

Litzsinger Road Ecology Center

Community Newsletter

9711 Litzsinger Road • Ladue, MO 63124 • Phone (314) 540-4068 • www.litzsinger.org

Summer's Coming

By Bob Coulter

As the year winds down, I want to share our appreciation for your efforts in helping kids care about the environment and their community. As a former classroom teacher myself, I know it's easy to get sucked into the "default" standard curriculum. Your efforts to go further really make a difference.

Before you pack up for the summer, be sure to get your application in for next year. As you know, the best spaces on the calendar go quickly. If you haven't started your application yet, please plan to spend a little more time on it than you may have in the past. We are really pushing you to share more detailed reflections on how the work you are proposing links to your professional goals. Knowing that will help us to partner with you in designing projects for your kids. We are also trying to work with you to develop a trajectory for how the project itself can grow over the next few years. The more you can share with us the more we can help you to realize your teaching goals.

Once you are scheduled with us and your last grade reports are in, find your favorite spot, bring a good book and a cool drink, and get to work on that most important "recharging" project. Fall will be here before you know it. Until then, we wish you the best for the summer. ☘

Teachers, don't forget to complete and submit your LREC application for the upcoming school year!



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Upcoming LREC Events:

Volunteer Enrichment: Water Chemistry

May 26, 1–3pm. Learn to monitor water chemistry, or if you've been trained but would like a refresher, now is your chance! RSVP to (314) 540-4068 or martha@litzsinger.org.

Deer Creek Stream Sampling

May 27, 9am–12pm. Meet at Glass House. Contact Danelle with any questions: danelle@litzsinger.org.

Volunteer/Staff Picnic

June 3, noon. At Tilles Park. RSVP to Martha at (314) 540-4068 or martha@litzsinger.org.

Upcoming Opportunities:

Plastic Pot Recycling

May 3–September 30, 9am–5pm. Drop-off at 4500 Shaw Blvd and additional sites. Plastic lumber made from recycled pots also available. Learn more at <http://www.mobot.org/plasticpotrecycling/>.

Spring Wildflower Sale

May 8, 9am–4pm. At Shaw Nature Reserve. Admission \$3. Preview sale May 7 for Garden Members. Learn more at <http://www.shawnature.org>.

Native Plant School—Pond and Lake Landscaping

May 13, 1–4pm. At Shaw Nature Reserve. \$12 (\$8 for Garden Members). Register online at <http://www.mobot.org/classes> or call (636) 451-3512 x0.

The College School has indefinite boundary lines. That is, on a typical school day, formal learning spills out of the classrooms into the schoolyard, the surrounding community and beyond. This is an intentional result of the school's commitment to "joyful, meaningful and creative learning through an adventurous, theme-based, experiential curriculum." That commitment includes educating for sustainability. Tim Wood, the school's Sustainability Coordinator, gives us an overview of the implementation of natural community restoration into the school's curriculum.

—Eddie Jones



A teacher from another LREC partner school checks out native plantings at the College School. Photo by Eddie Jones.

Sustainable Schoolyards: Parks, Neighborhoods, and Watersheds

By Tim Wood

In the fall of 2008, our school built a Greenhouse and Garden Space. I was charged with creating the curriculum for the new space.

Since we knew the new program would start the following year, we focused our Faculty Retreat on sharing ideas related to this new endeavor. A committee of College School teachers volunteered to explore curricular ideas for the Greenhouse and Garden.

In the end we decided on four goals to start the program:

1. Promote the growth of native plants on our campus and in our community.
2. Create gardens that attract and support monarch butterflies and other wildlife.
3. Produce fresh vegetables and encourage gardening in our school community.
4. Promote and teach natural cycles and help our students understand their importance.

Since many of our teachers valued the planting of native plants, I contacted Litzsinger Road Ecology Center (LREC) for help. Fortunately, I met Mary Voges, a friend from my college days, and she offered her support.

Our first project with LREC involved seeds. First, our third grade students went to LREC to collect plant seeds growing along the stream. They brought the seeds back to our campus where the LREC staff taught us about stratification and scarification. We stratified the collected seed. The following spring we started the seeds in flats in our green house. Students later planted the plants along "The River," an environmental play space at our school.

Our second project with LREC was the *Sustainable Schoolyards* program. This one-week summer program for educators taught a number of our faculty about native plants and connected us with the *Earth Partnership for Schools* curriculum.

See **Schoolyards**, page 3

Schoolyards, from page 2

We used the information learned from this workshop to develop a plan for restoring the natural woodland community in the park adjacent to our school. The Lockwood Park Project involved the removal of bush honeysuckle and then the planting of native trees, shrubs, and forbs. We added more than forty new species to the park and reclaimed a large area that had been taken over by honeysuckle.

Two more similar projects followed at sites around our school. This year we are producing a large number of native perennials to use in our restoration project and to share with others. Additionally, we are experimenting with a more efficient way to stratify seeds and are having good success.

Our school has adopted the mission of natural community restoration and we are looking to acquire a tract of land where



Tim Wood (at right) explains restoration work at the woodland area bordering the playground at the College School to teachers visiting from other LREC partner schools. Photo by Eddie Jones.

we can conduct larger scale projects. Currently we are looking at 28 acres in the LaBarque Creek watershed that would serve this purpose.

Many thanks to the good people at LREC who have provided our teachers and our school with inspiration, knowledge,

resources, and support. We have improved the quality of the ecology of our campus and surrounding area as a result of what we have learned from Litzsinger Road Ecology Center and the innovative *Earth Partnership for Schools* curriculum. ☞

The College School

Location: 1 Newport Place, St. Louis, MO 63119

Grade Levels: preschool through eighth

Number of Students: about 260

Classrooms Working with LREC: 2

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

Teachers—

Are you interested in developing a sustainable schoolyard at **your** school? Gather a colleague or two and register to attend our **Sustainable Schoolyards** workshop June 14–18, 2010.

Information about this and other summer workshops for teachers is available at <http://www.litzsinger.org/profdev.html>.



Photo by Eddie Jones.

Calendar Commentary

This is the photo for May 2010 from the LREC Calendar.

Sycamore
(Platanus occidentalis)

Height: 75 to 100 feet

Bloom time: April

Bloom color: male flowers: yellow; female flowers: red

Sycamore trees are commonly found throughout Missouri. They reach their greatest size in lowland areas along rivers and streams. A notable characteristic of this tree is its brown bark, which peels off in irregular pieces to reveal creamy white inner bark. Small flowers begin to appear in April. The female flowers become fuzzy balls of seeds that can remain on the tree through winter. Native Americans used the hollowed out trunk of the Sycamore tree as a canoe.

References:

Kurz, D. 2009. *Trees of Missouri*. Missouri Department of Conservation; Jefferson City, MO.

Kemper Center for Home Gardening web site, <http://www.mobot.org/gardeninghelp/plantinfo.shtml>

Tying It All Together

By Leslie Memula

On the morning of April 8, Mary Ellen Leary's kindergarten class from Clark Elementary School in Webster Groves visited us at LREC. This was their third and final trip to the center this school year, having visited previously in fall and winter. As the students got off of the bus, one boy pointed and exclaimed, rather excitedly, "Look everyone...bluebells!"



Virginia bluebells. Photo by [Kaldari](#).

It was clear to me that these kids had done some serious homework. I inquired and they began to explain how they knew the names of some of our plants. When the students got back to school, they worked on a class writing activity describing their experience. Here is what they had to say:

Dear Leslie,

In preparation for our recent spring visit to LREC we accessed the Glass House Quiz: Beauties and Beasts from the April newsletter on our Smart Board. On the Glass House Quiz we saw native and non-native spring flowers that we would see on our visit. Our class learned a valuable geography lesson by finding the parts of the world on our world map that the non-native plants are from. We wondered how the Star of Bethlehem plant, from the Middle East, or Periwinkle, from the woodlands of Europe, traveled all the way to our woods in Missouri. Most of all it was very exciting to be able to identify familiar spring flowers at LREC.

Thank You,

Mrs. Leary's Class, Clark Elementary School Kindergarten

As Mrs. Leary wrote in her email to me, "So now we have integrated science, social studies, literacy, and technology into one lesson, pretty cool!" I would have to agree...pretty cool indeed! ☺

Clark Elementary School

Location: 9130 Big Bend Boulevard, Webster Groves, MO 63119

Grade Levels: kindergarten through fifth

Number of Students: about 286

Classrooms Working with LREC: 3

Web site: <http://www.webster.k12.mo.us/education/school/school.php?sectionid=5>



Volunteers dig along Deer Creek before they dine. Photo by Tasha Haun.

Digging and Dining along Deer Creek

By Danelle Haake

Several groups beside LREC are working to restore native habitat along Deer Creek. One of these, the River des Peres Watershed Coalition, has received a grant to do just that along a segment of the creek that runs through Maplewood's Deer Creek Park (known by many locals as "Rocket Park" due to the rocket theme of the large playground).

Along this stretch of Deer Creek, a new biking/walking path was recently added. In the process, a large area of soil was exposed, allowing a variety of invasive plants to spring up, including Japanese knotweed, Japanese hops, lesser celandine, and garlic mustard. The Coalition has been removing these invasive species and replacing them with native trees, shrubs, grasses, and flowering forbs.

This year, the Coalition is holding a series of events they call "Dig N Dine at Deer Creek." On the first Monday and third Wednesday of every month, volunteers gather at 4:00 p.m. (or as soon as they can after work) at the park to remove invasives and replace them with natives. After spending a couple of hours on restoration, they go to a nearby eatery to share a meal. For additional details, check out the web site at www.riverdesperes.org.

So, if you are looking for a week-night activity this summer, join the River des Peres Watershed Coalition some evening—they would be glad to meet you! ☘



Photo by Eddie Jones.

Calendar Commentary

This is the photo for June 2010 from the LREC Calendar.

Wild bergamot or bee balm (*Monarda fistulosa*)

Height: 2 to 4 feet

Bloom time: June to September

Bloom color: lavender

Native to Missouri, bee balm is a common perennial in the mint family. It can be found statewide and prefers dry or well-drained soils. Its flowers are unique in their appearance and attract butterflies and hummingbirds. Due to its long summer bloom time, bee balm is easy to find at LREC. Look for the large patch of bee balm in the corner of the North Prairie near the big box elder tree.

References:

Denison, E. 2008. *Missouri Wildflowers*. Missouri Department of Conservation; Jefferson City, MO.

Kemper Center for Home Gardening web site, <http://www.mobot.org/gardeninghelp/plantinfo.shtml>



Left: Volunteer Educator Marianne Young introduces first graders to the fragrance that gives spicebush its name. Photo by Eddie Jones.

Hooray for Volunteer Educators!

By Eddie Jones

Volunteer Educators at LREC facilitate high quality field experiences for several thousand visiting students each year. Their faithful commitment to the work of the center translates into a greater understanding and appreciation of natural world by the students they serve. Occasionally, students provide written feedback in the form of thank you notes. Here are some thoughts on their experiences with Volunteer Educators, gleaned from these notes:

What students have expressed to their LREC Volunteer Educators?

- *My leader...a great guide...my teacher...the best volunteer.*
- *You taught me things that I did not know.*
- *I want you to know how thankful I am just having a chance to visit you.*
- *Thank you for being nice to me.*
- *I wish I could come again.*
- *I enjoyed the trip so much that I didn't want to leave.*
- *I hope that I can see you again next year.*
- *I can tell that you had fun by your smile.*

What have students learned during field investigations with Volunteer Educators?

- *When people pour chemical down the storm sewer it will pollute the creek.*
- *Wherever an animal goes, it leaves tracks.*
- *When we cut down trees we are taking the animals' lives away.*
- *Wear thicker shoes when it is muddy and wet.*
- *We watched the male ducks fight over the females.*
- *Fungi is found in many places.*

Students have also learned:

- *...how to find out types of trees with a dichotomous key.*
- *...how to find things in the creek.*
- *...what decomposers do to trees.*
- *...about predators, omnivores, and carnivores.*
- *...parts of the watershed and types of birds and fish.*
- *...about woodpeckers and how they sound.*

Why is it important for students to work with Volunteer Educators?

- *They can have fun, learn and have the experience of their life. I know that I did.*
- *You can learn new things, have a great time and get a really thick packet of knowledge.*
- *They can learn about watersheds, food chains, flowers, trees and to enjoy the outdoors.*
- *They need to know about the environment and where they live.*
- *I still know the trees that we identified.*
- *I'm going camping and I'm going to look for a pawpaw tree. ☞*

Glass House Quiz: Frogs and Toads

By Danelle Haake and Deanna Lawlor

This month, we celebrate the first full newsletter-year of the *Glass House Quiz*! We have had a wonderful time putting together the quizzes. We also have gotten some great feedback and were excited to learn that teachers are incorporating them into their lessons! We love to get feedback from you and appreciate any suggestions you might have for topics you would like to see in future.

Since this newsletter is on hiatus for summer, we have decided to post at least one quiz on Facebook during the summer months. So, if you are on Facebook, join the Litzsinger Road Ecology Center group (<http://tinyurl.com/lrec-facebook>) to keep up-to-date.

Now, for the quiz! Over the past few weeks, we have been enjoying the calls of several amphibians. In some cases, we have even had a chance to photograph them. Can you tell which of the following are frogs and which are toads? For bonus points, name the species of frog or toad...



1. I am 1¼ to 2 inches long. My color varies from the bright green you see here to gray, greenish-gray, or brown.



3. I'm ¾ to 1¼ inches long. Many people think of my song as a sign of spring.



2. I am 2 to 3½ inches long. The females of my species are generally larger than the males.



4. I'm 3½ to 6 inches long. You can hear me calling for a “jug-o’-rum” all summer long.

Frogs and Toads: What’s the Difference?

According to MDC, here are a few differences:

Skin:

- Toads have dry, warty skin.
- Frogs have smooth, wet skin.

Teeth:

- Toads do not have teeth.
- Frogs have tiny teeth on both the upper and lower jaw.

Legs and Movement:

- Toads have shorter legs than most frogs and tend to hop.
- Frogs typically have longer legs and jump.

Eggs:

- Female toads lay their eggs in long strings.
- Female frogs lay their eggs—depending on the species—in small or large clumps or as a film on the water’s surface.



5. My identity is a mystery to the LREC Staff. Any guesses?

Photos 1, 2, & 5 by LREC Staff.
Photo 3 by David Cappaert, Michigan State University, Bugwood.org.
Photo 4 by Russ Ottens, University of Georgia, Bugwood.org.

See **Quiz Answers**, page 8

Calling all volunteers!

END-OF-THE-SCHOOL-YEAR
**VOLUNTEER/STAFF
PICNIC**

Thursday, June 3; Noon.
At Tilles Park.

RSVP: (314) 540-4068 or
martha@litzsinger.org.



Find us on
Facebook

Litzsinger Road Ecology
Center is now on Facebook!

Go to <http://tinyurl.com/lrec-facebook> and join us for updates, discussions, photos, and more!

Quiz Answers, from page 7

1. **I'm a frog: gray treefrog (*Hyla chrysoscelis* or *Hyla versicolor*)**
There are two species of gray treefrogs in Missouri that are so similar in appearance that they are nearly impossible to tell apart. Their call, however, will give away their identity. The treefrog pictured was found this spring in the woodland area between Deer Creek and the gravel drive.
2. **I'm a toad: American toad (*Bufo americanus*)**
This is our most common toad. American toads enjoy hanging out at small ponds, vernal pools, and even roadside ditches during the breeding season, which is April and early May. This picture was taken at the glasshouse. The nearby wetland pond has been busy with springtime toad activity. If you happen to be at LREC this month you should make your way over to the wetland area where you will probably see many tadpoles and maybe a toad or two.
3. **I'm a frog: spring peeper (*Pseudacris crucifer* formerly known as *Hyla crucifer*)**
Spring peepers are small and pinkish, gray, or light tan. They like to hang out in woodland areas near ponds, streams, and swampy areas with thick undergrowth. A distinguishing characteristic of the spring peeper is the dark X mark on its back. The subspecies found in the St. Louis area is the Northern spring peeper (*Pseudacris crucifer crucifer*).
4. **I'm a frog: bullfrog (*Rana catesbeiana*)**
Bullfrogs are Missouri's largest frog. They live in a variety of aquatic habitats such as Deer Creek and the wetland pond area at LREC. Bullfrogs are a game species and have a hunting season and bag limit in Missouri.
5. If you know the identity of this mysterious amphibian, send an email to danelle@litzsinger.org or call (314)961-4410. We'll post the identity on the LREC blog (<http://www.litzsinger.org/weblog>).

Reference:

<http://mdc.mo.gov/nathis/herpetol/frog/id.htm>

Help Wanted!

This summer, the Horticulture team will spend several days each month on plant identification. If you have some experience with plant id and would like to help identify our native flora, please let us know! Contact Danelle at (314)961-4410 or danelle@litzsinger.org for dates and times.

