

# Litzinger Road Ecology Center

## COMMUNITY NEWSLETTER

www.litzinger.org

### in this issue

- 2 Look What's Happening at The Soulard School
- 4 Glass House Quiz: Our Mighty Oaks
- 6 Create a Native Plant Garden
- 6 LREC Announcements
- 6 Local Events

November 2012

## Watch Your Language!

by Bob Coulter

In preparing for a conference presentation at the North American Association for Environmental Education (NAAEE) last month, I was reviewing the proposals and project plans submitted for this year. One striking trend was a pattern in language: Teachers with more fully developed plans for student investigations described their students' work in active verbs: observe, measure, compare, and the like. These presented a contrast with plans where the partnerships are still emerging, where verbs like "see" and "visit" predominate.

All of us are committed to the students having good experiences on site here at LREC and in the community. The difference is in what students do with that experience, in terms of sense-making and drawing conclusions. This observation isn't meant to criticize where anyone is, just a note about the path we are all on. As we continue to build plans together, can

we "upgrade" our verbs to give students a more active role in the investigations? Are we pushing the envelope on science process skills as students go about their work? Developing math skills as the kids work with the data they have collected? We look forward to working with you in these areas as we collaborate on behalf of your students. ✎

*Students at The Soulard School work together on planting in their schoolyard. See page 2. Photo by Leslie Memula.*



# Look What's Happening at The Soulard School

by Leslie Memula

If you have ever talked with Litzsinger Road Ecology Center staff about what we do, you have no doubt heard the term place-based education (PBE). PBE has been the focus of our programming and how we work with teachers since before I began working here. Our niche in PBE is to help our teachers use local ecology as a framework for studying a variety of subjects while interacting with their community. Although this may seem simple, we find that PBE practices are still struggling to take root in our local area. That being said, it is always refreshing to witness first hand the strides that our partnering teachers are taking to grow in their own practice.

In mid-October I began communicating with a couple of teachers from The Soulard School, Laura Pupillo and Brandy Ray, to prepare for their visit to LREC

## The Soulard School

Location:  
1110 Victor, Saint Louis, MO 63104

Web site:  
<http://www.soulardschool.org/>

Grades: PreK-6

Classes partnering with LREC: 3



The schoolyard at The Soulard School. Photo by Leslie Memula.

with their combined class of fourth and fifth grade students. They had been focusing on plant life cycles and native Missouri plants. I was thrilled to hear that they were planning to do some fall weeding and planting at their schoolyard as a way to enhance their outdoor learning spaces. It was even more exciting to learn that they were asking for some support and assistance from LREC staff with this project.

On Tuesday, October 16, Deanna and I arrived at The Soulard School prepared to help clean up the schoolyard a bit. Laura showed us around to discuss their plans for trimming, removing, and moving some plants around. Brandy

brought out the class and we broke into small groups. Each group worked to clean up a portion of the schoolyard and get it ready for planting the next day. It was challenging work! We didn't have enough tools, or maybe even the best tools for the job, but the kids stuck with it and persevered.

When we arrived the following morning, we had even more students as both preK and second graders joined in to assist with the planting efforts. The Soulard School ordered some wild strawberry plants and little bluestem, among others, from Missouri Wildflowers Nursery

See **The Soulard School**, page 3





From **The Soulard School**, page 2



An older student helps a preschooler plant in the schoolyard. Photo by Leslie Memula.

(with funding provided by the Discover Nature Schools grant through the Missouri Department of Conservation) and we brought some of the seedlings that had been over-summered at LREC. The second graders concentrated on adding to the butterfly garden while the preK students paired up with a fourth or fifth grade student to plant inside and outside the pond area and also outside of the main school fence.

The work that the kids did was amazing—I was blown away by all that they were able to accomplish in about four short hours. Later

that day Mother Nature provided the newly planted plants with a good soaking. Word has it that the kids have taken quite an ownership of the spaces they worked in and the plants that they planted...and that they are looking forward to seeing the fruits of their labor. 🌱



Inside the schoolyard at The Soulard School. Photo by Leslie Memula.

## THE SUSTAINABLE SCHOOLYARD AT THE SOULARD SCHOOL

This summer five teachers from The Soulard School—Travis DeRousse, Courtney Keefe, Sheri Mancuso, Laura Pupillo, and Brandy Ray—participated in the week-long *Sustainable Schoolyards* workshop here at Litzsinger Road Ecology Center.

During the workshop week, we had an opportunity to visit their campus and learn more about their school. The Soulard School has a variety of outdoor spaces that are used to meet curriculum goals across all disciplines. These learning spaces include a fenced in pond area landscaped with a variety of plants (some funding came from a grant through Gateway Greening) and an emerging butterfly garden right on the school grounds. A landscape committee, comprised of parent volunteers and helpers, works to maintain these areas.

The teachers and students also have access to two other plots of land, located near the school and owned by students' families, for additional outdoor learning activities. Vegetable gardening is already occurring in one of these spaces, and native habitat development is planned in the future.

The Soulard School is also working with Earthways Center (at the Missouri Botanical Garden) to minimize their waste and to improve their composting methods. We are excited to be partnering with both teachers and students at The Soulard School to further place-based education in St. Louis. 🌱



# Glass House Quiz: Our Mighty Oaks

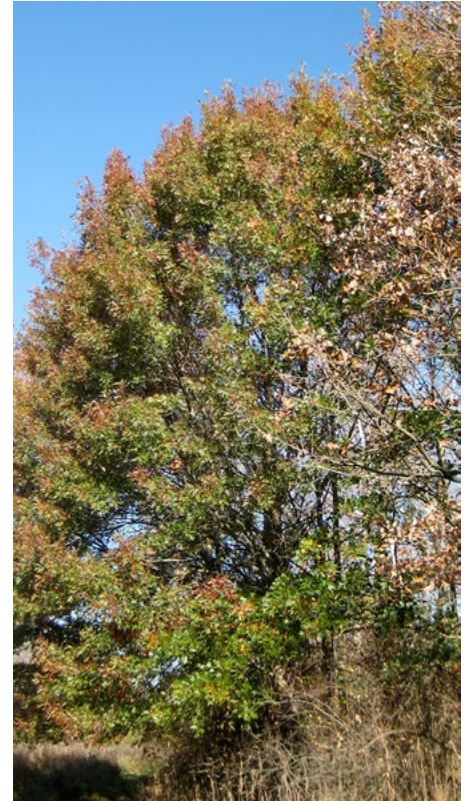
by Danelle Haake and Deanna English

Oaks (*Quercus* sp.) are considered to be some of the most important trees in the Missouri landscape. They provide humans with lumber for furniture and flooring. And they give us beauty as they line our streets, grow in our yards, and shape the surrounding landscape of much of Missouri. Maybe more importantly, however, oaks provide a substantial amount of food for wild animals in the form of their acorns.

Twenty-one oak species are native to Missouri, and 13 species are found naturally in St. Louis County—we are truly fortunate. For this month's quiz we thought we would take a closer look at this wonderful gift. Hopefully you'll discover some new bits of information about Missouri oaks.

- 1. All oaks are split into two groups named for colors. What are the two groups?**
  - a) Green and red
  - b) Red and white
  - c) Brown and white
  - d) Black and green
- 2. How old will an oak tree typically be before it produces acorns?**
  - a) 4 years
  - b) 10 years
  - c) 20 years
  - d) 30 years

- 3. In winter, oaks can often be picked out easily in a forest or woodland by the brown leaves that just don't want to drop off. Why might oaks hang onto their leaves?**
  - a) They hang onto their leaves until spring to get the most nutrient value when the leaves hit the ground and decompose.
  - b) The leaves provide some frost protection for buds and young twigs.
  - c) The leaves act as a deterrent to browsing deer who might damage the buds.
  - d) Oaks are in their juvenile stage of evolution and are somewhere between evergreens and fully deciduous trees.
  - e) All of the above



This oak grows at the edge of prairie at LREC.  
Photo by Deanna English.

- 4. Which one of the animals below does not eat acorns?**
  - a) Deer
  - b) Otters
  - c) Turkeys
  - d) Ducks
  - e) Coyotes
  - f) Bears
- 5) Can humans eat acorns?**
  - a) Yes
  - b) No

See **Quiz**, page 5



From **Quiz**, page 4

Answers:

1. **b) Red and white.** (Note: sometimes the red oaks are called black oaks.)  
When first learning to identify oaks you can begin by dividing them into these two categories. In general, red oak leaves have bristle-tipped lobes or if unlobed the leaf terminates in a bristle, and the inside of the acorn cap has fine, silky hairs. The white oak has rounded lobes without bristles and the acorn cup has no hairs.
2. **d) 30 years.** Most oaks are more than 30 years old before they produce acorns.
3. **e) All of the above.** Oaks are considered *marcescent*, which means that they retain dead plant matter. Nobody knows for sure why oaks tend to hang onto their leaves through winter. These answers are only possibilities. All that we know for certain is that these lovely brown leaves rattling in the winter wind are just another mystery to ponder on our winter hikes.
4. **b) Otters.** Otters do not eat acorns—they are carnivores that eat mostly fish, frogs, crayfish, and other aquatic invertebrates. But oaks provide a great service to our wildlife. Additional animals that eat acorns include squirrels, fox, raccoons, chipmunks, mice, and quail.
5. **a) Yes.** People can eat acorns, however it requires a lot of work and the ability to identify oak species. The best acorns for eating in Missouri are from the burr oak. If you're willing to experiment they can be quite tasty. For more information and some recipes, Deanna recommends this blog: <http://honest-food.net/2010/01/14/acorn-pasta-and-the-mechanics-of-eating-acorns/>.

Sources:

Denison, Edgar and Bruce Palmer. *Missouri's Oaks and Hickories*. A Missouri Department of Conservation Field Guide. Conservation Commission of the State of Missouri, 1994. Viewable online at <http://intranet.wcastl.org/sites/wsmith/upload/4aa15190d35ae.pdf>.

Snyder, Michael. "Why Do Some Leaves Persist On Beech and Oak Trees Well Into Winter?" *Northern Woodlands*. 22 November 2010. <http://northernwoodlands.org/articles/article/why-do-some-leaves-persist-on-beech-and-oak-trees-well-into-winter>. ❧



Top: Leaves of a red oak (left) and a white oak (right). Middle: Leaves of a swamp white oak. Bottom: A white oak, full of unshed brown leaves, towers over the Glass House. Photos by Deanna English.



## CREATE A NATIVE PLANT GARDEN

Are you and your students ready to start a native plant garden on your schoolyard? Now is the time to begin your planning. Download *A Guide to Native Plant Design* (1.18 MB) from the Litzsinger Road Ecology Center web site (<http://www.litzsinger.org/research/fox.pdf>). The guide is designed to be a starter project for teachers interested in incorporating native plants into their curriculum.

Created by 2011 LREC intern Rachel Fox, this guide includes:

- tips on how to get started
- instructions for constructing a raised bed
- garden design templates
- list of native plants with light and water requirements
- a short list of other resources



Learn to construct a raised bed like this one. Photo by Eddie Jones.

We are available to assist you in planning and creating your native plant garden, as well as providing guidance on how to implement the process into your curriculum. 🌿

### THANKSGIVING by Martha M. Schermann

Teaching  
Happy  
And  
Nimble  
Kids  
Solidifies  
Great  
Ideas  
Volunteers  
Inspire  
Nurturing  
Growth



Save the date:

### Volunteer Holiday Party

MONDAY, DECEMBER 10, 2012

11AM TO 2PM

At the Glass House, located at  
9733 Litzsinger Road  
St. Louis, Missouri 63124

RSVP to Martha at 314-540-4068  
before December 3, 2012 to let her  
know how many will be coming.  
Spouses and children are welcome.

### LREC Announcements

November 27

#### Volunteer Enrichment: Site Exploration with Staff

12:30 to 2pm meet at the cabin. Or if you'd like to bring a brown bag lunch, join us at noon. Questions? Contact Martha Schermann at 314-540-4068.

November 28

#### Monthly Water Quality Sampling

1 to 4 pm, meet at the Glass House. Questions? Contact Danelle Haake at [danelle@litzsinger.org](mailto:danelle@litzsinger.org) or 314-961-4410.

### Local Events

Select Fridays & Saturdays,  
November through March

#### Owl Prowls

7 to 9pm at the World Bird Sanctuary in Valley Park, Missouri. A naturalist will introduce you to live owls and their unique calls. Then, take an easy night hike through the grounds to try to call in a wild owl. Adults: \$9, children: \$7. Advanced registration is required: call 636-225-4390. Learn more at <http://www.worldbirdsantuary.org/>.

November 8

2012 Whitney and Anna Harris Conservation Forum—

#### Environmental Issues of St. Louis: Past, Present, and Future

6 to 9pm (registration 5:30pm) at the Saint Louis Zoo. Lectures, exhibits, and a panel discussion. Free but registration required ([hintonpa@umsl.edu](mailto:hintonpa@umsl.edu) or 314-516-6203). Details at <http://academyofsciencestl.org/events/>.