

The Rectrix

A seasonal newsletter of the Missouri River Bird Observatory Volume 6 No. 1 – January 2016



rectrix |rek-triks| noun. (pl. -trices) any of the larger feathers in a bird's tail, used for steering in flight.



Happy New Year from the MRBO Staff



Left: Veronica (center) with 2015 seasonal assistants, educator Emily Wilmoth (left) and grasslands technician Andrea Ambrose (right)

Right: Ethan & Dana with a Black-capped Chickadee recaptured at Burroughs Audubon Library four years after it was originally banded.

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Director

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Our Mission

To contribute to the conservation of Missouri's birds and their habitats through research, monitoring, education & outreach.

On the cover

A Northern Saw-whet Owl captured on 11/12/15 at MRBO's home site in Saline County, MO.

Starting the New Year off right, New Years Day bird hike at Arrow Rock.



Dear MRBO Members and Friends,

It is tradition at this time of year to look back on the previous four seasons and make resolutions for what is to come. We are happy to report that 2015 was an outstanding year for MRBO for many reasons – in our monitoring projects, in the education realm, and in organizational development.

In the field: As many of our members know, MRBO's grasslands project has been on-going since 2012. This year we further refined our field protocol and focal areas. With assistance from the Missouri Department of Conservation (MDC) Wildlife Division and the National Audubon Society, we surveyed 50 public and private properties for a suite of grassland bird species, for some of which Missouri provides the most critical habitat. The information collected by MRBO will help Missouri's land managers improve habitat conditions, assess the results of on-going restoration, and identify acreage that could benefit from particular management actions. The 2015 grassland surveys could not have been accomplished without our excellent field staff, comprised of Nic Salick, Zeb Yoko, and Andrea Ambrose.

Last year, we also took on a new survey project in bottomland hardwood forests and implemented the successful reincarnation of our wetland project. Both of these projects are similar to the grassland bird monitoring program in that the goal is direct feedback to land managers interested in conserving birds. Thanks once again to the MDC, this time in the Natural Areas and Private Lands departments, MRBO has expanded to working with foresters in the critical bottomlands of the Mississippi Alluvial Valley, and more than 30 private landowners engaged in the Wetland Reserve Program across the state.

As we head into 2016, we are pleased to announce that in addition to the on-going grasslands, wetlands and bottomland forest projects, MRBO will be working with the Department of Natural Resources assessing bird response to restoration in St. Joe State Park, southwest of St. Louis. We look forward to working with new partners in a new habitat – this time, the upland forests of the Ozark foothills.

Education: 2015 was a banner year for MRBO's education programs, thanks largely to our extraordinary seasonal educator, Emily Wilmoth. Emily arrived from Wisconsin in April and spent most of 2015 with MRBO. Due to her outstanding work, MRBO logged 79 education events that reached more than 6,000 people, 4,620 of which were in the under-18 age group. Events were conducted all over the state, with activities ranging from natural history hikes at State Parks to class field days in Conservation Areas or on-site at schools. Emily showed an amazing ability to weave in messages of nature appreciation and conservation to presentations to any age group. She will be a hard act to follow, but we wish her the best as she pursues an opportunity for environmental outreach in Russia next summer, followed by graduate school in the fall!

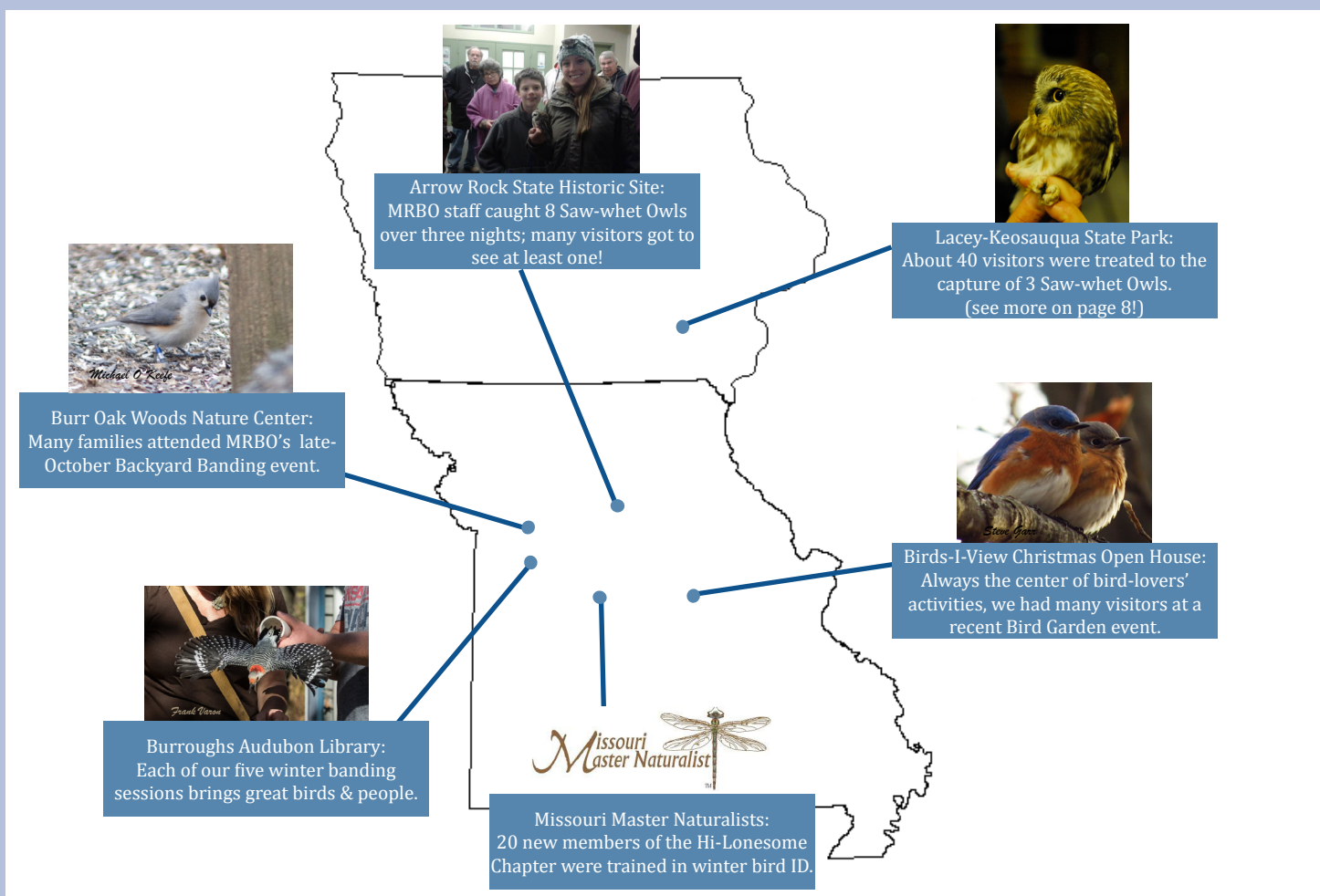
Development: As 2015 drew to a close, the MRBO Board hosted our first big fundraising event in Kansas City. About 120 people turned out in grand style to this black-tie event, including old friends from the conservation community and the village of Arrow Rock and new friends from the Kansas City area! The funds raised by the World of Dreams event will support MRBO's education program in 2016 and allow us to provide matching funds for important grant opportunities.

As we head into 2016, we are excited about MRBO's slow but steady growth and, more importantly, the relationships we have cultivated in Missouri that allow the organization to continue contributing to bird conservation. We wish everyone a happy, peaceful and bird-filled New Year.



Veronica, Dana & Ethan at MRBO's first gala fundraiser in December. In the six years of MRBO's life, we have never dressed like this!

Recent Education & Outreach Highlights



Burr Oak Woods Nature Center:
Many families attended MRBO's late-October Backyard Banding event.

Arrow Rock State Historic Site:
MRBO staff caught 8 Saw-whet Owls over three nights; many visitors got to see at least one!

Lacey-Keosauqua State Park:
About 40 visitors were treated to the capture of 3 Saw-whet Owls. (see more on page 8!)

Birds-I-View Christmas Open House:
Always the center of bird-lovers' activities, we had many visitors at a recent Bird Garden event.

Burroughs Audubon Library:
Each of our five winter banding sessions brings great birds & people.

Missouri Master Naturalists:
20 new members of the Hi-Lonesome Chapter were trained in winter bird ID.

Upcoming Events

Join MRBO and friends for bird-related indoor and outdoor activities this winter! All events below are **bird-banding demonstrations** unless otherwise noted.

February 2nd in Jefferson City: "Real Climate Talks". The first of MRBO and River Bluffs Audubon Society's two seminars on climate change in Missouri. Dr. Michael Urban, Professor of Geography at MU, will discuss the real science behind climate change predictions. 7 p.m. at the Scheppers Distributing Co. Clydesdale Room, 2300 St. Mary's Boulevard.

February 6th in Blue Springs: Burroughs Audubon Library, 7300 SW West Park Road. 10 a.m. – 2 p.m.

February 26th in Jefferson City: Birds-I-View Bird Garden, 512 Ellis Boulevard. 1 – 3:30 p.m.

February 28th in Kingsville: Powell Gardens, 1609 E. US Highway 50. 1 – 3:30 p.m. (weather date: March 13th)

March 1st in Jefferson City: "Real Climate Talks", once again at 7 p.m. at the Scheppers Distributing Co. Clydesdale Room, 2300 St. Mary's Boulevard. This second seminar will focus on the forecasted effects of climate change on Missouri's birds and other wildlife.

March 5th in Blue Springs: Burroughs Audubon Library, 7300 SW West Park Road. 10 a.m. – 2 p.m.

March 12th in Springfield: Springfield Nature Center, 4600 S. Chrisman. 1 – 4 p.m. (weather date: March 19th)

March 15th in Marshall: "Cooking Naturally", a class presented by MRBO's Dana Ripper and Ethan Duke at the Saline County Career Center. Learn about how your food choices can positively affect bird habitat while also being great for your health! Participants also get to take home local, organic meats and herbs. 6 – 9 p.m.. Learn more and register at: <http://www.marshallschools.com/sccc>

Meet the MRBO Board of Directors



Gene Gardner – *Board Chairman*

After completing his Masters of Science (MS) in Zoology/Mammalogy/Bats at Arkansas State University in 1978, Gene worked as a Wildlife Biologist with the Missouri Department of Conservation until 1985. He was an Associate Research Scientist with the Illinois Natural History Survey for 8 years and a Senior Environmental Specialist with the Missouri Department of Transportation for 8 years. Gene then returned to work for the Missouri Department of Conservation, excelling through roles of Policy Coordinator, Wildlife Programs Supervisor, and eventually retiring as Unit Chief of Wildlife Diversity. Gene currently Chairs the Missouri Bird Conservation Initiative and is also president of Greenbelt Land Trust of Mid-Missouri.

Lynn Schaffer – *Secretary*

Lynn has completed a Master of Science (MS) in Biology/Biological Sciences at Arkansas State University in 2003. From there she immediately achieved a Doctor of Law (JD) with a focus on Energy, Environment, and Natural Resources Law at Vermont Law School. If that weren't enough she completed a Master of Laws (LLM) with focus on Environmental Law at the Lewis & Clark Law School in 2015. She has experience as a practicing attorney with eight years of litigation experience at the trial and appellate levels. Experience and expertise in public interest law, human rights, environmental and natural resources law, criminal law and procedure, administrative law, tort litigation, public trust law, land use law, food and agriculture policy, constitutional law, wildlife and fisheries ecology, avian biology, American Indian law and history.



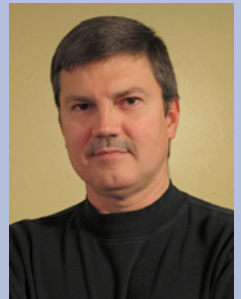
Diane Benedetti – *Board Member*

A native of the Chicago area, Diane began her career in the fashion industry at an early age with the then largest fur retailer in the world. Moving to Hong Kong in 1985, she continued her marketing and fashion production business and took on the Hudson's Bay Fur Trading Company (now NAFA) as a client. After successfully opening the China market for this company, she took a full time position with them that lead to becoming International Marketing Director. Diane is credited with leading an aggressive marketing team that helped NAFA expand its position worldwide. In addition to China, NAFA captured increased market shares throughout Europe, Russia, Korea, the UAE and Central Asia. Diane later returned to North America and took on the position of Senior Vice President of Marketing. She retired from NAFA in 2014 but still consults with them on international projects. The historical significance of Arrow Rock led Diane to make her home in Missouri where she has a wine bar and bistro that embraces the heritage of the fur trade and promotes the need for an understanding of conservation issues.



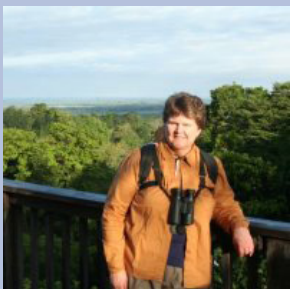
Steven Byers – *Board Member*

With a career spanning nearly three decades, Steve Byers brings both depth and breadth of experience to his client relationships. His practice encompasses large and small organizations in a variety of fields—universities, hospitals, human services and historic preservation. He is a Certified Fund Raising Executive and is a past president of the Association of Fundraising Professionals Mid-America Chapter, which named him Outstanding Fundraising Professional of 2013. For a full biography, visit stevenjbyers.com



Elizabeth Cook – *Board Member*

Liz completed her Masters Degree in Geography from the University of Missouri in 1979. She was a resources planner for the Missouri Department of Conservation until 1985 and has served as an Associate Research Scientist with the Illinois Natural History Survey at University of Illinois-Urbana-Champaign until 1993. Liz has spent the past 22 years as a GIS (Geographic Information Systems) Specialist for the USDA-Natural Resources Conservation Service in Columbia, Missouri.



Seth Gallagher – *Board Member*

Seth served as Stewardship Team Director for the former Rocky Mountain Bird Observatory (RMBO), now Bird Conservation of the Rockies since 2008. In this role, he built a highly successful private lands program and established a team of 14 staff to assist private landowners with habitat conservation through an innovative array of cost-sharing arrangements with NRCS, state fish and wildlife agencies, and other conservation organizations. His current role is Sage Grouse Initiative Field Capacity and Delivery Coordinator, with Pheasants Forever in partnership with IWJV, Fort Collins, CO. Seth coordinates the field delivery of the Strategic Watershed Action Team (SWAT) partnership, overseeing 26 cost-shared field biologists and range conservationists in sage grouse strongholds. He catalyzes partner investments among the 40+ organizations contributing funds to this landmark effort. His degrees are in Wildlife Management from Minot State University and Lincoln Memorial University.





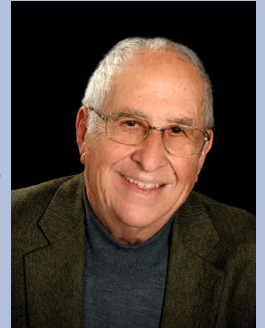
Whitney Kerr, Jr. – Board Member

Whitney is an industrial real estate broker specializing in sales and leases transactions throughout the Kansas City metropolitan area. He has over 30 years of experience representing tenants and landlords and has been involved in commercial real estate transactions totaling more than \$500 million. Whitney began his career in real estate as an industrial specialist for Kerr & Co. in 1984 and became president of the company in 1989. As president, he directed brokerage operations and continued as an individual producer until the merger with Colliers Turley Martin, a predecessor company of Cushman & Wakefield (formerly DTZ), in 1995.

His community leadership aside from his role on the MRBO board includes: Children's Mercy Hospital, Ambassador, Children's Mercy Hospital, Circle of Care, United Way Leadership Circle, The Studios, Board Member, Author of Flashing Bugs, published in 2012, and is a KC SmartPort, Board Member.

Clay Miller – Board Member

Clay is a native of Oklahoma and has lived the majority of his life in Oklahoma, Texas and Missouri. A graduate of Cornell University with a major in Economics, Clay served in the U.S. Army as a First Lieutenant, stationed in Fort Lee, VA. He has been in the financial service business for 55 years. He began his career in Kansas City with H.O. Peet & Co., later being recruited to Oklahoma City as the manager of the Harris Upham brokerage office. After a return to Missouri and several years with George K. Baum Investment Bankers, he settled in Dallas, TX for 30+ years. In Dallas he joined Stifel Financial, a New York Stock Exchange firm as a Senior Vice President and continues to be affiliated with that firm even after his 2014 relocation back to the Midwest. Clay has served as a director on several corporate boards including the National Association Security Dealers (NASD - Midwest Division), Cereal Food Processors (KC), Red Eagle Oil and Gas Exploration (OKC), and Mead Foods (Dallas). He was also a member on the Board of St. Luke's Hospital, Kansas City; the Cassidy School and the Young Life Youth Ministry in Oklahoma City.



Michele Reinke – Board Member

Michele received a B.S. in Biology from Missouri Valley College in 1997. She earned a M.S. in Forest Resources from the University of Arkansas – Monticello, where she studied the impact of prescribed fire on nutrient cycling and invertebrate populations. She returned to teach at Missouri Valley College in the fall of 2002. Courses taught include: Principles of Biology, Environmental Science, Ecology, Ornithology, Microbiology, Wildlife Ecology and Management, and Conservation Biology. Her research interests include avian biology, ecosystem ecology, conservation, and management. She is an Assistant Professor of Biology at Missouri Valley College. It is from this role that she helped establish MRBO's first monitoring efforts.



New MRBO Members & Contributors

We would like to express our most sincere appreciation to the following people. Some are new or renewing members of MRBO while others provided generous contributions to our December fundraising event. Thank you!! Because of your support, in 2016 MRBO will be able to provide education and outreach programs that would not otherwise have been possible.

Keith & Leslie Anderson
James Allinder
Doug Anning & Kirk Isenhour
Timothy Banek
George & Toni Blackwood
Kathy Borgman
Gavin Clark
Pat & Charlie Cooper
Jimmy Cosentino & Pam Sandy
Mandy Dorrance & Bruce Satterlee
Bill & Carol Edson
Gary & Bess Elkhurst
Shelby Gregory
Randy Haas
Tom & Margaret Hall
John Keeley

Whitney & Day Kerr
Bill Love
Tom & Margaret Hall
Bill & Becky Krueger
Travis & Beverly Land
Sherry Leonardo
Kirby McCullough
India McCullough
Dana Myers
Danny Ng & Steve Stroade
Donnie & Kim Nichols
Beverly Powell
Grant & Linda Ripper
Mark Stahl
Myron & Nicole Wang
Gary & Sandy Zorich



With special thanks to:

Missy Love
Dan Auman
Karen Miller
Katy, Adrienne, Kristan & Sara

for their incredible support on behalf of
the World of Dreams fundraiser.

You Can Save the World...by eating!



By MRBO Director Dana Ripper

At MRBO, we are often asked the question, “how can I help birds”? This is frequently asked in the context of a discussion about environmental problems, most of which seem completely overwhelming to people as individuals. The truth is that there are several critical things each of us can do on a daily basis for conservation. These range from easy (such as keeping your cats indoors) to more complex or time-consuming (such as volunteering your time with a conservation organization or working with your state representatives to affect change). We have written many articles on these topics in previous newsletters and a summary can be found at mrbo.org/birdfriendly/. However, one of the most *essential* contributions an individual can make, and possibly the most far-reaching in its consequences, is to choose your food in a thoughtfully ecological manner. The excellent news is, doing so will have endless benefits to your physical health and improve your enjoyment of daily life.

Recently, in a conversation about MRBO’s involvement with private ranches, I had a good friend ask what food production has to do with conservation. I explained that habitat loss in Missouri was, and is, primarily due to conversion of land to agriculture, and that the decline of wildlife populations follows directly thereafter. Still, it’s a bit harder to explain how it’s not a particular farm or ranch individually but the entire American food system as a collective. Luckily, here in Missouri we do not face many of the ubiquitous, overwhelming industrial problems that some other states do; we are not, for example, overrun by potentially destructive oil and gas exploration like the West, and our resources agencies have ensured that Missouri’s forests are well-managed. The main area in which we could stand to do better is in land stewardship in our agricultural areas. Many Missouri farmers and ranchers are already doing so. And your contribution can be by voting with your fork.

To begin your foray into personally and environmentally friendly foods, you first must consider the current industrial agricultural system. Missouri and our neighboring states have landscapes that give testament to our devotion to millions of acres of row crops. Consider that this land was once marsh, forest and prairie. Though some agricultural land may be restored to native habitat by voluntary landowners, most will remain in some sort of production and it is critical to conservation just what the production activities entail.

Most of our millions of acres of cropland and in Missouri are dedicated to growing corn and soybeans. Who eats all this? As it turns out, we all do...just not in anything close to its original form. The majority of crops are converted either to processed foods (think high fructose corn syrup in soda) or livestock feed (found in every piece of meat on supermarket shelves, unless otherwise labeled). On-going studies clearly show that processed food, as well as meat and dairy from corn-and-soy “finished” livestock, are detrimental to human health *and* the livestock that end up in feedlots or concentrated animal feeding operations (CAFOs) *and* our land and water resources.

There are also millions of acres of prairie that have been converted from native flora to fescue for livestock grazing. While from a bird’s perspective it is marginally better to have fescue grass than toxin-laden row crop fields, most fescue pastures are monocultures and do not support much wildlife diversity. Many ranchers are moving towards grazing cattle on native prairie, restoring fescue pastures to native grasses, and rotating cattle in ways that allow a variety of grass heights for wildlife. Conscientious producers are also shifting away from sending their livestock to feedlots or CAFOs – meats produced in this way are often called “grass-fed/grass-finished” in the case of beef or “pastured” in the case of pork and poultry.

Today we often hear the words “conventional vs. organic agriculture”. In my opinion, using the word conventional is extremely misleading. It’s a funny adjective to use for a type of production that has only been around for the past 50 to 60 years, a blip in terms of human agricultural civilization and less than a blip in biological time. Consider that not many decades ago, our forefathers maintained small, diverse farms where a number of different crops were grown and livestock were raised. The crops were “processed” (for example, wheat or barley ground into flour) locally and the meat or dairy items were used by the family or distributed on a local scale.

Left to right: ribeyes from grass-fed cattle; our local CSA with part of their weekly harvest; Ethan making fresh sausage from pastured pork.





Left to right: local and home-grown vegetables; one of our local producers who sells at our impromptu Marshall farmstand everyday, rain or shine; Rupe Family Farms with pastured meat and free-range eggs at the Sedalia Farmers Market; our own tomatoes and herbs.

The conventional vs. organic description is most often used in the context of genetically modified crops (GMOs) and their partner chemicals. Consider that the first GMO produce (the so-called Flavr Savr tomato) hit the market in 1994 and the tide of GMO crops and their associated herbicides and pesticides has since engulfed our food system. One such example is glyphosate (sometimes known as Round-Up), an herbicide that has been reported to cause endocrine disruption, neurotoxicity, and tumors. It is also extremely water-soluble, meaning any run-off will contain the chemical and affect life other than the target crop. Consider that one of the last strongholds of milkweed, critical to the reproduction of Monarch butterflies, is found growing along roadsides and fencerows; how do you think glyphosate is effecting that last bit of Monarch habitat? Not to mention your drinking water! 88% of corn and 94% of soybeans grown in the US are GMO, which means that approximately 90% of our major food crops are chemically treated. And don't forget, those crops end up in everything from potato chips to pork chops, unless you choose wisely.

The argument is often heard that "the American heartland is feeding the world". Do not be deceived – we will feed whomever is the highest bidder. This strategy may be backfiring, however, as our agricultural products become increasingly difficult to market internationally. There is mounting consumer understanding of the US's "conventional" chemical production methods and lack of sustainability. Many countries have already banned the use of GMOs in their own production, including our neighbor to the south; Mexico, not always known for its strict environmental standards, has banned GMO corn.

So what is a person to do? Happily, in Missouri and elsewhere there is an enormous movement towards eating locally and organically, making food choices easier and easier for everyone. Eating organically will support farms that do not pollute land and water, and protect your own body from chemical residue. At one point, organic products were significantly more expensive than non-organic but as the organic supply increases, competitive prices are evening out. Organic foods can be found at almost any grocery store today.

An even better choice, and the one that will ultimately enhance your life, your community, and the culture of your family's meals, is growing what you can and finding your own nearby food sources for what you can't. This is another way in which Missourians are exceptionally lucky, as there are outstanding produce, meat and dairy producers all around us. Most towns now have a farmers market, where you can meet the people that have grown your food and find out about their production methods. I have yet to meet a producer that wouldn't welcome a personal visit to their farm. These are people who are lovingly cultivating the land, their livestock, and their produce. You can learn from them about how they work their soil, how they feed and care for their animals, and what the wildlife is like on their land. Our local producers are motivated by every reason from a love for nature to concern for their the health of their own families and neighbors.

Finally, the icing on the cake: local and organic food tastes better. It tastes like real food. There is no loss, no sacrifice on the part of the palate, in choosing foods that are better for nature and human health. I hope this article has inspired some food-centric thoughts and I would love to hear from anyone who has questions or stories of wonderful food - dana.ripper@mrbo.org.



Right: Ethan and a Walleye.

Suggested reading

Michael Pollan's *The Omnivore's Dilemma*
and *In Defense of Food*

Maddie Earnest & Liz Fathman's *Missouri Harvest: A Guide to Growers and Producers in the Show-Me State*

The December 2015/January 2016 issue of *Mother Earth News* magazine, which contains well-referenced articles detailing the link between food and human health.

MU's Missouri Farmers Market Directory:
<http://agebb.missouri.edu/fmktdir/>

The 2015 Southern Iowa *Northern Saw-whet Owl* Extravaganza



Emily Wilmoth, Jerry Toll and Veronica Mecko at Iowa's Shimek State Forest

By MRBO Special Projects Coordinator Veronica Mecko

This interview with Scott Weidensaul, author of many books about birds and coordinator of Project OwlNet, gives a good idea of what has been learned from banders across the country who are part of Project OwlNet. For several years now I have banded Northern Saw-whet Owls (NSWOs) near Maloy, Iowa at a satellite station of my friend Jerry Toll's banding project at Hitchcock Nature Center, north of Council Bluffs. This year Jerry was able to get some funding so that I could monitor for the owls at different places in southern Iowa during their fall migration south.

A coworker of mine from MRBO, Educator Emily Wilmoth, worked with me on the project. We spent three nights at each of six different public areas in southern Iowa: Stephens State Forest, Mount Ayr Wildlife Management Area, Lake Wapello State Park, Shimek State Forest, Lacey-Keosauqua State Park and Lake of 3 Fires State Park. Mount Ayr Wildlife Management Area is a place near Maloy where I have caught owls since 2011. This year on the first night of banding at this site, we captured the biggest NSWO I have captured yet. It weighed 111 grams compared to 102 grams for all owls in all other years!

A big goal of owl banders is that either the owls that they band will be recaptured at a different location or that they will recapture an owl with a band number different than the numbers they use. From these "foreign" recaptures we get information about the owls' movements, longevity and physical condition at different sites. At Hitchcock Nature Center since 2009 Jerry has had both foreign recaptures and his owls recaptured at other locations; however, I haven't had either happen at my sites in southern Iowa yet.

Aside from the banding project we also did a few educational events. As Emily is an experienced environmental educator, she organized "Owlween" at Shimek State Forest and then a few days later on a Wednesday evening we had about 40 people come to Lacey-Keosauqua

Emily & Jerry at the Shimek State Forest trapping site, showing the set-up of owl nets in the background. The nets are rolled until opening after sunset.



From the NPR Fresh Air interview Oct. 20th, 2015.

www.npr.org/2015/10/20/450038490/flights-of-fancy-exploring-the-songs-and-pathways-of-the-living-bird

TERRY GROSS: "Share with us one incredibly interesting thing you've learned through these tags about owl migration."

SCOTT WEIDENSAUL: "Well, just the fact that there's a lot of them. I mean, when we started working with northern saw-whet owls in the mid-1990s, they were chosen as the symbol for Pennsylvania's Wild Resource Conservation Fund because they're so rare. Nobody ever saw them. Three years ago, in one fall, we caught almost 4,000 of them. I mean, these birds are both incredibly common, but they're very secretive. And they're flying at night. And saw-whet owls are found all across North America. They breed across the northern forests and down through the Rockies and the Appalachians. But in the fall, they migrate almost everywhere. So almost wherever anybody is listening to this interview, at night in the fall there are probably these little owls about the size of a soda can that weigh as much as a robin flying over their house. And we're completely oblivious to it."



State Park to learn about owls. One of my favorite nights of the project was when we had the education event at Lacey-Keosauqua State Park. We had moved the nets earlier in the day to a trail that ran along the Des Moines River. We wanted to see if perhaps owls were using the river as a corridor. We had the banding station for the event in a large stone shelter with a fireplace and we had a roaring fire going during the whole evening. We opened nets, but didn't have any owls the first net run though we already had dozens of people there. Emily went to check nets for the second run and most of the visitors walked down the long, sloping path to where the nets were. There was an owl on the river side of the nets! People were so excited and had so many questions. Then we had two more net runs where there was an owl and both of these owls were ones we had banded on the previous two nights. We therefore got to explain about recaptures and there were some folks who had come later and everyone got to see an owl!

The project was a great opportunity to get to spend time at beautiful public areas that I hadn't visited before. Because of rain we spent four days at Lake Wapello (pronounced WHOP-ello) and I was so glad to have an extra day at this park. There were Pied-billed Grebes on the lake and lots of woodpeckers all over, Pileated, Red-headed, Red-bellied and Downy. We stayed in a small but very comfortable cabin. Lacey-Keosauqua State Park covers a huge area on the south side of the Des Moines River. There are several shelters that overlook the river and a River Trail as well as other trails.

After the project in Iowa, Emily and I spent a week in Missouri banding owls for MRBO. We anticipated that perhaps we would recapture one of the owls from southern Iowa. The first night of banding near Marshall we captured an owl that had a different band number and after submitting that number to the Bird Banding Laboratory we found out that the owl had been banded on Oct. 7, 2015 near Collegeville, MN. Two nights later in Arrow Rock we captured a second owl with a different band number that had been banded Oct. 13, 2015 in southeast Minnesota. It was very exciting to have these recaptures although I am still hoping that within the coming years we learn that an owl from southern Iowa has been recaptured somewhere else.



Emily at the Mount Ayr Wildlife Management Area owl site.

I would like to thank several people for their time and assistance with this project: Jessica Flatt at Stephens State Forest, Chad Paup at Mount Ayr Wildlife Management Area, Chad Horn at Lake Wapello State Park, John Byrd at Shimek State Forest, Justin Pedretti at Lacey-Keosauqua State Forest, and the staff at Lake of Three Fires State Park.

Also, many thanks to friends who helped out with the project by joining us at the banding stations or providing lodging and food. Sophie, Betsy, Brian, Keith, Peter, Cassie, Sandy, and Jerry – thank you!

Funding for Veronica and Emily's Southern Iowa Northern Saw-whet Owl Extravangza was provided by



Many visitors got to see owls at Arrow Rock State Historic Site when Veronica and Emily returned from the Iowa Extravanza for several days of owl banding in central Missouri.



Birds of the Winter Wonderland



White-crowned Sparrow and Harris' Sparrow, both photos courtesy of MRBO friend Daniel Henehan. Right: Slate-colored Junco, Photo Cornell Lab of Ornithology.

It's winter and a great time to be in the field. The uncomfortable chill in the clean, crisp air melts away once we put one foot in front of the other and get moving. All you need are warm dry layers of clothing and a love for the outdoors. Going afield in the winter has advantages over other seasons. First, even some of the most popular places are devoid of distractions created by others. This will help you spend more time focused on the natural experience and also increases the chance of wildlife being undisturbed. Also, when lucky enough to have snow on the ground, wildlife is often easier to spot.

Nature is fascinating and if you haven't yet had a change to explore your warm weather haunts in the winter, you are missing out. From determining how hungry the deer are by examining what they are choosing for winter browse or looking for winter birds, the explorations in the winter world are unlimited.

What winter birds are out there?

Each winter we are treated with some great guests from the north, particularly sparrows. The Harris's Sparrow is a large, striking bird that was first discovered in Missouri. Since it is such a far northern breeder, it was last bird in North America to have had its nest and eggs found. The amazing Dark-eyed Junco can be found in good numbers. Look for stands of birches, where chickadees or others have been knocking seeds to the ground. You may find a bonanza of a mixed flock in one small area, where juncos forage alongside White-crowned and White-throated Sparrows with sometimes even a Song Sparrow mixed in!

The tiniest gems you should be able to seek out are Golden-crowned and Ruby-crowned Kinglets. The Golden-crowned Kinglet winters throughout the Midwest and is often found in larger deciduous trees. Listen for their high-pitched sounds and look for the distinctive facial coloring of this species with white and black streaks above the eye topped with a gold patch and a bold white stripe on the wing. Ruby-crowned Kinglets are more common in the southern states during the winter and would be more likely to visit a suet or bird feeder for sunflower seeds or peanut hearts. The ruby crown of this species is rarely observed but look for the partial white-eye ring and less bold white stripe on the wing than the Golden-crowned Kinglet. The Ruby-crowned Kinglet seems to be more tolerant than most bird species of large, approaching beings and so it may be possible to get quite close to them and fun to see how close they will approach you as they forage for food.

If you aren't able to head far afield for a winter walk, there are plenty of birds right in your own backyard. Whether or not you have a bird feeder in your yard or neighborhood, if you find an area with shrubs, native plants with berries and medium to large size trees as well as a water source you

Orange-crowned Warbler.
Photos: Cornell Lab of Ornithology.



can look for two species of warblers and kinglets that can be observed in Missouri during the winter months. These birds are smaller than sparrows and have thin, pointy bills for capturing insects. It may be a bit more difficult to find these birds as they will be found mainly in shrubs or trees, not on the ground. Often they can be observed fluttering quickly away from and then back to a perch as they hover in grabs for insects.

The Orange-crowned Warbler breeds throughout Canada and in the western United States and is one of the last warblers to migrate in the fall. Most Orange-crowned Warblers spend the winter in states along the gulf coast and throughout Mexico but individuals have been known to spend the winter north of this area if there is a



Ruby-crowned Kinglet (above) and
Golden-crowned Kinglet (below).



food supply. They mainly eat insects such as ants, beetles, spiders and flies and they supplement their diet with such foods as dried berries and seeds. Orange-crowned warblers may visit a suet feeder. Look for these small, gray and olive-colored birds with sharp bills in shrubs and dense vegetation.

The Yellow-rumped Warbler winters across much of central and southeastern U.S. Their main diet is also insects but sometimes can be attracted to feeders with sunflower seed, raisins, suet and peanut butter. The best field mark for this species is a bright yellow rump patch along with a yellow patch on the sides of the breast that contrast with brown, gray and white coloration in females and young birds and blue-gray and white in adult males. They are most commonly found in deciduous trees.

To learn more about the habits and requirements of these species during winter months visit feederwatch.org. To learn about their call notes in winter go to www.allaboutbirds.org.



The aptly named Yellow-Rumped Warbler. Photo: Cornell Lab of Ornithology.

Help Missouri's Winter Birds (and get to see them more closely, too!)

This article first appeared in the Winter 2014 issue of The Rectrix. Many new members who receive the newsletter have joined MRBO since that time, so we hope first-time readers will find these tips interesting and fun!

While most Missourians are wishing that winter would just go away, we who love birds consider how much tougher winter is on wildlife. Food gets scarce, there are fewer hours of daylight with which to gather food, water, and warmth, and sheltering from temperatures in the teens or single digits is very difficult. With this in mind, we present a few activities that families can do together that are not only fun but will help your outside birds!

- » **Build and put up nest boxes.** “Nest” boxes aren’t just for nesting. Many species will use them in all seasons, but especially in winter, for nighttime roosting. A variety of boxes placed around your yard with different entrance-hole sizes can provide shelter for Carolina Wrens, Chickadees, Titmice, Eastern Bluebirds, and several woodpeckers.
- » **Make feeders and keep them filled.** Easy access to a food supply makes the difference between life and death for many birds when it is bitterly cold. High-protein seeds such as black oil sunflower are great and not too expensive (compared to niger seed and sunflower hearts), and blocks of suet will sustain not just woodpeckers but nuthatches, chickadees, and even goldfinches and Yellow-rumped Warblers.
- » **Spread some seed on the ground.** Our wintering sparrows, such as White-crowned, Harris’s, Fox, and White-throated Sparrows, Slate-colored Juncos, and year-round resident Song Sparrow, prefer to feed on the ground instead of on a traditional feeder. Spread some seeds on the ground or on your porch to attract these species, especially when there is snow cover. Don’t forget to keep your cat inside, since these ground-dwelling sparrows are more vulnerable to predation than birds on higher feeders.
- » **Make a pile.** A brush pile! It helps birds and small mammals to have as much cover as possible during the winter. This helps with warmth and to protect them from predators (*usually!* See below). Brush piles and thick bushes provide a warmer, sheltered place to roost for non-cavity using birds such as the sparrows described above.
- » **Watch what happens!** When you provide birds with life-sustaining resources, they will reward you with many hours of close-up viewing. Everyone’s winter day is brightened by seeing the dashing red of a male Northern Cardinal or seeing the diversity of sparrows that migrate to Missouri in the winter for a break from their Canadian breeding grounds!



Steve Garr

The fact that brush piles provide cover for small birds and mammals is also known to the occasional Cooper's Hawk, like this one that visited the backyard brush of our friends the Garrs in Jefferson City. This hunter went away empty-taloned, which is often the case when dense cover is available for its smaller avian prey.

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