The Marsh Wren

SINCE 1976 | THE FRIENDS OF DYKE MARSH | SPRING 2023

FODM 2023 Member Meetings

May 17, at 7 p.m. (see p. 1)
October 25, at 7 p.m.

Calendar of Events

Every Sunday, 8 a.m., Bird Walks
May 6, 20; June 3, 17, 10 a.m., Invasive Plants Control
May 8 (**11** rain date), Water Testing
May 20, 10 a.m., Plant New Native Sites
June 10, 10 a.m., Ecology Walk
September 23, 1-3 p.m., Raptor Rapture, Fort Hunt Park Pavilion B
October 23, 1-3 p.m., Fall Colors Walk

See www.fodm.org and our Facebook page for details.

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Warming Up to Ticks and Mosquitoes

May 17, 7 p.m. FODM Zoom Program

House mosquito (*Culex pipiens*)
Photo by Susan Ellis, Bugwood.org

Blacklegged tick, (*Ixodes scapularis*)
Photo by Scott Bauer, USDA Agricultural Research Service, Bugwood.org

Ticks and mosquitoes may not be anyone's favorite insects, but on May 17, we can learn more about them when Kasha Helget will give a Zoom presentation at 7 p.m. to FODMers on how to identify them, their role in the environment, life cycles and eco-friendly, management responses. Helget is a certified master naturalist and past Board member of the Arlington Regional Master Naturalists (ARMN).

She will also address some myths and facts about ticks and mosquitoes. Here are some examples:

- What is the best way to reduce the number of mosquitoes in your yard? It's not spraying.
- What is the best color to wear on hikes and working around shrubs in your yard? White.
- Are you safe from ticks in the winter? No.

To register, click here or visit www.fodm.org and click on "Click here" in the program's notice, left side of the home page. To support insects, see articles in this issue.

Insects Are in Decline; How to Help

BY GLENDA C. BOOTH

Insects and other invertebrates make up 94 percent of the world's animal species, according to the Xerces Society. "Of an estimated three to 30 million insect species on the planet, only one million have been identified by scientists," wrote Laura Tangley in a 2020 National Wildlife Federation article.

Many people cringe when they see insects or kill them for little reason. Who hasn't swatted a pesky fly?

The late Dr. E.O. Wilson, an ant expert, called insects "the little things that run the world." They provide free ecological services. They pollinate plants,

Gray hairstreak butterfly (*Strymon melinus*) Photo by Bob Veltkamp

INSECTS IN DECLINE (*continued on page 4*)

George Washington Memorial Parkway Superintendent's Message

BY CHARLES CUVELIER

Park staffing will improve in fiscal year 2024 thanks to the Infrastructure Reduction Act (IRA). IRA has one-time funding available through 2030 to enhance staffing throughout the National Park Service (NPS). The GW Memorial Parkway will receive $4.4 million. We have targeted specific areas where there are persistent needs, including resources management. We have also submitted a project proposal through the Bipartisan Infrastructure Law (BIL) to address invasive plants. The number of projects submitted for BIL funding make it very competitive, but we are optimistic given the science supporting forest health.

On the subject of forest health, the NPS Inventory and Monitoring networks and the Schoodic Institute recently published in the journal Ecological Applications a study entitled Overabundant Deer and Invasive Plants Drive Widespread Regeneration Debt in Eastern United States National Parks. (https://esajournals.onlinelibrary.wiley.com/doi/10.1002/eap.2837). The study describes deer browse and the devasting impact of the emerald ash borer as contributing impacts on forest health. The article states, "These findings underscore the critical importance of an integrated forest management approach that promotes an abundant and diverse regeneration layer. In most cases, this can only be achieved through long-term (i.e., multidecadal) management of white-tailed deer and invasive plants." We have made creating a deer management plan for the park as one of our near-term (within the next three years) priorities.

As a follow-up to our community meetings held in the fall of last year, including the September event at Belle View Elementary School and the virtual event in November, here is an update on the Belle Haven and Belle View intersections. We outlined five steps to move forward in the implementation of safety measures. We have completed three of the five, including preliminary design concepts, traffic modeling and design. Compliance with several federal laws is pending and upon completion of those reviews, we will issue a contract modification to implement the changes.

Charles Cuvelier
Photo courtesy of NPS

Progress continues on the south parkway and Mount Vernon Trail Environmental Assessment (EA). We appreciate the engagement that occurred during the public scoping period, including participation in our virtual meeting as well as input from the community. We received 700 correspondences which have over 4,600 comments. We are analyzing those comments to shape and inform the development of our preferred alternative. Once we have prepared a draft environmental assessment (EA), we will reach out again for public input.

GWMP Emergency Road Repairs at Waynewood Boulevard

We have completed the emergency concrete pavement repairs on the southern section of the parkway near Waynewood Boulevard. We completed the repairs to the northbound lanes between March 17 and 19 and repairs to the southbound lane between March 31 and April 2. Additionally, workers grouted and sealed the joints from the repair patches in April.

Editor:
Glenda Booth

Assistant Editors:
T. D. Hobart
Bob Veltkamp

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Visit our website at
www.fodm.org
or our **Facebook** page.

President's Message

Glenda C. Booth, President, Friends of Dyke Marsh

It's been a busy spring with bald eagles, ospreys and a barred owl pair raising young, woodcocks courting, a great horned owl nesting and much, much more going on in Dyke Marsh.

Here I share some of our projects and hope they will inspire you to volunteer:

Native plants -- We will add two new sites and plant around 80 Joe Pye weed (*Eutrochium*) and swamp milkweed (*Asclepias incarnata*) plants on May 20. A big thank you to Earth Sangha for donating the plants. Check out our new sign at the native plant site.

Controlling invasive plants -- We have two invasive plant work sessions monthly, typically attracting from 10 to 20 volunteers.

Wildlife camera -- Two volunteers installed and are monitoring a motion-activated camera in hopes of confirming weasels and minks in Dyke Marsh. So far, we've not had those sightings but many interesting photos.

Racoon (*Procyon lotor*) captured by motion-activated camera

Chronolog stations -- We have a Chronolog station at the native plant site and will soon have a second near the Haul Road trail so people can photograph seasonal changes in the marsh. Visit www.chronolog.io, click to explore chronologs and search for Dyke Marsh.

Saving pumpkin ash trees -- We are in our ninth year financing the treatment of 18 pumpkin ash trees (*Fraxinus profunda*). Dyke Marsh is losing over 1,000 because of the invasive emerald ash borer (*Agrilus planipennis*).

Beetles Study -- We are funding a study to identify several beetle species collected from George Washington Memorial Parkway properties, many of which are from Dyke Marsh. Dr. Donald Chandler at the University of New Hampshire is doing this work.

Trash cleanups -- We host several trash cleanups a year.

Surveys -- We have many knowledgeable surveyors who are documenting breeding birds, butterflies, dragonflies and plants, for example. Larry Cartwright has led the breeding bird survey for over 25 years.

Walks -- We have weekly Sunday bird walks and this year will have an ecology, butterfly and fall colors walk.

Checklists -- We are preparing a Dyke Marsh birds checklist. We have a butterfly checklist with host plants for each species and several plant lists.

There are more ongoing efforts, including this newsletter, our website, three speaker programs a year and regular coordination with the National Park Service. We have completed a workplan with NPS.

Two proposed construction projects could impact Dyke Marsh: a floodwall and levee in the Belle View-New Alexandria-River Towers area and reconstruction of the Mount Vernon trail, 2.5 miles of which go through the preserve. Be sure to read our comments on our website, https://www.fodm.org/about/taking-action.html. For the floodwall and levee, we filed a freedom-of-information request with the U.S. Army Corps of Engineers because the agency planned to publish only a summary of comments received, not the complete comments. As a public service, we have posted all of the comments submitted.

Butterfly and Dragonfly Results

Jessica Strother and Jim Wagner led volunteers in 2022 who observed the following (the first number is the number of species; the second, the total number): butterflies, 31 and 366; dragonflies and damselflies, 22 and 315. The most common butterfly was the eastern tailed-blue (*Cupido comynias*).

Kudos

We salute long-time FODMer John "Jack" Sullivan who was named an Alexandria "Living Legend" in March, an award recognizing people who contribute to their community.

Invasive Plant Initiatives

Please thank Virginia's state legislators for passing two bills to discourage the sale and use of invasive plants and thank Governor Glenn Youngkin for signing the bills into law. A big thank you to Delegates Paul Krizek and David Bulova for getting the bills approved. You can read the bills here: HB 1998 (Krizek) https://lis.virginia.gov/cgi-bin/legp604.exe?ses=231&typ=bil&val=HB1998 and HB 2096 (Bulova) at https://lis.virginia.gov/cgi-bin/legp604.exe?ses=231&typ=bil&val=HB2096.

On the Record

To learn how your state legislators voted on conservation issues, visit https://valcv.org/2022-conservation-scorecard. For federal elected officials, visit https://scorecard.lcv.org. Virginians will elect the entire General Assembly and officials in many localities, including Fairfax and Arlington Counties on November 7.

INSECTS IN DECLINE (*continued from page 1*)

disperse seeds, provide food for wildlife, recycle nutrients and decompose animal and plant matter. In the mid-Atlantic region, "Insects pollinate approximately 80 percent of the flowering plants," reports the Audubon Field Guide to the Mid-Atlantic States.

Without insects, food webs would collapse, plants would not get pollinated, animals would disappear and people would be left with bacteria and fungi, University of Delaware entomologist Dr. Doug Tallamy has said.

The world is experiencing what some call an "insect apocalypse." More than 40 percent of the world's insect species face possible extinction, concluded a 2019 study in Biological Conservation. "The creatures that keep us alive are disappearing," Tallamy warned. One-quarter of land-dwelling insects have disappeared in the past 30 years.

We must "live in harmony with the natural world sustainably," Tallamy urged, instead of "declaring war on nature."

How to Save Insects

- Ninety percent of insects eat only vegetation from plants with which they share an evolutionary history. Plant native plants and trees.
- Reduce lawns, remove invasive plants, avoid buying imported plants.

The eastern redbud (*Cercis canadensis*) is an example of a native tree that can be planted to provide insects with nectar and pollen in early spring when both are often hard to find elsewhere.
Photo by Bob Veltkamp

- Wait to clean up your spring garden until insects have had time to emerge from winter, generally when we've had seven consecutive days of temperatures above 50 degrees Fahrenheit.
- Leave the fall leaves for overwintering insects, like moth and butterfly caterpillars.
- Reduce light pollution by using motion-sensitive lights and yellow light bulbs outside.
- Avoid mosquito spraying, even if companies claim their products are "natural." These products kill all insects, not just mosquitoes.
- Minimize use of insecticides and pesticides.
- Don't use bug zappers. They kill 99 percent of insects.
- Reduce your carbon footprint.

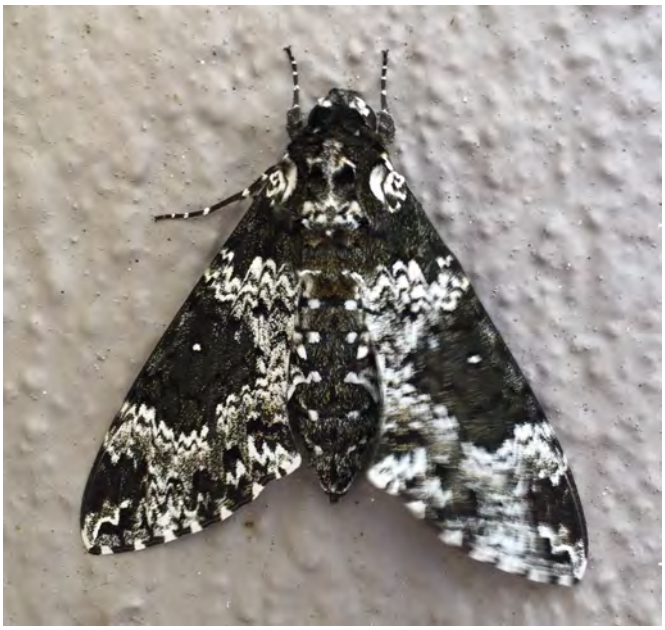
How to See Insects

Some insects are quite conspicuous, such as butterflies, but many are cryptic, hard to see, like beetles and moths that resemble bark. "Settle on a patch of wildflowers and note what visits the flower, what is crawling on the stem and what is perambulating about the leaf litter. . . Look closely in flowers, on bark and among leaves. You'll be amazed at what you find there." These are tips from The Ecology of Eastern Forests, by John C. Kricher and Gordon Morrison.

Celebrate Moths

During the 12th annual National Moth Week, July 22-30, 2023, you can help insects by documenting moths and mapping their distribution.

Visit https://nationalmothweek.org to learn how to watch moths and sign up.



Rustic sphinx moth (*Manduca rustica*)
Photo by Bob Veltkamp

Controlling Invasive Plants in Dyke Marsh

BY JIM GEARING

Thanks to many devoted volunteers, we have wrapped up our third winter season of controlling invasive plants in Dyke Marsh, mostly working outside the native plant area.

In 2018, FODM began working with the National Park Service to clear an upland area and restore it to a native plant area. In addition to planting about 4,000 native plants, FODMers since then have worked to maintain the native plants and control invasive plants in that area and we have been largely successful. We still work to control invasive plants in the native plant area about five months a year.

In the fall of 2020, we began working to control English ivy (*Hedera helix*). Since then, we have scheduled invasive plant control sessions year-round and have begun controlling invasive plants outside the native plant area.

After the annual, fall leaf-shedding and die-back of native plants, it is easier to access some plants than at other times. Since many invasive plants hold their leaves late into the fall or all winter, many of them are easier to identify in the fall and winter. Many of them also leaf out earlier in the spring than the native plants do and are thus easier to identify then.

The invasive plants we work on in the fall, winter and early spring include these:

- Asian bittersweet (*Celastrus orbiculatus*)
- Bush honeysuckle (*Lonicera maackii*)
- English ivy (*Hedera helix*)
- Japanese honeysuckle (*Lonicera japonica*)
- Multiflora rose (*Rosa multiflora*)
- Porcelainberry (*Ampelopsis glandulosa*)
- Sweet autumn clematis (*Clematis terniflora*)

Porcelainberry (*Ampelopsis glandulosa*) is a climbing, woody vine that has speckled berries with two to four seeds, dispersed in bird droppings.

Jim Gearing collected invasive vines to help volunteers identify them.

Plants like Asian bittersweet and sweet autumn clematis do not have leaves in the winter and we have learned how to identify their vines. We have also learned how to identify porcelain berry by the vine and distinguish it from the native grape vine (*Vitis*).

We did not lose a session to bad weather from November through March and we had very good volunteer turnouts.

Meet the Plants -- Botanizing from the Bridge

BY DR. ELIZABETH WELLS

The wooden bridge on the George Washington Memorial Parkway's multi-use trail across from Tulane Drive is the best, most efficient way to see a large swath of Dyke Marsh up close and personal, where there are fewer non-native plants than along the Haul Road trail and a clear view of wetland plant species and their relationship to the ever-changing depth of water in the marsh. As a freshwater tidal marsh with a tidal amplitude of about three feet and an almost constant flow of water rising and falling twice a day, the thick jumble of marsh plants and the depth of water on either side of the bridge is on full display right at our feet.

The bridge spans the wetland, giving people an up-close view of the diverse plant life of Dyke Marsh.

Starting from the three-car parking area and walking north, as we step from the paved trail onto the wooden bridge, immediately the species composition changes from floodplain forest dominated by trees to marsh species. Narrow-leaved cattails (*Typha angustifolia*), which prefer tidal freshwater marshes, become dominant. The other cattail commonly found in the mid-Atlantic region, the wide-leaved cattail (*Typha latifolia*), prefers non tidal freshwater marshes such as the Huntley Meadows Park wetland and is not present in Dyke Marsh. Other plants in the uppermost to mid-zone of the marsh, which is the least flooded area during high tide, are red-stemmed dogwood, also called swamp dogwood (*Cornus amomum and C. stricta)*, swamp rose (*Rosa palustris*), marshmallow or wild cotton (*Hibiscus moscheutos*), buttonbush (*Cephalanthus occidentalis*) and an occasional ash tree (*Fraxinus profunda or F. pennsylvanica*).

Dodder and narrow-leaved cattails (*Typha angustifolia*) Photos by Glenda Booth

The bridge passes through a stand of forested wetland dominated by ash, box elder (*Acer negundo*) and red maple (*Acer rubrum*) trees. Other woody plants include river birch (*Betula nigra*), sycamore (*Platanus occidentalis*), cottonwood (*Populus deltoides*), river willow (*Salix nigra*), slippery elm (*S. rubra*), the shrub alder (*Alnus serrulata*) and five common vines: trumpet vine (*Campsis radicans*); Virginia creeper (*Parthenocissus quinquefolia*), the most common native vine in the mid-Atlantic region); greenbrier (*Smilax rotundifolia*); poison ivy (*Rhus radicans*) and the ever-present, non-native Japanese honeysuckle (*Lonicera japonica*). Two noteworthy herbs around the edge of this stand of forest are red-flowered cardinal flower (*Lobelia cardinalis*) and purple-flowered New York ironweed (*Vernonia noveboracensis*).

BOTANIZING FROM THE BRIDGE (*continued on page 7*)

Further north as the bridge leaves behind the forested wetland and returns to the open marsh, we see the tall, majestic wild rice (*Zizania aquatica*) during the summer and fall months, surrounded by peltandra (*Peltandra virginica*) with flowers and fruit within a green spadix that resembles the head and slender neck of a goose lying in the mud and spatterdock (*Nuphar luteum*), also called yellow pond lily or cow lily.

Wild rice (*Zizania aquatica*)

We at last come to the channel, an area that some call the Upper Gut, where a solid stand of spatterdock with yellow, golf-ball-sized flowers line the channel, as this plant can tolerate the longest periods of daily tidal flooding. Here and there are clumps of the blue-flowered pickerelweed (*Pontederia cordata*) at the edge of the channel. After the bridge crosses the channel, narrow-leaved cattails dominate again, with abundant jewelweed or touch-me-not (*Impatiens capensis)* bearing orange hanging flowers that are the perfect size for solitary bees to crawl into in search of nectar and pollen; yellow-flowered marsh beggar tick (*Bidens laevis*), which turn the marsh brilliant yellow briefly in mid-September; and dodder, the orange-colored, leafless, parasitic vine (*Cuscuta gronovii*).

Other plants in this area include yellow-flowered sneezeweed (*Helenium autumnale*) and tear thumb (*Polygonum arifolium*), the latter of which grows onto the bridge during the summer and may tear the clothes and skin of people who get too close to it. Here and there we see six-foot-tall, green-flowered water hemp (*Acnida cannabinus*) and the equally tall, coarse grass, Walter's water millet (*Echinochloa walteri*). Water hemp's name refers to the strong, durable fibers in the stem, which Native Americans used as rope to make fishing nets. Walking farther north along the bridge we approach a low depression on the west side of the bridge where we find duck potato or wapato (*Sagittaria latifolia*) with large oval leaves and distinctive split leaf bases. As we reach the end of the bridge, narrow-leaved cattails yield to higher ground and we leave the marsh and step onto the paved trail and next to a woodland habitat to the east.

With such a close view of some of the wetland plants from this bridge, a visit here opens our eyes to the rich biodiversity of Dyke Marsh.

Editor's note: The National Park Service plans to replace this bridge this summer so check https://www.nps.gov/gwmp before you go.

The yellow golf-ball-like flower of the spatterdock plant (*Nuphar luteum*)

Jewelweed (*Impatiens capensis*)

Saving Pumpkin Ash Trees

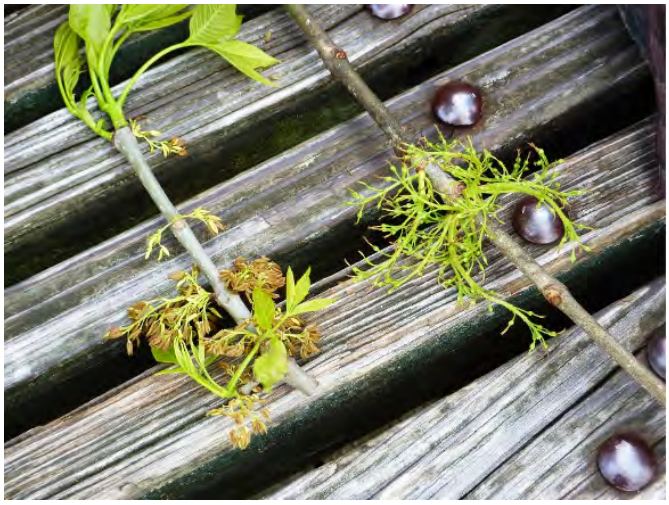
BY ROBERT SMITH

Five of the project trees (and other trees) that continue to flower and leaf. Photo by Robert Smith

The Friends of Dyke Marsh (FODM) are in the ninth year of a long-term project to protect a self-sustaining group of pumpkin ash trees (*Fraxinus profunda*) from the emerald ash borer (EAB) (*Agrilus planipennis*) infestation that is devastating ash trees throughout the northeastern United States. This year will mark a major step forward as we hope to harvest some of the seeds and see if they will sprout and produce viable seedlings.

The EAB is a beetle from Asia that was first identified in 2002 as the cause of widespread loss of ash trees in Michigan. It infests trees by inserting its eggs in the tree's bark. The larvae subsequently bore into the tree and feed on the phloem, which is essential for moving nutrients within the tree. This boring leads to canopy loss and eventual death of the tree. Since first identified, this insect has been steadily moving south and east and was documented on George Washington Memorial Parkway lands about 10 years ago.

Pumpkin ash trees, which are related to green ash (*Fraxinus pennsylvanica*), are relatively uncommon and are adapted to live in wetlands. They once comprised many of the trees in Dyke Marsh and most have now been lost. Protecting them is a costly and labor-intensive process that means only selected trees can be preserved. Saving trees is done by treating them with an insecticide (Emamectin Benzoate) every two years. With approval from the National Park Service (NPS), licensed professionals inject the insecticide into the trees through the root stems near ground level. This ensures that the insecticide is in the tree's system and will kill the larvae and minimize the external impact of the insecticide. Additionally, we have shielded the project trees from beaver damage with protective netting around the base of each tree.



Flowers of the pumpkin ash tree (*Fraxinus profunda*). Left, male; right, female. Photo by Robert Smith

We plan to treat the 18 project trees around mid-May, after the trees have flowered and leafed out. This timing ensures that the insecticide will be drawn into the trees' circulatory system. Seed clusters should be fully developed by September and the FODM project team will then cut clusters from each of at least three trees. An FODM member, Kaela Mattson, has volunteered to plant selected seeds from each tree and see if they will germinate and produce saplings.

This is a critical step for the project because the purpose has been to maintain a self-sustaining group of local trees that can help reforest the marsh. When the project started in 2015, FODM and the NPS selected a group of trees close to each other and with relatively easy access for observation and treatment. A cluster of trees is desirable since there are male and female trees and they are wind pollinated. Pollinators like insects do not carry the pollen between the trees. The sexes of the trees can be distinguished when they are in flower, around April.

The Friends of Dyke Marsh are very pleased that all 18 treated trees continue to flower and leaf. In addition to these efforts, the North Carolina Botanical Garden collected seeds from many pumpkin ash trees in September 2015 for preservation.

Butterflies in Dyke Marsh

BY LARRY MEADE

Dyke Marsh is a well-known birding destination, with many species found there over the years. If you are visiting in the warmer months, you may also notice that there are other flying creatures at Dyke Marsh -- butterflies. Butterflies are in the order of insects called Lepidoptera which means "scaly winged." This order includes all butterflies and moths.

Most butterflies fly in our region from early April to late October. The butterflies that you might find depends on both where and when you are looking for them. Many of them only fly during specific time windows. For example, falcate orangetips (*Anthocharis midea*), small white butterflies with orange wingtips, can only be found in the spring. Other butterflies prefer specific habitats, often near their host plants where they lay their eggs. One of the best places to find them is on patches of flowers where they are feeding on nectar.

The Dyke Marsh native plant site has many plants that several butterfly species use to lay eggs and to nectar. You can find FODM's checklist of butterflies at https://www.fodm.org/images/Butterfly.pdf. It includes the larval host plants for each species.

If you are butterflying at Dyke Marsh, it's best to start by checking the bushes near the water at the Belle Haven Park picnic area. This is a good place to find skippers. These are small lepidoptera which are like moths in some ways but are still considered to be butterflies. The most common skippers at Dyke Marsh are sachems (*Atalopedes campestries*), silver-spotted skippers (*Epargyreus clarus*) and Zabulon skippers (*Paones zabulon*). In the fall, fiery skippers (*Hylephila phyleus*) can be abundant. The bushes at the Belle Haven Marina can have more skippers and larger butterflies such as the Eastern tiger swallowtail (*Papilio glaucus*), Virginia's state insect.

Silver-spotted skipper (*Epargyreus clarus*) Photo by Larry Meade

Silvery checkerspot (*Chlosyne nycteis*) Photo by Larry Meade

The flowering bushes along the Haul Road trail often have silvery checkerspots (*Chlosyne nycteis*) and Horace's duskywings (*Erynnis horatius*), another skipper species. Once you turn the corner of Haul Road trail, it turns into excellent butterfly habitat. I once found a broad-winged skipper (*Poanes viator*) next to the water, a butterfly which I had never seen before. Monarchs (*Danaus plexippus*) can also be found, especially during fall migration as they stop to feed on the goldenrod during their trip south to Mexico. At the end of the boardwalk, there is an area with plentiful flowers for butterflies to nectar on. I have seen viceroys (*Limenitis archippus*) and common buckeyes (*Junonia coenia*) there.

BUTTERFLIES (*continued on page 10*)

BUTTERFLIES (*continued from page 9*)

If you want to learn more about butterflies, I will lead a butterfly walk in Dyke Marsh this summer. See FODM's website. Also, I am the compiler of the North American Butterfly Association (NABA) Alexandria circle butterfly count, which includes Dyke Marsh and is scheduled for September 10. This citizen science project plays an important role in monitoring butterfly populations. All are welcome to participate, including beginners. The count is sponsored by the Audubon Society of Northern Virginia. Check www.audubonva.org.

Monarch butterfly (*Danaus plexippus*) Photo by Larry Meade

Skinks More Active as Weather Warms

BY GLENDA BOOTH

Lift up a log, pull up a rock and a skink may run for cover and quickly find a place to hide. The common five-lined skink (*Plestiodon fasciatus*) likes moist, wooded or partially wooded areas with good cover. They are the most commonly seen skink around homes, says the Virginia Department of Wildlife Resources.

This skink, about five to seven inches in length, has a wedge-shaped head and small limbs. The young ones have five creamy or whitish stripes down the back of their dark brownish-gray body and a bright blue tail. "Blue tails fade as they mature, particularly after they are sexually mature," reports Alonso Abugattas in The Reptiles and Amphibians of the Washington, D.C. Metropolitan Area. "Males may lose stripes completely and have reddish heads during the breeding season.

Five-lined skink (*Plestiodon fasciatus*) Photo by Glenda Booth

Common five-lined skinks mate in May and the female lays one clutch of eggs in June and July, usually in a decaying log. "Females stay with the eggs in the nest until they hatch, although there is no parental care afterwards," according to the Virginia Herpetological Society (VHS). They eat insects and are prey for birds, foxes, raccoons, opossums and snakes.

The VHS offers this Virginia skink history: "Mark Catesby (1731-1743), who probably saw many of these lizards during his stay in Virginia during 1712-1719, described it as follows: "This Lizard is usually small, seldom exceeding six inches in length, the head short, the tail is blue, the rest of the body brown; except that from the nose runs five yellow lines of equal distances, along the back to the tail. They are seen often on the ground and frequent hollow trees. Some people suspect them to be venomous, tho' I never heard of an instance to confirm it. They are found in Virginia and Carolina."

To learn more, visit www.virginiaherpetologicalsociety.com.

Thinking about Biodiversity, Ecology and Economics

BY GLENDA BOOTH

Biological diversity is a term encompassing the genes, species, ecosystems and ecological processes of which they are parts, nature's variety. Biodiverse ecosystems ensure sustainability for all life forms, including humans.

In 1988, the late Dr. E. O. Wilson wrote, "the diversity of life forms, so numerous that we have yet to identify most of them, is the greatest wonder of this planet. . . much of the diversity is being irreversibly lost through extinction caused by the destruction of natural habitats . . . ." He went on to say that "we do not know the true number of species on Earth . . . the absolute number falls somewhere between five and 30 million." He estimated that around two million species are known to science.

On December 20, 2022, at the United Nations-sponsored conference called COP15, negotiators agreed to protect 30 percent of the planet's land and water by 2030. Currently, 17 percent of the world's land and ten percent of the world's marine areas are protected in some fashion. Nearly 200 countries signed the agreement, but not the United States (U.S.) or the Vatican.

President Joseph Biden has proposed protecting 30 percent of U.S. land and coastal seas by 2030. Currently, the U.S. is conserving around 12 percent of its land and 26 percent of its coastal waters, according to the U.S. Geological Survey.

> "Only when the last tree has died and the last river been poisoned and the last fish been caught will we realize we cannot eat money." -- based on a Cree saying

New Board Elected

At the March 1 annual meeting, FODM members elected officers and the Board of Directors, listed on page 2. Congratulations to all.

Welcome New FODM Members

FODM welcomes our **new members**: Art and Laraine Bennett, Connie Carpender, Hiromi Chino, Diane Erbland, Rachel Greider, Eleanor Hoff, Gerry Hyland, Dorothy Keough, Kerry Kincannon, Malcolm Northam, Roger Orwan, Scott Perkins, Ingrid Reid, Trevor Scheffel, Joan Schindel, Mary Vasse and Sophie Zhang. We welcome our **new life members** Melanie Choukas-Bradley, Connie Ericson and Nancy Glynn.

Sunday Morning Bird Walks

FODM holds bird walks on 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.

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 newsletter, The Marsh Wren; membership meetings with knowledgeable speakers; bird and nature 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, its protection and full restoration. Just click on the "Join" or "Donate" button on our membership page at www.fodm.org/membership.html to make your tax-deductible contribution by credit card or from your bank account securely through PayPal. For help, email 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 supporting FODM.

DUES AMOUNT..…..… $ _____
ADDITIONAL CONTRIBUTION..…….. $ _____

NAME _____
ADDRESS _____
CITY_____ STATE ____ ZIP_____
TELEPHONE NUMBER _____
EMAIL ADDRESS _____

Please address any questions or comments about *The Marsh Wren* to Glenda Booth 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).

The Marsh Wren

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

FODM Photographer Wins Award

Congratulations to FODMer Jane Gamble whose photograph of a female indigo bunting (*Passerina cyanea*) was chosen for the 2022 Audubon Female Bird Gallery.

This competition spotlights what the National Audubon Society calls "some of the most overlooked birds in the world, the female bird category . . . the sex that is too often ignored. This neglect by bird lovers and even scientists isn't just a problem of philosophy or equality. Recent research has shown that lack of focus on the specific needs of female birds has profound consequences for species conservation."

Jane said, "I'm honored that my photo was chosen and I hope it will encourage other women to get their photographs into the public eye, right alongside their male counterparts." She took the photo at Maryland's McKee-Beshers Wildlife Management Area.