Lesson One:

1 am an Estuarian-

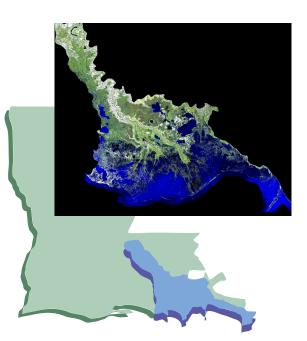
Poetry about the Plants and Animals of the Barataria-Terrebonne Basin



An estuary is defined as a coastal area where salt water from the ocean mixes with fresh water from rivers, rainfall, and upland runoff. The seasons, wind-driven tides, and daily weather patterns all affect the relative amounts of salt and fresh water within an estuary. These changing, dynamic conditions produce our coastal estuarine ecosystems. These rich, diverse ecosystems are home to people, plants, and animals: the estuarians.

At the interface of the Mississippi River and the Gulf of Mexico, fresh and salt water mingle in one of the most productive estuaries of the world. The Barataria-Terrebonne estuary, encompassing an area of approximately 6400 square miles, lies between the Mississippi and Atchafalaya Rivers, and it is actually two different estuaries, Barataria and Terrebonne separated by Bayou Lafourche. Parishes that are totally or partially part of these basins include: Ascension, Assumption, Iberville,





Jefferson, Lafourche, Orleans, Plaquemines, Pointe Coupee', St. Charles, St. James, St. John, St. Mary, St. Martin, Terrebonne, and West Baton Rouge.

Salt and fresh water mix together between coastal wetlands and the protection of barrier islands, where nutrient-rich water, sediments, and pollutants from the Mississippi River combine with the salty waters of the Gulf of Mexico. Changes in salinity, water level, and temperature create a rigorous environment, but the hardy plants and animals are adapted to these conditions. The people who live here, too, are hardy and adaptable, since they face sinking coastlines, rising sea level, hurricanes, pollution, and other challenges. These are the Estuarians!

Plants and animals are an integral part of every ecosystem, but an estuary is one of the most biologically diverse places on the planet.



Objectives

STUDENTS WILL

- observe the biotic factors of the Barataria-Terrebonne Estuary.
- develop an appreciation for the complex interrelationships among organisms of the Barataria-Terrebone Estuary.
- communicate thoughts or feelings about the natural world as experienced in the Barataria-Terrebonne Estuary.
- develop "I AM" poems about estuary life and culture.

However, we often don't see what is there beyond the obvious. The focus of this activity is to have students consider the interaction of plants and animals in the Barataria-Terrebonne Estuary.



Handout: *I am an Estuarian--Observer's log sheet* (p.4)

Handouts: *I AM* **Formats** for *I am the Estuary* (p.5) *I am an Estuarian* (p.7) *I am a Child of the Estuary* (p.11)

Handouts: IAM Model Poems for

I am the Estuary (p.6) I am an Estuarian (p.8) I am a Child of the Estuary (p.12)



- 1. Make copies of the handouts.
- 2. Plan a field experience, if possible, for students in order to conduct observations of some of these organisms. (BTNEP has a field trip guide to day trips within the estuary. The field trip handbook is available on the web site, www.btnep.org)
- 3. Discuss elements of the I AM AN ESTUARIAN poems with students.
- 4. Brainstorm ideas with the class.





- 1. Using the format and models of the *IAM* poems provided, students should work alone or with a partner to compose original poems about some aspect of life or culture observed in the Barataria-Terrebonne Basins.
- 2. Either assign students an *IAM* poem format or have students select their choice of ONE of the *IAM* poem formats. Direct them to follow the steps for observation and writing of the poem.
- 3. Here are some suggested steps:
 - (a) Have students use their senses to collect as many observations about the organism as they can.
 If possible, they should return to the same spot on other occasions, especially at another time of day or in other weather conditions. Have them complete an observation log sheet each time.
 These will help them complete the lines of the poem that begin with "I hear, "I see...., "I touch...."
 If you can't go on a field trip, use field guides, nature cards, trade books, or
 the Internet to watch the *Estuary Live* video which can be downloaded from the BTNEP website.
 - (b) Have students use their internal senses to try to understand a connection between that organism and others in the estuary. This will help them complete the lines of the poem that begin with "I pretend, "I worry, "I dream, "I hope"
 - (c) Putting observations and feelings together will help them complete the poem. These are the lines that start with, "I am, "I wonder, "I understand, "I try"
 - (d) Allow students to use a computer and other resources such as clip art or photographs to enhance their *IAM* poetry. You may want to give extra credit to students who draw their own art work.
 - (e) Student poems should be typed, proofed, edited and shared with classmates.



HANDOUT: I AM AN ESTUARIAN-OBSERVER'S LOG SHEET

Location _____

____ Date____

In the boxes below, write **descriptive** words that capture your observations and feelings at this site.

Plants	Weather Conditions
Animals	Sounds
Non-living Things	Thoughts or Feelings





A POEM ABOUT THE

BARATARIA-TERREBONNE BASIN

Imagine that you are the estuary . . .

FORMAT

FIRST STANZA

I am	(two special characteristics you have)		
I wonder	(something you are actually curious about)		
I hear	(an imaginary sound)		
I see	(an imaginary sight)		
I want	(an actual desire)		
I am	(the first line of the poem repeated OR something synonymous)		

SECOND STANZA

I pretend	(something you actually pretend to do)
I feel	(a feeling about something imaginary)
I touch	(an imaginary touch)
I worry	(something that really bothers you)
I cry	(something that makes you very sad)
I am	(the first line of the poem repeated OR something synonymous)

THIRD STANZA

I understand	(something that you know is true)
I say	(something that you believe in)
I dream	(something that you actually dream about)
I try	(something you really make an effort about)
I hope	(something that you actually hope for)
I am	(the first line of the poem repeated OR something synonymous)





A MODEL POEM

MODEL

FIRST STANZA

I am the elbow of salt and fresh water. I wonder what the future holds for me. I hear plaintive cries and voices of hope. I see my acres diminishing. I want the restoration to succeed. I am the estuary, a marvel of biodiversity.

SECOND STANZA

I pretend that my coastline is not eroding. I feel the sting of wind and waves. I touch the lives of all who call me home. I worry that my children will be left homeless. I cry at the prospect of seeing them move on. I am the estuary, protector and protected.

THIRD STANZA

I understand the importance of dollars and cents. I say, "Don't sell out your heritage!" I dream that all these issues will be resolved. I try to hold on, to hold on, . . . to hold on . . . I hope America will take action to save me. I am the estuary, lifeblood of Louisiana.





I AM AN ESTUARIAN: FORMAT

A POEM ABOUT THE PLANTS AND ANIMALS OF THE BARATARIA-TERREBONNE BASIN

Imagine that you are an estuary creature . . .

FORMAT

FIRST STANZA

I am	(two special characteristics you have)		
I wonder	(something you are actually curious about)		
I hear	(an imaginary sound)		
I see	(an imaginary sight)		
I want	(an actual desire)		
I am	(the first line of the poem repeated)		

SECOND STANZA

I pretend	(something you actually pretend to do)
I feel	(a feeling about something imaginary)
I touch	(an imaginary touch)
I worry	(something that really bothers you)
I cry	(something that makes you very sad)
I am	(the first line of the poem repeated)

THIRD STANZA

I understand	(something that you know is true)		
I say	(something that you believe in)		
I dream	(something that you actually dream about)		
I try	(something you really make an effort about)		
I hope	(something that you actually hope for)		
I am	(the first line of the poem repeated)		



HANDOUT: I AM AN ESTUARIAN

A MODEL POEM

The Blue Crab

FIRST STANZA

I am a crab; my name means savory swimmer; I wonder if you know about my estuary home. I hear the waves, the gulls, the ships, the people. I see the land washing away from the shore. I want to protect the fragile fringe that sustains me. I am the blue crab, *Callinectes sapidus*.

SECOND STANZA

I pretend that all is well in the estuary; I feel a change in my watery world; I touch the faces and fortunes of so many people; I worry that erosion and pollution will destroy us all; I cry because we were once so bountiful; I am the blue crab, *Callinectes sapidus*.

THIRD STANZA

I understand my value in Louisiana; I say do what you can to help me survive; I dream of returning in countless numbers; I try to teach others about my estuary life; I hope coastal erosion will be no more; I am the Blue Crab; I am the Blue Crab.





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I Am A Child of the Estuary

Poetry about the People of the Barataria-Terrebonne Basin



There is evidence of the Barataria-Terrebonne Estuary's rich cultural heritage everywhere we look, but we may not always see it. We deal with the people who live in our community every day, but we don't always think about the jobs they do, such as shrimpers, trappers, ship builders, miners, oil field workers, farmers, chefs and cooks, or fishing guides. We don't always think about the cultural history of our friends and neighbors either, such as Cajuns, Native Americans, Islenos, Hispanics, Asians, Africans, or European settlers.

The focus of this activity is to have students reflect on their own personal role or background in the estuary, or on the role of others through an interview process

interview process.



- 1. Have students brainstorm as many observations and attributes about their role or history as they can. These will help them complete the lines of the poem that begin with "I hear, "I remember"
- Students should use their internal senses to try to feel a connection with the people around them and express what they are thinking or feeling about their reflections. This will help them complete the lines of the poem that begin with "I wonder, "I worry, "I dream"
- 3. Putting observations and feelings together will help them complete the poem. These are the lines that start with, "I am, "I wonder....,"I understand"



The uncontrolled growth of the world's fishing fleets is one of many developmental pressures resculpting the fishing industry. Photograph by Marian Brister Martinez. Used with permission.



- 4. Allow students to use a computer and other resources such as clip art or photographs to create *I AM A CHILD OF THE ESTUARY* poetry. You can give extra credit to students who do original artwork.
- 5. Student poems should be typed, proofed, and edited.
- 6. Have students share their poems with their classmates.
- 7. Select poetry as scripts for Readers' Theater and have students perform them. Copy, distribute, and review the handout on *Readers' Theater*, (p.15).



Terry Shelley of Belle Chasse has seen the highs and lows of the fishing industry. Once the captain of a 72-foot shrimp boat, Shelley now sloshes through the marshes looking for oysters. This day near Empire recently was relatively easy. Sometimes a fast-moving tide brings the water up to his neck as he's scanning the floor for oysters. (Photo by Ted Jackson © 1997 The Times-Picayune Publishing Co., all rights reserved. Used with permission of *The Times-Picayune*.)





A POEM ABOUT THE INHABITANTS OF THE BARATARIA-TERREBONNE BASINS

Reflections on the role of humans in the estuary . . .

FORMAT

FIRST STANZA

I am	(your role or history in the Barataria-Terrebonne Estuary)
I wonder	(something to reflect on about your role or history)
I hear	(your favorite sound of the estuary)
I see	(your favorite sight of the estuary)
I wish	(your dream for the estuary)
I am	(the first line of the poem repeated)

SECOND STANZA

I remember	(thoughts on your past in the estuary)
I feel	(a feeling about the estuary)
I cherish	(something you hold very dear about the estuary)
I worry	(a fear you have about the estuary)
I cry	(something you've witnessed in the estuary that makes you very sad)
I am	(the first line of the poem repeated)

THIRD STANZA

I understand	(something about your role or history in the estuary that you know is true)
I say	(something to those who might follow in your footsteps)
I dream	(your vision for the future of the estuary)
I try	(what you do to make your situation better)
I hope	(how you want things to be)
I am	(the first line of the poem repeated)





A MODEL POEM

A Fisherman

FIRST STANZA

I am a fisherman, as my father before me. I wonder if my son will be one, too. I hear the wind whipping the waves. I see the tide flow in and out. I wish the estuary wasn't changing. I am a fisherman, guardian of the coast.

SECOND STANZA

I remember nets filled with fish. I feel that things will never be the same. I cherish my time spent on the water. I worry about supporting my family. I cry to see marsh becoming open water. I am a fisherman, with empty nets.

THIRD STANZA

I understand the rise of the tides, the pull of the moon. I say it's not the same life anymore. I dream that I can fill my nets again . . . and again . . . I try to learn other ways, do other things. I hope for better times. I am a fisherman, but for how much longer . . .?



QUESTIONS FOR JOURNALING

- 1. Look at the evidence of change in your community, both in the natural world and in the lives of the people who live there. Describe what has happened. What, if anything, are people doing about it?
- 2. Can you recall a time from your own childhood when you paid close attention to some detail in the natural world? What was it that captivated you? Describe your experience.
- 3. After you have shared poems with other students, did you notice any common themes that were found in several poems? What were they? Why did they occur so often?
- 4. Your poems are works of art that describe an element of nature. How did your poem reflect your attitude toward the plants or animals of the estuary? Did you feel a sense of discovery? Did you feel like an artist in the creation of a visual piece of artwork?
- 5. Did you write your poem about a wild animal of the estuary? Describe the elusiveness or mystery of that animal. Is this elusiveness part of the mystery that attracts people to such animals?



POEM RUBRIC	Degree to which the format is maintained; Clarity of writing	Degree to which the elements of the poem are developed	Degree to which a logical flow of the elements is present	Degree to which the work as a whole fits the assignment
A Well Constructed	Format maintained throughout the poem; effective writing	Major points developed	Major points connected	Fully developed poem
B Constructed	Most of the format maintained through- out the poem; clear writing	Most points developed	Most major points connected	Essential elements of the poem are present
C Under- Constructed	Format not maintained in poem; writing unclear	Some points developed	Some major points; not all points connected	Tried to complete the assignment
D Absent	Format absent; writing unclear	Lack of development	Lack of plan; no connections	Assignment not completed



6.

- 1. Design a mural for your school, local museum, library, church hall, or community center that depicts the history of the lives of people inhabiting the Barataria-Terrebonne Estuary. Develop a plan to get your mural funded. Recruit volunteers who will help you paint the mural. Plan an opening ceremony to showcase your mural to the community.
- 2. Activity in the natural world of the estuary is frequently associated with physical hardship. Write a short story about one of your own experiences in the estuary. Its focus can be either hardship or its opposite, the delight and pleasure connected with your experience.
- 3. Select a single animal that was an important part of your life at one time and write a short essay describing how your relationship to it was important to you. How does that compare to your thoughts and feelings about the wild animals of the estuary?
- 4. Organize your classmates and some adult volunteers to build bat houses, butterfly houses, wood duck nesting boxes, or other animal shelters. Find the best places to put them in your community. Monitor them regularly to see if they attract any wild inhabitants.
- 5. Submit your poetry to a contest such as the Louisiana Environmental Education Calendar Competition or River of Words. Each year, River of Words, in affiliation with The Library of Congress Center for the Book, conducts a free international environmental poetry and art contest for youth, 5-19 years of age, on the theme of watersheds. The contest is designed to: *help youth explore the natural and cultural history of the place they live, and to express, through poetry and art, what they discover. The natural world as seen through the eyes of its children is heartening, humbling, fresh, often life-affirming, and sometimes disturbing.* (http://www.riverofwords.org/poetry/index.html) For information about the organization and the contest as well as to read winning poems and view art work, visit the web site: http://riverofwords.org
 - Perform READERS' THEATER.





READERS' THEATER

WHAT IS IT?

Readers' Theater is drama with no memorization, no full costumes, and no full stage sets. If costumes are used, they should be neutral and suggest or imply the nature or personality of the character. If stage sets or props are used, they should be simple and suggestive. Scripts are always used. Reader should read individual lines or stanzas alone, in pairs, or in unison with as much creative expression as possible.

PROCEDURE

- 1. Select a group of students to model Readers' Theater.
- 2. Make copies of the following script *Remorse of An Estuary* by Steven "Chris" Miller from Chalmette, Louisiana.

REMORSE OF AN ESTUARY

I am the thing you fear the most.

I wonder how many have seen my ghost.

I hear the morning dew drips cry.

I see the irises wither and die.

I wish to unleash these feelings I hide.

I remember children's laughter fulfilled.

I feel the mood, soft and stilled.

I cherish the sweet warbler's song.

I worry my life won't last that long.

I cry the tears of my love's sweet despair.

I can't bear the sight of fishing nets bare.

I understand I can change this fate. I say to those who care, "Don't wait!" I dream my waters are rich and pure. I try to purge my unsightly shore. I hope that you have seen the light. I need everyone to feel my plight.

I am the dying rememberance of a place called HOME my Estuary.

3. Rehearse the reading with the performers, giving suggestions if needed.



- 4. After the group has modeled Readers' Theater, analyze the performance with the audience.
- 5. Break the students into groups. Ask them to select one of their "I AM" poems for their participation in Readers' Theater.
- 6. Review "Tips for Readers" with the class.
- 7. Allow time for rehearsals.
- 8. Each group performs. (If possible, videotape student performances.)

TIPS FOR READERS

- 1. Have a script for each person. Sharing scripts makes it harder to follow along.
- 2. Always read the whole script first so that you'll be comfortable with the words and meaning, and you'll know the context of your character's words.
- 3. Review difficult or unfamiliar pronunciation and vocabulary.
- 4. Highlight your part.
- 5. Try out different voices, rates of speech, accents, postures, and gestures. Use creative expression, enunciation, appropriate volume and intonation.
- 6. Study yourself in a mirror. Can you make your face look angry, sad, afraid, happy, or anxious?
- 7. Practice your part alone or with friends and family, if possible.
- 8. Rehearse with your group before performing. Offer specific feedback. Instead of, "Read with more expression," say, "Sound angrier."
- 9. When others are reading, be silent and still. Follow along so that you'll know when to speak.
- 10. Hold your script at waist level. If you hide behind it, your voice will be muffled and difficult for the audience to hear.
- 11. If you make a mistake, just go on as if you didn't.
- 12. If someone else makes a mistake, try to help in a discreet way.
- 13. Look up from your scripts at both the other readers and the audience.
- 14. Look at and react to other readers. The narrator should face the audience. Make sure that the audience can see and hear each reader.
- 15. Have fun!





BOOKS

Saving Our Good Earth: A Call to Action. Barataria-Terrebonne Estuarine System Characterization Report. BTNEP; 1995.

WEB SITES

Barataria-Terrebonne National Estuary Program www.btnep.org

The Pulitzer Board: "Are the World's Fisheries Doomed?" http://www.pulitzer.org/year/1997/public-service/works/1-1/

U.S. Army Corps of Engineers - New Orleans District http://www.mvn.usace.army.mil/

USDA Natural Resources Conservation Service - Louisiana http://www.la.nrcs.usda.gov/

NOAA National Marine Fisheries Service http://www.nmfs.noaa.gov/habitat/restoration/

U.S.G.S. National Wetlands Research Center http://www.nwrc.usgs.gov/

Louisiana Governer's Office of Coastal Activities http://www.goca.state.la.us

National Coastal Wetlands Conservation Grant Program http://www.fws.gov/cep/cwgcover.html

Louisiana Cooperative Extension Service http://www.lsuagcenter.com/en/administration/about-us/extension

Education & Public Outreach Tales of the Blue Crab http://www.serc.si.edu/education/resources/bluecrab/index.htm

Sea Science - Blue Crab http://www.dnr.state.sc.us/marine/pub/seascience/bluecrab.html

LA Department of Wildlife & Fisheries http://www.wlf.louisiana.cpr

America's Wetland Campaign http://www.americaswetland.com

EPA Region 6 http://www.epa.gov/region/index.htm

US Fish and Wildlife Service http://www.fws.gov/

Louisiana Department of Natural Resources http://dnr.louisiana.gov

Louisiana Seagrant http://www.laseagrant.org/

Coast 2050 http://www.coast2050.gov

Blue Crab Home Page http://www.blue-crab.net/

Blue Crab Archives http://www.blue-crab.org/

Blue Crab Education Page http://www.vims.edu/adv/ed/crab/contents.html

Seafood Saftey http://www-seafood.ucdavis.edu/Pubs/safety1.htm

