SINCE 1976 THE FRIENDS OF DYKE MARSH SPRING 2021



### **FODM Spring Meeting**

Wednesday, May 26, at 7:00 p.m., see page 1.

# **2021 FODM Meetings** May 26, October 20 at 7 p.m.

#### Calendar of Events

Given the uncertainty posed by the coronavirus, many of our 2021 events are undecided at this time.

May 8 and 22, 10 a.m. to 12 noon - Remove ivy from trees and invasive plants in native plant site. See www.fodm.org and our Facebook page for details and registration.

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# The Potomac River: Its Health and Challenges

While the Potomac River is much improved since then-President Lyndon Johnson called it "a national disgrace" in 1965, it's still not safe for swimming or fishing and its recovery may be stalling.

On May 26, Hedrick Belin, President of the Potomac Conservancy, will discuss the latest Potomac River water quality results, including the 2020 Potomac Report Card (https://potomacreportcard.org/). He will talk about challenges facing the river and how citizen activism is offering new opportunities to protect water quality.

Deforestation is stripping the land's ability to absorb polluted rainwater and a warming climate is making storms more intense. If left unchecked, polluted urban and suburban runoff could undo decades of progress to return clean waterways to our communities.

FODM welcomes cosponsors the Four Mile Run Conservancy Foundation, Porto Vecchio Condominium, the



The Potomac River as it flows by Hunting Creek near the Dyke Marsh Wildlife Preserve. Photo by T.D. Hobart

Friends of Little Hunting Creek, the Friends of Mason Neck State Park and the Society for Conservation Biology, Washington, D.C., chapter.

This Zoom program is free and open to the public. Please register at www.fodm.org (home page, left side).

## **NPS Announces Parkway Safety Study**

The National Park Service (NPS) on April 5 issued a safety study of the south parkway, the 6.3 miles between Belle Haven Road and Mount Vernon Estate. NPS's 2014 and 2019 statistics show that from 70 to 85 percent of drivers exceed the posted speed limit, creating many dangers.

NPS proposes several near-term and long-term changes, depending on available resources. FODM recommended that NPS retain the parkway's historic character, "keep it green" and avoid degrading valuable habitat.

Built to commemorate the bicentennial of George Washington's birth, the

parkway is listed on the National Register of Historic Places. To read the study, visit https://parkplanning.nps.gov/projectHome.cfm?projectID=89079.



Scenic view of the parkway's stone bridge in spring. Photo by NPS

### A Tribute to Pat Salamone

#### BY GLENDA C. BOOTH

Pat Salamone, our FODM treasurer. passed away on March 19, 2021, after a brave battle with cancer. Pat was a devoted, valued member of our Board of Directors, a woman of quiet strength who made many contribu-She served as tions. treasurer, wrote articles the marsh's



Pat Salamone with the plants at Dyke Marsh. Photo by G. Booth

plants for the Marsh Wren, led fall colors walks and helped prepare some of our materials. Pat was also an active member of the Virginia Native Plant Society. One of her friends called her "a quiet do-gooder."

Pat went to Thomas Edison High School, earned her bachelor's degree from the Worcester Polytechnical Institute and a master's from Boston College and did doctoral studies there. In 1984, she began working at the MITRE Corporation where she spent her entire career and earned numerous awards. She worked on projects like the Air Force's Global Air Traffic Management; National Oceanic and Atmospheric Administration's Observing Systems Architecture project; the Office of the Director of National Intelligence, Director of Science and Technology; and the Army's Blast Injury Research Program. A work colleague said, "There was no problem she would not approach."

Her death leaves a big void in the Friends of Dyke Marsh. Donations may be made in her memory to an organization of your choice.

## Kym Hall, New NPS/NCA Director

FODM welcomes Kym Hall as the National Park Service's (NPS) new National Capital Area (NCA) Director.

A 34-year NPS employee, Hall is responsible for 16 superintendents, including the superintendent of the George Washington Memorial Parkway, 1,000 employ-



New NPS/NCA Director Kym Hall. Photo by NPS

ees and an approximately \$350 million budget for the area's nearly 65,000 acres of parkland. The region includes, for example, the National Mall, Washington monuments and the White House and stretches from Fort Washington on the eastern Potomac River shoreline to Maryland's Catoctin Mountain Park in Thurmont and Antietam National Battlefield in Sharpsburg.

Hall came to this position from a six-year tenure as the superintendent of Virginia's Colonial National Historical Park and Captain John Smith Chesapeake National Historic Trail, which included responsibility for Fort Monroe National Monument, Historic Jamestown and Yorktown Battlefield. She was instrumental in organizing the multi-year, multi-park commemoration of the 400th anniversary of recognizing the first enslaved Africans landing in English-occupied North America in 1619 near today's Fort Monroe.

She has worked at Olympic National Park, Cape Hatteras National Seashore, Wright Brothers National Memorial, Fort Raleigh National Historic Site, Glacier National Park and Glen Canyon National Recreation Area. She also worked in the NPS's national office and as a special assis-

KYM HALL (continued on page 7)

## Editor:

**Dorothy McManus** 

#### **Assistant Editor:**

T. D. Hobart

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# Friends of Dyke Marsh Board of Directors

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**Board members can receive emails at info@fodm.org**. *The Marsh Wren* is a quarterly publication of the Friends of Dyke Marsh, Inc., a nonprofit 501(c)(3) organization. Letters and submissions to *The Marsh Wren* are welcome. Send them to the address at left. Special thanks to Duncan Hobart for managing our website (www.fodm.org).



# President's Message

## Glenda C. Booth, President, Friends of Dyke Marsh

The spatterdock has emerged, the ospreys are back, mayapple carpets the forest floor and spring is well underway.

Woodpeckers have specially

adapted beaks to excavate cavities, but chickadees? Excellent photographer, FODMer Jane Gamble captured a Carolina chickadee "excavating" a tree cavity, removing a mouthful of sawdust from a cavity along the Haul Road trail on March 21. "I saw it make several trips to the cavity and come out each time with a large mouthful of dust which it dropped nearby," she emailed.

Dyke Marsh again has three active bald eagle nests. Unfortunately, Northern Virginia lost two bald eagles on February 17 when they died just a few miles west of the



Two dead bald eagles with interlocked talons, found in the Mount Vernon area on February 17, 2021. Photo by Daniel Weinberg

marsh. Passersby found the two with their talons locked together and one bird appeared to have a burned tail feather. Katherine Edwards, Fairfax County's wildlife biologist, speculated that the eagles died by colliding with a power line while interlocked during what's called "a talon-grappling display." "They are known to engage in talongrappling and tumbling displays (also known as "talon-clasping" "cartwheel displays") that are thought to be involved with either territorial de-

fense or courtship," she explained.

#### **Hooray for Volunteers**

Hats off to volunteers! We've had an outpouring of people helping clip English ivy off trees to save them. This year, we have collected a whopping 136 bags of ivy, as of April 10 from the Haul Road, west Dyke Marsh, Belle Haven Park, the Marina Road and the bicycle trail across from Tulane Drive. Thank you, thank you. Starting in June, we'll resume invasive plant control at the native plant site.

We value volunteers for many reasons. We've learned that one volunteer hour is worth \$27.20 per hour, according to Independent Sector. Visit www:independentsector.org.

"At our current population density, we are committed to actively managing the planet on which we live; we have no planet to which to retreat should we err.." -- H.H. Shugart

Parkway staff use our volunteer statistics to compete for funds to purchase tools and for other activities.

Be sure to complete the NPS volunteer service agreement form. By signing the form, you are covered by the Federal Employees Compensation Act in case you are injured while volunteering.



FODMer Patty McCarthy, a dedicated volunteer, holds a mature English ivy vine with berries. FODMers try to prevent the ivy from getting to this stage. Photo by Glenda Booth

#### **Closed Restrooms**

Many people are disappointed that the new concessioner of the Belle Haven Marina, with the concurrence of the Park Service, has locked the public restrooms and is restricting use to marina slip holders. We have expressed our objections and will continue to do so.

#### **New Leadership**

We're eager to learn who the next director of the National Park Service will be. The new Department of Interior (DOI) Secretary Debra Haaland opened her February 23, Senate confirmation hearing testimony by acknowledging that Washington, D. C., is on the ancestral lands of the Nakochtank, Anacostan and Piscataway people. The first native American to serve as a Cabinet Secretary, she told senators, "It was in the cornfields with my grandfather where I learned the importance of water and protecting our resources and where I gained a deep respect for the Earth. I will ensure that DOI's decisions are based on science and be a fierce advocate for our public lands. If an indigenous woman from humble beginnings can be confirmed as Secretary of the Interior, our country holds promise for everyone."

Maine Senator Angus King is the new chair of the Senate National Parks Subcommittee. Senator King grew up in Alexandria, graduated from the former Hammond High School and got a law degree from the University of Virginia. The senator said, "I think we need to talk about where we want the parks to be in 25 years. This is the thrill of a lifetime to be the chair of this subcommittee. I've been working on land conservation and outdoor issues since 1987."

# Glenda C. Booth

Glenda C. Booth is the president of the Friends of Dyke Marsh and active in conservation issues in Virginia.

## **Periodical Cicadas**

We are publishing this article with permission from the author, Alonso Abugattas, Natural Resources Manager, Arlington Department of Parks and Recreation. He writes an online blog, the Capital Naturalist (http://capitalnaturalist.blogspot.com/), in which he "reveals some of the wonders of the natural world found right around the Washington, D.C., metropolitan area."

They're coming! And in a BIG way! Billions of periodical cicadas will be emerging from mid April to the beginning of June after spending 17 years underground! These are different from the many species of annual cicadas which grace us with their songs each summer. Though each individual annual cicada lives 2-5 years underground before emerging, they're life cycles are staggered so we get some each year. Most annuals emerge after the last of the periodicals have finished reproducing.

Periodical cicadas emerge on prime numbered years, either 13 or 17. The 13 year ones are restricted to the South.



Periodical burrows and a molt.

There are a couple of theories why this is. One has to do with the ice ages during the Pleistocene Epoch 1.8 million years ago. Summers then were believed to be cyclical, with warmer summers each 13 or 17 years. While underground the tem-

peratures were regulated, the adults emerged on these warmer years. This was a good adaptation as no predators could evolve to take advantage of them emerging so far apart. By all of them emerging in synchronization over a short time period, when ground temperatures reach 64 degrees Fahrenheit in a sustained pattern, usually after a rain, they overwhelm the predators that remain. Through what is called predator satiation, where animals who would eat them are flooded with so many cicadas that they can consume only a small amount, reducing the probability of an individual being eaten, many survive to lay eggs.

The cicadas that emerge together in the same year are collectively called a "Brood" which are labeled with Roman numerals. There were at one time 17 broods in North America, but now some are now extinct. Take for example Brood XI which was last seen in Connecticut in 1954. The ones emerging in the DMV and other parts are parts of Brood X, the Great Eastern Brood. This is one of the larger and most widespread of them. For the first time since 2004, periodical cicadas will emerge in parts of Delaware, Georgia, Illinois, Indiana, Kentucky, Maryland, Michigan, North Carolina, New Jersey, New York (though almost extinct (extirpated) here), Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Washington, DC.

While there are 3,000 species of cicadas (Latin for "tree cricket"), periodical cicadas are a rarity, with only North

America having them. This is a natural phenomenon where cicadas form huge choruses by species. For while they may seem the same, there are actually three species that emerge together to then attract their specific females. Each male



Periodical cicadas will be emerging from mid April to June.

chorus (for only the males call) has its own species specific songs to attract their mates and they group together for best effect. They last for 5-6 weeks as adults. You will start to notice the burrows as they emerge, or occasionally chimneys that they form when digging out and then the empty molts of old skins from the emerging nymphs. Most periodical cicadas have red eyes, but some also have white or grey eyes.

Brood X includes these three species, which are not always easy to tell apart. The Pharaoh cicadas, Magicicada septendecim, are the largest and the ones that can be found the furthest north of all the periodical cicadas. They are characterized by their broad orange stripes on their abdomen, the patch of orange between their eyes and wing, and of course their species specific song that they all have. The Dwarf cicada, Magicicada cassini, or Cassini's periodical cicada, is smaller, has no orange between the eye and wing, and usually an all black abdomen. The Decula cicada, Magicicada septendecula, is similar in size to the dwarf Cassini, also lacks an orange patch between the eye and wing, and has some orange on its abdomen. The last two are easily confused. They of course have species specific calls. While the 13 year periodical cicadas are often treated as different species, many now think they're variations of these three species that come out in their own broods of 13 years.

Periodical cicadas, no matter which species, are often called locusts. Actual locust are grasshoppers, so why did they call cicadas locust? This goes back to the first time that a brood was seen by European settlers. In 1633, in the Plymouth colony in Massachusetts, a large emergence of periodical cicadas was reported. This was shortly followed by what they called a "pestilent fever" that raged through the colony and the Indian neighbors. This was close enough to the biblical plagues that included locusts in huge numbers to ensure that name for them. It was a new experience for the colonists and the only thing they could compare it was the locust plagues of the bible.

And though the biblical proportions of the cicadas is still hard to believe, and though they pale in comparison to what they used to be, the billions that will arrive will be of epic proportions. Cicadas are known to be among the loudest of insects. Choruses of males singing can reach from

CICADAS (continued on page 5)

#### CICADAS (continued from page 4)

100-120 decibels. This is enough to affect many people with sensitive hearing. This as loud as a rock concert, but will last for many, many days. Interestingly enough, the sound of leaf blowers, power tools, and lawn mowers may attract them. Such chores are best left to early morning or late after noon to avoid any such confusion.

The females twitch their wings in response to the males songs when they accept a male to mate with. Once they've mated, the females search for places to lay their eggs. While adult cicadas don't really feed, except for some harmless sucking of some plant sap, the egg laying is what people worry about. For the 3-4 week adult life span, mated female cicadas use their ovipositors to slice into pencil-sized twigs to lay their eggs. They lay 24-48 eggs into the slits they carve out until they reach the 600 more so eggs they're allotted

The egg laying inside these slender twigs causes many to die off. They often wilt and hang down, while others may break off. The wilted and hanging branches are referred to as flagging. Cicadas are picky as to which tree (they don't disturb plants or ferns) they choose to insert their eggs in. They are usually 6 feet or more tall, mostly at the edge of mature woods, where's there some sun, and usually have pencil-sized stems to oviposit in. They tend to avoid lawn areas with small shrubs unless they're near mature woods. For those people who were around the last time cicadas emerged, they normally use the same places to try and lay eggs again. They don't like to use any evergreens, sumacs, pawpaws, many viburnums, euonymus, or Osage orange. Studies have shown that healthy trees don't show long term ill affects. Think of it as natural pruning that has been going on for millennia. If you do want to be cautious, leave your tree planting until the fall. Or protect your trees with 1.0cm netting (but beware that this may trap birds and snakes), but



A house sparrow feeds on a periodical cicada.

make sure they don't get branches poking through and remove then when the egg laying is done. It can also affect pollination efforts by other insects. One thing that did not help was the use of pesticides. Studies have shown that this did not make a difference in egg laying. The

young nymphs hatch out after 6-10 weeks and burrow underground to feed on tree roots for 17 years.

Now many animals feast on the cicadas, including things you don't normally think of eating them such as squirrels, chipmunks, turkeys, and even copperheads. Many animals, especially birds, will benefit and rear more young due to the extra food supply. Dogs and cats will also feed on them, and this where you may want to be cautious. Cicadas are edible (more on that in a second), but eating too many of the hard shells may cause digestive issues in pets. They do

make good bait as some people have learned. I caught a huge carp on one that had decided to surface feed.

So I did mention they were edible, which includes by people? The native American tribes would consume them when they were available. They've been called the "shrimp of the land" and that is true. They are both arthropods and can make good meals. Just be aware if your allergic to shell-fish, and that at least one study has shown that they accumulate mercury. People every year start to practice entomophagy (eating of insects) when they appear. Don't be surprised to see some of the local restaurants including them on their

menus. It's not just countless wildlife species who relish them.

Cicadas are gluten free, low in fat, low carb, rich in protein (the same pound for pound as beef). They've been grilled. skewered, steamed. barbecued. blanched, boiled. blanched, and used in cocktails. My old boss would fill the empty skins with Cheez Whiz and serve them as appetizers. But there are a few things you want to know if trying them (I



A freshly emerged, or teneral, cicada, still white and soft.

know I will again!). First of all, they are best when their teneral, meaning freshly molted adults. Get them while their white and soft, before the chitin on their shells have hardened, you don't need all that crunch. Collect them from places that have not been exposed to pesticides and herbicides. As they come up from the ground at night and in the early morning to climb anything they can molt on, that's the best time to get them. Pull off the legs and wings as well. With a bit of Old Bay, they really do taste like seafood. You can see eat one here: (15) Capital Naturalist: Eating Cicadas - YouTube.

Periodical cicadas emerge and mate well before cicada killers emerge to paralyze the annual green ones to feed their young. More on cicada killers in this blog I put together: Capital Naturalist by Alonso Abugattas: Cicada Killers or Cicada Hawks. One thing that periodical cicadas can't elude is the Massospora fungi that infects them. This fungus fills their abdomens and destroys their ability to reproduce. Sometimes the entire abdomen falls off.

So some of you may remember seeing some earlier than the 17 years. This pre-emergence happens quite a bit. These stragglers, as they're called, usually come especially come out 4 years earlier. This has led to the theory that these actually may be the 13 year ones that some classify as different species. For more on this, check out this blog I did on them: Capital Naturalist by Alonso Abugattas: Periodical Cicadas Early Emergence.

So enjoy this natural phenomenon while you can. These "locust" don't spread disease or eat our crops. They can pro-

CICADAS (continued on page 7)

# Meet the Plants of Dyke Marsh -- Orange Jewelweed

#### BY ELIZABETH F. WELLS

Orange jewelweed or touch-me-not (*Impatiens capensis* in the *Balsaminaceae* family) is a succulent-stemmed, native, annual herb growing to five feet tall, abundant in shallow tidal water on both sides of the wooden bridge of the bike path across the Gut and near the boardwalk and wooden bridge on the Haul Road.

The plants have spurred, bilaterally symmetrically, orange, spotted flowers about an inch long, with a slender spur about one-quarter inch long and folded completely back under the flower. The flowers dangle from slender stems called pedicels in the axils of alternate, simple, elliptic to elliptic-ovate leaves. The size of the flower offers a perfect fit for a large solitary bee such as a bumble bee, which enters the flower, crawls to the back and extends its proboscis into the spur to collect the nectar which is secreted in the spur. The bee pollinates the flower in the process of retrieving the nectar. The mature fruit is a capsule, which dehisces explosively and scatters the seeds when touched gently, giving the plant one of its common names.

Orange jewelweed flowers from May until frost. Early in the season capsules are frequently found without evident

flowering, apparently from early self-pollination within cleistogamous flowers that never open.

Touch-me-not is common in moist shady woods. ditches and freshwater marshes throughout eastern North America from Canada (Newfoundland and Quebec) south to South Carolina, Alabama and Oklahoma. It is found in every county of Virginia. A related but more infrequent plant, yellow touch-me-not (Impatiens pallida), is also found in similar habitats throughout its



Orange jewelweed flower. Photo by R.W. Smith, Lady Bird Johnson Wildflower Center

range, but is not found in Dyke Marsh.

The juice in the stem of orange jewelweed and yellow jewelweed can be used to prevent the rash caused by poison ivy, to wash the oil of poison ivy off the skin and to relieve the itch of the rash.

## **GWMP Superintendent's Report**



Charles Cuvelier. Photo by N.P.S.

#### BY CHARLES CUVELIER

Thanks for the opportunity to provide an update on several park activities. In response to a Friends of Dyke Marsh request, the park hosted weed warrior training in March and April. I hope some of you participated and will join the dedicated friends who continue the great work of keeping invasive plants out of Dyke Marsh. The FODM website page describing volun-

teers' work at the Dyke Marsh native plant site is a great way to share the story of your ongoing efforts at the marsh.

Keep an eye out in the Alexandria Times for the public notice associated with the park's application for a permit from the Virginia Marine Resources Commission for the next phase of the Dyke Marsh Restoration Project. Once the notice appears in the paper, the public has 15 days to send in any comments. The application process continues to move steady forward.

Aaron LaRocca has returned to the park after serving as the acting Superintendent at Fort McHenry. We welcome him back in his role as Chief of Staff and thank Jaime Boyle for her service during the last two months. Jaime successfully helped us prepare and release the South Turkey Run Concept Plan. The plan includes a framework and set of concepts that will help the NPS make future management decisions at that location. You can learn more about these concepts at https://parkplanning.nps.gov/document.cfm? documentID=111225.

The park also shared with the public the South GWM Parkway safety study. U. S. Representative Don Beyer advocated for the study on behalf of the community to address your safety concerns. In addition to the press release and media inquiries, we have spoken with nearly 70 members of the community. We were invited to the Mount Vernon Council of Citizens' Associations combined Transportation and Public Safety Committee meeting. We also engaged our local, state, and federal officials regarding the study. We will be awarding a contract this year to stripe the south parkway and implement the road diet as part of the project. Between Tulane Drive and Stratford Lane, we will change markings so that there will be three travel lanes (two north-bound, one southbound and one center turn lane). The re-

port has a lot of data, information, analysis and recommendations for the park to consider and implement. You can read the complete report and appendices at https://parkplanning.nps.gov/projectHome.cfm?projectID=89079.



FODM volunteers clear invasive plants. Photo by G. Booth

#### **Books for Conservationists**

Georgetown University professor Edd Barrows, a biologist who has conducted research and led walks in Dyke Marsh, has a new book, titled *The Washington, D. C., Area Ecosystem 2021*, which includes information on Dyke Marsh. For ordering information, please go to https://biology.georgetown.edu/.



Dr. Edd Barrows teaches his students in Dyke Marsh. Photo by Glenda Booth

Another gem of a book is *The Reptiles and Amphibians of the Washington, D. C., Metropolitan Area* by Alonso Abugattas. A "must have" guide for nature lovers, it includes details and photos of area reptiles and amphibians. Post-covid, we hope to have more Alonso-led walks in Dyke Marsh. It is available here: https://audubon-naturalist-society.square.site/product/reptiles-amphibians-of-dc-md-va/183? cp=true&sa=false&sbp=false&q=true.

#### **KYM HALL** (continued from page 2)

tant to the Assistant Secretary for Fish and Wildlife and Parks.

In a NPS press release, Hall said, "I'm eager to return to our nation's capital to support the parks and programs as they work to carry out the NPS mission, manage complex projects, reduce our maintenance backlog and preserve and share the stories of some of the most iconic sites in our country."

#### **Welcome New FODM Members**

FODM welcomes our **new members** Jerry Andersen, Christina Barbour, Susan Berry, Jill Bloom, Terry Brown, Yongjing Jin and Jian Qin Cao, John Culbertson, Deborah Davidson, Jack Ferry, Wiley Grant, Scott Harman, Christine Heiby, Devin Horne, Fred Hufford, Stephen Hunt, Charlie and Lynne Lindsey, Samuel Lum, David Malakoff, Solomon Morgenstern, Michelle Moses, Randy Myers, Ashlin Oglesby-Neal, Patterson Oh, Michaela Oldfield, Rose Presser, Danette Rodriguez, Judy Scherer, Bryan Scott, Gary Shinners, Maggie Siddle, Emily Smith, Kaye Titerence and Jim Waggener. And welcome **new Life Members** Marshall Kofler, Meriel Oconor and Andrew Norberg and conversions to **Life Membership** Helen Abadzi, Marie Canny and Laurie Fulton.

U.S. Park Police, Emergency Number: 202-610-7500

**CICADAS** (continued from page 5)

vide benefits such as aerating the soil or providing food for countless creatures. The next time we can hear and see this unique event won't be until 2038.

WATER (continued from page 8)

assist on Wednesdays or Thursdays during the daytime. Visit https://www.potomacriverkeepernetwork.org/ for more information.

PRKN welcomes volunteers in activities like stream cleanups, participating in rapid response to investigate pollution incidents and on-the-water recreational trips, which we call RiverPalooza. For more information, please see their website at https://www.potomacriverkeepernetwork.org/.

## **FODM Membership - Dues and Contributions**

Support the Friends of Dyke Marsh by becoming a member or renewing your membership. Benefits include the Friends' quarterly publication. The Marsh Wren: membership meetings with knowledgeable speakers; Sunday morning bird walks and notification of activities in and around the marsh. Most importantly, your membership lends your voice in support of the Dyke Marsh Wildlife Preserve and our efforts to advocate for full restoration of the marsh. Just click on the "Join" or "Donate" button on our membership page at www.fodm.org to make your taxdeductible contribution by credit card or from your bank account securely through PayPal. For help, info@fodm.org. If you prefer, you can send a check, payable to FODM, P.O. Box 7183, Alexandria, Virginia 22307. The annual dues are \$15.00 per household, \$250.00 for life membership for an individual. You will receive a notice by mail or by email when your renewal is due. A financial statement is available upon written request from the Virginia Office of Charitable and Regulatory Programs. Thank you for your support of FODM.

DUES AMOUNT		\$
ADDITIONAL CONTRIB	UTION	\$
TOTAL AMOUNT ENCL	OSED	\$
NAME		
ADDRESS		
CITY	_STATE	ZIP
TELEPHONE NUMBER		
EMAIL ADDRESS		

Please address any questions or comments about *The Marsh Wren* to Dorothy McManus and about membership to Bob Veltkamp. You may contact them by mail at FODM, P.O. Box 7183, Alexandria, Virginia 22307 -7183, by telephone or by email (see page 2).

# **Testing the River's Water Quality**

### BY NANCY STONER President, Potomac Riverkeeper Network

The Friends of Dyke Marsh and Potomac Riverkeeper Network (PRKN) have worked together for many years to stop pollution flowing into the Potomac River and to en-

hance access to the beauty and wonder of places along the river like Dyke Marsh.

In 2019, Potomac Riverkeeper Network began a community science water quality monitoring program to test public access points along the river for bacterial contamination so that river users would know whether it is safe to go into the water. PRKN collects water samples from May until the

end of September every year, including a site at the Belle Haven Marina and posts the results weekly on Swim Guide at https://www.theswimguide.org/affiliates/potomacriverkeeper-network/. During 2020, PRKN's volunteers took samples at 16 different locations, including tributaries up and down the Potomac. In 2019, of the 20 days of sampling, six samples exceeded the threshold of E. coli present

in the water with a count over 235 as indicated in the red on SwimGuide. This gave the Belle Haven Marina site a pass rate of 14/20 or 70 percent, which means that 30 percent of the time, the site had too much bacteria in the water to be safe for water-based recreation

In the 2020 update, PRKN used a similar process and collected 20 samples on different days. The good news is that 2020 had only three sites where the E. coli count was higher than 235 making the pass rate 17/20 or 85 percent. Compared to 2019's pass rate of 70 percent, the percent of pass increased by 15 percent. While this is a positive trend,

there is enough variability that additional sampling is needed to see whether the river in the Belle Haven area is actually getting safer for swimmers.

To help monitor the water quality, you can take PRKN's online training, starting May 5. Volunteers must be certified, must be 18 or older and must be available to

**WATER** (continued on page 7)





The Friends of Dyke Marsh P.O. Box 7183 Alexandria, VA 22307-7183