



**School Program Description**  
**Trees Are Tree-Mendous**  
**Level: 4<sup>th</sup> & 5<sup>th</sup> Grade**

**Saginaw Bay Visitor Center**  
**Bay City State Recreation Area**

**PROGRAM DESCRIPTION:**

Students will investigate trees and explore their value to man and wildlife. Students will take a hike through the wooded wetland and learn how to identify trees by their leaves and how each tree is a special and unique member of the wooded wetland community. As they hike students will learn vocabulary and anatomy of leaves which will help them use a dichotomous tree key later, i.e.: opposite and alternate leaf arrangement; toothed, double-toothed, lobed and entire margins; palmate and pinnate arrangement and venation; simple and compound; lop-sided and symmetrical base. Next, students participate in a leaf relay, which helps them review the anatomical parts of leaves. In conclusion, students use a Bull's Eye Leaf Key to identify trees on the Tree ID Trail. Students may collect leaves on the hike for a leaf collection to take back to the classroom.

**PROGRAM GOALS:**

To help students realize the rich variety of tree species which make up the wetland forest community.

To help students appreciate the value and beauty of the wetland woods community, alias, the "swamp".

**PROGRAM OBJECTIVES:**

1. Students will be able to define a wooded wetland.
2. Students will be able to distinguish between opposite and alternate leaf arrangement.
3. Students will be able to distinguish between compound and simple leaves.
4. Students will be able to distinguish between lobe, toothed, and entire margins.
5. Students will be able to name at least one tree which lives in a wetland habitat.
6. Students will be able to identify a Michigan Wetland Woods tree by using a Bull's Eye Key.
7. Students will be able to group tree leaves by their similarities and differences.
8. Students will be able to list one product we get from trees.
9. Students will be able to list at least one reason we should conserve our wetland forests.

**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. Bring a gallon zip-lock bag for each student to put their leaf collection in.
3. Go over the parts of a tree: root, bark, leaf, sap, bud, seed, cone, nut, fruit, berry.
4. Project Learning Tree Activities: Tree Treasures- students brainstorm a list of products we get from trees, Adopt a Tree – students conduct a year long study of a tree in the school yard;
5. Project WILD: Graph-animal – students create picture collections of animals in two different habitats and then "visit" the habitats by going on a "nature walk" in their classroom where they tally the number of animals they see and then graph and compare the results.

**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 wooded wetlands.
3. Assign each student a wetland woods animal and have the students each draw a picture of the animal and how they depend on trees 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 silhouette on the program handout. Laminate or cover with clear contact paper.
5. Use the leaves collected on the hike to leaf print T-shirts, or poster paper when you get back to the classroom.
6. Project Learning Tree Activities: Name That Tree- review of basic leaf identification methods; Looking at Leaves – students take a closer look at leaves and create colorful art projects; Trees as Habitats – students discover how plants and animals depend on trees in many ways.
7. Have the students press their leaves between sheets of newspaper (weight the paper with heavy books). After one week, tape the dried leaves into the leaf collection book. Use the Bull's Eye Key to identify them.
8. Have the students try to inventory the trees in your schoolyard and use the Bull's Eye Key to identify them.

**COORDINATING WITH MICHIGAN SCIENCE Grade Level Content Expectations:**

Life science Organization of Living Things: L.OL.04.15, L.OL.04.16, L.OL.06.51, L.OL.07.62, L.OL.07.63

Earth Science Solid Earth: E.ES.06.11E.SE.06.13

Physical Science Properties of Matter: P.PM.04.23

Physical Science Change in Matter: P.CM.04.11

Physical Science Energy: P.EN.07.43

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

Life Science Evolution: L.EV.04.21, L.EV.04.22, L.EV.05.12

Earth Science Earth in Space & Time: E.ST.04.12, E.ST.04.21, E.ST.04.32

Life Science Ecosystem: L.EC.04.11, 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

**COORDINATING WITH BAY CITY PUBLIC SCHOOLS SCIENCE CURRICULUM****BENCHMARKS:**

Ecosystems 4-1, 4-2, 4-3, 4-4

Organization of Living Things 5-1, 5-3

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

Geographic Perspective

II.1—I.e.2

II.2—I.e.1, I.e.2, I.e.3, I.e.4

II.4—I.e.3, I.e.5

II.5—I.e.1

Economic Perspective

IV.2—I.e.1

