

Friends of
BOMBAY
Hook



<http://www.friendsofbombayhook.org>

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The President's Corner
 By: *Frank L. Rawling, Jr.*

The Refuge Needs You!

In these days of lower and more restricted Federal budget allocations for items such as the National Wildlife Refuges the use of volunteers on the Refuges has become of greater importance. I have discussed this issue before and I do so again because it is of such great importance. One of my pleasures in life since I retired several years ago is attending the University of Delaware's Academy of Lifelong Learning. There are over 2,000 members of the ALL and all the courses are led by members of the Academy. Who are these folks? Well they are people like you and me who have a strong interest, one might say a passion almost, about a specific subject. It may be ancient history, art, music, literature – you get the idea. Their interest is strong enough that they want to share it. What has this got to do with the Refuge? Well, these folks are all volunteers! Have you ever learned something that so piqued your interest that you just had to share it with someone? That is the type of interest these folks have and it is the type of interest that the volunteers at the Refuge possess. The very fact that you are reading this Newsletter, or you are a member of the Friends, indicates that you have a special interest in Bombay Hook. Now wouldn't you like to share that interest?

Bombay Hook is a special place! People come here for a variety of reasons but they all come with the realization that they are visiting someplace special, the type of place that is rapidly disappearing. Perhaps they have come simply because they saw the sign out on Route 9 or Route 13 and decided to stop and check it out. But, whatever the reason, they came. I suspect that most of them return in the future. As a volunteer you have the opportunity to talk to these folks, and the myriad of others who visit, to intro-

duce them to the Refuge and its history and purpose.

Come join us. Share your interest in the Refuge. The more people who are familiar with the Refuge and the Refuge System the greater the chance for protecting areas like this. We all lead busy lives but we can all fit a little time in for volunteer effort. Retirement is not a necessity. Call the Refuge (302-653-6872) or stop into the Visitor Center on your next visit to learn more about the volunteer program.

The next volunteer orientation meeting will be held at the Visitor Center on March 5, 2005 at 10:00am. Come join us. Join a group of dedicated people, both volunteers and staff, and enrich your life!

The Refuge Store
 By: *Verna Price*

The Refuge Store had a great fall season, thanks to all of you who visited and made purchases.

As usual, books were a big sales item, and the enamel jewelry is proving to be quite popular. The T-shirt designed by Great Graphics especially for Bombay Hook was a big hit, and we will be ordering it in a different color for spring. Many of you liked the long-sleeved shirts, and we will be stocking some.

If you have any suggestions of items to sell in the store, please let us know as we are always on the lookout for things visitors might like.

We look forward to seeing you in the Refuge Store!!!!

Bird Notes

By: Frank L. Rawling, Jr.

Welcome to the Fall Migration Season at Bombay Hook. The season was characterized by a continuation of the wet weather the region has experienced all year. As usual the statistics referred to are for Wilmington. NOAA only has a compilation for Wilmington on their web site. But, it is only 50 miles north so it usually fits well with the Dover area. At any rate, September was 1.1 degrees F above normal and rainfall was a whopping 5.28 inches above normal. Most of that came on the 28th when Wilmington experienced 5.72 inches of rain. October was 1.2 degrees F cooler than normal and rainfall was 0.65 inches below normal. November came in at 1.1 degrees F above normal and rainfall was 1.54 inches above normal. It has been a wet year. At the end of November Wilmington precipitation was about 15 inches above normal! Regardless of the weather birdwatchers were out and about and the fall continues as Bombay Hook's most popular season. So let's get to it and see what was being seen at the Refuge.

September

The month began with a bang when no less than 12 **Bald Eagles** were seen, most at Shearness Pool but Bear Swamp hosted 2 adults. This was followed on the 2nd with a **Curlew Sandpiper** at Raymond Pool as well as a **White-rumped Sandpiper**. On the same day 2 **Wilson's Phalaropes** were seen at Raymond and a **Peregrine Falcon** was observed at Bear Swamp. Another falcon, a **Merlin**, was seen at Raymond on the 7th. And, the same day, a **Clapper Rail** was seen at Shearness. Also on the 7th a half dozen **Snow Geese** were seen at Bear Swamp. **Bobolinks** put in an appearance on the 8th. On the 10th a **Blue Grosbeak** was seen near the Visitor Center and a female **Wood Duck** was observed on the Refuge. The same day saw 3 **Hudsonian Godwits** at Raymond along with the aforementioned 2 **Wilson's Phalaropes**. The number of **White-rumped Sandpipers** at Raymond had increased to 3 on the 11th. No less than 36 **Black-crowned Night Herons** were at their usual spot on Bear Swamp on the 11th. They were accompanied by an immature **Yellow-crowned Night Heron**. The **Wilson's Phalaropes** and the **Hudsonian Godwit** were still at Raymond on the 13th and were joined by a lone **Dunlin** and several **White-rumped Sandpipers**. The same day a **Reeve** was seen at Raymond Pool along with 2 **Stilt**

Sandpipers. Also, an adult **Yellow-crowned Night Heron** had joined the immature at Bear Swamp. On the 14th the **Snow Goose** flock had increased to approximately 350 at Shearness. The **Peregrine Falcon** was still in the area on the 15th, this time seen at Finis. At Shearness there were about 200 **Double-Crested Cormorants** and in one of the fields there were estimated to be some 1,000 **Bobolinks**. The number of **Wilson's Phalaropes** at Raymond had increased to 4 by the 18th and on the same day there was a juvenile **Ruff** at Shearness. On the 19th a **Blue-winged Teal** was observed at Raymond and 1 **Hudsonian Godwit** was at Shearness. Finally, on the 19th, a birder saw some warblers. 3 **Black and White Warblers**, and single **Black-throated Blue** and **Yellow Warblers** were seen at Raymond as well as 3 **Black-bellied Plovers** at Shearness. The same day a **Sedge Wren** was seen along the Boardwalk Trail. On the 22nd 2 **Cackling Geese** were seen at Shearness along with a **Ross's Goose** and 4 **Hudsonian Godwits**. On the 23rd, 5 **American Golden Plovers** were spotted at Raymond Pool. A **Red-tailed Hawk** was seen near the Visitor Center on the 24th. The same day a lucky birder spotted an immature **Golden Eagle** at Bear Swamp and an immature **Peregrine Falcon** at Shearness. A **Northern Harrier** was at Shearness that day. Also on the 24th there were some 300 **American Avocets** seen at Raymond Pool. 3 **Caspian Terns** were seen at Shearness on the 25th. On the 26th a real nice find was a **Philadelphia Vireo** along the Boardwalk Trail. And 2 **Sedge Wrens** were noticed at Shearness on the 27th. A **Marbled Godwit** was seen at Raymond on the 29th. The **Caspian Tern** flock had increased to 25 at Bear Swamp on the 29th and the month closed out with the sighting of a **Merlin** at Shearness, 7 **Black-crowned Night Herons** at Bear Swamp, 3 **Eastern Phoebes** at the same location and the jackpot, 46 **Royal Terns** at Shearness!



Merlin

October

The sighting of an **Osprey** over the bay at Shearness began the month on the 2nd. The same day, **Pectoral Sandpiper**, **Peregrine Falcon** and **Ruddy Duck** were all seen at Shearness Pool. On the 5th 3 **Eastern Wood Pewees** and a female **Common Yellowthroat** were all seen in the

vicinity of the main entrance gate. Also on the 4th several **Ross's Geese** were seen at Raymond Pool among the **Snow Geese** and **Eastern Phoebes** were common everywhere on the Refuge. A **Hudsonian Godwit** and 2 **Glossy Ibis** were at Raymond Pool on the 7th. On the 9th an **Osprey** was seen in the vicinity of Finis Pool, the **Hudsonian Godwit** was still at Raymond Pool, a **Bald Eagle** was seen at Sheariness and an **American Bittern** was spotted at Bear Swamp. In addition 25 **American Avocets** were in residence at Raymond Pool and a **Red-shouldered Hawk** flew over Sheariness. On the 10th a **Pectoral Sandpiper** was seen at Raymond Pool. Also seen at Raymond were 2 **Hudsonian Godwits** and a **Marbled Godwit**. An **Orange-crowned Warbler** was observed along the Boardwalk Trail. On the 11th **White-crowned Sparrows** were seen near the feeders at the Visitor Center. Also **Bobwhite** were heard. At Raymond Pool on the 12th were 3 **American Golden Plovers** and 3 **Stilt Sandpipers**. There were 2 to 300 **American Avocets** in Raymond Pool on the 14th. The **Hudsonian** and **Marbled Godwits** were still on the Refuge on the 15th as well as the **American Golden Plover** and 4 juvenile **White-rumped Sandpipers**. 5 **Northern Harriers** were patrolling the Refuge on the 17th and there was a male **Black Scoter** on the bayside at Sheariness on the same day. Both adult and immature **Bald Eagles** were seen at Bear Swamp on the 22nd and 12 **American Pipits** were seen near the Allee House on the 24th. A **Snowy Egret** was also seen that day. In addition **White-crowned Sparrows**, **Savannah Sparrows** and an **Eastern Meadowlark** were seen on the Refuge on the 24th. An adult **Goshawk** put in a brief appearance on the 16th at Raymond Pool as well as an immature **Bald Eagle** and an immature **Peregrine Falcon**. On the 27th a **Sharp-shinned Hawk** flew by the Visitor Center. On the 30th 2 **Snow Buntings** were seen on Sheariness Dike. Cruising in the same area was a **Merlin**. The same day there were 2 **Pied-billed Grebes** and 2 **Red-tailed Hawks** at Bear Swamp as well as a **Cooper's Hawk** at Finis Pool. Close to 100 **Willetts** were seen at Sheariness on the 30 and approximately 8 **Solitary Sandpipers**. Duck numbers were building at this time with **Northern Shovelers**, **Northern Pintails** and **Green-winged Teals** in abundance. Finally the month closed with



Red-tailed Hawk

a sighting of a **Golden Eagle** flying over Raymond Pool and **Semi-palmated Plovers** and a **Pectoral Sandpiper** seen at Sheariness.

November

Tundra Swans put in an appearance on the 1st with 2 seen at Sheariness Pool. In the same location were the long-staying **Marbled Godwits**. Also, 2 **Ring-necked Ducks** were seen on the bayside of Sheariness. The 2 equally long-staying **Cackling Geese** were seen at Bear Swamp on the 1st. On Sheariness Dike a **Lapland Longspur** was seen on the 3rd. An **American Coot** was on the bayside of Sheariness on the 3rd. By the 5th the **Tundra Swan** population had increased to 34, scattered between Raymond and Sheariness. Also on the 5th 5 **Bald Eagles** were seen at Bear Swamp and a dozen **American Pipits** spotted along the road to the Allee House. The 2 **Snow Buntings** were still in the area of Sheariness Dike on the 5th, as were the 2 **Pied-billed Grebes** at Bear Swamp. Also in residence at Bear Swamp were 2 **Buffleheads**. The same day a **Peregrine Falcon** was seen over the salt marsh at Sheariness. 8 **American Avocets** were still at Raymond on the 5th and some 15 **Forster's Terns** and 20 **Green-winged Teals** were observed at



Green-winged teal

Sheariness. On the 7th an **Eastern Meadowlark** was in the vicinity of Sheariness and a **Lincoln's Sparrow** was on the bayside of Raymond Dike. 6 **Yellow-rumped Warblers** were observed along the Boardwalk Trail on the 8th. A dozen **Golden-crowned Kinglets** were seen in Finis Woods on the 11th. **Snow Buntings** along Sheariness Dike had increased to 10 on the 12th. They were joined by the **Lapland Longspur** on the 13th. At the same time there were 3 **Lapland Longspurs** along the Whitehall Neck Road. In addition 2 **Northern Harriers** were observed at Sheariness Pool on the 13th. The 13th turned out quite well for there were 10 **Rusty Blackbirds** and 20 **American Pipits** seen at Sheariness on that day. The 14th saw a **Fox Sparrow** at Finis and 2 **Ross's Geese** at Sheariness. The **Lapland Longspur** was still in the area on the 20th, this time seen along the road to Raymond Pool. On the 22nd the **American Avocet** flock had in-

creased to 200 on Shearneck and a couple of **Horned Larks** were with 20 **American Pipits** on the road to Raymond Pool. Meanwhile there were some 1,000 **Dunlin** on the mudflats at Shearneck. And the long-staying **Godwits** were still on the Refuge on the 23rd. Several **Seaside Sparrows** were seen along the Boardwalk Trail on the 24th and 3 **Hooded Mergansers** were seen at Bear Swamp on the 27th. 4 **Bobwhites** were seen at Raymond on the 28th.

That's it for this time.

CHEERS AND GOOD BIRDING!!!!

The Refuge Corner *By: Terry Villanueva*

The beginning of 2005 is an appropriate time to look back on last year and share with you some of the plans for the coming year. I would like to start by thanking the Friends of Bombay Hook and the Refuge Volunteers for their continued support of the Refuge. Volunteers donated 4,836 hours at the Refuge last year. Much of the visitor programs and on the ground work could not be accomplished without your continuing dedication.

I would also like to acknowledge the work of the dedicated Refuge staff. Everyone is focused on meeting the wildlife conservation mission of the Refuge and providing quality wildlife-dependent visitor opportunities.

Some of the highlights of the year were the addition of Refuge Officer Frank Polyak and Refuge Biologist Ray Brown to Refuge staff. Both are contributing much through their individual expertise but also pitch in wherever there is a need.

Ray Brown began as the new Refuge Biologist in April. With the biologist position having been vacant for nearly a year, Ray dove right in, getting to know the Refuge resources and programs, and managing on the ground resources for wildlife. His experience and perspectives are proving valuable as we continue to build on the foundation of a strong wildlife conservation program at the Refuge.

Frank Polyak was hired as the first full time Refuge Officer at Bombay Hook on February 22nd. He actually arrived

at Bombay Hook in May after six required law enforcement training assignments. Frank has been getting familiar with the Refuge and has proven to be a real asset at the Refuge providing visitor assistance, fostering stronger working relationships with the Delaware Division of Law Enforcement under the Delaware Department of Environmental Conservation and Environmental Control, providing a law enforcement presence at the Refuge, and identifying and addressing law enforcement issues.

In March, Friends of Bombay Hook President Frank Rawling and I attended the Conservation in Action Summit held at the National Conservation Training Center in West Virginia. It provided an opportunity for 250 people, including Service employees and partners, to help plan priorities for the National Wildlife Refuge System as we begin this new Century. Frank did a great job of covering the highlights of the last issue of the newsletter.

Visitor activities were held throughout the year from field trips, to teacher workshops, birding trips, boat tours, and two festivals. Refuge led field trips added on a new perspective with four evening events providing opportunities to experience the Refuge at night. These included a woodcock walk led by Jeff Gordon, listening and searching for frogs with Delaware herpetological expert Jim White, an evening spent learning about bats and echo-location with Graduate researcher Marcia Fox, and an evening of stargazing with the Delmarva Stargazers Club.

You may have noticed new railing and bumpers at the parking lots to the observation towers are at Raymond and Shearneck. These areas are being improved through Federal Highway dollars. Parking areas are more clearly defined and signs are on order to provide information to visitors at the trailheads and on the towers. The towers also received a facelift with a much needed painting.

We treated over 100 acres of invasive phragmites, mostly in the impoundments, by aerial spraying of herbicides with a helicopter. This habitat improvement projects was made possible through a cooperative effort with the State of Delaware and funding from the USFWS Delaware Estuary Program.

In October, we resumed bimonthly aerial surveys for waterfowl after two years. Lack of funds and a year with the Refuge Biologist position being vacant resulted in the can-

cellation of this valuable monitoring tool. We were able to set aside a bit of funds at the end of the year to get this program going again.

The BBC filmed at the Refuge for a documentary as part of the series called Planet Earth. The film will focus on freshwater and ends the journey in the tidal marshes of the Refuge with spectacular views of the snow geese.

The public restrooms received a much needed facelift with replacement and updating of the fixtures and tile.

The November oil spill from the Athos I put us on alert for potential impacts on the Refuge. We are coordinating with the Coast Guard and the USFWS Ecological Services branch for monitoring and responding to any impacts from the spill. At this time, much of the oil sank to the bottom of the Delaware Bay. We may see some tar balls and sheen from the spill. The impacts on the benthic natural communities is much less apparent but is being assessed by USFWS.

Wet weather provided favorable conditions for the Refuge impoundments throughout the year with the exception of one 11 inch rain event that resulted in higher than planned water levels and loss of some of the moist soil plants. However, good quality habitat conditions were reflected in the year round use by shorebirds, wading birds, and waterfowl.

Looking towards 2005, we have many things going on at the Refuge. January 4th we conducted the second annual Wheelin' Sportsman event, providing an opportunity for hunters in wheelchairs to experience goose hunting. Experienced hunters and guides provided equipment and their talent to help make the day a success. More information is included in another article.

As usual, Tina is planning another great year of activities to provide opportunities for the public to experience and learn about our natural world. Look to the ongoing schedule of events for details.

We will be working with support from Friends of Bombay Hook on developing a professional video to provide a good overview of the Refuge to visitors. A joint contract including a video for Prime Hook will lower the cost of the video for each Refuge.

Work began in January on the Bear Swamp Trail to improve wheelchair access including on the spur trail.

At this time it looks like funds will be available this year for much needed rehabilitation of Refuge displays in the visitor facility.

Plans and funding are in place to repair the Shearness Pool water control structure and stabilize erosion on the dike on either side of it. We will also be replacing the boat dock used for access to the marsh by Refuge staff and permittees. The projects are being designed through a partnership with Ducks Unlimited.

Bombay Hook will be participating in a multi-refuge study being conducted on 23 refuges along the northeast and central U.S. The study will focus on managing impoundments for Spring and late Summer shorebirds, wading birds, and waterfowl. It is an expanded study on impoundment management conducted in this Region. Bombay Hook participated in the previous study and will be a part of this study because shorebird data from the Delaware Bay area is an important component of this study.

Ray Brown and I recently participated in a meeting initiating planning for the New England Mid Atlantic Bird Conservation Region, an area extending from the coast of Maine to Virginia. The purpose of the meeting was "to coordinate bird conservation planning and implementation efforts in the Bird Conservation Region and create opportunities to collaborate and pool resources on activities directed towards the conservation priority species, populations, and habitats. By working together to plan and implement at the Bird Conservation Region scale, each partner agency or organization will have a better understanding of what contributions they need to make in order to meet regional and continental bird conservation species."

The meeting was coordinated by the U.S. Fish and Wildlife Service office of Migratory Birds. A broad array of partners attended including State Natural Resource agencies, National Wildlife Refuges, the U.S.F.W.S. Division of Ecological Services, and conservation groups including Audubon, the Nature Conservancy and Delmarva Ornithological Society. Bird experts and land managers from throughout the region will be working together to identify

needs and set priorities for bird conservation on a landscape scale.

The foundation of the plan includes using existing bird conservation initiatives such as the North American Waterfowl Conservation Plan, U.S. Shorebird Conservation Plan, Partners in Flight, and Waterbird Conservation for the Americas. Because much of this work translates to providing habitat on the ground, it is appropriate that land managers from Refuges be at the table as we formulate this plan. Bombay Hook will continue to play an important role in ongoing bird conservation efforts for landbirds, waterbirds, waterfowl, and shorebirds.

During the 2005 budget planning cycle, the Senate version of the budget included \$350,000 for planning and design of a new Administrative Building and Visitor Facility at Bombay Hook. Although the final Congressional budget did not include the funds, it included language about the need for the Department of Interior to investigate the need to replace the Refuge Administrative Building and Visitor Facility. Friends of Bombay Hook will be developing a Capital campaign to raise contributions and grants in support of this much needed facility. More information will be provided in the future.

While maintenance dollars are improving, operational dollars are being stretched thinner each year for the National Wildlife Refuge System. At Bombay Hook that translates to the fact that the second Maintenance Mechanic position has been vacant for four years and the second Outdoor Recreation Planner position has been vacant for nearly two years. Again, we would not be able to accomplish as much as we do at the Refuge without the time and talent of dedicated volunteers.

I will be detailing at Chincoteague National Wildlife Refuge as Acting Refuge Manager for two to three months. Refuge Manager John Schroer is retiring after many years of dedicated and exemplary service with the National Wildlife Refuge System. I will help cover until a new Refuge Manager is selected. Oscar Reed will do a great job as Acting Refuge Manager at Bombay Hook and the rest of the staff will keep the Refuge operating smoothly as always. I look forward to the opportunity to spend some time facing new challenges at another Refuge then returning to Bombay Hook after the detail.

Purple Martin House and Gourd Data
By: Joel Martin

Bombay Hook NWR

<u>Year</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
First scout here			05-Apr	
First egg laid	05-May	20-May	08-Jun	14-May
Total # of eggs	109	190	164	283
Total # of hatchlings	99	152	135	224
Total fledglings	95	148	127	176
Last fledge date	07-Aug	08-Aug	19-Aug	28-Aug
Total pairs	24	41	36	54
% eggs hatched	90.83%	80.00%	82.32%	79.15%
% eggs fledged	87.16%	77.89%	77.44%	62.19%
Fledglings/pair	3.96	3.61	3.53	3.26

Bombay Hook NWR

<u>Year</u>	<u>2004</u>			
<u>Location</u>	<u>Office</u>	<u>Driveway</u>	<u>Tanks</u>	<u>Total</u>
First scout here				
First egg laid	16-May	14-May	15-May	14-May
Total # of eggs	58	49	176	283
Total # of hatchlings	38	24	162	224
Total fledglings	19	11	146	176
Last fledge date	28-Aug	26-Jul	19-Aug	28-Aug
Total pairs (successful)	6	2	36	54
% eggs hatched	65.52%	48.98%	92.05%	79.15%
% eggs fledged	32.76%	22.45%	82.95%	62.19%
Fledglings/pair	3.17	5.50	4.06	3.26



The Allee House At Bombay Hook
By: Robert W. Mayer

In 1682 Nicholas d'Allee, a forty-two year old Huguenot from Dunois, France, set sail from Holland on the good ship *Faith*, bound for America. With him were his wife and two children, John and Rachel, along with other Huguenots (the nickname given to French Protestants who followed the teachings of John Calvin) and their Dutch counterparts, members of the Dutch Reformed Church. After landing in New York, he settled in the Dutch community of Hackensack, New Jersey. Nicholas died there in 1700.

Nicholas' son, John, was born in 1665 in Artois, France. In 1688, following the family's immigration to America, John married Susanna LaRoe Helling, a widow, and he changed his name from John d'Allee to John or Jan Allee. John and Susanna had ten children, and they lived in several of the Dutch settlements in Essex and Bergen Counties, New Jersey. In 1706 he purchased six hundred acres called *Woodstock Bower* on Dutch Neck in Kent County. Following Susanna's death, he married another widow, Maritie de Grave Terhuynne in 1709, and in 1710 he and his family moved to Kent County, Delaware. After moving to Delaware, John added to his land holdings. In 1711 he purchased a plantation known as *Islington*, adjacent to *Woodstock Bower* and located between Dawson's and Irons' Branches of Duck Creek. Later John bought *Pasture Point* and a tract at Beaver Dam Point. John's holdings were mostly tobacco plantations, although he also planted large apple and peach orchards.

John died in 1718, and his estate was divided among his children. His son, Abraham who was born in 1696 in Hackensack, inherited *Islington Plantation* on Dutch Neck, six hundred sixty acres of upland fields, woodlands, and brackish tidal marsh. It was on this land that Abraham built

the Allee House in 1753.

Like his father, Abraham also set about acquiring additional land. He received from his sisters, Hannah and Mary, marshlands known as *Pasture Point* that they had inherited. He purchased *Barren Hope*, a marsh and woodland along Duck Creek, but his larger purchases included a six hundred acre plantation known as *Hillyard's Adventure*, located on the north side of Irons' Branch, and another plantation called *Calway*. All told, he held nearly two thousand acres, but instead of tobacco plantations, Abraham grew grains, primarily wheat and corn. Abraham was a slave owner who at one time held at least nine slaves. He also built several houses for himself and his children, including a two-story brick house built about 1740 on Dutch Neck, before building the Allee House.

He also played a role in civic affairs. Abraham was elected to the Assembly of the Lower Three Counties on the Delaware in 1726. How long he served in this Assembly is not known, but in 1738 he was appointed Justice of the Peace. This was followed in 1749 by his appointment as Chief Ranger for Kent County.

Abraham died in 1770, and *Islington Plantation*, including the Allee House, was passed on to his son Jonathan. Just five years later, in 1775, Jonathan also died, and his son Abraham (the second) acquired the Allee House and a portion of *Islington Plantation*. Unfortunately, Abraham (the second) encountered financial difficulties, and in 1828 he was forced to sell what was then called the *Islington Farm*, and the Allee House passed out of the ownership of the Allee family.

Origins of the Allee House remain clouded. The first real documentation of the house was in the inventory of Jonathan Allee's estate, ordered by the Orphans Court following his death in 1795. Abraham Allee bequeathed a house to his son, Jonathan, but his will identified the house only as "the one where I live." There were no other clues to establish that this was, indeed, the house in question. It was known that Abraham owned at least one other house, the one he built in 1740, but the inventory of Jonathan's estate gave a detailed description of the Allee House, giving dimensions for the main house and the kitchen wing, and eliminating all doubt – this was the Allee House in which Abraham lived and the one that he bequeathed to his son.

According to local tradition and general consensus the Allee House was built in 1753 by Abraham Allee; however, there is no documentation to support the claim other than that it has been so widely repeated.

Nor is there any record to explain why the date 1765 is incised on two bricks on the south elevation or why the initial of the first name of the wife and children of Abraham's son, Jonathan, are incised on another brick. These scratchings are not the kind of date mark expected on a house of the quality and elegance of the Allee House, and in fact there is a niche on the west chimney of the kind used for the builders name and date – but unfortunately it is empty.

So the best guess is that not only was Abraham Allee the builder but also that he built it in 1753.

The Allee House is located in the middle of a half-mile wide peninsula and orientated on a north-south axis. The front or south elevation faces what probably even in 1753 were cultivated fields; the north elevation faces what then was a small stream, navigable by flat-bottomed boats, that led to Duck Creek and thence to the Delaware River and Bay. This small stream, without doubt, was the primary means of transportation to and from the Allee House.

The architecture of the original house is Queen Anne, also known as Early Georgian. Additionally it has been called a *Penn Manor House*, a design styled after William Penn's home in Fairmont Park, Philadelphia – and a design that apparently was copied frequently in the middle colonies.

However, the Allee House differs from the typical Queen Anne style. Although the bays on either side of the central hallway are of nearly equal size, on the left there are two windows, while on the right side there is only one.

The original house is a two-story rectangle, forty-two by twenty-two feet, laid in Flemish bond with a grapevine joint. Flemish bond is a bricklaying style favored in the eighteenth century that alternates stretchers (i.e., bricks placed lengthwise) and headers (i.e., bricks placed on end). Grapevine joints are made by drawing a single line with a small stick through the joints between the bricks (it has the visual effect of softening the appearance of a brick wall).

The architecture style of the front or south elevation differs from that of the north or back elevation, the south using

later design elements than those found on the north. For example, the south and west elevations have a molded brick water table (but not found on the north and east); Flemish bond headers on the south are unglazed, while those on the north have a blue salt glaze, an older style; windows on the front have plastered lintels, while those on the back have segmented brick window heads, again an older style; the front elevation has a plaster and lath cove cornice, while the back has an older style wooden box cornice.

A two-brick wide belt course (between the first and second floors) is found on the south, west, and north elevations, but not on the east. The east elevation is stuccoed, probably an original feature that was used for weatherproofing.

Windows are nine over nine pane sash; the rear door with an Indian Bar is original, while the front door has been replaced. The front steps also have been replaced (they block the brick-lined gutter that was intended to drain rainwater away from the building).

The original kitchen was in the east end of the basement, under the "dining" room. The large cooking fireplace still can be seen, although it has been blocked up to accommodate the current heating system. This was a "winter" kitchen. In colonial homes it was customary to cook indoors during the winter, but to cook outside in "summer" kitchens during the warmer months.

During the second half of the eighteenth century it became fashionable to move kitchens from basement locations to ground level, and apparently Abraham Allee followed the fashion. Sometime before 1790 and probably about 1775, he built the kitchen addition. It was built around the original exterior entrance to the basement. There is a sleeping loft above the kitchen. Kitchen brickwork is American bond. This also was a "winter" kitchen, to be used only during the colder months. It too has a large cooking fireplace – the opening was reduced and the face of the fireplace was replaced in the twentieth century.

Little is known about the third kitchen, the "summer" kitchen. The only reference to it is in a 1795 inventory in which it was described as a log structure adjoining the brick kitchen addition and having an outside brick chimney.

The eight foot wide center hall separates the two first floor rooms, and it includes the stairways from the basement to the first floor, from the first to the second floor, and from

the second floor to the attic. As they are throughout the house, the paneling, moldings, and hardware are original, and the woodwork is painted in original colors.

Each of the four main rooms (parlor, “dining” room, and two bedrooms) has its own fireplace that, along with its chimney stack, projects into the room. The end walls in the parlor and bedrooms are paneled, creating space for cupboards and closets. The hearths in all fireplaces are laid in sand.

The parlor is the most elegant room in the house. The west wall has paneling that surrounds the fireplace and contains two china cupboards that flank the hearth. These have beautifully detained butterfly shelves. The room has raised paneled wainscoting and crown molding.

With the exception of the soft furniture, all of the furnishings in the room are period pieces and similar to those listed in a 1795 inventory.

This room was used for entertaining guests, meeting with important dignitaries, and other special occasions. It was not in everyday use.

The room opposite is called the dining room, and certainly it served this purpose. But it had many other uses as well.



Parlor

It is where the women sewed or spun flax into linen thread, where Abraham may have tallied up his books after a sale of grain, where the children played – where most of the daily activity took place.

This room is plain, with none of the paneling and moldings found in the parlor and center hall. It does have two closets on either side of the fireplace that provided a warm, dry storage space.

The chairs and table are authentic Queen Anne style. The corner cupboard is of the period, but not necessarily suited for this space.

The two bedrooms match in size the rooms below them. The one over the parlor is more elaborate and clearly the master bedroom. Both, however, have paneled walls on the fireplace ends that create large closets. Closets of this



Dining Room

kind were virtually unheard of in the mid-eighteenth century, a remarkable feature of this house.



Foundation for the two fireplaces

The west end of the basement, under the parlor, remains in its original condition. The floor is loose-laid brick in a herring bone pattern. The structure on the west wall is not a fireplace, but rather the foundation for the two fireplaces on the floors above it. The floor joists show adze marks and careful notching to accept the transverse stringers.

The Allee House is open for guided tours spring and fall weekends from 1:00 to 4:00 p.m.

***Hunters with Disabilities Welcome the New Year
at Bombay Hook National Wildlife Refuge
with a Unique Hunting Opportunity
By: Terry Villanueva***

On January 4th, hunters with disabilities, many of them veterans, welcomed the New Year with what is for them a unique and rare waterfowl hunting trip. Refuge personnel, professional waterfowl guides, and volunteers from the Delaware Chapter of the National Wild Turkey Federation and Delta Waterfowl helped hunters in wheelchairs enjoy a day in the outdoors filled with camaraderie, duck and geese calling from world champion waterfowl callers, and the thousands of ducks and geese that winter on the refuge.



Volunteers and hunters after a long and memorable day at the Wheelin' Sportsmen event



Thanks to The National Wild Turkey Federation's Wheelin' Sportsmen Program and the U.S. Fish and Wildlife Service's National Wildlife Refuge System, these hunters experienced the beauty and bounty within Bombay Hook National Wildlife Refuge.

The Refuge has the land and the birds. The volunteers and sponsors make the day possible by sharing their support and talent for calling the birds and providing the opportunities for the participants.

Over 20 people volunteered their time organizing the event, designing and assembling the blinds, preparing food, scouting sites, calling birds, and teaching waterfowl hunting techniques. The volunteers commented that they got as much from the experience as the hunters and enthusiastically asked to be part of the event again next year.

The day began with breakfast and welcome, providing an opportunity for professional guides and volunteers to meet the hunters. After a drive in the darkness, the hunters settled into blinds amid the decoys and clover fields, waiting and watching for the 150,000 snow geese, Canada geese, and ducks that visit the refuge during the winter months.

Guides and volunteers put out dozens of decoys before daylight. At first light, guides looked to the skies and listened for groups of geese passing over the blinds. They blew on the goose calls, man talking to birds, and the birds responded. Some turned in flight and circled over the decoys, eventually settling toward the ground.



All of the hunters were enthusiastic about the opportunity to spend the day in the outdoors with most of them staying till the end of legal shooting hours. They were all successful in getting at least one goose. All the participants gathered together at the end of the day to share tales and laughter about the day's events.

Chris Karinja, Regional Director for the National Wild Turkey Federation expressed his satisfaction with the event, saying, "The Wheelin' Sportsmen program is all about bringing people to the outdoors and when you can do that in a pristine setting like the Bombay Hook refuge, you create memories that last a lifetime."

Today's event is the result of a groundbreaking partnership between the National Wildlife Refuge System and The National Wild Turkey Federation's Wheelin' Sportsmen Program. The partnership was created to develop new opportunities for people with disabilities to enjoy the outdoors. The event is also sponsored by Delta Waterfowl, Bass Pro Shops, the Delaware Department of Natural Resources and Environmental Control, and Larry McAllister's Metal Masters.

Special wheelchair accessible blinds built by the Delaware Chapter of the National Wild Turkey Federation were designed and assembled for the event. Larry McAllister's Metal Masters also retrofitted one of their waterfowl blinds for wheelchair access and loaned it for the day.

Bombay Hook also has a wheelchair accessible waterfowl blind that is available for use by disabled hunters during the Refuge regular goose hunting season.

64th Annual Bombay Hook Christmas Bird Count
By: Andrew Ednie

This year was the 64th annual Bombay Hook Christmas Bird Count, held the day after Christmas, December 26th. The count has been run continuously since 1945, making it the oldest continuous count in Delaware.

Christmas counts were originated in 1900 by the famed ornithologist Frank Chapman. I have a worn copy of his "Handbook of the Birds of North America", published in 1895. You can still get some interesting notes from those old writings. Chapman purposed a Christmas Bird Count to replace the Christmas "side shoot", where teams tried to see how many birds they could kill. The Christmas Bird Count, run by the National Audubon Society, involves counting every bird in a 15 mile diameter circle. The Bombay Hook count circle extends from Woodland Beach to Kitts Hummock, east to Ship John Light, and west to Garrison's Lake and Dover. Several teams bird each section, compiling the data at refuge headquarters in the evening.

This year was started on a sad note with the loss of former compiler Dave Cutler. Through the years, Dave has participated on 62 counts, compiled all but 12 at Bombay Hook. Dave's brother Herb, the original count compiler, and his wife Betty participated on their 64th count. This

year, 31 observers saw 120 species, making Bombay Hook one of the highest counts on the East Coast, that does not touch the Atlantic Ocean. The Snowy Owl found at Port Mahon, and still present today, was the biggest find of the count. This year, a new species was added for a cumulative total of 217, Cackling Goose. These are the small form of Canada Goose. Scientists decided there was enough evidence that this was a separate species. Bombay Hook has recorded eight different species of goose through the count's history.

The weather was fierce, cloudy cold and winding. Temperatures ranged from 26-31 degrees, with a 10-30 MPH northeast wind. The early freeze the week before the count drove much of the waterfowl to the bay. It was so cold that even the Boat-tailed Grackles left the marsh to forage in the farm fields. Bombay Hook refuge annually contains one of the biggest lists of birds for the count circle.

Cackling and Ross' Goose were just two species found exclusively on the refuge. An immature Northern Goshawk stayed all day at the intersection of the Raymond Pool and Shearness Road. This beautiful raptor was seen by all the parties. Highlights in the refuge included 2 Great Egrets, all three species of mergansers, 4 Bald Eagles (3 adults and an immature), 2 Virginia Rails, 1 Greater and 3 Lesser Yellowlegs, a Lesser Black-backed Gull on Shearness Flats, 5 species of owl, Yellow-bellied Sapsucker, a late Common Yellowthroat, and 30 Snow Buntings.

What makes the count's exciting is watching the changes occur. Snow Geese numbers were way down from previous years, only 7,000. Canada Goose is beginning to come back, 11,500 seen. American Kestrel is declining at an alarming rate, only 2 were found on the refuge, where we used to find 15-20.

All this data is sent to Cornell University, the largest data bank on winter bird populations in the world. Volunteers are already needed for next year's count.

A Reminder

The Friends of Bombay Hook (FOBH) is a 501 (c)(3) non-profit organization.

Therefore, monetary contributions made to FOBH is tax-deductible.



Volunteers Keep On Giving *By: Tina Watson*

Bombay Hook National Wildlife Refuge honored volunteers for over 4,800 hours of work donated during the year. The recognition luncheon was held at the Refuge and provided an opportunity for the volunteers to visit and enjoy each other's company instead of doing work.

The 4,800 volunteer hours included working at festivals; maintaining equipment, trails, the grounds, and the native plant garden; providing environmental education programs, tours of the Allee House, and visitor services; surveying birds and horseshoe crabs; building nest boxes and collecting



nest box data; and donating their photography and artwork for Refuge publications. Friends of Bombay Hook, Inc. broad members also volunteer their time to manage the Refuge Store, raise money to support the Refuge, and produce the Friends Newsletter.

The Friends of Bombay Hook, Inc. purchased canvas overnight bags, with Bombay Hook embroidered on the bag, as the recognition gift. The 2005 National Wildlife Refuge System Calendar was also given as a token of appreciation for the volunteers' dedication and hard work.

The volunteers brought a toy to donate to the holiday toy drive. Over 40 items were delivered to the Salvation Army for distribution during the holidays. Thanks to all the volunteers that keep on giving!



**Bombay Hook NWR
2005 Calendar of Events**

February 8, 2005

Gardenkeepers meeting and workday, 9:30 – 12 noon

March 5, 2005

Volunteer Orientation

Bombay Hook NWR Visitor Center

Find out about volunteer opportunities and tour the Refuge.

10:00 am – 12:00 noon

March 5, 2005

Visitor Center re-opens on weekends from 9 am – 5 pm

Allée House re-opens on weekends from 1 pm – 5 pm

March 8, 2005

Gardenkeepers meeting and workday, 9:30 am – 12 noon

March 26, 2005

Evening Woodcock Program with Refuge Biologist - Ray

Brown. Meet in Visitor Center Auditorium, 6 pm

April 9, 2005

Environmental Education Workshop – “Exploring the Refuge”

For teachers, scout leaders, and volunteers. 9 am – 4 pm

April 12, 2005

Gardenkeepers meeting and workday, 9:30 – 12 noon

April 23, 2005

Earth Day Work Project - Highway Clean-up

1 pm – 4 pm. Refreshments served.

April 30, 2005

Horseshoe Crab Survey Training

1 pm – 4 pm

May 7, 2005

Delaware’s Native Plant Society’s Annual Meeting

10:00 – 10:15 a.m. - Opening remarks, Bill McAvoy, President, Delaware Native Plant Society

10:15 – 11:00 a.m. - Lecture & Keynote Speaker: “Hydrogeology of the Delaware Coastal Plain: Flat is a relative term” presented by Judy Denver, United States Geologic Survey State Representative

The USGS Biological Resources Division cooperates with other Federal and State agencies to assess the type, quantity, health, and diversity of biological resources in Delaware. The Delaware River, Delaware Bay, Chesapeake Bay, and the Bombay Hook National Wildlife Refuge are current locations for USGS biological research and study in Delaware. Study topics include habitat restoration for fish and bird species; assessing the effects of pesticides on aquatic life; mapping the diversity of plant and animal communities through the use of satellite imagery; gathering and analyzing quantitative information on populations of breeding birds; and assessing the effects of urbanization on fish in certain river reaches. You know that Delaware’s National Wildlife Refuge’s are special places, not only to endemic species, but of international importance to migratory species which depend on them. Join Judy and discover why!

11:00 - 11:15 a.m. - Break

11:15 - 12:00 p.m. - “Beauty, Birds and Butterflies”

This will be the premier of Delaware Native Plant Society’s own Bob Edelen’s illustrated program about the joys and rewards of growing Delaware native wildflowers in your garden. Bob is talented photographer and gardener whose ability to propagate native plants is legendary! You won’t want to miss this special presentation.

12:00 - 1:00 p.m. - Lunch - Lunch is by reservation only (302) 653-6449

1:00 - 1:30 p.m. - Annual Meeting.

1:30 - 2:30 p.m. - The Native Plant Garden at Bombay Hook is going through a metamorphosis and Quentin Schlieder will discuss plans to showcase plants of the Coastal Plain at a scale which hopefully will inspire others to discover the joys of native plants in their own gardens!

2:30 p.m. - Optional Auto Tour on your own to experience the natural beauty of Bombay Hook National Wildlife Refuge.

If members of the Friends plan to attend that they phone Quentin Schlieder for a reservation at (302) 653-6449

May 8, 2005

Shorebird ID Workshop, Bombay Hook NWR

Learn to ID shorebirds based on size, structure, habits, and plumage. Half day trip includes both classroom and field work. Delmarva Ornithological Society member, Andy Urquhart, will lead the trip. Reservations required. Call Andy for details on 302-239-2471.

May 10, 2005

Gardenkeepers meeting and workday, 9:30 – 12 noon

May 14, 2004

Spring Bird Count, 7:00 am - 1 pm

May 6, 8, 10, 21, 23, and 25, 2005. Tentative dates for horseshoe crab surveys.

May 21, 2005

Migratory Bird Festival. Collisions: Clear the Way for Birds

Coming in June – Barn Owl banding. We will let you know the date when the owls are here. Check the website for updates: www.bombayhook.fws.gov

June 4, 6, 8, 20, 22, and 24, 2005. Tentative dates for horseshoe crab surveys.

June 14, 2005

Gardenkeepers meeting and workday, 9:30 – 12 noon

For more birding trips check Delmarva Ornithological Society’s website: http://www.udel.edu/dosbirds/field_trips/schedule.htm

The Calendar of Events is subject to changes and additions.

Check for an updated schedule on the website at:

[bombayhook.fws.gov](http://www.bombayhook.fws.gov)

Bombay Hook National Wildlife Refuge

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For more information contact:

Tina Watson, 302-653-6872

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