# Litzsinger Road Ecology Center

**COMMUNITY NEWSLETTER** 

www.litzsinger.org

November 2010

### in this issue

- 2 Schoolyard Learning... Down the Street
- 3 Glass House Quiz: Seed Dispersal
- **4 LREC Announcements**
- **4 Local Events**

## **Picturing Change**

by Bob Coulter

ast month I suggested the framework of your kids growing into "agents of care" for the environment. As we know, an essential part of that is building connections to the spaces near them. That's why LREC promotes place-based education as an integral part of a successful curriculum. We want to help you build these connections with your kids and support their efforts to improve the community.

There are a number of techniques many of you use to build this connection, including journaling, sketching, and watercolor painting to capture natural scenes that capture kids' interest. As you build your program, I'd like to encourage you to consider photo monitoring as an additional way to build this connection. We've started doing this with a couple of groups during their time at LREC, but it lends itself even better to spaces like your school yard that the kids see more regularly.

The idea is easy: Take digital photographs of the same location on a regular basis. This might be leaves changing through the seasons, or changes in

a nearby creek level before, during, and after a storm. With tween-age kids we've been having them take ownership of what to monitor, but the project would work as well with adult support for younger kids' efforts. From a curricular point of view, these images can be the basis for oral and written language skills as the students describe what they see in the images and what has changed. More importantly, having a collection of images of "my space" can help to foster that bond we need to help kids create if they are to become agents of care.

I hope you find this useful. Keep us posted on how well it works for you.  $\mathcal{L}^{\mathcal{Y}}$ 

Plants, like this Culver's Root, are dispersing their seeds this time of year. Learn about seed dispersal and take a quiz on page 3 Photo by Deanna Lawlor



## Schoolyard Learning...Down the Street

by Eddie Jones

aint Raphael the Archangel School is located on the campus of the church in the St. Louis Hills neighborhood. While the church property has little green space, it's located just a few blocks from Wilmore Park, a large city park on the east bank of River des Peres. The Saint Raphael fourth- and fifth- grade students have recently "adopted" an undeveloped area at the north end of the park (locally known as the Breezeway), which currently consists of lawn grass with some widely-spaced trees.

What does "adopt" mean? The students and their teacher, Pat Eaton, are finding out! The city parks department has given its

approval for the students to assess the area and recommend how to naturalize the space.

On a fine fall morning last month, the students walked the half mile to the park, accompanied by Pat, colleague Mary Pat Hennicke, a few parents, and two LREC staff. The students spent the better part of the morning determining the current ecology of the site, which included identifying trees and other plants, in addition to doing several plot studies. Students also picked up trash.

Student recommendations include removal of a large poison ivy plant and several large winter creeper



Students doing a plot study Photo by Eddie Jones

vines that surround some of the tree trunks. The students' next step is to introduce a few appropriate native plants to an area near a dead cottonwood tree.

These students are not only engaged in real-world learning, but they are contributing to the ecological health and beauty of their neighborhood. 🚜

#### St. Raphael the Archangel School

Location:

6000 Jamieson Avenue, St. Louis, Missouri 63109

Grade Levels: K-8

Number of Students: about 160

Classrooms Working with LREC: 2

Website:

http://www.straphaelarchangel.org/ school



## **Glass House Quiz: Seed Dispersal**

by Danelle Haake and Deanna Lawlor

ost of the plants at LREC have finished flowering, and are now spreading their seeds, a process called seed dispersal.

Ecologically speaking, it's beneficial for a parent plant to send its seed a good distance away. This allows the new seedlings to grow without competition from the parent plant, and increases the chances that the new generation of plants will pollinate other members of the species, thus increasing the genetic diversity of the population as a whole.

Some of the most common dispersal mechanisms are described below.

To learn more, try these links:

- <a href="http://www.youtube.com/">http://www.youtube.com/</a> watch?v=zbQ1jWl3AOM
- <a href="http://www.mbgnet.net/bioplants/seed.html">http://www.mbgnet.net/bioplants/seed.html</a>

#### **Common Seed Dispersal Methods**

- Rainfall: rain knocks seeds away from the parent plant
- Floating: water carries seeds downstream
- Wind: blows the seeds
- Explosion: plants "launch" seeds
- **Burying**: animals collect and bury seeds
- **Hitchhiking**: seeds attach to the fur and skin of animals
- Scat: animals eat seeds and leave them behind in scat

Shown below are photos of seeds found at LREC. Can you decide the most common way these seeds are dispersed? *Note: seeds are sometimes dispersed in more than one way.* 



















See Quiz, page 4

Litzsinger Road Ecology Center 9711 Litzsinger Road Ladue, MO 63124

www.litzsinger.org

#### From **Quiz**, page 3

#### Answers:

- 1. Rose Mallow (Hibiscus lasiocarpus)—scat
- 2. Beggar Lice or tick-trefoil (Desmodium sp.)—hitchhiking
- 3. Sugar maple (Acer saccharum)—wind
- 4. Jewelweed (Impatiens capensis)—explosion
- 5. Eastern Wahoo (Euonymus atropurpurea)—scat
- 6. Culver's root (*Veronicastrum virginicum*)—rainfall
- 7. Dogbane (Apocynum cannabinum)—wind
- 8. Black walnut (Juglans nigra)—burying
- 9. Coconut\* (Cocos nucifera)—floating
- \* Found in the kitchen at LREC! @ 💥



Above: Beggar lice hitchhike on Deanna's jeans

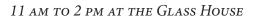


bove: Jewelweed pod after the "explosion."

All photos here and on page 3, except for coconut, by Deanna Lawlor

#### **VOLUNTEER HOLIDAY PARTY**





Contact Martha at 314-540-4068 to RSVP.



#### **LREC Announcements**

#### November 17

#### Volunteer Enrichment: The Seedy Side of Litzsinger (Native Plant Seeds)

Noon to 2 pm. Bring a sack lunch. RSVP to Martha at 314-540-4068 or martha@litzsinger.org.

#### November 18

#### **Water Monitoring**

Meet at 9 am at Glass House. Contact Danelle Haake (314-961-4410 or danelle@litzsinger.org) with questions.

#### **Local Events**

#### November 1 and 17

#### Dig N Dine at Deer Creek Park

Streamside habitat restoration at Deer Creek Park (on Laclede Station Rd.) from 4 to 6 pm. Contact Danelle Haake (314-961-4410 or <u>danelle@</u> <u>litzsinger.org</u>) for further details.

#### November 10

### Conservation Forum: Global Climate Change

5:30 to 9 pm at Missouri Botanical Garden. Free but registration required (call 314-516-6203). More information at icte.umsl.edu/about/events.html.

#### November18

#### Science Café: "Sacred Seeds"

7 to 9 pm at Herbie's Restaurant, 405 N. Euclid Ave. Free. MBG research specialist, Ashley Glenn, presents her work with the Sacred Seeds program. More info at <a href="https://www.mobot.org/events/calendar.asp">www.mobot.org/events/calendar.asp</a> or call 314-289-4424.

#### November 23

### Creepy Crawly Conservation: The Value of Invertebrates

7:30 to 9 pm at the Living World (Saint Louis Zoo). Free. Featuring Jennifer Hopwood of the Xerces Society. For information, call 314-646-4544.