



Learning on the Edge Newsletter

Summer 2014 Issue



Upcoming Dates

April 13 Earth Day Bay Day

<http://www.baysfoundation.org/events/edbd/>

June 10-12 Coastal Bend Environmental Science Elementary Workshop

June 23 - 26 Coastal Bend Environmental Science Secondary Workshop

June 16 - 19 Coastal Bend Environmental Science Alumni Workshop <http://www.nuecesdeltapreserve.org/workshops.html>

Did You Know?

They're here! The wildflowers are starting to peek out giving us brilliant colors across the Delta.

Federal legislation requires using native plants in federal highway landscaping. That means 25 cents out of every \$100 in the landscaping fund must go toward highway plantings. That's why our roadsides bloom with wildflowers! It's not just beautiful but necessary for pollinators as well.



Meet the Staff

This year the education staff would like to introduce the project staff at the Coastal Bend Bays & Estuaries Program and the work they do. In this issue of the Learning on the Edge newsletter, we spotlight the two members of our Coastal Bird Program, David Newstead and Owen Fitzsimmons.

David conducts and manages projects involving census, survey and management of coastal birds – including colonial-nesting waterbirds, marshbirds and shorebirds – and their habitats in the Texas Coastal Bend. David earned a Bachelor's degree from the University of Houston and a Master's degree from Texas A&M University – Corpus Christi. His experience has been in research, restoration and conservation of coastal habitats for birds and other wildlife.



David Newstead

Director of Bird Conservation



Owen works with CBBEP's coastal water bird program, monitoring and managing bird populations throughout our 12-county region. He received his Bachelor's and Master's degrees at Texas A&M University-Kingsville where his primary focus was on coastal wetlands and waterbirds. He previously worked in habitat management for a private lease on the King Ranch, with Ducks Unlimited and the Texas Forest Service.

Owen Fitzsimmons, Conservation Biologist

Colonial Waterbird Project

If you've ever been on a field trip to the Nueces Delta Preserve you have probably noticed that our staff loves to bird watch and point out birds to students. We spend a lot of our time discussing birds since they are fairly easy to spot, identify, and one of the few animals that will be active in the middle of the day and near large groups of students. But did you know that the Coastal Bend Bays & Estuaries Program also does bird research and bird habitat management?

The Coastal Bird program focuses on restoring coastal bird populations through management of nesting sites and assisting efforts to monitor changes in coastal bird populations. The CBBEP has two staff members and lots of volunteers who help with these projects.

The colonial waterbird nesting program focuses on the approximately 27 species of birds that nest in large groups (or colonies) in our area. The nesting season for these birds ranges from February to August as different species spread out their nesting behaviors. The earliest birds to build nest and lay eggs are the great blue herons. Many of the wading birds (herons, egrets, spoonbills and ibis) nest in low shrubs and trees in large mixed species groups. Our local terns, gulls, skimmers and pelicans tend to nest on low vegetation or bare ground. Some of the species that utilize these colonial nesting habitats **ONLY** nest on isolated coastal islands.

In recent years there have been documented decreases of many of these species throughout their range. Due to those declines, our program uses a variety of tools to increase nesting success with the hopes that population numbers will begin to grow again. The main issues facing colonial nesting waterbirds are habitat loss due to erosion and human development, predation by raccoons, hogs, coyotes, fire ants, gulls and grackles, and human disturbance during the nesting season.



Predators can be a major threat to nesting birds, when their populations are out of balance. The CBBEP bird program spends time removing and deterring predators and modifying habitat on many coastal islands. Red Imported Fire Ants are an introduced species which has caused major problems for wildlife throughout the southern United States, including on rookery islands. Their mounds are treated with pesticide in order to reduce their impact to hatchlings. Bird predators such as owls are discouraged by reducing the amount of habitat that attracts them (good perches, hides) in hopes that the predator will choose a new habitat.



Laughing gulls – though native to the area – have become highly abundant because they have adapted to take advantage of a steady year-round supply of food in the form of leftover food in garbage cans and handouts from well-meaning beachgoers. On islands, they often eat the eggs or chicks of other species if the colony is disturbed forcing adults to leave nests. The best things you can do to limit the impact of Laughing gulls is to not give them food and not disturb nesting colonies.

Volunteers have been helping the bird program by growing native plants that can be transplanted to local nesting areas in order to improve nesting success. The bird program has also made recommendations on where to place dredge material from local projects to reclaim areas on small islands. The bird program has also had help from local Boy Scouts who have built nesting platforms that are used by great blue herons.

The CBBEP bird program also worked last year with the American Bird Conservancy to make a local public service announcement about keeping a safe distance from nesting birds, especially while boating and fishing. The organizations paired with Texas musician Gary P. Nunn to film the “Fish, Swim and Play from 50 yards away” spot which aired on local cable channels. The program staff also makes sure that signs alerting the general public are in place and good condition. Raising public awareness of disturbance is a huge part of public outreach.



Signs that birds are being disturbed include birds begin vocalizing or shifting positions, the birds take flight, and the birds begin dive bombing the visitor. Remaining a safe distance, staying off the islands, and keeping your pets off the islands helps the birds nest more successfully. When birds are disturbed and leave the nest the eggs and chicks are at risk of heatstroke and predation, especially by gulls. Repeat disturbances will eventually cause the birds to abandon the colony, often too late to nest elsewhere that year.



Protection of these birds is important because they are a top predator in the coastal aquatic ecosystem, and also a great indicator of overall ecosystem health. The Coastal Bend region also makes money each year on visitors who come to bird watch and see many of our specialty birds. From the Whooping Crane Festival in Port Aransas to private bay tours to look at rookery islands, there are many businesses that rely on bird watching to provide revenue.

The easiest way for the general public to help these birds is to remember to “Fish, Swim, and Play from 50 yards away” during the nesting season.

Spring is in the Air: Pressing Wildflowers

Pressing flowers is a great way to make collection field guides, ID cards, bookmarks or even gifts. Students have the opportunity to collect, identify, label flower parts, and classify flowers as monocots or dicots. Following the six steps below students will be successful in creating a unique field guide of their own.

Step 1

Search your garden for fresh flowers that you would like to press and arrange in keepsake items.



Step 2

Lay the intact flowers or individual petals down on a sheet of newspaper, avoiding overlap.



Step 3

Trim thick flowers with a razor blade to 1/16 of an inch or thinner so they will lie flat and dry evenly.



Step 4

Place a second newspaper sheet on top of the flowers; make sure no plant parts stick out of the paper.



Step 5

Sandwich the newspaper between several heavy books for 2-3 weeks or until all moisture is removed.



Step 6

Use glue to adhere the dried flowers to paper and allow to dry. Enjoy your beautiful field guides or give as gifts.



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Photos by In Churl Yo

2014 Wildlife Conservation Camp

The Welder Wildlife Foundation will be hosting a Wildlife Conservation Camp sponsored by the Texas Chapter of the Wildlife Society. High school students who have completed the 9th, 10th, 11th or 12th grade are eligible to participate. Camp will be from July 20-26. For more information about the camp and how to apply visit www.wildlifecamp.tx.org.



Delta News



Our 2013-14 one day teacher workshops are coming to an end, but the good news is its time for our summer time 3 and 4 day workshops!

Teachers that joined us at the Nueces Delta Preserve **Just Gotta Evolve** oneday workshop had the opportunity to get classroom activities and hear from Here are what participants had to say about the workshop:

"We all agreed, that your workshop was by far the best workshop we have attended this year. I am certain we will use majority of the information that was available to us through your presentation. The ideas for the classroom will be very helpful in establishing hands-on activities for our students. I feel that the discussions we had with Kim Bilica provided us with more knowledge in regards to evolution, and

it will help us to better present the sensitive topic to our curious and outspoken students. I personally feel more confident to answer questions they may have.

We look forward to attending more workshops that you have to offer. We will spread the word about the Nueces Delta Preserve to our teachers here at King High School and tell of all the wonderful opportunities you have available!" **Jennifer Boggan, Ashley Lopez, Robert Abben , Biology Teachers - King High School**

Learning on the Edge News

Registering for our teacher workshops is easy and **FREE**. All you need to do is go to our website, fill out the online form, and hit submit.
<http://www.nuecesdeltapreserve.org/workshops.html>

Workshops are accredited, and you will receive professional development for SBEC as well as TEEAC. This is a great opportunity to get outside, learn about nature, get continuing education hours, and most importantly have FUN!!!

Register for the EXCITING SUMMER FUN WORKSHOPS:

Costal Bend Environmental Science

Elementary June 10-12, 2014 (18 Hours SBEC & TEEAC Credits)

Secondary June 23-26, 2014 (24 Hours SBEC & TEEAC Credits)

Alumni June 16-19, 2014 (24 Hours SBEC & TEEAC Credits)

Join us for Free Activities, Free Lunch, and most of all TONS OF FUN!

The Coastal Bend Environmental Science provides all the tools necessary for teachers to engage in successful science instruction in their classrooms: the experiences, the curriculum, the pedagogy for teaching field-based science, and the equipment necessary for student field experiences.

Educators participating in the Summer Academy exit the program obtaining added insight into the issues affecting the bays and estuaries, a sound knowledge base of the local ecology, and curriculum that translates into successful science experiences for their students.



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or classroom
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