



# Minnesota Project Learning Tree Educator Update

May 2008

*May is Minnesota Arbor Month*

E-newsletter for educators who have attended a Project Learning Tree workshop

## NEWS

### Back from the Deep South

Minnesota PLT staff attended the International PLT Coordinators' Conference earlier this month in Jackson, Mississippi. In comparing Minnesota's state program with other states, we're doing pretty well... but we could do better! The strength of our program is the excellent teachers who attend workshops and use PLT with their students. Thank y'all for all y'all's support!

### Contraband in the Classroom?

Did you know it is illegal to collect nests, feathers, eggs, and other bird parts from the wild to use in the classroom? This is because most birds in Minnesota are migratory or protected and fall under the protection of the U.S. Fish and Wildlife Service's "Migratory Bird Treaty Act." To collect these items, you must possess **both** a State and a Federal Salvage permit.

1. State Permit Instructions: Contact the Minnesota Department of Natural Resources (DNR) at 651-259-5203 to apply for a Wildlife Salvage Permit. No fee.
2. Federal Permit Instructions: Go to [www.fws.gov/permits/mbpermits/birdbasics.html](http://www.fws.gov/permits/mbpermits/birdbasics.html) to download the Special Purpose - Salvage form and mail it in. (There may be a \$50 - \$100 permit fee.)



Neither the State nor the Federal permit covers the salvage of endangered or threatened species. Check with the U.S. Fish & Wildlife Service and the DNR before accepting animal carcasses or parts from other parties. Use this as a "teachable moment" to ensure that wanton collection of wild birds don't threaten the health of important species. Keep your permits in your classroom, and you're covered. If you have questions, contact your local DNR Conservation Officer [www.mndnr.gov/enforcement](http://www.mndnr.gov/enforcement)

### Minnesota Minerals Education Workshop

Don't miss the Minnesota DNR's once-a-year, 3-day Minerals workshop—August 5-7, in Ely! This is what you get for \$30: all breakfasts and lunches, all materials, and transportation to all field trip sites. Field trips will feature: Ely greenstone, Lake Vermilion formations, the Mud Creek fault zone, Soudan iron formation, and an underground trip to the Soudan mine. One optional graduate continuing education credit is available from the University of Minnesota. There are some scholarships available to help Minnesota PLT Educator Update

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Minnesota 5<sup>th</sup> grade teacher, Rob Marohn, poses with his "National PLT Outstanding Educator of the Year" award at the PLT conference with National PLT director, Kathy McGlauflin (left), and Minnesota PLT coordinator Laura Duffey (right).



Wear hard hats and look at rocks!

pay for the workshop registration fee, graduate tuition fees, and travel expenses. Applications are due June 13 and awards will be made by June 30. Application forms are on: [www.mndnr.gov/education/geology/workshop/](http://www.mndnr.gov/education/geology/workshop/)

## FREE STUFF

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### Do you write in the margins of your PLT guide?

Dr. John Guyton, a Wildlife and Fisheries associate professor of Extension at Mississippi State University does! John has created a fun, quirky booklet titled *Marginalia*. This booklet contains fun stories and extensions correlated to ALL the PLT activities. Go to [www.mndnr.gov/plt](http://www.mndnr.gov/plt), click on "curriculum," and scroll down to "Marginalia."

*Here's an excerpt!*

*PLT Activity #8 "The Forest of S.T. Shrew"*

*I guess this entire story is my response. I can certainly identify with Jackie when she said, "I wanted to stop and talk to them..." As a demonstration, hold a millipede loosely in a paper towel and shake, then note the pleasant almond smell. This odor is toxic to beetles, shrews, and other predators. It was discovered in the late 1800s that in a jar, the millipede's cyanide defensive chemical will kill other insects.*



### Schoolyard Geology

(Resource for "Schoolyard Safari" PLT PreK-8 Activity #46)

How do you to conduct a schoolyard geologic field trip? Activities include mapping a schoolyard using the U.S. Geologic Survey's "The National Map," which locates and identifies rocks, and learning geologic concepts such as glacial striations, layers, and sinkholes. <http://education.usgs.gov/schoolyard>

### What's Invading Your School Yard or Forest?

(Resource for "Invasive Species," PLT PreK-8 Activity #12)

Get a short, full-color booklet of the most serious invasive plant species that threaten the health of Minnesota ecosystems. The booklet, "Minnesota's Forest Invaders," is free as a PDF on [www.mlep.org/Documents/InvasiveSpeciesInsert.pdf](http://www.mlep.org/Documents/InvasiveSpeciesInsert.pdf)

### What Does a Forester, Map-Maker, or Interpreter Do?

(Resource for "Who Works in This Forest?" PLT PreK-8 Activity #34)

If you work with high school or college level students, show them this 10-minute "You Tube" video. Produced by the Minnesota Department of Natural Resources, this video is a quick overview on natural resources careers: naturalists, conservation officers, planners, biologists, geologists, map-makers, policy-makers, educators, engineers, research scientists, and foresters. [www.dnr.state.mn.us/jobs/video.html](http://www.dnr.state.mn.us/jobs/video.html)

### Free Environmental Toolkit

Those of you who teach preschool children know that, often, you have to teach parents, too! Hennepin County and Community POWER made an on-line environmental toolkit for early childhood family education programs. The toolkit will help ECFE educators to engage families in creating a healthier environment in the home by reducing waste, properly

disposing of hazardous items, and rethinking reuse and recycling. This toolkit can be downloaded at [www.greenguardian.com/ECFEtoolkit](http://www.greenguardian.com/ECFEtoolkit).

A similar tool kit for congregations is available at [www.greenguardian.com/c3toolkit](http://www.greenguardian.com/c3toolkit)

### Free 1-Year Subscription to YES! Magazine

YES! magazine is an ad-free quarterly journal published by the Positive Futures Network, an independent, nonprofit organization supporting people's active engagement in creating a just, sustainable, and compassionate world. Our stories are about real people making positive change in the real world. They are stories of hope that are especially inspiring to young people. YES! can provide K-12 classroom teachers and college faculty with a one-year introductory subscription at no cost. <http://eelink.net/cgi-bin/ee-link/newclick/4530952>

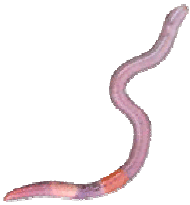
### Free Teacher's Kit and Chance to Win \$200 in Random Drawing

The CAPCO Classroom Aerosol Adventure Kit contains all of the materials necessary to teach your students about the Earth's protective upper ozone layer, CFCs, and aerosol products in a fun and active way. The kit includes a teacher's guide, classroom activities, experiments, homework assignments, and the DVD, "Another Awesome Aerosol Adventure," created by the makers of "Beakman's World." It is a perfect compliment to standard teaching materials and an excellent way to meet state SOLs. The kit is free and can be ordered or downloaded from CAPCO's Web site.

<http://eelink.net/cgi-bin/ee-link/newclick/4530954>

## JUST FOR FUN

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Earthworms were introduced into the United States by European settlers as eggs (cocoons) on plant roots or in clods on horses' hoofs. Native earthworms in the south can't survive northern winters and are not beneficial to plants. An acre of land may contain 50,000 earthworms. Earthworms plow the soil by creating tunnels through which water and air travel, and they enrich agricultural soils of the United States and Canada by leaving nutrients in soil and by depositing castings on the soil surface. Consisting of 70% protein, they are a valued food for birds. Although beneficial to agriculture, they are harmful to forests by destroying humus necessary for understory growth and tree reproduction. Earthworms produce both sperm and eggs. They have five hearts but no lungs. They move by anchoring the head end with extended bristles and pulling the rest of the body forward, then extending bristles at the lower body while pushing the head end forward. They have more than 100 body segments.

Pine trees have no flowers or fruits, but like other members of the pine family, they produce seeds wedged between scales of a woody cone. Cones are named because of their "cone" shape. Because the cone produces seeds, it is a female cone; the male counterpart is not a cone and is known botanically as a **strobilus**, which produces the wind-blown pollen. Seeds have wings to enable them to be dispersed by wind. Learn more about pinecones from the [www.lovett-pinetum.org/pinecones.htm](http://www.lovett-pinetum.org/pinecones.htm)



# UPCOMING ENVIRONMENTAL EDUCATION WORKSHOPS

from the Minnesota Department of Natural Resources

Also check the workshop calendar [www.mndnr.gov/education/teachers/calendar](http://www.mndnr.gov/education/teachers/calendar)



## Projects WET and WILD Aquatic for K-8

June 26, 2008

Carlos Avery Field Station, Forest Lake

To register, contact Jan Welsh at

[jan.welsh@dnr.state.mn.us](mailto:jan.welsh@dnr.state.mn.us) or 651-982-9720 x5

## **SUMMER INSTITUTE!** Projects WILD/PLT/WET for Middle and High School Educators

July 15-18, 2008; check in is 12:00 noon on 7/15

Vermilion Community College, Ely, Minnesota

This workshop will examine methods to incorporate environmental education (EE) into your daily middle and high school classroom routine and provide hands-on examples of proven activities. Expert speakers from wildlife, forestry, and the water sciences will lead field trips each day. Includes trips to the Soudan Underground Mine and the International Wolf Center. Using background information and field experiments, you will gain knowledge and experience to increase your comfort in EE.

**Cost: \$225.** All participants get:

- Four days room and board (dinner on 7/17 on own)
- *Project WET* (water education) *K-12 Activity Guide*
- *Project WILD* (wildlife education) *K-12 Activity Guide*
- *Project Learning Tree* (forestry & EE) *High School Modules*
- *Project WILD Aquatic* (aquatic wildlife education) *Activity Guide*
- A certificate for 12 CEUs
- Optional Saturday canoe trip into the Boundary Waters Canoe Area Wilderness (July 19)
- **Two optional graduate credits** from Hamline University (\$224)

Registration forms are on

[www.mndnr.gov/education/teachers/calendar](http://www.mndnr.gov/education/teachers/calendar)

## Other Workshops

### Worm Workshops

Exotic earthworms in Minnesota are a very serious threat to the health of our forests. Visit the worm workshops calendar on [www.nrri.umn.edu/worms/](http://www.nrri.umn.edu/worms/)

### Teaching in the Outdoor Classroom

Prairie Wetlands Learning Center, Fergus Falls  
June 9 – 13 (8:00 a.m. – 4:00 p.m. each day)  
OR

June 16 (12:30 p.m. – 4:30 p.m.)

Workshop participants may teach any grade level and will have the opportunity to apply their new skills each day with a small group of interested students. Participants receive 30 hours of clock hour instruction, one graduate credit (optional; fee), and other workshop materials. Dormitory lodging is available for \$15 per night. Class teachers Dave Ellis and Chip McAllister; and U.S. Fish and Wildlife Service Instructional Systems Specialist Molly Stoddard and Environmental Education Specialist Teresa Jaskiewicz.

Call Molly Stoddard at (218) 736-0938 x14, or e-mail [molly\\_stoddard@fws.gov](mailto:molly_stoddard@fws.gov).

### Minnesota Master Naturalists Training Course

Prairie Wetlands Learning Center, Fergus Falls  
Tuesdays & Thursdays June 19 through July 24 (6:00 pm – 8:30 pm) (No class July 3); AND Saturday, June 28 and Saturday, July 12 field trips (All day)

Graduates are expected to complete 40 hours of volunteer service per year to be considered active Master Naturalists.

Participants receive course manuals and supplies. Cost: \$200.00. Scholarships are available. [www.minnesotamasternaturalist.org](http://www.minnesotamasternaturalist.org)  
Lead Instructor: Steve Henry, Shoreland Specialist, Otter Tail County.

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