



# Minnesota Project Learning Tree Educator Update

November 2007

*Happy Thanksgiving!*

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

## NEWS

### PLT Presents: Update on Environmental Education for Early Childhood

October was a busy month for busy mouths! The *Minnesota PLT Early Childhood Supplement* has been dangled in front of hundreds of educators attending these conferences: Education Minnesota, Minnesota Homeschoolers Association, Head Start Region V, the Midwest Environmental Education Conference, and the University of Scouting.

### Did You Miss the Oct. 31 Deadline?

If you missed the fall deadline for getting a PLT GreenWorks! grant, never fear! The next grant deadline is April 30. \$250 - \$5,000 grants are available. I'll send out more on this later. In the meantime, visit [http://www.plt.org/cms/pages/47\\_191\\_0.html](http://www.plt.org/cms/pages/47_191_0.html)



### Congratulations to TWO PLT "Outstanding Educator of the Year" Nominees

Minnesota PLT has nominated two teachers for the NATIONAL Project Learning Tree "Outstanding Educator of the Year" Award. If they are selected for this prestigious award, they get an all-expenses-paid trip to Jackson, Mississippi for the annual PLT National Conference, a chance to mingle with some of the country's top environmental educators, and be the star attraction at the conference's star-studded awards ceremony.

Erica Heath, 7<sup>th</sup> grade science teacher, Brooklyn Park Middle School, is also a PLT facilitator who has stepped up to teach at several PLT workshops, has attended the Temperate Forest Foundation teacher tour, and does an excellent job adjusting PLT activities to her own classroom of inner-city students, daily!

As the Bay View School Forest Coordinator and 5<sup>th</sup> grade teacher at Bay View Elementary School in Duluth, Rob Marohn, uses PLT to encourage fellow teachers to use PLT and other environmental education activities. Under Rob's



Rob Marohn, at ease

direction, the school now has classroom sets of snowshoes, maple-syruping tools, bird-feeding stations, and an orienteering route.

### The Swingset vs. The Woods (or ditch, or ravine)

If you are tuning in to the movement to naturalize school and home yards, may I recommend this article: "Natural Play Environments: Prescription for the Future"? It contains references to good research on how **frequent, unstructured** time in nature benefits kids. I also liked the tips for naturalizing landscapes on the cheap. One of the best articles I've read all month!

<http://www.landscapeonline.com/research/article/9556>



A young Jamie Duffey playing with logs.

## GRANTS

### **More Kids in the Woods**

Deadline: late January

Source: U.S. Forest Service

The RFP should be out in mid-late November with proposals due in 60 days. The minimum funding request is \$10,000 with no max. This years top funded project was around \$55,000 Want to see what was funded last year?

<http://www.fs.fed.us/recreation/programs/woods/index.shtml>



## FREE STUFF

### **FREE Minnesota's Wild And Rare (Wildlife) Coloring Book**

From the DNR. <http://www.dnr.state.mn.us/wildandrare/index.html>

**FREE "Geology of Minnesota" Teachers' Guide** Developed by the Minnesota DNR for teachers. No activities, but a great basic "primer" on Minnesota geology, soils, glacial history, etc. [www.dnr.state.mn.us/lands\\_minerals/geologyhandbook.pdf](http://www.dnr.state.mn.us/lands_minerals/geologyhandbook.pdf)

### **FREE "Firewise Communities: Reducing the Risk of Wildfire" Curriculum for Middle/High School**

The *Firewise Communities: Reducing the Risk of Wildfire* curriculum was created for educators who would like to explore geography and new technologies while conducting a Firewise Assessment with 6th to 12th grade youth. It consists of core lessons that lead students through the basic steps of the assessment process utilizing aerial photos, Geographic Information Systems (GIS) and Global Positioning Systems (GPS). Also included are optional lessons for further exploration. The curriculum is correlated to national and Minnesota Academic Standards in geography and science.

[http://www.dnr.state.mn.us/education/wildfire/firewise\\_communityproject.html](http://www.dnr.state.mn.us/education/wildfire/firewise_communityproject.html)

## RESOURCES FOR PLT ACTIVITIES

### **New Stuff to Help You Teach PLT Activities**

Additional resources, student pages, articles, and even pod casts are available for most activities in the PreK-8 Activity Guide and all the high school modules!

<http://www.dnr.state.mn.us/plt/curriculum.html>

For example:

- *PreK-8's "The Global Climate"* (carbon cycle game/activity)
- *PreK-8's "Invasive Species"* (videos and pod casts)
- *Biodiversity's "Global Invaders"* (videos and pod casts)
- *Forest Ecology's "Home Sweet Home"* (videos and pod casts)
- *Biodiversity's "Potatoes, Pesticides, and Biodiversity"* (Home Grown Wisconsin Potatoes initiative)
- *Solid Waste* (photography)

### **Why Do Minnesota Forests Look Like That?**

The University of Minnesota Extension Service operates a terrific Web site for folks interested in forests. This is one of my favorite sources for finding photos of Minnesota trees and forests, examples of succession, and easy-to-understand articles on basic forestry topics.

<http://www.myminnesotawoods.umn.edu> Great resource for *PLT PreK-8's "400-Acre Woods," "Forest for the Trees,"* and *"Every Tree For Itself,"* and any activity in the *Forest Ecology* module.

### **Earth Conservation Plan (ECP) Carbon and Lifestyle Calculator**

Participants can take a three-minute test to determine your contribution to global climate change. Upon completion of the test, participants can then make pledges to reduce their impact and score. With each change and commitment into their everyday lives, scores are recalculated. The ECP calculator is the first carbon calculator to allow its users to save and track each calculation and pledge, so participants can refer to the data at any time – while tracking their personal improvements over time. <http://www.earthlab.com/esurance>

Resource for PreK-8's "Renewable or Not", "Plant a Tree," "Reduce, Reuse, Recycle," "Energy Sleuths," "Waste Watchers," "A Peek at Packaging," "The Global Climate," and "In the Driver's Seat."

### **Why Writing is Important**

Get your students excited about the power of literature and writing. Let them watch this one-woman show portraying Rachel Carson, as if she were still alive and speaking directly to you. You can see it at <http://www.pbs.org/moyers/journal/09212007/watch2.html>  
Excellent resource for PLT PreK-8's "In the Good Old Days."

### **A Web Site Your Kids Can Play With**

Topics include photosynthesis, forest change, measuring trees, and urban sprawl. Produced by the state of Vermont 4-H for elementary/middle school students.  
<http://www.ext.vt.edu/resources/4h/virtualforest/index.html>

## **JUST FOR FUN**

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### **Move Bird Feeders Closer to Your Window**

Did you know that up to 100 million birds are killed each year by collisions with windows? You can reduce bird deaths by moving your feeders CLOSER to your windows! When feeders are placed within three feet of a window (or more than 30 feet away) the number of window strike deaths is much lower. When feeders are close to a window, a bird leaving the feeder isn't going fast enough to do harm if it hits the window. Source: MN-DNR



### **Your Diet Impacts the Environment More Than Your Car**

13 percent = The percentage of greenhouse gases created by all trucks, SUVs, cars, airplanes, trains and other transportation.

18 percent = The amount of greenhouse gases created by livestock production.

*Moral of the story:* If you are an average U.S. meat eater, reducing your meat consumption to 2 ounces per day is roughly equivalent to doubling your vehicle's fuel efficiency, in terms of greenhouse gas reduction.

Source: United Nations

**See pages 4 - 6: UPCOMING WORKSHOPS**

**Minnesota PLT Web Site: [www.dnr.state.mn.us/plt](http://www.dnr.state.mn.us/plt)**

**National PLT Web Site: [www.plt.org](http://www.plt.org)**

**Minnesota PLT coordinator: [laura.duffey@dnr.state.mn.us](mailto:laura.duffey@dnr.state.mn.us)**

# UPCOMING ENVIRONMENTAL EDUCATION WORKSHOPS

Check also the workshop calendar [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)



## How To Teach Forestry To Kids – Project Learning Tree

**Dec. 13, 2007**, 9:00 a.m. – 3:30 p.m., Forest History Center, Grand Rapids

**Jan. 23, 2008**, 9:00 a.m. – 3:30 p.m., Bemidji State Park Visitor Center, Bemidji

**Feb. 27, 2008**, 9:00 a.m. – 3:30 p.m., Heintz Center, Rochester

This workshop is designed for **Foresters & Natural Resources Professionals** who do field days and occasional learning with kids. This workshop features fun, hands-on activities designed to teach how to appeal to different learning styles, improve field day activities, how to work with teachers, use age-appropriate activities, and more.

**FREE to DNR staff; \$20 for others.**

Participants get:

- *PLT PreK-8 Activity Guide*
- Lunch
- Optional: Five (5) Society of American Foresters CFE contact hours
- Optional: One (1) Woodland Advisor WAE13 elective credit

Registration forms are on [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)



Tree ID techniques!

## Project Learning Tree and MinnAqua for Grade K-8 Educators

**Jan. 22, 2008** 8:00 a.m. – 4:00 p.m.

**Valley Branch Environmental Learning Center, Afton**

Designed to help St. Paul School district educators integrate MinnAqua and PLT into their curricula. This fun, hands-on workshop will introduce Project Learning Tree and MinnAqua at the beautiful Valley Branch ELC!

**Cost: \$20** (St. Paul School District teachers only); or \$50 all others

Participants get:

- Lunch
- MinnAqua's *Fishing: Get Into the Habitat!* Activity Guide (39 lessons)
- *Project Learning Tree* (forestry and environmental education) *PreK-8 Activity Guide* (96 lessons)
- Other environmental education teaching materials from the Minnesota Dept. of Natural Resources
- A certificate for 7 continuing education units (CEUs)

Registration forms are on [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)

## Project Learning Tree for Early Childhood Educators

February 2, 2008 9:00 am. – 3:30 pm

Proctor Community Center (near Duluth)

Get great materials designed by experts in early childhood and environmental education! Learn fun, hands-on activities to do with young children to get them engaged in their environment at their level, and at their pace. Environmental education and young children is a natural fit!

**Cost: \$35**

Participants get:

- *Project Learning Tree* (forestry and environmental education) *PreK-8 Activity Guide*
- *Minnesota Project Learning Tree Early Childhood Supplement*
- *Natural Wonders: A Guide to Early Childhood for Environmental Educators*
- Other environmental education teaching materials
- A certificate for 6 continuing education units



Taking outdoor pictures, preschool-style

Registration forms are on [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)

## Invasive Species Workshop (Project Learning Tree) for Middle/High School Educators

February 8, 2008 8:30 a.m. – 3:30 p.m.

Minnesota Pollution Control Agency Building/Dept. of Natural Resources Building, St. Paul

Want a fun, effective way to teach about invasive species to middle and high school students that engages computer technology, mapping, math and population analysis, and journaling? Val Cervenka, DNR forest health expert, will explain the important invasive species that every citizen should know about. Then, learn how to use WISE (<http://wise.berkeley.edu>) as a tool for teaching a variety of science subjects to your students. Optional: Participants may purchase the PLT preK-8 Activity Guide for an additional \$20).

**Cost: \$15** Participants get:

- Project Learning Tree high school module
- Access to the WISE computer platform (developed by U.C. Berkeley)
- Lunch
- Other environmental education teaching materials
- A certificate for 6 continuing education units (CEUs)
- **Substitute stipends** are available for the first 15 people who ask for them! (Up to \$125)



Registration forms are on [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)

## Project Learning Tree, Project WET, and Project WILD for Grade K-8 Educators

Feb. 29 and Mar. 1 2008, 4:00 pm – 8:00 pm and 9:00 am – 3:00 pm

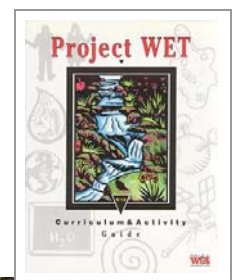
Wargo Nature Center, Lino Lakes, Minnesota

Incorporate environmental education into your existing curricula. Get all three "Projects" at the same time, while engaging in fun, hands-on indoor and outdoor learning activities designed by and for educators.

**Cost: \$70**

Participants get:

- *Project WET* (water education) *K-12 Activity Guide*
- *Project WILD* (wildlife education) *K-12 Activity Guide*
- *Project Learning Tree* (forestry & EE) *PreK-8 Activity Guide*
- *Project WILD Aquatic* (aquatic wildlife education) Activity Guide
- A certificate for 12 continuing education units (CEUs)
- Optional **graduate credit** from Hamline University (\$110)



Registration forms are on [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)

## Project Learning Tree for Grade K-8 Educators

March 8, 2008 8:00 a.m. – 4:00 p.m.

Forest History Center, Grand Rapids, MN

Get great forestry and environmental education lessons that engage students in math, science, social studies and language arts. All activities are correlated to Minnesota Academic standards. Participants will learn through fun field activities and hands-on lessons at the beautiful Forest History Center!

**Cost: \$25**

Participants get:

- Lunch
- *Project Learning Tree* (forestry and environmental education) *PreK-8 Activity Guide*
- Other great environmental education teaching materials
- A certificate for 7 continuing education units (CEUs)

Registration forms are on [www.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)



The blacksmith shop at the Forest History Center

## 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 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. Past workshops have included a field trip in to the Soudan Underground Mine. Using background information & field experiments, you will gain knowledge & 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 continuing education units (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.dnr.state.mn.us/education/teachers/calendar](http://www.dnr.state.mn.us/education/teachers/calendar)



Outdoor activities such as journaling, field study, canoeing, picnics, and more, are part of this fun summer

## OTHER UPCOMING EVENTS

### Minnesota Environmental Education Week is April 13-19, 2008

Governor Pawlenty has announced Minnesota will recognize for the first time National Environmental Education Week. The purpose is for educators to raise awareness about the benefits of environmental education. Tips are on [http://www.eeweek.org/EE\\_benefits.html](http://www.eeweek.org/EE_benefits.html)

### Minnesota School Forest Conference Is February 29 – March 1, 2008

**Cloquet Forestry Center (University of Minnesota), Cloquet**

This fun conference is tailor-made for ONLY educators and staff who work in schools that have official DNR "School Forests." Substitute stipends are available. A full-length Project Learning Tree certification workshop will be offered on March 1. For more information on this conference, contact Amy Kay Kerber, [amykay.kerber@dnr.state.mn.us](mailto:amykay.kerber@dnr.state.mn.us)