only 10 days. Both adults feed the nestlings because it takes both adults to provide enough food for the nestlings to fledge in





Photo above: (1) Five Prothonotary Warbler eggs in box on Gordon Creek, Chickahominy Riverfront Park, May 16, 2024. Photo by Shirley Devan. (2) Male Prothonotary Warbler, Northwest River, May 17, 2024. Photo by Jennifer Trevino

10 days. If something happens to one of the adults, then the nestlings are not likely to fledge.

Volunteers have monitored PROW nest boxes in Coastal Plain since 2011. This project is sponsored by Coastal Virginia Wildlife Observatory (CVWO), a non-profit focused on protecting wildlife

through field research, education, and habitat conservation. In addition to the PROW monitoring, Historic Rivers Chapter partners with CVWO on a variety of projects – butterfly research and butterfly counts, hawk counts at College Creek in the Spring and Kiptopeke Hawkwatch in the fall.

I have monitored PROWs since 2011 when Dr. Robert Reilly, Professor of Biology at VCU and a Master Bander, asked if I wanted to take over the PROW nest boxes along the Northwest River in Chesapeake, VA. I had just completed bird banding training in 2010 and had banded at the Kiptopeke Songbird Banding Station in the fall of 2010 under his supervision. I became a subpermittee on Dr. Reilly's federal and state banding permits.

Dr. Reilly still supervises my work, answers my questions, and provides the bands I use to band the PROW nestlings and adults. At the end of each season, I report my band numbers to Dr. Reilly and he reports them to the Bird Banding Lab, part of the US Geological Survey. Dr. Reilly has other volunteer subpermittees in the Coastal Plain and

Piedmont conducting research on warblers and owls and operating a MAPS station (Monitoring Avian Productivity and Survivorship) near Hopewell.

Since 2011 a cadre of HRC volunteers has assisted in monitoring PROW nest boxes – first in

Chesapeake. Then CVWO installed PROW nest boxes at Powhatan Creek Trail, Chickahominy Riverfront Park, the Dragon Run, and Newport News Park. Gary Driscole monitors 22 Dragon Run PROW boxes and Dave Youker monitors seven nest boxes at Newport News Park and Harwoods Mill Reservoir. They do not band PROWs, but they do report productivity of their boxes to Dr. Reilly.

From April to late July, volunteers and I monitor 82 nest boxes in Chesapeake, 11 boxes at Chickahominy Riverfront Park along Gordon Creek, and seven nest boxes at Powhatan Creek Trail. "It takes a village" because we use a motorized canoe to monitor the nest boxes installed on poles about 10-15 feet offshore. The exception is Powhatan Creek Trail where we don our boots for the "swamp stomp" on either



Photo above: Hatch Day, Northwest River, May 17, 2024. Photo by Shirley Devan

side of the long bridge.

Each nest box tells a story. "This was the box that had the leucistic nestling." "This was the box that had the snake." (We rarely find a snake in the nest boxes because they are installed in the water.) "This was the box that had three clutches."

As we move from box to box, it's like Christmas morning. We never know what to expect when we open a box. We know what was in the box when we checked it last. But in a week or two, lots can happen. A box that was empty two weeks ago could have a nest with five eggs and an incubating female. Usually, we can capture the female with a small hand net as she exits the nest. We are thrilled when we see she already has a band. We have a large Excel file of band numbers from the past 14 years so we can look up her band number to learn when and where she was banded.

Recaptured females have a story all their own. Sometimes the female is nesting in the same box where she was banded as a nestling—sometimes just one year later. Sometimes the female is nesting in the same box she has nested in for the last few years (or a nearby box). Like many songbirds, Prothonotary Warblers have a high nest site fidelity. After a round trip from Virginia to Panama or other Central American location, they return to the same area and often to the same nest box.

At Northwest River Park, 2018 was a record year for banded nestlings although not for number of eggs. See table below for data from 2018-2023. We did not monitor boxes in 2020 because of COVID. When we resumed in 2021, we observed new phenomena—buried and abandoned nests with eggs resulting in fewer nestlings, fledglings, and captured females. Forty-four boxes had abandoned nests; 43 boxes had buried nests; 22 boxes had both. What changed to cause such a decrease in

productivity between 2018/2019 and 2021 which has continued into 2023 (and 2024)?

Dr. Reilly, my master bander, performed a deep dive into Google maps of the Northwest River area. Using the Google maps measuring tool, he was able to determine three recent successive clear cuttings of 529 acres along two edges of the Northwest River. Insights from Dr. Reilly in 2022:

The females are not evolutionarily programmed to sacrifice themselves versus sacrificing eggs and/or nestlings. The females will conserve themselves to continue to reproduce and extend their species.

One or more unknown stressors on the females on their Northwest River breeding grounds caused them to abandon their eggs, which may or may not have been buried under a new nest with eggs by the same or different female. Since females were not recaptured, volunteers could not determine if the same or different females laid eggs in subsequent nests. Incubating eggs and feeding young require incredible energy from the female. If the females are stressed and do not have the energy to incubate and raise young, then they will save themselves and sacrifice their eggs and young.

Migration for these new adults is very challenging at the end of the season. They fly 1500–3000 feet high and have difficulty negotiating the winds as they head south to Central and South America. Also, their habitat on their wintering grounds is disappearing as the mangrove swamps are destroyed to create shrimp farms in many areas. So, the adults face stressors on their wintering grounds as well.

Northwest River Park	2018	2019	2021	2022	2023
Boxes	83	84	84	84	82
Eggs laid	486	579	570	462	340 (est)
Nestlings banded	318	278	88	32	59
Fledged without banding (estimated)	51 (est)	105 (est)	65 (est)	35	45 (est)
Total # nestlings fledged (estimated)	369	383	153	67 (est)	104 (est)
% Fledged, of eggs laid	75% (est)	66% (est)	27% (est)	12% (est)	31% (est)
New adult females banded	29	30	26	13	24
Females recapped	42	46	15	4	4

With fewer Prothonotary Warbler fledglings at Northwest River for the past two years and fewer new birds migrating south to winter in another stressful environment, nesting success in coming years may continue to be low at Northwest River. The 2023 Prothonotary Warblers will be observed to see what effects the past two years have on the returning populations and their 2023 nesting success.

We hypothesize that a drastic reduction in the food supply around the river for the adults and the nestlings is the primary reason for the reduction in PROW productivity in the last four years. 2023 results were a bit improved but not even close to the 2018/2019 levels of productivity.

At Northwest River, we have two months of observations in the books for 2024, and this season could be the worst. The warblers should be finished with their first clutches by the end of May. So far, we have banded 17 PROW nestlings, one of which was found dead the following week. We have banded only 5 females and recaptured only 2 females. Sadly, we've found 21 dead nestlings and 32 abandoned/buried eggs. We'll be monitoring the second clutches in June and July. Will the females renest and lay more eggs? We'll find out.

Prothonotary Warblers are increasingly stressed by changes to their habitat on their wintering grounds and on their local breeding grounds. Even though the parks where they nest in boxes (and natural cavities) are protected, often the surrounding acres are not protected from changes from clear cutting, development, and agricultural uses.

The long-term data from Northwest River Prothonotary Warblers clearly demonstrate the risks for all our birds from habitat loss. Research and education are key.

This project truly takes a village. Many thanks to the volunteers who have cheerfully devoted many long hours to helping monitor all the PROW boxes at all the sites in the last 13 years (in alphabetical order): Nancy Barnhart, Donna Benson, Rick Brown, Barb Bucklin, Inge Curtis, Gary Driscole, Jim Easton, Lauren Ewell, Adrienne Frank, Babs Giffin, Geoff Giles, Sara Helmick (W&M Master Naturalist), Karen Hines, Deborah

Humphries, Cheryl Jacobson, Judy Jones, Judy Kinshaw-Ellis, Les Lawrence, Steve Living, Jan Lockwood, Patty Maloney, Christine Mason, Alex Minarik, Sue Mutell, Barb Neis, MJ O'Bryan, Sarah O'Reilly, Sharon Plocher, Susan Powell, Connie Reitz, Samantha Rogers (VCU Graduate Student), Brian Taber (CVWO President), Jennifer Trevino, Arlene Williams, Bill Williams, Deb Woodward, and Dave Youker.

NOTE: All handling and banding done with proper permits from the USGS Bird Banding Lab and Virginia Department of Wildlife Resources.



More about Prothonotary Warblers: vawildliferesearch.org/songbird-research allaboutbirds.org/guide/Prothonotary_Warbler



Pictured above: (1) Male Prothonotary Warbler, Northwest River, May 17, 2024. Photo by Shirley Devan. (2) Three volunteers ready to launch the canoe at Northwest River April 23. Photo provided by Shirley Devan.

Shorter Shares from HRC Members and Partners

Volunteers needed for 4-H Schoolyard Outreach —by Stephanie Schmuck

A program of the York-Poquoson Virginia Cooperative Extension is seeking more volunteers to support their efforts with the youth related environmental education, and gardening for wildlife, ecological health, and public education. See Stephanie's email to the HRC Google Group for more details. Currently Summer Stewards are needed for Tuesday mornings and Friday evenings to help tend native plant habitats at local schools. Contact Judy Turner at jodybynature@gmail.com if you are interested in this and additional opportunities related to local schools and gardens.



May 4 Native Plant Sale —by Mike Whitfield

Several members helped with the John Clayton Chapter of the Virginia Native Plant Society's (JCC-VNPS) 39th annual plant sale. Boy Scout Troop103 provided helpers to unload plants and load plants into customer vehicles. Pictured above is Adrienne Frank, HRC member and JCC-VNPS Plant Sale Chair, during the 4.5-hour event which was held at the Williamsburg Community Building.

The plant sale was the culmination of many helpers' efforts since the beginning of the year. Proceeds go to youth nature camp scholarships.



May 4 Outreach at Farm Day—by Shirley Devan

HRC Outreach joined the Williamsburg Community Growers (WCG) for their annual Farm Day. The free event was hosted at the WCG 10-acre urban farm and community garden, located between Warhill High School and Warhill Sports Complex, and featured self-guided eco tours, education stations, and a garden workshop. Pictured left to right: Janet Harper, Shirley Devan, and Linda Cole.



May 8 Oyster Spotlight at HRC Meeting—by C. White

Jackie Shannon, Virginia Oyster Restoration Manager for the Chesapeake Bay Foundation (CBF), spoke on the history of oysters in the bay and oyster gardening for CBF during the speaker portion of the May HRC General Meeting. If you would like to view the recording for continuing

education (CE) credit use the link in Janet Harper's May 9 email.

During the business portion of the meeting, it was announced that the chapter approved funds to sponsor two sets of oysters for the 2024-2025 CBF oyster gardening season at New Quarter Park. If you are interested in joining the current team of oyster gardeners contact Judy Tucker and Claire White. The HRC oyster gardening team currently meets at 6:30pm on Monday nights.



May 14 PCP Litter Pickup —by Lisa Cumming

The May 14th litter pick up crew for Powhatan Creek Park (PCP) included Bob Kaplan, Jeanette Navia, Keith Navia, Les Lawrence, Frank Smith, and George Sallwasser, pictured left to right in front of a canoe planter at the park.

NABA Butterfly Counts —by Adrienne Frank

NO EXPERIENCE IS NECESSARY!!! If you wish to participate, contact the compiler to volunteer in any of the 2024 North American Butterfly Association (NABA) Coastal Region Butterfly Counts. There may be a \$3/person registration fee with each count but check with the compiler to be sure. Many organizations cover the cost for the volunteer.

On the linked webpage zoom into the Williamsburg area on the map to see nearby counts. Click on the icons to see the count name and compiler contact information or refer to Adrienne's original email on the HRC Google Group for contact information.

Tuesday, June 25: George Washington's Birthplace

Saturday, July 13: Great Dismal Swamp

Sunday, July 14: Chippokes Plantation State Park

Sunday, July 28: Delmarva Tip

Tuesday, July 30: Northumberland-Lancaster

Saturday, August 3: Williamsburg

Saturday, August 24: Middle Peninsula

Tuesday, August 27: Dragon Run



May 20 YRSP Wildlife Mapping Photography —by Shirley Devan

On May 20th at the weekly Monday morning Wildlife Mapping at York River State Park (YRSP), Shirley Devan captured the above photo of a Redshouldered hawk (Buteo lineatus) chick. Shirley noted that the chick looks like she has been fed recently and has a full crop. Other photos captured that day included a Blue Grosbeak perched in a wildflower meadow, a Crappie fish caught by an angler, an owlet moth, Fowler's toad, King Snake, Southern Leopard frog, and many species of butterflies (Buckeye, Sulphur, and Red Admiral).



Purple Martin Project—by Cheryl Jacobson, Shan Gill

As of May 26th, the Purple Martin Project is doing very well this spring. Between the Chickahominy Riverfront Park and Fords Colony we have 147 eggs at this time. The birds are still building nests and laying more eggs. For example, at the Chickahominy there are an additional 6 nests actively being built with the birds constantly bringing in leaves. In some of the completed nests the birds have just begun to lay their eggs with only 1 or 2 eggs so far in some of the nests. We will keep you updated as the season progresses.



May 27 Black Birder Event Prep—by Barb Creel

Several HRC members signed up to help celebrate Black Birders Week at York River State Park (YRSP) with a Memorial Day birding event in honor of noted naturalist Dr. Ernest Just. This scientist was also a founder of fraternal organization that promotes friendship. HRC co-sponsor John Gresham and HRC member Dean Shostak worked together to organize the event. Unfortunately storms and rain prevented birders from exploring YRSP.

Pictured left to right: Joanne Sheffield, Lisa Nickel, Dean Shostak, Bill Weldon, Valerie Shostak, Babs Giffin, Janet Harper, Bill Harper, and John Gresham. Not pictured: Barb Creel, Nancy Barnhardt, Seth Ring (YRSP Intern).

Cicadas Clamor in Williamsburg by Claire White



On April 30th Marie Robertson, and I asked HRC members to share their periodical cicada (genus *Magicicada*) findings during the month of May. We are in the beginning stages of preparing a cicada theme for our BugFest display in September that features both periodical and annual cicadas. HRC sightings started coming in immediately and most mass sightings shared were west of Route 199, but some cicada sightings were gathered from the eastern side of town. It will be interesting to learn more about the species that can be verified as having emerged this spring in our area. In my search to understand more about various periodical species I learned from the University of Connecticut website

that some periodical cicadas can be "off-schedule" by one or more years and are called straggling or spurious. Keep sharing your photos and exoskeletons, and if you're interested in volunteering for BugFest let us know this summer. In the meantime check out Wendy Nelson's cicada photographs (one pictured above) from her cicada blog posts (*They're Here!!*, *Puberty is Rough!!*, and *Just a Shell...*).

The Virginia Master Naturalist Program is a statewide corps of volunteers providing education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities. Interested Virginians become Master Naturalists through training and volunteer service. The program is jointly sponsored by seven state organizations and based in the Department of Forest Resources and Environmental Conservation within the College of Natural Resources and Environment at Virginia Tech.

Learn more about our chapter at historicrivers.org

The Naturalist is the monthly newsletter of the Historic River Chapter (HRC) of Virginia Master Naturalists. Other organizations may not publish material from the newsletter without express permission from the chapter. Newsletter contributions should be emailed to HRCeNewsletter@gmail.com by the end of the month. If you have a submission in the works, please notify the newsletter editor. Photos should include concise captions and credits to photographer(s).





Bonus picture: Juvenile blue crab (Callinectes sapidus) gently held in place under shoe sole after being removed from oyster gardening cage at New Quarter Park dock on 05/28/24 by Claire White.

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