

Litzsinger Road Ecology Center

Community Newsletter

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

Taking the Nature Challenge

By Bob Coulter

One of my discoveries in the past year has been becoming more familiar with David Suzuki's work. For those not familiar with him, he is a famous Canadian naturalist (he was cited by a popular vote in 2004 as one of the 10 greatest Canadians in history), with extensive credits as a writer and TV show host. His work has taken him across the globe on behalf of environmental causes. I was on vacation in Toronto last November when I came across some of his materials at the retail outlet for the Canadian Broadcasting Corporation.

One of Suzuki's many efforts has been to provide ordinary citizens with the tools needed to make effective environmental choices. He has done this succinctly with what he has called the Nature Challenge: easy-to-do, high-impact activities. Here they are, a menu to choose from as they are appropriate to your circumstances:

- Reduce home energy by 10%
- Eat meat-free meals once a week
- Buy a fuel efficient, low-polluting car
- Choose an energy efficient home and appliances
- Stop using pesticides
- Walk, bike, or take transit to regular destinations
- Prepare your meals with locally produced foods
- Choose a home close to regular destinations
- Support alternatives to the car
- Get involved, stay informed

Obviously, some of these are things we can do today, and others are for when we are ready to move or buy a new car. Personally,

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Upcoming LREC Events:

LREC Stream Team

October 5, 9am–12pm. Sample macroinvertebrates. Call Jennifer at (314)961-4410 if you plan to attend.

LREC Stream Team

October 18, 9–11am. Monitor water chemistry. Call Jennifer at (314)961-4410 if you plan to attend.

Intern Talk

October 26, 11am. Intern Jennifer Hoffman discusses her research on Japanese hops. Glass House.

Lunch

October 26, 12pm. Place to be announced.

Ecology School (Volunteer Enrichment)

October 26, 1–3pm. Barn. See page 2 for more information.

Upcoming Opportunities:

Harvest Festival at Shaw Nature Reserve

October 15, 11am–5pm. A fun event that includes music, food from St. Louis area restaurants, a farmers market, family games, hayrides, and pony rides. For more information call (636)451-3512 or visit www.shawnature.org.

Announcing: Ecology School

By Eddie Jones

I am a student of local ecology. After 20 years of teaching high school science, I am just beginning to know how little I know about ecology; the workings and interactions of living things and their environment. There is hardly a day that goes by at LREC that I don't have a question for fellow staffers Mary, Malinda, Jennifer, or Heather about some natural phenomenon that I have witnessed. On the basis of many conversations with LREC staff, volunteers, and teachers, I'm convinced that I'm not alone. Furthermore, other

environmental and education centers are looking to LREC for guidance in developing and enhancing their own programs. With such a demand for ecological understanding, we are in a search of a reliable supply source. Herewith is a proposal to meet the demand: *Ecology School*.

Malinda provided the "seed" for this proposal by revealing two volumes with dog-eared pages. The *Tallgrass Restoration Handbook* and *Terrestrial Natural Communities of Missouri* are resources that she looks to on a regular basis as she goes about

the work of managing ecological restoration at LREC. Our hope is that a study of these two volumes will provide the conceptual foundation for us to build a more complete and coherent understanding of ecological restoration. This more formal approach to continuing education will complement the seasonal explorations of LREC habitats, or "walkabouts," scheduled for volunteers and staff. The desired outcome is that the LREC community will become more effective ecological educators and restorers.

The inaugural session of Ecology School will commence at **1pm, October 26**. The two-hour session will introduce the concepts and format of this learning opportunity, which will take place monthly through the school year.

Contact Martha (martha@litzsinger.org or (314) 442-6717) if you would like attend that initial session.

Teachers who are interested in a possible summer session or an after-school "walkabout" can contact Eddie (eddie@litzsinger.org or (314) 256-9418). We look forward to growing as a community in our understanding of local ecology and its underlying principles.



Mink at LREC

By Jennifer Brown



Photo by Illinois DNR

Increased sightings of mink (*Mustela vison*) at LREC this spring and summer sparked my curiosity and spurred me into wanting to learn more about these semi-aquatic creatures belonging to the weasel family.

For the most part, mink are solitary animals and are primarily active at night. This surprised me because we see them from time to time along the creek and bounding through adjacent parts of the property during the daylight hours. On a couple of occasions earlier this year, I also spotted more than one mink darting back and forth along the creek, underneath the exposed roots of large Sycamore tree growing on the

bank and into the water in search of food.

These individuals appeared to be smaller in size than the mink I'm used to seeing, which led me to believe that they were perhaps young kits whose mother chose to den in the side of the stream bank. After doing a little bit of research, it is very plausible that the observed mink activities this spring and summer were that of a mink family taking-up residency on the property.

Mink are known to make their homes in the cavities of banks, under logs and stumps, in tree hollows, and in old muskrat burrows, usually within 600 feet of open water. Breeding begins in late February and impregnated females typically give birth to a litter of 1-8 young in the late spring (April or May). Young are reported to remain with their mother through the summer until fall when they begin to disperse and establish their own territories.

A mink's territory can range up to five miles in diameter, with the males typically occupying larger ranges than the females. The range of individuals typically does not overlap and males are particularly

aggressive in staking-out and defending their territories from other mink. Mink communicate their territorial boundaries by way of chemical signaling encoded in their droppings or the strong, musky-smelling secretions they leave in conspicuous places such as on flat stones or logs along the stream channel. Other noticeable signs of mink to look for at LREC include their tiny, five clawed tracks that frequently appear in the mud along the creek.

Also keep your eyes out for 4-6 inch in diameter tunnels along the stream banks marking the entrances to their burrows. These burrows may actually have several entrances extending a foot deep or so into the ground before leading into the den chamber, which is about one foot in diameter. Often times the interior of the chamber is lined with bedding material made up of grasses, leaves, and sometimes the fur or feathers of the mink's prey.

Interestingly, both males and females will maintain a series of temporary homes which they use periodically for a day or two at a time. These vacation homes of sort allow

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mink the flexibility of moving about their range, while having a place to hole up for a period of time. Although tending to stay along waterways, they may cut across country from one body of water to another. Depending on their range size, it takes a mink approximately two weeks to sweep through its entire range once. These habitat requirements of mink are good examples of how Deer Creek and its riparian area serve as important travel corridors for wildlife.

Mink are also an important top predator of stream ecosystems as they prey upon various aquatic creatures and other small mammals. During the summer their diet can consist of crayfish, frogs, fish, small turtles, rabbits, squirrels, mice and voles, muskrats, and even water fowl. In the winter their primary food source is constricted to small mammals, of which their favorite is muskrat

despite the fact that a muskrat is typically large in size. Mink are aggressive and fearless predators, but as part of their secretive nature they

prefer to carry their food back to the den to eat it and they sometimes cache it in their dens for later.

Mink have few predators, but occasionally they may be eaten by foxes, coyotes, or raptors such as great horned owls. Humans remain the mink's biggest threat due to habitat loss and killing them for their fur. However, I was happy to learn that, although more scarce in Missouri than other parts of their native range, wild mink populations seem to have recovered from the over hunting that occurred in the late 19th and early 20th centuries. The presence of mink at LREC and the role that it plays in the ecosystem highlights the value of the restoration work that we have been doing on the property in providing habitat and connective corridors that enable wildlife to subsist.



Photo by Illinois DNR

Nature Challenge, from page 1

I'm enjoying a broader range of foods as I cut back on meat-based meals and look for local foods. Mary Voges helped me to figure out how to get the thermostats in the house to cut back on air conditioning. Re-programming the computerized thermostats was a non-trivial task, even for a techie like me. Compact fluorescent bulbs are replacing incandescents.

As a Center, we are similarly always on the lookout for ways to walk lightly on the Earth, whether it involves using energy efficient appliances and infrastructure, minimizing our use of chemicals, or helping each other to become more informed about being a good planetary citizen. Be sure to check out our two new rain barrels by the barn, installed by Richard Pandorf, Fred Rausch, and Ray Potter. They will be using recaptured rain water when the front prairie needs to be watered. If you have other ideas for how we can improve our conservation efforts, please don't hesitate to share them. I hope you find something of use in Suzuki's challenge as well. For more information, you can see the David Suzuki Foundation web site at david Suzuki.org.

Summer/Fall Restoration Interns at Litzsinger

By Malinda Slagle

This summer we were blessed to have three restoration interns here at Litzsinger. Restoration interns help us with the flood of work we have during the growing season including invasive species removal, seed collecting, planting, trail maintenance, and grounds maintenance. These students also conduct some type of independent project which includes an oral and written component. We select individuals who are studying or studied environmental studies, biology, horticulture, or natural resource management who might benefit from learning about a career in native plant horticulture or restoration ecology.

Jack Connor, a student from Maryville University, interned with us as a requirement for his environmental studies major. He produced a field guide to the summer fungi of Litzsinger, which we will make available soon for student groups.

John Lee, a student from University of Missouri-St. Louis, studied methods of controlling wintercreeper (*Euonymus fortunei*), an invasive species in the woodland at LREC. He found that weed-whacking *Euonymus* is ineffective, and that just spraying *Euonymus* kills it much more slowly than weed-whacking and spraying it.

Jennifer Hoffman, a student from Southern Illinois

University-Edwardsville, is still interning with us! We are very pleased to have her for a little longer to help us to control invasive species. She has been studying methods of controlling Japanese hops (*Humulus japonicus*). Japanese hops is an invasive species in the prairie and along the creek at LREC. Jennifer will be writing up her results and presenting them at 11am on October 26 at the Glass House. Please come if you're interested.

These interns do an excellent job helping us out in the summer, and we greatly appreciate all their hard work!

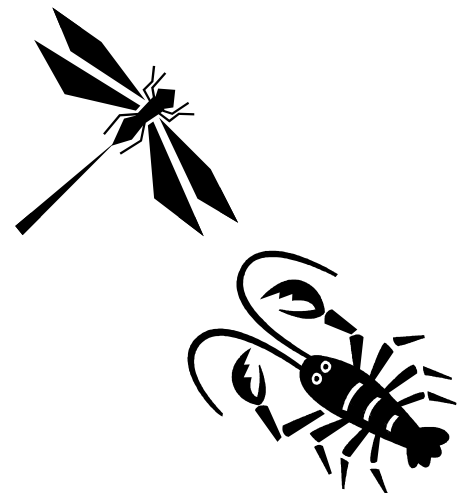
LREC Stream Team Events

The LREC Stream Team doesn't stop just because it's autumn. Join the Team for a couple of events in October. Equipment and training provided.

Please contact Jennifer at (314)961-4410 if you plan to participate.

Sample Macroinvertebrates
Thursday, October 5
9am-12pm

Monitor Water Chemistry
on World Water Quality
Monitoring Day
Wednesday, October 18
9-11am



New Restoration Projects

by Malinda Slagle

This month marks the beginning of two exciting new restoration projects at LREC. First, the Pasture Prairie at 9711 Litzsinger Road will be expanded again. The first expansion in 2004 between the Pasture Prairie and the Strip Prairie is coming along very nicely. False aster, cardinal flower, blue lobelia, black-eyed susan, sneezeweed, Canada wild rye, Indian grass, and big bluestem are just a few of the prairie plants flowering this year in the 2004 expansion. We are now looking to expand the Pasture Prairie to extend it closer to the driveway on the eastern corner. We will be roping off the area this month, spraying it with Round-up® to kill the Bermuda grass that is currently there. We will rake the area with students or till the area this fall to prepare the seedbed, and spread seeds with students this winter. Students will also help us collect and clean seeds and



Black-eyed susan. Photo by Jenna Tune.



Euonymus surrounding a tree in the woodland. Photo by Eddie Jones.

propagate and plant plants in the area. By helping to recreate the prairie ecosystem, the students understand it better.

The second restoration project will be in the woodland just north of the cabin. Contractors will be spraying the wintercreeper (*Euonymus fortunei*) in that area with Round-up® this month. For those of you new to Litzsinger, *Euonymus* is an evergreen vine from Asia popular in St. Louis with homeowners as a groundcover. However, *Euonymus* is invasive into natural habitats such as those at Litzsinger, where it covers over 50% of our woodland floor, preventing germination of native plant species. After the contractors spray the *Euonymus* in the woods, it may take a

month or more to die. Then we will conduct a prescribed burn in the woodland to clear any remaining *Euonymus* and stimulate native plant growth. The woodlands in Missouri are adapted to fire and the low intensity burn we conduct will only travel along the ground and will not damage the trees. We will spread seed and plant woodland grasses in the woods this winter.

If you have *Euonymus* growing in your yard, please spray it with Round-up® in September or October or pull it by hand. If you cannot bear to part with it, please cut the vines that grow up trees and fences, those are the vines that flower and produce fruit that gets spread by birds to Litzsinger!