

Litzsinger Road Ecology Center

Community Newsletter

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

Expanding Borders

By Bob Coulter

On the day after Thanksgiving, LREC welcomed a group of international visitors from Asia, Africa, Europe, and Mexico. They were touring the United States to learn about environmental education programs and how non-governmental organizations promoted civic involvement. Selected by their embassies as up and coming leaders, they share our commitment to effect change in the community through environmental education. Despite the inherent cultural divide, the overarching goals we all shared were the same: building and sustaining a vision that people can be involved in making their community a better place. As a result of your hard work and creative energy, I was able to share many examples of how we collectively are making a difference.

To highlight just a few of the projects underway with an impact beyond the actual grounds of the Center, some of our partner schools are building native gardens in their school yards, modeling the ecological benefits of trees in the neighborhood, and cleaning up local streams. A new program done in partnership with the Metropolitan Sewer District (MSD) will bring 100 teachers here over the next 3 years, with a commitment on their part to help their students see their school yards as part of a watershed. Outside of the formal school environment, our Ecological Restoration Corps will be continuing to work as part of a collaborative to enhance the native plants in Calvary Cemetery, and we are building new after-school urban ecology programs in St. Louis and University City. For adult learners, we are working with garden clubs and similar organizations, helping them to promote native habitats in the community.

While we can hope that our international visitors gained something useful from their time here, we can be confident that the work that attracted them to come here is making a difference in the local community. Many thanks for your ongoing commitment.

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Upcoming LREC Events:

Ecology School (Volunteer Enrichment)

January 16, 1–3pm. At the glass house. RSVP to Martha at (314) 442-6717.

Upcoming Opportunities:

Eagle Fest

January 7, 1–4 pm. Powder Valley Conservation Nature Center. Learn about the bald eagle at this all-ages day of discovery. For more information call (314) 301-1500.

Watercolors From the Tallgrass Prairie

January 10–February 26, 9 am–5 pm daily. Ridgway Center at the Missouri Botanical Garden. Paintings by George Olson.

Native Plant School: Winter Pruning

January 11, 1–4 pm. Whitmire Wildflower Garden at Shaw Nature Reserve. Session includes hands-on tours and demonstrations. \$12 (\$8 for Garden Members). Reserve your place by calling (636) 451-3512.

Owl Prowl

January 19, 7:30–9 pm. Rockwoods Reservation. All-ages program includes hike. Registration begins January 5 at (636) 458-2236.

Ecological Investigations: Here, There, and Everywhere

By Eddie Jones

Over the past two years, I have observed the following student activities, all involving the same 30 students.

1. A third grade student tosses stalks of little bluestem into the air, seeds flying everywhere. Another is cracking open seedpods with a hammer. Still another is stomping the seed heads of gray-headed coneflower, filling the room with a deliciously sweet fragrance.
2. A group of third graders plant stratified native plant seeds in flats for greenhouse germination.
3. Two third graders transplant a prairie plant seedling in a prairie restoration area.
4. Three fourth graders stoop at creek's edge, counting water striders that are living up to their name.
5. A team of fifth graders is tracking a deer along the edge of a prairie.
6. A group of fifth grade students present a comparison of three local natural communities to classmates and instructors, making note of features that are common to all.

The students were "at school" during each of the above encounters. No, they do not have a large school campus, but they were participating in learning activities, with their teacher in charge, during the school day. The encounters took place in three different locations: Litzsinger Road Ecology Center (LREC), Shaw Nature Reserve (SNR) and Saul Mirowitz Day School-Reform

See **Reform Jewish Academy**, page 4

School Facts:

Location: 11411 North Forty Drive, Creve Coeur, MO

Grade Levels: K-5

Number of Students: 88

Total Number of Classrooms: 6

Number of Classrooms Working with LREC: 3

Website: <http://www.saulmirowitzdayschool.com/index.html>



To Sow or Not to Sow

By Mary Voges

If you attended the Holiday Party recently, you hopefully went home with a packet of native seeds. These seeds were collected from various sites: LREC, Shaw Nature Reserve, and our newest collection site... Jennifer Brown's backyard! We offered either a sun or shade mix with an assortment of seeds such as Prairie dropseed, Great Blue Lobelia, Wild Bergamot and Senecio (my personal favorite!).

So...dig the packet out from between your car seats or pull it from the glove compartment and get ready...it's sowing time!!!! Here at LREC we use several methods of growing native plants. All of the hard work of collecting and cleaning seed is now coming to an end as we prepare for the next stage of our propagation circle.

The greenhouse will soon be cleaned and readied for germinating seedlings. Students will be preparing flats and sowing seed that has been stratified (seed placed in moist sand, peat moss, or sawdust at temperatures between 32° and 41° F) and sitting in our refrigerator for 60-90 days, imitating nature's winter. But that will have to wait a few more weeks. Now is the time we gather loose, dry seed and trash cans of chaff (seed pods

and stems), assemble students and our wonderful volunteers and head out to the prairies, woodland, riparian area, savannah, and rain garden.

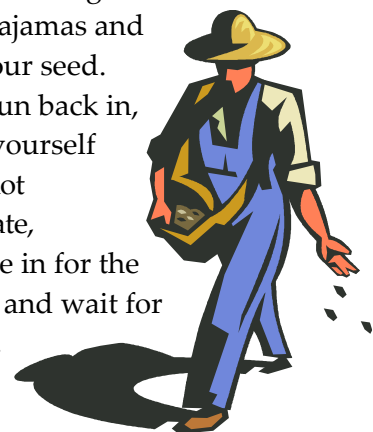
I have found the following method of sowing to be fun, educational, and successful. Gather any and all of the seeds you have collected over the summer and fall and separate them into site-specific piles. At home, I usually divide my collection into sun/dry, sun/wet, shade/dry, and shade/wet. I mix the seed with a large amount (usually 5 to 1 or 10 to 1) of sand, sawdust, old potting soil, or leaf mulch. This provides the filler material to make sowing easier and the seed less likely to float or blow away.

Our dry, saved seed is sown out in winter months, usually during or after a nice wet snow. The melting snow or wet ground draws the seed down, making good soil-to-seed contact and insuring a large percentage of the seed remain in place. Also, as the ground freezes and thaws, the seed works itself into the soil. At LREC, we like to sow directly after a prescribed burn; the burn has warmed the ground and fresh nutrients are available for seed-to-soil contact. We have yet to do a burn this season, but since we

leave at least one of the prairies unburned each year, we are ready to proceed with our sowing in the South Prairie. Not only will we throw seed out, but also the chaff collected throughout the year.

Malinda Slagle is our resident burn manager and prairie restorationist, and after intense preparation of seed lists and combinations of seeds best suited for particular areas of the prairie, the sowers are lined up, given bags of seed and filler, and sent on paths of designated lines, tossing seed. This process will continue throughout the property until pounds and pounds of seed and chaff have been spread. Once this is completed, we wait for Mother Nature to thrill us with her bounty.

So...my advice for the rest of us who just plan on spreading a small amount of seed...when it's wet and cold and especially if it is snowing...run outside in your pajamas and sow your seed. Then run back in, make yourself some hot chocolate, snuggle in for the winter and wait for spring.



Reform Jewish Academy, from page 2

Jewish Academy (RJA). While the students don't attend a big school, they have a huge "classroom." And why don't they just don't stay in one place for their lessons? Because no single educational setting lends itself to facilitating all learning objectives, especially if the objectives include observing, recording, and interpreting ecological relationships. The teachers at RJA are keenly aware of this and take full advantage of the outdoor spaces and horticulture facilities at SNR and LREC.

In addition to studying grasslands of the world, the third graders are participating in the restoration of local grasslands. They are accomplishing this by collecting and cleaning prairie plant seeds at LREC and SNR. The students will also start prairie seeds in flats and assist with their eventual transplantation in a prairie restoration (Encounters 1-3).

The fourth and fifth graders are comparing and contrasting three local ecosystems, prairie, woodland, and stream by analyzing their own observations at LREC over a period of one month (Encounters 4-6).

Morah Debra and Morah Cheryl are the teachers who,

along with their colleagues at RJA, adeptly lead these students through meaningful learning experiences on a daily basis. Morah is Hebrew for Teacher.

RJA is an independent school that effectively integrates Jewish and American values, language, and heritage in a curriculum that is supported by experiences like those

described above. RJA is a member of the Independent Schools of St. Louis. The staff and volunteers at LREC are grateful for the opportunity that we have to partner with such a visionary school community.

Keep your eyes open. There's no telling where these students will show up next!



Terrestrial Habitat Improvement and Benefits of Removing Bush Honeysuckle

by Malinda W. Slagle

I wrote the following article as a part of a grant that LREC is partnering on with the City of Olivette Parks and Recreation Department to control bush honeysuckle in Olivette. I will be giving workshops to inform homeowners of bush honeysuckle identification, removal and replacement on January 27, March 24, and April 28 from 9:30–10:30 am at the Olivette Community Center. Workshops will be free to residents of Olivette and Ladue. If you are interested in participating please call the Olivette Parks and Recreation Department at 314-991-1249. We also will be doing bush honeysuckle removal and replacement projects at LREC in February and March. Please let me know if you're interested.



Lonicera Maackii

Photo: USDA-NRCS PLANTS Database/
Herman, D.E. et al. 1996. North
Dakota tree handbook. USDA NRCS
ND State Soil Conservation Committee;
NDSU Extension and Western Area
Power Admin., Bismarck, ND.

Bush honeysuckle (*Lonicera maackii*) is an invasive plant species that is native to Asia. Invasive plant species are non-native plant species that grow quickly, spread, and dominate natural areas to the point that they displace native species, disrupting ecological systems and processes, and they may also cause damage to economic and human health factors if not controlled (Czarapata 2005). Invasive plants can result in a loss of biodiversity from an ecosystem, first of native plant species, then of the native animal species dependent on the native plants for food. Of the 958 endangered species in the United States, 400 of them are considered to be at risk primarily because of competition with or predation by invasive species (Nature Conservancy, 1996). Economic costs of invasive species are also a concern. In the United States, invasive plant species result in an annual cost of \$138 billion a year in environmental damages and losses (Pimentel et al. 1999).

Bush honeysuckle is considered an invasive species in the St. Louis area because it is widespread in all counties in Missouri and is invading and disrupting natural habitats (Gaskin 2002). The deciduous shrub has negative effects on both the native plant and animal communities.

Bush honeysuckle is a successful forest habitat invader because it shades the forest floor early in spring before native flora emergence, and its leaves stay green until November (Czarapata 2005). As a result, the shrubs have a negative effect on native plant communities, shading out the understory woodland wildflowers (Miller and Gorchoy 2004). Bush honeysuckle also reduces light, heat, and moisture available to native tree seedlings. This limits their recruitment, putting the whole forest community at risk (Gorchoy and Triesel 2003, Hartman and McCarthy 2004). With no trees, there will be no forest, only a bush honeysuckle thicket.

Invasion by bush honeysuckle also poses a threat to native fauna. Seed dispersal is by bird consumption of the berries. The food and habitat provided to birds by bush honeysuckle is often cited as a reason for encouraging the shrubs. However, songbirds near Ithaca, New York such as cedar waxwings, white-throated

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Bush Honeysuckle, from page 5

sparrows, Kentucky warblers and yellow-breasted chats that ate bush honeysuckle berries developed orange feathers rather than the yellow feathers they would have had were they eating their ordinary diet (Czarapata 2005). This color shift is a major concern because bird reproductive behavior is based heavily on plumage coloration. Bush honeysuckle also makes poor nesting habitat for birds. Higher nest

predation was found in American robins and wood thrushes that nested in bush honeysuckle compared to those that inhabit similar native shrubs. Higher nest predation rates can contribute to decreasing populations of songbirds (Schmidt and Whelan 1999).

Control of bush honeysuckle is necessary to protect woodland understory communities, bird

communities, and the sustainability of the forest ecosystem itself. Removing honeysuckle will provide residents with beautiful wildflowers, songbirds, and trees. This habitat enrichment can provide recreational opportunities such as hiking and photography as well as providing improved habitat for wildlife and plants.

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