



Delta Discovery

Connecting Classrooms to Nature at the
Nueces Delta Preserve

Upcoming Dates

Sept 6: Read a Book Day

Sept 8: Nature Story Time

Sept 10: Delta Discovery Family Picnic

Sept 21: Zero Emissions Day

Sept 22: Autumn Equinox

Sept 17-24: Nat'l Estuaries Week

Sept 24: Celebration of Flight

<http://www.hawkwatch.org/participate/special-events/item/649-a-celebration-of-flight>

Sept 25: World Rivers Day

October 5: World Teacher Day

October 10: World Habitat Day

October 13: Nature Story Time

October 22: Delta Discovery Family Picnic/ TX Nature Challenge

Teacher Discovery News

Did You Know?

National Estuaries Week

(September 17-24) promotes the importance of estuaries—where fresh water meets the salt water of the ocean—and the need to protect them. It is a time for people from coast



to coast to learn about their connection to these inspirational areas.

Estuaries, such as the Nueces River Delta, are unique ecosystems because they provide variety in physical and chemical conditions. Due to the varying degrees of salinity, estuaries provide many diverse habitats for a variety of organisms that have adapted to these unique factors in the ecosystem. Estuaries are important for a variety of reasons from providing crucial breeding and nursery areas for many of our commercial fish catch to stabilizing shorelines and protecting coastal areas, inland habitats and human communities from floods and storm surges during hurricanes.

For more information on how to plan or find an event in your area go to: <https://www.estuaries.org/national-estuaries-week>



Have you ever used a photo as a writing prompt? Every photo is a story after all, and despite a photo's often literal representation of the world, it invites different

interpretations. The advent of digital photography has made it easier to share and distribute photos online. For teachers and students, it's also a terrific tool to spur different kinds of writing. You can vary prompts with the photo to include key words, questions to consider, ideas for writing, possible opening lines, suggestions for research, and more. This is a great way to create different dialogues, narratives, and commentaries.

Journaling Topics



For more information contact
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Coastal Bend Bays & Estuaries Program
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Wetland Model Activity



Objectives:

The student will be able to create a wetland model with knowledge of its characteristics to discover how they filter water. The student will also be able to describe the functions of a wetland.

Background:

Wetlands are common along the Coastal Bend of Texas. These areas are often transition zones and are usually found in an estuarine environment where the fresh water from the rivers mixes with the saltier water of the Gulf of Mexico. For many years, wetlands were not considered to be an important part of the environment. Today, views have shifted. The wetland areas provide a safe habitat for many species, they serve as filters and environmental buffers, and they guard against erosion. This activity will illustrate how wetlands and estuaries work in our environment.

Materials:

- Glass pans or clear Tupperware plastic
- Modeling clay
- Sponges
- Measuring cups
- Clear water
- Muddy water
- Pictures of different kinds of wetlands
- Construction paper (1 sheet per student)

Prepare the model by spreading the clay on a gradual slope of sand or newspaper in half of the pan to represent the land. Be sure to smooth the edges along the pan sides to seal the edges. The other side of the pan should be empty. Do not put the sponges in the middle for the first simulation. This activity can be modeled by the teacher or as a co-operative learning activity. Further, groups can build either model-one with sponges while others are without-and the students can compare each other's models.

Wetland Model Activity

Procedure:

1. Begin a KWL chart for the word wetlands. Determine how much the students already know and together create a definition for wetlands and estuaries.

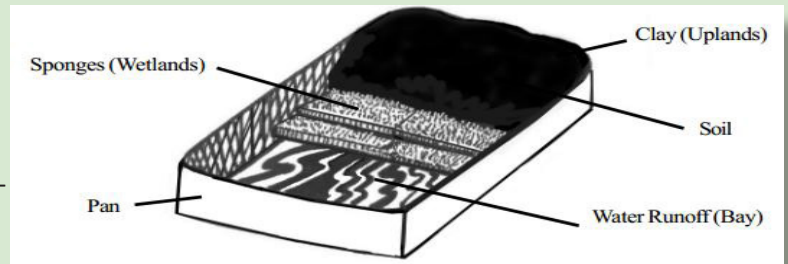
2. Tell the students that these areas are very important habitats and are also important to our environment. You may elaborate upon this! Show students pictures of different wetland environments and allow them to compare differences and similarities.

3. Begin the demonstration by pouring 1 cup of clear water slowly on the clay, which can represent rain, melting snow, urban runoff, etc. Ask the students to describe what happened. Then, pour 1 Cup of the muddy water onto the clay.

4. Observe what happens when there are not wetlands present. What happens?

5. Drain the water. Add the sponges to the model and tell the students they represent the wetlands. Ask, "What do you think will happen when the water gets to the wetlands?"

6. Pour 1 cup of the clear water onto the clay. Have the students describe what is happening. Then, pour 1 Cup of the muddy water over the clay. Have the students describe what happens. "What's happening?" You will notice the sponge acts as a filter – this is something that can be added to the KWL chart at the end.



Further Discussion:

- Compare the wetland areas of before and after. How did the "wetlands" affect the water flow and clarity?
- Discuss why the wetlands are important to us.
- Ask how they can help people.

Closure:

Return to KWL chart and finish activity. Teachers may wish to have students illustrate both wetland models and explain, in their own words, what happened and why.

*Activity adapted from the Environmental Protection Agency



Delta News

The NDP Education Staff has had such a great time this summer hosting our Nature Story Time that we have decided to continue the program during the school year!

We have scheduled NST for the following dates in the Fall semester:

September 8, October 13, November 10, and December 8. Please check our website for additional information and Spring dates. Thanks to everyone who came out and made this pilot program a success!



We will also be continuing our Delta Discovery Family Picnics. Our picnics allow students who have visited the Delta through a school field trip to bring their families, share what they've learned, and explore a little more, but of course, everyone is welcome to come enjoy the sights and sounds of the Nueces Delta Preserve. Our scheduled picnic dates are: September 10, October 22, March 4, and May 27 from 11:00 am - 2:00 pm.

Please bring a picnic lunch, picnic blanket, sunscreen/bug repellent, and plenty of water for everyone (we recommend at least two bottles per person). Staff will be scattered around the area to answer questions and give background information on plants, animals, and history. We look forward to seeing you out there!



Learning On the Edge News



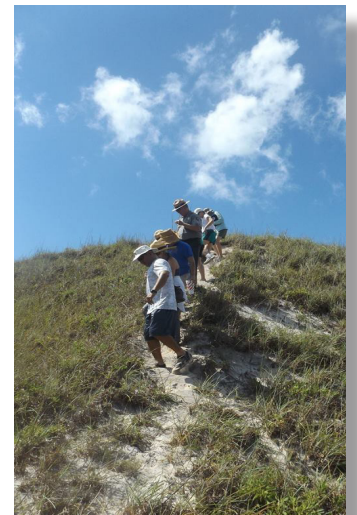
The NDP Educators had another fun filled summer facilitating the CBES Elementary and CBES Alumni teacher workshops! We were happy to see some new faces alongside some familiar ones too! Teachers exited the program obtaining added insight into the issues affecting the bays and estuaries,

a sound knowledge base of the local ecology, and curriculum that translates into successful science experiences for their students. Here's what local CCISD teacher, Kim Ogden, had to say about our summer workshops:

"CBBEP Summer Workshops gave me the opportunity to connect with... hands-on experiences, fellow educators with a variety of perspectives to offer, and real live field scientists. I look forward to utilizing the multitude of resources I acquired with my students and my campus at large. Becoming the learner and renewing my own wonder with the world around me, guided by amazing local experts, will directly impact my ability to model and encourage students' unlimited innate curiosity. AND I had so much fun!!! Teacher Camp Rocks!"

The Education Staff hope you will consider joining us for one or more of our upcoming free teacher workshops! Please see the attached flyer for the dates and subjects of our 2016-17 teacher workshops. And as always, for more information or to sign up for a workshop visit our website:

www.nuecesdeltapreserve.org





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Teacher Workshops at the Nueces Delta Preserve



Fall/Spring Workshops:

October 24 - 25: WILD About Science

March 8: Wildflower Workshop

Summer Workshops:

**June 19 - 22: Coastal Bend Environmental Science
(Secondary)**

June 26 - 29: In & Out Workshop

Register on our website to reserve your spot:
www.nuecesdeltapreserve.org/teacher-workshops



Nueces Delta Preserve
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www.nuecesdeltapreserve.org

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1305 North Shoreline, Suite 205
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Texas Nature Challenge



Texas Nature Challenge

Family-friendly competition focused on nature activities

Visit parks
and other
outdoor sites

1. Sign up at naturechallenge.tamu.edu
2. Choose your challenges
3. Visit sites and explore

Adventure
across the
Lone Star
State

Connect with
nature, family
and friends

Coastal Bend Region
August 13 - November 5

