Crab Lines

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BTNEP's Volunteer Program Off to a Good Start for 2018

Since January 2018, BTNEP has had more than 100 volunteers totaling up more than 500 volunteer hours on various projects in the Barataria-Terrebonne Estuary System (BTES). People who volunteer with BTNEP come from all over the country and because of this, the volunteers also serve as important communicators of the issues and the importance of all the resources coastal Louisiana provides for the nation. Volunteers take home and spread the knowledge of why it is important to restore and protect coastal Louisiana.

The University of Buffalo Alternative Breaks program were hosted by Bayou Grace Community Services and spent five days volunteering with BTNEP and receiving a unique education concerning our estuary's resources. Common Ground Relief out of New Orleans supplied BTNEP with volunteers on several separate events involving plant propagation and marsh plantings. A small group from the University of Illinois spent two days volunteering with BTNEP at the Nicholls State University Farm propagating marsh grasses. Another Alternative Breaks group from the University of Missouri, spent four days volunteering with BTNEP and receiving a unique hands-on education concerning resources of the BTES.

BTNEP also has had volunteers from partners of the program. As part of the SMART (Saving Marshes and Ridges Together) project, 35 participants from Shell Oil Company volunteered with BTNEP near the Greater Lafourche Port Commission on April 20, 2018. The volunteers planted more than 1,100 marsh grass pots into a marsh platform in Fourchon, LA in celebration of Earth Day.

Outside of individual and partner groups of volunteers, BTNEP also hosted several open volunteer days where anyone could come out and volunteer with the program. A recent open volunteer day included the local Master Gardners. Each participant volunteered for at least 5 hours assisting in transplanting native Louisiana trees to be used for coastal restoration.

Osprey Nest Platforms Installed in Lower Terrebonne Parish

This year the BTNEP in partnership with Apache Louisiana Minerals and the Barataria-Terrebonne Estuary Foundation (BTEF), installed nest platform structures for Osprey. Ospreys are large, fish-eating raptors that usually nest near swamps, rivers, lakes, marshes, and coastal areas. The typical breeding season for Ospreys nesting in Louisiana takes place March through August. Ospreys usually construct their nests at the top of dead trees, power poles, on man-made nesting platforms, buoys, or other structures. The nests are most often used year after year, with the breeding pair adding new nest material each season.

Installation of osprey nests in Terrebonne Parish

In late February 2018, ten Osprey nest platforms were constructed and installed in lower Terrebonne Parish thanks to a generous donation from Apache Louisiana Minerals, LLC to the BTEF, whose mission is to support BTNEP. Ospreys are a top predator within aquatic ecosystems, feeding almost exclusively on fish throughout their entire life cycle, and therefore are an excellent indicator species that can be used to monitor habitat conditions, fish populations, and overall health of aquatic ecosystems.

Ospreys living near coastal areas can have a difficult time finding suitable nest sites and often use man-made structures such as electric utility poles, where they are in danger of being electrocuted. Osprey nest platforms can provide important nesting habitat improvements and are known to increase the species nest success. BTNEP and Apache are partnering together to monitor the nest platforms to determine usage and productivity throughout the breeding season.

The nest data gathered by BTNEP will be submitted to OspreyWatch, a global database of Osprey nest observers linked by an interest in Osprey and a concern for aquatic environments. The mission of OspreyWatch is to collect information on a large enough spatial scale to be useful in addressing three of the most pressing issues facing aquatic ecosystems including global climate change, depletion of fish stocks, and environmental contaminants.

Male Osprey displaying courtship feeding

The first nest platform check following the installation took place on March 14, 2018. Apache and BTNEP staff were excited to discover a pair of Osprey investigating one of the platforms.

During the month of April nest building was documented on three of the platforms. The males were gathering nesting material as the females perched on the nest platform and arranged the nest material. Courtship feeding was documented during one of the nest checks; the male brought back a fish to the female.

BTNEP has been a leader in the protection and enhancement of native biological resources since its inception. Stay tuned for additional Osprey nest platform updates!

If you know of an Osprey nest near you and are interested in monitoring the nest, visit o*sprey-watch.org* to learn more.

Want to join our volunteer email list?
Visit our website at https://volunteer.btnep.org/join-us/

Marine Debris Educational and Prevention Program Completes 3rd Year

BTNEP recently completed its third year of the Marine Debris Educational and Prevention Program (MDEPP), in which high schools located within the estuary take part in collecting data of marine debris accumulation on Elmer's Island, located near Grand Isle, LA. Juniors and seniors from 11 high schools located in Lafourche, Terrebonne, and Jefferson parishes participated.

The most southern edge of the Barataria-Terrebonne Estuary has a marine debris problem. Marine debris is defined as persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally disposed of or abandoned in marine environments. BTNEP wanted to see a major reduction in marine debris and support EPA's Trash Free Waters Initiative. The goal of this program is to bring awareness about marine debris to the youth and public officials of coastal parishes.

The BTNEP Marine Debris Prevention and Education Program engages high school students in understanding marine debris, researching causes, and the writing of a Marine Debris Prevention Plan. The students collected monthly data and discussed plans to prevent marine debris. The students' action plans to reduce Marine Debris all stem in education. The students want to get the message out about the problems of marine debris from wildlife entanglement to flooding. They plan to bring the message to their peers in ways that teachers and scientists cannot, which makes this program highly effective. Students also looked at the growing concern for microplastics in the Gulf of Mexico and Gulf Coast beaches. Microplastics were found in every water sample and sand sample collected.

"Our best chance to reach the target audience is through the youth of our communities," said Alma Robichaux, BTNEP Education/ Outreach Coordinator and MDEPP Project Manager.

BTNEP Expands Plant Propagation

BTNEP is staying very busy with its work at the Nicholls State University farm. Recently, BTNEP finished up work on its shadehouse expansion, which has increased the shadehouse another 1600 sq. ft. to a total of 6400 sq. ft. (80 ft. x 80 ft.). New groundcover was installed and all new overhead irrigation was added.

Also, up-potting of one year old woody seedlings is taking place. Seedlings are up-potted from "cone"-tainers into trade gallon sized pots for grow out this summer. These plants will be used in by CPRA for ridge plantings for CWPPRA projects at Bayou Dupont (BA-48) and Grand Liard (BA-68) this fall or winter. Plant species grown out for the two projects include live oak, red mulberry, hackberry, wax myrtle, yaupon, persimmon and American beautyberry and total 6,750 seedlings. BTNEP has been assisted with the up-potting of seedlings through staff participation and volunteers from LSU Ag Center's Louisiana Master Gardener Program LA-Terre Unit.

BTNEP's shadehouse expansion located at Nicholls State University Farm

Native seeds collected last fall, this winter, and this spring have also been potted for germination.

Habitat Restoration Project in Grand Isle State Park

The Habitat Restoration project in Grand Isle State Park, made possible by a community service payment through the US Department of Justice, began in 2017 and will run through 2019. The Barataria-Terrebonne Estuary Foundation (BTEF), with technical assistance from BTNEP's Environmental Scientist and Invasive Species Coordinator Michael Massimi, is contracting work to remove invasive plant species and to plant native trees and other vegetation at the park.

Grand Isle State Park is known for its fishing and birding opportunities. It also boasts a nature trail and several acres of wax myrtle and live oak forest, critical to migrating songbirds. Unfortunately, much of the park's area is being overrun with invasive vegetation, especially the Chinese tallow tree. Tallows produce incredible amounts of seeds and grow very quickly, outcompeting native vegetation.

BTEF has contracted with David Baker of Baker Botanical Consulting, LLC of New Orleans, to conduct the tallow removal and suppression activities, to engage in monitoring and control of other invasive vegetation, and to coordinate the installation of native plant materials.

Mr. Baker has conducted several removal efforts for Chinese tallow using chainsaw and herbicide, and has initiated control efforts for an invasive morning glory vine that was covering the oaks and wax myrtles. This work will continue to next year with repeated visits to target smaller trees with cutting and chemical suppression, and continuous removal of new seedlings and sprouts. The project will conclude with the installation of over 200 native trees and other plants to jump-start the revegetation and restore the habitat.

This aerial image of Grand Isle State Park shows the approximate areas of severe Chinese tallow infestation in need of intensive cutting, removal, suppression, and replanting (red polygons), and approximate areas of morning glory vine and other invasive species in need of spot treatment and monitoring (orange polygons).

Grand Isle's "tallow forest" as it appeared in 2016 (left) compared to spring of 2018 (right). As tallows are cut and removed, the native wax myrtles and elderberry can recover.

Use of Geolocators to Define Migratory Pathways of Red Knots in Louisiana - Project Update

Red Knot Green Flag 180 with red geolocator tracking device on right leg

From April to early May, flocks of rusty red sandpipers begin to congregate on the shorelines of southeast Louisiana. This pigeon-sized sandpiper is a globally cosmopolitan species, capable of flying up to 4,000 miles nonstop over several days. In December of 2014, the U.S. Fish and Wildlife Service formally listed the Red Knot as threatened under the Endangered Species Act after surveys indicated a serious population decline. The Red Knot may winter as far south as Chile, migrating to its breeding grounds in the arctic up to 7,000 miles away. Southeast Louisiana serves as a stopover site within this long journey that occurs twice a year to both the breeding and wintering grounds.

Since 2014, BTNEP has partnered with the Coastal Bends and Bay Estuary Program (CBBEP) out of Corpus Christi, Texas to better understand the status of the imperiled Red Knot in Louisiana. In Grand Isle, over 200 birds have been marked with unique alphanumeric flagged bands. Last year, fifty geolocator tracking devices were deployed to learn about the migratory routes used by the Red Knots in this state. The data from the geolocators highlights the critical importance of the northern Gulf of Mexico – particularly Grand Isle – for this population of Red Knots, and the need for further investigation to discover specific wintering sites.

This April, two devices were recovered and preliminary results show one individual wintering in Panama and the other near the Ecuador/Peru border. Identifying areas important to this species helps with implementation of conservation actions that will benefit Red knots in the United States and abroad.

A group of Red Knots ready to take flight. Photo credit: Barbara Keeler

Eastern Bluebird Trail Expansion into Northern Iberville Parish

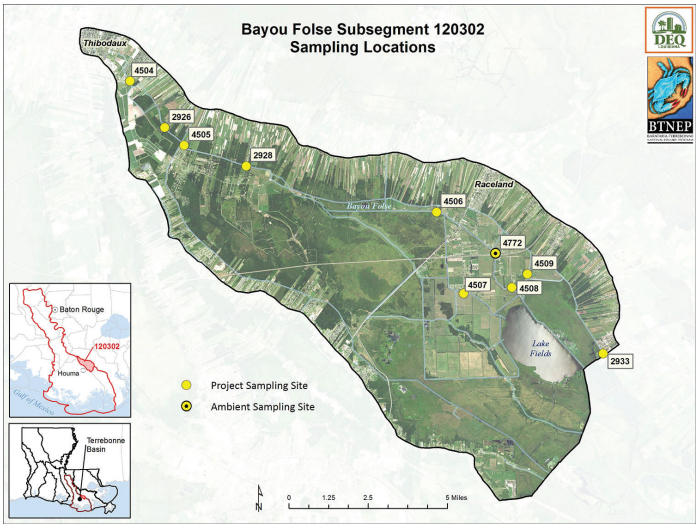
In preparation for the 2018 breeding bird season, BTNEP sought to expand is Eastern Bluebird Trail from Pointe Coupee Parish southward into the northern reaches of Iberville Parish. In late January 2018, BTNEP biologists reached out to John Clark, the Environmental and Permits Manager with the Iberville Parish Government, to discuss the possibilities of expanding the trail. Clark, a member of the BTNEP Management Conference, was keenly interested in the idea and offered to help in locating properties in northern Iberville Parish. Numerous sites were visited in early February and 16 nest boxes were established at locations along Louisiana Highway 77 and Louisiana Highway 386. This addition increased the nest box count for the trail to 45.

Soon after the boxes were established, weekly visits to the nest boxes were made to gather data on nest usage and nest fate for Eastern Bluebirds. Monitoring of the additional 16 boxes showed 5 nesting attempts. Two nests fledged young birds, one nest was lost for unknown reasons, young birds in another nest were loss due to the very cold weather in early April of this year, and one nest is still active. Bluebirds were sighted at a number of locations along the new part of the trail. Since it typically takes time for birds to find and use nest boxes, it is expected that more use of the nest boxes will be experienced next year.

Nest boxes in Pointe Coupee Parish showed similar results to those along the new addition. There were a total of five nesting attempts, where one nest succeeded in fledging birds, several nest failures occurred due to the cold spring weather, and one nest is currently active. Students with several schools in Pointe Coupee and Iberville Parishes have helped with the trail both with the construction and monitoring of Bluebird boxes.

The Bayou Folse Watershed Initiative

Bayou Folse is an impaired watershed, which meants it has a lot of water quality problems. Nutrients, dissolved oxygen, and bacteria are often outside of their standard limits. This means that the waters in the Bayou Folse watershed could cause problems for the health of fisheries and humans. The causes of these problems are linked to cattle farming, row crop agriculture, and poorly maintained home sewage treatment systems.



Bayou Folse is located in Lafourche Parish, Louisiana between Thibodaux and Lockport, and between Bayou Lafourche and Bayou Blue. It also includes Lake Fields, a very popular fishing and hunting area.

The goal of this project is to improve the water quality in the Bayou Folse watershed, to protect the health of fisheries, and to protect the health of the public by reducing nutrients and fecal coliform bacteria. To accomplish these goals, the BTNEP has been working with various partner agencies to improve the water quality in the watershed from the various contributing land uses. Natural Resources Conservation Service (NRCS) will be working on the reduction of pollutants from cattle and row crop farming operations, while BTNEP and Louisiana Department of Environmental Quality (LDEQ) are focused on fixing home sewage systems. BTNEP and LDEQ have been sampling in the watershed twice per month since October 2016, which is providing a picture of which parts of the watershed need the most attention.

Once the areas that contribute the highest pollutants are identified, then the partnering agencies can begin focusing "best management practices" (BMPs) in these areas of the watershed. For rural areas contributing high levels of fecal coliform bacteria, NRCS will provide cost-share assistance to cattle farmers through the construction of fencing and clean water supplies to prevent cattle from contaminating Bayou Folse water drainages. For rural areas contributing high levels of nutrients, NRCS will also provide cost-share assistance to sugarcane farmers for the development of nutrient reduction strategies. For developed areas contributing high levels of fecal coliform bacteria, BTNEP and LDEQ will provide homeowner assistance by identifying broken home sewage systems, repairing problems with direct cost reimbursement, and providing information about long term maintenance of home sewage systems. Through this systematic approach, BTNEP and its partner agencies are working to protect the health of fisheries and people of the Bayou Folse Watershed.

Upcoming 2018 Management Conference Meetings:

August 2, 2018

November 1, 2018

All meetings begin at 9:30 AM and are tentatively scheduled to be held on the NSU campus.