

Natural History along the Natchez Trace Parkway



On-Site LESSON: Wetland Habitat on the Trace: WETLND

➤ **Grade Level:**

9th – 12th

➤ **Subject Areas:**

Biology

➤ **Setting:**

Scenic Trail on Natchez Trace Parkway (See Resources)

➤ **Duration:**

Two hours in the field and one class period

➤ **Skills:**

Observation, explanation, research and evaluate

➤ **Core Standards:**

MS Biology I Competency/Obj. 3b

➤ **Vocabulary:**

Wetland, ecosystem, community, population, organism,

Summary: On a National Scenic Trail students will observe aquatic plants and animals and investigate the role that wetlands play in our environment.



Materials Needed: Each student will need a notebook, pencil, and a field guide for plants and animals (see resources).

Instructional Information

Mississippi Objectives:

Biology I: Investigate and evaluate the interaction between living organisms and their environment. 3b. Provide examples to justify the interdependence among environmental elements.

Biotic and abiotic factors in an ecosystem

Energy flow in ecosystems

Interrelationships among organisms

Teacher Set: The students will be visiting a National Scenic Trail and identifying the plants and animals found in wetlands. In the classroom, students will become familiar with the term wetlands and discuss the role that each organism plays in a wetland ecosystem.

Teacher Overview: Wetlands have an ecological importance to the environment. They are the primary habitat of hundreds of species of waterfowl as well as many other birds, fish, mammals, reptiles, amphibians, and insects. During periods of heavy rain, wetlands act like a gigantic sponge to soak up water, reduce floods, and recharge ground water. They filter out pollutants, trap sediment, and improve water quality. Wetlands also reduce soil erosion by slowing runoff from storms and spring runoff.

What are wetlands? According to the U. S. Environmental Protection Agency, wetlands are defined as “lands where saturation with water is the dominant factor determining the nature of soil development and the

types of plant and animal communities living in the soil and on its surface.”

Student Instruction: Students will be identifying the type of plants and animals found in a wetland ecosystem. Prior to the field trip, students should have knowledge of the vocabulary terms on ecology in the textbook.

Student Task: Students will use a field guide of plants and animals and list in their notebook the type of plants and animals species that were identified on the National Scenic Trail.



Teacher Closure: Explain to the students that wetlands play a vital role in the world in which we live; not only do they provide habitat for many species of plants and animals, but they help to improve the quality of the water that we drink and use every day.

Student Assessment: Participation and completing the activity.

Suggestions for re-teaching: Refer to the field trip when discussing other ecology topics such as habitat and ecological niche, community interactions, population density and distribution, and population growth patterns.

Resources

Scenic Trails on the Natchez Trace Parkway that contain wetlands:

- Cypress Swamp located @ mp 122.0
- River Bend located @ mp 122.6
- Myrick Creek located @ mp 145.1
- Cole Creek located @ mp 175.6
- Donivan Slough located @ mp 283.3
- Rock Spring located @ mp 330

“The Vascular Flora of the Natchez Trace Parkway”, February 2008: [www. nps.gov](http://www.nps.gov)

Kirkman, Katherine L, Donald J. Leopold and Claud L. Brown. Native Trees of the Southeast: An Identificaton Guide. Timber Press, Inc. 2007.

Watts, May Theilgaard. Tree Finder: A Manual for Identification of Trees by their Leaves. Nature Study Guild Publishers. 1963.

Cox, Donald and Shirley A. Peron (illustrator). A Naturalist’s Guide to Wetland Plants: An Ecology for Eastern North America. Syracuse University, Press. 2002.

Watts, May Theilgaard and Tom Watts. Winter Tree Finder, Vol. 1. Nature Study Guild Publisher. 1970.

Conant, Roger, Joseph T. Collins, Isabelle Hunt Conant and Tom R. Johnson. A Field Guide to Reptiles and Amphibians of Eastern and Central North America (Peterson Field Guide Series). Third Edition, Expanded. Houghton Mifflin Company. 1998.