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*Environmental Learning Center
of Goshen College*

Wonderful Wetlands

3rd - 5th

Program Description

Immerse students in a wetland ecosystem by putting on waders to dip for small animals, identifying these critters and hiking around the wetland. Throughout each activity and game, students recognize physical and biological components of each wetland type and the important functions of wetlands.

Program Objectives

Students will:

- Explore a marsh ecosystem and discover the plants and animals living there
- Sample for aquatic macroinvertebrates, learn to identify them and utilize this data as an indicator of water quality

Program Outline

Students rotate in groups through four different activity stations:

1. **Wetland Dipping:** Students use waders and nets to dip for aquatic macroinvertebrates in a wetland ecosystem.
2. **Wetland Lab:** Students use microscopes and field guides to identify aquatic macroinvertebrates. Then students explore how this data can be used to determine the water quality of the wetland at the time of the program.
3. **Hike:** Students hike around the wetland participating in various age-appropriate activities.
4. **Game:** Students play a tag game to understand how water quality impacts macroinvertebrate populations.

Vocabulary

- Wetland
- Macroinvertebrate
- Invasive Species
- Pollution Tolerance Index

Quick Facts



Season Fall: September - November
Spring: April - May
Summer: June

Grades 3rd - 5th

Program Length 4 hours

Maximum # of Students 80 Students

Standards Correlation

LS2.A: Interdependent Relationships in Ecosystems Populations live in a variety of habitats, and change in those habitats affects the organisms living there (3-LS4-4)

LS1.A: Structure and Function: Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)

LS2.A: Interdependent Relationships in Ecosystems: The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem. (5-LS2-1)

ESS3.C: Human Impacts on Earth Systems: Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1)

