

# Litzsinger Road Ecology Center

## COMMUNITY NEWSLETTER

www.litzsinger.org

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*Chesterfield Elementary fifth graders, their teacher, and a mom working on their schoolyard prairie. One of the students was overheard saying, "We're doing math, science, and language arts all at the same time!"  
Photo by Eddie Jones.*



October 2016

## You Are Here

*by Bob Coulter*

**W**hile this truism can be a statement of the obvious, there is also a deeper meaning to consider. Each of the three words points toward a way of reclaiming our work from the larger cultural forces that are turning teaching into a technician job, implementing work designed by others. Let's try it—

**You:** Only you can bring the perspective, insight, and skills you have as an educator. There's no standardization here: different teacher, different learning environment. What is it that you bring to the kids?

**Are:** Scripted curriculum paths make it hard for everyone to be fully alive and engaged in the classroom. What can you do to do to be more fully present in your roles, and help your kids do likewise?

**Here:** What is it about the place where you find yourself that calls for a unique response? How can you use the school grounds and community to create meaningful learning experiences for kids? More

generally, how can you sculpt the curriculum to best meet the actual needs of the kids you have?

In short, teaching doesn't happen in standardized "anywhere, any place" nuggets. It's something we each create locally every day. Remind yourself every day that you are here. It makes a difference. ✍️



# Stories from the Schoolyard: The Soulard School

## EFFECTIVE OUTDOOR LEARNING GOING ON IN THE ST. LOUIS AREA

by *Leslie Memula*

The Mums room at The Soulard School is a magical place. Upon entering the room, I was drawn to the aquarium that held a number of monarch chrysalises and a chalkboard chock full of information on caterpillars and butterflies. There were pictures of students matching paint swatches to colors they found in nature right alongside student artwork utilizing those same colors. Read below how Julie Radin and Amy Cross utilize their school community to get their students outside investigating their own place:

*The kindergartners at The Soulard School are excited to learn and explore outside. We wanted to give them an opportunity to explore our neighborhood and meet learning goals at the same time so we decided to go on an Alphabet Hunt! We divided the students into small groups and sent each group out with an iPad, a short list of letters, and—of course—an adult. They were encouraged to use their imagination to find letters or create letters. Here is what they had to say about the activity:*

“I found a G. J was the hardest letter to find.” —Otis

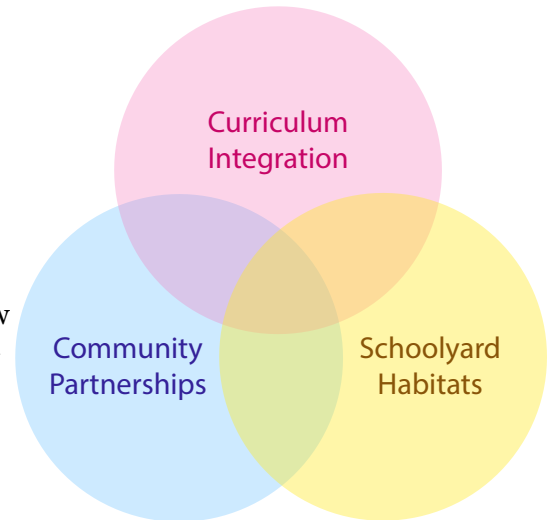
“N is my favorite letter we found because it is made out of metal.” —Logan

“It was kinda fun because it was hard to find the letter. The hard part is the fun part.” —Celeste

*This place-based learning activity built a sense of teamwork for our students while giving them a chance to practice the alphabet. It also generated a very natural way for parents to be involved in their child’s learning. Several parents have shared with us how their children are pointing out letters wherever they go!*

See photos from the Alphabet Hunt on the next page.

We look forward to sharing another story with you next month! ✍️

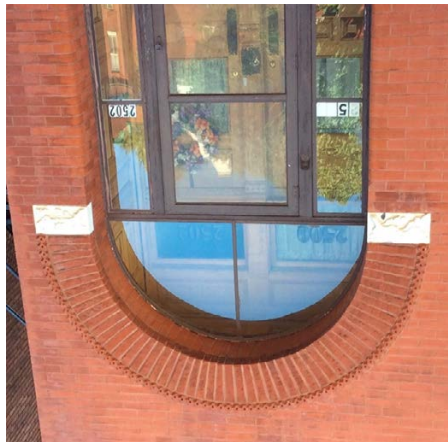


See **Soulard**, page 3





From **Soulard**, page 2



*Alphabet Hunt finds. Photos by The Soulard School kindergartners.*

## **NEW VOLUNTEER EDUCATOR TRAINING**

We are holding training sessions in October for new Volunteer Educators. If you have joined us since the training sessions last spring or would like a refresher, we invite you to join us this month. Please let Eddie know if you plan to attend ([eddie@lrec.net](mailto:eddie@lrec.net)).

*Thursday, October 6  
9am–noon*

**Duties, policies, communication, ethics, safety**

*Thursday, October 13  
9am–noon*

**How we work with teachers and their students**

*Thursday, October 20  
9am–noon*

**Connecting with the curriculum: living things**

*Thursday, October 27  
9am–noon*

**Connecting with the curriculum: earth processes**

## **OCTOBER** *by Martha M. Schermann*

**Offering  
Critical  
Thinking  
Overcomes  
Barriers  
Easily  
Recognized**





# Summer Intern: Josh Lovera

by Susan Baron

Joshua Lovera was one of our interns this summer (along with Amy Turlington, whose research I wrote about last month). For his research project, Josh decided to dig into our existing records to investigate the effects that burning the prairie has on certain species of plants. Combining data from prairie monitoring and our burn records, Josh looked at the change in average percent coverage of 13 different species at the sample plots before and after a burn. His results help us understand a little more about the short-term effects of fire on some prairie plants.

After performing some statistical tests on the data, Josh did not find a significant difference in coverage before and after prairie burns for most of the plants he looked at. This group included big bluestem (*Andropogon gerardii*), Short's sedge (*Carex shortiana*), tick trefoil (*Desmodium* sp.), white avens (*Geum canadense*), wild bergamot (*Monarda fistulosa*), foxglove beardtongue (*Penstemon digitalis*), mountain mints (*Pycnanthemum* sp.), sweet coneflower (*Rudbeckia subtomentosa*), tall goldenrod (*Solidago altissima*), and Culver's root (*Veronicastrum virginicum*).

A few plants did show a significant change in at least one of the two prairies Josh looked at. In the north prairie, the coverage of dogbane (*Apocynum cannabinum*) increased after a burn, and in the south prairie, jewelweed (*Impatiens capensis*) decreased after a burn. The only group of plants that showed a significant change in both prairies was blackberries and raspberries (*Rubus* sp.), increasing in both prairies after a burn.



Jewelweed (*Impatiens capensis*). Following a burn in the south prairie, jewelweed coverage decreased. Photo by Missouri Botanical Garden.

Josh's research paper can be downloaded at [www.litzsinger.org/research/lovera.pdf](http://www.litzsinger.org/research/lovera.pdf).

This was a limited study, and factors such as differences in weather and burn time could have affected the data. Over the years, different Litzsinger Road Ecology Center staff members have collected the prairie monitoring data, and each one had different skills and specialties in plant identification, leading to some variation in the accuracy of the data. Josh took this into consideration when choosing the plants he looked at, choosing common plants that are generally fairly easy to identify.

Thanks to Josh for all his hard work this summer! You'll continue to see him at LREC for a while because we've been able to extend his internship through the fall. We're so happy to continue to have him around! 🌿



Josh Lovera. Photo by Susan Baron.

# Glass House Quiz: The Scoop on Scat

by Mary Voges and Jamela Thompson

You can probably make a good guess as to what animal visited your newly washed car or your attic based on the overly-friendly gifts they left. But what about when you come across scat on the trail? Or on a log? Scat is one of the most revealing signs of an animal, as much information can be derived from it. The clues as to whether you're observing the droppings of a feathered or furred creature, its role as predator or prey, and in some cases its gender are all there for you to detect. You know what they say, the proof is in the pudding.

## Shape

Is the scat pointed, round, small, rough and wrinkled or smooth and oval? These characteristics will give you a sense of the local fauna. Both deer and rabbits drop pellets, but deer pellets are pointed while

rabbits' are round. Mice droppings are very small, wrinkled, rough, and irregularly shaped, while squirrel pellets are smooth, oval, and slightly larger. Fox scat tends to twist into a stringy, pointed end.

## Color/Texture

Color and consistency of the scat is not a true determinant, as animals' diet change and they, like us, experience digestive issues. The season can affect the moisture content of their diet, which can alter the texture of the scat. Omnivore scat will vary more as their diet has a wider range of foods. Does the scat have any white in it? If so, it most likely has nitrogen content and has come from a bird, reptile, or amphibian.

## Contents

Do you see plant material? Look for seeds, stems, and leaves.

This is typical of an herbivore. Interestingly, there is almost always no scent to herbivore droppings, although animals that eat a lot of berry leaves usually have sweet-smelling feces.

Is there animal material present? Look for scales, bones, and fur. This is a sign of a carnivore and the dung will have a pungent odor.

## Location

Where did you find the feces? Canines, such as coyotes, wolves, and foxes, will often intentionally defecate on trails to mark territory. Sometimes you will see scat piles next to or near a tree base. Look up! It may have come from a nest or roost in the tree. If you notice cliff faces that appear "whitewashed", it is a sign of birds' nests high up on the rock. Is there a cluster? Raccoons will deposit in the same spot repeatedly, which is known as a latrine.

*Safety Note: When you come across animal feces, do not pick it up without gloves or a tool and avoid inhaling around it, as parasite dust particles may be present.*

Are you feeling scatterbrained yet? On the next page see if you can match the animals listed to the photos of their "calling cards." Then see if you recognize them on your next hike!



It's pretty clear that this is the work of a bird (or birds!), but the sources of some other animal droppings are not so obvious. Photo by [velkr0](#).

See **Quiz**, page 6





From **Quiz**, page 5

Animals:

- |            |           |               |             |
|------------|-----------|---------------|-------------|
| a. Raccoon | c. Coyote | e. Turkey     | g. Squirrel |
| b. Deer    | d. Rabbit | f. Black bear | h. Fox      |

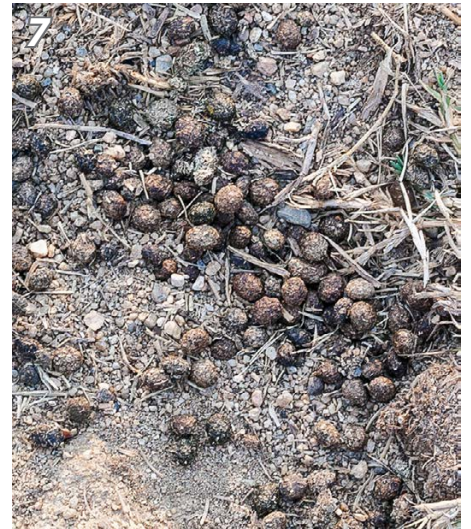


Photo credits: 1, 2, 3, 4, 5) [Randall Schietzelt, Harper College](#). 6) [Seabrooke Leckie](#). 7) [Tichakorn Pimjaipapar](#). 8) [Susan Baron](#).

See **Quiz**, page 7



From **Quiz**, page 6

Answers:

1. **b.** Deer scat is somewhat pointed and pellet-like and is left in a pile.
2. **c.** This coyote scat contains seeds and fur, which is reflective of their omnivorous diet.
3. **g.** Squirrel scat is small and pellet-shaped.
4. **a.** This appears to be a raccoon latrine as it is a large pile of scat containing seeds and berries.
5. **h.** The twisted, stringy appearance of this scat suggests a fox.
6. **f.** The size of this scat and the abundance of berries suggests that this is bear scat.
7. **d.** Rabbits have rounder pellets than deer.
8. **e.** Turkey scat has some white in it, which is indicative of bird scat.

Sources:

Internet Center for Wildlife Damage Management. (2015). *Droppings, Scat & Feces Identification*. Retrieved from <http://icwdm.org/inspection/Scat.aspx>.

Schietzelt, Randall, Harper College. *Animal Scat or Droppings*. Retrieved from <http://www.harpercollege.edu/ls-hs/bio/dept/guide/gallery/evidence/scat/thumb.html>.

Wilkinson, Todd. (2000). *Reading Backcountry Animal Scat*. Retrieved from <http://www.backpacker.com/skills/reading-backcountry-animal-scat/>. 🌿

## LREC Announcements

October 12

### Teacher Enrichment: Learning with Seeds

4–5:30pm, at Keysor Elementary (725 N. Geyer Road, Kirkwood, MO 63122). Teachers, RSVP to your staff contact.

October 14

### Volunteer Enrichment: Wild for Monarchs! Presented by Ann Earley and Bob Seimer

1–3pm, meet at the Glass House. Bring your brown bag lunch at 12:30pm or meet us for the program at 1pm. RSVP to Martha at 314-540-4068 or [martha@lrec.net](mailto:martha@lrec.net).

## Local Events

October 15

### Forest School Congress of the Midwest

8am–5pm, at Raintree School (2100 S. Mason Road, St. Louis, MO 63131). Learn about nature-filled, place-based learning through speakers, exhibits, a resource fair, and more. \$135 registration. 5 CEUs. Learn more at <http://www.raintreeschool.org/conference>.

October 29–November 6

### Honeysuckle Sweep Week

Various locations, days, and times. Learn about and help eradicate invasive bush honeysuckle. Learn more at <http://biodiversecitystl.org/>.

November 4

### Missouri Wildlife Trivia Night

7–9pm, at August A. Busch Memorial Conservation Area. Gather your friends and family to see if you really know it all. Compete for prizes and bragging rights! Learn more at <http://mdc.mo.gov/events/view/1052472>.