An Island Refuge in Our Midst Projects Continue at the Stone Harbor Bird Sanctuary By Dr. Lenore Tedesco

s early as the mid-19th century, Stone Harbor gained recognition for large colonial nesting bird populations - great and snowy egrets, black and yellow crowned night herons, blue and green herons among them. At times, as many as 7,000 egrets and herons nested and roosted in the trees along the marsh edge in an area of tidal wetlands in the vicinity of 115th Street and Third Avenue. There are early reports of 20-30 nests per tree. This recognition resulted in the official establishment of the Stone Harbor Bird Sanctuary (SHBS) in 1947. In 1965, SHBS became the first national natural landmark in New Jersey.

The history of the bird sanctuary is well-known by the many residents and visitors to Stone Harbor who worked so hard to protect and preserve the heronry, and then later by those who worked tirelessly to restore the site with the hopes of

bringing the birds back.

In the mid-1980s, the population of colonial nesting birds at the sanctuary began to disperse, and by 1994 the birds had entirely left the site. The cause remains unknown, but site degradation including draining and ditching of the marsh, development of the surrounding area, and encroachment of the site by predators and invasive plants is widely believed to be the cause.

In 2006, the Borough of Stone Harbor and borough citizens assembled a partnership to initiate a comprehensive sanctuary restoration project. The partners include the U.S. Fish and Wildlife Service, Cape May County Mosquito Control Commission, New Jersey Forest Service, Ducks Unlimited, New Jersey Department of Environmental Protection Clean Shores program, local businesses and organizations. The Stone Harbor Sanctuary Committee developed a mission state-

ment for the sanctuary and it appears in the Sanctuary Rejuvenation Master Plan written by Duffield Associates in 2006 that guided the restoration effort.

• To preserve, protect and foster the ecological well-being, and diversity of Stone Harbor Bird Sanctuary and that of the birds that nest there.

• To create and continually maintain an environment in the SHBS that will encourage the nesting of colonial wading and other compatible species of birds.

• To provide for the education of visitors to the SHBS concerning the significance of the Sanctuary, its historical origin and community relationship, the species of birds in the SHBS and their importance to our environment and the need for preservation of both SHBS and its inhabitants.

The Centennial Volume on Stone Harbor tells the story of the sanctuary and its restoration very well and is a great resource. I won't dwell on the history, but instead will focus on the current status of the sanctuary and the steps being taken now to continue to steward this amazing site.

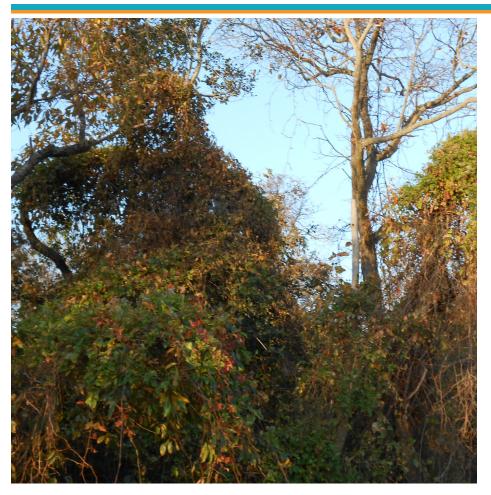
The SHBS underwent a restoration plan that included improving tidal flow into and throughout the sanctuary to restore tidal wetlands, creation of a berm to separate freshwater wetlands and improve their function, management of wetland invasive plant species, and the creation of four trails to provide recreational access. In December 2013, the restoration master plan was completed and the next phase of management of the SHBS is beginning. Restoration efforts have resulted in a reduction of the invasive reed Phragmites in the marsh areas, improved habitats for neotropical migratory songbirds, migrating butterflies and dragonflies, and amphibians including

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The Stone Harbor Bird Sanctuary Management Areas, with trails highlighted.





the Southern Gray Treefrog. Black and yellow crowned night heron have resumed use of the site, but it is unclear if they are nesting there or using the site primarily as a roosting site.

Despite these successes and ongoing partner efforts, there is a persistent problem with invasive and non-native plants in the sanctuary that are smothering trees and impacting sanctuary health and suitability for nesting birds. The Wetlands Institute, working with the borough, U.S. Fish and Wildlife Service,



NJDEP and the Sanctuary Committee, has been working to develop and implement a program for invasive-species control and sanctuary management. The vegetation-management plan can be found on the Wetlands Institute website for more information.

As part of the plan, NJDEP Clean Shores program, community volunteers, SHBS committee members, and the Borough of Stone Harbor Public Works have been working on invasive-plant management. The initial areas that were cleared of vines included areas around Paul's Pond, along Holly Path, and the Meadow Overlook Trail area near the pump house on Third Avenue near 116th Street. The project areas were selected to open flight paths and tree canopies in areas where some night herons have been seen and in areas of very high-quality habitat and trees that were at risk. In particular, the area around the ancient holly trees on Holly Path had been completely overgrown with the invasive English Ivy. Projects were started last fall and continued until early spring, when the arrival of the birds prevented further work. Additional work will begin again in the fall after the birds head south.

In addition to managing invasive vines, another critical management requirement is managing disturbance and predators. To address disturbance,





(Top) Two black-crowned night herons viewed from the Stone Harbor Bird Sanctuary's Heron Cam. (Bottom) Black-crowned night heron perched on a tree at the sanctuary.

the Holly Path has been seasonally closed and the shell path through the marsh has been shortened. These measures were taken to limit human disturbance in the area where black and yellow crown night herons frequent. The goal is to create an area of safety and security again so that herons and egrets may begin to utilize the site.

The sanctuary tours were moved to the Egret Espy Trail further to the south on Second Avenue and the Bird Sanctuary Committee installed a Heron Cam to provide up-close-and-personal views of the birds, providing excellent access to the birds without disturbance. The camera is accessible through the Stone Harbor Bird Sanctuary website, stone-harborbirdsanctuary.com, and is a great way to remotely visit Stone Harbor from anywhere.

These initial efforts are beginning to work and the site is being increasingly used by black crowned night herons. This fall, Wetlands Institute researchers will do a site assessment to determine if the birds nested in the sanctuary and will repeat a vegetation survey of the property to compare to a study we did in 1994. We are working closely with the Borough Public Works staff on planning the next stages of vegetation management and will continue to maintain newly treated areas. Planning is underway to refresh

the gardens as an additional wildlife habitat, utilizing native species.

The news continues to be good because, in addition to efforts to bring back the heronry at the sanctuary, the sanctuary is a bird and wildlife magnet for so many other animals as well. The mosaic of habitats present at the sanctuary and the diversity of environments make the sanctuary a refugia on a heavily developed island. The sanctuary is home to a host of resident and migratory birds that thrive in the newly opened canopy areas and in the marshes and gardens. During migration, Cape May is a world-renowned area and is host to one of the great migrations on earth, and the Stone Harbor Bird Sanctuary is an important stopover for birds looking to rest and feed on their ways both south and north. It's a wonderful place to see and hear the spectacle of migration – or just sit and contemplate the guiet that can be found in the midst of all the activity of a wonderful summer day. Check out the sanctuary website, take a tour or a stroll in the sanctuary and come see what a special place it is – and why so many people spend so much time protecting, preserving and restoring it.

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AUTUMN HAPPENINGS

It is autumn in the marsh and The Wetlands Institute is open 7 days a week from Sept. 2-Oct. 12. Unless otherwise stated, all activities occur onsite at The Wetlands Institute. Questions? Please call The Wetlands Institute at 609-368-1211.

Salt Marsh Safari: Starting in Marsh View Hall, watch the award-winning film, "Secrets of the Salt Marsh." Then take a guided interpretive walk through the wetlands! Stroll along the new elevated walkway, down the salt-marsh trail and out onto the dock overlooking Scotch Bonnet creek. To fully experience the marsh, make sure to wear shoes that can get wet and muddy! Free with admission. Daily, 11am & 2pm.

Creature Feature and Craft: A different live animal or group of animals is highlighted each day. Get up-close with turtles, fish, crabs, sea stars and urchins, mollusks, horseshoe crabs and the animals of "Finding Nemo." After the presentation, create a take-home craft related to that day's Creature Feature! Free with admission. Monday & Friday, 12:30pm.

Catch o' the Day: Get your feet wet (or wear waders!) as you discover what

swims in the back bays. Help drag a seine net through the water to find crabs, shrimp, fish and more. Activity recommended for ages 8 and up. Younger children are welcome to attend and can assist in removing creatures from the net! (This activity is tide-dependent and may not occur during low tide.) Free with admission. Wednesday, 12:30pm.

Aquarium Feeding: Help feed the fish and crabs, or just watch them gobble down their food. Feeding will be opened up three times each week so you can see the turtles chasing minnows and the horseshoe crab gobbling shrimp. (Not all animals are fed every day.) Free with admission. Tuesday, Thursday & Saturday, 12:30pm.

Seashell Sunday: Starting a shell collection? Want to know where shells come from? Can't figure out what you found on the beach? Bring it in and the Wetlands staff will tell you all about seashells, how to collect them without harming the environment, and feature an assortment of live mollusks and cool artifacts. Free with admission. Sunday, 12:30pm.

With the start of winter hours Oct. 13, The Wetlands Institute will only be open Friday, Saturday and Sunday. Please check its website calendar for programming updates as we transition from autumn to winter hours.



Dr. Lenore P. Tedesco is the Executive Director of The Wetlands Institute in Stone Harbor. Tedesco has a Ph.D. in marine geology and geophysics from the University of Miami, and a bachelor's degree in geology from Boston University. She joined The Wetlands Institute in October 2011. Prior to then, she had been a professor in the Department of Earth Sciences at Indiana-Purdue University for 21 years. She was also Director of the Center for Earth and Environmental Science, where she worked on wetland restoration, water resources and environmental education.



SATURDAY & SUNDAY, SEPTEMBER 20-21

9:30am-4:30pm

TWO-DAY TICKET PRICE

Non-member: \$15 adult, \$10 child Member: \$13 adult, \$8 child

ONE-DAY TICKET PRICE

Non-member: \$10 adult, \$8 child, \$30 family pack of 4 Member: \$8 adult, \$6 child, \$25 family pack of 4

The sheer abundance and diversity of species migrating through the Cape May Peninsula is an amazing sight to see and makes this area among the top birding destinations, not only in North America, but the world. At The Wetlands Institute, fall is an especially good time to experience the changing of seasons and the spectacle of migration as raptors, warblers, waterfowl and butterflies travel through the area. Here are some of the Fall Migration Festival activities:

Live butterfly presentations and tagging; guided nature walks focusing on birds, butterflies and bees; guided back-bay boat and kayak tours; fish, sea turtle, butterfly and bird crafts; migration themed games and activities; special autumn terrapin release; live animal presentations by community partners, and more.

