



# Minnesota Project Learning Tree Educator Update

Summer 2008

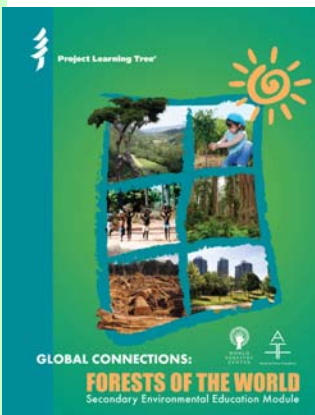
Deep summer is when laziness finds respectability. ~Sam Keen

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

## NEWS

### New PLT Secondary Module, *Forests of the World*

Project Learning Tree® (PLT), in partnership with the World Forestry Center, has completed a new set of secondary activities *Global Connections: Forests of the World* that explore from a global perspective the factors and challenges impacting this critical natural



resource. The module consists of nine activities that provide students with the opportunity to do research and apply critical thinking skills to consider the social, economic, and environmental implications that underlie decisions about forest management. Educators can use the module in biology, geography, agriculture, and other science and social studies courses at the high school or early college level. The module includes a poster and set of maps.

### FREE PLT Workshop

Do you have a DNR School Forest? If you think your staff is ready to learn how to better use their outdoor classroom, PLT can help. Free workshop includes presenters and all materials for all attendees. Must be at your School Forest site. We only offer a few of these each year, but we have to be asked! Some schools have already hosted this workshop: North Shore Community School, Bay View Elementary, Cedar Creek/East Bethel, St. David's, Silver Bay, and more.

If you want this workshop, contact Laura Duffey at 651-259-5263, 888-646-6367, [laura.duffey@dnr.state.mn.us](mailto:laura.duffey@dnr.state.mn.us). For DNR



*Teachers measuring trees at St. Therese School Forest*

School Forest Schools only.

## CLASSES

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### Online and Field-based Courses for Science Teachers

University of Wisconsin – Madison

- **"Trees of the Midwest"** - a 2-week online and field course, Aug. 11-28: Learn how to identify our native tree species!
- **"Rainforests and Coral Reefs"** *online* course, Sept. 29 - Dec. 12: A virtual exploration of the world's most diverse ecosystems with up-to-date science to bring to your classroom.
- **"Field Methods in Ecological Research"** - a 3-week online and field course, Fall dates TBA: Learn methods for field sampling and data collection for ecological inquiry.

Earn up to 2 credits for each course! For more information on these and other courses visit:

[www.wisc.edu/wistep/2008courses.html](http://www.wisc.edu/wistep/2008courses.html)

or contact Catherine Woodward at [cwoodwar@wisc.edu](mailto:cwoodwar@wisc.edu)

### Summer Institute for Climate Change Education

August 11-13, 2008 at the Science Museum

Hosted by the Will Steger Foundation This is for teachers only, esp. grade 3-12. Only the first 75 applicants are accepted. \$75 per person or \$100 per pair of teachers from the same school or district. Dr. James Hansen, renowned NASA climate scientist, will be the keynote speaker to discuss the latest on climate science. Institute participants will receive a resource binder with new climate change curricula, expedition supplements and action resources. The theme of the Institute is "Changing School Culture" with a focus on reducing a school's carbon footprint, from classroom to community.

[www.willstegerfoundation.org](http://www.willstegerfoundation.org)



## FREE STUFF

### Two New *Natural Inquirer* Issues: World's Forests, and FaceLook monograph

Get FREE Classroom sets of hardcopies from the U.S. Forest Service! View, download, and/or order issues from: [www.naturalinquirer.usda.gov/](http://www.naturalinquirer.usda.gov/)



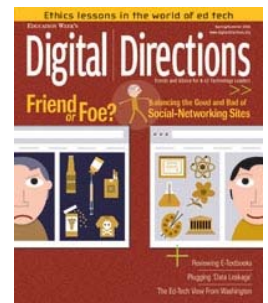
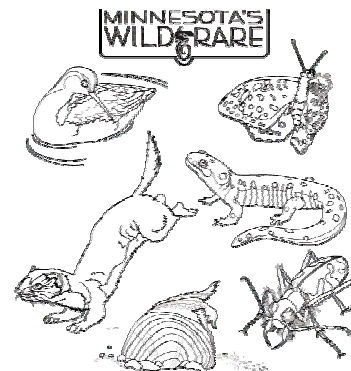
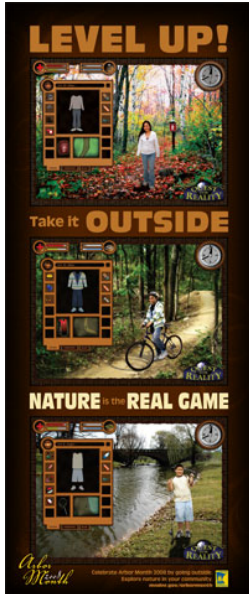
### Free Magazine Subscription to *Digital Directions: Trends and Advice for K-12 Technology Leaders* Subscribe for FREE!

([http://reg.itworld.com/servlet/Frs.frs?Context=LOGENTRY&Source=source&Source\\_BC=53&Script=/LP/80140066/reg&](http://reg.itworld.com/servlet/Frs.frs?Context=LOGENTRY&Source=source&Source_BC=53&Script=/LP/80140066/reg&))

- [Friend or Foe? Balancing the Good and Bad of Social-Networking Sites](#) – By Michelle R. Davis. With the advent and rapid growth of social-networking sites, the result is that school leaders are being forced to deal with a host of unsettled and even unsavory issues.
- [Q&A: The Ed-Tech View from Washington](#) – By Michelle R. Davis. The director of the U.S. Department of Education's office of educational technology talks about the big picture and emerging issues.
- [Total Cost to You...\\$0](#) – By Michelle R. Davis. Building an ethical playbook for dealing with IT vendors could save your job.
- [Reviewing E-Books](#) – By Rhea R. Borja. Virtual textbooks—some with interactive zing to better teach a generation of students weaned on Xbox and iTunes—are attracting attention from more schools.

### DNR Posters

Get a free DNR poster mailed to your classroom. Several topics available. See [www.mndnr.gov/forestry/education](http://www.mndnr.gov/forestry/education) for an overview, or call the DNR Information Center at 651-296-6157, 800-766-6000,





## MONEY AND GRANTS

### Environmental Learning in Minnesota (ELM) grant 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 deadline is mid-October 2008. To be notified as to when applications are ready, send an e-mail to [maeeinfo@naaee.org](mailto:maeeinfo@naaee.org)

### Wild Ones: Seeds For Education Grant Program

<http://www.for-wild.org/sfecvr.html>  
Schools, nature centers and other non-profit and not-for-profit places of learning including houses of worship with a site available for this stewardship project may apply for an SFE grant annually. Project goals should focus on the enhancement and development of an appreciation for nature using native plants. Projects must emphasize involvement of students and volunteers and increase the educational value of the site. Creativity in design is encouraged, but must show complete and thoughtful planning. The use of and teaching about native plants and the native plant community is mandatory, and they must be appropriate to the local ecoregion and the site conditions (soil, water, sunlight).

Examples of appropriate projects are:

- The design, establishment and maintenance of a native plant community such as prairie, woodland, wetland etc. in an educational setting such as an outdoor classroom.
- Developing and maintaining an interpretive trail landscaped with native plant communities.

- Developing a wetland area to study the effect of native vegetation on water quality improvement.
- Group student-teacher research projects aimed at documenting the presence, behaviors, needs and contributions of various forms of wildlife and the impact of native plant species.

Funds will be provided only for the purchase of native plants and seed. A project budget should show how monies are to be spent.

Submit completed and signed proposal 15th of November (postmarked)

### 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. [www.plt.org](http://www.plt.org)

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 awards!



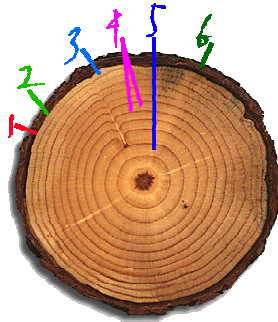
## ACTIVITY ENHANCEMENTS

### How to Read Tree Rings

Resource for the PLT PreK-8 Activity Guide: "Tree Cookies"

The [Ultimate Tree-Ring Web Pages](#) are designed to be the ULTIMATE source for information on the science of Dendrochronology. The pages were designed to be easily understood at all levels of education, from elementary school students to high school students, and from first grade teachers to college professors. Learn the basics of tree-ring dating, find reference and bibliographic information, access products and supplies, and books all on these webpages.

<http://web.utk.edu/~grissino/default.html>



### Forests on the Edge Radio Series

Resource for PLT's Secondary Modules: Focus on Forests, and Forest Ecology Ten 10 Earth & Sky Radio Shows dealing with topics such as loss of private forest lands in communities, importance of forests to communities, and the role of forests in climate change. You can now listen to the following three shows, [Forest service expert gives U.S. forest overview](#), [U.S. forests face threat from development](#), and [Forest managers grapple with rapid change](#), as well as [Sally Collins on the state of American forests](#), an extended podcast of the shows.

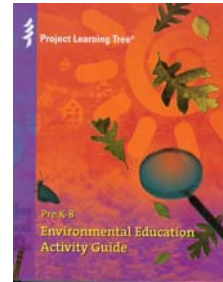
[www.earthsky.org/radioshows](http://www.earthsky.org/radioshows)

### LandScope America

Resource for PLT's Secondary Module: Places We Live, and the PreK-8 Activity Guide: "Then and Now," "Planning the

*Ideal Community,"* and "People, Places, Things"

Planned for full release in Fall 2008, [LandScope America](#) is an interactive conservation Web site linking maps, data, and stories about natural places of America's lands and waters. This online resource for the land-protection community and the public is a collaborative project of NatureServe and the National Geographic Society. Tour the site, sign-up for the newsletter, and learn more about conservation efforts and issues in the U.S. [www.landscape.org/](http://www.landscape.org/)



### Free Book: "Take a Cloud Walk"

Resource for PreK-8 Activity Guide: "Water Wonders," "Every Drop Counts," and "The Global Climate"

*Take a Cloud Walk* by Jane Kirkland, is available as a [free PDF download](#). In this full-color, 30-page book, readers learn the basic names and shapes of clouds, why they move, why they are white, how they affect climate change, the difference between weather and climate, and weather terms and conditions such as hail, lightning, and fog.

<http://www.nostudentleftindoors.com/>

### Clean Sweep U.S.A.

Resource for PLT's Secondary Module: Municipal Solid Waste and the PreK-8 Activity Guide: "Earth Manners" and "Reduce, Reuse, Recycle."

This educational math and science classroom [online resource](#) for students (grades 4-8) now includes lessons on litter prevention and beautification and features interactive learning modules that help students, teachers, and families address real-world issues about waste.

[www.cleansweepusa.org/](http://www.cleansweepusa.org/)

### **Land of Curiosities**

*Resource for PreK-8 Activity Guide: "Loving It Too Much" and PLT's Secondary Module Focus on Forests' "Who Owns America's Forests?"*

A book by Deanna S. Neil, [Land of Curiosities](#) is the first tale in a series of adventures with the Clifton family into Yellowstone during the year that it is declared the world's first national park. The collection is staged around defining events and themes in the history of the environmental movement as told through the experiences of two young and courageous fictional characters who learn to protect each other and the environment. The first book, for ages eight and up, includes a real history section, and was inspired by real events and places. [www.theecoseekers.com](http://www.theecoseekers.com)

### **Consumer Choices: Greening Your Purchases**

*Resource for PreK-8 Activity Guide: "A Peek At Packaging," "Reduce, Reuse, Recycle"*

As consumers, we are faced with choices every day. Paper or plastic? Bottled or tap water? Sirloin or pasta? Standard or hybrid? Incandescent or compact fluorescent? It has long been the case that such decisions have environmental implications, but only recently has much attention been given to the environmental impacts of consumer choices. Four-page PDF: [www.forestinfo.com/Products/eco-links/index.htm](http://www.forestinfo.com/Products/eco-links/index.htm) (This Eco-Link is from the Temperate Forest Foundation)

### **A Day in the Life of a Drop**

*Resource for PLT PreK-8 Activity Guide: "Water Wonders"*

Teaches students about the connections between the sources of the water they use and how that use affects human health and the environment. PDFs of teachers' guide, two student worksheets, a spreadsheet to track water use at home, and a pledge for students and their families to "end bad water habits."

[www.epa.gov/watersense/water/drop.htm](http://www.epa.gov/watersense/water/drop.htm)

## **VIDEOS TO WATCH**

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### **Managing Minnesota Forests For Today and Tomorrow**

Learn how Minnesota foresters fight forest fires, manage forests and protect our forest for today and tomorrow. Go to [www.dnr.state.mn.us/forestry](http://www.dnr.state.mn.us/forestry) and play the two-part You Tube video.

### **"Get 'Em Outside"**

This video illustrates the joys and the benefits of environmental education and shows the positive impact that outdoor, hands-on learning has on children's academic achievement, critical thinking skills development, empowerment, health and leadership.

<http://eeinwisconsin.org/net/content/go.aspx?s=70644.0.0.2209>

### **UPM's Forest Life Experience**

UPM is a global forest products group. If you have a fast Internet connection, watch this cool interactive video about how forests grow, are harvested, and replanted.

<http://w3.upm-kymmene.com/upm/forestlife/index.html>

### **Watch the Today Show**

The trend keeps growing to get kids outside. Richard Louv is interviewed.

<http://today.msnbc.msn.com/id/21134540/vp/25701705#25701705>

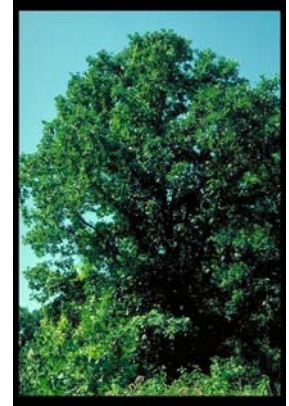
## JUST FOR FUN

### Do you know what a tree is? Really?

Trees are woody plants with one erect, perennial stem at least three inches in diameter at breast height (4.5 feet above ground) and at least thirteen feet tall. In contrast, shrubs are small woody plants, usually with several perennial stems branching at the base. In areas where trees don't thrive, trees may grow as shrubs. Shrubs provide forage for wildlife and livestock. An acre of trees can remove 2.6 tons of carbon dioxide each year from the atmosphere, and two mature trees can supply enough oxygen annually to supply a family of four. Trees produce seeds abundantly, for example, a mature birch tree can produce one million seeds per year. One-third of the United States is covered by forests.



*This is not a tree.*



*This is a tree.*

### Minnesota's Forest Invaders

Do you know the big "20?" The "Minnesota Forest Invaders Booklet" lists all 20 in a nice field guide format. Get yours on-line. [www.mndnr.gov/treecare](http://www.mndnr.gov/treecare) (click on "Invasive Species booklet"), or call the DNR Info Center for a full-color paper copy: 651-296-6157, 800-766-6000.



*Garlic mustard*



*Buckthorn*

# 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)



08/01/08	Room 25, Pomeroy Center, 1964 Fitch Ave, University of Minnesota, St. Paul MN 55108	<a href="#">Flying WILD &amp; One Bird Two Worlds Workshop</a>
08/04/08 - 08/06/08	Macalester College, St. Paul	<a href="#">GPS/GIS Workshop for Middle &amp; High School Teachers</a>
08/11/08	Winona, MN	<a href="#">Project WILD &amp; Aquatic WILD Workshop for K-12 Educators</a>
08/13/08	Elk's Nature Center, Mankato, MN	<a href="#">Project WET &amp; WILD K-8 Educator Workshop</a>
08/25/08	Wargo Nature Center, Lino Lakes	<a href="#">Project WET Workshop for Homeschools</a>
10/11/08	Minnesota Landscape Arboretum, Chanhassen	<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)**