



ECHO School Program

Marsh Madness

Grades K-2



Summary

Take an imaginary journey into a marsh. Discover what tools scientists need to study this habitat. Learn how the recipe for a wetland includes both living and non-living things. Discuss what you might see, hear and smell along the way. Meet the marsh inhabitants and explore the ways these plants and animals have adapted to life in their aquatic world. See a live turtle, move like a heron, become a beaver.

Essential Question:

What is a wetland?

Focusing Questions:

Why are wetlands important?

What plants and animals live in wetlands?

What adaptations do plants and animals have that help them live in wetlands?

Vermont Standards and Grade Expectations

7.13 The Living World

Fulfills: SPK – K: 30, 34, 38 and S1 – 2: 30, 34

Survival of Organisms, Interdependence within Ecosystems, Classification of Living Things

Key Program Activities

- ◆ Tools used by outdoor scientists and naturalists
- ◆ Vocabulary: Wetland, marsh, bog, swamp, adaptation, habitat
- ◆ Living vs. Non-living features of a wetland
- ◆ Animals that do and do not live in a wetland
- ◆ Characteristic features of specific species that have adapted to live in a wetland
- ◆ Live animal comparisons

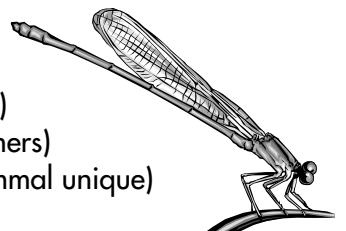
Pre-Trip Activities:



- ◆ Create a wetland mural (children can add what they think belongs in a wetland)
- ◆ Ranger Rick's NatureScope "Create a Scene" (cut, color and paste animals and plants onto a scene)
- ◆ Sunny Days & Starry Nights "Create a Creature" (create a wetland critter from magazine photos)
- ◆ Play "Marsh Master" (a team play game to teach about habitat and conservation)

Post-Trip Activities:

- ◆ The Kids' Wildlife Book "Palms Up" (create a moose head-can be adapted to a mask)
- ◆ Ranger Rick's NatureScope "Cattails for Kids" (make cattails using felt and pipe cleaners)
- ◆ Keepers of the Animals "Mammal Masks" (make masks to discuss what makes a mammal unique)



- ◆ Keepers of the Animals "Frog Tongue Flick" (color, cut, and staple a frog flipbook)
- ◆ Trails, Tails & Tidepools in Pails "Eye and Ear Helpers" (turn empty paper rolls into eye/ear helpers)
- ◆ Swamp Snooper (make underwater viewers for a closer look into a wetland)

Outdoor Activities:

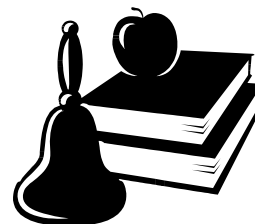
- ◆ Take a fieldtrip to a natural area (see suggested locations)
- ◆ A Toothy Tongue and One Long Foot "Find a Skinny/Fat This or That" (write opposite words and find matches in nature)
- ◆ Trails, Tails & Tidepools in Pails "Pond Scoop" (explore who lives in and near the water)
- ◆ Sunny Days & Starry Nights "Who Was Here?" and "The Secret W's" (encourage a closer look at nature)



Wetlands Bibliography:

- Amsel, Sheri. A Wetland Walk. The Millbrook Press, 1993. Illustrations and rhyming text depict a day-long walk through a marsh and introduce plants and animals of a wetland environment.
- Arnosky, Jim. Come Out, Muskrats. Mulberry Books, 1989. In late afternoon the muskrats come out to swim, dive, and eat green water weeds.
- Challand, Helen. Disappearing Wetlands. Children's Press, 1992. Examines the ecological role of wetlands and discusses how they are formed, what life they support, and how people modify or destroy them.
- Clarke, Barry. Amazing Frogs and Toads. Alfred A. Knoff, 1990. Introduction to frogs and toads for four through six year olds.
- Cristini, Ermanno. In the Pond. Verlag Neugebaure Press, 1984. Illustrations present a wordless panorama of the marshy wetlands where a variety of fish, birds, animals, and plants live.
- Dawe, Karen. The Pond Book. Workman Publishing, 1995. An illustrated field guide to more than 40 things that slither and swim; plus activities for young naturalist.
- Fleming, Denise. In the Small, Small, Pond. H. Holt, 1993. Illustrations and rhyming text describe the activities of animals living in and near a small pond as spring progresses to autumn.
- Hickman, Pamela. Wetlands. Kids Can Press Ltd. 1993. Easy-to-follow experiments and projects let you experience just how important wetlands such as, swamps, bogs, fens, marshes, sloughs, or quagmires are to everyone.
- Luenn, Nancy. Squish!: A Wetland Walk. Atheneum/Simon & Schuster. An illustrated book of wetland adventure emphasizing sensory awareness.
- Matthews, Downs. Wetlands. Simon and Schuster, 1993. Describes different types of wetlands and the animals and plants that are found there.
- Rood, Ronald. Wetlands. HarperCollins, 1994. Introduces the many kinds of plants and animals found in freshwater wetlands, including flycatchers, whirligig beetles, and worms.
- Rosen, Michael. All Eyes on the Pond. Little Brown Co., 1995. Illustrations of a variety of animals that live on, in, and around a pond.
- Taylor, Barbara. Pond Life. Dorling Kindersley, Inc., 1992. Photographs and fascinating facts about animals and plants found in ponds.

Teacher Resources



Braus, Judy. Wading Into Wetlands (Ranger Rick's NatureScope series). National Wildlife Federation, 1989. Wetland activities for primary through eighth grade.

Bruchac, Joseph and Michael J. Caduto. Keepers of the Animals. Fulcrum Publishing, 1991. Native American mythology and activities about animals.

Castaldo, Nancy Fusco. Sunny Days & Starry Nights. Williamson Publishing, 1996. Childrens' outdoor adventure activities for two through six year olds.

Kashanski, Catherine. Wetland Activity Guide. Vermont Agency of Natural Resources, 1994. An information and activity guide for teaching about Vermont wetlands.

Lawrence, Gale. Burlington's Intervale, A Natural History Guide. The Intervale Foundation, 1996. Natural history, activities and field trip suggestions pertaining to the Intervale.

Marsh Master. Great Blue Productions, 1993. A team play board game to save the wetlands from Arnold Pathetic. Learn about species, habitats, and conservation.

Ponds and Lakes(OBIS module). Delta Education, 1979. Childrens' activities to explore life in and around the water.

Redington, Charles R. Plants in Wetlands. Kendall/Hunt Publishing Company, 1994. Field guide to wetland communities, plants and their interactions. Easy to understand and use.

Shedd, Warner. The Kids' Wildlife Book. Williamson Publishing, 1994. Information and activities about North American animals for four to ten year olds.

Possible Field Trip Destinations

Vermont

- ◆ Colchester Bog UVM Natural Area, Colchester 802-656-3131
- ◆ Dead Creek Waterfowl Mgmt. Area, Addison 802-759-2398
- ◆ Delta Park, Colchester 802-863-5744
- ◆ Ethan Allen Homestead/Intervale, N. Burlington 802-863-5744
- ◆ Green Mountain Audubon Center, Huntington 802-434-3068
- ◆ LaPlatte River Nature Conservatory Trail, Shelburne 802-229-4425
- ◆ Missisquoi National Wildlife Refuge, Swanton 802-868-4781
- ◆ North Beach City Park, N. Burlington 802-865-7247

New York

- ◆ Ausable Marsh Wildlife Mgmt. Area, Ausable 518-897-1290
- ◆ Kings Bay Wetlands Mgmt. Area, Champlain 518-897-1290
- ◆ Wickham Marsh Wildlife Mgmt. Area, Chesterfield 518-897-1290

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