

SINCE 1976

THE FRIENDS OF DYKE MARSH

SPRING 2019



FODM Quarterly Meeting Wednesday, May 15, at 7:30 p.m., Huntley Meadows Park, Norma Hoffman Visitor Center, 3701 Lockheed Blvd., Alexandria, VA 22306. Phone 703 768-2525. Free to all.

2019 FODM Meetings May 15, September 11, November 13. FODM will host an informal social 30 minutes before each meeting. Check fodm.org for locations.

Calendar of Events May 6 - Plant Natives, p.6. June 9 - Ecology Walk

CONTENTS		
FODMers Honored	2	
Congressman Dingell	2	
President's Message	3	
Nature Supports Life	4	
Vines of Dyke Marsh	5	
Plants of Dyke Marsh	6	
Spring Colors at DM	8	

Sea Level Rise

Its Impact on the Potomac River Shoreline Ecosystems

Please join the Friends of Dyke Marsh on Wednesday evening May 15 to hear Geoffrey Sanders, a National Park Service (NPS) biologist, give a presentation on the impact of sea level rise on Dyke Marsh and other shoreline communities based on modeling of several scenarios. His study concluded that "significant habitat changes are likely at Dyke Marsh as a result of rising water levels," including changes in vegetation.

From 1900 to 2017, sea levels rose about a foot and a half along the Chesapeake Bay, according to scientists at the Woods Hole Oceanographic Institution. An Old Dominion University study, "Climate Change, Global Warming and Ocean Levels," assumes a mid-range estimate of a 3.7-foot increase in sea level rise by 2100. Former Governor Tim Kaine's Commission on Climate Change in 2008 predicted that sea levels



Sea level rise impacts shorelines like Dyke Marsh. Photo by Glenda Booth

in the Chesapeake Bay region will be 2.3 to 5.2 feet higher by 2100.

The National Climate Assessment reported in November that "the impacts of climate change are intensifying across the country."

MEETING (continued on page 7)

Restoration Update

BY GLENDA BOOTH

Coastal Design and Construction, Inc., has been building the 1,500-foot breakwater in the south marsh since July 2018, under a contract with the U.S. Army Corps of Engineers, Baltimore District. The contractor has suspended work until July 1 because the construction permits have seasonal limitations to protect fish, birds and other wildlife during their breeding and migration season. Officials are now monitoring how the structure built to date is settling.

National Park Service (NPS) officials say that the foundation stone underwater is largely completed and that the visible armor stone above the water is one-third done. The breakwater's base is



The breakwater extends 1,500 feet into the marsh. Photo by Glenda Booth

primarily composed of what are called "marine mattresses." By February 11, 2019, the contractor had lowered 3,800

RESTORATION (continued on page 2)

FODMers Receive Awards

Congratulations to two outstanding FODMers! On April 1, the Steury family awarded FODM Vice President Ned Stone the 2019 Alexandria Citizen's Award for Natural Resources Stewardship.



Brent Steury commended Ned for his many successful efforts organizing trash cleanups, nonnative invasive plant

National Park Service's Brent Steury presents FODM vicepresident Ned Stone the 2019 Alexandria Citizens Award for Natural Resources Stewardship.

eradication projects, native plant restoration and reintroductions and for introducing the public to local wetlands. Ned is often seen in his kayak patrolling the Potomac River's AWARDS (continued on page 7)

RESTORATION (continued from page 1)

mattresses from a barge to the river's bottom, stacked one on top of another and placed armor stone on top.

In the meantime, NPS is developing proposed permit modifications in preparation for restoration's next phase.

U.S. Geological Survey and National Park Service (NPS) studies identified a breakwater in the southern marsh as the top priority. The breakwater is designed to replicate the historic promontory removed by dredgers between 1940 and 1972. Destroying the promontory altered the hydrology of the marsh. The breakwater would "redirect erosive flows in the marsh, particularly during strong storms and would re

Dyke Marsh Has Lost a Friend -Congressman John Dingell

Former U.S. Congressman John Dingell passed away on February 7 at age 92. The longest-serving member of Congress in U.S. history, he was elected to represent Michigan's 15th district in 1955 and retired in 2015.

Congressman Dingell was one of the key sponsors of the legislation that added the Dyke Marsh Wildlife



Congressman John Dingell at FODM's October 2009 celebration of the 1959 law.

Preserve to the national park system, a bill that became Public Law 86-41 in 1959. Congressman Dingell attended FODM's October 4, 2009, celebration of the 1959 law. At the event, he said that "Dyke Marsh is a beautiful piece of ground. I'm proud of what we did. Conservation requires constant vigilance and effort. The Friends of Dyke Marsh are making a tremendous contribution."

In a 2013 hand-written note, Congressman Dingell wrote us, "I am most pleased with what we see with Dyke Marsh. It is a treasure that I recall with pride. . . As you say, it will need protection against erosion and other natural threats. I am happy to be of help here. You have my best wishes. John"

-establish hydrologic conditions that would encourage sediment accretion," says the NPS 2014 plan.

The 2010 and 2013 U.S. Geological Survey studies concluded that without action Dyke Marsh will be completely gone by 2035.

Board Members

Ed Eder (Past President)

Bob Veltkamp (Membership)

David Barbour

Deborah Hammer

Laura Sebastianelli

Dixie Sommers

Editor:

Dorothy McManus

Assistant Editor: T. D. Hobart

Friends of Dyke Marsh P.O. Box 7183 Alexandria, VA 22307 info@fodm.org

Visit our website at www.fodm.org or on Facebook.com

Copyright © 2019, The Friends of Dyke Marsh, Inc. All rights reserved.

Friends of Dyke Marsh Board of Directors

President Glenda Booth 703-765-5233

Vice President Ned Stone 703-768-5441

Secretary Dorothy McManus (Marsh Wren) 703-960-3643

> **Treasurer** Pat Salamone 703-329-1748

Board members can receive email 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).

The Marsh Wren 🔅 Spring 2019



President's Message Glenda C. Booth, President, Friends of Dyke Marsh

Many FODMers and visitors are transfixed by the three active bald eagle (*Haliaeetus leucocephalus*) nests in Dyke Marsh this spring. Spring's renewal

lifts the spirits and brings people outdoors. We send a big thank you to all who came out for our Raptor Rapture and trash cleanup events.

At a meeting of national parks friends' groups in March, Grand Teton National Park Superintendent David Vela inspired attendees by saying "people believe passionately in protecting our nation's most special places," and added that the "Park Service cannot do its job" without friends' groups.

Keeping Sewage Out of Waterways

Thank you, Virginia General Assembly for approving \$25 million to help upgrade Alexandria's combined sewer system. This comes after local state legislators persuaded their colleagues to pass a bill, which Governor Ralph North-



Youngsters got to feel a fox

pelt on a visit to Dyke Marsh.

Photo by Glenda Booth

am signed, requiring the city to remediate the system by July 1, 2025. Alexandria's combined sewer system, dating to the late 1800s and largely in Old Town's 540-acres, collects both sanitary sewage and stormwater together. During most rain events, the stormwater-sewage

mixture flows untreat-

ed into the Potomac River and Dyke Marsh. As early as 2013, FODM urged the city to develop a better system and stop polluting the river. We had a representative, Dixie Sommers, on their stakeholder committee. Finally, long-overdue action has begun.

Alarming Apocalypses

Warnings continue to come from the scientific community. A fungus called chytridiomycosis is contributing to the decline of at least 501 amphibian species, especially frogs, according to a March 28 article in Science. Some species have likely become extinct and many more could,

"There is symbolic as well as actual beauty in the migration of the birds, the ebb and flow of the tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature – the assurance that dawn comes after night and spring after the winter."

-- Rachel Carson, The Sense of Wonder

the writers concluded. One author Jonathan warned, Kolby, "We've never before had a single disease that had the power to make multiple species extinct on multiple continents, all at the same time."



250 people attended our Raptor Rapture event at Belle Haven Park. Photo by Glenda Booth

"More than

40 percent of the world's insect species face possible extinction," reported the February 14 Washington Post summarizing a Biological Conservation Journal article. Calling it an "insect apocalypse," entomologist Michael S. Engel compared the declines to the game of Jenga: "You pull too many blocks from the tower, and it collapses. We remove one biological reserve here, we extirpate a series of species there, we pollute, we fragment, we introduce invasive species, all to the point of eventual catastrophe." It's all connected and our lives depend on insects' survival, he stressed. So think twice the next time you swat a bug. Hopefully, our native plant project can help a little. Send us photos of any insects you see there.

Get Outdoors

A February Aarhus University, Denmark, study, led by Kristine Engemann, measured vegetation around the childhood homes of nearly a million Danes born between 1985 and 2003.

"Children who grow up with greener surroundings have up to 55 percent less risk of developing various mental disorders later in life," including depression, eating disorders, anxiety and obsessive-compulsive disorder," the study concluded. Researchers adjusted for factors like a family history of mental illness or social disadvantage.

Ms. Engemann said, "There is increasing evidence that the natural environment plays a larger role for mental health than previously thought. Our study is important in giving us a better understanding of its importance across the broader population." The study did not attempt to explain why "green" bolsters mental health, but some speculate that green space filters unhealthy pollution, is calming, can relieve stress and provides exercise and socializing space. She urged urban planners to give more attention to green space. So, add to the Dyke Marsh Wildlife Preserve's other marvelous attributes, stress buster. Enjoy Dyke Marsh for your mental health!

Glenda C. Booth

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

Nature, Our Life Support System

BY GLENDA BOOTH

If you've ever taken penicillin for an infection, thank a fungus. Penicillin, an antibiotic that has treated bacterial infections since 1928, comes from the Penicillium fungi. Before 1928, common infections could be fatal. This is but one example of what are called "ecological services," the benefits that nature provides to people.

What Are Ecological Services?

Here is expert Robert Constanza's explanation: "Ecosystem functions refer variously to the habitat, biological or system properties or processes of ecosystems. Ecosystem goods (such as food) and services (such as waste assimilation) represent the benefits human populations derive, directly or indirectly, from ecosystem functions." Nature offers many examples of what for human beings is our "life support system."

Wetlands and Coastal Habitats

Wetlands like Dyke Marsh are like sponges that help control flooding. A one-acre wetland can store about three acre-feet of water or one million gallons, according to U.S. Environmental Protection Agency officials. Wetlands also filter pollutants and trap sediments and nutrients.

Natural defenses like wetlands cannot totally protect against ferocious storm events, like hurricanes, but marshes, underwater grasses, oyster beds, coral reefs, dunes and coastal forests can curb erosion, dissipate wave energy and absorb some flood waters. Stanford's Katie Arkema argues, "If we lose these defenses, we will either have to have massive investments in engineered defense or risk greater damage to millions of people and billions in property."

Wetlands are fish nurseries. "Around two-thirds of

commercial fish and shellfish most use wetlands tidal as spawning and nursery areas," noted Kathy Reshetiloff, U.S. Fish and Wildlife Service. "About one-third of the nation's threatened or endangered wildlife also depend on wetlands for habitat." Calling wetlands



Wetlands like Dyke Marsh are like sponges and help control flooding. Photo by D. McManus

"biological supermarkets," Dr. Kirk Havens, with the Virginia Institute for Marine Science, wrote, "In an area roughly the size of an average desk top, there can be as many as 8,300 animals."

Wetlands can absorb carbon dioxide, a major greenhouse gas. The Association of State Wetland Managers' website explains: "All types of wetlands are carbon sequestering systems (aka 'carbon sinks'), from temperate freshwater wetlands to boreal peatlands. That means that wetlands have the ability to store excess carbon (via photosynthesis) from the atmosphere – one of the primary components of greenhouse gases and a driver of climate change."

Plants and Trees

Plants provide food, fuel and wildlife habitat. They conserve soil, filter water and curb runoff. Plants are the source of many drugs. A 2001 Scientific American article by Kate Wong reports that "nearly half of all hupharmaceuticals man now in use were originally derived from natural sources."



An Eastern tiger swallowtail butterfly (*Papiol glaucus*) nectars on a hairy leafcup (*Smallanthus uvedalius*) plant. Photo by Glenda Booth

Forests reduce evaporation, enhance ground water restoration and absorb toxins and excess nutrients from runoff. Forests are also "carbon sinks," consuming more carbon than they emit. Trees also absorb pollutants like ozone, carbon monoxide and sulfur dioxide.

Trees can reduce glare and air conditioning costs and provide windbreaks. "Property values of landscaped homes are five to 20 percent higher than those of non-landscaped homes," International Society of Arboriculture officials estimate. Trees can lift the spirits. A University of Illinois study found that hospital patients recovered from surgery faster when they saw trees outside their hospital window. And of course, trees provide habitat for birds and other wildlife.

Insects

Renowned biologist Edmund O. Wilson calls insects the "little things that run the world." He wrote, "The truth is that we need invertebrates, but they don't need us. If human beings were to disappear tomorrow, the world would go on . . . But if invertebrates were to disappear, I doubt that the human species could last more than a few months. Most of the fishes, amphibians, birds and mammals would crash to extinction about that same time. Next . . . the bulk of the flowering plants . . . and the world would return to the state of a billion years ago. . . ." Bugs, beetles and butterflies pollinate fruits, nuts, crops and vegetables. Insects dispense seeds, aerate soils, recycle nutrients, eat waste and function as predators.

Birds and Bats

Birds dispense seeds that become food, plants and timber. Raptors control rodents. Vultures clean up roadkill. And how about this? Pennsylvania's 1914 health commissioner Samuel Dixon touted, "The duck is one of the greatest known enemies of the mosquito and therefore of yellow fever and malaria."

Bats pollinate, disperse seeds and can eat as many as 1,000 mosquitoes in an hour.

Economic Engines

Lakes, forests, mountains, meadows, coasts, preserves and parks provide jobs and recreation for outdoor enthusiasts. National parks alone contribute \$1 billion a year to NATURE (continued on page 5)

The Vines of Dyke Marsh

BY ED EDER

Eleven species of native grapes grow in Virginia and Dyke Marsh has some impressive examples of these vines growing over 100 feet in length and reaching the crowns of some of our riparian sweetgum and sycamore trees.

In March, Aleksandra Voznitza, a National Park Service staffer, coached members of the FODM invasive plant team on how to differentiate grape vines from the invasive, non-native porcelainberry (*Ampelopsis glandulosa var*.

brevipedunculata)



and Asiatic or Oriental bittersweet (*Celastrus orbiculatus*) vines. Porcelainberry bark has lenticels or small bumps; native grape vines have dark, shaggy, vertically-cleaved, stringy bark. Grape vines usually have

tendrils for clinging,

but they do not twine.

An eastern phoebe (*Sayomis phoebe*) sits on a native grape vine. Photo by Ed Eder

When cut, the pith of porcelainberry is white whereas in grape vines, the pith is brown.

Flower distribution in grapes is in large racemes, while porcelainberry flowers grow in tight clusters. Porcelainber-

NATURE (continued from page 4)

Virginia's economy, reports the Virginia Outdoors Plan. Valuing Ecosystem Services

The concept of ecological services poses questions like what is nature worth? Some debate whether we can put a dollar value on ecosystem services. "While it is often impossible to place an accurate monetary amount on ecosystem services, we can calculate some of the financial values. Many of these services are performed seemingly for 'free,' yet are worth many trillions of dollars. . .," argues the Ecological Society of America's (ESA) website, citing the Mississippi River Valley where natural flood protection has been undermined by draining and filling wetlands and reengineering channels.

Dr. Gretchen Daily, Stanford University professor and a founder of the Natural Capital Project, offers, "Despite their vital importance, ecosystem services are generally taken for granted, scarcely monitored, and, in many cases, undergoing rapid degradation and depletion. This has serious – and potentially catastrophic – consequences for human wellbeing."

Natural assets are not typically factored into budgets, profit-and-loss statements or balance sheets. "The economies of the Earth would grind to a halt without the services of ecological life-support systems, so in one sense their total NATURE (continued on page 6) ry leaves vary greatly in anatomy and are not as reliable for identification. Finally, the berries of the porcelainberry vary from ivory to turquoise and blue, whereas grape berries are usually black or glaucous-blue.





A northern flicker (*Colaptes auratus*) rests on a mature grape vine. Photo by Ed Eder

red-colored arils around a red-purple seed and are covered by orange and yellow capsules. The trunk of the vine is gray with an interwoven appearance. This vine has strong twining properties.

The FODM invasive plant control group tries to not damage native vines, including poison ivy (*Toxicodendron radicans*), plants that provide food and habitat for wildlife.

According to the National Park Service resource brief, winter grape (*Vitis vulpina*) is by far the most common species of grape found in our moist upland and bottomland habitats including Dyke Marsh. Vitis vulpina is known by some people as winter or frost grape because the acerbic tartness sweetens after the first frosts. It is also known as fox grape because foxes seem to like the fruit.

The Marsh Wren, Preserved at the Library

On a handsome mezzanine floor of the City of Fairfax Regional Library in downtown Fairfax is a great community resource, the Virginia Room, which houses a collection of "the historical record of the people, associations, events



and places of Fairfax County and the Commonwealth of Virginia." And the Friends of Dyke Marsh is there.

FODM sends every issue of *The Marsh Wren* to the Virginia Room and the library makes current copies available to the public in the reading room. We have provided Librarian Laura Wickstead past issues of the *Wren* going back to its first issues in 1988. The library has bound these volumes and placed them on their shelves for researchers and others interested in our history. Our newsletters join their other holdings such as genealogy books and databases, newspapers, maps, rare books, photographs, periodicals, records from the Revolutionary War, War of 1812 and more extensively the Civil War (primarily Confederate), as well as materials of sister organizations devoted to Fairfax County's and Northern Virginia's natural history. The library is open every day; check times before you visit at www.fairfaxcounty.gov/library/branches/virginia-room.

Meet the Plants of Dyke Marsh: Passionflower

Pennsylvania south, and as far west as Illinois.

Oklahoma, and Texas.

Its preferred habitat is

woodlands, forests, and

yellow passionflower,

which appear between

May and September,

have a complex struc-

ture that is hard to de-

scribe but fascinating to

look at. They have five

stamens surrounding a

central pistil in the mid-

dle of a fringe of long,

slender petals. They are

small (an inch or less

across) and, as you will

The blossoms of the

Nebraska,

Missouri.

thickets.

BY PATRICIA P. SALAMONE

The passionflower genus (*Passiflora*) includes some 500 species. Most of these species are found in Mexico and Central and South America, but a couple do make it to the Washington area. The yellow passionflower (*Passiflora lutea*) is the northernmost species of *Passiflora*, occurring slightly further north than the purple passionflower or maypop (*Passiflora incarnata*). Purple passionflower also grows in our area but is not, as far as I know, found in Dyke Marsh. (Let us know if you've seen it there.)

Yellow passionflower is a perennial herbaceous climbing or trailing vine that grows from 12 to 36 feet in length. It is native to the mid-Atlantic and southern U.S., from



Yellow passionflower vine in the Dyke Marsh native plant restoration area, staked up by volunteers. Photo by G. Booth

have guessed, yellow or greenish-yellow in color. The fruit is a marble-sized dark blue-purple berry.

The leaves have a pretty shape, being wide and smoothedged with three shallow palmate lobes tapering to rounded points, and turn yellow in the fall.

The yellow passionflower vine has considerable value to wildlife. The flowers provide nectar for butterflies and other insects, the fruit is eaten by birds and small mammals, and the leaves are a major food source for the caterpillars of several neotropical butterfly species, including the Julia Heliconian (Dryas iulia), Mexican fritillary (Euptoieta hegesia), Gulf fritillary



Close-up of yellow passionflower blossom. Photo by Alan Cressler, Lady Bird Johnson Wildflower Center

(Agraulis vanillae), crimson-patched longwing (Heliconius erato), and zebra longwing (Heliconius charitonia).

In addition, yellow passionflower pollen is the only known larval food of the passionflower bee (*Anthemurgus passiflorae*), a rare small black bee that occurs from central Texas to North Carolina and north to Illinois. Despite its dependence on this plant, the passionflower bee is thought—because of its size and foraging habits—to contribute very little toward its pollination.

In the summer and fall of 2018, FODM volunteers and NPS staffers planted around 3,500 native trees, grasses, and herbaceous plants in the previously cleared native plant demonstration area along the west side of the Haul Road trail. NPS staff and FODM volunteers who monitor the status of those plantings have reported that other native plants—present in the seedbank but previously excluded by invasives—have sprouted in the planted area. The yellow passionflower is one of these very welcome "volunteers."

Help Restore Habitat, Plant Natives

FODM needs volunteers to help us restore degraded habitat and support wildlife by planting native plants in Dyke Marsh on May 6 (rain date, May 13) 1 to 4:30 p.m. This will supplement the native plants we put in last year. Meet at the Haul Road trail native plant site, about 1/3 mile from the entrance. Wear gloves, long pants and sun protection and bring water. This event will take place unless we have severe rain



and lightning that day. Please sign up at info@fodm.org.

NATURE (continued from page 5)

value to the economy is infinite," posits Costanza. Ecological services are difficult to quantify, others contend.

Because It Matters

Acknowledging nature's services is step one. "Up to now, scientists have thoroughly investigated only one percent of Earth's 250,000 plant species and a far smaller percentage of its millions of animal species. Who knows what future benefits the now-unknown portion of biodiversity's genetic library could provide us?" environmental consultant Norman Myers wrote.

Do we have to give everything an economic value? "Even the smallest bird is a miracle that needs no further vindication or defense," wrote Scott Weidensaul in a 2013 Audubon article titled "Why Birds Matter." "Birds matter. Period," he asserted. Many agree.

MEETING (continued from page 1)

Since the Potomac River is a tidal tributary of the Chesapeake Bay, sea level rise will affect the river and its shoreline.

Geoff is the Network Program Manager for the Park Service's National Capital Region Inventory and Monitoring Network where he has worked for 15



Sea level rise affects the river and shoreline. Photo by Glenda Booth

years. Prior to his NPS employment, Geoff worked for the U.S. Geological Survey on projects related to coastal marsh dynamics and the implications to coastal bird communities. Geoff has a B.S. in biology from the University of Scranton and a M.S. in environmental science and policy from Johns Hopkins University.

This free, public program will be at 7:30 p.m., Huntley Meadows Park, Visitor Center, 3701 Lockheed Blvd., Alexandria, VA 22306. It is cosponsored by the Environmental Council of Alexandria, the Northern Virginia Conservation Trust, the Potomac Riverkeeper and the Four Mile Run Conservatory Foundation. FODM will host an informal gathering at 7 p.m. for all before we begin the event. If you use a GPS device, be sure to enter the street address, not the park's name.

Sunday Morning Bird Walks

Bird walks are held Sunday mornings, all seasons. Meet at 8 a.m. in the south parking lot of the Belle Haven picnic area. Walks are led by experienced birders and all are welcome to join us.

Welcome New FODM Members

FODM welcomes our **new members** Aaron Bowen-Ziecheck, Lyn Dybas, Judy Evans, Jeffrey Gringer, Beth Gutierrez, Eric Hooker, Thomas Jordan, Denise Mulholland, Mark Murphy, Nancy Renner, Kimberly Rennick, Julie D. Shaw, Matthew Smith, Karena Thek and Ellen Weston.

And a big welcome to our newest conversions to Life Membership James Morrison and Jason Yee.

AWARDS (continued from page 2)

shorelines, at times with an errant, large blue barrel or tire in tow. Ned recently found a new native plant not previously identified among the more than 1,300 species already documented from a local national park. Ned is fluent in Spanish, prepared a FODM flyer in Spanish and encour-



Cathy Ledec. Photo credit: George Ledec

ages everyone to protect our natural resources.

The Fairfax County Federation of Civic Associations on April 7 honored Cathy Ledec as the Fairfax County Citizen of the Year, recognizing her as a "tornado of volunteerism" and her extensive community service. A FODM member, Cathy was elected chair of the Fairfax County Tree Commission in January, is president of the Friends of Huntley Meadows Park and is active in many conservation efforts. Under her leadership, the Friends of Huntley Meadows Park often partners with FODM. She is an ardent birder and native plant advocate.

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

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; quarterly 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 tax-deductible 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 CONTR		
TOTAL AMOUNT ENG		
NAME		
ADDRESS		
CITY		
TELEPHONE NUMBER	२	
EMAIL ADDRESS		
Please address any ques <i>Marsh Wren</i> to Dorothy ship to Bob Veltkamp. Y at FODM, P.O. Box 718	McManus and You may conta	about member- ct them by mail
-7183, by telephone or by	y email (see pa	ige 2).

Some Spring Colors of Dyke Marsh

BY GLENDA BOOTH

In the spring, leaves unfurl and flowers open, providing colorful accents throughout Dyke Marsh in the wetland and in the woodlands. Some flowers are big and showy; others are small and inconspicuous. Winter's quiescence is behind us and nature's renewal ensues. Ed Eder, former FODM president and an excellent naturalist and photographer, has provided these beautiful examples of spring flowering plants in the Dyke Marsh Wildlife Preserve. Come to Dyke Marsh and walk down Haul Road to see these spring colors.



Northern Spicebush (Lindera benzoin) ... blooming now.



Eastern redbud (Cercis Canadensis)



Bloodroot (Sanguinaria Canadensis)

Spring Beauty (Claytonia virginica)



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