



Vol. 28, No. 3 May 1, 2018

Our Mission Statement:

The Friends of Bombay Hook is a not-forprofit corporation working in conjunction with Bombay Hook NWR and the U.S. Fish and Wildlife Service. It supports and enhances educational and recreational programs at Bombay Hook, provides volunteer services and financial assistance and serves as a link between the Refuge and the public.

We still need Friends volunteers in operating our Blue Heron Gift Shoppe and assisting with other events at the Refuge. Our store will remain open until the end of June, depending on volunteer availability, so if you are interested, please let us know at fobh@comcast.net. Training will be provided.

We still have "I SUPPORT NATIONAL WILD-LIFE REFUGES" decals available; every purchase/donation goes to our Capital Improvement Fund. We also have the loyalty card available at the Blue Heron Gift Shoppe. If you purchase items totaling \$20 or more, we mark your card. If you accumulate \$100, you will receive a 15% discount on total items purchased.

New items for the Blue Heron Gift Shoppe include our 2018 Atlantic Flyway T-shirts in two colors and cuts (see Page 4 for more information).

2018 Newsletter Schedule

Newsletter Release
September 1
November 1
September 1
November 1
Articles Due
August 7
October 7

The next newsletter will be issued on September 1, 2018

HAVE A HAPPY AND SAFE SUMMER!!!!

Published Quarterly by Friends of Bombay Hook, Inc. 2591 Whitehall Neck Road Smyrna, DE 19977 (302) 653-8322

http://www.friendsofbombayhook.org



Visiting Edwin B. Forsythe NWR By Julie Memmolo

Edwin B. Forsythe NWR is an excellent refuge. The refuge is located in Ocean-ville, New Jersey, which is approximately a ninety-minute drive from Bombay Hook. With an eight-mile Wild-life Drive and four





walking trails, there is plenty to see. On my visits in the winter I have seen Shorteared Owls, Snowy Owls and a Redmorph Screech Owl (top, right). Visitina in the spring, I enjoyed seeina flocks of

Black Skimmers and Canada Goslings (*left*), as well as many song birds. Much like Bombay Hook, it has open marsh, meadows and wooded trails. It is well worth a visit! (*Photos by Julie Memmolo*)

New Refuge Picnic Tables

A very special thanks to our Refuge volunteers, Pete and Greg, who stained the three new picnic tables for the Refuge. The tables were purchased by the FOBH for use in the Youth Environmental Educational programs offered by the Refuge. (Photo by Bruce Lantz)



February 1 through March 31, 2018



February started out very cold with low temperatures in the low teens for a few days with significant ice covering the impoundments. However, temperatures soon moderated and by mid-month, spring-like weather prevailed. Several days with highs in the mid-60's and 70's almost convinced us that winter was over. However, March reminded

us that it wasn't with several northeast storms with high tides and a significant snow and ice storm on March 21 resulting in considerable downed trees and limbs both on and off the Refuge.

WATERFOWL

During early February up to 25,000 **Snow Geese** were noted roosting in Money Marsh. These birds would normally leave the Refuge shortly after sunrise and feed in agricultural fields in the surrounding area. After mid-February Snow Goose numbers declined on the Refuge but were still abundant within the state. Flocks of 4,000 to 5,000 were still using the Refuge and adjacent farmland during early March. By the 3rd week of March approximately 2,000 birds were still noted in the area with that number dropping to a few hundred by March 31.

Tundra Swans remained throughout the report period with as many as 400 birds noted within the Refuge boundaries and as many as 750 counted off Refuge farm fields within 3 miles of Bombay Hook. Swans were utilizing both Bombay Hook and Woodland Beach wetlands for roosting activities and flying to the agricultural fields to feed. A significant portion of the Swans appear to have departed the area after mid-March with virtually all but an occasional straggler gone by the end of the month. At least one pair of **Mute Swans** has remained on the Refuge.

Duck use was good throughout the two months with Blacks and Mallards predominating during early February with significant influxes of Shovelers, Green-winged Teal and Pintails occurring during February and through mid-March. 1,500 Pintails were noted in Bear Swamp on February 9. By the last two weeks of March, hundreds of Shovelers and Green-winged Teal were visible along the Auto Tour Route both in the impoundments and in the adjacent saltmarshes. Naturally, this time of year they were in prime breeding plumage and quite beautiful. Lesser numbers of Ruddy Ducks, Bufflehead, Ring-necked Ducks, Gadwall, Wigeon and Mergansers of three species were normally available for patient observers. Less common species reported during the period included Blue-winged Teal, Redhead, Canvasback and Long-tailed Ducks. A few White-fronted Geese, Ross's Geese and Brant were reported as well.

SHOREBIRDS

Avocets showed up in the second week of February and the population built to 200 by the end of March. **Woodcocks** were reported by early February and were easily observed during their courtship flights at dusk during many evenings throughout March. **Yellowlegs** and **Wilson's Snipe** were reported by early March and were followed by arriving **Dunlin** and **Black-bellied Plover**.

MARSH AND WATER BIRDS

As usual the **Great Blue Herons** were common throughout the period. **Pied-billed Grebes** were not-

Pied-billed Grebe Photo by Lee Karney/USFWS

ed in early March with Snowy Egrets, Glossy Ibis and Great Egrets all arriving later in the month.

GULLS AND TERNS

A Lesser Black-backed Gull was recorded on Leatherberry Flats in mid-February and early March. A Forster's Tern was recorded during late March.

RAILS & COOTS

A few **Coots** were observed in Shearness Pool during both months of the report period. **Clapper Rails** were reported during early March in Money Marsh and a **Virginia Rail** was reported at the Boardwalk Trail during late March.



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(FOBH)", a non-profit 501(c)(3) organization working in conjunction with Bombay Hook NWR and U.S. Fish and Wildlife Service. FOBH provides financial and developmental support for Environmental Education programs at the Refuge and in communities throughout the region.

Our readers are encouraged to share comments, provide articles for publication and/or suggestions regarding the Refuge as well as notifying us of address changes.

Please direct communications to:

Friends of Bombay Hook, Inc. 2591 Whitehall Neck Road Smyrna, DE 19977 Phone: (302) 653-8322 Fax: (302) 653-0684

email: fobhmembership@idv.net
http://www.friendsofbombayhook.org

GALLINACEOUS BIRDS

Both **Bobwhite** and **Turkeys** were observed frequently during the period. Turkeys were gobbling vigorously between Parson Point Trail and Finis Pool on March 6.



Great Horned Owl Photo by Tom Koerner/USFWS

RAPTORS

There were two active **Bald Eagle** nests visible from the Wildlife Drive in January. Unfortunately, the nest on the island within Raymond Pool was later abandoned and a **Great Horned Owl** was visible in the nest. Activity observed at the George's Island nest on 3/22 appeared to indicate that young may be present.

Short-eared Owls were seen along Shearness Dike during the first two weeks of February.

Barred Owls were commonly heard and seen in the Finis Pool area.

A leucistic **Red-tailed Hawk** was reported again this year in the Bear

Swamp area.

Peregrines were reported during both months. One was reported near the Visitor Center on the evening of 3/22 feasting on a recent bird kill while perched on a Bluebird box.

Ospreys were reported in Shearness on 3/26 and at Bear Swamp on 3/30.

PASSERINES

White-crowned Sparrows were sighted frequently near the Visitor Center bird feeder. A Rusty Blackbird was spotted near Finis in late March. American Pipits and Tree Sparrows were reported near the Allee House during late March. Pileated Woodpeckers were frequently reported in several sites this period.

The Red-winged Blackbird

How many times have you heard, "Oh, it's just a Red-winged Blackbird?" Yes, for sure they are common in many parts of the U.S., and many times the bullies of our bird feeders, but I always get a kick out of people coming in to the Visitor Center that are amazed at these birds and so excited to see them. Like a few other bird species, they get quite overlooked around here.

Did you know.....?

- That according to the American Breeding Bird Survey, the Red-winged Blackbird population has declined by over 30% from 1966 to 2014.
- 80% of their population spends part of the year in the U.S., 14% in Canada; and 16% in Mexico.
- Male Red-winged Blackbirds spend most of their time on tall reeds and grasses watching over their territories and singing their hearts out, while the female stays lower in the grasses collecting nesting materials and food.
- Blackbirds nest in loose groups in partly because of the scarcity of appropriate marsh habitats. Typically, females crowd from 5-15 nests in one males' territory. The females usually mate with the male who holds the territory but will also mate with nearby males.
- They build their nests low on shoots of marsh vegetation and sometimes trees or shrubs.



Male Red-winged Blackbird
Photo by Karen Dever

- They mainly eat insects in the summer and seeds in the winter.
- In the fall and winter, you can usually find the Red-winged Blackbirds flocking with other Blackbirds, Cowbirds, Grackles and Starlings in open fields eating and then roosting together into the thousands and millions.



We're back!!

It has been a long winter! Tree buds can now be seen and flowers are blooming but as of this writing, I am still asking myself when are the temperatures going to feel like spring? Hopefully our weather will start turning around for us!

We have been busy stocking up on goodies in the store.

Our new 2018 T-shirts have arrived (see photo at right)! This year we are focusing on the Atlantic Flyway for migrating birds. Bombay Hook is a very important stop for many birds on their journey north and south each year. The shirts are available in a women's cut and a regular (unisex) cut. Attached to each shirt is an information card briefly educating about the flyway. We think they turned out great! As always, a big shout out to Marsha Holler and crew at Great Graphics of Dover, DE for all the special help in the art and design of our one of a kind, collectible shirts!



We have a few new products I would like to mention (see photos at right). We are trying out some ceramic coasters with wildlife photos on them, some lovely bandanas in different styles and some twig-designed shepherd's hook for your feeders! Later in the year we will be once again digitizing a photo for a new hat design. Friends of Bombay Hook takes great pride in their t-shirts and most of their hats in being unique to us only and very different than what you will find at any other Refuge store!

C'mon in and check us out! The store is open till the end of June and then closed until September. Thank you to all our volunteers who work many hours in order for the Visitor Center to be open on the weekends in season and also operate the Blue Heron Gift Shoppe!

Karen Dever, Store Manager





Spring/Summer 2018 Friends of Bombay Hook Bird Club Schedule

Welcome to the 2018 FOBH Bird Club Year! Please come and join us at any time during the year. This spring and summer's

birding trip calendar offers many exciting new destinations, some new leaders, targeting seasonal birds in and around Bombay Hook NWR. Beginning birders to advanced birders and everyone in-between are welcome. No dues or meetings. Use your own transportation to the meet sites. All questions, concerns or to be added to our email list please contact: fobh@comcast.net, inquire on our Facebook page or call (302) 653-8322 and leave a message (messages are retrieved 1-2 times/week) All members will be contacted via email in case of unforeseen changes in the schedule due to inclement weather, etc. *Some of our trips may require registration to attend.

Everyone is encouraged to dress appropriately for field trip weather, consider proper footwear, insect repellant, and bring water. Traditionally many in our bird club will share a meal together after the birding trips outside Bombay Hook NWR. Please join us!

Sunday, May 6, 2018 from 7:30 a.m. to 10:00 a.m.

Prime Hook NWR

A spring Warbler Walk though some of the best spots at Prime Hook.

Meet at Prime Hook NWR Visitor Center

Leaders: Bill & Sally Fintel

Sunday, May 20, 2018 at 8:00 a.m.

DE F&W Ashton Tract, North of Port Penn, DE (along Thorntown Road off Route 9)

Explore this new state property on the south side of 1,000 Acre Marsh

Meet at Ashton Tract parking lot Leaders: Bill & Ann-Marie Bond

Saturday, June 2, 2018 (time and leader to be announced)

Dupont Nature Center at end of Lighthouse Road, along Mispillion River This trip was suggested as an afternoon shorebird trip, at low tide. Meet in the Nature Center parking lot.

Sunday, August 19, 2018 from 7:30 a.m. to 10:30 a.m.

Woodland Beach Area

Meet at the Woodland Beach fishing pier parking lot.

Leader: Randy Murphy

We encourage you to join Marcia Poling for Warbler Walks during Wednesdays in May at Bombay Hook NWR. Details can be found on the Bombay Hook NWR website under Calendar of Events.



Future Bombay Hook NWR Road Projects

After an April meeting with the department that manages the Federal roads at the Refuge, our Refuge Manager Oscar Reed has the following updates:

- The Federal Highway Administration (FHWA) has pushed the chip and seal project for Bombay Hook into Fiscal Year 19 (begins fall of 2018).
- Our roads coordinator is advocating for FHWA to do the project in the early part of the new fiscal year.
- In the interim, efforts are underway to schedule a FHWA engineer's visit for advice on Refuge road maintenance until the project work begins.

Look for future project updates from the Refuge staff and on the FOBH website.



Bombay Hook's Junior Ranger and Junior Refuge Manager 2018 Programs

Inspiring children to spend more time outdoors is our mission! The program helps children ages 7-11 (and their families) learn about the Refuge's habitats and the plants and animals that rely on them. Each session includes a new topic along with exploring the Refuge. This gives families the flexibility to attend one session or many.



Each child is provided with the materials necessary to enhance their experience enabling them to become lifelong naturalists. Youth completing the program checklist will receive a Junior Ranger and/or a Junior Refuge Manager patch. You must pre-register for each session by calling (302) 653-9345. Please dress appropriately for weather for each session will have an outdoor field study.

Programs are held from 9:30 a.m. to 12:00 p.m. unless noted. Call to register at (302) 653-9345.

<u>May 19, 2018</u>: BIRD STUDY I; MIGRATORY SHOREBIRDS - Learn about the seasonal movement of shore-birds from their wintering grounds, to stopovers, then on to their breeding and nesting grounds. The focus of this session is to identify some of the common shorebirds visiting the area while learning about the nutrient-rich habitats they depend on before continuing their journey north.

June 16, 2018: BIRD STUDY II; CAVITY NESTERS - Swallows, Purple Martins, Barn Owls, Bats and Bluebirds to name a few...where do they nest? Learn about different birds, their nests and how they raise their young. The focus of this session will be on Purple Martins and Barn Owls; providing participants an upclose view of their nesting cavities.

<u>September 15, 2018</u>: WHO NEEDS POLLINATION? - We do! Can you imagine a world without flowers, fruit, or even chocolate? You will learn that pollinators are important because they create and maintain habitats that many animals depend on for food and shelter. During this session you will study different pollinators and learn how you can protect them in your backyard environment.

October 13, 2018: TREE STUDY - There are many kinds of trees around us...they all have three parts and can be divided into two groups. We will explore the Refuge to identify different trees, do bark rubbings, and learn how their leaves and seeds are used by wildlife. You will have a permit to collect leaves for your plant press.

<u>November 17, 2018</u>: WILDLIFE IN WINTER - How do animals prepare for the winter months ahead? How do bats, birds, deer, foxes, snakes, turtles, butterflies survive in the winter and where do they live during cold weather? We'll study hibernation, migration and adaptation and how, burrows, dead trees, dens and nests help animals survive. You will learn how to cast animal tracks with a take-home kit for your family to use through the winter.

Materials provided by:

BOMBAY Hook

Children's Corner By Paige and Tammy Lewis

My niece Paige helped create this game to help kids learn fun facts about birds.

Tic-Tac-Birds

Two players are needed for this game. The object of the game is like tic-tac-toe, but with a twist. There are nine birds in the boxes in which the player(s) choose a bird and answer a question pertaining to the bird chosen. The player has to correctly answer in order to mark with an X or O. The one who has three X's or three O's in a row (either across, down or diagonally) wins.

Questions (answers are at the bottom)

Swan: A baby Swan is called a ______

<u>Owl</u>: True or False: Owls are diurnal (daytime) animals.

<u>Sparrow</u>: Name one of the favorite foods of the Sparrow.

<u>Great Blue Heron</u>: True or False: Great Blue Herons can be found in saltwater and freshwater habitats.

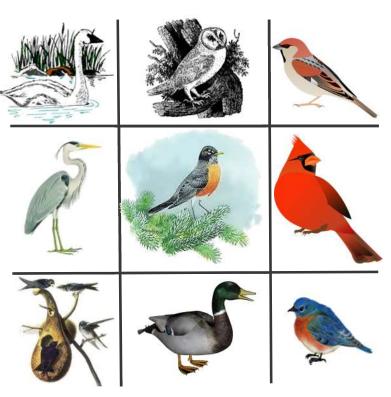
Robin: What is the color of a Robin's egg?

<u>Cardinal</u>: What is the color of a female Cardinal?

<u>Purple Martin</u>: Purple Martins are usually housed in a structure called _____.

<u>Mallard Duck</u>: True or False: Mallard Ducks live in wetlands and are social animals.

<u>Bluebird</u>: Name at least one of two states that have the Eastern Bluebird as the state bird.



Bluebird: Missouri or New York. They are the only two states that have the Eastern Bluebird as the state bird.

Mallard Duck: True. Mallard Ducks live in wetlands and are social animals, preferring to congregate in groups or flocks of varying sizes.

Purple Martin: Purple Martins are usually housed in a structure called gourds.

Cardinal: The color of a female Cardinal is gray.

Robin: The color of a Robin's egg is blue.

Great Blue Heron: True. Great Blue Herons can be found in saltwater and freshwater habitats ranging from open coasdines to backyard goldfish ponds.

Sparrow: White and Red Millet, Black-oil Sunflower Seeds, Medium Cracked Corn, insects and tender plant foods such as grasses and buds are foods that Sparrows prefer.

Owl: False, Owls are nocturnal animals, meaning they are active at night,

эмзи: У рару эмал із сапед а судлет

Answers to Tic-Tac-Birds

Winter Roads at Bombay Hook NWR 2018



This past winter the weather took a toll on the dirt roads on the Refuge. Ice, rain, and traffic all played a part in creating those annoying potholes along the 12-mile Auto Drive. In addition, the material used when the roads were re-graveled in 2010 created a very hard road surface. This condition was tough on the Refuge equipment and complicated the normal maintenance efforts. However, under the experienced guidance of Refuge manager Oscar Reed and the hard work of our new maintenance worker Mike Vandevander, the roads are being repaired and are greatly improved.

So just what creates dirt road potholes? Typically, water softens the roadbed in spots, and the collected rain or snowmelt splash out surface stones or any maintenance patch material. But let's take a closer view: with normal vehicle traffic, tires flatten slightly at the point of road contact and then return to their normal shape once the tire contact spot is off the

road. Like a compressed spring, as the tire moves over the road, the tire produces a pressure wave that breaks up the road surface ever so slightly. Now multiply four tires by the hundreds of vehicles per day, per week, all making roundtrips on some sections of the Auto Drive. At

slow speeds the tire pressure wave dissipates, but at faster speeds the road surface breakup accelerates and material can be kicked up and relocated.

Maintaining a good dirt road surface involves experienced maintenance, proper drainage and the right balance of surface angular stones mixed with fines to produce a tight pack. In summary, our Refuge staff manages a lot of variables when maintaining the Refuge dirt road system: winter weather, road materials and equipment, staffing, visitor traffic and Refuge activities. All in all, they do a pretty amazing job. (Photos by Karen Dever and Bruce Lantz)



Green Stink Bug (Chinavia hilaris)

Here are some fun facts about the Green Stink Bug which is commonly found at Bombay Hook NWR:

- Also called the Soldier Bug for its shield-shaped body.
- Yes, under its thorax are two large stink glands. Beware!
- They will not bite or sting you but they may slime you with some stink.
- Bright green body but also comes in a yellow-colored body option.
- Look closely for the thin yellow edges around the shieldshaped body and the black-barred antennas. These are field ID marks to the trained eye.
- One of four species of Stink Bugs native to Delaware.
 Don't confuse them with the non-native Brown Marmorated Stink Bug spreading across the country.
- They damage developing seeds and fruits by repeatedly sucking the fruit juices.
- Host plants include Black Cherry, Elderberry, Basswood, Wild Grapes, Dogwood and Blackberry.
- In the winter young will hibernate under tree bark, leaf litter, or Refuge buildings.
- In the fall Stink Bugs will gather in large groups; researchers just don't know why.



Whitewater Draw By Bill Bond

One of the best ways to learn about a new area is to talk with people you meet. One great find occurred while my wife and I were hiking in Davidson Canyon in Vail, Arizona. The Canyon is one of the places where a creek reappears on the surface, flows along the surface for a while and then disappears again to continue its journey underground. The presence of water on the surface makes this a great place to watch and photograph birds. While



we were enjoying the birds two men who were doing a short hike on the Arizona Trail appeared. As we're obviously enjoying the birds they

struck up a conversation with us about the Canyon and other places we might find interesting. One place that they highly recommended was Whitewater Draw. A drive of a little over 80 miles makes it close by in Arizona Terms.

Whitewater Draw had been a cattle ranch before the state acquired it 1997 and turned it into the Whitewater Draw State Wildlife Area. The area had a substantial wetland area which

the state has improved by managing it in a manner similar to Bombay Hook's management of the impoundments. This wetland area provides a win-



ter home for thousands of Sandhill Cranes from as far away as Alaska and Siberia.

We learned that the Sandhill Cranes leave Whitewater Draw early every morning and fly about 70 miles where they eat their fill before returning to Whitewater around 10 a.m. 10 a.m. worked nicely with an 80-mile drive after When we arrived at Whitewater breakfast. there wasn't a Sandhill Crane to be seen but by the time we had walked from the parking are to the edge of the wetland area dark dots began to populate the sky. Soon after the first birds started to circle lower and more birds returned to take their place high in the sky. This aerial show starts in November as a few thousand birds arrive. Before the Sandhills depart in March or early April that number will have grown to over 30,000 birds.

Even with 30,000 Sandhill Cranes on the water and adjoining land there are many other species of birds that find room at Whitewater. Although we only saw a nesting pair of Great Horned Owls, there is a nearby wooded area that provides shelter for owls. Other waterfowl include Northern Shoveler, American Wigeon, Cinnamon and Blue-winged Teal, and Mexican Duck to name a few of the birds that

enjoy Whitewater Draw

Even paradise has its problems. Arizona is in a multi-year drought which has made it difficult to maintain the wet-



land area. Invasive plant species are moving closer to the wetlands. The invasive bushes give predators hiding places that did not previously exist. While these and other threats are real, the area remains an Audubon Important Bird Area.

Arbor Day 2018

To celebrate Arbor Day this year the Friends of Bombay Hook gave out Loblolly Pine trees



to Refuge visitors. Starting on April 20, 2018. the bare root small pine seedlings were given away to Refuge visitors interested in aivina the trees а permanent home. The Loblolly Pine is a great native pine species that provides, clean air, food and habitat for our ecosystem.

We would like to thank the Delaware Forestry Service for providing the Loblolly Pine trees. In addition a special thanks to Ellen Wright,

Julie Memmolo and Karen Dever for making this project possible. (Photo by Karen Dever)

Bombay Hook NWR

2591 Whitehall Neck Road, Smyrna, DE 19977 (302) 653-9345 http://www.fws.gov/refuge/Bombay_Hook/

The Bombay Hook Visitor Center is open Monday through Friday from 8:00 a.m. to 4:00 p.m. and is open on weekends from 9:00 a.m. to 5:00 p.m.

The Wildlife Drive is open daily from ½ hour before sunrise to ½ hour after sunset.

The Allee House remains closed until further notice.

For more information about programs, contact Tina Watson at (302) 653-9345 or check our website above and <u>Facebook</u> for additions or changes.

Spring 2018 Calendar of Events

<u>Wednesdays, May 2, 2018 to May 30, 2018</u> <u>Bird Walks with Marcia Poling</u> (8:00 a.m. to 11:00 a.m.) - Join Marcia Poling, avid birder and artist, to look for early songbird arrivals from Mexico and South America. The group will walk several trails in search of songbirds and will stop to identify shorebirds along the Wildlife Drive. Location TBD (To Be Determined) depending on current sightings. Meet at the Visitor Center.

Sunday, May 6, 2018

- Beginning Birding Warbler Walk (8:00 a.m. to 10:00 a.m.) The walk will be on one or two trails along the Wildlife Drive with expert birders Eileen McLellan and Terry Willis.
- Refuge Introduction Tour (1:30 p.m. to 3:30 p.m.) "Climb aboard" the Refuge's 12-passenger bus for a 2 -hour guided tour of the Refuge. Look for wildlife, walk a short trail, and learn how the various habitats on the Refuge are managed to provide the food, water, and cover needed by the many species of wildlife that live on or pass through the Refuge. Bring your binoculars, or borrow a pair at the Visitor Center. Call to register at (302) 653-9345 or email: tina_watson@fws.gov.

<u>Wednesdays, May 9, 2018 to May 30, 2018</u> <u>Bird Walks with Marcia Poling</u> (8:00 a.m. to 11:00 a.m.) - Join Marcia Poling, avid birder and artist, to look for early songbird arrivals from Mexico and South America. The group will walk several trails in search of songbirds and will stop to identify shorebirds along the Wildlife Drive. Location TBD (To Be Determined) depending on current sightings. Meet at the Visitor Center.

Saturday, May 12, 2018

- Beginning Birding Shorebird Program (10:00 a.m. to 12:00 noon) Eileen McLellan and Terry Willis will give a presentation about shorebirds, their amazing migrations, and simple identification techniques. After the presentation, participants will visit the Bird Identification Station to practice their new skills.
- Monarch Presentation and Gardening Tips for Monarchs (2:00 p.m. to 3:30 p.m.) Learn how to identify monarchs and about their migration. Participants will learn about their habitat requirements and gardening tips to attract butterflies. Come learn about the amazing monarch and how you can help them survive. While monarchs will be the main focus, other local butterflies and pollinators will be included.

Tuesday, May 15, 2018 Toddlers/preschoolers (1 year old to 5 years old) and their guardian are FREE (9:00 a.m. to 2:00 p.m.) - Bombay Hook will be free for toddlers and their guardian on the 3rd Tuesday in May. Children from 1 to 5 years old are developing cognitive skills and being in nature can expose them to sights and sounds that might go unnoticed in their everyday setting. Take your child on the Wildlife Drive, walk a trail, climb a tower, read them a nature book, and look at wildlife exhibits in the Visitor Center. You are never too young to explore and learn. This is a free self-study for families. You can come anytime between 9:00 a.m. and 2:00 p.m.

Wednesdays, May 16, 2018 to May 30, 2018

Bird Walks with Marcia Poling (8:00 a.m. to 11:00 a.m.) - Join Marcia Poling, avid birder and artist, to look for early songbird arrivals from Mexico and South America. The group will walk several trails in search of songbirds and will stop to identify shorebirds along the Wildlife Drive. Location TBD (To Be Determined) depending on current sightings. Meet at the Visitor Center.

<u>Thursday, May 17, 2018</u> Garden Keepers: Meadow Maintenance and Reseeding (1:00 p.m. to 3:00 p.m.) – Join Larry and Leslie Cook prepare the meadow for Spring, clean up the path and reseed some milkweed.

<u>Friday, May 18, 2018</u> Refuge Introduction Tour (10:00 a.m. to 12:00 noon) - "Climb aboard" the Refuge's 12 -passenger bus for a 2-hour guided tour of the Refuge. Look for wildlife, walk a short trail, and learn how the various habitats on the Refuge are managed to provide the food, water, and cover needed by the many species of wildlife that live on or pass through the Refuge. Bring your binoculars, or borrow a pair at the Visitor Center. Call to register at (302) 653-9345 or email: tina_watson@fws.gov.

Saturday, May 19, 2018



- Junior Rangers Learn about Migratory Shorebirds (9:30 a.m. to 12:00 noon) New and returning children (7-11 years old) are invited to attend. Learn about the seasonal movement of shorebirds from their wintering grounds, to stopovers, then on to their breeding and nesting grounds. The focus of this session is to identify some of the common shorebirds visiting the area while learning about the nutrient-rich habitats they depend on before continuing their journey north. Call to register at (302) 653-9345 or email: tina_watson@fws.gov.
- The Shorebird and Horseshoe Crab Connection Presentation (12:30 p.m. to 3:00 p.m.) Greg Breese, Project Manager for the Delaware Bay Estuary Project, will start the program with a 15 minute video on shorebirds, their amazing migration journey, and horseshoe crabs on the Delaware Bay. The Red Knot, a robin-sized shorebird was designated as threatened under the Endangered Species Act December 9, 2014. A "threatened" designation means a species is at risk of becoming endangered throughout all or a significant portion of its range. After the presentation, the group will go to Pickering Beach to see horseshoe crabs that come up onto the Bay beach to spawn. If we are lucky we will see shorebirds as well, bring binoculars and spotting scopes if you have them. Note: High tide is at 1:49 p.m. and we will plan to be on the beach for about an hour around high tide. Program starts in the Refuge's auditorium. Call to register at (302) 653-9345 or email: tina_watson@fws.gov.

<u>Sunday, May 20, 2018</u> <u>Bird Identification Station</u> (1:00 p.m. to 4:30 p.m.) - Get a close look at the different bird species in the impoundments. Randy Murphy will be set up on the Wildlife Drive with scopes and binoculars to help you identify shorebirds, wading birds, and whatever else flies by. Look for the blue ID Station sign along the Auto Tour route.

<u>Various Days, May 21, 2018 to July 2, 2018</u>

Purple Martin Nest Checks (11:00 a.m. to 11:45 a.m.) - Joel Martin and Ray Gingerich will perform weekly Purple Martin gourd and house nest checks during May, June and July. Individuals can observe and assist with recording data, counting eggs and hatchlings, and after they hatch hold a chick. You will see birds that spent the winter in Brazil and you may see an adult sitting on a nest. The nests need to be checked quickly to make sure the Martins are not disturbed for a long period of time. Meet at the Visitor Center on the following dates: May 21, 25, 30, 2018 and June 4, 8, 13, 16, 18, 22, 27, 2018 and July 2, 2018.

Wednesdays, May 23, 2018 and May 30, 2018 Bird Walks with Marcia Poling (8:00 a.m. to 11:00 a.m.) - Join Marcia Poling, avid birder and artist, to look for early songbird arrivals from Mexico and South America.

(Continued on Next Page)

Bombay Hook NWR Spring 2018 Calendar of Events (Continued from Previous Page)

The group will walk several trails in search of songbirds and will stop to identify shorebirds along the Wildlife Drive. Location TBD (To Be Determined) depending on current sightings. Meet at the Visitor Center.

Sunday, May 27, 2018 Tour of the Refuge (11:00 a.m. to 12:30 p.m. & 1:30 p.m. to 3:00 p.m.) - Join Volunteer Ray Cullom for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

<u>Wednesday, May 30, 2018</u> <u>Bird Walk with Marcia Poling</u> (8:00 a.m. to 11:00 a.m.) - Join Marcia Poling, avid birder and artist, to look for early songbird arrivals from Mexico and South America. The group will walk several trails in search of songbirds and will stop to identify shorebirds along the Wildlife Drive. Location TBD (To Be Determined) depending on current sightings. Meet at the Visitor Center.

Saturday, June 9, 2018

- Bird Identification Station (1:00 p.m. to 4:30 p.m.) Get a close look at the different bird species in the impoundments. Randy Murphy will be set up on the Wildlife Drive with scopes and binoculars to help you identify shorebirds, wading birds, and whatever else flies by. Look for the blue ID Station sign along the Auto Tour route.
- Photo Workshop (2:00 p.m. to 4:00 p.m.) Join wildlife and landscape photographer Terry Willis (wildthingsphoto.gov) for a beginning look at how to photograph wildlife. This workshop will focus on learning how to go beyond the "Auto" mode on your camera to enhance your photos of nature. Learn what f-stop, shutter speed and ISO mean, and how to use them. We will also look at the differing techniques used to capture wildlife and landscapes with the camera.



Saturday June 16, 2018 Junior Rangers Learn About Cavity Nesters (9:30 a.m. to 12:00 noon) - Swallows, Purple Martins, Barn Owls, Bats and Bluebirds to name a few... where do they nest? Learn about different birds, their nests and how they raise their young. The focus of this session will be on Purple Martins and Barn Owls; providing participants an up-close view of their nesting cavities. Call to register at (302) 653-9345 or email: tina_watson@fws.gov



http://facebook.com/bombayhookwildliferefuge

IMPORTANT REMINDER TO REFUGE VISITORS....

To protect wildlife and their habitat and to provide the best opportunities in wildlife observation and photography, it is important not to disturb, injure, or damage plants and animals of the Refuge. In fact, it is a prohibited act as stated in 50 CFR27.51. This disturbance includes flushing birds and other wildlife or using electronic calls (taping) to lure birds closer for observation or photography. Please remember to take only memories and photographs and leave only footprints.

ARE <u>YOU</u> INTERESTED IN JOINING FRIENDS???

FRIENDS OF BOMBAY HOOK (FOBH) is a cooperating association formed with Bombay Hook National Wildlife Refuge (BHNWR) and U.S. Fish and Wildlife Service (USFWS). It is a 501(c)(3) non-profit corporation which was founded to promote conservation, Environmental Education, and better understanding of and appreciation for Bombay Hook NWR.

Each year students visit Bombay Hook. They use equipment to study habitats, watch videos about endangered species, and are taught from field guides - all provided by **FRIENDS OF BOMBAY HOOK!**

If you visited our store, the Blue Heron Gift Shoppe, that has been financed by FRIENDS OF BOMBAY HOOK!

If you attended programs such as the Native Plant Symposium or a Shorebird ID presentation, they are supported by FRIENDS OF BOMBAY HOOK!

Your Membership Dues and proceeds from the *Blue Heron Gift Shoppe* in the Visitor Center at Bombay Hook will make it possible for Friends to continue its support of popular educational/recreational programs, services, and improvements at Bombay Hook. Make the *Blue Heron Gift Shoppe* your place to buy field guides, books, T-shirts, posters, and souvenirs!

OUR MEMBERSHIP BENEFITS INCLUDE:

- •10% Discount on all items sold at the Blue Heron Gift Shoppe
- •Participation in special wildlife education programs and field trips
- Participation in the Birding Club
- •Attendance at the Annual Meeting in June
- •Eligibility in the Dover Federal Credit Union (DFCU)
- •Opportunity to meet others with similar interests in birds, other wildlife, wetlands, and the environment

And perhaps best of all, the chance to say, "Thank you Bombay Hook, for all the great times I've had here!"

MEMBERSHIP APPLICATION

Submit completed application at the Visitor Center (payment by cash, check or credit card) or Mail (with check) to:

Friends of Bombay Hook 2591 Whitehall Neck Road Smyrna, DE 19977

Or you can go to www.friendsofbombayhook.org/membership.html and follow the instructions in applying or renewing your membership thru PayPal

☐ Renewal ☐ New Member	<u>Membership Plan (Check One)</u>	Annual
Page 18 18 18 18 18 18 18 18 18 18 18 18 18	☐ Student (under 18)*	\$5.00
Date:	☐ Individual	\$15.00
130 6 6	☐ Family	\$20.00
Name	☐ Sponsor***	\$25.00
	☐ Sustaining	\$50.00
Address	☐ Corporate**	\$100.00
	☐ Life***	\$200.00
City, State, Zip	*Student membership: under age 18.	
	**Corporate sponsorship includes link to FOBH website; no voting privileges or store discount.	
	***Sponsor and Life memberships includes family .	
E-mail	Method of Payment	
Newsletter Preference:	☐ Cash (payment at Visitor Center only)☐ Check (payment by mail or at Visitor Center)	
☐ Print ☐ E-mail (require E-mail address)		
	☐ Credit/ Debit Card (payment at Visitor Center only)	

How Do You Support Friends???

(It's a fact: The National Wildlife Refuge system is underfunded and understaffed)

D-O-N-A-T-E!!!

Every year as funding is reduced, job vacancies are not filled and refuges operate without a budget. To cut costs, many refuges have been consolidated to share staff and resources.

Without the financial and volunteer support of Friends, many of the programs and activities at Bombay Hook would be either cancelled or nonexistent. Friends of Bombay Hook pays for or subsidizes many of the most popular Refuge programs, services, and improvements. Within the last several years, Friends paid for the construction of the new store, the *Blue Heron Gift Shoppe*; purchased new chairs and a screen-smart TV for the Refuge auditorium for enhanced presentations as well as viewing programs, webinars and movies to educate visitors; instituted a program to assist schools in funding transportation for field trips to the Refuge; and many other expenditures. Working with Refuge staff, Friends members and volunteers helped to launch the Junior Ranger and Junior Refuge Manager programs and the *Every Kid in a Park* pass program to 4th Grade teachers at local schools; planned, organized and staffed the "Connecting Families with Nature" and the Bombay Hook Quarter Ceremony events; organized the Native Plant Symposiums for the Garden Keepers; and many other activities.

As a 501(c)(3) corporation, we receive no Federal or State funding. We rely on the membership dues and donations we collect and the profits from the Blue Heron Gift Shoppe to provide financial support for the Refuge. Your donations are tax-deductible.

There are several ways you can donate to Friends:

- You can make a donation to Friends by check made out to "Friends of Bombay Hook Inc." and send to:
 Friends of Bombay Hook, 2591 Whitehall Neck Road, Smyrna DE 19977 (make sure to indicate on
 the Memo line of the check that it is a donation) with the enclosed form provided below.
- You can go online at www.friendsofbombayhook.org/support.html and donate thru PayPal.
- You can stop in at the Visitor Center during Gift Shoppe hours (will vary in the Fall and Spring months) and make a donation (by either check, cash or credit/debit card)

We urge you to help us continue to improve the visitor experience at Bombay Hook National Wildlife Refuge simply by making a contribution to the Friends of Bombay Hook.

Date:	BOMBAY HOOK DONATION FORM
Name	Donation Amount: \$
Address	 <u>Method of Payment</u> ☐ Check (payment by mail or at Visitor Center)
City, State, Zip	Cash (payment at Visitor Center only) Credit/ Debit Card (payment at Visitor Center only)
E-mail (optional)	