# **W**ETLAND **A**DAPTATIONS

## Main Objectives

- Gain an understanding of how animals survive in a changing environment.
- Use of critical thinking
- Collaboration and Communication

### ACTIVITY

Students will investigate how animals change their behaviors to adjust to a shift in their surroundings. By making observations on a nature walk, students will discuss and research how the plants and animals that they have seen are specially suited for the environment or ecosystem that they live in.

Water samples will be taken along with temperature and water turbidity measurements. Water quality testing for pH, nitrate, and nitrite levels help students understand the fine balance in an ecosystem as well as an understanding of the nitrogen cycle.

Note: This activity is particularly effective when coupled with a field trip to The Roanoke/Cashie River Center or The North Carolina Estuarium.

# Materials

Projector or TV for document presentation

Paper, pencils, crayons, markers, poster board

Clip Boards

Water Sample Test Kits

#### CURRICULUM COMPONENTS

- 4.L.1 Understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.
- 4.L.1.3 Explain how humans can adapt their behavior to live in changing habitats (e.g., recycling wastes, establishing rain gardens, planting trees and shrubs to prevent flooding and erosion).
- 4.L.1 Understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.
- 4.L.1.4 Explain how differences among animals of the same population sometimes give individuals an advantage in surviving and reproducing in changing habitats.

## Vocabulary:

Harmful, Community, Survival, Waste, Adaptation, Beneficial, Habitat, Instinct, Population, Environment, Learned Behavior, Inherited Behavior, Recycling, Flooding, Reproduce, Advantage, Animal, Plant, Disease, Behavior, Ecological Systems, Preserve, Conserve, Variation, Survival Advantage