STUDENT-LED HABITAT RESTORATION IN NORTHWEST FLORIDA

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Choctawhatchee Basin Alliance
December 13, 2016
The Choctawhatchee Basin Alliance is a non-profit watershed organization committed to sustaining and providing optimum utilization of the Choctawhatchee Basin watershed. Choctawhatchee Basin Alliance (CBA), employs a four-pronged approach:

- Monitoring
- Restoration
- Education
- Research
STUDENT-LED RESTORATION

Education Goals: To create the next generation of water stewards through hands-on experiences related to the area’s natural resources

Numbers

• Over **10,000** students have participated in CBA’s Education Programs

• CBA Education Programs have planted over **8,000** native plants at restoration sites throughout the watershed.

• Education Programs are made possible through an AmeriCorps Partnership. To date, **50** individuals have served on CBA’s Education Team.
GRASSES IN CLASSES

Grow native shoreline grasses in salt marsh nurseries.

Receive monthly lessons aligned to state standards (3rd/5th).

Take a service-learning field trip to a restoration site to transplant their grasses.

Students receive a Grasses in Classes folder that contains worksheets and information for each lesson.

We track performance with Pre/Post tests.

2015-2016

93% of students showed an increase in knowledge.
What is a Watershed?
All About Spartina alterniflora
Getting to the know the Pitcher Plant
Food Webs in the Salt Marsh
Oysters in Our Bay
Observation Tanks

3rd Grade

5th Grade

What is a Watershed?
How Substances are Measure in Water
Charting Erosion
Adaptations to Environmental Factors
Observation Tanks
Oysters in Our Bay
DUNES IN SCHOOLS

Middle School
Dune Restoration
Coastal Dune Lakes
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<td><strong>September</strong></td>
<td><strong>Field Experience at State Park</strong></td>
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<td>• CBA will lead the restoration event at the state park. Students will conduct data collection and restore the dunes by planting sea oats.</td>
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<td><strong>October</strong></td>
<td><strong>Sediment Lab</strong></td>
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<td>• Teachers will lead sediment lab in the classroom. This lab will expand upon longshore drift and allow teachers to look at sand samples.</td>
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<td><strong>November</strong></td>
<td><strong>Dune Building Lab</strong></td>
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<td>• CBA will bring in a lab where students will learn about the dune building process by designing a restoration site.</td>
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<td><strong>December</strong></td>
<td><strong>Dune Lakes Introduction</strong></td>
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<td>• Teachers will lead dune lake introduction through videos and a pH tannins lab.</td>
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<td><strong>January</strong></td>
<td><strong>Potting Sea Oats</strong></td>
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<td>• CBA will come in and pot the sea oats with the students. Students will grow the sea oats until the end of the year and will be used in next year’s restoration field trip.</td>
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<td><strong>February</strong></td>
<td><strong>Land Use and Hurricanes</strong></td>
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<td>• Teachers will explore how land use has changed around the Coastal Dune Lakes and then examine the ideal structure to survive a hurricane on a coastal dune lake.</td>
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<td><strong>March</strong></td>
<td><strong>Dune Lake Investigation</strong></td>
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<td>• CBA will bring information that explores how the Dune Lakes are unique and dynamic systems. This includes the influence of the outfall on species found in the lake.</td>
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RESTORATION FIELD TRIPS
UNIQUE PROGRAM CHARACTERISTICS

Teacher Education Program
Professional Development
Edmodo
TEACHER EDUCATION PROGRAM

• Education majors developed literary resources that correlate with our GIC curriculum.

• Introduces soon to be teachers to the GIC program

• Helps to align the curriculum to current/upcoming state standards
Professional Development

- School Districts offer PD hours for teachers involved in the program
  - Kick-off training
  - Monthly reflections
  - Tech Hours
  - Restoration Points
  - Edmodo
PROGRAM PARTNERS

• AmeriCorps
• Okaloosa/Walton School Districts
• NFWF
• Boeing
• State Parks
• Community Partners
AmeriCorps provides the manpower to develop an education team. Without AmeriCorps, we would not have such an intensive, hands-on program.

- National Service organization
- Living Stipend
- Education Award
GROWTH AND EXPANSION
GRASSES IN CLASSES OVER THE YEARS
HIGH SCHOOL PROGRAM

- Received grant support to expand estuarine education into high school

- Students will become active in the restoration of oyster habitat in Choctawhatchee Bay by constructing reefs and growing oyster spat near their schools

- Program will officially launch in Fall 2017