Litzsinger Road Ecology Center

COMMUNITY NEWSLETTER

www.litzsinger.org

January 2012

in this issue

- 2 McGrath Anniversary Garden
- 4 Glass House Quiz: Raptors
- 7 Eco-Friendly Holiday Party
- **7 LREC Announcements**
- 7 Local Events

provides hands-on opportunities for students to learn about native plants and ecology. Find out more about the garden and how the students are using it on page 2.

A New Year's Challenge

by Bob Coulter

Ver the Thanksgiving break I escaped for a week of vacation in London. While I was there I learned some interesting bits of World War II history that link to our shared work. While many are familiar with stories of children and youth being evacuated from London to safer areas during the blitz, there are also many examples of young people doing important warrelated work right in London. Examples include everything from searching through rubble helping to rescue bombing victims to actually capturing German POWs. In one case teens helped shoot down a German fighter pilot.

Granted, these were extraordinary circumstances, but there is a nugget of truth in here about kids being more capable than they are given credit for. Too often, schools (and parents) expect students to work quietly, preparing for some far off future when they will be able to make a difference.



Their work amounts to filling out forms, with goals set by people they have never met. We applaud your efforts to change this dynamic, getting your students involved in real work building up gardens, caring for birds, and taking on stewardship for local streams.

My challenge for you in 2012 is twofold: continue your work, and bring another teacher along on this path. As colleagues working together, you can begin to shift the culture in your building toward helping students learn through real projects.

Happy New Year! 🚜

McGrath Anniversary Garden

by Mary Voges

What happens when you combine a small patch of lawn, a dedicated group of teachers, parents, gardeners, and students, and a goal to promote a special

occasion? You do what McGrath Elementary School in Brentwood did...create a beautiful Anniversary Garden that rivals any other native wildflower garden!

Spring 2007



Top: the site before creation of the garden. Bottom: the site this past September. Bottom photo by Eddie Jones.

The Anniversary Garden was created four years ago to celebrate the school's fiftieth anniversary. The garden features plants native to Missouri. A bird bath, bench, and sidewalk (complete with simulated animal tracks to enhance the theme of the garden) were added.

Take a look at the before and after photos and you will see the transformation that took this plot from an area you merely walk by on your way to and from school, to a garden you wander through, surprising and thrilling your senses.

This small outdoor classroom allows year-round educational opportunities, providing a tranquil spot for young students to become familiar with native plants and their pollinators. It also provides an opportunity to learn about the special adaptations of native plants. Students can observe and discuss the difference between the rain runoff on their parking lot and the rainwater soaking into the soil of the deeply rooted native garden. This summer was a perfect example of the benefit of native plants. Little, if any, water was needed during the high temperatures and drought situation.

See **McGrath**, page 3

From McGrath, page 2



Throughout the year, plant and animal science is right at the students' fingertips. In fall they can learn about seed dispersal, soil attributes, and underground critters, and spring and summer are opportunities to learn about plant growth and pollination. Returning from summer break, students are surprised by seasonal changes to the garden, sparking more discussion.

The Anniversary Garden is just one of two outdoor classrooms at McGrath. The other—started ten years ago by retired teacher, LREC volunteer, and environmental educator Becky Bopp—incorporates raised beds, a meandering creek, and a pergola with benches beneath for classroom activities.

The Super Gardeners Club was created about seven years ago to help with garden upkeep. Participating students in third through fifth grades meet after

Because my Kindergarten students brought an innate interest in the natural world around them, I began incorporating environmental studies into every component of the early childhood curriculum, from pre-reading and writing to math and social studies. Most importantly, I wanted to foster their sense of stewardship to our earth. It worked, and they thrived; building a sense of community and increasing their individual self-esteem. I wanted my kids to have these same opportunities to explore their schoolyard and continue to grow in their years at McGrath. I started studying models of successful outdoor classrooms in '98 and '99 with the dream of creating a place where other teachers might feel comfortable to do environmental studies outside.

—Becky Bopp

school in the spring and fall to turn the compost pile, weed, and help with general maintenance. In addition, a group of dedicated adults meet periodically to keep both areas looking their best.

We at Litzsinger Road Ecology Center are proud to play a role in providing seeds, plants, and horticultural expertise to complement our partnership with McGrath. These gardens demonstrate the natural exploratory traits of McGrath's students while providing a community outreach opportunity.

Please visit http://www.mcgrathanniversarynativegarden.blogspot.com to view the Anniversary Garden.

Special thanks to contributors: Jane Helbig, Brentwood resident and Master Gardener; Christie Hembree, McGrath School Secretary; and Becky Bopp, my personal hero.

McGrath Elementary School (Brentwood School District)

Location: 2350 St. Clair Avenue, Brentwood, Missouri 63144

Grade Levels: K-5

Number of Students: about 189 Classrooms Working with LREC: 2

Website: http://www.brentwood.k12.mo.us/mcgrath/

Glass House Quiz: Raptors

by Danelle Haake and Deanna English

ow many times have you seen a large bird circling in the sky or heard the call of a raptor and wondered what kind it is? Rarely does a day go by at Litzsinger Road Ecology Center without a sighting of a hawk or other raptor. The raptor we see most often at LREC is the red-shouldered hawk: we have a mating pair that lives on site and that has tried to nest near the glass house for the past two years. Other raptors—also called birds of prey—seen and heard at LREC include red-tailed hawks, great horned owls, barred owls, and American kestrels.

See how much you know about raptors in our quiz!

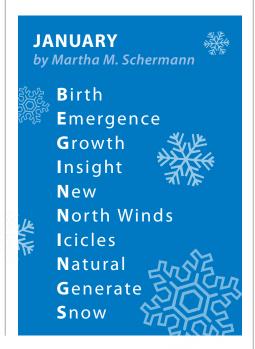
- 1. Recently at the glass house, we have been hearing a great horned owl (*Bubo virginianus*) calling at dusk. If we are quick about it, we can turn off the light inside and watch as it swoops down from behind the house to the prairie. What are some of the adaptations owls have for hunting at night?
 - a) Echo location, swiveling head, flat face.
 - b) Large talons, wide wing span, intelligence.
 - c) Large eyes, lopsided ears, serrated feathers.
 - d) Both a and b.
- 2. Which is the hawk you often see along the highway on a fence post?
 - a) It is most likely a red-tailed hawk.
 - b) It is most likely a red-shouldered hawk.
 - c) It is most likely a broad-winged hawk.
 - d) It is most likely an American kestrel.
- 3. An unfortunate hawk died a couple of months ago when it flew into one of the glass house windows. We have had the juvenile red-tailed hawk (*Buteo jamaicensis*) stuffed for use in education programs. What makes the red-tailed hawk the most abundant hawk in Missouri?
 - a) It is an aggressive hunter.
 - b) It will eat just about anything that's available.
 - c) It easily adapts to different environments.
 - d) All of the above.

See Quiz, page 5

Introducing Breezeway

LREC welcomes its newest resident: a hawk called Breezeway. This redtailed hawk (*Buteo jamaicensis*) died when it flew into one of the glass house windows. Now stuffed, it will be available for students to have a closer look at its physical features, including talons, wings, and beak.





From Quiz, page 4



- 4. We have a nesting pair of red-shouldered hawks (*Buteo lineatus*) here at LREC. How many eggs will a red-shouldered hawk normally lay in a season?
 - a) 1.
 - b) 2-4.
 - c) 4-6.
 - d) 7-10.
- 5. Red-shouldered hawks are best known for feeding and nesting in which area?
 - a) Prairies.
 - b) Forested streams and rivers.
 - c) Along highways.
 - d) Urban areas.
- 6. Nesting bald eagles were common in the early 1800s, but they were almost gone as nesters here by 1890. What caused the near elimination of nesting eagles in the 1800s?
 - a) Hunting.
 - b) Habitat loss.
 - c) River flooding.
 - d) Both a and b.

See Quiz, page 6

Eagle Days

This is the time of year to get out to see our majestic national bird, the bald eagle (Haliaeetus leucocephalus).

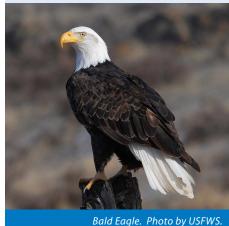
Bald eagles migrate south in the winter to take advantage of open water. Because of our large rivers and lakes, Missouri is one of the best places to observe eagles during the winter months.

Learn more about bald eagles at these upcoming local events:

January 14–15 **MDC Eagle Days Festival** at Old Chain of Rocks Bridge Learn more at http://www. confluencegreenway.org/eagledays. php or call 314-436-1324 x117.

January 28 & 29 **MDC Eagle Days Festival** at Clarksville Learn more at http://www. clarksvillemo.us/eagledays.html.

January & February Eagle watching at the Audubon Center at Riverlands (West Alton, Missouri) kicks off on January 7 with the **Alton Eagle Festival**, followed by Eagle Watch Weekends January 15, February 4 & 11. Learn more at http://riverlands.audubon.org/newsevents.



From **Quiz**, page 5

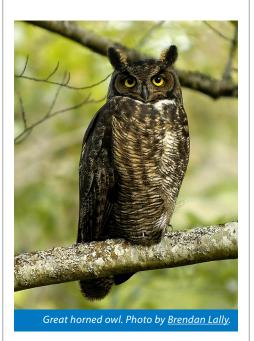
Answers:

- 1. c) Large eyes, lopsided ears, serrated feathers. The eyes of an owl, nearly the size of human eyes, allow a lot of light to be gathered to give the owl better night vision. The eyes are facing forward for three-dimensional sight, but are fixed, requiring the owl to swivel its head to focus on different objects. The ear openings are directed forward, and one ear opening is slightly higher than the other which allows for three-dimensional hearing as well. Their specially-adapted feathers reduce the sound of the air flowing over them, allowing a silent attack.
- **2. a) Red-tailed hawk.** Red-tailed hawks are frequently seen perched along highways. But if you see a small hawk *hovering* along the edge of the highway, it is most likely an American kestrel (*Falco sparverius*).
- **3. d) All of the above.** The red-tailed hawk easily adapts to different environments. It is often aggressive towards other hawks: it will steal their prey and preempt the nesting sites of red-shouldered and broadwinged hawks. Red-tailed hawks will also prey on smaller hawks.
- **4. b) 2–4.** While the red-shouldered hawk lays 2–4, most other hawks lay from 1–6 eggs per clutch.
- **5. b) Forested streams and rivers.** Locally, red-shouldered hawks are most commonly seen in the Ozarks and Mississippi Lowlands. If you like to spend time on Missouri streams canoeing, hiking the banks, or just playing in the water, you are likely to see a red-shouldered hawk soaring above.
- **6. d) Both a and b.** Hunting and the draining of cypress swamps and cutting of cypress trees contributed to the decline and eventual elimination of Missouri nesting bald eagles in the 1800s.

Sources:

Davit, Carol. "Missouri Raptors." *Missouri Conservationist*. January 2009. http://mdc.mo.gov/conmag/2009/01/missouris-raptors.

Toland, Brian. "Missouri's Eagles, Hawks, Falcons & Vultures." (reprinted from *Missouri Conservationist*). 1985. Missouri Conservation Commission.





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Eco-Friendly Holiday Party

by Anne Wamser

This year we decided to make our volunteer holiday party as sustainable as possible. The idea was to reduce the amount of waste—particularly paper products and food scraps—that end up going to the landfill. This required various shopping trips to Goodwill and other thrift stores to find enough plates, cups, coffee mugs, silverware, and cloth napkins to accommodate our sixty guests.

The success of our efforts was apparent, especially in the small amount of waste generated by the party, which filled only one third of a kitchensized trash bag!

In the upcoming year I challenge you to find ways to be more sustainable at your own gatherings. I know that disposable items can be much easier to use when entertaining guests, but it is much gentler on the environment (and more economical) to select reusable items.

At LREC, we were very pleased with the end results of the party, and that we were able to further the Garden's mission of sustainability.



LREC Announcements

January 17

Volunteer Educator Walk-about

12:30–2pm, meet at the barn. Or join us at noon with a sack lunch. RSVP to Martha at 314-540-4068 or <u>martha@litzsinger.org</u>.

January 26

Monthly Water Quality Sampling

12:30–3:30pm, meet at the glass house. Questions? Contact Danelle Haake at <u>danelle@litzsinger.org</u> or call 314-961-4410.

Local Events

January 3, 6, 7, 13, 14

Wolf Howl

7:30pm at the Endangered Wolf Center in Eureka. Indoor lecture/slideshow followed by outdoor "howl." Call 636-938-5900 for reservations. Info at http://www.endangeredwolfcenter.org/content/wolf-howl.

January 14

Growing a Butterfly Garden from Seed

2–3:30pm at the Butterfly House. Learn which easy-to-grow-from-seed plants attract butterflies. Advance registration required: 314-577-5140 or http://www.mobot.org/classes.

Beginning January 24

People and Plants

4:30–7:30pm on select Tuesdays, at the Missouri Botanical Garden. In this Professional Development course geared for teachers grades 4–8, Garden ethnobotanists and educators cover diverse topics including plants as medicine, food chemistry, and biodiversity. Also open to nonteachers. Fees vary. Learn more at http://www.mobot.org/education/workshops.asp or call 314-577-5147.