

Salt Marsh Field Study

Grade Level: Sixth-Eighth

Content Area: Sixth and Seventh: Life Science, Eighth: Earth Science

Core Area: Exploring Organisms and Their Environments

Lesson Overview: The Reserve's sixth-eighth estuary programming aligns to the current SC Academic Standards and Performance Indicators for Science, Next Generation Science Standards (NGSS), and NOAA's Ocean and Estuarine Literacy Principles and Concepts. Programs can be customized to incorporate activities on our marsh boardwalk or trail, Hobcaw Discovery Center exhibits and classroom, a screened outdoor classroom, freshwater pond and dock. Class size is limited to 60 students per trip, with one field study scheduled per day at our salt marsh sites to protect the sensitive nature of the habitats. Programs vary in length from 2-4 hours each, and may be combined with other activities as staff and schedules allow. Cost for programs is \$5 per student (teachers, chaperones are free), and must be booked in advance.

Grade Six: LIFE SCIENCE: DIVERSITY OF LIFE – CLASSIFICATION AND ANIMALS LIFE SCIENCE: DIVERSITY OF LIFE – PROTISTS, FUNGI AND PLANTS

Grade Seven: LIFE SCIENCE: ORGANIZATION IN LIVING SYSTEMS ECOLOGY: INTERACTIONS OF LIVING SYSTEMS AND THE ENVIRONMENT

Grade Eight: EARTH SCIENCE: EARTH'S PLACE IN THE UNIVERSE, EARTH SCIENCE: EARTH SYSTEMS AND RESOURCES

Reserve field studies for middle school incorporating these science standards include:

Fresh & Salt (comparing the two different habitats using refractometers, PH strips and more)

Life in a Forested Wetland/Pond/Swamp <http://www.kevkurtz.com/books/>

Zones of the Salt Marsh

Planet Plankton <https://coast.noaa.gov/estuaries/curriculum/planet-plankton.html>

Many of the Reserve's curriculum activities are based on or adapted from the NOAA's 'Estuaries 101' Curriculum. This suite of estuary education resources help educators bring estuarine science into the classroom through hands-on learning, experiments, fieldwork, and data explorations. These specially designed lessons, activities, animations and videos can be used

independently or as a supplement to existing curricula and can be adapted to meet any grade level.

Resources:

SC Academic Standards and Performance Indicators for Science

<https://ed.sc.gov/instruction/standards-learning/science/standards/>

Next Generation Science Standards (NGSS) <https://www.nextgenscience.org/>

NOAA's Ocean Literacy Principals and Concepts

https://aamboceanservice.blob.core.windows.net/oceanservice-prod/education/literacy/ocean_literacy.pdf

Estuaries 101 Curriculum <https://coast.noaa.gov/estuaries/>

Estuarine Literacy Principals and Concepts <https://coast.noaa.gov/data/estuaries/pdf/estuary-principles-and-concepts.pdf>