



Minnesota Project Learning Tree Educator Update

March 2007

In like a lion, out like a lamb...

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

NEWS

Facilitator Training for PLT, Project WET, and Project WILD is June 13-14, 2007

If you would like to help facilitate future "Projects" workshops to an audience of your choice, PLEASE attend this fun, FREE training to hone your facilitation skills, meet other trainers, and become an official DNR volunteer facilitator. The training is free, but you must pre-register. Applications for the training are available on <http://www.seek.state.mn.us/volunteer.cfm>

PLT's new secondary module *Exploring Environmental Issues: Biodiversity*, is now available online as a PDF at http://www.plt.org/cms/pages/21_21_16.html. The module includes three activities: Global Invaders; Protected Areas: Issues and Analysis (Coming Soon); and Potatoes, Pesticides, and Biodiversity (Coming Soon). The module also includes Background Information for Educators, a Glossary, Correlations to National Science and Social Studies Standards, our Conceptual Framework, and Acknowledgments.



RESOURCES FOR PLT ACTIVITIES

Free "If Trees Could Talk" curriculum This nine-module, middle school curriculum gives teachers the opportunity to download social studies activities that are based upon archival materials. The centerpiece of each module is a compilation of primary resources--documents, maps, newspaper articles, oral histories, or photographs--from which students will be asked to gather, examine, and analyze information, and synthesize insights. Produced by the Forest History Society in collaboration with Duke University's Nicholas School of the Environment, North Carolina State University, PLT, and the North Carolina Forestry Association. www.foresthistory.org/Education/Curriculum/actlist.htm.

National Institute of Health (NIH), National Library of Medicine Web Sites

Tox Town uses animation in lessons that show the connections between chemicals, the environment, and the public's health. It lists everyday locations where you might find toxic chemicals, gives non technical descriptions of chemicals, additional links, etc. Go to <http://toxtown.nlm.nih.gov>. (*Resource for Focus on Risk and PreK-8's "Pollution Search."*)

ToxMystery makes a game out of identifying sources of toxic chemicals inside the home. Go to <http://toxmystery.nlm.nih.gov>. (*Resource for PreK-8's "Pollution Search" and "Air We Breathe."*)

TOXMAP helps users visually explore data from the U.S. Environmental Protection Agency concerning the release of toxic chemicals into the environment. Go to <http://toxmap.nlm.nih.gov/toxmap/main/index.jsp> (*Resource for Focus on Risk secondary module.*)

Radio Documentary Series – Grades 9-12

With a grant from the USDA Forest Service and American Forests, Soundprint has produced a 10-part radio documentary series on the value of urban forests. Learn more at <http://trees.soundprint.org>
Resource for "Trees in Trouble" (#77) and "Three Cheers for Trees" (#30).

Americans and Climate Change – Grades 9-12

The Yale School of Forestry and Environmental Studies convened a group of leaders to discuss why the scientific consensus on climate change has not produced action in the U.S. commensurate with the threat. The synthesis of their findings and recommendations for action are in the book *Americans and Climate Change*. Order or free download from the Web site.

<http://www.environment.yale.edu/climate/> Resource for "Field, Forest, Stream" (#48), "The Global Climate" (#84), and "Our Changing World" (#86).

GRANTS & MONEY

GreenWorks! Grants due April 30



Beginning in 2007, PLT will distribute a total of \$100,000 to service-learning, community action projects, an increase of \$75,000 over previous years. Also, *GreenWorks!* now has two grant cycles. The first round of proposals will be due on April 30, with winners announced in May. The second round of proposals are due on October 31, with winners announced in November. The maximum grant amount awarded is now \$5,000! **Only PLT teachers can apply for this grant.** To apply, visit www.plt.org and click on *GreenWorks!*

Build on a *GreenWorks!* or other school garden project with...

Operation Green Plant, of the America the Beautiful Fund, can help you get ready for spring with their seed program. For a grant of flower and/or herb seeds, visit http://www.america-the-beautiful.org/free_seeds/index.php and fill out an application. Seeds cost \$14.95 for the first 100 packets, \$5 per 100 afterward.

Grow Your School Garden Program

Apply to win one of 20 Mantis tiller/cultivators (each complete with border edger attachment) for your garden program through www.kidsgardening.com. To apply, include a photograph(s) of your garden space and a diagram of the garden's dimensions and layout. The deadline is March 31, 2007.

JUST FOR FUN

Thinking about tapping a tree? Maple sap runs best when daytime temperatures are in the high 30s to mid-40s and overnight temperatures are below freezing. Ideally, this cycle of above-freezing days and below-freezing nights needs to continue for several days. Some sap may flow as early as late January or as late as May, but the typical time for a "good" sap run in Minnesota is March 15 to April 20. Sap is converted to syrup by boiling off most of the water content of the sap, which leaves the sugar and flavor behind. It usually takes 30-40 gallons of sap from a sugar maple to produce one gallon of pure maple syrup. Tappers don't tap maples less than 10 inches in *diameter*. At 10 inches, one tap is OK, but no more. An additional tap can be put in for each 4-inch increase in diameter, up to about five-six taps maximum. Tapping can be done annually at this size rule with no known harm to the tree. It's said that there are maples in the Northeastern U.S. that have been tapped every year for centuries with no ill effect. From a video about sugaring by the Fond du Lac Ojibwe, it appears they tap maples smaller than 10 inches, but tap for three years and then leave those trees untapped for the next five years to "rest" them. - Dave Crawford, DNR Park Naturalist, Wild River State Park

Want to get rid of garlic mustard, dandelions, and pigeons? Eat them! Try *The Invasive Species Cookbook: Conservation Through Gastronomy* www.bradfordstreetpress.com

UPCOMING WORKSHOPS

Project Learning Tree

March 24, 2007	PLT/WET K-8 Workshop, Lake Bemidji State Park, Bemidji	\$30
March 24, 2007	PLT Early Childhood Workshop, Ridgewater College, Hutchinson	\$45
March 31, 2007	PLT Early Childhood Workshop, Tamarack Nature Center, White Bear Lake	\$30
April 14, 2007	PLT K-8 Workshop, North Mississippi Regional Park, Minneapolis (optional graduate credit available for \$106)	FREE
April 14, 2007	PLT Early Childhood Workshop, Lakes and Pines Community Center, Mora	\$25
July 18, 2007	PLT/WET K-8 Workshop, Prairie Wetlands Learning Center, Fergus Falls	\$38



Attendees get the PreK-8 Project Learning Tree Activity Guide, Continuing Education Units, posters, and more. Early Childhood workshop attendees also get the Early Childhood Supplement and the Natural Wonders Guide to Early Childhood Education for Environmental Education. For more workshops and registration information, see www.dnr.state.mn.us/plt

Minnesota Association for Environmental Education (MAEE) Conference

April 27-28, 2007

Holiday Inn, Alexandria, Minnesota

Open to ALL Minnesota educators. This fun, family-friendly event will convene environmental educators around the state. The Minnesota Naturalists' Association will host all field trips. Session topics include residential environmental learning centers, geography and history in the classroom, using environmental education in the classroom, using stream tables, classroom ecological sampling methods, and more. Hotel rates go up after April 12, 2007. For registration, and session and scholarship information, visit www.naaee.org/maee.



You may have heard of Master Gardeners, but did you know that the University of Minnesota Extension Service operates two similar programs of interest to people who want to learn basic forestry or become "Master Naturalists"?

Woodland Advisors Classes

Learn how to manage invasive species, how to plant energy-saving landscapes, and more. The Woodland Advisors class schedule is now available on <http://cfc.cfans.umn.edu/wa/>

Master Naturalist Classes

Learn all about Minnesota's flora, fauna, climate, and geology by becoming a **Master Naturalist!** Class schedule is on <http://www.minnesotamasternaturalist.org/>