

Western Upper Peninsula Center for Science, Mathematics and Environmental Education

Monthly Update for Copper Country ISD Board and Superintendent
by Shawn Oppliger, Director and Joan Chadde, Education Program Coordinator
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MASB Education Excellence Award

The Western UP Center received the Education Excellence Award for their Torch Lake Project. Since the Fall of 2003, high school classes at Calumet, Chassell, Hancock, Dollar Bay-Tamarack City, and Lake Linden-Hubbell High Schools have been assisting the US Environmental Protection Agency to monitor the recovery of five locations within the Torch Lake Superfund Area. One hundred years of copper mining in the Keweenaw had left portions of the shorelines of Torch Lake, Calumet Lake and Lake Superior covered by millions of tons of stamp sand (coarse black crushed rock) creating a hot, dry environment inhospitable to plant and animal life, and exposed to wind and water erosion. With assistance from the U.S. Environmental Protection Agency Superfund Division, U.S. Fish & Wildlife Service, and Western Upper Peninsula Center for Science, Mathematics and Environmental Education, teachers and students tackled the job of monitoring recovery following the EPA's \$15 million remediation project.

Pollution Prevention Grant

The Western UP Center received a grant from the Michigan Department of Environmental Quality to implement the *Modeling Proper Chemical Use in Rural Communities* project. This project has three goals for the participating districts:

- All participating districts will create and maintain a comprehensive inventory of chemicals used in science, arts and industrial arts instruction and maintenance.
- All districts will work collaboratively with MTU to remove chemical waste through a coordinated pickup.
- Staff in participating districts will practice proper chemical storage, hygiene and handling and will use less toxic or non-toxic alternatives for instruction, custodial, maintenance and grounds keeping when possible.

Participating districts are CCISD, GOISD, Ironwood, L'Anse, Adams, Chassell, Dollar Bay- Tamarack City, Hancock, Stanton, Houghton, Lake Linden- Hubbell, Baraga, Bessemer, and C-L-K.

Michigan Science Teachers Conference & National Science Teachers Association Conference

Center staff attended and made presentations at two professional education conferences in March and April. At Michigan Science Teachers Conference in Lansing on March 3-4, Joan Chadde conducted a 4-hour workshop on the *MEECS Water Quality Unit* and presentations on the Center's *Family Science Night Program*, and *University/School District Partnership (between MTU & the CCISD/GOISD School Districts) Provides Enhanced Math & Science Programming for K-12 Teachers & Students*. At the National Science Teachers Association Conference in Anaheim, CA on April 5-8, Joan Chadde presented on the *MEECS Water Quality Unit, Pre-School Science Education*, and the Center's *After-School Math & Science Enrichment Program*. Travel was funded by the MDEQ grant.

Great Lakes Aquarium Delivers Assemblies & Classroom Programs to CCISD & GOISD Students

The Center coordinated the visit of the Great Lakes Aquarium of Duluth, MN to the western U.P. to conduct assemblies and classroom programs from April 3-7 at nine elementary schools in Houghton, Baraga, and Gogebic counties reaching more than 1700 K-8 students in this three-county area. These programs engage students in learning about the cultural, geologic and ecological history of Lake Superior in a fun and memorable fashion. Classroom presentations focused on Lake Superior geology, the water cycle, and animals from the Great Lakes area. In addition, 14 MTU students in the Chemical Engineering Honor Society presented 14 classroom programs to students in K-6 at Chassell School on March 21 & 23 (see Gazette article 3/28/06).

Funding for Limnological Investigations Aboard MTU's Agassiz Research Vessel for Students

The Center received \$2500 from the Michigan Space Grant Consortium and \$2,000 from MTU to provide a 70% subsidy to the cost of 2-hour scientist-led investigations aboard the *Agassiz* for middle/high school classes and community residents from May-October 2006. The usual cost of \$400 will be reduced to \$150 with the grant, and fund a total of twelve cruises. The goal is to enhance middle/high school students' interest in real-world applications of earth and life sciences.