

Litzsinger Road Ecology Center

COMMUNITY NEWSLETTER

www.litzsinger.org

February 2016

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Mrs. Davie, a teacher at Gateway Elementary, documents her students' experiences at LREC. Read about the experiences of one of her fourth graders on page 2. Photo by Eddie Jones.

Do Unto...or With?

by Bob Coulter

I've just completed a marathon process of reviewing federal grant proposals which provided a fascinating window into how people are framing the educational challenges before us. One observation I've made is to note the almost universal consistency of framing projects as "doing unto" students to remedy perceived deficits in their capacity to succeed in the future. Not one had any meaningful involvement among students in terms of setting the direction for projects, and very few made even a token nod toward teachers as a source of knowing what would make an effective project. Most projects were designed to train teachers in what they should do, with subsequent monitoring for fidelity to the script.

It's disheartening to see how little those who are actively engaged in the classroom—both teachers and kids—are relied upon to scope out the best learning paths. In this context, the work you are doing is all the more impressive—sharing outdoor adventures with your kids and jointly planning projects with them in ways that honor their capacities rather than patching their deficits. Keep up the good work, and let us know how we can make this spring the best experience possible. ✍



See and Be: a Fourth Grader's Account of Her Visit to Litzsinger Road Ecology Center

All the words that follow are Taylor's. She is a student in Mrs. Sandy Davie's all-girls class at Gateway Elementary School, St. Louis Public Schools. —Eddie Jones

We went to Litzsinger Ecology Center in December. The week before we went, a man came to our classroom. His name is Mr. Eddie from Litzsinger Ecology Center. He talked about what we should expect. He also said, "Wear some shoes that you don't mind getting dirty." I really enjoyed him giving our class some of his time. Mr. Eddie also talked about details. He gave us a piece of paper that had animals and ecosystems that we should see and hear. He said, "It's a wide open space and everything's outside."



Volunteer Educator Ray Potter encourages Gateway students to use all their senses to investigate a natural setting. Photo by Eddie Jones.

At Litzsinger Ecology Center I learned lots of things about ecosystems of the creek and of the forest. I saw lots of trees that had fallen down. What we saw, smelled and touched. When I saw all of those trees on the ground, I thought it was a tornado or a flood. My guide, Layla, pulled out decomposing soil from the tree and it was red and dark brown. She pulled it from a tree that had fallen down. All of the trees were bare (had no leaves). Also, when we went to the creek, there was even sand! In the prairie, there were lots of tall grasses. My favorite part was when we went to the creek. I saw fossils in the rocks. We got to throw rocks in the creek.

For our activities, we has to write in our journals. We also had to use all of our senses in our book and tell what we saw, heard, smelled and touched. Our chart included homes, tracks, trails, sights and sounds. We had to write a lot and draw pictures. It was fun to me and I think my group worked really good. I can't wait until we go back in the new year. I think Litzsinger is better than learning at school because I can see and be in the environment. ✍

—Taylor L.
January 7, 2016

Activity Spotlight: More Winter Lessons (Trees and Seeds)

by Leslie Memula

TREES

I hope you worked through the [Glass House Quiz](#) from our January newsletter. If you did, you likely became more familiar with the buds and barks of some common trees found in our area. If you overlooked it, no worries, there is another opportunity to brush up on your skills this month! My friends Deanna and Danelle are back with more examples (see page 5).

Since you are feeling a bit more confident with winter tree id, I suggest the activity [“Twigs are for Kids!”](#) from the [EPS \(Earth Partnership for Schools\)](#) curriculum. Your students can practice their observation skills while building their tree vocabulary. This activity would be a great way to find out what trees you already have in your schoolyard. By doing this research, you and your students can determine if there are species that you would like to plant to increase the tree diversity in your outdoor spaces.

Are you interested in free trees? [Project CommuniTree](#), a program of Forest ReLeaf of Missouri, may be able to help you out.

Applications for free trees and shrubs are accepted once the season opens, which is usually sometime in February, for spring planting. You can also check out another one of their programs, the [Missouri Forestkeepers Network](#), where you will find even more [lesson plans](#) to try.

SEEDS

If you joined us for the Teacher Enrichment session in October, you may be wondering what to do with all of those seeds you collected this fall. [“How To Make Seed Balls”](#) is an easy and fun activity to do with your students. While I found many different lesson plans, I chose

this one because it provided some solid background information on the benefits of adding native plants to your schoolyard and home. The lesson also addressed invasive species and gave some history on the use of seed balls, which I found interesting.

Check out a [list of invasive plants in Missouri](#) from the Missouri Department of Conservation (MDC). Information is also available on our [Litzsinger Road Ecology Center website](#) where you can download a copy of [“Is An Invasive Plant Species in Your Backyard?”](#) 🌱



Seed ball. Photo by [PermaCultured](#).

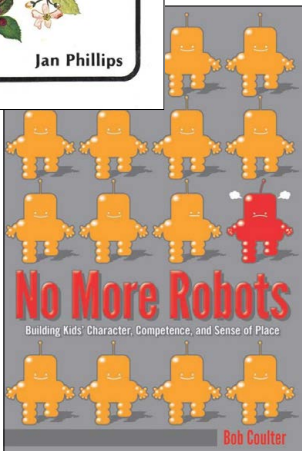
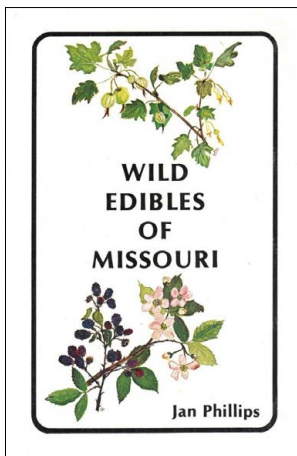
VOLUNTEER ENRICHMENTS FOR FEBRUARY, MARCH, AND APRIL

by Mary Voges

Our Volunteer Enrichment Program is off to an impressive start this year as we offer three more engaging opportunities to familiarize yourself with certain aspects LREC.

Enrichments begin at 1pm in the barn. We suggest you come early (12:30pm) and bring your lunch to enjoy time with other volunteers and staff before the enrichment begins at 1!

RSVP to Martha: 314-540-4068 or martha@lrec.net. 🌿



Winter Tree Identification

Wednesday, February 17, 1–3pm
Led by Jamela Thompson

Winter is a wonderful time of year to practice your tree identification skills! Learning some key features will equip you to identify trees year-round. No leaves? No problem! So let's take this time to turn the old adage on its head and see the trees for the forest! Topics will include identifying characteristics such as bark, buds, and growth habits. The enrichment will begin with hot drinks and a PowerPoint, followed by a short walk in the woods to closely observe some of our native trees. Waterproof boots/shoes and warm socks are recommended. Please remember to dress for the weather as frozen toes are the enemies of fun!

Meet the Author: Our Very Own Bob Coulter

Friday, March 18, 1–3pm

Aside from our field investigations and native restoration projects, LREC is home base for three federally-funded research projects investigating ways to engage kids with "STEM" (science, technology, engineering, and math) fields. Bob captured much of this work in his recent award-winning book *No More Robots: Building Kids' Character, Competence, and Sense of Place* (2015 Choice Magazine Outstanding Academic Title), and he's hard at work on the sequel due out in 2017. Come join in on a "no holds barred" discussion of life in schools today, and how that impacts our work with teachers.

Foraging and Wild Edibles at LREC

Monday, April 18, 1-3pm
Featuring Jan Phillips, author of *Wild Edibles of Missouri* and Ryan Maher, local chef/founder of *Missouri Wild Edibles*

Ever wonder what is under our feet when walking through the woodlands, along the stream, and in the prairies? Well, a lot of what we consider weeds, are actually tasty, healthy ingredients, IF we know what to pick and how to prepare them.

At this enrichment, we'll learn how to turn Missouri plants into pies, jellies, juices, fritters, biscuits, soup, pancakes, and more. We'll also root around outside, scavenging for goodies and learning about the edible and poisonous parts of plants. Samples of prepared plant recipes will be available, and we will learn how to pick and prepare Ryan's tasty garlic mustard. Who knew this invasive could be such a gift?

If you have Jan's book, *Wild Edibles of Missouri*, you may want to bring it to write notations. This is the go-to manual for foraging in Missouri.

Jan Phillips is the former Head of the College School and the author of *Wild Edibles of Missouri*.

Ryan Maher is an avid forager, chef, and the founder/owner of *Missouri Wild Edibles*. He has been featured in *Feast*, *Sauce* and *St. Louis* magazines. He is also a fellow enemy of honeysuckle and garlic mustard! (Read more about him in an online article at [Sauce magazine](#).)

Glass House Quiz: Barks and Buds, Part Two

by Deanna English and Danelle Haake

As promised, we are back this month with another set of LREC trees. We hope you had a chance to get out and practice in January, especially while there was snow on the ground. Getting out after a snowfall allows us to connect to the natural world in a unique and precious way. The world suddenly becomes brighter and quieter. Taking a walk at night during the full moon that was available during the January snowfall makes for a lovely experience.

Along with practicing winter tree identification, the snow also allows us a glimpse into who we share our spaces with. If we are fortunate enough to get a nice February snowfall, take your tracking field guide along on your winter walks and become more familiar with your non-human neighbors, too.

As you get ready to start this month's quiz, you may want to take a moment to look back at January's quiz to review the branching pattern information. Do you remember how the phrase "M.A.D. horse bucking" can help you remember the trees with opposite branching? If not, follow this [link to the January quiz](#) and refresh your memory.

After you start to get the hang of this go out and try your skills on some real trees. Also, check out the February 17 enrichment right here at LREC. We'll be focusing on winter tree identification.

Take a look at the photos of bark and buds and branching patterns on the next pages and try to match them with the names listed below:

- Flowering dogwood (*Cornus florida*)
- Kentucky coffeetree (*Gymnocladus dioica*)
- Bald cypress (*Taxodium distichum*)
- Box elder (*Acer negundo*)
- Eastern redbud (*Cercis canadensis*)
- American sycamore (*Platanus occidentalis*)
- Eastern cottonwood (*Populus deltoides*)

OPPOSITE

(branches are growing opposite of each other on the limb)



ALTERNATE

(branches are offset from each other on the branch)



...

Quiz photos by Danelle Haake.

Sources:







Virginia Tech Dendrology website (<http://dendro.cnre.vt.edu/dendrology/main.htm>)

Illinois Extension website: <https://web.extension.illinois.edu/fjprw/downloads/56616.pdf>

Cliburn, Jerry, and Ginny Wallace. *A Key to Missouri Trees in Winter*. Missouri Department of Conservation, 2003

See **Quiz**, page 6









From **Quiz**, page 5

Tree	Branching Pattern	Bark	Bud
1	alternate		
2	opposite		
3	alternate		

See **Quiz**, page 7



From **Quiz**, page 6

Tree	Branching Pattern	Bark	Bud
4	alternate		
5	opposite		
6	alternate		
7	alternate		

See **Quiz**, page 8

From **Quiz**, page 7

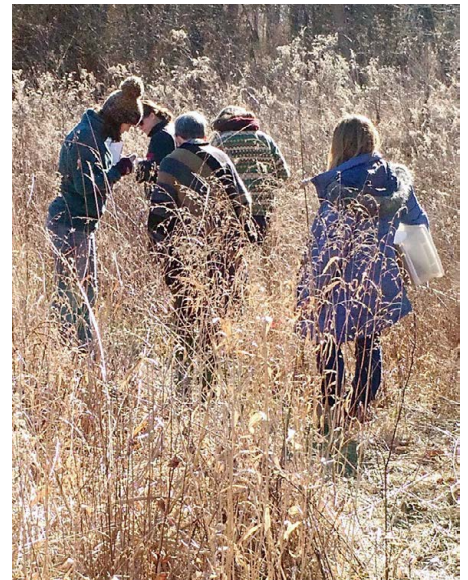
Answers:

Tree Identification	Virginia Tech Information	LREC Comments
1. Bald cypress (<i>Taxodium distichum</i>)	Bark – fibrous, red-brown but may be gray where exposed to weather; old, thick bark may appear somewhat scaly Bud – Round buds near the end of the twig	Alternate branching The bald cypress is one of three native conifers in Missouri, but it loses its needles in the winter. The other two natives are short leaf pine and eastern red cedar.
2. Box elder (<i>Acer negundo</i>)	Bark – thin, gray to light brown, with shallow interlacing ridges; young bark is generally warty Bud – white and hairy, lateral buds appressed* *pressed close or flat against	Opposite branching There are lots of box elders around the property upon which to practice your identification skills. Along with your bark and buds skills look for green, opposite branching twigs. One impressive box elder here at LREC is the big old tree between the North and South Prairies.
3. Kentucky coffeetree (<i>Gymnocladus dioica</i>)	Bark – dark grayish brown, scaly, developing deep fissures with scaly ridges Bud – small and sunken	Alternate branching At LREC you can find a Kentucky coffeetree near the demo garden behind the sedge garden. This tree has amazing leaves, seed pods, and bark. Check it out any time of year.
4. Eastern cottonwood (<i>Populus deltoides</i>)	Bark – smooth, gray to yellow-green when young; later turning gray with thick ridges and deep furrows Bud – buds ¾ inch long, covered with several brown, resinous scales	Alternate branching Cottonwoods love living near streams. Once you become familiar with the bark it's easy to pick out these giants in the woods.
5. Flowering dogwood (<i>Cornus florida</i>)	Bark – gray and smooth when young, turning very scaly to finely blocky Bud – the terminal flower buds are clove-shaped, vegetative buds resemble a dull cat claw.	Opposite branching There are several beautiful flowering dogwoods up near the glass house. We also have several other dogwood species at LREC, which are also beautiful trees, but arguably not as showy.
6. Eastern redbud (<i>Cercis canadensis</i>)	Bark – initially smooth and brown; later ridged and furrowed to scaly and dark gray; may have some maroon patches evident and orange in the cracks. Bud – tiny and dark red to chestnut in color; flowers buds are round and often numerous in large clusters on older woody stems.	Alternate branching While not always available, you can also look for persistent seedpods in the winter to help identify this tree.
7. American sycamore (<i>Platanus occidentalis</i>)	Bark – thin, mottled brown, green, tan and white; older stems are gray-brown and scaly (The most striking feature of this tree, often referred to as “camouflage” bark that readily exfoliates.) Bud – terminal bud is absent; lateral buds are reddish, resinous, with a single, cap-like scale.	Alternate branching This is the real giant here at LREC, beating out the cottonwood. It's fun to see if groups of kids (or adults) can hold hands and reach all the way around one of the larger sycamores in the woodland. 🌳

LOL (LEGITIMATE OUTDOOR LEARNING): PHOTOS FROM THE JANUARY 28 TEACHER WORKSHOP

by Eddie Jones

Twenty-one Litzsinger teachers partners, along with a couple of community partners, shared effective outdoor learning strategies at LREC on a pleasant and rewarding winter day.



Litzsinger Road Ecology Center

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Find us on Facebook:

[LREC Teachers](#) • [LREC Volunteers](#)



Seen recently at LREC: doe and buck. Photo by Danelle Haake.

TEACHERS: DID YOU KNOW ABOUT THE ST. LOUIS TEACHERS' RECYCLE CENTER?

The St. Louis Teachers' Recycle Center, Inc. gathers creative materials from local business and industry that are landfill-bound and makes them available to teachers, parents, and youth groups. There are locations in Chesterfield and Lemay, or you can take advantage of Van GO, a traveling reuse center that can come to you. Learn more at <http://www.sltrc.com/>.

FEBRUARY

by Martha M. Schermann

Finding
Ecological
Benefits
Raises
Useful
Awareness
Rousing
Youth



LREC Announcements

February 17, March 18, and April 18

Volunteer Enrichments

1 to 3pm; meet in the barn. Bring your brown bag lunch at 12:30pm or plan to join us at 1pm for the program. See page 4 for details and topics. RSVP to Martha: martha@lrec.net or 314-540-4068.

February 23

Teacher Enrichment:

What Does a Four-Season Outdoor Classroom Look Like?

4 to 5:30pm; at Covenant Christian School (2145 N. Ballas Road, St. Louis, MO 63131). RSVP to your Litzsinger staff contact.

Local Events

February 6

Maple Sugar Festival

10am to 3pm at Rockwoods Reservation. See trees tapped, watch sap collected and boiled down, and taste the results! Free and for all ages. More info at mdc.mo.gov.

February 13

Darwin Day 2016

7:45am to 12:30pm at Washington University in St. Louis. This free education event for area K-12 teachers features workshops, drawings, networking, food, and fun! Registration deadline is 5 pm on February 5: <http://schoolpartnership.wustl.edu/events/darwin-day-2016/>.

February 16

Woodpeckers (SLCC Continuing Education class)

7 to 9pm at SLCC-Meramec. Take an in-depth look at local woodpecker species. \$25/\$17.50 for age 60+. Call 314-984-7777.