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Coastal Watershed Connections: Student Impact, Stewardship, and Reflections

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Coastal Watershed Connections: Student Impact, Stewardship and Reflections

Sherry S. Herron and Shelia A. Brown | Center for Science and Mathematics Education



THE UNIVERSITY OF SOUTHERN MISSISSIPPI



B-WET

BAY WATERSHED EDUCATION & TRAINING PROGRAM

PROJECT SUMMARY

The project provided students and teachers in six coastal and noncoastal Title 1 secondary schools in Mississippi with experiential learning activities to emphasize connections between their local watershed and coastal habitats of the Gulf of Mexico using GLOBE (Global Learning and Observations to Benefit the Environment) protocols, OBIS (Outdoor Biology Instruction Strategies) Science) and service-learning projects.

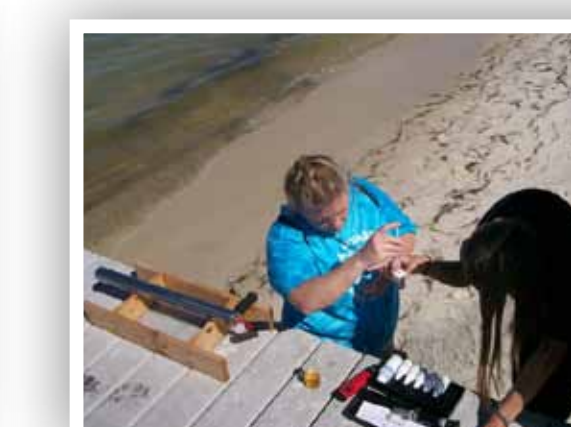
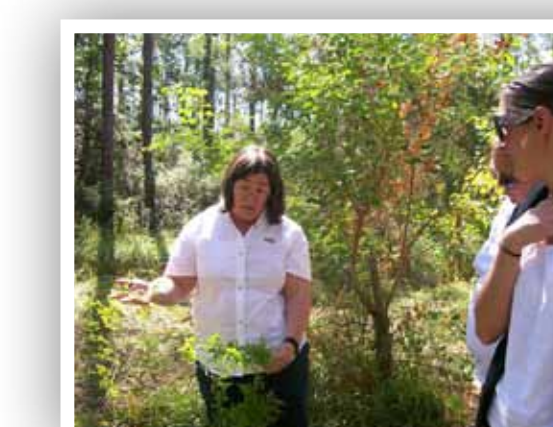
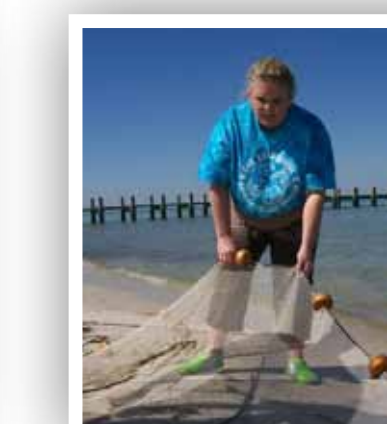
PARTNERS

- NOAA B-WET Program
- Southern Miss Gulf Coast Research Laboratory's Marine Education Center in Ocean Springs, Miss.
- Southern Miss Center for Science and Mathematics Education in Hattiesburg, Miss.
- Grand Bay National Estuarine Research Refuge in Gautier, Miss.
- Mississippi Department of Environmental Quality

ACTIVITIES

- Three-day summer workshop for 12 teachers from six schools
- Three visits to each school during the school year >400 total students impacted/visited
- Two-day field trip to coastal habitats per school
Gulf Coast Research Center
Grand Bay National Estuarine Research Reserve
McLeod State Park
Ship Island (a Mississippi barrier island)

SUMMER TEACHER WORKSHOP



SCHOOL EXPERIENCES



'Sharks Make Sense'
A compass simulates the Ampullae of Lorenzini and detects hidden magnets taped to pictures of rays, the prey.



How long was a megalodon?
~ 1" of tooth = 10' of shark

GLOBE IN THE SCHOOLS



SERVICE-LEARNING PROJECT

Tutoring Elementary Students



TUPELO MIDDLE SCHOOL

in the *Tupelo Daily Journal*



SERVICE-LEARNING PROJECT

Three Rivers Household Hazardous Waste Day



STUDENT FIELD TRIP

Grand Bay NERR

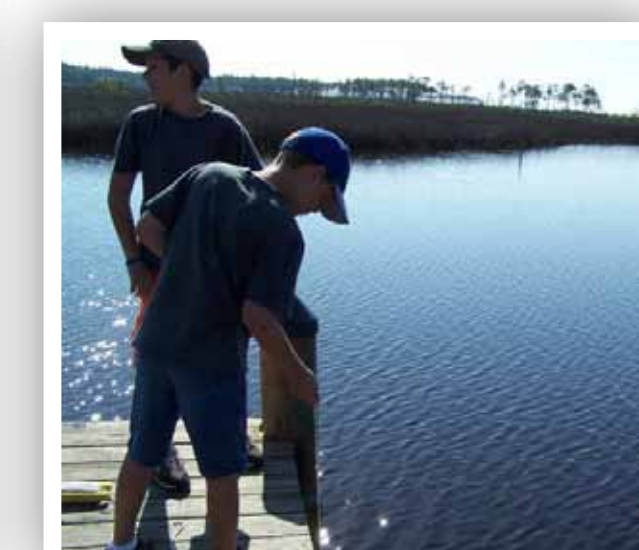


Table 3. Pretest/Posttest Evaluation Results

School	Date	Location	Pretest Mean	Posttest Mean	Significance Value
Hancock North Central Elementary	3/18/11	GNDNERR	7.2162	11.4865	≤0.01 (0.000)
	5/15/11	Clermont Harbor, MS	4.7059	8.1471	≤0.01 (0.000)
Nicholson Elementary	3/25/11	GNDNERR	3.8333	6.933	≤0.01 (0.000)
	5/29/11	Ship Island, MS	2.963	4.667	≤0.01 (0.001)
Tupelo Middle School*	4/7/11 through 4/8/11	Ocean Springs, MS and Ship Island, MS	5.36	9.58	≤0.01 (0.000)
Vance High School**	4/19/11	GNDNERR	5.5937		
	4/11/11	Ship Island			

*One two-day field trip.

**Teacher has not returned the tests.