SINCE 1976 THE FRIENDS OF DYKE MARSH WINTER 2014



The Friends of Dyke Marsh

FODM Quarterly Meeting

Sunday, March 2, at 3:00 p.m., Huntley Meadows Park, 3701 Lockheed Blvd., Alexandria, VA 22306. Phone 703-768-2525. Free to all.

Calendar of Events

April 5, Spring Cleanup at Dyke Marsh; April 19, 1:30 p.m. Nature Walk; April 26, 10 a.m. Earth Day, see raptors. 2014 Membership Meetings Wednesday 7:30 p.m. May 14, September 10, November 12.

CONTENTS Ned Stone Honored 2 President's Message 3 Why DM Is Significant 4 USGS Study Update 5 Meet the Plants of DM 6 Potomac River Gets C 7 The Shy Cosmet 8

What's Happening to Frogs?

Learn All About it on March 2

The Friends of Dyke Marsh, the Friends of Little Hunting Creek and the Friends of Huntley Meadows Park will host a program for all ages on frogs, species commonly found in Virginia, their status and threats.

The program will be held on Sunday, March 2, at 3 p.m. in the Huntley Meadows Park Visitors Center, 3701 Lockheed Blvd., Alexandria, VA.

The speaker will be Chris Hobson, coauthor of *A Guide to the Frogs and Toads* of Virginia, and a zoologist with the Virginia Division of Natural Heritage.

Frog populations are declining world-wide because of pollution, infectious diseases, habitat loss, invasive species, climate change and over-harvesting, says Save the Frogs. Frogs are excellent "bioindicators" because their permeable skin can absorb toxic chemicals and signal problems in the environment. Their life cycles are fascinating and diverse, and allow them to occupy habitats from lush rainforests, to arid deserts.



Green frogs (Rana clamitans) are common in Virginia. Photo by Ed Eder.

What is the largest frog in the world? What is the smallest? How many frog species are there? What do frogs eat? What eats frogs? What is Bufotoxin? We'll explore these questions and more. You will learn tips to help identify frogs found in the mid-Atlantic region, including their calls, colors, and behaviors. Whether it's the science of frogs, the calls of frogs or Kermit the Frog – you'll learn all about these fascinating amphibians.

Marsh Restoration Is Closer to Reality

In our last issue, we reported that U.S. Secretary of Interior Sally Jewell visited the Dyke Marsh Wildlife Preserve on October 24 and announced funding of \$25 million to restore Dyke Marsh. The grant, known as "Hurricane Sandy" funds, is intended to support activities that stabilize the marsh, restore wetlands and improve the resiliency of the shoreline. This grant is in addition to the previously-announced \$2.5 million for restoration in mitigation funds from the Federal Aviation Administration.

The National Park Service (NPS) has now released the draft final restoration plan. It has three approaches, including a preferred alternative, known as Alterna-



Secretary Sally Jewell with U.S. Senator Tim Kaine and U.S. Congressman Jim Moran. Photo by Bob Veltkamp.

tive C, "hydrologic restoration and fullest possible extent of wetland restoration." (Alternative A is "no action.") NPS

RESTORATION, (Continued on page 6)

Ned Stone Recognized

FODM Vice President Ned Stone received the Potomac Champion Award at the Alice Ferguson Foundation's (AFF) 8th Annual Trash Summit on October 18. Lori Arguellles, Executive Director of AFF, lauded Ned's untiring efforts to remove trash from the Potomac River and the Dyke Marsh Wildlife Preserve. "Whether he's cruising along Belle Haven Marina in his kayak with D.C. Surfriders or making upgrades to the



Ned Stone shown removing trash along Haul Road in Dyke Marsh. Photo by Glenda Booth.

Dyke Marsh Wildlife Preserve, he graciously works to mold a future generation of environmental stewards," she commented. She also cited Ned's work to control invasive plants and lead nature walks.

The Trash Summit is a forum of elected officials, government agencies, non-governmental organizations, businesses and citizens gather to develop approaches to reduce litter and waste in the Potomac watershed.

Congratulations Ned!

New Book Offers Wetlands Basics

A new book titled Tidal Wetlands Primer: An Introduction to Their Ecology, Natural History, Status, and Conservation by Ralph Tiner touts the value of wetlands.

"The purpose of this book is to introduce the world of tidal wetlands to students and professionals in the environmental fields and others with an interest in the subject. . .," announced an October 2013 press release from the publisher, the University of Massachusetts Press. "This volume provides a clear account of the factors that make these habitats unique and vulnerable. It discusses their formation, the conditions affecting their plant and animal life, and the diversity of types across North America, as well as their history, use by wildlife and humans, current status, conservation, restoration, and likely future. The emphasis is on vegetated wetlands -- marshes and swamps -- with additional discussion of eelgrass meadows, rocky shores, beaches, and tidal flats." The 500+ page book is priced at \$39.95.

A Call for Volunteers

Volunteers are the lifeblood of FODM. We especially need volunteers to help with student visits and are seeking someone skilled in graphics to design materials. We also welcome volunteers to help with trash cleanups and invasive plant control. If you'd like to help, email Glenda Booth at gbooth123@aol.com.

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

h, spring! A bald eagle pair is at home in a new nest, the ospreys will return soon and plants are springing into leaf.

Signs of spring stir the urge to be outside.

Restoration Advances

FODMers are heartened by the draft final restoration plan, all 247 pages of it. See article on page 1. I am reminded of a quotation I saw in Gros Mourne National Park, Newfoundland: "The Earth's plants and animals are our biological bank account. We are living off the capital of this forest, not the interest. We have been given a green inheritance, but will we leave a green legacy?" We FODMers should be proud that we can help leave a "green legacy."

Ron Litwin, the lead scientist in the U.S. Geological Survey study of the wetland's destabilization, wrote us on October 30:

"My coauthors and I congratulate the Friends of Dyke Marsh on yesterday's DOI [Department of Interior] announcement. You have been tireless advocates for the marsh, and it now can be restored whole as a premier freshwater wetland within federal lands in the Washington, D.C., metro area.

"The timing of DOI Secretary Jewell's funding announcement yesterday was fortunate. Our journal article on the marsh [see page 5] shows that the marsh had only 10-20 years left before it would have fully eroded away, due to tidal imbalance and northbound storms. As the study is in an international journal (Netherlands), I expect it will get wide readership. It includes 150 years worth of maps documenting the marsh's deconstruction. Thought you might wish to know that.

"The formal NPS boundary markers that GWMP recently placed in the river will bring new public awareness of the marsh's historic presence along the river and will serve as an approximation of what the reunited and restored wetland will look like once more, intact and once again whole...

"Congratulations. Well done." -- for my coauthors, Ron Litwin, USGS, Research Geologist.

Visitors

The American Academy of Pediatrics reports that older children and teens are spending more than 11 hours daily with technology, from television to smart phones. Some Alexandria teens may be defying the trend. A group of T.C. Williams International Academy tenth-grade biology students visited Dyke Marsh. Their teacher, Leigh Arscott, wrote:

"Our students were able to see and touch things we've talked about in the classroom . . . I feel like today at Dyke Marsh we saw the real thing -- where our watershed really shows its importance and where the ecological concepts we've learned in class really shine. Even better, now our students have real-world experiences to which they can con-

nect new learning that will take place in class. These hands-on experiences likely even more important for our English language learners than for most students since it helps them retain the vast amount of



T.C. Williams students conduct water sampling by boat. Photo by G. Booth.

knowledge and language we expect to teach them in our science courses.

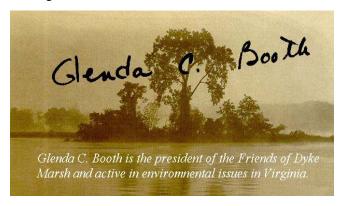
"Thank you so much for guiding and instructing our students all day. I know they had a great time and had nothing but good things to say (unless they complained they didn't get to do more!)."

WAMU Reporter Jonathan Wilson spotlighted Dyke Marsh restoration in December and January, after his December 16 visit. You can learn about it here: http://wamu.org/programs/metro_connection/13/12/20/tiny potomac river marsh gets new lease on life.

401 Parks

At a January national meeting of friends groups, NPS Director Jon Jarvis noted that there are now 401 national parks, at least one in every state. In 2013, President Obama added Delaware's First State and Maryland's Harriet Tubman Underground Railroad National Monuments. Jarvis urged advocates to use the 2016 centennial to "reinvest and reconnect with the American public." Annually, friends groups provide over \$125 million to America's parks.

Correction: In our fall *Marsh Wren*, I reported that national parks are 1/15th of the federal budget. Alert reader John Perry appropriately questioned this. National parks spending is 1/15th of one percent of the federal budget, according to the National Parks and Conservation Association.



Why Is Dyke Marsh Significant?

The Dyke Marsh Wildlife Preserve is a 480-acre complex with several habitats -- a freshwater tidal wetland, swamp forest, upland forest and open water. It is on the Virginia side of the Potomac River in Fairfax County and has been seriously degraded by dredging, dumping, filling and the introduction of non-native species. Congress added Dyke Marsh to the National Park System in 1959 "so that fish and wildlife development and their preservation as wetland wildlife habitat shall be paramount." (Pub. Law 86-41)

What is it? What's there?

Dyke Marsh is --

- a freshwater tidal marsh and freshwater tidal marshes are rare.
- one of the largest remaining freshwater tidal wetlands in the Washington metropolitan area.
- one of the largest, most significant temperate, climax, riverine, narrow-leafed cattail marshes in the national park system
- habitat for 300 known species of plants, 6,000 arthropods, 38 fish, 16 reptiles, 14 amphibians and over 270 species of birds, and at least 20,000 species of insects. Officials estimate that 90 percent of the marsh's microhymenoptera are not yet described.
- home to the narrow-leafed cattail (*Typha angustifolia*), a plant more common to salty water.
- one of the best studied wetlands in the U.S. and an outdoor laboratory for several area universities.
 - at least 2,200 years old, in the southern part.

Three plants found in Dyke Marsh are considered "critically imperiled" or "imperiled" in Virginia: ¹

- Davis's sedge (*Carex davisii*)
- River bulrush (*Bolboschoenus fluviatilis*, also known as *Schoenoplectus fluviatilis*)
 - Rough avens (Geum laciniatum)

Two bird species found in Dyke Marsh are among Virginia's rarest known native animals:

The American bittern (Botaurus lentiginosus). In Virginia, this bird is "extremely rare and critically imperiled" for



Dyke Marsh sometimes has rare visitors like this western bird, the Eared Grebe. Photo by Ed Eder.

breeding occurrences and "very rare and imperiled" for nonbreeding occurrences.

■ The swamp sparrow (*Melospiza georgiana georgiana*). In Virginia, this bird is "extremely rare and critically imperiled" for breeding occurrences.

It is the only known nesting area of the marsh wren (Cistothorus palustris) in the upper Potomac River tidal zone. The marsh wren is uncommon locally and numbers

of nests have declined to a handful.

Two species of carabid beetles previously unknown in Virginia were found in 2012.

Dyke Marsh has survived years of abuse and impacts from surrounding



Dyke Marsh is disappearing - 1.5 to 2 acres / year. Photo by Ned Stone.

dense development, a rare tidal wetland in a suburban/urban metropolitan area that provides an outdoor classroom for students of all ages, a laboratory for scientific study and many opportunities for recreation and nature study.

It's disappearing.

Dyke Marsh is disappearing. Around 1.5 to two acres of wetlands are vanishing every year, a rate so severe that U.S. Geological Survey scientists say Dyke Marsh will be gone by 2035. Mining reduced what was once 200 acres of emergent marsh to 83 acres and destabilized the whole system, spurring the loss of another 23 acres. Today fewer than 60 acres remain.

It's gotten attention.

Dyke Marsh has been featured on PBS television's This American Land, National Public Radio/WAMU's "Metro Connection," in the Washington Post and in Virginia Wildlife magazine. A feature film about Dyke Marsh, On the Edge, premiered at the Kennedy Center.

For more information, visit www.fodm.org, Face-book.com and www.nps.gov/gwmp on the internet.

¹Plant and bird rankings developed by Virginia Department of Conservation and Recreation, Division of Natural Heritage.

Coastal Habitats, the Strongest Defense

Natural coastal habitats are critical to protecting coasts, maintains an October 2013 study by Natural Capital Project at the Stanford Woods Institute for the Environment.

Lead author Katie Arkema, a Woods postdoctoral scholar, wrote, "If we lose these defenses, we will either have to have massive investments in engineered defenses or risk greater damage to millions of people and billions in property."

Conservation and restoration of shoreline marshes, seagrass beds, oyster beds, coral reefs, dunes, coastal forests and large kelp beds buffer coastlines from waves and storm surges. Loss of these habitats would increase the vulnerability of many communities. Of 25 most densely populated counties in the United States, 23 are along the coastline, the author points out.

Dyke Marsh in "Late Stages of Failure" -- USGS

BY GLENDA BOOTH

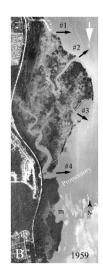
In previous issues we have reported on the landmark 2010 study by the U.S. Geological Survey study of Dyke Marsh which concluded, "Analysis of field evidence, aerial photography, and published maps has revealed an accelerating rate of erosion and marsh loss at Dyke Marsh, which now appears to put at risk the short term survivability of this marsh. . . This freshwater tidal marsh has shifted from a semi-stable net depositional environment (1864–1937) into a strongly erosional one."

USGS Study Updated

In a July 2013 update published by USGS scientists R.J. Litwin, J.P. Smoot and M.J. Pavich, in the journal Wetlands, they affirmed that during the dredging of Dyke Marsh from 1938 to 1974, which the authors call the "pre-mining phase," the marsh surface declined from 184 to 83 acres. "Dredging not only directly consumed emergent marshland surface area and altered the historically shallow riverbottom adjacent to the marsh, but also altered marsh hydrology by deconstructing most of the tidal channel network that historically existed on the marsh from at least 1862 AD to ~1960 AD." The post-mining stage has seen "persistent, unabated erosion since its beginning in the mid-1970s," they concluded.

Removal of a promontory on the southern end of Dyke Marsh has been a major factor in the destabilization of the marsh and its subsequent erosion. Other factors include "the







Removal of the promontory (shown in Fig. A) has been a major factor in the erosion of Dyke Marsh. Photo by NPS.

significant change in the depth profile of the Potomac River adjacent to Dyke Marsh," which has affected how "wind-driven waves approach the margin of the marsh" The pre-dredging shallow water shelf served as an erosion buffer "by causing larger waves to shoal before reaching the marsh shoreface. The modern (post-mining) Potomac River bottom profile by contrast provides little to no room for shoal-



Wind-driven waves approach the margin of the marsh, undermine trees and the trees fall. Photo by Ned Stone.

ing maximum-sized waves before they reach the marsh shoreface." Additionally, dredge channel scars" provide northbound waves an extended deep-water path towards the altered marsh shoreface, enabling waves to get closer to the marsh edge before shoaling and increasing their potential erosive force."

In addition, "... shortening or removing the tidal channel network by mining diminished the ability of the marsh to trap suspended sediments in order to aggrade laterally and vertically. Aggradation diminished because the foreshortened tidal creeks were less effective in their ability to distribute and to retain particulate-laden slackwater due to the shorter travel distances during falling tide levels, and the marsh experienced a decreased ability to trap sediment as a result of decreased surface area."

The authors wrote that the current shoreline erosion rate is 8.5 feet a year and that "high shoreline erosion rates at Dyke Marsh were unexpected." They maintain that the marsh is unlikely to "self-restore" . . . related in part to a consequent diminished ability of dredge-mined marshes to fully re-equilibrate to diurnal (non-storm) tidal energy."

Gone by 2035

The article concludes: "... Dyke Marsh presently is in its late stages of failure as a freshwater tidal marsh system . . . In the absence of human efforts to restore the equilibrium between marsh and tide, and equilibrium to the other natural forces acting on this wetland, Dyke Marsh likely will continue to accelerate its degradation, erosion, and fragmentation until it is gone. This likely will occur prior to 2035 AD."

You can read an abstract of this paper here: http://link.springer.com/search?query=Litwin&facet-subject=%2Freshwater+%26+Marine+Ecology%22.

How Old Is Dyke Marsh?

The authors estimate that in the southern part of Dyke Marsh, "peat had developed at the site by at least the Early Woodland Period (~2200 BC). . . . "

Meet the Plants of Dyke Marsh: Red Maple

BY PATRICIA P. SALAMONE

When you think about the red maple (acer rubrum), it may be its fall foliage that comes to mind. But there's more to the red maple than that. Look at one in the early spring and you'll see it tinged with red then too. That isn't the leaves, it's the red maple flowers. The red maple is one of the first trees to bloom in the late winter or early spring. Its deep red-orange flowers, growing in clusters, are small, but showy.

In fact, the species name (rubrum means "red") may come from its flowers rather than its foliage. The fall foliage is actually quite variable in color; it can be bright red (especially in cultivars) but also may be a duller yellow or yellowish green. Nancy Ross Hugo writes, "Probably the red maple's early spring flowers—small, red, and appearing in dense clusters before the leaves—led to the tree's name, not its leaves."

Most red maple trees bear either predominantly male or predominantly female flowers, but some trees produce both. The flowers appear in late winter to early spring before the leaves. Red maple is pollinated by both the wind (hence its habit of blooming before the leaves come out) and by insects; bees and early butterflies visit red maple flowers. The USDA plant fact sheet notes: "Because of the abundance and wide distribution of red maple, its early-produced pollen may be important to the biology of bees and other pollen-dependent insects."

By the time the leaves begin to open out, the fertilized female flowers will have matured into long drooping clusters of red, pink, or yellow two-winged seeds (botanically, "samaras," but also known colloquially as maple keys) that will ripen and then "helicopter" to the ground later in the spring.

So be sure to look for red maple flowers this spring. As Nancy Ross Hugo writes, "Against a deep blue sky, illuminated by late afternoon sun, red maple flowers glow, and to miss them is to miss half the beauty of this tree."



Red maple flowers in early spring. Photo: © 2005 Steven J. Baskauf.

To learn more:

The Blossom on the Bough: A Book of Trees, and From Flower to Fruit by Anne Ophelia Dowden. Intended for "young readers" but interesting to readers of any age; wonderful illustrations.

USDA plant fact sheet http://plants.usda.gov/core/profile?symbol=ACRU.

"The Sex Life of the Red Maple," Richard Primack, Arnoldia, the Magazine of the Arnold Arboretum, Volume 63, Number 1, 2004.

Seeing Trees: Discover the Extraordinary Secrets of Everyday Trees, by Nancy Ross Hugo, photography by Robert Llewellyn. Amazing close-up photos.

RESTORATION, (Continued from page 1)

is accepting comments until March 18, 2014. The draft plan or environmental impact statement (EIS) and NPS's newsletter are here: http://parkplanning.nps.gov/dykemarshdeis. NPS held a public meeting on February 12.

The major components of Alternative C are these:

- restore 245 acres of marsh in phases, including building temporary containment cells for fill;
- build a breakwater structure "at the southern alignment of the historic promontory to provide immediate protection to Dyke Marsh from erosion";
- restore emergent marsh "within the area of the historic promontory";
 - fill deep channel areas north of the former promontory;
- cut tidal guts in the restored marsh "similar to the historical flow channels of the original marsh"; and
- construct "breaks in the Haul Road, returning tidal flows to approximately 20-30 acres west of the Haul Road," to re-establish "the historic swamp forest."

The document states that Alternative C would provide "long-term beneficial impacts on most resources," including "hydrology and sediment transport, as well as vegetation and wetlands . . . because the marsh would be stabilized and

the amount of vegetation and wetlands would be greatly increased," all of which would benefit "fish, wildlife and species of concern."

As we have previously reported, U.S. Geological Survey scientists have concluded that Dyke Marsh could disappear by 2035 without action. To read the USGS study that documents the destabilization of Dyke Marsh visit http://pubs.usgs.gov/of/2010/1269/. See also our update of this study on page 5.

Schedule and Funds

NPS Regional Director Steve Whitesell sent FODM the "expected timeline" in a November 22, 2013 letter.

In 2014, January, draft EIS release and public meeting; February, draft public comment analysis report; April, preparation of final responses and text changes, final public analysis report and first internal final EIS; June, second final EIS and camera final EIS; September, final record of decision.

The airport mitigation funds have two deadlines: December 31, 2015 – sign contract for construction of the breakwater; December 31, 2016 – begin construction of the breakwater. (The "breakwater" would replicate the former promontory in the southern part of the marsh that protected the marsh from northbound storms.)

Potomac River Gets a C

Potomac Conservancy has given the Potomac River's health an overall grade of C. The analysis evaluated habitat quality, people, fish, land use and pollution.



The Potomac River's ecological health is recovering. Photo by T.D. Hobart.

Here are a few examples: tidal water quality, C-; underwater grasses, D; current land use, C+; future development, C-; stream water quality, D; protected land, A; forested buffers, C-.

"The recovery is a slow one," the Conservancy notes. "Fortunately, there has been a renewed commitment at the start of the 21st century to return the Potomac to full ecological health. And we're starting to see some signs of progress as evidenced in this report."

The Potomac River is a drinking water source for five million Washington, D.C.-area people. In 2012, American Rivers designated the Potomac as the nation's number one most endangered river.

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.

Welcome New FODM Members

We welcome **Life Members** Susan Ginsburg and Kesh Narayanan along with our **New Regular Members:** Dorothy Canter, Liz Richards and Matt Frame, Marilyn Fingerhut & David Haartz, Mr. Eric C. Johnson and Kathleen Minadeo Johnson, Meg Jonas, Marty Katz, Susan R. O'Connor, Mr. William Theodore Pierson Jr., Laura Sebastianelli and Michael Sieracki, and Lacey Walker.

Dyke Marsh Needs Your Help!

People concerned about Dyke Marsh's future can respond to the National Park Service's (NPS) request for public comments on the draft final restoration plan (an environmental impact statement/EIS). See page 1. Participation and interest from the community are vital to preserving this great resource.

The NPS draft plan/EIS is open for review and comment until Tuesday, March 18, 2014. The plan and newsletter are available on the NPS Planning, Environment and Public Comment (PEPC) website.

Calendar of Events

March 2, FODM Quarterly Meeting, on Frogs. (See page 1.) **April 5**, Spring Cleanup at Dyke Marsh.

April 19, 1:30 p.m. - 3:30 p.m., Signs of Spring nature walk.

April 26, Earth Day, 10 a.m. to 12. See rehabilitated raptors. **May 14**, FODM Quarterly Meeting, on Birds.

September 10, FODM Quarterly Meeting, on Climate Change Storms and Wetlands.

November 12, FODM Quarterly Meeting, on Bats.

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. 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. Annual dues are \$15.00 per household; \$250.00 for life membership for an individual. You can sign up or renew for one or more years, using the form to the right if by mail. You will receive a notice by mail or by email when your renewal is due. Thank you for your continuing support of FODM.

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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).

In Search of the Shy Cosmet

BY ED EDER

In early December, I was captivated by the sight of three Carolina Chickadees repeatedly flying at cattail seed heads and very deliberately pecking into the fluff. I have witnessed this behavior before and assumed they were after seeds, but was surprised to learn that the Chickadees are searching for the caterpillar of the Shy Cosmet Moth (*Limnaecia phragmitella*) otherwise Known as the Cattail Moth. This moth in the *Cosmopterigidae* family, has an extensive range, including Europe. Asia, New Zealand, Australia and North America. In the Eastern US it extends from Nova Scotia to Virginia. The larvae overwinter in the

cattail head and feed on cattail seeds. They often spin silken webs in the cattail flowers and seeds and fluffed this larva infested cattail looks something like cotton candy.





The caterpillars pupate in late spring and emerge in early summer as a moth.

The caterpillars are about 5 mm long and have a dorsal stripe. They camouflage well within the cattail. Often, what appear to be seeds in the fluff are actually frass from the larvae.

Here are my pictures of a Carolina Chickadee searching for a Cosmet Moth. I observed them actually taking Cattail fluff to a nearby branch and picking through it for their nutritious protein snack.



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