

# FRIENDS OF BOMBAY HOOK

Newsletter

Little Egret



Vol. 27, No. 4  
September 1, 2017

***Our Mission Statement:***

The Friends of Bombay Hook is a not-for-profit 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.

The Blue Heron Gift Shoppe will re-open for the Fall season starting in September and we need Friends volunteers operating our store and assisting with other events at the Refuge. Please check Facebook and our website for the latest schedule.

The Visitor Center will re-open on the weekends during the Fall season starting September 2. There will be a volunteer orientation at 10:00 a.m. in the Visitor Center auditorium on the same day (see Page 10 in our Calendar of Events). If you are interested in volunteering, please attend our orientation. Training will be provided.

Bombay Hook has many Fall events planned!!! Take a Refuge tour, take advantage of a free entrance fee day, let kids become Junior Rangers, or take in a Native Plant Symposium--see our Calendar of Events on Pages 10-14 for all these events and more!

***2017 Newsletter Schedule***

**Newsletter Release**      **Articles Due**  
November 1                      October 7

The next newsletter will be issued on  
November 1, 2017

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

<http://www.friendsofbombayhook.org>



***An Unexpected Visitor Comes to Bombay Hook***

Many people "flocked" to Bombay Hook this Spring to behold something not too familiar to these parts of the world. The *Little Egret* (photo above) paid us a nice long visit and flaunted his beauty to us all. This stranger to the Refuge has a breeding distribution in wetlands in warm temperate to tropical parts of Europe, Africa, Asia, and Australia. A successful colonist, its range has gradually expanded north, with stable and self-sustaining populations now present in the United Kingdom.

It arrived during the breeding season when the adult has two long plumes on the nape that form a crest. These plumes are about 150 mm (6 inches) and are pointed and very narrow. There are similar feathers on the breast, but the barbs are more widely spread.

Why was it here? How did it get here? A mystery for sure, but we welcomed it with open binoculars, scopes and photo lenses!

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**New Bird Club Schedule**

The new schedule of field trips from September through next Spring will be posted on the Friends' website after Labor Day. It also will be emailed to Bird Cub members.

# BIRD NOTES

By Franklin Smith

April 1 through July 31, 2017

This lengthy (four-month) report period included the departure of the last migrant waterfowl including primarily Shovelers, Green-winged Teal, a few Buffleheads, Ruddy Ducks, Ring-neck Ducks and Mergansers. Blue-winged Teal were recorded passing through as well. A few Blue-winged stay and nest at Bombay Hook as do Black Ducks, an occasional Green-wing, Mallards, Gadwall and Wood Ducks. A substantial number of Canada Geese remained as a resident breeding flock. Duck and Canada Goose broods began showing up in the impoundments during April. One pair of Mute Swans was reported throughout the period.

The annual Spring shorebird northern migration also occurred during the April to early June period. By July some shorebirds such as Dowitchers and several species of Sandpipers were present on their way back south. Up to 600 Avocets were reported during April. Black-necked Stilts again nested within the impoundments but had to be vigilant as rapidly rising water levels from abundant rainfall created conditions which could flood out low-lying nests. Wilson's Phalaropes were reported in May and July. A couple of Ruffs were recorded in Refuge impoundments during July, as was a Hudsonian Godwit and four Whimbrels.

Black-crowned and a few Yellow-crowned Night Herons returned to their usual haunts on the island in northeast Bear Swamp pool. Three species of Ibis were recorded this period: the abundant Glossy, White-faced and an immature White. A Little Egret (a rare visitor from Europe) was reported throughout most of June and early July (*see article and cover photo on front page*).

As reported earlier, four Bald Eagle nests were present on the Refuge this year. During April and early May, spectacular concentrations of Bald Eagles could be seen each day, especially during low tide as they gathered on the salt marsh flats and to a lesser extent within the impoundments to feed on spawning carp. It was common to see between 30 and 50 Eagles feeding on the fish or perched in surrounding trees. Ospreys were commonly observed feeding heavily within Bear Swamp.

As usual the period from late April through most of May offered visitors great opportunities to hear and view a variety of neo-tropical migrants particularly along Finis Branch and Parson Point Trail. In addition, Refuge fallow fields offered viewing opportunities for Grasshopper Sparrows, Bobolinks, Wild Turkey, and Bobwhite. A Red-headed Woodpecker was reported on Parson Point Trail in April.

Bonaparte's Gulls, Forster's Terns, Caspian Terns, Lesser Black-backed Gulls, Black Skimmers, and Black Terns were on recorded on the Wildlife Drive this period. In addition, a Little Gull was also reported during June and July.

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## In Memoriam



The Friends of Bombay Hook would like to express condolences to the family of Joel Citron.

Joel Citron passed away on August 8, 2017 from a stroke. Joel, along with his wife Barbara, were long-time volunteers at the Refuge and Friends

members. His obituary can be seen at <http://www.legacy.com/obituaries/delawareonline/obituary.aspx?n=joel-david-citron&pid=186332839&fhid=20403>, where tributes can also be posted.

He will be sadly missed.

### Friends of BOMBAY HOOK Newsletter

is published quarterly by "Friends of Bombay Hook, Inc. (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:

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2591 Whitehall Neck Road  
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Phone: (302) 653-8322  
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<http://www.friendsofbombayhook.org>



Hi All!!

Well what a great season we had this Spring at the Blue Heron Gift Shoppe!!! And how did we do it? By having such loyal visitors like you!!

A special shout out to Michelle Butler, Julie Memmolo, Bruce Lantz, Joanne Lantz, Bill Panadero, Barbara Hajel, Tammy Lewis, Vickie Hogue, Jaimie Schaeffer, Brandi Besecker, Joel Citron, Barbara Citron, Ray Cullom, Marybeth Cullom, Jay Messenger, Joni Bero, Janet Manchester and Mark Dever for opening the store during your Visitor Center shifts and making it all possible!! You all are amazing!

The Blue Heron Gift Shoppe will re-open for the Fall in September 2017.

As most of you have already purchased our 2017 T-shirt, I wanted to let you know just what a collector's item you have!

Our Tees come from a wonderful local company called Great Graphics located in Dover Delaware and every design is a special one of a kind that is made for us. That's right folks, you can only get them here! Bill and Marsha Holler make sure we have the best shirts and designs of any refuge store! Marsha Holler is a wonderful artist and we're fortunate to have the opportunity for her to design our shirts. A graduate of Rochester Institute of Technology in New York, Marsha holds a Bachelor of Fine Arts degree in print making. She pursues her love of nature and art by transforming her energies into beautiful art that can be enjoyed on a variety of products, both collectable and useful.



Marsha Holler

"All of my artwork is injected with the energy of a story," Marsha says. "While I draw, not only do I think of color and composition, but also the life energy of my subject whether it's a dolphin or a butterfly or a historic mansion. My aim is to reproduce those good feelings in my graphics that you can take with you or give as a gift. Together with Great Graphics' clean screen printed apparel and my artwork, my hope is to give you a memory to preserve."



Every year we are featuring different themes and a variety of wildlife that can be found at Bombay Hook. On the front is usually the name and year of our shirt and on the back is where the artwork is. The shirts are of the same design and are offered in a female cut and a regular cut in a variety of sizes. This year we chose to feature our Wetlands. Stock is winding down and sizes are selling out! Get yours before they're all gone for the year!

Marsha also sells shirts in her Dover shop....visit online at <http://www.marshas.net/>

See you soon!

Karen Dever

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**BOMBAY HOOK NWR ENTRANCE FEE OPTIONS  
AND AMERICA THE BEAUTIFUL PASSES**

<i>Entrance Fee Options*</i>	<i>Cost</i>	<i>Can Be Used By</i>	<i>Allows Entry To</i>	<i>Good For</i>
Single Visit Entrance Fee	\$4.00/car \$2.00/bike \$2.00/hike	Anyone Under 16 years old - FREE	Bombay Hook Refuge	Daily
Bombay Hook Refuge Pass	\$12.00/year	Anyone Under 16 years old - FREE	Bombay Hook Refuge	1 year from issue date
Interagency Annual Pass	\$80.00/year	Anyone Under 16 years old - FREE	Access to and use of NPS, USDA FS, FWS, BLM and Reclamation sites that charge entrance or standard amenity fees.	1 year from issue date
Interagency Senior <b>Annual</b> Pass	<b>\$20.00</b> Effective 8/28/17	U.S. Citizens or Permanent Residents Age 62 & older	Access to and use of NPS, USDA FS, FWS, BLM and Reclamation sites that charge entrance or standard amenity fees, plus 50% discount on some expanded amenity fees.	<b>Annual</b>
Interagency Senior <b>Lifetime</b> Pass	<b>\$80.00</b> Effective 8/28/17			<b>Lifetime</b>
Interagency Access Pass	FREE	U.S. Citizens or Permanent Residents who are permanently disabled	Access to and use of NPS, USDA FS, FWS, BLM and Reclamation sites that charge entrance or standard amenity fees, plus 50% discount on some expanded amenity fees.	Lifetime
Federal Duck Stamp	\$25.00/year Effective 7/2015	Anyone	All National Wildlife Refuges which charge entrance fees.	1 year (July 1 - June 30)
Interagency Volunteer Pass	FREE	Volunteers who accrue 250 volunteer hours after 1/1/07	All Federal Entrance Fee areas	1 year from issue date
Active Duty Military Pass (Must be issued by staff)	FREE	Current members of Army, Air Force, Navy, Marines, Coast Guard and National Guard	Access to and use of NPS, USDA FS, FWS, BLM and Reclamation sites that charge entrance or standard amenity fees.	1 year from issue date
4 <sup>th</sup> Grader -Every Kid in the Park Pass	FREE	4 <sup>th</sup> Grader who brings in a voucher to exchange for a 4 <sup>th</sup> grade pass	Access to and use of NPS, USDA FS, FWS, BLM and Reclamation sites that charge entrance fee or standard amenity fees.	1 year (September 1 to August 31)

\*Allows entry of permit holder and passengers in a non-commercial vehicle (passenger car, pick-up truck, recreational vehicle). Children under 16 are admitted free. Motorcycles are individual vehicles; however, if two individuals have signed an annual pass and are traveling on separate motorcycles, then both can be admitted on one pass.

*Visiting Other Refuges  
By Joanne and Bruce Lantz*

*Lostwood National Wildlife Refuge*

Ten years ago Frank Rawling wrote a great little story in the FOBH Newsletter about his visit to Ridgefield NWR in Washington. In response to Frank's refuge travel story, the following month Janet Manchester suggested that we all consider sharing our experiences when we visit a new refuge. So, in reply (10 years later), here's our travel story.

Over the past several years my wife and I have bypassed the airports and have done cross-country auto trips to our vacation destinations. When planning our trip routes, we try to include several National Wildlife Refuges.



This past May we drove out to the Dakotas for two weeks of exploring. While in the northwestern section of North Dakota, we visited Lostwood National Wildlife Refuge. It's in the heart of the prairie pothole region, shaped by the last glacier advance. The Refuge is 28,000 acres of mostly rolling grassland hills, dotted with countless wetlands, pools, ponds and small lakes. The area was home to Northern Plains American Indians and bison for thousands of years and saw a limited number of 19<sup>th</sup> century settlers. The Refuge got its name after settlers cut a grove of trees for firewood only to have a blizzard bury the firewood.

Today the Refuge habitat supports many grassland species, including deer, moose, pronghorn antelope, songbirds, and nesting waterfowl. The short entrance road leads to an office/visitor kiosk. There we met the Refuge Manager who spent considerable time with us, explaining the importance of the Refuge in the shrinking prairie pothole region. He showed us a regional wall map of the Federal/private land partnerships protecting thousands of prairie pothole wetland acres.



We then drove the seven-mile self-guided Auto Tour. You can see where they have used controlled burns and grazing to manage the grasslands, remove invasive plants and restore the native mixed grasses. The Auto Tour gravel road crosses a series of rolling grassy hills with wetland pools between each, and offers up fantastic birding. Our short list included: Sharp-tailed Grouse, Say's Phoebe, Wilson's Phalarope, Black Terns (50), Horned Grebe, Mt. Bluebird, Redhead, Blue-wing Teal, Canvasback, Yellow-headed Blackbird, Franklin's Gull, Brewer's Blackbird and Western Meadowlarks everywhere! We saw deer and pronghorn antelope, no moose and sadly no Baird's Sparrow.

We strongly recommend you visit Lostwood if you're in that region. For more information visit their website at [www.fws.gov/refuge/lostwood/](http://www.fws.gov/refuge/lostwood/)

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*Where Do Our Visitors Come From???*

Approximately 100,000 people visit Bombay Hook every year. Our 2015-2016 totals show the top 6 states that frequently visit the Refuge are Delaware, Pennsylvania, Maryland, New Jersey, New York and Virginia. We had visitors from 48 states total and 13 different countries!-----Nice!

## Purple Martin Numbers

Congratulations once again to volunteers Joel Martin and Ray Gingerich for all their hard work in making our Purple Martins at Bombay Hook so successful. Friends of Bombay Hook is always proud to be a part of this program. With the support of our Friends memberships, we have been able to supply all that is needed to make this program possible.

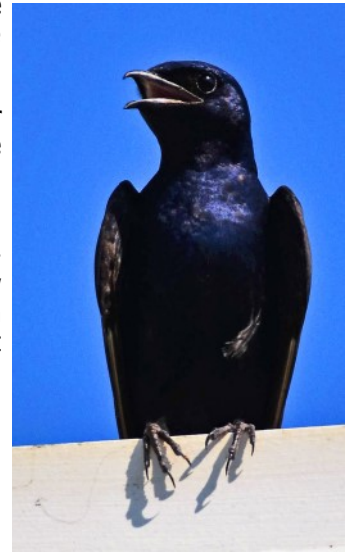
### Counts

2016	2017
413 Eggs	448 Eggs
317 Hatched	368 Hatched
299 Fledglings	341 Fledglings

### Fun Facts about Purple Martins

Purple Martins are beautiful, beloved songbirds, and these popular swallows are highly sought after as backyard birds, particularly in the eastern United States. But how much do you really know about Purple Martins? There is more to these birds than just pretty plumage!

- With a length of 7-8 inches and a wingspan up to 15 inches, the Purple Martin is the largest swallow in North America and one of the largest of the world's roughly 90 swallow and martin species.
- Despite their colorful name, these birds are not actually purple. Their plumage is a dark blue-black with an iridescent sheen. Depending on the light and angle, their color may appear bright blue, navy blue, rich deep purple or even green.
- The male Purple Martin is the only North American swallow with a dark belly. This makes in-flight identification easier than with many other swallow species. Birders still need to take care not to confuse Purple Martins with Swifts, which may also have dark underparts but have a very different flight style.
- Different ages and genders of Purple Martins migrate at different times. While there is some variation, older males typically migrate first, followed by older females and then younger birds. Because of this, older birds typically choose the better nesting sites because they arrive on the breeding grounds first.
- Purple Martins are social, colonial birds, especially in eastern populations. Nesting colonies may include hundreds of pairs of birds, and roosting colonies later in the season may have tens of thousands of birds. The largest roosting colony was estimated to have 700,000 birds at one time.
- Purple Martins follow an insectivorous diet, eating primarily flying insects such as moths, gnats, flies and mosquitoes. They catch the majority of their prey in midair, acrobatically twisting and turning to follow agile insects. They even drink in midair, flying over a pond, lake or stream and scooping water into their bills while on the move.
- Purple Martins do most of their feeding between 160-500 feet high (50-150 meters). Because of this height, mosquitoes make up only a small portion of their diet, despite rumors that the birds can eat up to 2,000 mosquitoes per day. They could consume that many, but mosquitoes are not generally found at those heights in such large numbers.
- Purple Martin parents may feed their nestlings up to 60 times per day, bringing them various insects that are high in protein and other nutrition the young birds require. Both males and females help feed the young chicks.
- Purple Martins are highly susceptible to bad weather. During long periods of cold or rain there will be no insects available to feed on, and entire bird colonies can die off if the weather does not improve in 2-3 days.
- The association between Purple Martins and humans began centuries ago. Native Americans hung



*(Continued on next page)*

## Fun Facts about Purple Martins

*(Continued from previous page)*

gourds for the birds to nest in, hoping to attract them to help keep insects away from crops. Today, eastern Purple Martin colonies are almost 100 percent dependent on human-supplied housing, though western populations still nest in natural cavities such as tree snags.

- These birds are geographically loyal and Purple Martins will return to the same nesting site year after year if it is still suitable. Adding new houses to colony sites can help birders accommodate growing Purple Martin families and increase their local bird population.
- The longest recorded lifespan of a Purple Martin is over 13 years for a banded bird.
- The top flight speed of Purple Martins is greater than 40 miles per hour. These birds are agile in flight hunters and can engage in complex aerial acrobatics, which they often do while chasing prey.
- Purple Martins are complete neo-tropical migrants and travel from North America in the summer to South America as far as Brazil and Argentina in the winter. The full migration can take 2-3 months to complete as birds rest and feed along the way.
- The Purple Martin's worst enemies are the European Starling and the House Sparrow. Both of these species are aggressive toward Purple Martins and may attack or kill birds in competition for nesting sites. Other enemies of Purple Martins include snakes, raccoons, hawks, owls, squirrels and feral cats. Some predators will hunt active Purple Martins, while others will invade nests to kill young birds or may even destroy eggs.

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## SHARE THE EXPERIENCE PHOTO CONTEST

The National Park Foundation is pleased to announce the start of the 2017 "Share the Experience" Federal Recreation Lands Photo Contest. Enclosed please find your initial supply of the "Share the Experience" Photo Contest tabletop displays, postcards and posters. The Grand Prize includes \$10,000, and most importantly, the image may appear on the 2019 Federal Recreational Lands Pass! Second Prize will win \$5,000 and Third Prize will win \$3,000.

In addition to cash prizes for the top three places, there will be six Honorable Mentions and two Fan Favorites. Each Honorable Mention and Fan Favorite will win a two night stay at a select hotel from the Historic Hotels of America and prizes from Celestron and Osprey Packs. All winners also receive a Federal Recreational Lands Annual Pass and other prizes from our sponsors.

In 2016 the "Share the Experience" Photo Contest received over 16,000 entries and we want to continue that tradition. Please proudly display the materials and share them with your visitors and nearby communities to help make this year's contest a tremendous success. Who knows ... perhaps it will be your site that is featured on the Federal Recreational Lands Pass in 2019!

Sponsored by the National Park Foundation in collaboration with the Bureau of Land Management, US Army Corps of Engineers, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service, the "Share the Experience" Photo Contest will harness the power of pictures to help connect people with their Federal Recreation Lands.

Contest details and official rules can be found at [www.sharetheexperience.org](http://www.sharetheexperience.org).

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### MONARCH BUTTERFLIES ON THE MOVE

By the time of our Newsletter printing the Monarch Butterfly's Fall migration will have started. Moving down the edges of the impoundment roads, Monarchs clinging to Goldenrod in the breezes is a sign of seasons changing. If you have an interest in Monarch Butterflies and want to learn more, consider the upcoming Bombay Hook Refuge program on September 9. It's a great way to learn about this incredible insect. Visit the Refuge Events Calendar for more details and what to wear.

**SEPTEMBER 9, 2017**

**Monarch Butterfly Tagging (2:00 p.m. to 3:30 p.m.)**

Join volunteer Terry Willis at the Visitor Center for an exciting program.

## The 2017-2018 Migratory Bird Hunting and Conservation Stamp



The new 2017-2018 Migratory Bird Hunting and Conservation Stamp, also known as the Duck Stamp, was released at a ceremony at Bass Pro Shops in Little Rock, Arkansas on Friday, June 23, 2017.

James Hautman, a skilled wildlife artist from Chaska, Minnesota, had had his stunning artwork chosen last September to grace the current stamp. His work was chosen among 152 art pieces at a contest evaluated by five judges. This painting of three flying Canada Geese is now the third Duck Stamp to be priced at \$25.

This is also the fifth time that Jim Hautman's waterfowl artwork appears on a Federal Duck Stamp. (He ties his brother, Joseph, in having artwork appearing five times on the stamp.) Jim's art previously appeared on the stamps for 1991-1992 (Black-bellied Whistling-Duck), 1995-1996 (Mallard), 1999-2000 (Greater Scaup), and 2011-2012 (White-fronted Goose).

The U.S. Fish and Wildlife Service produces the Migratory Bird Hunting and Conservation [Duck] Stamp, which sells for \$25. The annual proceeds collected can run to nearly \$42 million, depending, of course, on the number of stamps sold. The money goes to conserve wetland, bottomland, and grassland habitats for the National Wildlife Refuge System for the benefit of waterfowl as well as other birds and wildlife. Investments of stamp dollars have gone into securing habitat at 253 different National Wildlife Refuges and have helped preserve about three million additional acres in the smaller Waterfowl Production Areas (WPAs).

The Federal stamp program has existed since the mid-1930s. While waterfowl hunters, 16 years of age or older are required to purchase stamps in order to hunt migratory waterfowl, anyone can contribute to conservation by buying Duck Stamps. In addition to serving as hunting license and conservation tool, a current Federal Duck Stamp is also a free annual pass into any National Wildlife Refuge that charges an entry fee. Since all of the proceeds are used to conserve habitat for birds and other wildlife, birders, nature photographers, environmental educators, and other outdoor enthusiasts regularly buy Duck Stamps to help ensure that they can always enjoy wildlife at their favorite wild places.

Basically, buying a Duck Stamp is one of the simplest ways that anyone can support bird habitat conservation in this country. The program remains one of the most successful conservation tools ever created to protect habitat for birds and other wildlife.

*(Information taken from: <http://www.friendsofthestamp.org/>)*

You can get the 2017-2018 Migratory Bird Hunting and Conservation Stamp at Bombay Hook National Wildlife Refuge. Cost is \$25 and can be purchased with cash or check only at this location.



## Bombay Hook's Junior Ranger and Junior Refuge Manager 2017 Programs



The Junior Ranger & Junior Refuge Manager Program is for children ages 7 to 11+ years old. This series of programs will connect children with nature teaching them about the importance of protecting land for wildlife. Fun, hands-on activities provide Rangers the opportunity to get outside and to explore nature.



Programs are held from 9:30 a.m. to 11:30 a.m. unless noted. Call to register at (302) 653-9345.

### September 16, 2017: INSECT INVESTIGATION

Be a dead log detective to see what kind of insects live within. You will make a viewing jar so that you can study them without hurting them. You will then identify and journal what you see! **Junior Rangers bring your notebook, we will review your progress and checklist!**

### October 21, 2017: THE POLLINATION PROCESS

Find out how flowers reproduce by pollination. You will discover how new seeds form, how pollen can travel, and how to identify the reproductive parts of a plant. Learn what roles birds, bees and butterflies can play in the pollination process.

### November 18, 2017: EXPLORE THE BLUEBIRD BOX TRAIL & LEARN HOW TO CLEAN THE BOX

The program will cover the plight of the Eastern Bluebird and how conservation activities can benefit the species. The group will walk a 1-1/2 mile section of the Refuge, exploring the Bluebird nest boxes and the different kinds of wildlife that use them.

### December 2, 2017: THE GREEN SCENE IN WINTER

Mistletoe, holly, cedar and pine...what is their significance for wildlife? Come learn why they stay green in the winter along with some fun Holiday facts. You will create a Holiday decoration to take home! **Junior Rangers bring your notebook, we will celebrate your accomplishments!**

Materials provided by:



9



# Bombay Hook NWR

2591 Whitehall Neck Road, Smyrna, DE 19977

(302) 653-9345

[http://www.fws.gov/refuge/Bombay\\_Hook/](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 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.**

**Biting flies, mosquitoes, and ticks are active during September.**

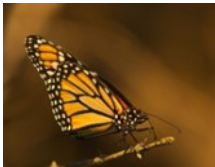
**Wear appropriate clothing and bring bug spray.**

**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 Facebook for additions or changes.

## Fall 2017 Calendar of Events

**Saturday, September 2, 2017** *Volunteer Orientation* (10:00 a.m. - 12:30 p.m.) - A meeting about volunteer opportunities will be held in the auditorium. The meeting will describe the different types of volunteer opportunities, upcoming activities, and the latter part of the session will be a tour of the Refuge. Individuals are needed to staff the Visitor Center on weekends and weekdays from September through November. Volunteers are also needed to provide environmental education programs for school groups, conduct Refuge tours, provide trail and landscaping maintenance, and help with highway cleanups. Training is provided.



**Saturday, September 9, 2017** *Monarch Tagging* (2:00 p.m. – 3:30 p.m.) - Terry Willis will give a short explanation of the Monarch Butterfly life cycle before tagging Monarchs. After tagging Monarchs that were raised in captivity, participants will visit the meadow at the Visitor Center to capture and tag Monarchs. Participants should wear long pants and long-sleeved shirts.



**Saturday, September 16, 2017** *Junior Rangers Learn About Insects!* (9:30 a.m. - 11:30 a.m.) - New and returning children (7-11 years old) are invited to attend. Be a dead log detective to see what kind of insects live within. You will make a viewing jar so that you can study them without hurting them. You will then identify and journal what you see! **Junior Rangers bring your notebook, we will review your progress and checklist! Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

**Tuesday, September 19, 2017** *Toddlers/preschoolers (1 year old to 5 years old) and their guardian are free* (9:00 a.m. - 2:00 p.m.) - Bombay Hook will be free for toddlers and their guardian on the 3<sup>rd</sup> Tuesday in September, October, and November. 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.

**Sunday, September 24, 2017** *Tour of the Refuge* (11:00 a.m. – 12:30 p.m. & 1:30 p.m. – 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.

**Saturday, September 30, 2017**

- **FREE ENTRANCE FEE** ½ hour before sunrise to ½ hour after sunset - The \$4.00 entrance fee will be

waived to celebrate National Public Lands Day and to invite people to visit Bombay Hook. It's a great opportunity to spend the day exploring and relaxing in nature. National Public Lands Day is a fee-free entrance day at many Federal public lands including, National Park Service, U.S. Fish and Wildlife, Bureau of Land Management, Forest Service, and U.S. Army Corps of Engineers.

- **Annual Native Plant Symposium (10:00 a.m. – 2:30 p.m.)**

- ◆ **10:00 a.m.** - Welcome and Introductions

- ◆ **10:10 a.m.** - George Coombs – *Presentation on Trial Gardens* - Native plants are essential in habitats for pollinators, birds and other wildlife that provide an ecosystem with food, water, cover and shelter. This year our guest speaker will be George Coombs, manager of the horticultural research program at Mt. Cuba Center, including the trial garden where he evaluates native plants and their related cultivars for their horticultural and ecological value. To date, he has authored evaluation reports on Heuchera, Coreopsis, Baptisia, and Monarda. In addition to the trials, George also evaluates plants for introduction to the nursery trade. Most recently, his work has helped bring to market four new selections of hardy Coreopsis. George is a graduate of the University of Delaware and prior to joining Mt. Cuba Center, he worked in the nursery industry at both the wholesale and retail level.

Join George Coombs as he details how Mt. Cuba selects and evaluates native plants for superior garden performance, and learn about some of their exciting research comparing the ecological value of cultivars and straight species.

- ◆ **11:30 a.m.** - Discussion of Volunteer Day at University of Delaware, Lewes

- ◆ **12:00 noon** – Lunch

- ◆ **1:00 p.m.** - Nancy Lawson - *Presentation on Native Bees* - Nancy is the author of *The Humane Gardener: Nurturing a Backyard Habitat for Wildlife*, published by Princeton Architectural Press. A columnist for *All Animals* magazine, she is the founder of *Humane Gardener*, an outreach initiative dedicated to cultivating compassion for all creatures great and small through animal-friendly and environmentally sensitive landscaping methods. Lawson volunteers as a master naturalist and master gardener in central Maryland. After an early career in newspaper journalism, she worked for more than 15 years as an editor and publisher at The Humane Society of the United States, leading the creative teams behind the organization's award winning print and digital magazines.

The symposium is sponsored by Friends of Bombay Hook, Inc. and Delaware Native Plant Society. Lunch will be provided. **The symposium is free, but registration is required and space is limited; contact Eric Wahl at EWahl@elementdg.com or (302) 645-0777.**

**Sunday, October 1, 2017** *Refuge Introduction Tour (1:30 p.m. – 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.**

**Sunday, October 8, 2017** *FREE ENTRANCE FEE ½ hour before sunrise to ½ hour after sunset* - The \$4.00 entrance fee will be waived to celebrate National Wildlife Refuge Day and to invite people to visit Bombay Hook. It's a great opportunity to spend the day exploring and relaxing in nature.

**Saturday, October 14, 2017** *Backyard Birding (10:00 a.m. - 11:30 a.m.)* - Learn about the types of birds you see in your backyard. We will discuss bird feeding techniques and identify the birds at the bird feeders.

*(Continued on next page)*

**Tuesday, October 17, 2017** *Toddlers/preschoolers (1 year old to 5 years old) and their guardian are free (9:00 a.m. - 2:00 p.m.)* - Bombay Hook will be free for toddlers and their guardian on the 3<sup>rd</sup> Tuesday in October and November. 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.

**Friday, October 20, 2017** *Your First Visit To Bombay Hook Tour (10:00 a.m. - 12:30 p.m.)* – Learn a little about the Refuge's history, why it is here, how it is managed for wildlife, and bird migration at the Refuge. We will walk a trail and identify birds. **Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**



**Saturday, October 21, 2017** *Junior Rangers Learn About the Pollination Process (9:30 a.m. - 11:30 a.m.)* - New and returning children (7-11 years old) are invited to attend. Find out how flowers reproduce by pollination. You will discover how new seeds form, how pollen can travel, and how to identify the reproductive parts of a plant. Learn what roles birds, bees and butterflies can play in the pollination process. **Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

**Sunday, October 22, 2017** *Tour of the Refuge (11:00 a.m. – 12:30 p.m. & 1:30 p.m. – 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.

**Wednesday, October 25, 2017** *Refuge Introduction Tour (10:00 a.m. – 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](mailto:tina_watson@fws.gov).**

**Saturday, October 28, 2017** *Impoundment Tour of the Refuge (10:00 a.m. - 12:00 noon)* - Join Terry Willis and Eileen McLellan for a bus tour of the Refuge impoundments and salt marsh. We hope to see and identify shorebirds, waterfowl, and wading birds along with Eagles and other passing raptors. Viewing scopes will be provided. Tour will take approximately 2+ hours depending on conditions. **Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

**Sunday, October 29, 2017** *Tour of the Refuge (11:00 a.m. – 12:30 p.m. & 1:30 p.m. – 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.

**Saturday, November 4, 2017** *Mysteries of Gulls and Terns (10:00 a.m. - 12:00 noon)* - Delmarva Ornithological Society (DOS) and the Delaware Museum of Natural History (DMNH) will offer a Gull and Tern Identification Workshop in Bombay Hook's auditorium. The intent is to offer participants the opportunity to view, study and discuss the skins of a variety of gulls and terns one might see on the Delmarva Peninsula. The skins will include both the common and the unusual species in a variety of plumages. Dr. Jean Woods, Curator of Birds at the DMNH, will guide us through the museum's collections.

The workshop is free. Space is limited and registration is required. If you're interested in attending the Mysteries of Gulls and Terns workshop, **please contact Jean Woods at [jwoods@delmnh.org](mailto:jwoods@delmnh.org) or (302) 658-9111 x314.**

Wednesday, November 8, 2017 *Refuge Introduction Tour (10:00 a.m. – 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](mailto:tina_watson@fws.gov).**

Friday thru Sunday, November 10-12, 2017 *FREE ENTRANCE FEE ½ hour before sunrise to ½ our after sunset* - Honoring veterans, the National Wildlife Refuge System is providing free entrance to Bombay Hook National Wildlife and all the Refuges throughout the U.S. This is a good time of year to see hawks, Eagles, ducks, and geese. Take time out to remember our veterans and to enjoy nature.

Saturday, November 11, 2017 *Beginning Bird Watching – Duck, Duck, Goose (10:00 a.m. - 12:30 p.m.)* What are all those ducks and geese around the Refuge? Come and learn how to tell one duck from another at this beginning birders’ class. We’ll start with a presentation at 10:00 a.m. and then practice our identification skills on the Wildlife Drive.

Sunday, November 12, 2017 *Refuge Introduction Tour (1:30 p.m. – 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](mailto:tina_watson@fws.gov).**

Saturday, November 18, 2017



- *Junior Rangers Explore the Bluebird Trail and Learn How to Clean the Boxes (9:30 a.m. - 11:30 a.m.)* - New and returning children (7-11 years old) are invited to attend. The program will cover the plight of the Eastern Bluebird and how conservation activities can benefit the species. The group will walk a 1-1/2 mile section of the Refuge, exploring the Bluebird nest boxes and the different kinds of wildlife that use them. **Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

- *Impoundment Tour of the Refuge (2:00 p.m. - 4:00 p.m.)* - Join Terry Willis and Eileen McLellan for a bus tour of the Refuge impoundments and salt marsh. We hope to see and identify shorebirds, waterfowl, and wading birds along with Eagles and other passing raptors. Viewing scopes will be provided. Tour will take approximately 2+ hours depending on conditions. **Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

Tuesday, November 21, 2017 *Toddlers/preschoolers (1 year old to 5 years old) and their guardian are free (9:00 a.m. - 2:00 p.m.)* - Bombay Hook will be free for toddlers and their guardian on the 3<sup>rd</sup> Tuesday of November. 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.

Wednesday, November 22, 2017 *Refuge Introduction Tour (10:00 a.m. – 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

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at the Visitor Center. **Call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

**Friday, November 24, 2017**

- ***Your First Visit To Bombay Hook Tour (10:00 a.m. - 12:30 p.m.)*** – Learn a little about the Refuge’s history, why it is here, how it is managed for wildlife, and bird migration at the Refuge. We will walk a trail and identify birds. **Space is limited, call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**
- ***Bird Identification Station (12:00 noon - 5:00 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 waterfowl, passing raptors, and whatever else flies by. Look for the blue Bird ID Station sign along the Auto Tour route.

**Sunday, November 26, 2017** ***Tour of the Refuge (11:00 a.m. – 12:30 p.m. & 1:30 p.m. – 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.



**Saturday, December 2, 2017** ***Junior Rangers Learn Why and How the Trees and Plants Stay Green in Winter (9:30 a.m. - 11:30 a.m.)*** - New and returning children (7-11 years old) are invited to attend. Mistletoe, holly, cedar and pine...what is their significance for wildlife? Come learn why they stay green in the winter along with some fun Holiday facts. You will create a Holiday decoration to take home! **Call to register at (302) 653-9345 or email: [tina\\_watson@fws.gov](mailto:tina_watson@fws.gov).**

**Wednesday, December 6, 2017** ***Refuge Introduction Tour (10:00 a.m. – 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](mailto:tina_watson@fws.gov).**

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Deer Hunt Dates – Partial Closures affecting the Wildlife Drive

**BACK SECTION CLOSED – Bear Swamp, Finis Pool, and Road to Allee House**

September 1 and 8, 2017 until 1:00 p.m. for Archery

October 9, 11, and 13, 2017 - all day for Muzzleloader

November 4, 10, 11, and 15, 2017; December 11 and 14, 2017; January 19, 2018 - all day for Shotgun

**FRONT SECTION CLOSED – Raymond and Shearneck – Enter Refuge on Rt. 9 at Dutch Neck Road**

November 13 and 17, 2017; December 13, 2017 - all day for Shotgun



<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 YOU 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](http://www.friendsofbombayhook.org/membership.html)  
and follow the instructions in applying or renewing your membership thru PayPal

Renewal       New Member

Date: \_\_\_\_\_

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
E-mail

Newsletter Preference:

Print       E-mail (require E-mail address)

#### **Membership Plan (Check One)**

- |  | Annual   |
|--|----------|
| <input type="checkbox"/> Student (under 18)* | \$5.00   |
| <input type="checkbox"/> Individual          | \$15.00  |
| <input type="checkbox"/> Family              | \$20.00  |
| <input type="checkbox"/> Sponsor***          | \$25.00  |
| <input type="checkbox"/> Sustaining          | \$50.00  |
| <input type="checkbox"/> Corporate**         | \$100.00 |
| <input type="checkbox"/> Life***             | \$200.00 |

\*Student membership: under age 18.

\*\*Corporate sponsorship includes link to FOBH website; no voting privileges or store discount.

\*\*\*Sponsor and Life memberships includes family .

#### **Method of Payment**

- Cash (payment at Visitor Center only)
- Check (payment by mail or at Visitor Center)
- 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](http://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.



DONATION FORM

Date: \_\_\_\_\_

\_\_\_\_\_  
Name

Donation Amount: \$ \_\_\_\_\_

\_\_\_\_\_  
Address

Method of Payment

\_\_\_\_\_  
City, State, Zip

- Check (payment by mail or at Visitor Center)
- Cash (payment at Visitor Center only)
- Credit/ Debit Card (payment at Visitor Center only)

\_\_\_\_\_  
E-mail (optional)