



BARRINGTON LAND CONSERVATION TRUST

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Property Spotlight: Allin's Cove Conservation Area



by Melissa Horne. Photos by Robert Puckett

Allin's Cove is a testament to the ability of the natural world, with help from environmentalists, to heal itself and provide a valuable place for wildlife to co-exist with humans.

Tucked into the northwest corner of Barrington, the Allin's Cove Conservation Area consists of about 10 acres of property surrounding a tidal cove that facilitates the drainage of the Annawamscutt Creek into Narragansett Bay. From the early 1900's until the 1990's, Rhode Island Lace Works and other manufacturing facilities operating in Bay Spring Village pumped pollution from dye vats and other sources directly into Allin's Cove. As a result, a variety of heavy metals settled into the tidal flats of the Cove. Beginning in 2003, the U.S. Army Corp of Engineers conducted a project intended to relocate the channel in the Cove and restore the salt marsh.

Today, the Conservation Area consists of marsh, grasslands and wooded uplands. Although invasive *Phragmites* are prevalent, native coastal grasses, shrubs and trees can be found in the

uplands and buffer areas. Plants found in the salt marsh include two different species of *Spartina* cordgrass, sea lavender and glasswort. The Cove supports a large variety of aquatic species, including small fish, crabs, and various types of shellfish. Many species of birds, including raptors, song birds, and aquatic birds such as ducks, heron, swans and osprey, call Allin's Cove home on either a seasonal or full-time basis. Mammals ranging from mice, squirrels and rabbits to coyotes, foxes, and deer inhabit the uplands and buffer areas. Once in a while, during the late winter, a seal will haul out on the beach.

BLCT is responsible for managing the Allin's Cove Conservation Area, various parcels of which are owned by the Trust, the Town of Barrington and the State of Rhode Island. BLCT's management plan was developed with the input of a wildlife biologist employed by the Natural Resources Conservation Service. The primary management strategy is to control the growth of invasive plants such as *Phragmites*, Japanese knotweed and multiflora rose so that they do not crowd out native

plants that provide habitat and food for birds, mammals, butterflies and bees. This strategy involves removing invasive plants, planting native grasses and cutting milkweed plants to encourage new shoots on which monarch butterflies can lay their eggs. In other areas, the recommended approach is to mow the area in a manner intended to promote diversity in the landscape and prevent the uncontrolled growth of *Phragmites*. Other management goals are to facilitate the growth of the marsh and to monitor and maintain erosion control measures.

Allin's Cove may be accessed for purposes of passive recreation from Narragansett Avenue, Third Street and Willow Way. In addition to being a peaceful place to walk and observe a wide variety of plants and animals, it has a wonderful view of the sunsets across Narragansett Bay. When you go there, take a moment to appreciate the positive effects of saving and rehabilitating the wild places within our midst.

Winter Update from the Vendituoli Farm

Vendituoli Farm is thriving as the Barrington Farm School prepares for another busy year. This winter educators and students constructed a new hoop house for planting seedlings and built a cold frame for early season growing. Seeds have been ordered and the planting and growing schedule is underway. Students of all ages are welcome to join the farming activity and sign up for classes. So far, there will be classes for beekeeping and composting, in addition to general farming activities. E-mail questions to BarringtonFarmSchool@gmail.com



The Farm School received an \$8,000 solar grant from the **RI Resource Conservation & Development Area Council** and the **Department of Environmental Management Farm Energy Program**. The small solar system will power the farm's well water pumps and should be installed and running this spring. Several high school students participated in the project.

Congratulations to **Doreen Schiff** for receiving Teacher of the Year from the **Rhode Island Environmental Education Association**. For eight years, Doreen and her 8th grade science students at St. Luke's School have led a macroinvertebrate study of Annawamscutt Creek in collaboration with schools in East Providence. BLCT has relied on the data for managing several properties. Former BLCT board member Sandra Wyatt is a key organizer of the project.

Photos by Tim Faulkner



BLCT Receives Grant from Bank Newport

In December 2018, the Barrington Land Conservation Trust was selected as a recipient of a \$1,000 grant from **Bank Newport** as part of the bank's 200th anniversary "We're All In" giving program. BLCT was one of 200 organizations that were selected from a pool of grant applicants. Bank Newport's giving program was directed at local RI non-profits and community groups and geared towards "making a positive impact on the lives of residents". BLCT's grant award will be used for two upcoming projects at our Sowams Woods property.

Half of the award will fund the purchase of materials for a new trail-head kiosk to be constructed and installed this spring by a local Boy Scout as his Eagle project. The new kiosk is expected to display a new trail map as well as fact sheets regarding the natural history of the site.

The remaining funds will be used to purchase tree and plant identification signs to be placed along trails in Sowams Woods. Both projects are expected to enhance the visitor experience for the frequent visitors to this beautiful property.

Osamequin Nature Preserve Cleanup

By Victor Lerish. Photos by Victor Lerish and Bill Dwyer of Save The Bay

On Saturday, October 20th, BLCT, working with Save the Bay, co-sponsored a cleanup at Osamequin Nature Preserve. The cleanup was part of the International Coastal Cleanup (ICC) organized by the Ocean Conservancy. For over two hours, eighteen volunteers collected and catalogued 85 pounds of trash. In addition, the volunteers removed a mounted tire, a wooden pallet, a sleeping cot, parts of a bench and several small pieces of lumber from the site. BLCT's volunteers were among 2,234 volunteers involved in similar cleanup projects along the Rhode Island coastline and an estimated 800,000 volunteers participating in this effort around the world.

In RI, the most commonly encountered pieces of trash included cigarette butts, plastic pieces, glass pieces, food wrappers, foam pieces, bottle caps, beverage bottles and cans, plastic straws, and plastic bags. There were more than thirty other types of items identified. These items are largely non-biodegradable and can enter our waterways, our precious Narragansett Bay and the ocean, where they can be harmful to marine life such as fish, turtles, whales and marine birds, by causing entanglements or by entering the food chain leading to injury or death.

Simple steps you can take to protect this fragile environment include not littering; carrying out anything you carry in when visiting our parks, trails and beaches; properly disposing of pet waste (bagging it and carrying it home if no trash receptacles are available) and not casually discarding cigarette butts on the ground. Bring a trash bag along....CARRY YOUR WASTE AND TRASH OUT!

Please join us for the 2019 cleanup in October. The exact date will be announced this summer, and we will post it on our website and on Facebook.



Long-term Monitoring at the Johannis Farm Salt Marsh

by Tom Kutcher, Wetland Scientist, Rhode Island Natural History Survey

A team of researchers has been monitoring a large salt marsh on the Palmer River adjacent to Johannis Farm in Barrington for almost two years. The team, which has developed a salt marsh monitoring, assessment, and restoration program for Rhode Island, includes scientists and managers from the Narragansett Bay National Estuarine Research Reserve, Rhode Island Natural History Survey, Rhode Island Coastal Resources Management Council, Save The Bay, U.S. EPA, University of Rhode Island, and other partner organizations. The marsh at Johannis Farm is one of a few “sentinel” salt marshes around the state that are being studied by the group to track changes in the condition of Rhode Island’s salt marshes over time. These sentinel salt marshes are used to represent what is happening at other salt marshes across the state. Scientists plan to collect data on vegetation, elevation, tides, soils, fish, crabs, and birds at the sentinel marshes in perpetuity.

Salt marshes are important for people and wildlife for several reasons. They can filter excess nutrients, sediments, and toxins from stormwater runoff and groundwater before they reach the Bay. They provide critical foraging and cover habitats for numerous fish, birds, and other wildlife. They protect properties from storm surges by slowing the movement of water. And they provide recreation platforms, scenic views, and cultural heritage to people. Unfortunately, the very survival of salt marshes in Rhode Island is at risk, and collecting data at these marshes is now more important than ever.

For the past few decades, evidence has been mounting that accelerating sea-level rise, associated with global climate change, has been causing detrimental changes to the conditions at salt marshes across Rhode Island, as well as elsewhere. With sea-level rise, salt marshes are exposed to longer periods of inundation (time under water). As inundation increases, several things happen in a series of interactive events that scientists typically refer to as a “positive feedback loop”. First, plant communities shift; smooth cordgrass (*Spartina alterniflora*) that historically grew primarily on the edges of the marsh takes hold across the surface of the marsh platform and displaces historically-occurring salt hay (*Spartina patens*), because the cordgrass can tolerate the long periods of inundation better. The increase in flooding and the shift in plant species soften the marsh soils, causing the soil to subside slightly, which in turn causes water from higher tides to pond on the surface for extended periods of time. The ponding further softens the soil and can cause even the tolerant smooth cordgrass to weaken or

die, further contributing to subsidence (as the roots of the plants give the soil most of its structure) and causing yet more ponding. This unfortunate process has been referred to as “marsh drowning”.

Additionally, the softer soils can contribute to a boom in the population of burrowing marsh crabs, which now can burrow further onto the softer marsh platform and access the new stands of cordgrass, a preferred food source for some species. In doing so, the crabs can perforate and denude the marsh soils and expose them to erosion as the tides flow in and out. This process is often referred to as “marsh dieback”. Together, marsh drowning and dieback have accounted for the loss of about 17% of marsh vegetation in Rhode Island since the 1970s.

Scientists have already used sentinel site data to examine the progress and causes of marsh drowning and dieback discussed



above. As a group, we hope to further use the data to inform management solutions that can help marshes persist in the face of predicted sea-level rise. The marsh on the Palmer River at Johannis Farm will play a vital role in our understanding of marsh condition and resilience to sea-level rise and other stresses, as it is the sole sentinel site representing the Warren River system, which contains a large proportion of the salt marshes in the state. The BLCT has helped our group by coordinating convenient access to the site and providing some field assistance. For more information about the Johannis Farm marsh or Rhode Island’s salt marsh monitoring, assessment, and restoration program, please contact me directly at tkutcher@rinhs.org.

Monitoring the Osprey nests on the Johannis Farm Wildlife Preserve for the Audubon Society of Rhode Island

*By Thomas Poirier, Osprey Monitor
Volunteer*

The Audubon Society of Rhode Island currently monitors the population of Ospreys in Rhode Island for their breeding success. In the 1950s and 1960s, the Osprey population in Rhode Island had declined due to the use of the pesticide DDT. The DDT had gotten into the food chain of the Osprey, specifically the fish they ate. The DDT caused the Ospreys to have thinner, more fragile egg shells causing the population to decline. In 1976, the Osprey was put on the Federal Endangered Species list. The Rhode Island Department of Environment Management started to monitor them to count the current population and how many offspring each nest produced. In 1977 there were only 9 known active nests in Rhode Island. The population started to slowly rebound. The Audubon Society of Rhode Island took over the task of monitoring the Osprey population in 2010. It set up a program of volunteers to monitor nests throughout the State. Volunteers go through a training program and then are allowed to record weekly results on an online program on the Audubon website. Volunteers are assigned nests to monitor.

As an avid fisherman, I have always been interested in watching the Ospreys in Narragansett Bay. When the Ospreys arrive in the spring, they signal the return of

baitfish, which are followed by the Striped Bass which prey on them. This usually occurs in the middle to end of March. My grandfather had a house on Long Island, New York and



Photo by Robert Puckett

while visiting him I used to watch the Ospreys fish in front of his house. They dove into the water and gathered fish to eat. Their nest was not far from the house and I could watch them bring the fish to their nest and feed their offspring. When I read in the paper that the Audubon Society was looking for volunteers to monitor nests in Rhode Island I signed up and took the training. The Audubon Society has an interactive map of all the current nests in Rhode Island. I noticed one area that had many nests was the Johannis Farm Wildlife Preserve. It was being monitored by another volunteer by boat.

I was very familiar with the property and the Johannis family, as I grew up in the area, went to school and was a friend of several members of the Johannis family. While hanging around with Johannis family, we played on the property, so I knew the

trail system on the property. I knew the property had been turned over to the Land Conservation Trust, so I contacted the Trust. I arranged permission to go onto the property and monitor the Osprey nests.

From the property, I am able to monitor six Osprey nests -- four on the property and two on the properties to the North. During this summer, I visited the property once a week and did my observations. I then logged the information into the Audubon Society's database on their website. Some of the required observations are

how many eggs were laid, how many hatch, how many chicks were feeding, and how many fledged. In addition to this, I kept an eye on the property, picked up trash, did some minor trail maintenance. I did a monthly report to Peter Burke of the Land Trust as to what I observed on the condition of the property.

The results of the 2018 season is that all six nests fledged at least one Osprey. One nest on the South side of the property in a dead tree fledged two Ospreys. Being back on the property and walking the old trails brought back many childhood memories. It was truly an honor to be able to access the property again.

The 2019 season is just around the corner. The Ospreys will return to their nest from their winter grounds in the South. And the cycle will start all over again.



February Scavenger Hunt: Get outside and explore!

Date: Feb. 21, 2019 Time: 10 am – 12 noon. Location: Meet at the **Osamequin Nature Preserve**, Rt 114 North

Enjoy the fresh air and new sights during a winter scavenger hunt at Osamequin Nature Preserve. Sharpen your observation & investigative skills as you hunt for interesting nature objects and signs of wildlife at this beautiful property. The walk is ideal for elementary school-aged children with their parents or grandparents but all are welcome, regardless of age. Everyone should dress warmly with the expectation that you might get muddy.

Free and open to all. Families please register with the Barrington Public Library. Co-sponsored by the Barrington Land Conservation Trust and Barrington Public Library.

Osamequin Nature Preserve. Photo by Catherine Boisseau

