**GRADE K-1**

**Color Hunt! ½-1 hr**

*Summary:* Students will examine the role of color in nature. What colors are most common? How does the color of an animal affect its ability to hide? Students will participate in several short sensory-oriented games.

*Michigan GLCE’s:* SCI: S.IP.00.11-14; S.IA.00.12-13 SCI., E.SE.00.11 SCI. 1st: S.IP.01.11-14; S.IA.01.12-14.

**Signs of Spring ½-1 hr**

*Summary:* We will explore the landscape, looking for signs of spring. Can we hear birds singing, or find buds on a tree? Students will also participate in a scavenger hunt.

*Michigan GLCE’s:* SCI: K: S.IP.00.11-14, S.IA.00.12-14, L.OL.00.11-12, E.SE.00.11. SCI 1st: S.IP.01.11-14; S.IA.01.12-14; L.OL.01.13; E.ES.01.11; E.SE.01.12.

**GRADE 2**

**Frog-tastic! 1½-2 hrs**

*Summary:* Students will participate in a variety of frog activities followed by a frog search and careful observation of discoveries. Students will describe the basic requirements, adaptations, and life cycle of frogs.

*Michigan GLCE’s:* SCI: S.IP.02.11-14; S.IA.02.12-14; E.FE.02.11.

**Plant Parts 1½-2 hrs**

*Summary:* Students will review the different parts of a plant through a variety of activities. They will also participate in a scavenger hunt and explore some of the ways we use plants.

*Michigan GLCE’s:* SCI: S.IP.02.11-12,14; S.IA.02.12-14; P.PM.02.12;L.OL.02.14, L.OL.02.22.

**GRADE 3**

**Insect Sampling 1½-2 hrs**

*Summary:* How do scientists sample insects? Are sampling methods different for terrestrial vs. aquatic insects? What are exotic, invasive species? Do we have any? What are the life cycles of different insects? How do insects find their mates? Students will answer these questions as they collect and study insects from terrestrial or aquatic habitats.

*Michigan GLCE’s:* SCI: S.IP.03.11-14; S.IA.03.11-14; S.RS.03.14-15, 18; L.OL.03.32, 42 ; L.EV.03.12; L.ES.03.52.

**What’s For Dinner? 1½-2 hrs**

*Summary:* Students will learn about predator/prey relationships and strategies animals have developed to avoid being eaten. Students will also explore why birds sing and how animals use their senses to communicate with each other.

*Michigan GLCE’s:* SCI: S.IP.03.11-12; S.IA.03.12-14; S.RS.03.11,18; L.OL.03.32; L.EV.03.12.

**GRADE 4**

**Wetland Ecology 1½-2 hrs**

*Summary:* Students will investigate wetlands by studying the soil, plants, and hydrology. Students will be able to describe the essential components of a wetland and classify them. They will also learn why wetlands are such important ecosystems.

*Michigan GLCE’s:* SCI: S.IP.04.11-16; S.IA.04.11-15; S.RS.04.11,14, 18; P.PM. 04.17 ; L.OL.04.15;

**Lichens 1½-2 hrs**

*Summary:* Lichens can be found on trees and rocks. Most students have noticed them, but do not realize they are both fungus and algae, forming a symbiotic relationship. We will search for lichens, classify them into different groups and learn why they are important in a forest ecosystem.

*Michigan GLCE’s:* SCI: S.IP.04.11-16; S.IA.04.11-15; S.RS.04.11,14,18; L.EC.04.11, 21.

**GRADE 5**

**What’s that Plant? 1½-2hrs**

*Summary:* Students will explore the forest around them, observing the different plants. How many of them can we identify? Are any of them useful to us? Students will practice identifying plants and participate in a scavenger hunt, looking for different plants.

*Michigan GLCE’s:* SCI: S.IP.05.11-14; S.IA.12-13; S.RS.05.12-13,17; L.HE.05.11; L.EV.05.21.

**Birds in Spring 1½-2 hrs**

*Summary:* Spring is a busy time for birds. They are returning from migration, mating and building nests. Students will listen and look for birds and record the data, practice using binoculars and learn the names of some common birds.

*Michigan GLCE’s:* SCI K: S.IP.00.11-14; S.IA.00.12-14 SCI., S.IP.01.11-14; S.IA.01.12-14; L.OL.01.13; L.ES.01.11, E.SE.01.12.

**GRADE 6**

**Pond Sampling 1½-2 hrs**

*Summary:* Students collect data to discover fauna, and flora of a pond. Students will also sample pH, dissolved oxygen, temperature, etc. We will also discuss ways to make sure we are not negatively impacting the delicate ecosystem of a pond.

*Michigan GLCE’s:* SCI: S.IP.06.11-16; S.IA.06.11-15; S.RS.06.11-14,17; L.EC.06.21,31-32,41.

**Invasive Species 1½-2 hrs**

*Summary:* What are invasive species? Are there any in the surrounding area? How can we slow down their invasion? Students will learn about some of the native, exotic and invasive species in our area and then investigate the surrounding area, looking for them.

*Michigan GLCE’s:* SCI: S.IP.06.11-15; S.IA.11-13,15; S.RS.06.13,17; L.OL.06.51; L.EC.06.21-23, 41-42

**GRADES 7-12**

- Native Plant Uses
- Lichens
- Invasive Species
- Birds of the Keweenaw
- Frogs as Bioindicators

A special field trip for grades 4-12, the Isle Royale Research Simulation, will be offered from April 11-22, at the Lake Linden School Forest. Students will act as scientists, searching for wolf-moose kill sites within the forest. They will interpret the data, which simulates the real data gathered from Isle Royale. Students will also investigate actual moose bones and learn more about the wolf and moose ecology on Isle Royale. See attached brochure for more information.
Spring Forest & Pond
Field Trip Information

Field trips are available at a NOMINAL FEE to schools in the CCISD and GOISD school districts!

The field trips will be $25 per classroom per field trip and a $10 fee for each additional classroom on the same day at the same location. The CCISD will invoice each school at the end of the semester for a total number of field trips per school per semester.

How to Schedule a Field Trip:
Teachers should fill out a “Field Trip Request Form.” These forms can be obtained through your school, from our website, or by calling us. On the form, you will need to select a program, preferred dates, and location. Your school can schedule multiple trips for the same date and possibly two field trips at the same time. After we receive your form, we will schedule your class and send you a confirmation letter regarding your field trip schedule.

School should provide:
First aid kit
Chaperone (parent/teacher) for every 10 students.

Center will provide:
A naturalist to lead your field trip.

Appropriate Dress:
The weather can be very unpredictable at this time of the year. Please have your students dress for the weather conditions! Some rubber boots will be available for field trips to a wetland or pond.

Logistics:
1) You will meet your presenter(s) at the field trip site (unless other arrangements are made).
2) If the school decides to cancel a field trip (in case of severe weather) please call Beth at 487-3341 two to three hours in advance!

Please discuss with students before trip:
1) Stay with your group leaders; don’t wander off.
2) Don’t litter (Bring a plastic bag to pick up litter!).
3) Respect the plants and animals in the forest. This is their home. Behave the way you would at your friend’s house.

Locations for Spring Field Trips:
- Michigan Tech. Recreational Trails – Sharon Ave
- Nara Chalet and Preserve
- Lake Linden-Hubbell School Forest
- McClain State Park – Bear Lake Trail
- Calumet Waterworks Park
- Black Creek Nature Sanctuary (near Calumet)
- Baraga School Forest (Pelkie)
- Maasto Hihto Ski Trails (Hancock)
- Ford Forestry Center (Alberta)
- Bessemer City Park (Bessemer)
- Norrie Park (Ironwood)
- Porcupine Mountain State Park
- Ottawa National Forest Visitor Center
- Lake Perrault (near Painesdale)
- Boston Pond (near Boston Location)
- Your school
- Suggest a site!

To request a field trip:
Download a request form from our website!
http://wupcenter.mtu.edu/education/fnftrip.htm

Send your field trip request form to:
Beth Squires
Western U.P. Center for Science, Mathematics & Environmental Education
105 Dillman Hall – Michigan Technological University
1400 Townsend Dr., Houghton, MI 49931-1295
Fax: 906-487-1620 Tel: 906-487-3341

For more information, contact:
Beth Squires, Outdoor Science Investigations
Spring 2011 Field Trip Coordinator
Email: eksquire@bhkfirst.org or call: 906-487-3341

The Western Upper Peninsula Center for Science, Mathematics & Environmental Education is a partnership of Copper Country & Gogebic-Ontonagon Intermediate School Districts and Michigan Technological University serving schools and communities in Houghton, Baraga, Gogebic, Ontonagon and Keweenaw Counties.

The Outdoor Science Investigation Field Trip Program is funded for five years by Jim and Mary Nelson’s foundation with their full annual distribution. The Nelsons share the Center’s commitment to providing opportunities for youth to spend time outdoors learning about the natural environment.

“Opening the door to a lifetime of wonder and exploration of the natural world.”