Michigan's Environmental Education Curriculum Support (MEECS)
Summer Institute

June 12-16, 2006
(may attend 1-5 days)

Michigan Tech
Ford Forestry Center
Alberta, Michigan

Michigan’s Environmental Education Curriculum Support (MEECS)
Western U.P. Center for Science, Mathematics & Environmental Education
Michigan Technological University
1400 Townsend Dr.
Houghton, MI 49931-1295
What is the Michigan Environmental Education Curriculum Support (MEECS) Project?
The Michigan Environmental Education Curriculum Support (MEECS) is a set of environmental education curriculum lessons and support materials, carefully designed to help teachers integrate environmental materials into their classrooms – materials that are Michigan-specific, balanced, science-based, and critically aligned to the Michigan curriculum framework standards and benchmarks. The materials were carefully developed with broad-based review, and teacher-tested in Michigan classrooms.

The MEECS curriculum consists of five foundation environmental education units for grades 4-9 which support Michigan’s science and social studies curriculum framework and benchmarks: Ecosystems & Biodiversity, Land-Use, Water Quality, Energy Resources, and Air Quality.

The Department of Environmental Quality (DEQ) and the Department of Education have worked hand in hand to develop sound science-based supplementary environmental education curriculum materials for use by Michigan educators. The curriculum units were carefully created by a team of experts, carefully reviewed by a variety of organizations, teachers, university faculty, environmental groups, business and industry trade associations, and government agencies. Then each curriculum unit was field-tested by 20 to 30 classroom teachers and thoroughly revised based on their feedback.

The curriculum units are distributed through teacher training workshops, conducted by trained facilitators, to help educators more easily understand and integrate the materials into their classrooms.
June 12-16, 2006 Sessions
9:00 am - 4:30 pm EST

Monday, June 12, 2006

**Ecosystems & Biodiversity** (Gr. 4-6; eight lessons)
Explores how organisms interact with their environment, ecosystem services, Michigan’s environmental timeline, and concepts related to biodiversity including “Michigan’s Web of Life” and “Biodiversity Study.” (Limit 20 participants)

Tuesday, June 13, 2006

**Land Use** (Gr. 4-5; eight lessons)
Teaches students how to analyze and understand issues regarding land use and the impacts people have on it with lessons from “Classifying Land Use” to “Solving Land Use Conflicts.” (Limit 20 participants)

Wednesday, June 14, 2006

**Energy Resources** (Gr. 7-9; eight lessons)
Addresses Michigan energy use and sources, how electricity is generated, renewable and non-renewable energy resources, energy conservation and efficiency, and environmental sustainability. Students keep an Energy Use Diary, compare Michigan and U.S. per capita energy consumption to energy use in other countries, and calculate their energy footprint. What is Michigan’s energy future? (Limit 20 participants)

Thursday, June 15, 2006

**Water Quality** (Gr. 6-8; nine lessons)
Students discover the essential role that water plays in Michigan’s economy and our lives; calculate how much water they use, investigate how land uses can impact water quality, explore Michigan watersheds and characteristics of healthy streams, analyze Michigan stream data, and investigate challenges to the Great Lakes. Students consider “How can we protect Michigan’s water quality and quantity?” and “Are the Great Lakes really great?” (Limit 20 participants)

Friday, June 16, 2006

**Air Quality** (Gr. 7-9; eight lessons)
Explores the sources, types and health effects of air pollutants in Michigan and examines current Michigan issues through lessons on: “Why Should We Be Concerned About Air Quality?” and “How Can We Tell What the Quality of Air is Today?” Also includes a series of lessons on global climate change and its potential effects on the Great Lakes. (Limit 20 participants)
**Location & Directions**

This institute will be take place in the beautiful forested setting of Michigan Tech University’s Ford Forestry Center located on the east side of US 41, 8 miles south of L’Anse, 40 miles south of Houghton, and 4 miles north of M-28 junction. The Ford Forestry Center is a 4,547 acre facility used for research and education. It is the historic site of the restored Ford lumber mill. The Ford Forestry Center offers lake, wetland and forest ecosystems for field activities, and many hiking/biking trails. Facilities include a modern 50-room dormitory, several historic homes, a dining hall, four classrooms, a computer lab, and a large conference room. The Center is one mile from the spectacular Canyon Falls of the Sturgeon River. To learn more: [http://forest.mtu.edu](http://forest.mtu.edu)

**FREE Classroom and Teacher Materials for Workshop Participants!**

Every Kit Includes:
- Binder of Lesson Plans
- Background Information for Teachers
- CD-ROM with electronic version of units, extension lessons, supplemental resources and materials, PowerPoints, videos and more.
- Hands-on Activities & Experiments
- Pre & Post Tests
- Colorful Posters & Worksheets

Some of the workshop will take place outdoors. Participants should come prepared for current weather conditions.

**SB-CEU’s & MTU Credit Available**

SB-CEU’s available at no charge. MTU graduate credit is available @ $214/credit for up to two credits. Participants receive one credit for every two days which they attend. The cost is the responsibility of the participant.

**Workshop Cost**

Free to all Michigan Teachers. Lunch and free curriculum for all workshops. Overnight Lodging available at additional cost at the Ford Forestry Center for those teachers who would like to attend multiple days. Lodging and meals are $45/day for a double which includes dinner and breakfast. Contact Gail Weisinger ([mtuffcgw@mtu.edu](mailto:mtuffcgw@mtu.edu)) to make reservations.

**Registration**

Send completed registration form to: Loret Roberts at [loret@copperisd.org](mailto:loret@copperisd.org) or call (906) 482-0331.

**For More Information**

To find out more about the workshop, contact Shawn Oppliger at shawn@copperisd.org or call (906)482-0331; or visit the Western UP Center’s website: [http://wupcenter.mtu.edu](http://wupcenter.mtu.edu).
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June 12-16, 2006

REGISTRATION FORM
Registration deadline is Wednesday, May 31, 2006

Name

Address

School/Other Affiliation

Phone

Email

Grade(s) Taught
Subject(s) Taught

Full Day: 9:00 AM—4:30 PM

Monday, June 12, 2006
_____ Ecosystems & Biodiversity

Tuesday, June 13, 2006
_____ Land Use

Wednesday, June 14, 2006
_____ Energy Resources

Thursday, June 15, 2006
_____ Water Quality

Friday, June 16, 2006
_____ Air Quality

Send Registration form to:
Loret Roberts
Western UP Center for Science, Math & Env. Education
P.O. Box 270
Hancock, MI 49930
Fax: 906-482-5031   Email: loret@copperisd.org