

Litzsinger Road Ecology Center

Community Newsletter

9711 Litzsinger Road • Ladue, MO 63124 • Phone (314)442-6717 • www.litzsinger.org

Take The Webby Challenge

By Bob Coulter

First of all, welcome back to a new school year. We had a busy summer with teacher and student programs, but are looking forward now to working with you on your plans for the coming year. We applaud your ambition in building on last year's successes to make your students' experiences even richer this year.

As you look ahead, I encourage you to take what I'm calling the Webby challenge. If you're not familiar with the Webby awards, they are given each year to the best web sites in a variety of categories. In a model other shows should copy, the winners are limited to a *five word* acceptance speech. The New York Times web site NYtimes.com was among this year's winners, wryly remarking "Elliot Spitzer, We thank you!"

What can you say about your LREC experience in five words or less? Drop me a note at bob.coulter@mobot.org and we'll publish the ones we receive in next month's newsletter. From an administrative point of view, I see Litzsinger as "Local good for bigger audiences." This captures our dual focus on creating high-quality programs that meet your needs as we develop models that we share nationally through our professional networks.

How about "Ecology stitches it all together" or "Local plants for local kids" as a starting point? What does Litzsinger mean to you? We look forward to seeing what you contribute. ☞



Would you like to reduce paper clutter? Do you want to save postage and trees? Contact Martha at (314)442-6717 if you would prefer to receive this newsletter by e-mail.

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Upcoming LREC Events:

New Education Volunteer Training

Mondays, September 8–November 10, 9am–3pm. If you know of a new recruit, have them call Jackie Juras at (314)577-5187. Veteran volunteers welcome.

Volunteer Enrichment:

Nature Photography

September 22, 1–3pm.

Upcoming Opportunities:

Open Garden

September 5, 4–8pm. At Shaw Nature Reserve. Native plant sale, light food, and wildflower walks from 4–6pm; native landscaping presentations 6–8pm. Reservations required: call (636)451-3512 x6075.

Prairie Day

September 20, 10am–4pm. At Shaw Nature Reserve. Celebrate prairie heritage through pioneer games, guided hikes, craft demonstrations, live music, and a native plant sale. Information at www.shawnature.org or call (636)451-3512.

Green Homes & Renewable Energy Festival

September 27, 10am–6pm. Grandel Square will become a promenade of exhibitors, green vendors, workshops, and kid's activities. Information at www.greenhomesstl.org or call (314)577-0220.

School Spotlight: The Freedom School

By Eddie Jones

All of our partner schools use the Litzsinger Road Ecology Center to extend their classroom curriculum with outdoor nature study. Many go further, collaborating with LREC staff to design and implement service learning projects for their students, such as developing native habitats on their school grounds. Still others build after-school programs to engage students even more deeply in learning about their local community. The Freedom School participates in all of these!

Students at three grade levels have had the opportunity to investigate local ecosystems at LREC, Shaw Nature Reserve, and their own schoolyard. Beginning this past spring, Freedom School students established a 100-square-foot native plant garden intended to attract pollinators, and participated with the local community to clear a larger area of bush honeysuckle and winter creeper. Plans for the coming year include extending the native plant habitat into this cleared area. Also, teachers Jenny Brockmeyer (Pre-K) and Charlie Dill (third grade) are expanding the program this year so that *all* of the students in the school will be helping to develop the schoolyard native plant habitat.

While all students in the school will participate to some extent, members of the Freedom School's after-school program will be working as leaders of the project, receiving advanced training to complete more complex tasks. This work is supported through Litzsinger's LIONS (Local Investigations of Natural Science) program, funded by the National Science Foundation to develop new ways to make after-school and summer learning meaningful for students. With the support of their dedicated teachers, the students are on their way to becoming life-long advocates of ecological restoration. ☪

Freedom School at a glance:

Location: 1483 82nd Street,
University City, MO 63132

Current enrollment: about 90

Students served: Pre-K–6

Total classrooms: 8

Classrooms served by LREC: 5

Web site:

www.thefreedomschool.org

School Background & Key Facts:

Situated on a large campus in University City, the Freedom School is a Christian elementary school, Pre-K through sixth grades, committed to providing a racially and culturally diverse educational environment. The name honors a wonderful history of the pursuit of justice and freedom for children in St. Louis. Ex-slave John Berry Meacham founded the original Freedom School in 1847. The Freedom School intentionally partners with the urban poor, immigrants, and refugees. As such, most of the student body receives significant tuition assistance.

Announcing...

Mae Anne Slagle

Born May 30, 2008

6:55 a.m.

7 lbs. 5 oz.; 20 inches

Proud parents are

Malinda (LREC Restoration Ecologist)
and Corey Slagle



ERC Update

By Sean Fears


One of the highlights of this summer was the re-starting of our Ecological Restoration Corps program. From July 7–18, six high-school students, representing a diversity of school backgrounds had the opportunity to deepen their knowledge about local ecological issues and the restoration of native spaces. We “learned by doing” as we removed Japanese hops here at LREC, cleared invasives in St. Louis’ last original remnant prairie at Calvary Cemetery, and collected and cleaned seeds at Shaw Nature Reserve. We also had the opportunity to make connections with schools participating in our Sustainable Schoolyards initiative and look ahead to some of the activities we’ll be taking on during the school year. Current plans include continued restoration work at Calvary Cemetery, a visit to a water treatment facility, and investigating resource sustainability issues at EarthWays Center.

For those of you who haven’t heard about the program before, ERC is a high school youth experience consisting of engaging activities and experiential learning in two parts: an intensive two-week summer program focused on building basic ecological knowledge and restoration skills through activities such as seed



Above: ERC involves both learning and doing.

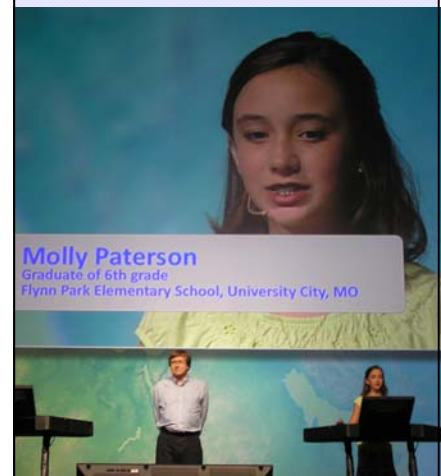
collection and cleaning, invasive species management, and water monitoring; and bi-monthly classroom sessions and weekend work days during the school year that build on and improve those skills while simultaneously establishing, enhancing, and maintaining native spaces at the Litzsinger Road Ecology Center and other locations in the community. After-school sessions will be held on Thursdays from 3:30–4:30pm, while work days will meet on Sunday afternoons from noon until 4pm.

The program will be open to recruitment throughout the school year; if you know of someone who would be interested in joining, please contact us! 

Congratulations, Molly Paterson

On August 4th, Molly Paterson, a recent 6th grade graduate of Flynn Park Elementary School, held an audience of more than 10,000 computer mapping professionals enthralled as she presented her work investigating socio-economic change in University City over the three generations her family has lived there. Molly completed this project as part of her participation in LIONS (Local Investigations of Natural Science), our National Science Foundation-funded after-school program. LIONS is part of a national effort to develop new models of after-school programs that develop students’ interest in math, science, and technology.

Below: Molly presenting at the mapping conference.



Hungry Water Snakes, Stranded Fish, and Young Nature Explorers

By Sharon Pedersen, LREC Horticulture and Education Volunteer

Six groups of enthusiastic primary grade students from Maplewood-Richmond Heights and their volunteer leaders explored the woods, prairies, pond, and creek of Litzsinger Road Ecology Center June 9–12 for evidence of plants and animals in the natural world.

We looked for bugs and insects to decide which are most common at Litzsinger. Which insect do you think is most common? We discovered insects living in galls on leaves; different kinds of mushrooms on dead trees; aphids on cup plant leaves, and lady bugs eating the aphids. We saw slugs, worms, roly polys, spiders, and beetles under sitting stumps, and lots of ant hills.

We examined leaf edges and bark patterns, and we made rubbings. Some leaf rubbings even showed bug bites. We know how to identify jewelweed: soft leaves with pretty toothed edges, and

stinging nettle: big pointed leaves, with stickers on the undersides and along the stems. We learned if you rub jewelweed stem juice on stinging nettle scratches, the hurt goes away. But we also learned to stay away from stinging nettle!

The most common blossom color was white, but we found some yellow, red, pink, lavender, and blue blossoms, too. Our favorite flower name is “wild hairy petunia.” We saw just a few pale blue ones at the edge of the north woods.

The woods and prairie are filled with molehills but we didn't see any moles. Some groups saw the same mouse three times on her nest under a bug board in the woods. One group saw two mice running from their nests in the prairie. There were fresh little fawn tracks right beside big deer tracks and some of us saw a young deer bounding across the grass. We saw raccoon tracks

in the woods, the paths along the prairies, and in the muddy creek banks, and a pile of raccoon scat filled with mulberry seeds. We saw coyote scat and turkey scat, too.

We learned that turkeys nest in the prairies but we didn't see any turkey eggs. Every day turkeys ate birdseed that had fallen from the deck feeders, made gobble sounds, and puffed out their feathers. Mary taught one group how to talk to turkeys, and we tried to stalk them, slowly, quietly, carefully, but they always disappeared.

Hundreds of tiny baby frogs hopped in the grass at the edge of the rain garden pond, filled with little black tadpoles. Mr. Hankley found a brown American toad in the grass nearby, as big as a chicken egg. After we had looked at it, he carefully put it in the grass and vines under a tree. We spotted kingfisher holes on the high banks of Deer Creek, beaver trail tracks, raccoon and duck tracks, and saw the mother duck, seven ducklings, and the uncle duck sunning themselves on the gravel bar.

Upcoming Opportunities for LREC Volunteers

Volunteer Educator Training

Mondays, September 8–November 10, 9am–3pm.

Volunteer Enrichment Session: Nature Photography

Monday, September 22, 1–3pm.

Volunteer Enrichment Session: Geology, Fossils, and Soils

Monday, October 20, 1–3pm.

See **Nature Explorers**, page 5

One afternoon Nick and Chuck discovered a very small pool in the creek channel filled with fish, but the pool was too small; the water would evaporate soon and those fish would die. So the boys suggested a fish rescue to Eddie.

The next day all the groups, with nets and buckets, gathered at the small pool. Shawn caught the first fish in his net. Students shared nets and held buckets, and Isaac caught a few fish with his bare hands. We worked together catching and carefully pouring the wiggly fish into the buckets, and then into the deeper waters of a nearby channel. Our fish rescue was a big success—four different kinds of fish moved to safer habitat.

It was a hot day. We were tired and ready to go back to the cabin. We walked north on the rocks to a wide creek pool we couldn't cross, looking for the trail through the woods. Some groups climbed up the east bank, some the west bank. Slipping and sliding, our shoes soggy, we inched along carrying buckets and nets till we got to the far end of the pool.

We found the trailhead and then Mortz cried out, "A snake. Look! A snake in the water!" There, in the middle of the wide pool, a northern water snake about two feet long swam up to a fish and...snap! caught it in his jaws! The fish flipped and splashed but the snake wouldn't let go. The snake swam to the bank, slithered up beside a rock, and ate him!

We were there. We saw it with our own eyes, and Eddie took pictures. Litzsinger Road Ecology Center is a great place to explore. You never know what you'll discover! 🐸



Above: Students rescue fish from a small isolated pool and move them into a nearby channel.

Using Medicinal Plants as a “Hook”

By Sarah Berglund, Volunteer Educator

As Volunteer Educators, we’re always looking for a “hook,” or something that will keep a child’s interest. This can be especially challenging when we’re doing an exploration session that has no specific lesson plan. I’ve found that children enjoy learning how Native Americans used plants for curing upset stomachs, sore throats, or getting a bug bite to stop itching. Children are amazed to learn that Indian parents used the whole prairie as their medicine cabinet!

I’ve highlighted a few native plants that should be blooming through September. If you are a neophyte to plant identification like I am, it might be helpful to refer to *Ozark Wildflowers* by Don Kurz (page numbers for the species are given). LREC has several copies of this book in the library.



Spotted Touch-Me-Not or Jewelweed – *Impatiens capensis* (pg. 142)
You’ve got to love Nature! She frequently grows this plant alongside stinging nettle so if you get “stung,” relief is nearby in the form of the juice of the stem of the touch-me-not. Indians and settlers alike used this as a poultice to neutralize poison ivy after contact and to treat bruises and insect bites. (Incidentally, the Glass House has a shawl on display that was made of stinging nettle; not very cuddly, but a good use of plants!)

*Photo credits (Top, from left to right):
Gerrit Davids, Jenna Tune, Jenna Tune.*



Purple Coneflower – *Echinacea purpurea* (pg. 203)

Pretty on top, useful under the ground. “Plains Indians used the root to treat snakebites, bee stings, headaches, stomach cramps, toothaches, and sore throats,” wrote Kurz. This family of plants probably had the greatest variety of applications in the herbal remedies of the Plains Indians, as it is easily adaptable for various ailments. In fact, the Lakotas in South Dakota still utilize the plant today for medicinal treatments. It has been used as a cough medicine since ancient times, as the root, when ground up, then chewed, coats the throat for a very effective salve.



Cup Plant – *Silphium perfoliatum* (pg. 121)

This is the first plant I learned about at LREC because its tall, square stem is easily identified. The children like it in the morning because the “cups” collect dew and the night’s rainwater. The Omaha and Ponca tribes used the root as a smoke treatment to clear up head colds, similar to what we do today when we inhale herbal steam treatments. Another tribe gave the sap from the stem to pregnant women to alleviate vomiting. Indian children also chewed the gum from the sap as we would chew Juicy Fruit today.

See **Medicinal Plants**, page 7

White Snakeroot – *Ageratina altissima* (pg. 68)

The Plains Indians had to have a treatment for snakebites; one such cure in their arsenal was white snakeroot. They applied the poultice directly to the snakebite. In another form, snakeroot was used to ease congested lungs and to treat diarrhea. As a side note to the plant's deadlier qualities, white snakeroot (or "milk sickness") was responsible for the death of early settlers, including Abraham Lincoln's mother after she ingested it through the milk of a cow that had eaten snakeroot.



New England Aster – *Aster novae-angliae* (pg. 225)

This plant was the Plains Indians' version of smelling salts. They burned the plant and blew the smoke up the nose of an unconscious person. The Blackfoot tribe also gave this plant as a tea to babies who suffered from colic or other gas pains. The Pawnees apparently used the stems for their version of pressure points, positioning the burning stalks above the affected skin lesion.



Tall Goldenrod – *Solidago canadensis* (*Solidago altissima*) (pg. 132)

Native Americans used this plant to treat kidney stones (nothing new under the sun, is there?), bladder problems, colds and flu, and, surprisingly, allergies and hay fever. They crushed the flowers and used them as a poultice for wounds and skin disorders, such as eczema. The crushed flowers were also chewed to ease a sore throat. Tall goldenrods, by the way, are frequent hosts for galls. So, that's another "hook" to look for when exploring with children.



Cardinal Flower – *Lobelia cardinalis* (pg. 144)

The older children will like this Native American remedy: the Pawnees used the cardinal flower as a love potion. They combined the flower with ginseng, wild columbine, and wild parsley. Then, a third party would steal some hair of the woman desired, which would be added to the mixture, and, after eating it...voila! the woman would not be able to resist her suitor. (Match.com could take a few lessons from the early Americans.) It was also used to stop nosebleeds. Meriwether Lewis noted in his journal that the Chippewas used these plants in treating gonorrhea and syphilis, a fact that probably should not be shared with the children.



Photo credits (Right, from top to bottom):
E. Denison, Missouri Department of Natural
Resources, Gerrit Davidse, Alan S. Heilman.

See **Medicinal Plants**, page 8

Meet Anne!

By Jennifer Brown

Anne Wamser has been working with us this spring and summer as our Restoration Assistant. She has been helping to keep our restoration programs afloat during the staggered maternity leaves of both Jennifer Brown and Malinda Slagle.

Anne has primarily been assisting our site Horticultural Manager, Mary Voges, in daily operations and site management, ranging from trail maintenance to native landscaping. Anne has proven to be a self-starter, often working independently and helping us stay on top of our invasive plant management, seed collection, and water quality monitoring needs.



We are very grateful to have Anne onboard as part of the staff through November. She is a great asset and a cheerful addition to the staff here at LREC.

Anne lives in South City with her husband, Matt, and two children: Maya (age 4) and Miles (age 1). She enjoys live music and moonlight bike rides around St. Louis! ☞

Medicinal Plants, from page 7

There are many other plants throughout LREC that were used medicinally by Native Americans and early settlers. For more information, please refer to *Ozark Wildflowers* and *Medicinal Wild Plants of the Prairie* by Kelly Kinscher, which can also be found in our library.

Obviously, a disclaimer should be added when you're talking to the children about not trying these remedies at home! ☞

Learning Opportunities...

The Aster Family of Missouri

(NATR 723 600)

Continuing Education course at St. Louis Community College—Meramec

This class focuses on structures and identification of the plants in the Asteraceae family. The first two sessions will be in the laboratory; the third will be an opportunity to study these plants in the field.

Dates: 9/18/08 & 9/25/08: 7–9pm;
9/27/08: 9am–12pm (field trip)

For details or to register, call (314) 984-7500 and ask for Continuing Education or use the St. Louis Community College Summer Course Booklet.

Green Center Workshop Series:

These free workshops will be held on weekends. All sessions will involve hands-on study with a focus on U City's Ruth Park Woods. No previous experience necessary.

Proposed Schedule:

Leadership Skills

9/6/08; 9–11am

Invasive Plant Species Education & Eradication

9/6/08; 12–2 pm

Forest Ecology

10/4/08; 1–3 pm

Native Plant Propagation

(led by LREC's Mary Voges)
12/6/08; 12–2 pm

Urban Stream Ecology

February/March 2009

Ecological Monitoring

(led by LREC's Malinda Slagle)
May 2009

Call the Green Center at (314)725-8314 or email events@thegreencenter.org to reserve your spot in this six-part series!