

Litzsinger Road Ecology Center

COMMUNITY NEWSLETTER

www.litzsinger.org

January 2011

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LREC Volunteers gathered with staff on December 20 for the annual Volunteer Holiday Party. More photos on page 6. Photo by Deanna Lawlor.

Looking for Spring

by Bob Coulter

In these dark and short days of winter it's easy to lose sight of the spring that will be coming. As I write this we are approaching the winter solstice, which for those of us in the northern hemisphere gives us the shortest amount of daylight. In an interesting twist, noted author Jean Craighead George calls this the beginning of spring, as it is the point when days start to get longer.

It's also a great time to be thinking ahead to those spring days when you are out on the school grounds working on the wonderful projects you described to us in your applications. We're delighted to work with you in bringing them to fruition... please keep us posted on how we can help you. These slower days of winter give us the time to work directly with you to line up the resources you need for a great spring. Whether it's curriculum ideas, seeds, or something else, we're here to help you create great outdoor learning opportunities for your kids.

Over the next few weeks, we'll be checking in with you to see how your projects have been going, and how we can help you take the next steps.

Happy New Year! 🌿



Sustainable Schoolyards Spotlight: Edgar Road Elementary School

by Leslie Memula

This past summer, Edgar Road teachers Betsy Guthrey (third grade) and Keisha Wurgler (fourth grade) took part in the *Sustainable Schoolyards* workshop at LREC. The main goal of the workshop is to create a plan for the development of a natural habitat on your schoolyard to be used by your students to reach curriculum goals. For Betsy and Keisha, this means enhancing their enclosed courtyard by adding a variety of native plants.

During the fall, a bunch of Edgar Road third grade students helped to clear an area of their courtyard to prepare it for planting. On Monday, December 13th—in the frigid cold I might add—Betsy’s class did a stellar job of scattering a mixture of native plant seed in this area. The seed had been collected



Edgar Road Elementary third grade students sowing seeds in their school courtyard.
Photo by Leslie Memula.

Edgar Road Elementary School

Location:

1131 Edgar Road
Webster Groves, MO 63119

Grade Levels: K–5

Number of Students: about 390

Classrooms Working with LREC: 6

Website:

[http://schools.webster.k12.mo.us/
edgarroad](http://schools.webster.k12.mo.us/edgarroad)

at LREC and prepared for their school by Danelle Haake, LREC Restoration Ecologist. The kids will spend some time researching the different plants so they know what to look for come spring when the plants begin to emerge.

The courtyard area is also home to a small pond, complete with fish and even a turtle. Following their visit to LREC this fall, Keisha’s fourth grade students cleared weeds from the banks and the area surrounding the pond. The kids are in the process of determining which native plants would be

beneficial to their pond habitat. They are especially interested in those species that might attract more native wildlife to their courtyard. LREC plans to provide Keisha’s class with some young plants to plant around the pond this spring.

If you are committed to using your outdoor school grounds as a classroom, consider participating in our *Sustainable Schoolyards* workshop. This summer the workshop will be held June 13–17. For more information, please contact Bob, Eddie, Martha, or myself. 🌱

A Team Approach to Outdoor, Place-based Teaching and Learning

by *Eddie Jones*

As a reader of this newsletter, you are most likely one of our: a) participating teachers or b) Volunteer Educators. Together, you make up an outdoor education team that provides high-quality learning opportunities for students. Since the direct interaction between the two groups is fleeting, we thought we would help you get to know one another better.



Volunteer Educator Colleen Crank explores the winter prairie with Juanita Robinson and her students from Maplewood Richmond Heights Early Childhood Center. Photo by Eddie Jones.

VOLUNTEER EDUCATORS		PARTICIPATING TEACHERS	
...give of their time and talents to lead groups of school children in ecological investigations at LREC. They facilitate outdoor learning activities, designed by teachers (with help from LREC staff), that support the curricular goals of participating teachers.	<i>What they do</i>	...use LREC as a resource to assist in using outdoor spaces as effective teaching and learning environments. They accomplish this by planning, implementing, and assessing lessons that make substantial use of their own schoolyards and the LREC site.	
...enjoy working with kids in an outdoor setting, throughout the year. The natural world is of ongoing fascination. They are available to serve when schools are in session, and readily adapt to the goals and needs of a variety of students.	<i>Personal qualities that help them do their job</i>	...have a vision for extending students' learning outdoors and into their surrounding neighborhood. This is in addition to basic teacher qualities (such as saintly patience, superhuman strength, unbridled imagination, a nose for cheap teaching materials, etc...).	
...are regularly enriched through the interactions they have with students, teachers, other Volunteer Educators, and LREC staff. Oh yeah, and they get to wear orange shirts!	<i>Benefits of their role</i>	...appreciate they are not alone in their quest to utilize the outdoors as a place for learning. They and their students get to visit LREC several time over the course of the schoolyear.	
...receive initial and ongoing training in ecology and outdoor education from staff. Staff effectively communicates about lesson plans, coordinates student activities, and maintains a safe and friendly work environment.	<i>How LREC staff supports them</i>	...have an ongoing dialogue with staff as they apply local ecology concepts to achieve curricular goals with their students. LREC also assists them with native plant propagation, outdoor inquiry lesson planning, and schoolyard habitat development.	
...complete a formal training program and agree to serve on a weekly basis during the school year for a minimum of two years.	<i>Nature of their commitment to LREC</i>	...submit an annual plan to LREC that includes goals for outdoor learning at school and elsewhere; plan components include the use of community resources and outdoor learning site enhancements. They agree to implement that plan and seek guidance from LREC in doing so. 🌿	

Glass House Quiz: Our Winter Trees

by Deanna Lawlor and Danelle Haake

With winter upon us many think the natural world looks dead and uninteresting. You may even think that everything looks the same and you can't identify even your favorite trees. We bet you can identify more than you think. Here's a quick quiz to point out some of our favorite trees found here at LREC and their distinguishing winter (and summer) characteristics. (Quiz photos by Deanna Lawlor.)

1) The peeling bark is a giveaway for this young tree. Which is it?

- a. Flowering dogwood (*Cornus florida*)
- b. Eastern redbud (*Cercis canadensis*)
- c. River birch (*Betula nigra*)
- d. Wild plum (*Prunus americana*)



2) Only three conifers are native to Missouri. This one has scale-like leaves and shredding bark. Which of the following is it?

- a. Eastern red cedar (*Juniperus virginiana*)
- b. Short-leaf pine (*Pinus echinata*)
- c. Bald cypress (*Taxodium distichum*)
- d. White pine (*Pinus strobus*)



See **Quiz**, page 5

From **Quiz**, page 4

- 3) Which tree has lovely white bark that stands out so well in the winter?
- a. Sweetgum (*Liquidambar styraciflua*)
 - b. Sassafras (*Sassafras albidum*)
 - c. Sycamore (*Platanus occidentalis*)
 - d. Southern red oak (*Quercus falcata*)



- 4) This tree has very interesting “warty” bark. Which tree is this?
- a. River birch (*Betula nigra*)
 - b. Hackberry (*Celtis occidentalis*)
 - c. White oak (*Quercus alba*)
 - d. Sugar maple (*Acer saccharinum*)



- 5) This lovely giant has wonderfully tough bark that as a mature tree is easy to identify in the winter.
- a. Cottonwood (*Populus deltoides*)
 - b. Bur oak (*Quercus macrocarpa*)
 - c. Slippery elm (*Ulmus rubra*)
 - d. Black walnut (*Juglans nigra*)



- 6) Another of our native conifers, its leaf bundles help identify this one.
- a. Eastern red cedar (*Juniperus virginiana*)
 - b. Short-leaf pine (*Pinus echinata*)
 - c. Bald cypress (*Taxodium distichum*)
 - d. Eastern white pine (*Pinus strobus*)



- 7) You can identify this tree by its opposite branching and large end buds.
- a. Red maple (*Acer rubrum*)
 - b. White ash (*Fraxinus americana*)
 - c. Red oak (*Quercus rubra*)
 - d. Ohio buckeye (*Aesculus glabra*)



- 8) This tree is not native but is common throughout the area.
- a. Short-leaf pine (*Pinus echinata*)
 - b. Scrub pine (*Pinus virginiana*)
 - c. Jack pine (*Pinus banksiana*)
 - d. Eastern white pine (*Pinus strobus*)



See **Quiz**, page 7

Volunteer Holiday Party

photos by Deanna Lawlor



From Quiz, page 5

Answers:

- 1) c: river birch. The river birch can be found along streams and gravel bars. People often use this tree in their yards as an ornamental.
- 2) a: Eastern red cedar. Eastern red cedar can be identified by their scale-like leaves and shredding reddish-brown bark. They can be seen along many of our highways and in old pastures, fields, glades, and bluffs. Some cedars in the Ozarks have been aged at over 1,000 years old. Because of their shallow root systems, fire will often kill Eastern red cedar, and they do not do well in the forest understory.
- 3) c: sycamore. The sycamore likes to grow in rich soil and can often be seen along rivers and streams. The sycamore has a tendency to rot inside leaving hollow spaces where many woodland creatures make their homes.
- 4) b: hackberry. The hackberry has a very distinctive bark that is easy to identify any time of year. The hackberry grows in moist woodlands. Its small and seedy fruit is a great source of food for wildlife and is edible for humans as well.
- 5) a: cottonwood. The bark of the mature cottonwood is deeply furrowed with flat ridges. The cottonwood grows very fast and lives along streams and rivers. A short-lived tree, the cottonwood averages a lifespan of around 75 years. It is called the cottonwood for its fluffy seed hairs.
- 6) b: short-leaf pine. Our only native pine, short-leaf pine has bundles of two needles (occasionally three), which are 3–5" long. Short-leaf pine also has distinctive bark. Mature trees have broad scaly ridges, with brown- to black-colored bark.
- 7) d: buckeye. The buckeye is one of a handful of trees in Missouri with opposite branching. (The mnemonic "**mad horse bucking**" can help you identify opposite branching trees, even in winter. The mnemonic stands for **m**aple, **a**sh, **d**ogwood, **h**orse chestnut, and **b**uckeye.) Its large ends, or terminal buds, are another defining characteristic of the buckeye. Ash also have end buds but they are not nearly as large as the buckeye's, which are between ½" and 1" long. There are several species of buckeye in Missouri, including the Ohio buckeye (pictured).
- 8) d: Eastern white pine. Eastern white pine is commonly planted as a decorative pine in Missouri. In the eastern United States, it is the largest pine and has a rich history of uses including ships masts and coffins. You can identify the white pine by its bundle of five soft needles. The needles are between 3–5" long.



The unusual bark of the short-leaf pine.

References:

- Kurtz, D. 2003. *Trees of Missouri*. Missouri Department of Conservation, Jefferson City.
- Petrides, G. 1986. *Trees and Shrubs*. Houghton Mifflin Company, Boston. 🌲

LREC Announcements

January 6 and 27

LREC Stream Team

Meet at 9 am at Glass House. Contact Danelle Haake (314-961-4410 or danelle@litzsinger.org) with questions.

January 28

Volunteer Enrichment: Mushroom Foray and Talk

9:30 to 11:30 am. Meet at barn. Larry Evans, brother of Education Volunteer Don, will lead us through the fascinating world of fungus. Contact Martha at 314-540-4068 to RSVP.

Local Events

January 13 or 14

Native Plant School: Control and ID of the "Worst" Woody Invasive Plants

1 to 4 pm at Shaw Nature Reserve. Reserve. \$12 (\$8 for Garden Members). Call 636-451-3512 or visit <http://www.shawnature.org> to find out more or to reserve your place.

January 15

Level 2 Stream Team Training

8:30 am to 5 pm at Powder Valley Nature Center. Please register either on-line at www.mostreamteam.org or call Susan Higgins at 573-526-1002.

January 20

Science Café: "Climate Change—What We Really Know"

7 to 9 pm at Herbie's Restaurant, 405 N. Euclid Ave. Free. Explore the facts and the challenges of climate change with Jim Kramper, Warning Coordination Meteorologist for the National Weather Service. Learn more at <http://www.slsc.org/AdultProgramming/ScienceCafe.aspx>.