

# Litzsinger Road Ecology Center

## Community Newsletter

9711 Litzsinger Road • Ladue, MO 63124 • Phone (314)442-6717 • [www.litzsinger.org](http://www.litzsinger.org)

### New Beginnings

By Bob Coulter

**W**e hope that 2009 is getting off to a good start for you. The days are slowly getting longer, and warm weather will be here before too long. As I noted in last month's newsletter, 2008 was an unusual year for us with staffing changes and the flood. We remain grateful for your continuing support as we move into the new year. I'd like to take this opportunity to update you on a few things we're looking forward to.

First, on the staffing front, we'll be hiring Jennifer Brown's replacement soon. We have interviewed a couple of very strong candidates, and hope to wrap this up quickly. Our new ecologist will continue the leadership Jennifer showed for our creek and watershed projects. We're also close to hiring a staff member who will work with the "Community Science Investigators" after-school programs we run in schools here and in the Boston area (with our partners at MIT). I hope we can make introductions of our new team members for both positions in the next newsletter.

We're also looking forward to some new beginnings on the site of my old house. Demolition will begin in early January, and once the house is cleared out of the way, we'll begin planting a rain garden. This will expand the portions of the Center that have native plantings, which provides good habitat for our many critters. The plants will also help to stabilize the banks in that very flood-prone location. As we get going, we'll be looking for ways to engage your kids in the project if it fits your curriculum goals. ☪



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#### Upcoming LREC Events:

##### **Volunteer Educator Enrichment: How to Work Effectively with Kindergarteners**

January 15, 12:30–2:30pm. At the Barn. Call Martha at (314)442-6717 if you plan to attend.

##### **Volunteer Educator Enrichment: Cool Winter Field Investigations**

February 20, 12–2pm. At the Barn. Call Martha at (314)442-6717 if you plan to attend.

#### Upcoming Opportunities:

##### **Native Plant School: Control and ID of "The Worst" Invasive Woody Plants**

January 8, 1–4pm. At Shaw Nature Reserve. \$12 (\$8 for Garden Members). Reserve your place by calling (636)451-3512.

##### **Science Café: Medicinal Plants**

January 15, 7–9pm. At Herbie's Restaurant, 405 N Euclid Avenue. Free. Hosted by Dr. Rainer Bussmann. Presented by the Saint Louis Science Center and the Missouri Botanical Garden. For more information: (314)289-4424 or [www.slsc.org](http://www.slsc.org).

##### **"Power of Plants" Contest**

Entries due January 31, 2009. Students from kindergarten through 12th grade are invited to research plants and create a "plant superhero" with a secret power. Visit [www.mobot.org/power/](http://www.mobot.org/power/) for complete contest information.

## Winter Life

By Malinda Slagle

In the winter, once the leaves have fallen, it seems like everything is dead. If you close your eyes, however, you will hear the chirping of the cardinal, the calling of the chickadee, and the twitter of the Carolina wren. A careful examination of the snow reveals tracks from the scurrying gray squirrel, majestic whitetail deer, and tiny meadow vole. If you dug a few inches underground or into a rotting log, you would find a wealth of invertebrate life, all burrowed in. A lucky foray down to Deer Creek might reveal fish hiding under a layer of ice and little critters of all types seeking refuge under rocks. The animals are hiding and waiting for the warm temperatures of springtime.

But maybe even more surprising is the fact that even though all of the prairie grass is brown and all of the leaves have fallen from the trees, most of the plants are still alive. Most native plants are perennials, plants that live many years. Garden plants and weeds are often biennials, living only two years or annuals that live only one year. In the winter, the perennials senesce, or die back. They send all of their resources down to their roots for the winter time. In the spring, those sugars will go back up the stem through the phloem (the food

“blood vessels” of the plant) to make new leaves and branches.

Many students wonder how the prairie or woodland is able to grow again after fire. The answer is that the living parts of these plants are below the ground when we burn in the late fall to early spring. In the woods, if the trees are in a very hot fire, their bark may burn and they may have to come back from the roots instead of their branches and trunks. Some may not be able to come back at all, but in a very low, slow fire, trees’ bark shelters them from the flames, and they are able to re-grow from their trunks.

Prairie grasses and forbs, or wildflowers, re-sprout from their roots. We sometimes plant new seeds in the prairie areas we burn, but that is because we are trying to increase the number of species growing there, not because no plants will come back after a burn. The best time to scatter seed is after a burn because it is easier to get the seed in contact with the soil. Also, the seeds grow better because the burn returns nutrients to the soil and because the ground is black which increases the soil temperature.

Some plants are more interesting to look at in the wintertime. Our many sycamore trees (*Platanus occidentalis*) are particularly

beautiful in the winter because of their white branches. All trees lose bark to some extent due to growth, but you can really see this on sycamores. They lose the bark on their branches because it is brittle—not as elastic as that of many trees—so it is not able to accommodate growing branches. Sycamore bark just sloughs off since it can’t expand.

Winter is a good time to spot invasive plants too. An invasive plant is a non-native plant that is able to grow into wild natural habitats on its own and take over habitat from other plants growing there. Some invasive plants die back in the winter, but we have some that are evergreen, making them stand out this time of year.

Wintercreeper, or *Euonymus fortunei*, is an invasive evergreen

See **Winter Life**, page 3



Sycamore tree shedding its bark.  
Photo by Richard Webb, self-employed  
horticulturist. [www.bugwood.org](http://www.bugwood.org).

## Winter Life, from page 2

vine that creeps along the ground and grows up trees. We work to cut the vines from the trees in the winter when they are easy to spot. Cutting the vines from the trees is particularly important because these vines produce flowers and seeds which continue to spread the invasive plant to new places.

Winter does not mean that everything is dead! The plants and animals may have senesced or be in diapause or hibernation, but they will come back in the spring. Winter is a fun time to be an ecological detective, and see what signs of life can still be found. 🐞

Source:

[http://en.wikipedia.org/wiki/Platanus\\_occidentalis](http://en.wikipedia.org/wiki/Platanus_occidentalis)



Wintercreeper climbing a tree. Photo by Chris Evans, River to River CWMA. [www.bugwood.org](http://www.bugwood.org)

## Vanquishing Wintercreeper

If you have wintercreeper growing at your home or in your schoolyard, cut it off the trees first. Then try to pull out or spray the creeping parts of the vine with herbicide. Spraying herbicide is most effective in warm temperatures greater than 60 degrees F when there will be no freezing temperatures within 24 hours of spraying. You may have to spray the area two to three times to get an effective treatment. When using herbicide, apply according to the label, making sure to take precautions around wetlands and streams and to wear protective clothing.

## Making Room

Contributed by LREC Education Volunteer Diane Dubois

*These highlights are from "Making Room: Living More by Consuming Less, De-Cluttering your life, and Giving Back to Earth," a presentation sponsored by the Franciscan Sisters of Our Lady of Perpetual Help at their Kirkwood offices on December 9, 2008. Their next presentation, entitled "Walking Lightly on Earth," will be March 10, 2009, at 7pm.*

1. **The Story of Stuff** — This twenty minute presentation explains the system of "stuff": from extraction and production through distribution, consumption, and disposal. It is online at [www.storyofstuff.com](http://www.storyofstuff.com).
2. **Swap-O-Rama-Rama** — February 21, 2009, 12pm at the Missouri History Museum  
This one-day clothing swap and do-it-yourself workshop explores creative reuse by recycling used clothing. Bring at least one bag of your unwanted (but clean!) clothes to contribute to the "store," then dive in and find the treasures you would like to keep. After you have chosen your new duds, slide on over to a workshop to learn how to make modifications or totally transform your finds.
3. **EarthDance** — In 2009, EarthDance, a local community and culture catalyst for farming and the arts, plans to offer an apprenticeship in organic farming in Ferguson. Find out more at [www.earthdancefarms.org](http://www.earthdancefarms.org).



*Termite queen in rotting log. Photo by Sean Fears.*

## **Where Are All the Prairie Bugs in Winter?**

By Eddie Jones


**O**n a cold morning in early December, the second graders came to the cabin shivering from their trek through the North Prairie. Inside, they were confronted by a moldering log resting on a table. The inert appearance of the wood lured the inquisitive youngsters' noses to within inches of its surface before they sprang back with surprise as movement was detected. Apparently, the log was inhabited! In the ensuing moments, the students discovered no less than six different kinds of invertebrates lurking in the recesses of the rotting wood: roly-poly bugs (sow bugs, wood lice, or whatever you want to call these terrestrial crustaceans), two kinds of ants, a ground beetle larva, a centipede, and a tiny millipede. Subsequent

investigation of the recesses of the log turned up a magnificent termite queen.

A decade ago, a University of Wisconsin entomologist, Andrew H. Williams, conducted a study of prairie plant stems in the winter (Williams, 1998). Eighteen out of twenty plant species investigated were found to be providing winter homes for invertebrates. As many as thirty-one different arthropods were observed in the stems of such prairie plants as Culver's Root and Cup Plant. Most of the invertebrates were eggs or early larval stages of beetles or wasps, two highly diverse groups of insects. Some of the observed organisms were parasitic, feeding directly on the host plant. Others were herbivores or carnivores, simply

sheltering themselves from the onslaught of winter.

The study indicates that many invertebrate species are highly selective when it comes to finding a winter home and are, therefore, dependant upon one particular species of plant for their survival. The author of the study points out that prairie management practices, including burning, mowing, and grazing, have unknown effects on these invertebrates. He recommends that further investigation of these tiny organisms may have an impact on future prairie management practice. It could be that current practices are actually contributing to the loss of some invertebrate populations. This study is a good reminder that prairies are plant communities that exist and interact with specific populations of consumers and decomposers.

The next time the second graders visit LREC, perhaps they too can investigate the inhabitants of prairie plant stems as well as rotting logs. 

### *Reference:*

Williams, Andrew H.  
"Overwintering Fauna In or On Prairie Forb Stems." *Missouri Prairie Journal*. Winter 2000 (volume 21, number 1).