



School Program Description **Wetlands for Wood Ducks**

Level: 5th Grade

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

PROGRAM DESCRIPTION:

This program focuses on the wooded wetland bird, the wood duck. Wood ducks are one of the world's most beautiful birds. Students will discover how wood ducks were nearly wiped out by *market hunters* and habitat destruction in the early 1900's. They will also discover that Michigan's wood duck population has made a stunning comeback, thanks to the modern *sport hunters* and sportsmen organizations (like Ducks Unlimited and Michigan Duck Hunter's Association) who built, hung up, and maintained nest boxes made especially for the wood ducks. Students will be introduced to the wood duck and other Michigan waterfowl through a slide talk in the auditorium, and they will polish their skills of field identification through a Mystery Duck Lab. Next, students will discover some of the problems migratory waterfowl are facing today finding suitable habitat as they role-play a migrating wood duck. Students will then initiate a habitat improvement project by constructing wood duck nest boxes to help the wood ducks at our park and at a site near your school. One nest box per class is constructed, but additional nest boxes are available for the cost of the wood materials. In conclusion, the students take a hike out to the wetland to hang one box and to view migratory waterfowl staging on the park's ponds. Binoculars and spotting scope will be used for viewing. This program requires a 3-4 hour visit.

PROGRAM GOALS:

To help students appreciate and value Michigan's Wetland habitats and the wildlife they support..

To instill in students the spirit of stewardship of Michigan's remaining wetlands and the wildlife they support.

PROGRAM OBJECTIVES:

1. Students will be able to list three Michigan waterfowl and a corresponding field mark.
2. Students will be able to rank by size ducks, geese and swans.
3. Students will be able to correctly identify a waterfowl using field marks and a waterfowl field ID key.
4. Students will be able to label basic anatomical parts of a duck.
5. Students will be able to list the four components of an animal's habitat: food, water, shelter and space.
6. Students will be able to predict waterfowl population changes given specific alterations man has made in the wetlands.
7. Students will be able to explain why wetlands are important to waterfowl.
8. Students will be able to identify the wood duck male and female by sight and sound.
9. Students will help construct and hang a wood duck nest box.
10. Students will identify the modern "sport hunter" as playing the key role in the conservation success story of the Wood Duck.
11. Students will be able to differentiate between the "sport hunter" and the "market hunter".

PRE-VISIT SUGGESTIONS:

1. Have your students find pictures, artwork and craft representations of wood ducks. Assemble them on a table in your room for a display of "The World's Most Beautiful Duck".
2. Discuss the meaning of the words: stewardship, preservation, and conservation.

POST-VISIT SUGGESTIONS:

1. Have the students create a "Waterfowl of the Wetland" mural. Instruct each student to contribute a waterfowl which stages or breeds in Michigan's Wetland Habitat.
2. Assign each student a duck. Instruct each to research his/her duck and find out what that duck eats, what it looks like, where it nests, where it winters, how far it migrates, and population status. A good resource is Ducks Unlimited, at: www.ducks.org
3. Find out from Ducks Unlimited about other habitat improvement projects for waterfowl. Have your students construct one of them for the wetland near your school, examples are: mallard nesting cones, goose nesting tubs, and loon nesting rafts.
4. Keep track of where you hang your wood duck box on a map drawn by your students. Record changes to the habitat each year. Be sure you take your students to clean your box each year and add fresh cedar shavings. Assign students to start watching the box for signs of use in March. Keep a record of nesting structures that are used each year and by what.
5. Project WILD: *Oh Deer!* – students become "deer" and components of habitat; *Migration Headache* – students become ducks seeking wetland habitat; *No Water off a Duck's Back* – students conduct experiments using water, oil, eggs, soap, and feathers to discover negative consequences of pollution on duck populations; *Deadly Links* – adapt this activity to simulate the problem of lead poisoning in waterfowl; *Improving Wildlife Habitat in Your Community* – a plan of action for your wetland stewardship project; *My Kingdom for a Shelter* - students create replicas of wildlife shelters.
6. Project Aquatic WILD: *Migration Headache* – a little bit different version of the simulation game in students participate in this program; *Deadly Waters* – student become lab biologists examining water for pollutants; *March Munchers* – students simulate a marsh food web; *Something's Fishy Here* – students read and discuss a story inventing their own endings that lead to environmental action.
7. Project Learning Tree: *Trees as Habitats* – students explore other ways wildlife use trees; *Life on the Edge* – students create a public relations campaign for an animal which needs help.

COORDINATING WITH MICHIGAN SCIENCE Grade Level Content Expectations:

Science. Inquiry Process: S.IP.04.11, S.IP.04.12, S.IP.04.13, S.IP.04.14, S.IP.04.15, S.IP.04.16
 Science. Inquiry analysis & communication: S.IA.04.11, S.IA.04.12, S.IA.04.13, S.IA.04.14, S.IA.04.15, S.IA.04.15,
 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
 Life science Organization of Living Things: L.OL.04.16, L.OL.06.51, L.OL.06.52
 Life Science Heredity: L.HE.07.21
 Earth Science Earth System: E.ES.07.41
 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, 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 M.E.A.P. SOCIAL STUDIES CONTENT STANDARD BENCHMARKS:

Geographic Perspective
 II.2—I.e.1, I.e.2, I.e.4
 II.4=I.e.5
 II.5—I.e.1
 Economic Perspective
 IV.2—I.e.1

