



School Program Descriptions:

**Batty About Bats**

Level: 4<sup>th</sup> Grade

**PROGRAM DESCRIPTION:**

Students will be introduced to one of Michigan's most misunderstood (and beneficial) wetland creatures...the bat. Slides, simulation games, mounted bats, bat craft, bat habitat, improvement project (bat box construction), and a field excursion to look at the natural bat habitat are all employed in this program, which seeks to teach students about these amazing creatures and the environmental pressures they face due to man's inborn prejudices and our use of the land. This program starts out with an introductory slide program about the 9 species of bats, which are native to Michigan. The introduction includes information of the myths and legends, which have given man a negative attitude towards bats, and information on the problems bats are facing, how they are beneficial to man and some of the conservation practices man is using to help out the bats. The students then participate in a role-playing game, Bat Roost Scramble, which seeks to reinforce the need bats have for suitable roosting shelter and some of the problems they are facing. Students next are brought together for a Bat Review session in which they take a close look at a real, bat skeleton, then examine actual bat study skins. Three bat boxes are then built by the class, working in teams of 6-10 students. The bat boxes are made available for the school site and to participating land owners, who are cooperating in our Habitat for Bats Project. Adults who accompany the students may adopt a bat house or students may go home and have their parents stop by the visitor center to register for a bat house. Students then break for lunch. Following lunch, the students view an 18-minute video by the Pennsylvania DNR on bats. This video reinforces information from the morning sessions. Students then take a hike out into the wooded wetland to look at natural bat habitat and discuss places where bat boxes should be hung.

**PROGRAM GOALS:**

To dispel the fears and myths people hold against bats

To help students understand the importance of this group of bats, their basic needs and the ecological relationship between man, wildlife and wetlands

To demonstrate to students good conservation practices which benefit man and wildlife populations

**PROGRAM OBJECTIVES:**

1. Students will be able to list three reasons people do not like bats and say whether they are based on fact or fiction.
2. Students will be able to name two reasons why the bats are important to people.
3. Students will be able to describe how insect-eating bats catch their prey.
4. Students will be able to name two species of Michigan bats.
5. Students will be able to list two reasons why bat populations are declining.
6. Students will be able to name at least two ways man can help bats.
7. Students will be able to describe what to do if they find a bat in their house.

**PRE-VISIT SUGGESTIONS:**

1. Tell the students that they will be using black paint and that they should wear old clothes or paint shirts. They should be prepared for their outdoor excursion.
2. Get a copy of AIMES "Bats Incredible" activities booklet. Do one or more lessons in the booklet..
3. Discuss the meaning of the words: nocturnal, echo-location, habitat, cavern, carnivore, herbivore, omnivore, mammal, conservation, shelter.

**POST-VISIT SUGGESTIONS:**

1. Construct a bat mobile.
2. Play the game BAT-MOTH, found in Ranger Rick's Nature Scope AMAZING MAMMALS.
3. Do one of the activities provided in your post visit teacher's packet.
4. Assign each student a different species of bat to research and write a report about.
5. Have the class construct a book about what they have learned about Michigan Bats and share it with a younger grade.

**COORDINATING WITH THE MICHIGAN SCIENCE GRADE LEVEL CONTENT EXPECTATIONS:**

Science. Inquiry Process: S.IP04.11, S.IP.04.12, S.IP.04.13, S.IP.04.14, S.IP.04.15, S.IP.04.16, 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 & Communications: S.IA.02.14, S.IA.03.11, S.IA.03.12, S.IA.03.13, S.IA.04.11, S.IA.04.12, S.IA.04.13, S.IA.04.14, S.IA.04.15, 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.04.15, 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.04.16

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

Life Science. Ecosystems: L.EC.04.11, L.EC.04.21

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

Geographic Perspective

II.2—e.e.2, e.e.3, l.e.1

II.4—e.e.3, e.e.5

II.5—e.e.1, l.e.1

Economic Perspective

IV.1—e.e.2

Public Discourse and Decision Making

VI.1—e.e.1, e.e.2