School Program Description **Saginaw Bay Visitor Center**

WOW! The Wonder of Wetlands

Bay City State Recreation Area

Level: 2nd & 3rd Grade

PROGRAM DESCRIPTION:

Students will investigate the wetland habitat through indoor and outdoor activities. The program opens with a look at the role wetlands play in helping people and wildlife as nature's water filter. Students participate in a wetland model demonstration in the wet lab. Then students take a hidden look at the wildlife out on the wetland ponds through our remote control marsh camera. In conclusion, the students take a one-hour guided hike through four types of wetland habitat. Plants and animals which inhabit and depend on wetlands are pointed out and their interrelationships to each other. Beaver dens, muskrat dens, waterfowl, frogs, salamanders, birds of prey, and wetland wildflowers are usually visible on the hike. Man's actions, which threaten wetlands, will be introduced.

PROGRAM GOALS:

To help students appreciate and understand the value of wetland habitats.

PROGRAM OBJECTIVES:

1. Students will be able to define a wetland.
2. Students will be to identify one plant and one animal which depends on wetland habitats.
3. Students will be able to describe two types of wetland habitats, swamps and marshes.
4. Students will be able to tell why wetlands are disappearing.
5. Students will be able to draw a simple wetland food chain.
6. Students will be able to list at least one reason we should conserve our wetlands.

PRE-VISIT SUGGESTIONS:

1. Be sure that every student is dressed for the weather conditions. It can be 5-10 degrees cooler next to the Saginaw Bay. (Bring a box of square bottomed trash bags for an emergency rain poncho)
2. Review the following animal classifications: reptile, amphibian, fish, mammal, bird, insect, mullusk, predator, prey
3. Discuss food chains with your students.
4. Have your students draw a picture of the source of their drinking water and how it gets to their home.
5. Simply have students draw a picture of a "swamp" with no discussion or help from you.
6. Project Aquatic Wild: Are You Me? – Students match water wildlife adults with their young.
7. Project WILD: Beautiful Basics – students list the needs of people, pets, and wildlife; Habitat Rummy – students make cards and play a game (do it with a wetland wildlife twist).
8. Project WET: The Life in the Box – students figure out from a life box what is essential for life.

POST-VISIT SUGESTIONS:

1. Have each student draw and/or write a report on a plant or animal, which they saw in the wetland woods on the field trip.
2. Make a class mural of the animals which inhabit the wetlands.
3. Assign each student a wetland animal and have the students each draw a picture of the animal and how they depend on wetlands for their food or shelter.
4. Have each student press their leaves collected on their hike, individually between sheets of paper; then stack books on top of them and let them dry. Paste dried leaves to their matching sillouette on the program handout. Laminate or cover with clear contact paper.
5. Put together a list of 25 endangered species. Introduce one a day for a month. Help the students discover each one's habitat, and list it in a classroom table, which includes three columns, animal name, habitat, wetland yes or no. When complete have the students count the number of wetland animals compared to the number of non wetland animals. Wetland dwellers are in trouble because their habitat is disappearing.

6. Project WET: *Capture, Store and Release* – each student makes a wetland model using sponges; Wetland Metaphors – put together your own wetland metaphor box.
7. Project Aquatic WILD: *Turtle Hurdles* – students role play turtles who are in trouble finding suitable habitat; *Deadly Links* – students role play animals in a food chain who have toxic substances in the chain.

COORDINATING WITH MICHIGAN SCIENCE Grade Level Content Expectations:

Science. Inquiry Process: S.IP.02.11.S.IP.02.12, S.IP.02.13, S.IP.02.14, S.IP.02.15, S.IP.02.16, S.IP.03.11, S.IP.03.12, S.IP.03.13, S.IP.03.14, S.IP.03.15, S.IP.03.16
Science. Inquiry Analysis & Communication: S.IA.02.12, S.IA.02.13, S.IA.02.14, S.IA.03.11, S.IA.O3.12, S.IA.03.13, S.IA.03.14, S.IA.03.15,
Science. Reflection & Social Implications: S.RS.02.11, S.RS.02.13, S.RS.02.15, S.RS.02.16 S.RS.03.11, S.RS.03.14, S.RS.03.15, S.RS.03.16, S.RS.03.17, S.RS.03.18, S.RS.03.19
Life science Organization of Living Things: L.OL.02.14, L.OL.02.22, L.OL.03.31, L.OL.03.32, L.OL.03.41, L.OL.03.42
Earth Science Solid Earth: E.SE.03.13, E.SE.03.14, E.SE.03.22, E.SE.03.31, E.SE.32
Physical Science Properties of Matter: P.PM.02.41, P.PM.02.12, P.PM.02.13
Life Science Heredity: L.HE.02.13
Earth Science Earth System: E.ES.02.21, E.ES.03.41, E.ES.03.42, E.ES.03.43, E.EV.03.44, E.ES.03.52
Earth Science Fluid Earth: E.FE.02.11, E.FE.02.12, E.FE.02.13, E.FE.02.14, E.FE.02.21, E.FE.02.22
Life Science Evolution: L.EV.03.11, L.EV.03.12

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

Geographic Perspective
- II.1—e.e.2, l.e.2
- II.2—e.e.1, e.e.2, e.e.3, l.e.1, l.e.2, l.e.3, l.e.4
- II.3—e.e.1
- II.4—e.e.1, e.e.2, l.e.5
- II.5—e.e.1, l.e.1

Inquiry
- V.1—e.e.2