

ATTENTION TEACHERS AND YOUTH GROUP LEADERS

The Ottawa County Parks Nature Education
Center is offering the
following programs this winter



To register your school or group, call 616-786-4847

Nature in Winter

January 17 through March 30, 2012 - Program length varies by grade.

Nature in Winter was designed by the Ottawa County Parks Nature Education Center's staff to provide a unique outdoor learning experience for any grade level. Through a series of interactive indoor/outdoor activities and open dialog, students will observe and experience the subtleties of winter at Hemlock Crossing.

Winter is a season of dormancy and protection. Plants and animals have special adaptations to survive the short days, cold temperatures, snow, and ice. Deciduous trees have prepared for winter by losing their leaves. Buds are all that remain on the twigs. Only the underground parts of many other plants remain alive leaving the dead skeletons of stems, seeds, and shriveled leaves visible above ground. Other plants depend on seeds that lay dormant awaiting longer days and warmer temperatures to grow.

Some warm-blooded animals have migrated south while others have special adaptations allowing them to survive. Reptiles, amphibians, insects, and other cold-blooded animals depend on a wide range of fascinating strategies to survive the winter. Snow and ice add another dimension to survival and the presence or absence of snow and ice has different effects on different plants and animals.

The **Nature in Winter** program is an indoor/outdoor program. Weather permitting, we will spend as much time outdoors as possible.

Recommended Program Lengths by Grade

K - 2 nd	1.5 hours
3 rd - 4 th	1.5 to 2 hours
5 th - 6 th	2 hours

Program Fees: Program fees for Nature in Winter are based on the number of students (number of naturalists needed) and the length of the program. Our goal is to have no more than 15 students per naturalist. A typical classroom of 30 students for a 1.5 hour program would cost \$50. Your exact fee will be determined when you register.

(See Other Side)

Skull Detectives

Offered year-round - Program Length is 2 hours - maximum 30 students

Skull Detectives is a new program for 3rd grade and older students funded by an Including Our Neighbors grant. This indoor program is designed to meet the needs of children of all abilities and it correlates with the Battle Creek Science Curriculum "Organisms Have Character." Students will be introduced to vertebrates and invertebrates as well as the five major groups of vertebrates using skeletons and pictures. Students will then work in small groups to observe, compare, and identify the skulls of 10 common Michigan mammals using an identification key. After identifying the skulls, a naturalist will facilitate closer observation of skulls to explore predator-prey relationships and adaptations of the mammals using a variety of instructional tools.

Cost for program at the NEC: \$60

Cost for the program in your school/facility: \$60 plus travel time and transportation costs.

Winter Puppet Program

January 17 through March 30, 2012 - Program length is 1 hour - maximum 30 students

This program for grades K-2 will explore how animals cope with winter's cold and snow. Students will discover why some birds migrate, which animal is a true hibernator, and how active animals survive in the winter. Following the program, there will be a 30 minute outdoor hike to look for animal activity and signs. Program offered at the NEC only. Cost is \$40.

- If you desire a program on a specific topic, please call the NEC staff about designing a custom program. We will do the best we can to accommodate your needs.
- The Gift Shop will not be open to students during field trips unless special arrangements are made in advance.

Our Approach to Our Outdoor Programs

The NEC's holistic approach to youth programs is that all children are born with an innate sense of wonder about the natural world. Small group sizes allow the NEC staff to use a variety of techniques to provide a positive outdoor experience for all students. Using all the senses to unlock the many textures, smells, sounds and sights of the natural world, encouraging self-discovery through inquiry, and nature interpretation form the basic core of our seasonal outdoor programs.

The year-round seasonal programs offered by the NEC are designed to meet the Michigan Department of Education's Grade Level Content Expectations for the Inquiry Process Standards under the Science Processes Discipline. The state inquiry standards include the same processes that scientists use to learn about the natural world such as asking questions, observing closely, and constructing reasonable explanations based on observations. NEC's interpretive staff will encourage students to use inquiry to develop their knowledge, understanding, and appreciation of the natural world. These inquiry based seasonal programs complement, enhance, and expand upon the concepts that your children are learning in your classroom. The NEC is the perfect place to provide students with direct experiences with their natural world.