SINCE 1976 THE FRIENDS OF DYKE MARSH SPRING 2013



The Friends of Dyke Marsh

FODM Quarterly Meeting

Wednesday, May 15, at 7:30 p.m., Huntley Meadows Park, 3701 Lockheed Blvd., Alexandria, VA 22306. Telephone 703-768-2525. Free to all.

Calendar of Events

April 20, 10 a.m. - 12, Raptors Up Close, Belle Haven Park. May 1, 7 p.m., Frog and Bat Walk, River Towers, see p.7. 2013 Membership Meetings May 15, September 11 (see page 7) and November 13.

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Migration Miracle: The Monarch Butterfly

FODM Meeting to Feature Presentation on Monarchs

The migration of the monarch butter-fly (*Danaus plexipus*) is one of the most amazing phenomena in nature. Imagine a butterfly, weighing less than a dime, flying perhaps as much as 2,000+ miles in two months to roost high in the mountains of central Mexico for the winter! But the monarch making the journey south has never been there before.

Our May 15 meeting is cosponsored by the Friends of Potomac River Refuges and Georgetown University's Center for the Environment. You will learn about monarchs tagged in the Occoquan Bay refuge and found in Mexico.

Larry J. Brindza will share his experiences studying monarch butterflies in three physiographic provinces of Virginia: the Blue Ridge, the Piedmont Plateau and the Coastal Plain. He will explain the life cycle, how and why monarchs are tagged and will show the equipment he uses to catch, weigh and measure monarchs.



Larry Brindza gently holds a monarch butterfly. Photo by Glenda Booth.

Brindza has tagged monarchs since 1996. Each fall, he runs concurrent tagging studies at the Occoquan, Eastern Shore of Virginia and Fisherman Island refuges and at Kiptopeke State Park in Northampton County, Virginia. He is an advisor for the Coastal Virginia Wildlife

MIGRATION (continued on page 7)

Restoration May Get Initial Funding Soon

The U.S. National Park Service (NPS) has announced a proposed agreement with National Airport under which the airport may provide \$2.5 million for the first phase of Dyke Marsh restoration. These funds would represent compensatory mitigation for 1.94 acres of impacts of an airport runway safety area required to meet Federal Aviation Administration (FAA) safety standards.

The FODM Board urges members to submit comments by April 25 at http://parkplanning.nps.gov/projectHome.cfm?projectID=45963.

Under the proposal, the funds would be used to build a breakwater in the southern part of Dyke Marsh to replace the historic promontory removed by dredging. The U.S. Geological Survey's 2010 study found that the marsh is "not in a geologically stable state" and that removing the promontory "also removed historic geological protections to the marsh and altered the size and function of its remaining significant tidal creek network." The USGS study says, "The primary protections that likely are needed to protect and enhance natural deposition at the marsh include a functional wave break at the position of the former promontory and an effective blockage of the deep scar channels that parallel the shoreline within the Dyke Marsh eastern boundary."

Replacing the promontory is the key to restoring Dyke Marsh and FODM supports using these funds for that purpose. For more information on this proposal, see the President's Report on page 3.

Larry Cartwright to be Honored by VSO

FODM member Larry Cartwright will receive the Jackson M. Abbott Conservation Award on April 27 from the Virginia Society of Ornithology (VSO). FODM and other organizations recommended Larry, recognizing his many years of volunteer conservation work.

FODM wrote: "Larry is a dedicated, tireless conservationist. The Friends of Dyke Marsh recognized him last year with an award because of his 20 years as a diligent and expert coordinator of the annual Dyke



Larry Cartwright tabulates his survey data. Photo by Glenda Booth.

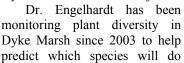
Marsh Breeding Bird Survey. Without his work, the U.S. National Park Service and the Friends of Dyke Marsh would likely not have such complete data on avian life in this tidal, freshwater wetland.

"His surveys and record-keeping are thorough and meticulous and he approaches this volunteer work with enthusiasm. . . He does not just count birds. He advocates for healthy ecosystems and habitats on which birds depend."

The VSO award is given to individuals or organizations that have demonstrated outstanding conservation work in Virginia. It is named honor of the late Jackson M. Abbott, FODM member and Mount Vernon-area resident, because of his lifelong devotion to conservation.

Scientists Unraveling Mysteries of DMWP

To help NPS managers in the restoration of Dyke Marsh, a team of scientists headed by Dr. Katharina A. M. Engelhardt from the University of Maryland's Center for Environmental Science is conducting research in Dyke Marsh on several subjects.





Elevation table in DM. Photo: N. Stone

well as the Potomac River rises. She is observing that some areas are changing rapidly and some are very stable. This work is funded by the National Science Foundation.

Her team is also monitoring elevation changes in the marsh using what are called RTK surveys, work she started in 2004. Her preliminary data show elevations changing rapidly in some areas and accretion in other areas. Therefore, the accreting areas appear to be keeping up with sea level rise, as other areas are losing elevation. "The northern part of the marsh is tilting upward," she said recently, "while the southern part is tilting downward." This coincides with changes in the plant communities.

Her team is also collecting sediments and plant litter deposition every other month to help determine if areas are susceptible to sea rise or can withstand it.

Dr. Engelhardt hopes to publish her results within the next two years.

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Visit our website at

www.fodm.org

for more information about us, our programs and how you can join the FODM.

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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 editorial address above. Board members too, can receive mail at this address. Special thanks to Duncan Hobart for managing our website (www.fodm.org), and to Paula Sullivan and Ed Eder for their photography contributions to The Marsh Wren and website.



President's Message

Glenda C. Booth, President, Friends of Dyke Marsh

As spring unfolds, we have much to celebrate.

Restored Promontory Is Key

Our page one article reports on

airport mitigation funds that could help restore Dyke Marsh. Replicating the former promontory in the southern part of the marsh would be the first phase of a more extensive restoration plan, a plan that NPS expects to publish this year. Under the airport-NPS agreement, a Statement of Findings, NPS must execute a contract by December 31, 2015 and complete construction by December 31, 2016.

FODM supports directing these funds to Dyke Marsh restoration. Human activity removed 270 acres of material from the marsh and because dredging destabilized the wet-

land, only 60 acres of marshland remain today. Dyke Marsh is losing 1.5 to two acres a year and could be gone in 30-40 years without action. A restored promontory can protect the marsh, encourage accretion and deposition of sediment, increase buffering from storms and flooding and restore ecosystem services that benefit the Potomac River, the Chesapeake Bay and the community. A promontory can enhance the success of the next phases of restoration by stabilizing this part of the eroding shoreline. Send your comments now to http://

parkplanning.nps.gov/projectHome.cfm?projectID=45963.

Larry Recognized

Our "own" Larry Cartwright has received the welldeserved Jackson M. Abbott Conservation Award from the Virginia Society of Ornithology for his outstanding conservation work. See the article on page 2.

Breeding Frenzy

The avian breeding frenzy is underway. The "boat ramp ospreys" are back and again, patiently tolerating nosy humans. We have a bald eagle pair tending their nest and presumably their nestlings for the fourth year and eastern screech owl too.

Action Abounds

On March 17, 20 D.C. Surfriders conducted a waterborne cleanup and hauled out around 50 bags of trash. Thirty-five volunteers collected several dozen large bags of trash in Dyke Marsh and along the shoreline at the Alice B. Ferguson cleanup on April 6. A local Brownie troop explored the marsh. We hosted a Washington Post science reporter who wrote about bald eagles. We had a walk with a NatureServe staffer who is developing a web-based field guide to the ecological communities of the George Washington Memorial Parkway (GWMP), including Dyke Marsh. We partnered with the Friends of Huntley Meadows Park for frog identification training and will have a walk in the western part of Dyke Marsh to look for frogs and bats on May 1. See page 7. We had an overflow crowd at our November 13 program on reptiles and amphibians where Caroline Seitz brought live herps – even an alligator!

Challenges

The National Park Service, like most federal agencies, is coping with budget "sequestration," a five percent cut in funding at a time when parks are 1/14th of one percent of the nation's budget. Congress had already cut the NPS budget by six percent in the last two years, contributing to an annual operations shortfall of \$500 to \$600 million. For the GWMP unit, sequestration has brought a \$500,000 to

> \$600,000 cut. Stretched budgets call for more volunteer efforts to support NPS as well as concerted work to build more public and political will in support of national

> I have had the honor of representing FODM at several meetings of national parks leaders and friends' groups. National leaders said that the national park concept of reserving unique and remarkable natural lands for all the people - was born in America. As filmmakers Ken Burns and Dayton Duncan titled their series, national

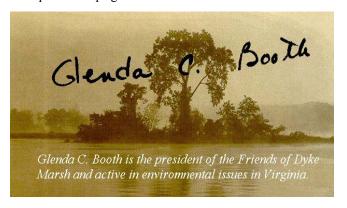
The DC Surfriders conducted a waterborne

parks are "America's best idea."

The National Park Service is preparing for the National Parks Centennial in 2016. Peggy O'Dell, an NPS Deputy Director, told friends' groups from around the country on February 26 that NPS "will not change its values" and the centennial will "not be a birthday party," but a "renewal" and "repositioning" for NPS. The heart of the planning is NPS's "Call to Action," a suite of 36 actions to advance national parks for their second century. I urge you to read it at http://www.nps.gov/calltoaction/.



cleanup at the marsh. Photo by Ned Stone.



The Results of the 2012 Dyke Marsh Breeding Bird Survey

BY LARRY CARTWRIGHT, BBS Survey Coordinator

The 2012 Dyke Marsh Breeding Bird Survey was conducted as part of a continuing biological inventory of this dwindling tidal wetland. The breeding status of each species was determined by means of behavioral criteria. Species were placed into one of four categories: confirmed breeder, probable breeder, possible breeder and present.

The official survey was conducted between Saturday, May 26, and Sunday, July 1, but any data collected outside of this period that confirmed a breeding species was entered into the database. This permitted us to weed out most migrants that do not use the marsh to breed. I also included information provided from the Sunday morning walks to supplement data reported by the survey teams. The survey tract encompassed the Belle Haven picnic area, the marina, the open marsh, the Potomac River shoreline and the surrounding woodland from the mouth of Hunting Creek to Morningside Lane. The volunteers reported 84 species at Dyke Marsh during the 2012 survey. By the time data collection was completed, they had collectively categorized 39 species as breeders, eight species as probable breeders and 23 species as possible breeders. An additional 14 species were present in the survey tract during the official reporting period, but were considered not to be in suitable breeding habitat.

The Eastern Screech-Owl pair returned for a second breeding attempt in 2012 after last year's highly successful nesting that produced three healthy fledglings. The tree



The Eastern Screech-Owl found this nest cavity for the breeding season. Photo by Ed Eder.

hosting the cavity in which the birds bred 2011 during fell down during following winter, but the breeding pair found a suitable replacement nest cavity for the 2012 breeding season. The gray morph male was first reported on March 24 in a cavity not more than 25 feet from the

original nest site. Unfortunately, the last observation was on May 6 as the developing foliage made the cavity and the owls more difficult to see. We did not document any fledglings and do not know the outcome of this year's breeding attempt.

The Bald Eagle breeding pair at the Morningside Lane nest did well again this year, fledging three healthy youngsters by June 8. The fledglings perfected their aerodynamic skills during the next week and a canoe team reported the birds in flight near the nest on June 17. Five of nine Osprey nests produced young this year. Three of the successful nests, including the well-known and closely observed marina nest, were on platforms, one was on a root ball and one

was constructed in a tree. The most interesting nest for me was the successful root ball nest that is situated between the two islands just south of the marina. Here three nestlings and their unconcerned parents



One of three Osprey nestlings on the root ball nest. Photo by Roger Miller.

calmly watched while canoeists passed as close as five feet from the nest to inspect the growing youngsters. It appears that both adults and nestlings perceived no malicious intent on the part of the canoeists and adapted well to human presence, as have the marina Ospreys. The ability of some birds to adapt is positive, but may also make them vulnerable to anyone wishing them harm. Fortunately, I am aware of no

The 2012 Breeding Bird Survey Results

Confirmed - 39 Species: Canada Goose, Wood Duck, Mallard, Osprey, Bald Eagle, Mourning Dove, Eastern Screech-Owl, Red-bellied Woodpecker, Downy Woodpecker, Great Crested Flycatcher, Eastern Kingbird, Warbling Vireo, Blue Jay, Fish Crow, Purple Martin, Tree Swallow, Northern Rough-winged Swallow, Barn Swallow, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, Carolina Wren, Marsh Wren, Blue-gray Gnatcatcher, American Robin, Gray Catbird, European Starling, Northern Parula, Yellow Warbler, Prothonotary Warbler, Northern Cardinal, Red-winged Blackbird, Common Grackle, Brown-headed Cowbird, Orchard Oriole, Baltimore Oriole, House Finch, American Goldfinch, House Sparrow.

Probable - 8 Species: Least Bittern, Eastern Wood-Pewee, Acadian Flycatcher, Willow Flycatcher, Red-eyed Vireo, Common Yellowthroat, Song Sparrow, Indigo Bunting.

Possible - 23 Species: Green Heron, Cooper's Hawk, Red-tailed Hawk, Killdeer, Spotted Sandpiper, Yellow-billed Cuckoo, Chimney Swift, Rubythroated Hummingbird, Belted Kingfisher, Hairy Woodpecker, Northern Flicker, Eastern Phoebe, American Crow, House Wren, Northern Mockingbird, Brown Thrasher, Cedar Waxwing, Black-and-white Warbler, Ovenbird, Louisiana Waterthrush, Scarlet Tanager, Eastern Towhee, Chipping Sparrow.

Present - 14 Species: Tundra Swan, Canvasback, Double-crested Cormorant, Great Blue Heron, Great Egret, Black Vulture, Turkey Vulture, Blackbellied Plover, Ring-billed Gull, Herring Gull, Great Black-backed Gull, Caspian Tern. Forster's Tern, Rock Pigeon.

instances at Dyke Marsh where humans have deliberately tried to hurt or harass breeding Ospreys.

Even after 20 years of conducting the survey, I am sometimes amazed and even entertained by what we find while in the field. This year it was nesting Purple Martins.

Purple Martins nesting in gourds or bird house apartments erected for them are hardly a new phenomenon, but the location and circumstances were quite unique at Dyke Marsh because the birds bred at the base of the Osprey nest in the marina. It just so happens that the slats or dividers in the platform that supports the nest served as nice



Purple Martins nest under the Osprey platform at the marina. Photo by Ed Eder.

nesting compartments for the Purple Martins. The birds were first noted hanging around the nest platform on June 1 and within a few days were actively bringing nesting material into the compartments. The collected data indicates that a minimum of six breeding Purple Martin pairs were nesting in the platform. We observed fledged young around the nest site in the company of well over a dozen adults on August 5. The breeding Ospreys seemed to take little notice and certainly did not interfere with the species sharing the platform with them. The story ended on a happy note for all as both Ospreys and Purple Martins successfully fledged young.

An active Yellow Warbler nest within a yard of the boardwalk also delighted both survey teams and participants in the Sunday morning walks. An observer first documented the boardwalk nest on June 4, which was followed by reports of five nestlings a few days later. The leader of



Adult Yellow Warbler tends to a fledgling. Photo by Ed Eder.

one Sunday morning walk stated that the male Yellow Warbler would fly into the nest with a mouthful of food and then sing for a moment before feeding the nestlings. This nest provided another success story as volunteers reported on nestling growth, development of feathers and finally fledging as youngsters began de-

parting the nest on June 13. In this case, fledging appeared to be a two-day event, as three of the young left the nest on June 13 and the remaining two the following day. It has been my understanding that songbird nestlings fledge simultaneously, but such it would seem is not always the case.

Among the most prolific breeding migrant songbirds at Dyke Marsh are Eastern Kingbirds, Warbling Vireos and Orchard and Baltimore Orioles. When I first began compiling the data for this survey in 1993, Warbling Vireos were confined to a few breeding pairs in the picnic area, but have now expanded throughout the area covered by the survey. I believe that up to 18 territorial males present in 2012 would not be an unreasonable estimate. Despite the ease of picking up singing males, Warbling Vireo nests remain incredibly hard to find. This year's survey yielded one documented Warbling Vireo nest. It was located in a sycamore tree beside the bridge on the Haul Road peninsula and presumably produced the two fledglings found in the area with their parents on June 30. The sycamore tree that hosted the Warbling Vireo nest also was popular with both oriole species in 2012 and provided nest site locations for at least one Orchard Oriole breeding pair and two Baltimore Oriole pairs. Despite the proximity of the oriole nests, all of which were active simultaneously, the breeding pairs displayed little interaction toward each other. Indeed, tolerating nearby nesting pairs with no evidence of territorial hostility seems to be an attribute of at least some, if not most, breeding orioles at Dyke Marsh.

Eastern Kingbirds building nests along the water's edge often place them in fairly open locations that provide par-

ticularly good views for canoe-based survey teams. This was true again in 2012 as nests with young near the boardwalk and Pipeline Bay were well documented by several canoe teams. The young are highly visible even at rest. They also can become noisy and competitive with nest mates when parents bring



Eastern Kingbird brings building material to its nest near the water. Photo by Ed Eder.

them food. Another advantage to being in a canoe is that even if things get fairly quiet, there is a host of Red-winged Blackbirds in the area that you can watch building nests, carrying food or tending to fledged young. There is always something to delight the senses on the water.

Canoe teams also often get the best views of three highvisibility bird species -- Prothonotary Warblers, Marsh Wrens and Least Bitterns. In the case of Prothonotary Warblers in 2012, canoeists found a nest while foot teams documented the results of successful breeding. A canoe team observed an active Prothonotary Warbler nest on May 27 at a location we happen to call Prothonotary Bay just inside the Big Gut entrance and in June, foot teams reported adults feeding fledged young north of Pipeline Bay and at the dogleg.

The fate of Marsh Wrens and Least Bitterns remain in doubt at Dyke Marsh, but the trend suggests eventual disappearance for at least the Marsh Wren. Marsh Wren nests were found in the channel separating the marsh vegetation between the Haul Road peninsula and the main island in 2012, but data analysis indicate that only approximately eight territorial males were present. In 2011, I estimated that 10 males held territories in this part of the marsh. A

SURVEY (Continued on page 6)

Meet the Plants of Dyke Marsh: Spatterdock

BY PAT SALAMONE

The bright yellow cup-shaped flowers of spatterdock emerging from the dark water are a common sight in Dyke Marsh from spring through early summer. Spatterdock (*Nuphar advena*, also called *Nuphar lutea*) is an aquatic perennial member of the water lily family (*Nymphaeaceae*) that is native throughout the eastern United States. Other common names include yellow pond lily, yellow cowlily and bullhead lily. It grows in shallow, still or slow-moving water up to 16 inches deep and has a rhizomatous root system that can be extensive, producing vegetative colonies.

Spatterdock leaves may float on the surface of the water, extend above the water or be submersed. The surface and floating leaves are large (up to 16 inches across), thick, heart-shaped and are attached to the stem. Submerged leaves are thin and attached to the rhizomes. In autumn, the flowers and leaf stems die back to the rhizome.

The flowers are one to two inches across and look as if they are only partly open; they are held at or above the water's surface on a thick round stem. They have six yellowgreen sepals which look like petals. The flower also has numerous small, inconspicuous petals, several rings of stamens and a yellow compound pistil.

Spent flowers are replaced by egg-shaped fruits (seed heads) about 1½ inches long that burst when they ripen and broadcast the rather large seeds across the water's surface.

Native Americans used both the rootstocks and the seeds of spatterdock for food. The rootstocks are starchy and were used both fresh as vegetables in stews or dried and ground into flour. The seeds could also be ground into flour or they could be popped like popcorn. Powdered roots were also used medicinally, in poultices that were applied to stop bleeding or swelling.

Spatterdock also provides food and cover or shelter for many aquatic animals. Waterfowl eat the seeds, muskrats and beavers eat the roots and deer will sometimes browse the flowers and leaves.

Spatterdock is also used as an ornamental plant in water



Spatterdock, showing bright yellow cup-shaped flowers. Photo credit: Bushman.K / Foter.com / CC BY-NC

gardens (though it probably sells better under the name yellow pond lily).

The exotic-sounding genus name, Nuphar, is likely derived from the Persian "ninufar," which means pond lily (and may in its turn have come from Sanskrit). The name made its way into European languages by the 13th century, when both French and English used the word "nenuphar" to denote water lilies of one type or another. Even today, the Spanish word for water lily is nenúfar.

For more information:

- United States Department of Agriculture USDA plant database http://plants.usda.gov/gallery.html
- Lady Bird Johnson Wildflower Center Native Plant Information Network (NPIN) - http:// www.wildflower.org/explore/
- J. Paclt, "Proposal to Amend the Gender of Nuphar, nom. cons. (Nymphaeaceae), to Neuter," Taxon, Vol. 47, No. 1 (Feb., 1998), pp. 167-169. Published by the International. Association for Plant Taxonomy.

SURVEY (Continued from page 5)

tributary of the Big Gut in the south marsh also hosted at least one nest in 2012, but canoe teams reported no more than two singing Marsh Wrens. Least Bitterns were difficult to locate in the north marsh during 2012, with even canoeists reporting no more than a single bird during each weekly survey. The south marsh provided a little more hope, with four individual birds and a possible breeding pair documented on June 10, but subsequent surveys yielded no Least Bittern nests or fledged young.

2012 was my 20th year as compiler of the Dyke Marsh Breeding Bird Survey, but there are so many wonderful volunteers who have participated over the past two decades that have made the survey possible. In particular, I would like to make special mention of Don Robinson and Eliza-

beth Ketz-Robinson who have participated in almost every weekly survey since 1993. They are truly special. With that, I would like to recognize those who took part in the 2012 survey, whether they actively participated on a survey team or provided supplemental data during a Sunday morning walk.

In alphabetical order, they are Eugene Ballering, Andy Bernick, Dave Boltz, Glenda Booth, Julie Bourns, Monique Derfuss, Ed Eder, Myriam Eder, Sandy Farkas, Kurt Gaskill, Susan Haskew, Gerry Hawkins, Jackie Howard, Beth Kemick, Phil Kenny, Elizabeth Ketz-Robinson, Mary Alice Koeneke, Glen Koppel, Ginny McNair, Larry Meade, Roger Miller, David "Nick" Nichols, Kurk Petrovic, Laura Plaze, Marc Ribaudo, Rich Rieger, Don Robinson, Alex Ronkainen, Molly Ross, Peter Ross, Paula Sullivan, Kim Taylor, Margaret Wohler and Chris Wolz.

Whooping Cranes, September 11

Ken Lavish from Patuxent Research Refuge's Wildlife Research Center will discuss the refuge's whooping crane project. Ken helps raise chicks as part of the effort to re-establish migrating flocks of whooping cranes, North America's tallest bird and a species that was



Adult Whooping Crane. Photo by Laura Erickson.

nearly wiped out when, in 1941, there were only around 22. The cranes are bred and hatched at Patuxent then transferred to Wisconsin. Scientists at the Patuxent Center, Laurel, Maryland, are leading cranes from Wisconsin to Florida with an ultralight airplanes. The meeting, cosponsored by the Audubon Society of Northern Virginia and the Northern Virginia Bird Club, will be at 7:30 p.m. at the Huntley Meadows Park Visitor Center.

Frog and Bat Walk, May 1

The Friends of Dyke Marsh will have an evening walk to look and listen for bats and frogs in the western part of Dyke Marsh, west of the park-



way, on Wednesday, May 1. We hope to hear species like green frogs and see big brown bats.

FODMer Deborah Hammer, a bat rehabilitator, will lead the walk. Meet at 7 p.m. behind the middle River Towers building, 6631 Wakefield Drive. Park in front of that building. Bring a flashlight and wear sturdy shoes (no need for boots). Postponed if rainy. Contact Glenda Booth at gbooth123@aol.com or 703-765-5233.

Welcome New FODM Members

Join us in welcoming our new **Life Members** Anna Finch, Renee Grebe and Dr. Eugene (Gene) Vinogradoff. We also welcome as our **New Regular Members**: Robert Blandford, Kathryn L. Kellam and John R. Cason, Mr. and Mrs. Eugene Larson, Pat and Diane Mann, Jan Moffatt, J.E. Sullivan, Nick Wasilewski, Lisa Webster, Christine Wozniak and Katherine and Mark Wychulis. And a special thanks to Steven Hantzis for his renewal as a **Life Member**.

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

MIGRATION (continued from page 1)

Observatory and coordinator of the Coastal Virginia Wildlife Observatory (CVWO) Monarch Butterfly Migration Project. The Observatory is located on the southern tip of the Delmarva peninsula, an area known for its spectacular fall monarch concentrations.

A retiree and Burke resident, Brindza had a 30-year career as a scientific reviewer in the Food and Drug Administration's Hematology and Immunology Division of the Office of In Vitro Diagnostic Device Evaluation and Safety.

In 2011, he was named Scientist of the Month by MON-ARCH NET, the North American network of monarch butterfly monitoring programs.

Sunday Morning Bird Walks

Bird walks are held every Sunday morning, all year. 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.

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. We encourage you to save paper (trees) and mailing costs by becoming a member or renewing your membership online at www.fodm.org. Just click on the "New Member" or "Renewal" button on our membership page to make your tax-deductible contribution by credit card or from your bank account securely through PayPal. 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. Renewal reminders will no longer be sent with The Marsh Wren. You will receive a separate notice by mail or by email when your renewal is due. Thank you for your continuing support of FODM.

DUES AMOUNT		\$
ADDITIONAL CONTRIB	UTION	\$
TOTAL AMOUNT ENCL	OSED	\$
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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).

Non-native, Mystery Snails along the Potomac, Dyke Marsh

BY MICHELLE RYAN, PH.D. CANDIDATE

Mystery snails (*Bellamya chinensis* and *Bellamya japonica*) are two non-native snail species from the viviparidae family found within North America, including Dyke Marsh and the Potomac River watershed. Originally transported from Asia to North America and sold as a food commodity or ornamental garden species over 100 years ago, the snails are now found across the Pacific Northwest, Great Lakes, New England and Mid-Atlantic coasts.

Despite their widespread distribution, researchers do not fully understand the morphology and possible impacts of *B. chinensis* and *B. japonica* on native freshwater systems such as the Potomac River. There is also taxonomic confusion concerning the snails. The adoption of a single scientific name for the species remains unresolved. Research has also shown that mystery snails can survive in dry environments for several weeks, making the snails able hitchhikers on man-made objects (such as boat trailers) transported between recreational areas. Researchers have also seen mystery snails increase the release of juvenile snails in the presence of predators to reduce predation stress.

A Ph.D. student at George Mason University, I am studying the distribution and role these snails are playing in



Non-native snail species are found on the shore at Dyke Marsh. (Compare size to nickel.) Photo by Glenda Booth.

the Potomac River watershed, particularly population densities and distribution.

I welcome volunteer citizen scientists to assist in the data collection from June to September, 2013. Please contact me at jryan10@gmu.edu for more information. I will hold training sessions. The first will be at on May 18 at the Occoquan Regional Park in Lorton.



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