



# Minnesota Project Learning Tree Educator Update

September 2008

*There are three good reasons to be a teacher – June, July August*

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

## NEWS

### No Child Left Inside (NCLI) Act of 2008 Vote

This act is separate from the NCLB reauthorization. NCLI will require and support (through grants and training) the



teaching of environmental education (EE) along with other content areas like math and reading. As of this writing, our state legislators are scheduled to vote on the NCLI Act (H.R. 3036 and S.1981) this week. If the NCLI Act passes, here's what it will do for you:

1. Every state will need to adopt a state environmental literacy plan (Title II)
2. Every state must provide grants for enhancing education through EE.
3. A national EE grant program will be established to help build national capacity (Title V).

The NCLI Web site asks educators and citizens to contact congressional representatives to express their support for EE.

[www.cbf.org/site/PageServer?pagename=act\\_sub\\_actioncenter\\_federal\\_nclb](http://www.cbf.org/site/PageServer?pagename=act_sub_actioncenter_federal_nclb)

### Looking for Service Learning Opportunities?

The DNR has several service learning opportunities for kids, scouts, parents, and adults. The "Volunteer" page is on [www.dnr.state.mn.us/volunteering](http://www.dnr.state.mn.us/volunteering). Projects are located all over the state. Here's an excerpt of just some of the jobs for DNR volunteers:

Minnesota PLT Educator Update

[laura.duffey@dnr.state.mn.us](mailto:laura.duffey@dnr.state.mn.us)

- Making Tree Cookies (for yours truly, PLT)
- MinnAqua Fishing Clinic volunteers
- Prairie seed collection and buckthorn removal projects at Scientific and Natural Areas

### New Biomes Poster

A biome is a term used to describe a biological community. Usually, biomes occur over large areas and include many similar plant communities and the animals that live in them. The DNR has created a beautiful poster depicting Minnesota's four biomes: The Tallgrass Aspen Parkland, Coniferous Forest, Deciduous Forest, and Prairie Grassland. Check out the accompanying Web site at [www.mndnr.gov/biomes](http://www.mndnr.gov/biomes) and get a FREE poster mailed to you from the DNR Information Center by calling 651-296-6257 or 888-646-6367, [info@dnr.state.mn.us](mailto:info@dnr.state.mn.us)



September 2008



### Summer Workshop at Vermilion Community College

Every summer PLT, WILD, and WET hold

a institute for middle and high school teachers up in the wilds of Northern Minnesota. This year in Ely, field trips took participants to the

Soudan Underground Iron mine, the underground Physics Lab, the International Wolf Center, deep into the woods to study forest ecology, and knee deep in northern Minnesota river water to study streams and water.

Watch for more workshops on [www.mndnr.gov/plt](http://www.mndnr.gov/plt)!

## ACTIVITY ENHANCEMENTS

### Secrets of Soil

The Smithsonian National Museum of Natural History has an exhibit titled *Dig It! The Secrets of Soil* that runs September 2008 through January 3, 2010. The connections between soils and everyday life will reveal a hidden world in a new way. The exhibit website includes information about soil as well as provides activity sheets that can be used in the classroom. Both middle and high school curriculum ideas are available. <http://forces.si.edu/soils/> (click on "Educators") Good connection to PLT activity #70, "Soil Stories."

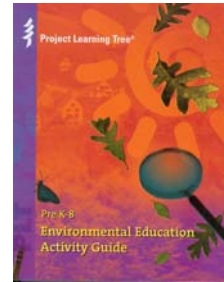
### Doodle! Studio

Students can use *Doodle!* [www.doolestudio.com](http://www.doolestudio.com) to create artwork and show them in an online studio. Any activity that incorporates drawing can use *Doodle!* As an educational tool. It combines the technology of a computer with fundamental art concepts, vocabulary, and techniques. Good connection for PLT activities: #1 "The Shape of Things," #3 "Picture This!," and #21 "Adopt a Tree."

### Tips For Teaching Outside

Excellent tips compiled by staff from PLT, The DNR's School Forest Program, and the Minnesota Naturalists Association. On [www.mndnr.gov/schoolforest](http://www.mndnr.gov/schoolforest) (click on "How to Teach Outside"). Excellent help to PLT activities: #23 "The Fallen Log," #48 "Field, Forest, and Stream," #2 "Get in Touch With

Trees," #43 "Have Seeds, Will Travel," #67 "How Big is Your Tree," #68 "Name That Tree," #46 "Schoolyard Safari," and #70 "Soil Stories."



### Papermaking and Wood Kits

These kits are very low-cost and downright COOL. If you attend the Education Minnesota Conference in October, the Minnesota Forest Industries (MFI) booth sells these at a lower price. But if you aren't conferencing, you can get the same stuff here:

[www.minnesotaforests.com/informationcenter/kidsandteachers](http://www.minnesotaforests.com/informationcenter/kidsandteachers)

PLT activities: #51 "Make Your Own Paper," #76 "Tree Cookies"



**Excerpt from "Marginalia: Things We Write in the Margins of Our PLT Guides"**  
([www.mndnr.gov/plt](http://www.mndnr.gov/plt))

By Dr. John Guyton, Associate professor-Extension, University of Mississippi

**Activity #62 "To Be A Tree"**

Give each student a twig from a red oak and a white oak. Let them dip one end of each in a glass of soapy water.

Tell the students to blow on the end of each twig, as if it were a straw. The red oak (but not the white oak) should produce bubbles on the other end, demonstrating different vascular structures.



*Twig of a Northern red oak*

## FREE STUFF

### Minnesota Invasive Species Field Guide

This is an 8-page, 8-1/2x11 booklet that features ID cards of Minnesota's forest invaders, including: Amur maple, buckthorn, garlic mustard, honeysuckle, leafy spurge, purple loosestrife, common tansy, Asian longhorned beetle, emerald ash borer, siren wood wasps, and more. The whole thing is downloadable from



[www.mlep.org/Documents/InvasiveSpeciesInsert.pdf](http://www.mlep.org/Documents/InvasiveSpeciesInsert.pdf)

Otherwise, if you'd like a hard copy, ask me and I'll send you one. Be sure to give me a current mailing address.  
[laura.duffey@dnr.state.mn.us](mailto:laura.duffey@dnr.state.mn.us).

### Federal Resources for Excellence in Education

This Web site has a host of free resources to support a variety subjects, from history to science. Note: There are 32 items on climate change!  
<http://free.ed.gov/>

### DNR Booth at Education Minnesota, Excel Energy Center, St. Paul

Stop by the DNR booth and say "hi!" Chances are you may know someone there. DNR gives away lots of cool free posters at this event, including new ones you may not have seen before.



## MONEY AND GRANTS

### MFI Grant - Deadline: Sept 26, 2008

Minnesota Forest Industry (MFI) is awarding Small grants to support teaching about trees and forests to students - either inside or outside. Grant can be used for transportation to School Forests, specific materials to teach forestry outdoors, guest speakers specific to forestry, etc.

[www.minnesotaforests.com/thelatest/foresteducationgrant.aspx](http://www.minnesotaforests.com/thelatest/foresteducationgrant.aspx)

**MFI likes to support Project Learning Tree teachers!**

### Melinda Gray Ardia Environmental Foundation - Deadline September 27th

Proposals sought to support educators to develop environmental curricula. The Melinda Gray Ardia Environmental Foundation seeks proposals to support educators to develop environmental curricula that integrates field activities and classroom teaching and that incorporates basic ecological principles and problem solving.

[www.seek.state.mn.us/article.cfm?id=4165](http://www.seek.state.mn.us/article.cfm?id=4165)

### Environmental Learning in Minnesota (ELM) grant: Deadline is October 15

For classroom and outdoor classroom activities, school visits to environmental education providers, and other projects. Two finding levels: 1) Up to \$3,000, and 2) Up to \$20,000. Application is on

[www.naaee.org/maee](http://www.naaee.org/maee).



*A winning GreenWorks! project at Northrup Urban School*

### Lowe's Outdoor Classroom Grants: Deadline October 17

A series of grants up to \$5,000 for schools to develop outdoor classrooms. This grant may be appropriate for schools needing help with landscaping & site development (trails, interpretive signs, etc.).

[www.toolboxforeducation.com](http://www.toolboxforeducation.com)

### PLT GreenWorks! Grant

The next grant deadline is **October 30**.

Projects are for

PLT educators and students who



want to engage with their local community and "learn by doing" environmental projects.

You can apply for a \$250 - \$1,000 grant or \$1,001 - \$5,000 grant. Application is on

[www.mndnr.gov/plt](http://www.mndnr.gov/plt)

*Congratulations to **Minneapolis Northrup Urban Environmental Learning Center**, **Bug-O-Ney-Ge-Shig School** (Leech Lake Reservation), and **East Grand Forks Senior High School** for their recent GreenWorks grant awards!*

### Wild Ones: Seed for Education Grant: Deadline November 15

Grant to support the purchase of native plants and seeds for projects to enhance appreciation and understanding of native plants. Perfect for schoolyards or School Forests.

<http://www.for-wild.org/sfecvr.html>

## The Disney Minnie Grants for 2009

**Deadline: Oct. 30**

The Walt Disney Company and Youth Service America are excited to announce grants of up to \$500 to support child-led service projects. These grants support children (ages 5-14) in planning and implementing service projects in their community. Teachers, older youth (15-25), and youth-serving organizations are also eligible to apply, if they engage younger children in planning and implementing the project.

***Did you know?***  
**Global Youth Service Day and Minnesota Arbor Day are both on April 24, 2009? Get some DNR tree seedlings and plant some trees!**

A significant part of the service must take place on "Global Youth Service Day 2009, April 24-26." We particularly encourage applicants to address the environmental issues and to

seek to empower children as young citizens through their projects.

Questions? Email [MinnieGrant@ysa.org](mailto:MinnieGrant@ysa.org)

The correct application is on:

[www.YSA.org/awards](http://www.YSA.org/awards) <<http://www.benchmarkemail.com/link/redirect.asp?g=0&c=168139&l=212410787&e=ysaall@ysa.org&url=http://www.ysa.org/awards>>

## Environmental Excellence Awards: K- 12 Due: Nov. 28

The SeaWorld & Busch Gardens Conservation Fund request proposals for the SeaWorld/Busch Gardens Environmental Excellence Awards. This program recognizes the outstanding efforts of students and teachers across the U.S. who are working at the grassroots level to protect and preserve the environment. \$80K expected to be available, 8 awards anticipated. [www.swbg-conservationfund.org/projects\\_Awards.html](http://www.swbg-conservationfund.org/projects_Awards.html)

## JUST FOR FUN

Short of heading outdoors, nothing spices up a lesson or meeting like a good treat! (Especially if you're teaching PLT activity #2: "Get in Touch With Trees")

Thank you to Facilitator **Misi Stine** for forwarding this recipe from the National Wildlife Foundation.

### Beaver Bark

6 graham crackers (cinnamon or plain)  
7 Tbsp butter  
¼ cup sugar  
¼ cup chopped nuts (pecan, walnuts, & almonds all come from trees)

Preheat oven to 350 F. Spray shallow baking pan with cooking spray. Lay the graham crackers in a single layer on the pan. Under medium-low heat,

melt the butter. Add the sugar. Stirring constantly, bring to boil. Cook for two more minutes, stirring constantly. Mixture will become frothy and thicken. Pour over graham crackers and spread evenly. Sprinkle nuts on top. Bake for 8 minutes. Cool. Use spatula to remove. Break into little pieces for your eager little beavers!



*Laura's note: I tried this last weekend when I was stuck indoors on a rainy muddy day with 5 kids under the age of 6. The kids loved*

*making it and eating it. I'm told this is an "old southern recipe" that goes by other names, But it does resemble bark!*

# UPCOMING ENVIRONMENTAL EDUCATION WORKSHOPS

## *from the Minnesota Department of Natural Resources*

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



10/11/08	Minnesota Landscape Arboretum, Chanhausen	<a href="#">PLT Early Childhood Workshop</a>
01/17/09	Stewart Community Center, Stewart	<a href="#">Project Learning Tree Early Childhood Workshop</a>

Information on all workshops above can be found on [www.mndnr.gov/plt](http://www.mndnr.gov/plt)



*Stealing the scene at a Project Learning Tree (PLT) early childhood workshop.*

### Other Courses

#### Graduate Course: "Principles of Environmental Education"

From the University of Minnesota. Course name is CI 5537, registration #34690 and is available this fall. The three-credit class meets Wednesday evenings from 4:40 PM to 7:20 PM. The course takes a critical view of environmental education, its history, theories, methodologies, and assessments. Five topics will be addressed: History, Principles, Curriculum, Instruction, and Assessment. For more information, contact Elizabeth Andre at <mailto:andre328@umn.edu>.