

Litzsinger Road Ecology Center

COMMUNITY NEWSLETTER

www.litzsinger.org

September 2013

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Maplewood-Richmond Heights students investigate Deer Creek during summer camp at LREC. Learn more about our summer activities on page 3. Photo by Eddie Jones.

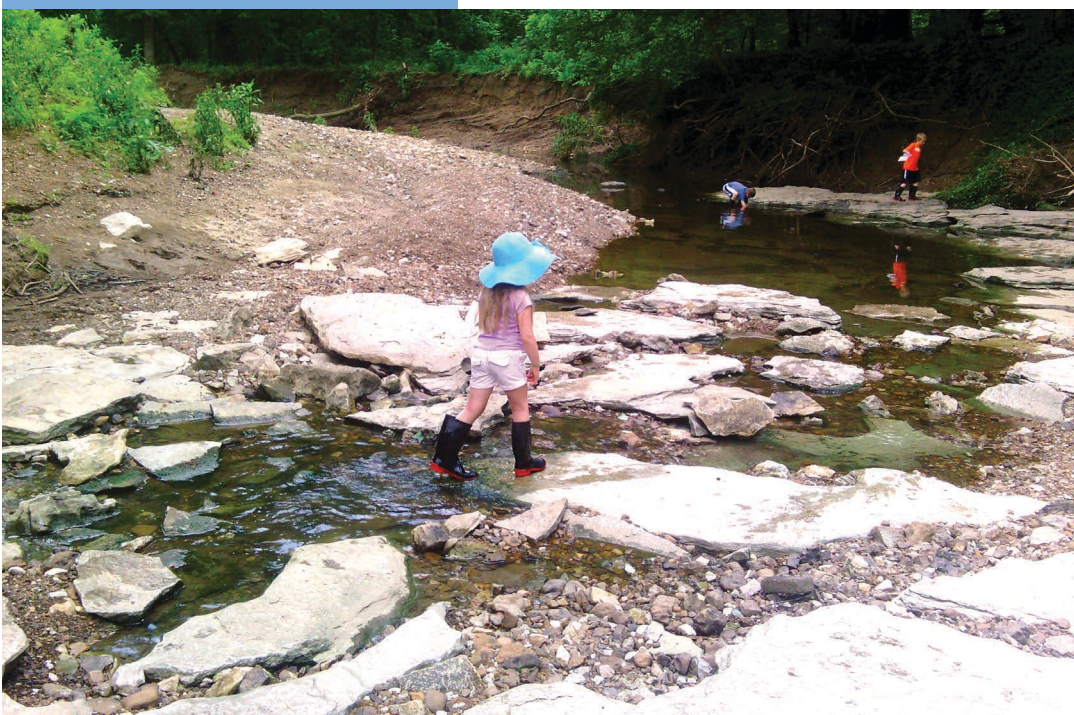
Welcome (Back)!

by Bob Coulter

We're looking forward to starting the new school year with you. For many of you, this is a place to pick up where we left off last year, and for many others it's the beginning of a new partnership. Whether you are just starting with us or you have been with us for several years, our goal is the same: Helping you create dynamic and engaging experiences with your kids, both at school and at Litzsinger. The entire team is ready to help you as we jointly design your kids' experiences at the ecology center and at school.

Just one request: Don't be a stranger. By far the most successful partnerships we have with teachers are where we have ongoing conversations and opportunities to work with you. This helps to link your occasional work at LREC with your ongoing projects on the school grounds or in the community. We lose context and can't help you as well

if we only hear from you right before a field experience. So, ping us an e-mail when you need help thinking about something, need some ideas, or just want us to come help you celebrate the great work your kids are doing. We'll be there... 🌿



Website Renovation

by Eddie Jones

The Litzsinger Road Ecology Center website has undergone a renovation! In addition to a bright new look, the revamped site better reflects our mission and aims to be more useful to the LREC community: volunteers, teachers, and staff. The new website went live on September 2; the web address remains the same: <http://www.litzsinger.org>.

The home page of the website begins with this statement:

Litzsinger Road Ecology Center (LREC) helps teachers learn how to engage their students in place-based education: using local ecology as a framework for studying a variety of subjects while interacting with the local community.

So, you might ask yourself, “What is place-based education?”

Effective outdoor place-based education

- is linked to learning goals across the curriculum (science, math, language, social studies, fine arts, physical education).
- involves the investigation and modification of the schoolyard as a native habitat.
- is sustained by the mutual support and enjoyment of the students, school staff, families, neighbors, local business, and civic leaders.

The power of place-based education is the opportunity that it affords to connect formal education with the surrounding community, the “real world.”

More information and links are available at <http://www.litzsinger.org/education/>. 🌿



In Memoriam

We are deeply saddened to have lost one of our wonderful volunteers this summer.

Leo Ebel passed away on May 16, 2013 at the age of 64 leaving behind wife Debra, son Brian, and many dear friends.

At LREC, Leo was a friend and mentor. He was a Certified Master Naturalist through Meramec Community College and was a founding member of Gateway Children’s Nature Connection which brings together conservationists, educators, professionals, and parents to promote and create meaningful opportunities to connect children with nature and the environment.

Leo loved to work with all age groups and treated every child like he or she was the only one in the group. He so endeared himself to the kids that some of them called him “Grandpa.”

He will be greatly missed. 🌿



In the Calendar this Month...

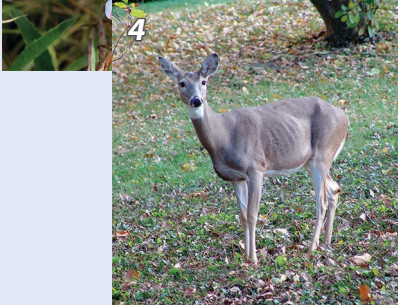
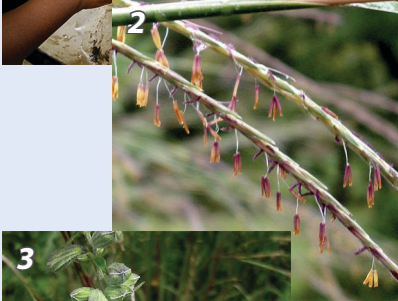
Welcome back to another school year with the Litzsinger Road Ecology Center!

September

1. Students collecting aquatic macroinvertebrates
2. Flowers of big bluestem (*Andropogon gerardii*)
3. Southern pink moth (*Pyrausta inornatalis*) on blue sage (*Salvia azurea*)
4. Curious doe (*Odocoileus virginianus*)

See full-size images on our blog:

<http://www.litzsinger.org/blog/>.



Summer 2013 Recap

by Leslie Memula

While this summer at Litzsinger Road Ecology Center seemed to speed by, it also proved to be quite busy! Here are some of the highlights:

We welcomed more than than 40 teachers to LREC for workshops:

For *Effective Outdoor Learning* (3 different sessions) we partnered with David Bruns of MDC to promote the *Discover Nature Schools* curriculum.

Furthering the LREC mission of outdoor place-based education *Sustainable Schoolyards* guided teachers in learning about the history and ecology of their school site and how to enhance that site as a habitat.

During *What's It Like Where You Live?* teachers learned to engage students in active investigations of local ecosystems and comparison of our region with others.



Top: Sustainable Schoolyards participants learn how to prepare their site for replanting. Bottom: Effective Outdoor Learning participants explore The Freedom School's prairie. Photos by Leslie Memula.

See **Summer**, page 4

From **Summer**, page 3

Students of all ages visited us too:

Elementary school children came to LREC during summer camps with the Maplewood-Richmond Heights School District and the Gifted Resource Council. We also hosted a computer camp utilizing Star-Logo TNG computer-based simulation software.

Middle school students, along with their college-aged leaders, spent time exploring LREC as part of two different Washington University experiences: the Alberti Summer Program and Camp Kumquat.

High school students from Gateway High's incoming ESL

freshman class and from the YES (Youth Exploring Science) Summer Program at the Saint Louis Science Center learned about local ecosystems.

College students from Harris-Stowe University participated in an urban ecology experience as part of their Science & Math Academy for incoming freshman biology majors.

Litzsinger staff participated in several off-site programs:

Staff helped managing the school's prairie and vegetable gardens as part of The Freedom School's Summer Enrichment Program.



Staff hosted a *Food & Games* camp on the main Garden campus where elementary students built AR (augmented reality) games using a mobile location-based software called TaleBlazer.

Staff worked alongside sixth grade students and staff at Covenant Christian School to manage their prairie and butterfly garden areas. ✂

Above: Maplewood-Richmond Heights students explore the creek. Photo by Eddie Jones.
Top-right: Students garden during the Food & Games camp. Photo by Bob Coulter.
Bottom-right: Covenant Christian School students maintain their prairie garden. Photo by Eddie Jones.



Glass House Quiz: LREC Staff

by Deanna English and Danelle Haake

The LREC family is extensive and includes many, many volunteers, along with board members, teachers, students, interns, neighbors, and other community members. Without this broad and diverse community we couldn't have this wonderful place. There are ten people, however, who have the privilege of being staff. As we begin a new school year, we thought it would be fun to have a quiz about the staff members so that the newest among you can get to know a bit about us, and those who have been around a while can test your knowledge.

1. **Which pet is most often found in staff members' homes?**
 - a) Cat
 - b) Dog
 - c) Bird
 - d) Hamster
2. **Since we are on the topic of pets, who has a pet chicken?**
 - a) Eddie
 - b) Anne
 - c) Deanna
 - d) All of the above
3. **Only one staff member has a grandchild. Who?**
 - a) Eddie
 - b) Deanna
 - c) Bob
 - d) Mary
4. **Whose family originates from three countries?**
 - a) Eddie
 - b) Danelle
 - c) Leslie
 - d) Martha
5. **Whose parents regularly volunteer at LREC?**
 - a) Deanna
 - b) Susan
 - c) Danelle
 - d) Anne
6. **Who is our Missouri Botanical Garden Green Team representative?**
 - a) Martha
 - b) Mary
 - c) Bob
 - d) Danelle
7. **Who is in charge of getting this newsletter together?**
 - a) Mary
 - b) Martha
 - c) Jennifer
 - d) Susan
8. **Who received a master's degree from Antioch University New England?**
 - a) Bob
 - b) Susan
 - c) Deanna
 - d) All of the above
9. **Who will soon publish a book?**
 - a) Eddie
 - b) Bob
 - c) Danelle
 - d) Martha
10. **Who is a member of the St. Louis Water Gardening Society?**
 - a) Danelle
 - b) Martha
 - c) Deanna
 - d) Leslie
11. **Who's planning to paddle down the whole Missouri River (over 2000 miles)?**
 - a) Danelle
 - b) Deanna
 - c) Eddie
 - d) Bob
12. **Who participates in "Tough Mudder" races?**
 - a) Deanna
 - b) Susan
 - c) Eddie
 - d) Anne

See **Quiz**, page 7

LREC Research: Hannah Carpenter

by Danelle Haake

In 2013, LREC has had the pleasure of hosting four student researchers. The work done by Maisie Greer of Antioch University, Hannah Carpenter of the University of Nebraska, Anna Chott of Drake University, and Jason West of Washington University this past spring and summer was excellent! This month and for the next three months, these students will be featured one at a time, because their top-notch work deserves no less.

Hannah Carpenter joined the LREC team via the Research Experiences for Undergraduates program run through the Missouri Botanical Garden. Her project was titled *The Effects of Invasive Species and Habitat Management on Native Tree Recruitment*. The results of her study of the seedlings and saplings that are growing in different parts of the LREC woodlands are being used to guide our management decisions on where to plant new trees and what

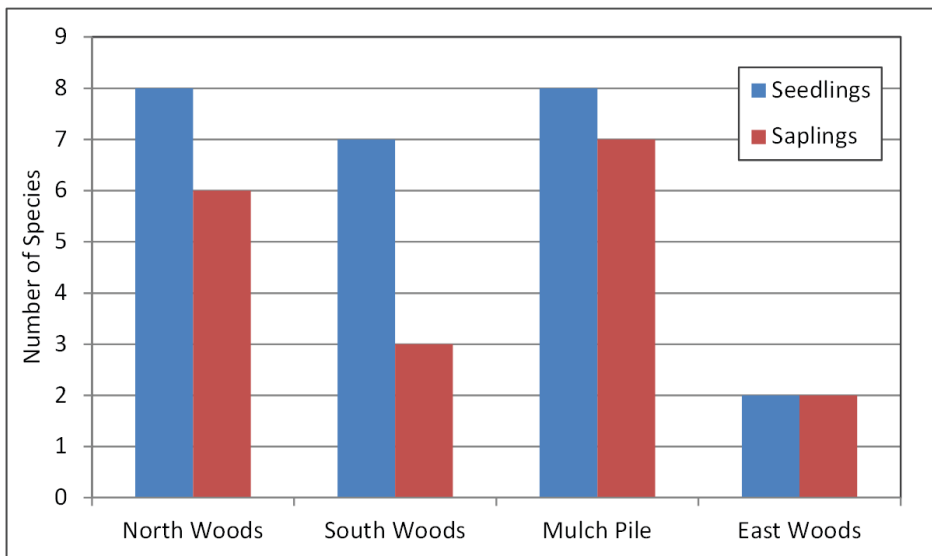
forms of invasive species control may be most effective at allowing trees to naturally re-populate the woodlands. An excerpt of her project poster follows:

“This study focuses on observing the natural regeneration of riparian woodland areas with different invasive species management histories. Four different sites within Litzinger Road Ecology Center in St. Louis, Missouri, were monitored for the



Hannah Carpenter at work with a measuring tape. Photo by Danelle Haake.

effects of *Lonicera maackii* and *Euonymus fortunei* on native tree seedling and sapling occurrence, species richness, and species diversity... Within each woodland location, twelve sample sites were monitored for canopy density, native tree seedlings within a one meter radius, and native tree saplings within a three meter radius. The heavily managed North Woods had the lowest canopy density; the unmanaged East Woods had the highest canopy density, which can be largely attributed to the dense stand of *Lonicera maackii*. The North Woods and Mulch Pile Woods had the greatest amount of combined species richness and diversity due



See **Research**, page 7



From **Quiz**, page 5

13. Who is crazy enough to have themselves filmed acting like a robot and then to post it on YouTube?

- a) Eddie
- b) Susan
- c) Anne
- d) Danelle

14. Who rides his/her bike to work almost every day?

- a) Danelle
- b) Eddie
- c) Bob
- d) Martha

15. Who has a website and blog about his/her yard?

- a) Martha
- b) Bob
- c) Leslie
- d) Deanna

16. Whose favorite animal is a turtle?

- a) Martha
- b) Leslie
- c) Susan
- d) Eddie

17. Who makes bread and yogurt, and grows basil in milk cartons on her home windowsill?

- a) Deanna
- b) Martha
- c) Susan
- d) Leslie

18. Who makes the very best Key lime pie and the very worst coffee?

- a) Mary
- b) Eddie
- c) Leslie
- d) Anne

19. Who has the longest commute?

- a) Eddie
- b) Leslie
- c) Jennifer
- d) Mary

20. Who lives the furthest from Litzsinger?

- a) Eddie
- b) Leslie
- c) Jennifer
- d) Mary

21. Finally, whose laugh is the loudest?

- a) Eddie
- b) Mary
- c) Leslie
- d) Martha

See **Quiz**, page 9

From **Research**, page 6

to a more aggressive management for invasive species. Increased invasive species management in the South Woods and East Woods should increase the native tree seedling recruitment.”

It was a pleasure to get to know Hannah this summer and very rewarding to watch her delve enthusiastically into monitoring grid installation, research method development, tree identification, invasive species management, and data analysis. She took challenges in stride and accomplished a fantastic amount in only ten weeks. Thank you, Hannah, for your hard work and your great spirit! ✨

NEW CALENDAR

by Martha M. Schermann

Never
Ending
Ways

Creating
Avenues
Letting
Each
New
Discovery
Aid
Rejuvenation



Horticulture & Restoration Offerings for School Groups

by Deanna English

Maintaining the property at LREC is a full time job, and many of the things that happen here throughout the year can be an opportunity for school groups. We welcome having students help us while they learn about what it takes to manage an urban natural area. If you are a teacher planning to visit LREC in September, below is a list of experiences that might be available at the time of your visit. If any of these fit into your lesson plan, please contact us and we can arrange for you and your students to get involved.

Stream cleanup—Cleanups available when the stream is at a safe level.

Stream monitoring—Stream monitoring kits are available and include dissolved oxygen, conductivity, pH, temperature (air and water), nitrates, turbidity, and chloride.

Invasive plant removal—We welcome opportunities to educate as students help us remove invasive plant species from the site.

Roots and plant structure demonstration—This activity introduces students to the purpose and function of roots and plant structures.

Tree monitoring (HS/MS)—High school and middle school students can develop tree identification skills and learn techniques used to inventory a large area of trees.

Plant monitoring—Students can learn how the plant monitoring grid is set up at LREC and practice their own monitoring skills.

Collect seed—Learn to identify one or two plants and go out and help us collect some seed.

Clean seed—Learn about different seed sizes and dispersment strategies. Clean some seed to prepare it for planting in the greenhouse or for sowing outside. 🌱



Mary works with students in the greenhouse.
Photo by LREC staff.



VE TRAINING STARTS SOON!

Do you know someone who would make a good Volunteer Educator? Let them know about us!

Volunteer Educator training for new recruits begins on Monday, September 9, 2013 from 9 a.m. to 3 p.m. Monday training sessions continue for eight consecutive weeks. During training, volunteers will become familiar with the site, learn inquiry-based, outdoor teaching strategies, and gain an understanding of basic ecology. Trainees will also have many opportunities to observe school groups and practice teaching.

Those interested in becoming Volunteer Educators and attending the training should contact Eddie Jones at (314) 409-4947 or email eddie@lrec.net. 🌱



From **Quiz**, page 7

Answers:

1. **a) Cat.** Of the ten staff members only three (Jennifer, Susan, and Anne) do not have at least one cat living in their home. There are 15 cats total in staff homes.
2. **b) Anne.** Anne has three children, a husband, and a chicken named Bawk-Bawk. She's looking for a companion for Bawk-Bawk if you know of anyone who has a hen looking for a home.
3. **d) Mary.** Mary is the only one of us lucky enough to have a grandchild. Lyla is 22 months old and she is the cutest grandchild ever!
4. **c) Leslie.** Leslie's husband is from India; her son, Nem, is from Ethiopia; and Leslie was born right here in the U.S.A.
5. **c) Danelle.** Danelle's parents, Carol and Henry Boeckmann, volunteer nearly every Friday at the horticulture end of LREC.
6. **a) Martha.** Martha represents us on the Garden's Green Team and makes sure that we practice the most sustainable practices here at LREC. Thanks, Martha!
7. **c) Jennifer.** Jennifer Krause is also our webmaster and, although we don't see her often, she is the one who makes sure that we have a professional presence on the web. There would be no newsletter or website without Jennifer.
8. **d) All of the above.** Bob, Susan, and Deanna all got their Master's degrees at ANE. Bob, M.Ed. '87; Deanna, M.S. '08; and Susan, M.S. '12.
9. **b) Bob.** Bob is scheduled to publish a book tentatively titled, *Putting Teachers and Kids in Their Place*. The book focuses on place-based education in schools.
10. **b) Martha.** Martha is always checking out water gardens here and in other cities.
11. **a) Danelle.** Danelle and her husband Hogan are regular paddlers of our awesome rivers, and they train and dream of exploring the total length of the Missouri one day.
12. **d) Anne.** Yep, that petite and soft-spoken woman we know at LREC is a wild woman once you get her to a Tough Mudder course. Climbing walls, swimming through ice filled giant containers, and even running through electrically charged lines while soaking wet. You go girl!
13. **b) Susan.** Those quiet ones can fool ya. Check it out (<http://youtu.be/XX5fYuutjws>), though she's not telling which robot she is.
14. **b) Eddie.** While a few of us ride occasionally, and more of us have good intentions, Eddie is the dedicated biker in our group. His round trip commute is 17 mile.
15. **d) Deanna.** Deanna practices permaculture and homesteading at her home in Richmond Heights. She calls her yard Adventure Farm and you can check out the website at <http://www.adventurefarm.org>.
16. **b) Leslie.** You can often find Leslie peering into the pool at the office overlook, identifying and checking on the resident turtles. She has lots of turtle stuff around her desk, too.
17. **c) Susan.** Susan is the newest member of our team and lives in Maplewood close to the farmers market—maybe she should set up a booth and sell some of her goodies! She also makes killer cornbread.

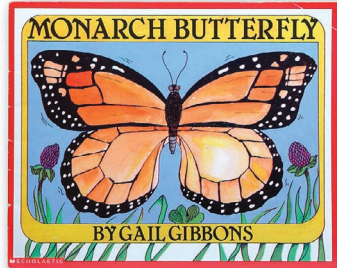
See **Quiz**, page 10

LREC READING CORNER

by Deanna English

Monarch Butterfly

BY GAIL GIBBONS



September is the time to watch for monarch butterflies as they make their way south for the winter. If you have milkweed plants in your yard you may even get the chance to host monarch larva and watch them grow.

This month's book selection, *Monarch Butterfly*, is an engaging read, appropriate for young children but still giving good information about the life and migration of this butterfly. I really enjoyed the simple illustrations that clearly show the life cycle of the butterfly, a migration route map, and even a little information about how to raise your own monarch. I think this would be a great book to read and then go out and hunt for monarchs in your neighborhood or schoolyard. Put on your citizen scientist hat and record your sightings at Journey North (<http://www.learner.org/jnorth/>). It's fun to see where other monarchs have been seen and to add to the data collection. ✂

From **Quiz**, page 9

18. a) **Mary**. Try to be around for the times when Mary brings in Key lime pie, but avoid the days she decides to make coffee!
19. d) **Mary**. While she'd like to live closer (and would be happy to talk to anyone that might be interested in buying a wonderful home in the woods), for now she has the longest commute at approximately 60 miles per day.
20. c) **Jennifer**. Gotcha, I bet. While Mary has the longest commute, Jennifer has the shortest since she just has to get out of bed and move to her in home office. We bet she works in her PJs some days. She does live the furthest from LREC, near St. Paul, Minnesota.
21. a) **Eddie**. Have you heard this guy laugh?

See photos and learn more about LREC staff at <http://www.litzsinger.org/about-us/staff/>. ✂

LREC Announcements

September 5

Volunteer Enrichment: Walkabout

Walk starts at noon; meet on deck.. Or bring a bag lunch at 11:30am. RSVP to Martha at 314-540-4068 or martha@lrec.net.

September 25

Monthly Water Quality Sampling

9am, meet at the Glass House. Questions? Contact Danelle Haake at danelle@litzsinger.org or 314-961-4410.

Local Events

September 6

Fall Wildflower Market

4 to 8pm at Shaw Nature Reserve. Admission is \$5. Learn more at <http://www.shawnature.org/>.

September 14

Loess Hill Prairie Field Trip

9pm at Squaw Creek National Wildlife Refuge in Mound City, Missouri. Join MDC biologist Steve Buback for a tour of the loess hills. Free tent camping available. More at <http://www.moprairie.org/events/>.

September 27

BioBlitz 2013

At Tower Grove Park. Join scientists and naturalists to explore natural areas in the park. Free, but pre-registration required. Teacher resources available. Go to <http://academyofsciencestl.org/initiatives/bioblitz.php> or call 314-533-8291.

September 28

Green Homes & Great Health Festival

9am to 4pm at Missouri Botanical Garden. Discover ways to maintain a healthy planet and a healthy you! Included in admission. Learn more at <http://greenhomesstl.org>.