



School Program Description

Wetland Wildlife

Saginaw Bay Visitor Center

Bay City State Recreation Area

Level: Secondary

PROGRAM DESCRIPTION:

Students will discover the rich variety of wildlife dependent on wetland for their habitat. Program opens with an indoor presentation on Mammals, Endangered Species or Birds (your choice). The indoor introduction builds upon what the students think they know about wildlife through slides, mounted specimens and study skins. Students working in teams of four, are given clues, and are asked to identify the animal. During this friendly competition, the students will learn of the many animals which inhabit wetlands. This is followed by a two-hour field investigation exploring the marsh, swamp, shrub fringe and pond for wildlife and animal signs. Students record what they see on a field study sheet. Binoculars and spotting scope will be provided for the students' use.

PROGRAM GOALS:

To help students appreciate and value Michigan's Wetland habitats.

To help students realize the need to conserve Michigan's remaining wetlands in order to preserve Michigan's wildlife populations.

PROGRAM OBJECTIVES:

1. Students will be able to list three Michigan animals that are Endangered Species that live in the park.
2. Students will be able to define and give examples from their field experience of Endangered Species and Threatened Species, habitat, niche, adaptation, limiting factor and extirpation.
3. Students will be able to list the four components of habitat: food, water, shelter and space.
4. Students will be able to list five wetland animals and their corresponding habitat and niche.
5. Students will be able to list destruction of wetland habitat as one reason native wildlife populations are in trouble.
6. Students will be able to describe one food chain from the wetland.
7. Students will be able to select two animals from the wetland habitat and describe how they are interrelated.
8. Students will be able to give an example of an alien species which is causing problems for wetland wildlife.
9. Students will be able to explain the meaning of the term "edge effect".
10. Students will be able to describe two types of wetland habitats.

PRE-VISIT SUGGESTIONS:

1. This activity can be used as an introduction or review for an ecology unit.
2. Students should dress for outdoor exploration in current weather conditions. It can be 5-10 degrees cooler next to the Saginaw Bay. Bring a box of square bottomed trash bags for emergency rain ponchos.
3. Discuss the types of habitat found in Michigan. Introduce the term wetland and how they are formed.
4. Look up Saginaw Bay Birding on the inter-net. Have the students find out what birds are found in the area and what birds are being reported at: www.saginawbaybirding.org
5. Have the students each make a list of the mammals that they expect to find living in the park's wetland habitat. When they return from their field trip have them make a new list of mammals which they learned live in the park. Next, have them compare the two lists and see if their predictions were right and what animals they did not know were there. Have them choose one animal which was not included on their first list to do a report on.

POST-VISIT SUGESTIONS:

1. Have the students list, as a group, the different Michigan Endangered and Threatened animals that they learned about in the program. Assign each student an animal from the list to write a report on. Have them include a map of where its found in Michigan, its food, water, shelter and space requirements and its limiting factor.
2. Have the students create a giant "Wetland Mural" and let each student draw a picture on it of an animal from Michigan's wetlands. Show the students the DNR Wetland Habitat poster to get them thinking.
3. Have each student write a letter to the DNR Natural Heritage Program, Wildlife Division, Attn: Eve Rolandson, P.O. Box 30180, Lansing, MI 48909-7680 and request information on one of Michigan's Threatened or Endangered Wildlife. Have them use this information to construct an informational storybook for students in a lower elementary grade. During National Wildlife Week in April arrange to have the students share the books with children from an elementary school in your district.
4. Project WILD: Shrinking Habitat – students simulate a process of land development; Birds of Prey – student interpret data, and generate and test hypotheses; Adaptation Artistry – students design and create imaginary birds; Bird Song Inventory – students investigate an area and use bird-counting techniques; Oh Deer! – students become "deer" and components of habitat; Which Niche? - students compare ecological niches with careers in their community.
5. Project Aquatic WILD: Edge of Home –students explore the concept of ecotones; Blue Ribbon Niche – students create a variety of representations of animals that live in riparian habitats; Migration Headache- students role-play staging waterfowl; Dragonfly Pond – students create a collage of human land-use activities around an image of a pond.
6. Project Learning Tree – Watch on Wetlands –students learn about wetlands and about how land-use decisions and legislation affect these areas; Life on the Edge – students will become advocates for endangered species and wetlands through a combination of activities, Trees for Many Reasons – by reading fables students examine the importance of conserving natural resources; Dynamic Duos – an activity on interdependence and symbiosis.

COORDINATING WITH MICHIGAN SCIENCE Grade Level Content Expectations:

Life science Organization of Living Things: L.OL.04.15
 Life Science Evolution: L.EV.04.21, L.EV.04.22
 Earth Science Earth in Space & Time: E.ST.04.32
 Life Science Ecosystem: L.EC.04.11, L.EC.04.21

COORDINATING WITH BAY CITY PUBLIC SCHOOLS SCIENCE BENCHMARKS:

Organization of Living Things 10-1, 10-3
 Heredity 10-1, 10-2, 10-3
 Evolution 10-1, 10-2
 Ecosystems 10-1, 10-2, 10-3, 10-4, 10-5, 10-6

COORDINATING WITH M.E.A.P SOCIAL STUDIES CONTENT STANDARD BENCHMARKS:

Geographic perspective
 II.2—h.s.1
 II.4—h.s.3
 II.5—h.s.2