School Program Description **Saginaw Bay Visitor Center**

Prairie Restoration Project **Bay City State Recreation Area**

Level: Secondary

PROGRAM DESCRIPTION:

Students will be introduced to two of Michigan's disappearing habitats, the Lake Plain Prairie and the Oak Savannah. The program includes a hike through remnants of these two habitats along the Andersen Nature Trail where students will be introduced to the plants which make these habitats unique. Students will learn why the prairie ecosystem is being threatened with extinction, species of animals which depend upon them and how man's land use practices have almost totally destroyed them. Following lunch, students will participate in habitat restoration project taking place in our park. Students will be trained in the identification of three native prairie grasses and will then participate in a seed collection. Seed harvested will be sent to the DNR ecologist for planting during the winter months. The following spring, students are welcome to come back to participate in an optional prairie grass planting at the Chickadee Nature Trail Prairie Project.

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 identify Big Bluestem, Indian Grass and Switch Grass.
2. Students will be able to discuss why Michigan's Prairies and Oak Savannah habitats are threatened with extinction.
3. Students will be able to list three reasons why these habitats are important and need to be conserved.
4. Students will be able to identify three animals which depend upon Prairies and Oak Savanna habitat.
5. Students will be able to describe the role natural fire plays in maintaining these two grassy habitats.
6. Students will be able to use the term biodiversity in describing the importance of these two grassy habitats.
7. Students will be able to demonstrate methods of collecting prairie grass seed.

PRE-VISIT SUGGESTIONS:

1. This activity can be used to conclude a unit on conservation, bio-diversity or ecology.
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.
4. 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 research the different plants and animals which make up the lake plain prairie or oak savannah habitat. Have them write a report on one plant or animal which lives there, or have them create a poster which advertises that animal's need for a home or preservation.

2. Have the students create a giant “Wet Prairie Mural” and let each student draw a picture on it of an animal from Michigan’s wet prairies. 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, Atn: 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: *Fire Ecologies* – students conduct a field investigation; *Improving Wildlife Habitat in Your Community* – students design and accomplish a project to improve wildlife habitat; *Smokey Bear Said What?* – students brainstorm, research and create murals showing changes in grassland habitats; *Shrinking Habitat* – students simulate a process of land development; Birds of Prey – student interpret data, and generate and test hypotheses.
5. Project Learning Tree – *Field, Forest, & Stream* –students compare different environments to see the influence of non-living on living; *Living with Fire* –students learn how fire is a natural event and how it helps ecosystems stay healthy.

COORDINATING WITH THE MICHIGAN SCIENCE GRADE LEVEL CONTENT EXPECTATIONS:

Science. Inquiry Process: S.IP.05.11, S.IP.05.12, S.IP.05.13, S.IP.05.14, S.IP.05.15, S.IP.05.16, S.IP.06.11, S.IP.06.12, S.IP.06.13, S.IP.06.14, S.IP.06.15, S.IP.06.16, S.IP.07.11, S.IP.07.12, S.IP.07.13, S.IP.07.14, S.IP.07.15, S.IP.07.16

Science. Inquiry Analysis & Communication: S.IA.05.11, S.IA.05.12, S.IA.05.13, S.IA.05.14, S.IA.05.15, S.IA.06.11, S.IA.06.12, S.IA.06.13, S.IA.06.14, S.IA.06.15, S.IA.07.11, S.IA.07.12, S.IA.07.13, S.IA.07.14, S.IA.07.15

Science. Reflection & Social Implications: S.RS.04.11, S.RS.04.14, S.RS.04.15, S.RS.04.16, S.RS.04.17, S.RS.04.18, S.RS.04.19, S.RS.05.11, S.RS.05.12, S.RS.05.13, S.RS.05.15, S.RS.05.16, S.RS.05.17, S.RS.05.19, S.RS.06.11, S.RS.06.12, S.RS.06.13, S.RS.06.14, S.RS.06.15, S.RS.06.16, S.RS.06.17, S.RS.06.18, S.RS.06.19, S.RS.07.11, S.RS.07.12, S.RS.07.13, S.RS.07.14, S.RS.07.15, S.RS.07.16, S.RS.07.17, S.RS.07.18, S.RS.07.19

Life Science. Organization of Living Things:
L.OL.06.51, L.0L.06.52, L.OL.07.62, L.OL.07.63

Life Science. Ecosystems
L.EC.06.11, L.EC.06.21, L.EC.06.22, L.EC.06.23, L.EC.06.31, L.EC.06.32, L.EC.06.41, L.EC.06.42

Life Science. Heredity:
L.EC.07.21

Earth Science. Earth Systems:
E.ES.07.41, E.ES.07.81

Earth Science. Solid Earth:
E.SE.06.11, E.SE.06.13, E.SE.06.14

Physical Science. Properties of Matter: P.EN.07.43

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

Geographic Perspective
II.2—h.s.1, h.s.2