



2026 Spring Refuge Improvements

Each year, Refuge improvements are planned for Bombay Hook, and 2026 is no exception. Multiple projects were initiated and completed earlier this spring. Others will start in the coming weeks and months.

This was made possible with the help from other maintenance staff members within our Northeast FWS Region. This crew includes USFWS staff from Montezuma NWR, Back Bay NWR, Cherry Valley NWR, Patuxent NWR, Parker River NWR, and Bombay Hook NWR. A similar type of regional maintenance crew successfully reworked the Bombay Hook Boardwalk Trail last year. By bringing together maintenance staff who are very skilled in the trades, it is amazing how much splendid work they get done so quickly. When asked about the advantages the regional crew brings, Dale Hudson, BHNWR maintenance manager, said, "The big thing is having the extra hands."



Planned improvement initiatives for Bombay Hook include the following:

- Maintenance work at all three observation towers. This work involved replacing the wooden obser-

2026 Spring Refuge Improvements: Continued from front page



vation decks and the stairway treads. At the top of the observation towers, the wrap-around expanded metal panels that created the top cage were replaced.

- The current weedy split rail fences around each observation tower parking area will be removed. In their place, it will be easier to mow around the wooden parking lot poles.
- Several refuge directional signs on the Auto Tour drive will be re-

placed.

- The capacity of the back parking lot at the Visitor Center will be increased to accommodate larger vehicles.
- A parking pull-off will be created at the Shearness impoundment photo blind along the Auto Tour drive.
- Finally, a working fiber optic internet cable between the maintenance office and the Visitor Center will be established.

The 2025 Fall Newsletter shared that the joint impoundment restoration initiative, in collaboration with USFWS and Ducks Unlimited, would begin early in 2026, including sluice gate upgrades at BHNWR. Although there has been a delay, the additional time is being used to pursue more grant funding. Plans are for this joint project to be back on schedule later this Fall.



Photos by BL



Bombay Hook NWR

2591 Whitehall Neck Rd., Smyrna, DE 19977
(302) 653-9345

<https://www.fws.gov/refuge/bombay-hook>

The **Wildlife Drive** is open daily from ½ hour before sunrise to ½ hour after sunset. The **Bombay Hook Visitor Center** is open during the week from 8:00 am to 4:00 pm. The **Blue Heron Gift Shoppe** (operated by Friends of Bombay Hook) is open M - F, Saturday & Sunday from 9:00 am to 4:00 pm, depending on volunteer availability.

The Allee House remains closed until further notice.

Programs are free and no registration is necessary unless otherwise specified.

To request a reasonable accommodation please call the Refuge office at (302) 653-9345 two weeks before the event.

Spring 2026 Calendar of Events

Saturday 05/23/2026 - Bring Back the Pollinators (11:00am)

Melissa Melum will present a program on the important role pollinators play in the Bombay Hook NWR ecosystem. She will also cover how to garden for pollinators.

Saturday 06/06/2026 - Choosing Optics for Viewing Wildlife (11:00am)

Terry Willis will give a review of binoculars and spotting scopes commonly used at Bombay Hook NWR.

Saturday 06/20/2026 – Delaware Turtles (12:00pm)

DE state biologist, Nathan Nazdrowicz, will review turtles common to Delaware.

WATCH FOR PROGRAM UPDATES ON OUR [FOBH WEBSITE](#) AND [FACEBOOK](#) THROUGHOUT THIS SPRING!





***Bombay Hook NWR in
the Spring*** *Photos by KD*



Prime Hook NWR's New Visitor Center



Have you seen the new Visitor Center at our sister wildlife refuge? Building construction and interior work at the new Prime Hook NWR Visitor Center were completed in early 2025. With all systems going, the doors opened to the public in April of 2025. Shortly after, the old Visitor Center, down by the water's edge at Shell Beach Pond, was demolished. The new Visitor Center is now

at the refuge entrance, just off Broadkill Road (RT 16).

As I pulled into the parking lot, I noticed that the building style and colors were the same as those used at the USFWS visitor centers at Bombay Hook NWR and Canaan Valley NWR. I was greeted at the door by Chance Davis, Prime Hook's Refuge Manager, who took a minute to show



me around. The entrance lobby boasts interpretive exhibits and displays. The history of the shoreline breaches that eventually changed the refuge's freshwater impoundment habitats is explained very well.

To the right of the lobby is a multipurpose room,



Photos by BL

surrounded by windows that let in lots of light. This room offers animal exhibits, ID posters, field guides, and a large program screen for educational programs and meetings. At the back of the lobby, doors open to a screened-in patio with outdoor tables and chairs. I am told visitors enjoy having lunch on this bug-free patio. Beyond that, to the right is a spacious open-air patio. Back inside the lobby area, the Friends of Prime Hook operates the well-stocked "Hooked on Nature

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Prime Hook NWR's New Visitor Center: *Continued from Page 5*

Gift Shop". Yes, all sales benefit the Prime Hook NWR activities through the Friends of Prime Hook. Here you will find an information desk staffed by FOPH volunteers to help direct you or answer questions about the Refuge.

This spring, the Refuge staff seeded a pollinator meadow behind the VC, which you should visit. So, this summer, if you are looking for a new place to explore, consider Prime Hook NWR and its new Visitor Center.



CAUTION! Spring Turtle Season



Photos by KD and BL

You also may see Diamondback Terrapins, Painted Turtles, Box Turtles, and Snapping Turtles crossing



Every year, from mid-May through the first few weeks of June, our Refuge turtles are on the move. You will see the tracks of Snapping Turtles across the mud flats up to the bank and their telltale shell line in the mud between the prints. Females are off digging their nests in the banks to lay eggs.



the Auto Tour Road or even Whitehall Neck Road. Slow down and check them out. Often these turtles are on the move to breed or make a nest to lay eggs.

Hard to believe, even with a speed limit of 25 mph, on the Refuge Auto Tour, we move multiple dead turtles off the road each year that have been hit by cars. Please give them a break.

Oscar Reed, Bombay Hook NWR Refuge Manager

Have you met Oscar Reed, our Refuge Manager? If you haven't, introduce yourself. You will find someone who wants to make your visit to the Bombay Hook Refuge enjoyable. As one of the most visible staff members at Bombay Hook NWR, he frequently welcomes visitors, responds quickly to fallen trees after storms, and manages various tasks for both the Refuge and Visitor Center.

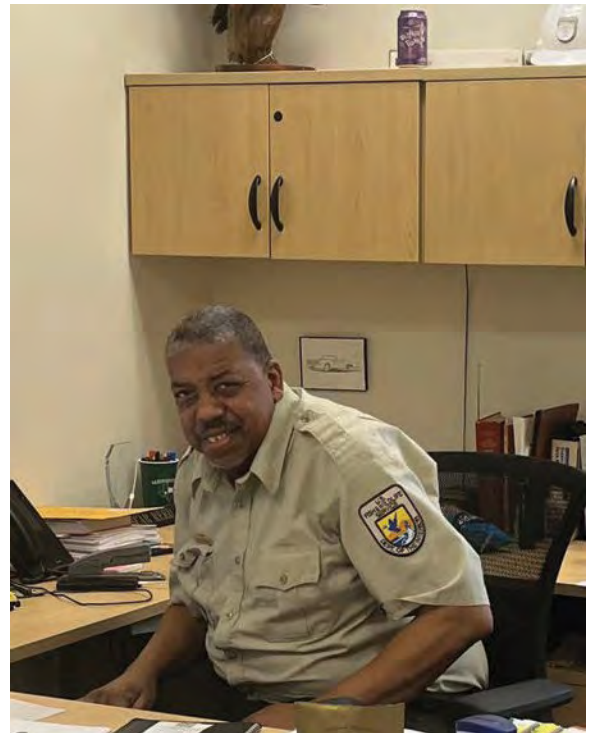
Oscar grew up in Grambling, Louisiana, and is a proud Grambling University alum.

He has been at Bombay Hook NWR for 28 years. Before that, he came to us from James River NWR in Virginia. With his many years of experience in the field, he is quick on his feet when unexpected problems arise.

Oscar is a pleasure to work with and is greatly appreciated by staff and volunteers. He always takes the time to hear your question and offer a helpful thought. When talking about our Refuge visitors, Oscar said he "likes to see people satisfied when they come to the refuge."

As Refuge volunteers and FOBH members, we interact regularly with Oscar on refuge projects or activities. He always listens to ideas, suggestions, and concerns with an open mind.

Oscar, thank you for all you do and the kind way you do it!



Blue Heron Gift Shoppe Manager: Karen Dever



Karen has been working at the Blue Heron Gift Shoppe (BHGS) for 16 years. Many years ago, she was a volunteer when the store manager suddenly left. Karen had sales and merchandising skills from the private sector positions she held. With her skills applied to the store, operations at the Blue Heron Gift Shoppe navigated those uncertain times and began to prosper. Under Karen's leadership, it has continued to build over the years, adjusting to changes in USFWS guidelines and policies. Keep in mind that the old BHGS was the size of a coat closet.

Karen manages a very dedicated staff of BHGS volunteers. She purchases all merchandise and manages inventory around seasonal store traffic. She plans her marketing around calendar holidays, special speaker programs, and weekend Refuge wildlife programs.

Reminiscing about moving the small gift shop into a larger, new one, Karen stated, "The greater store space was the chance to do something special."

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Blue Heron Gift Shoppe Manager: Karen Dever: *Continued from Page 7*

Several years before the new Visitor Center move, Karen directed FOBH hosted photo contests and other fundraising sales. She envisioned funding needs for the proposed new Visitor Center, which would include a larger retail space. These actions provided for new display racks and merchandise shelves, as well as their installation. This fundraising also made possible the extra store inventory that was needed for a larger gift shop.

Karen believes that, as a manager, you must show people you care. She said, "If you care, your volunteers follow your lead and help the store move forward. Please understand that they really do care about the gift shop and our visitors."

Under her guidance the Blue Heron Gift Shoppe has more than tripled its sales since the move. This allows FOBH to support the Refuge in so many ways.

Here are several more of her keys to success:

- We must follow the USFWS rules for the BHGS. She commented that the trick is working with the rules and applying them for success.
- With a small gift shop, Karen reports you cannot buy volume because she has limited storage space. This requires her to shop for good prices in smaller volumes.
- Another key to her success is constantly bringing new items into the gift shop to make the gift shop look fresh and new. She works hard to bring in local artists' work as well. She said her volunteers and FOBH members share fresh ideas from other nature shops they find in their travels.
- Finally, Karen reports, "there is a fine line between a well-stocked gift shop and a sloppy one." It is safe to say she walks the line.

Karen truly cares about the Refuge's Blue Heron Gift Shoppe. She said, "The Gift Shoppe's success is her way of giving back to the Refuge."

Thank you, Karen!



Forest Discovery Tree Trail

Have you explored the newest trail on the Refuge? The Forest Discovery Tree Trail is open to the public. Spring is a wonderful time to enjoy the trail with all the vegetation leafed out.

In the morning, the forest supports many migrating warblers, and resident birds are preparing for the breeding season—Typically, the Spring season is when deer flies are free until early June. The 2.7-mile trail starts just down the hill from the north end of the Visitor Center.

Look for the large trailhead sign. Enjoy!



Photos by BL



WHAT A DEAL!!



Hello 4th Graders, parents, grandparents, and teachers! How would you like to get a **FREE** National Pass good from now until August 31, 2026?

Get this pass that you and YOUR FAMILY can use to visit National Parks and National Wildlife Refuges from now until August 31, 2026 – **FOR FREE.**

Here is how you start: Go to the “Every Kid Outdoors” website at www.everykidoutdoors.gov and follow the simple steps. When you complete the “How it Works” part and print your pass, visit Bombay Hook NWR, and they will provide the official pass.

The visitor center is open Mon - Fri, 9-4. Sat and Sun vary so please call ahead.

Ernest F. Hollings ACE Basin National Refuge

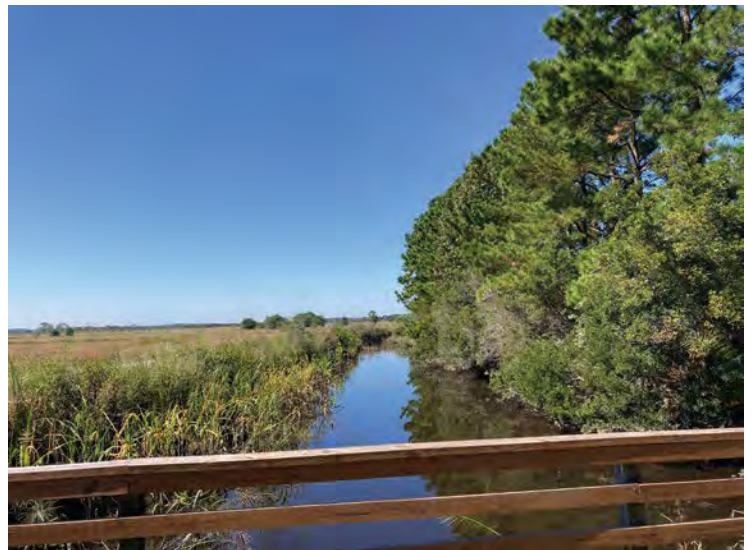


Ernest F. Hollings NWR (EFH) is in southeastern South Carolina below Charleston. Locals often call this part of South Carolina the Low Country. This refuge is situated in the larger Ace Basin System. The ACE Basin System consists of three winding rivers—the Ashepoo, Combahee, and Edisto—which together create an expansive river basin spanning 350,000 acres—one of the largest undeveloped wetland systems along the Atlantic coast. The EFH ACE Basin National Wildlife Refuge consists of two units: the Combahee and Edisto units.

The refuge comprises wet-bottom forest, upland forest, and both freshwater and saltwater marshes. Much of the low-country forest has a very thick Saw Palmetto understory. These diverse ecosystems of-

fer abundant habitat for birds, reptiles, amphibians, fish, and other wildlife. The refuge offers a variety of opportunities for outdoor activities, including hiking, birdwatching, photography, hunting, and fishing. The refuge also offers cultural history sites to visit. The Continental Army hero, Brigadier General Francis Marion (the Swamp Fox), harassed the British army from these marshes during the Revolutionary War. The Groove Plantation is in the Edisto Unit about 20 miles southwest of Charleston.

From the visitor parking lot, you walk along the old lane up to the plantation manor that serves as the refuge headquarters. The headquarters is surrounded by large stately Live Oaks, dripping with Spanish moss. Behind the manor are acres of old rice fields



Photos by BL

that are now freshwater impoundments. You can walk along the canals that help maintain the freshwater impoundments. We found an abundance of bird life across these wetlands. The vast swath of marsh that goes to the horizon in front of you continues for miles to the south and west. There are no public roads, just canals and meandering rivers.

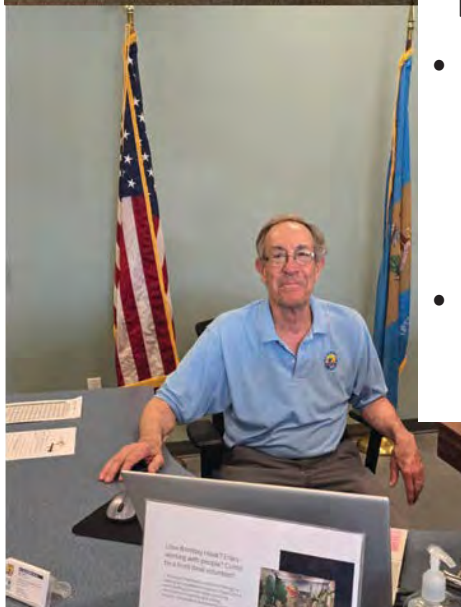
The EFH ACE Basin National Wildlife Refuge serves a critical function for migrating waterfowl and neotropical avian species. Early spring is a wonderful time to explore this vast refuge.





**LOVE BOMBAY HOOK?
ENJOY WORKING WITH PEOPLE?
BE A FRONT DESK VOLUNTEER!**

- Bombay Hook National Wildlife Refuge is looking for volunteers to spend a few hours a week staffing our front desk, providing information to visitors, and selling passes. Orientation and training are provided!
- Please contact Project Leader Kate Toniolo at Kate_Toniolo@fws.gov or (302) 222-6309 if you are interested.



Photos by BL

Insect Spotlight: Deer Fly (*Chrysopsinae*)

- The deer fly is also known as the sheep fly.
- It gets its name from deer, their host.
- They are in the sub-family Chrysopsinae.
- There are up to 15 species of deer fly.
- They are a blood-sucking insect.
- Deer flies harass Refuge visitors and staff from June to early September.
- This time window is when deer fly adults hatch from their pupal stage.
- Look for their yellow/brown body, clear wings with dark color bands.
- These flies have bright-colored compound eyes.
- The deer fly is larger than a house fly but smaller than a horse fly.
- Males collect pollen, while females feed on blood.
- Her mouth parts cut a cross on your skin, then she laps up pooling blood.
- Deer fly bites can cause minor pain, and they bite all Refuge mammals.
- There is an anti-coagulant in their saliva to prevent blood from clotting.
- Smell, sight, body heat, movement, dark colors, and carbon dioxide all draw them in.
- These flies are active in direct sunlight and temperatures above 70 degrees.
- DEET is not an effective repellent for Deer flies.
- Head nets are very effective protection and are commonly worn by Refuge staff and volunteers.
- Historically, local farmers would use green wild cherry twigs shaped into a wreath and worn on hats to repel deer flies. It really works!





Spotlight Artist: Charlese Annette

In this edition of the Artist Spotlight series, our highlighted artist is Charlese Annette. She currently resides in Delaware. Charlese finds Bombay Hook NWR one of her favorite places and a source of inspiration for her artwork. You can see Charlese's artwork in shows and exhibitions across Delaware and in neighboring states. She is currently an art educator and an active professional artist.

She is a photographer and painter, working in many mediums. In her own words, she more eloquently states, "I primarily describe myself as a fiber artist, though I work with multiple mediums within my creative practice. I use the photographs I take as references and inspiration within my work, from the subjects to the colors within the images."

In photographs of her artwork that she shared for this story, Charlese incorporates our nesting Red-winged blackbirds into an impressive weaving. In her words again, she states, "Bombay Hook is such an important staple in our area. It is the place that my love for photography flourished, and it has allowed me many a feathered and four-legged subject to photograph for hours on end over the years. Its beauty year-round makes it the perfect backdrop for a photoshoot or an evening drive to watch the sunset (which I love, especially in the fall). But in the Spring, when all of the Red-winged Blackbirds arrive, is always my favorite. So much so, I created a weaving using my photographs of them for inspiration, along with the natural scenery, in an artwork titled 'Ode to the Red-winged Blackbird'. I find joy when viewing this piece, as it allows me to "visit" this stunning Refuge any time, imagining myself there again. I recommend Bombay Hook to anyone who wants to get out in nature."

Please look for Charlese's artwork on exhibit throughout Kent County, the state of Delaware, and the Delmarva Peninsula. We thank Charlese for sharing the inspiration she finds at Bombay Hook NWR with us.

Photos by Naomi Phillips, Charlese Annette





Hello Friends!

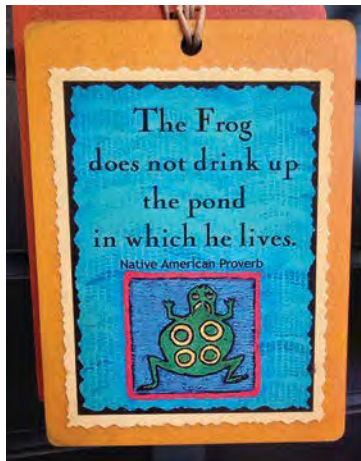
At the time of this writing, I'm not quite sure if it is truly spring or not. BRRRRRR!

We have some cute things to entice you to come into the store while visiting the Refuge this season. Farmer's Defense gloves, sleeves, shirts, the cutest ever tweezers, and beer can style glasses with a bird design. Ticks are here!!! Get repellent and pick up a tick remover. When the rest of the biting buggers get cozy as the weather warms, we carry net bug jackets and head nets. And if

they still get you, you can pick up a new "I Gave Blood At ..." badge to show that you survived! They are only \$2 each, and the seller was kind enough to make one for greenheads!!

We have brought back our frequent shopper cards. A \$20 purchase gets your card punched, and five punches get you 15% off your purchase! We have lots to choose from for Mother's Day and Father's Day, or maybe it's a new baby!!!! We have a great selection of baby items!

As always, I will close with a plea for volunteers. We need volunteers for weekdays and weekends in the store. Please pass on this message to anyone you know who might be interested in joining our family. Even if you can only do one 4 hour shift per month, that is still a big help!



Please email me at fobh@comcast.net if you would like to volunteer.

Warmly,
Karen



Photos by KD



HOW CAN YOU SUPPORT FRIENDS???

Donate or Become a Member!

Since 1990, the FRIENDS OF BOMBAY HOOK (FOBH) have been working with Bombay Hook NWR in supporting the message of conservation! Without memberships, donations, and proceeds from the Blue Heron Gift Shoppe, we surely would not exist today. Throughout the years, we have been able to aid the Refuge by supporting environmental education programs, fund transportation for field trips to Bombay Hook for school children, purchase audio/visual equipment, secure grants, paid for internships, purchased new chairs for the auditorium and for outside programs to name a few. Because of our supporters, we continue with our mission!

To donate or become a member, please fill out the form on the right and mail your check or money order to FRIENDS OF BOMBAY HOOK, 2591 Whitehall Neck Rd., Smyrna, DE 19977.

Or go to <https://www.friendsofbombayhook.org> and follow the prompts to either donate or obtain/renew membership. And you can always stop by the Visitor Center during gift shop hours to do it in person! We would love to see you! The Blue Heron Gift Shoppe is operated by volunteers and is only open when the volunteers are present. If you are uncertain of days and hours, please call ahead.

FOBH Membership Benefits include voting privileges at the FOBH Annual Meeting; 10% discount on merchandise sold at Blue Heron Gift Shoppe; and eligibility to join the Dover Federal Credit Union (<https://www.doverfcu.org>).

FOBH Memberships and Donations help support and finance Refuge programs, and are tax deductible.

Our Mission Statement

The Friends of Bombay Hook (FOBH) is a non-profit corporation (501c3) working in conjunction with Bombay Hook NWR and the U.S. Fish & Wildlife Service (USFWS). 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.

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www.friendsofbombayhook.org



FOBH MEMBERSHIP / DONATION APPLICATION

Submit completed application at the Visitor Center (payment by cash, check/money order, or credit/debit card), or by mail (with a check/money order) to *Friends of Bombay Hook; 2591 Whitehall Neck Rd.; Smyrna, DE 19977*, or go to <https://www.friendsofbombayhook.org> and follow the prompts to either apply/renew membership or make a donation online.

Membership Donation

Date _____

Name _____

Address _____

City, State, Zip _____

E-mail _____

Newsletter Preference:

Print E-mail (require E-mail address)

<u>Membership Plan (Check One)</u>	<u>Amount</u>
<input type="checkbox"/> Student (must be 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"/> Lifetime**	\$ 200.00

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

**Sponsor and Lifetime memberships include family.

<u>Donation (Check One)</u>	<u>Amount</u>
<input type="checkbox"/> Miscellaneous/General	\$ _____
<input type="checkbox"/> Allee House	\$ _____
<input type="checkbox"/> Memorial for:	\$ _____

Method of Payment

Cash (payment at Visitor Center only)

Check/Money Order (payment by mail or at Visitor Center)

Credit/ Debit Card (payment at Visitor Center only)