

The Rectrix

A seasonal newsletter of the Missouri River Bird Observatory

Fall 2011



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



Message from the Fundraising Chair

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On the cover ~
A Prothonotary Warbler,
banded on October 10th
at Van Meter State Park.

Dear Members and Friends of MRBO,

It has been just a few short months since the launch of the Missouri River Bird Observatory membership drive and our mission to further awareness of the need for conservation. This has been a most rewarding experience for many of us thus far. As we opened the world of MRBO to others through fundraising programs, we ourselves have discovered the true meaning of the “fun” in fundraising.

On the project end of things, both students and teachers at elementary schools throughout the area were overjoyed with the programs that Dana and Ethan presented this fall. There were many small groups but also large ones like the 150 second-graders in Centralia and the 180 elementary students from Fort Zumwalt School District who visited the MRBO station in the Busch Conservation Area. As you browse through the photos in this issue you, too can share the wonderment of children discovering nature through the beauty of a very small creature.

One of the projects that I found most interesting, and which you can read more about in a following article, is the Northern Saw-whet Owl project. These tiny owls are adorable and so “cuddly”. To hold one and just rub its little neck while it looks at you with those big eyes ... this is truly another of nature’s little miracles. Huge thanks goes to the Indian Foothills Park staff for letting MRBO use their office for the nightly owl banding as well as for the two months of song bird fall migration monitoring.

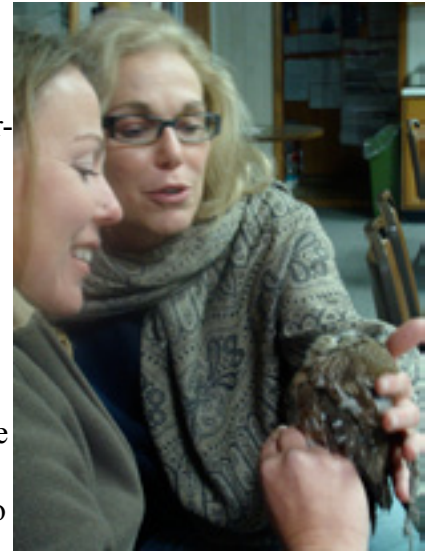
During the fall months, MRBO managed to band and collect data on over 1,000 birds at three individual migration sites. This was possible due to the care and diligence of the interns who have joined the organization, allowing MRBO to run several sites concurrently.

I am very happy to report that additional funding was recently secured from the US Fish & Wildlife Service along with a grant from the Audubon Society of Missouri. We also give thanks to new donors and contributors: the Garrs of Jefferson City, the Halls of Arrow Rock, the Hamiltons of Marshall, and the Edsons of Naperville, IL were our biggest private sponsors this quarter.

Although we have met our goals for the year, there is so much more that can be done with continued support of our fundraising activities. I would like to ask our current members to share this newsletter and their enthusiasm for MRBO with friends and associates. If you are not already a supporter of MRBO, please consider a donation. Your generosity not only brings joy and an awareness of the beauty of nature to the community, it allows our organization to gather scientific data that is shared with countless conservationists and government organizations in order to protect our natural resources for generations to come.

Warmest Regards,

The following people provided photographs for this issue: Ryan Davis, Stephanie Putnam, Sherry Leonardo, and Jeanette Kell.



January – March: Backyard Banding at homes, schools, and businesses around the state of Missouri. Birds are color-banded at bird-feeders so that people can get to know the individual birds that visit their feeders. Target species include Downy, Hairy, and Red-bellied Woodpeckers, White-breasted Nuthatch, and White-crowned and White-throated Sparrows. This is a fun and educational event for all ages! Please call us if you would like to schedule a date.

Miami, MO January 7th, 1:00 – 4:00 p.m.: Winter bird workshop at the **Van Meter State Park's** American Indian Cultural Center. Details as above. This workshop is also free and open to all.

Blue Springs, MO January 28th, 12:00 – 4:00 p.m.: Join us for our 2nd Annual Burroughs Audubon banding event. We will be color-banding birds at the **Burroughs Audubon Library at Fleming Park**. All are welcome.

Marshall, MO January 31st, 6:00 – 8:00 p.m.: Missouri's Winter Birds, a class presented by MRBO director Dana Ripper at the **Saline County Career Center**. Learn about the ecology of Missouri's winter species, and some of the amazing adaptations displayed by migrants and residents for dealing with our cold, snowy winters.

St. Louis, MO February 4th, 9:00 a.m. – 3:00 p.m.: MRBO is pleased to be a part of the **Missouri Botanical Gardens** 7th Annual Backyard Bird Festival. We will provide banding demonstrations throughout the day; there will also be vendors and guided bird walks.

Kingsville, MO February 5th, 9:00 a.m. – 4:00 p.m.: Join us at wonderful **Powell Gardens** for bird-banding at Powell's Feather Your Nest exhibit! Garden admission fees apply, but the event is free!

Check our homepage at www.mrbo.org - new events are added regularly!



L to R: Veronica Mecko (Research Volunteer/ Assistant), MRBO Mascot "The Wuz" in background, Director Dana Ripper, and Stephanie Putnam (Research Assistant/ Intern) enjoy an Ovenbird before release. Read about MRBO's assistants on **pages 4-5!**

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In the next issue of The Rectrix...
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Final Saw-whet Owl Results
Species Profile: White-breasted
Nuthatch
Marsh Bird Survey Plans
Kids' Corner: content for youth

Meet The Staff - Assistants Stephanie Putnam & Ryan Davis

Stephanie Putnam spent most of her life overseas as a military dependent, and calls Heidelberg, Germany, her home. She came to Missouri Valley College (MVC) on a wrestling scholarship and will be graduating with a B.S. in Biology in May of 2012. She has been working for MRBO for more a year and a half, beginning with an internship at the Grand Pass CA banding station before MRBO was even officially incorporated. Stephanie has become a sub-permitted bander and independently ran the Fall 2011 Migration Station and the Fall 2011 Saw-whet Owl Station, both located at Indian Foothills Park. When she is not banding, she enters data into our database; this year she will also be entering data into the Audubon Society of Missouri's CACHE/SPARKS database. Steph spent the summer of 2011 in Indiana as a field technician banding bats through Indiana State University in conjunction with the Hardwood Ecosystem Experiment. She is also a volunteer for the Marshall Animal Shelter where she adopted two beautiful dogs, JT and Kahoss; treasurer of the MVC Biology Club; and Fundraising Coordinator for the Coral Reef Ecology Class, a class which will take students to Belize in May of 2012 to conduct research through a non-profit marine conservation organization.



Ryan Davis grew up in southeastern Virginia and northeastern North Carolina, where his passion for wildlife grew out of his constant connection with nature. He attended North Carolina State University and earned a B.S. in Fisheries, Wildlife, and Conservation Biology with a minor in Forest Management. Though he originally intended on focusing his studies on reptiles and amphibians, Ryan ended up working on several bird projects while an undergraduate, which fostered his interest in ornithology. He has worked on several projects monitoring endangered species, including the Red-cockaded Woodpecker in North Carolina and the Southwestern Willow Flycatcher in Nevada. He has also worked as a species inventory biologist and as an undergraduate researcher. Ryan is currently searching for a graduate position where he can study birds and in the meantime is working on temporary wildlife technician crews.



Despite his high amount of experience with birds, Ryan didn't have any official banding experience until joining MRBO. It was an excellent opportunity for him to become proficient with this technique, and his position here has also encouraged his interest in environmental education and community outreach, areas which he had previously never thought of and in which he is quite talented.



Meet the Staff ~ Assistants Veronica Mecko & Brittany Woody



Veronica Mecko grew up in Illinois but went to school in Iowa, graduating from Grinnell College with a B.A. in biology, and has lived more than 20 years in Iowa. She has always had an interest in the natural world. About 10 years ago she focused on birds and began to identify and monitor the different bird species she observed on the 20-acre micro-farm she and her family lived on. She especially enjoyed spring and fall when the migratory species would pass through. In 2007 she visited Hitchcock Nature Center north of Council Bluffs and started volunteering as a hawk counter during the autumn hawk watches. In September of 2010, she spent 10 days at Long Point Bird Observatory in Ontario and learned the basics of banding passerine birds. In January of 2011 she took a leave of

absence from her job to pursue her interest in birds and from February through mid-May she volunteered and then did an internship in avian rehabilitation at the Florida Keys Wild Bird Center. From Florida, Veronica headed to Missouri to volunteer with MRBO. She worked with the MAPS banding project on prairie sites and also with the purple martin nestling banding project during the summer and stayed on for the fall migration banding as a research assistant. She considers her work at MRBO as invaluable for learning more about avian research and the opportunity to work on the prairies and in the woodlands of Missouri. Veronica will continue to be involved in the hawk watch and hawk and northern saw-whet owl banding in Iowa and hopes to pursue other work in avian research as well.



Brittney Woody is not only a senior at Missouri Valley College (MVC), but a mother of two. She will graduate from MVC with a B. S. in biology in May 2012. She took an ornithology course during the Spring 2011 semester that sparked her interest in this field of study. Brittney participated in an ornithological internship this semester through MVC working with the Missouri River Bird Observatory (MRBO). She started her training while observing MRBO employees extracting and banding passerines at the Indian Foothills Park Migration Monitoring site where she acted as the official data recorder. Brittney also assisted MRBO as a research assistant throughout the Northern Saw-whet Owl banding season where she began training in extraction and processing techniques.

In addition to motherhood, classwork, and internship duties, Brittney also acts as the assistant fundraising coordinator for MVC's Coral Reef Ecology class where MVC students will participate in a ecological research survey in Belize this coming May.





A "Birds-I-View"

We at MRBO are honored to have become associated with Steve and Regina Garr of Birds-I-View. Aside from being two of the warmest and most generous people we have met here in Missouri, the more we know the Garrs, the more opportunity we have

to share with our membership exactly what they do for people and birds. Steve is a Life Member of the North American Bluebird Society (NABS) and Birds-I-View is proud to be a Corporate Member of that organization. Steve is a past President, former Vice-president, and a past member of the Board of Directors of NABS. The Garrs are also co-founders of two separate state Bluebird societies. Steve is the President of the Missouri Bluebird Society and Regina is the Society's secretary as well as the Newsletter Editor.

The Garrs encouraged MRBO to add the Birds-I-View location to the Backyard Banding Project in the first season of the program. During our banding event there last March, many people visited and observed our banding procedures on their way to a seminar on Chickadees and Bluebirds. We are looking forward to another session on December 9th – coming up fast! We strongly encourage you to visit their website where you can find information about the plethora of public events and seminars hosted at the Birds-I-View store.

Their store is not just a store. It is a meeting place for camaraderie in the birding community and a place for education about wild birds, habitat concerns, and public involvement. The products they have include free information and all are tailored to benefit wildlife. It is selection beyond description... you just have to see it!



Check out this special **Blue-bird Feeder** designed by Birds-I-View owner Steve Garr!

[See video on the Birds-I-View website.](#)

Take advantage of our thirty four years of experience in the Wild Bird industry.

~Steve & Regina Garr

During December 2011 and January 2012, **we will Donate 10% of all Website sales to MRBO! (Be SURE to type MRBO in the comments section)**

Birds-I-View

invites you to visit their Website:

www.birds-i-view.biz

or come by our Retail Store in
Jefferson City

Come bird with us in our **Wild Bird Garden** at our store or attend one of our many **FREE Educational Seminars!**

Sign up on our website to receive our
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Jefferson City, MO

573-638-BIRD(2473)

Fall Banding Synopsis

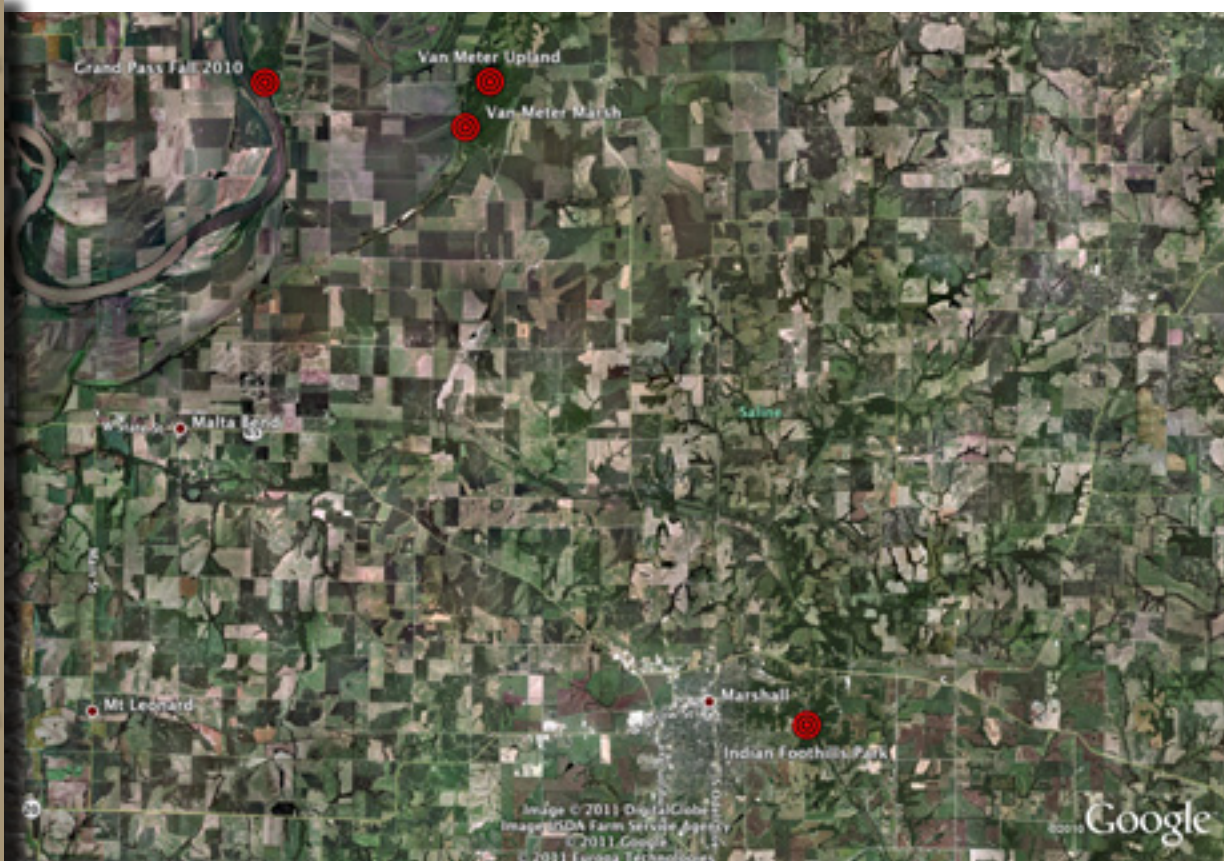
In 2010, we monitored fall migration using 20 nets in the southwest corner of Grand Pass Conservation Area. We were very pleased with the results of this site in terms of thrush captures, with relatively large numbers of Wood and Swainson's Thrushes. However, this site was lacking in terms of warblers, so we planned to operate an additional site at Van Meter State Park in Fall 2011. The Missouri River thwarted this plan by inundat-

significantly less productive than the other two sites - migrants seem to prefer scrubby second-growth thickets to mature woods in the fall - and we subsequently lessened net effort at the upland site.

Highlights of this fall included:

- Two American Woodcock, an unusual bird to capture at a migration station that we captured at both Van Meter State Park and

This map shows locations of four MRBO fall banding stations. Grand Pass CA was operated in 2010, but Missouri River flooding forced us to relocate in 2011. The three 2011 fall banding station results are posted on Pages 6-7 with the results from Grand Pass in 2010.



ing the southwest Grand Pass site with floodwaters throughout the summer and into the fall of this year. Therefore, instead of fall banding at Grand Pass, we set out to test three other locations. Two locations were located at Van Meter State Park. One of the Van Meter sites was located adjacent to a marsh in a shrubby area beneath a few old sycamores and cottonwoods. The second site was on a hilltop in a stand of near-mature hardwoods. The third site we chose was at Indian Foothill's Park in Marshall; this site was dominated by edge habitat and was a mixture of old field, regenerating hardwoods, and second-growth hardwood forest.

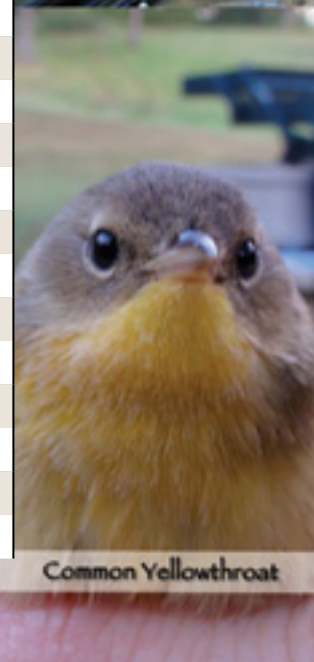
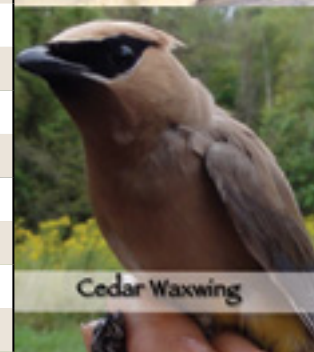
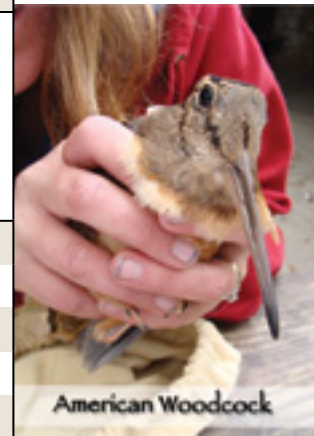
Net effort was nearly equal between the Van Meter marsh site and Indian Foothill's Park. Early on, we found that the Van Meter upland site was

Foothills Park.

- A flock of songbirds at Van Meter marsh that included both Golden-winged Warbler and Philadelphia Vireo.
- Flocks of Cedar Waxwings at Foothills Park that totaled 34 banded birds
- Large numbers of Gray Catbirds, Ovenbirds, Nashville Warblers, and Ruby-crowned Kinglets across sites.
- Learning that net placement is even more key in fall than in spring! Birds that prefer mature forest with little understory for nesting and spring migration move towards young hardwood thickets during fall.

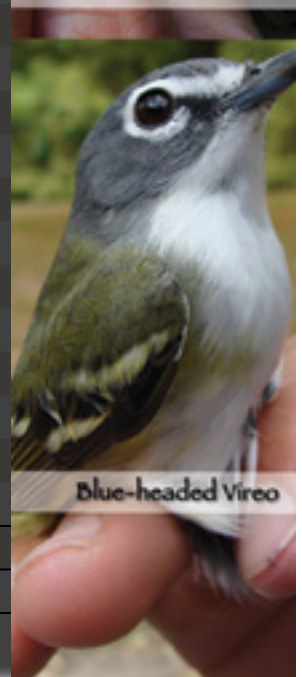
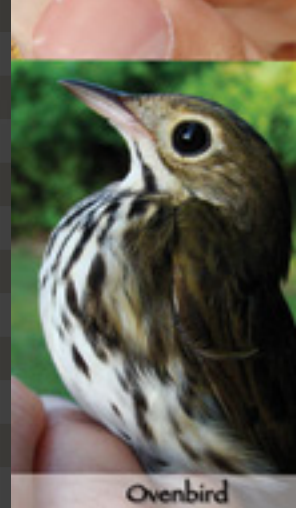
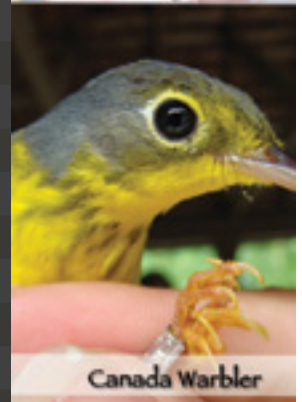
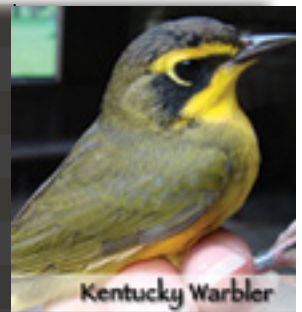
2010-11 Fall Passerine Migration Banding Results

Species	Banding Site/Effort				Grand Total
	Grand Pass	Indian	Van Meter	Van Meter	
	CA	Foothills Park	Marsh	Upland	
	2010	2011	2011	2011	
	49 days 3409 net-hours	43 days 1067 net-hours	42 days 1385 net-hours	15 days 370 net-hours	
American Goldfinch		12	3		15
American Redstart		2	4		6
American Robin		1			1
American Woodcock		1	1		2
Baltimore Oriole			1		1
Black-and-white Warbler		1	4	1	6
Blackburnian Warbler			1		1
Black-capped Chickadee	3	8	11	1	23
Blue Jay	2	4	3		9
Blue-gray Gnatcatcher			1		1
Blue-headed Vireo	1	1	2		4
Brown Creeper	18	1	7		26
Brown Thrasher	1	4	7	1	13
Canada Warbler	1		18		19
Carolina Wren	6	2	4		12
Cedar Waxwing		34			34
Chestnut-sided Warbler			8		8
Chipping Sparrow		2			2
Common Yellowthroat	3	1	14		18
Downy Woodpecker	4	6	4		14
Eastern Phoebe	1	3			4
Eastern Screech-Owl	1				1
Eastern Towhee			2		2
Eastern Tufted Titmouse	10	17	14	3	44
Eastern Wood-Pewee	3	2	16		21
Field Sparrow		2			2
Fox Sparrow	3	6	3		12
Golden-crowned Kinglet	9				9
Golden-winged Warbler			1		1
Gray Catbird	12	17	67	4	100
Gray-cheeked Thrush	1		1		2
Hairy Woodpecker	2	1	1		4
Hermit Thrush	37	5	3	1	46
House Wren			9	1	10
Indigo Bunting	7	14	34	2	57
Kentucky Warbler	4	1	5	1	11



A Comparison of Banding Sites

Least Flycatcher		2	1		3
Lincoln's Sparrow		3	2		5
Magnolia Warbler	1	2	4		7
Mourning Warbler			4		4
Myrtle Warbler	2	4			6
Nashville Warbler	10	27	14		51
Northern Cardinal	46	74	28	4	152
Northern Parula		3	2		5
Northern Waterthrush	9		6		15
Orange-crowned Warbler	5	6	5		16
Orchard Oriole			1		1
Ovenbird	16	9	24	19	68
Philadelphia Vireo			1		1
Prothonotary Warbler	1		1		2
Purple Finch		2			2
Red-bellied Woodpecker	3	2	2		7
Red-eyed Vireo		2	7		9
Red-winged Blackbird	1				1
Rose-breasted Grosbeak	2		4		6
Ruby-crowned Kinglet	7	13	20	1	41
Sharp-shinned Hawk		1			1
Slate-colored Junco	5	31	40	2	78
Song Sparrow	4	1			5
Swainson's Thrush	19	2	6	2	29
Swamp Sparrow		1	3		4
Tennessee Warbler	2	3	1		6
Traill's Flycatcher	1		5		6
Veery	2	1			3
Warbling Vireo		1			1
White-breasted Nuthatch		1			1
White-crowned Sparrow		1			1
White-eyed Vireo		1	1		2
White-throated Sparrow	94	100	73		267
Wilson's Warbler	1	2	6		9
Winter Wren	22	2	3		27
Wood Thrush	61	1	2	1	65
Yellow-bellied Flycatcher		1	13		14
Yellow-billed Cuckoo	2		4		6
Yellow-breasted Chat			1		1
Yellow-shafted Flicker	2				2
Grand Total	447	447	533	44	1471
Species Total	45	54	59	15	76



Northern Saw-whet Owl confirmed as a regular visitor to central Missouri!



By Dana Ripper
MRBO Director

The Northern Saw-whet Owl (*Aegolius acadicus*) is a tiny, strictly nocturnal owl that frequents the boreal forests of the northern US and Canada. Their diminutive size (8 inches), coupled with their nocturnal lifestyle and their habit of perching close to the bole of cedar trees in dense thickets,

makes them a fairly difficult bird to find unless you are lucky enough to reside in the far north and have Saw-whet nest boxes. They are also about the cutest thing you can imagine.

MRBO's relationship with this species began in July 2010, when I attended a workshop in Wisconsin entitled "Introduction to Raptor Field Techniques". The biologist leading the workshop, Gene Jacobs of Stevens Point, WI, has studied raptors for over 30 years, and has been running a yearly Northern Saw-whet Owl (NSWO) banding station since 1988. He has banded over 11,000 Saw-whets in that time, and during the 2010 workshop, discussed the ecology of this small owl and the methods for trapping it. When asked if the NSWO travels as far south as Missouri, Gene indicated that since very little has been done to study this species in the Midwest south of Wisconsin and Minnesota, no one

really knew how far, and how regularly, the NSWO travels south.

This sounded like an excellent challenge for MRBO, so our background research began. If one looks at some of the older field guides, including Sibley's, the NSWO is shown to only rarely occur south of Iowa and Illinois. In the Audubon Society of Missouri's extensive CACHE/SPARKS database (<http://www.mobirds.org>), there are only six NSWO records for our state. Also, banding records showed that from 1960 to 2009, only 19 NSWOs had ever been banded in Missouri. Compare this to 302 Barred Owls or 397 Great-horned Owls banded in the same time period.

From Project OwlNet (<http://www.projectowl.net>), we learned that the northeastern US is literally saturated with NSWO banding stations, but the further west you head, the fewer there are.

We began to have doubts that this species' winter range ended far to

our north. We soon learned

about a relatively new station operated by

bander Jerry Toll

at the Hitchcock Nature Center

just outside of Council Bluffs, IA. Jerry graciously hosted

Ethan Duke

and I November

2010, where we

learned the techniques of NSWO

trapping and banding protocol. Following

this visit, we made

several trial attempts at catching NSWOs here in Missouri. Over four nights in November

2010 and two nights in February 2011,

we captured 12 NSWOs in central Missouri. Nine of these were captured the night of November 13th at the home of Master Naturalists Jo and Jack Spicer in Benton County. Clearly, a full NSWO trapping



season was in order, planned for Fall 2011.

This fall we obtained the proper equipment, consisting of mist-nets with larger mesh than our passerine nets, and a FoxPro game caller that can transmit the NSWOW call over a great distance (we humans can hear it a mile away if the winds are right).

In October, we sent MRBO interns Stephanie Putnam, Ryan Davis, and Brittany Woody to visit Jerry Toll for training, where they were treated to a night with 13 NSWOW captures.

On October 30th, our NSWOW season began in earnest at Marshall's Indian Foothills Park. We erected four nets around a small grove of cedars within the Park's extensive deciduous woodland. Our first captures were on Halloween night. Over the course of the next month, we were able to operate the Foothills station 23 nights (133.5 hours total run time, or for you banders out there, 531 net-hours). Our protocol consisted of opening nets and deploying the FoxPro a half-hour after sunset, and running for six hours. We quickly found that cold nights with north winds were the key; conditions which were not abundant throughout this mild November. Information from northeastern banders showed that throughout the US, most stations were having mild fall weather and NSWOW capture rates were down across the country.

Nonetheless, from 31 October – 28 November, we trapped 18 NSWOWs here in Marshall! This shows us that this owl is a regular visitor here, migrating through and possibly over-wintering. And this is just the tip of the iceberg in terms of documenting this species' presence here. Is central Missouri the farthest south Midwestern point of the NSWOW range? Or did all these birds just pass through on their way to more southerly points? Are they nomadic in the winter, or do individuals maintain a set winter territory? Where else in Missouri do they travel through or winter in significant numbers?

MRBO is attempting to answer these

questions by conducting trapping trials at various locations around the state. On November 16th, Ethan and I ran four nets at Powell Gardens while Stephanie and Brittany ran our Marshall site – both sites caught two owls that night. Upcoming NSWOW trial sites include public lands near Kansas City and private lands outside of Springfield, Columbia, and Edwards.

MRBO is not alone in the quest for NSWOW knowledge in Missouri. St. Joseph banders Jack Hillsabeck, Larry Lade, and Dr. John Rushin operated Saw-whet nets on 11 nights (44 hours; 220 net-hours) in November. This station caught three owls the night of November 16th, and had a total five owls this season. Between us, in just two fall seasons we have almost doubled the amount of NSWOW records for our state. Now we just need banders in other parts of Missouri and the southern Midwest to take up the cause, so that we can begin bringing our knowledge of NSWOW movement here in line with that of the northeast!

Assistant Ryan Davis enjoys a Northern Saw-whet Owl banded in Iowa. We hope we see them both again!



Species Profile: Indigo Bunting

Eccentricity

Studying molt patterns in the Indigo Bunting (*Passerina cyanea*)

By: Dana Ripper

One of the questions we are most frequently asked at the banding station is, “can you tell how old that bird is?”. The answer is usually yes...though not to a fine enough scale to satisfy most people! In most songbirds, in the fall we are simply able to tell if a bird hatched this year (a Hatch Year bird), or in some previous year (After Hatch Year). In the spring, we are able to determine if the bird was hatched the previous year (a Second Year bird, which became SY on January 1st), or hatched some year before last year (an After Second Year).

We are able to determine this because passerines usually follow predictable patterns of molt – the replacement of feathers. Many ornithologists and banders have studied the timing of molt and which feathers are replaced when. Most passerines go through two molts each year, one in fall and one in spring. In most of these songbird species, After Hatch Year birds replace *all* their feathers in the fall, while Hatch Year birds replace only *some* of their feathers – and we know which ones those are. For example, in the male Indigo Bunting pictured (*right*) you can clearly see the difference between newer blue feathers and the retained brown ones. Since this photo was taken in spring, and we see that the bird did *not* replace all its feathers in its fall molt, we know that it is a Second-Year bird at the time of the photo. An After



Above: Newer blue feathers contrasting with the older brown feathers on a male Indigo Bunting.



Above: Expected molt of an after second year Indigo Bunting exhibiting all newer indigo-edged feathers.

Second Year male Indigo Bunting should have fully molted the previous fall, and have no retained brown feathers.

Pretty straightforward. Except that the Indigo Bunting, one of the most common songbirds here in Missouri, does not always seem to behave when it comes to predictable molt patterns. Supposedly, Indigo Buntings display the typical molt patterns described above. A male Indigo Bunting, if it is an After Second Year bird who has replaced all of its feathers in the fall, and then gone through its more limited spring molt to achieve breeding plumage before reaching us here in Missouri, should look like the photo (*left*), with all indigo-edged feathers – and sometimes they do.

But in Spring 2010, we realized that this is not always the case. Four of the 31 Indigo Buntings we banded in May 2009 returned to our nets in 2010. One of these individuals (*next page right*), a male that was in at least his second year

in 2009, would have been aged as a Second Year bird in 2010 had he not been already banded. This individual retained so many brown feathers that he looked like a scruffy Second-Year bird! He got us thinking – was this just an unusual case of one bird not completing his molt, or are there other Indigo Buntings that show misleading feather patterns?

We didn't know the can of worms that was about to be opened. Indigo Buntings have an extra, relatively recently discovered, supplemental molt not shared by other passerines. Additionally, they show what is termed an "eccentric" molt pattern: the feathers of each bird do not get replaced in a logical, predictable manner. Once we began closely examining the feathers of each Indigo Bunting's wing, we found that individual variation in feather replacement is *so* extensive that very few birds' wings were identical.

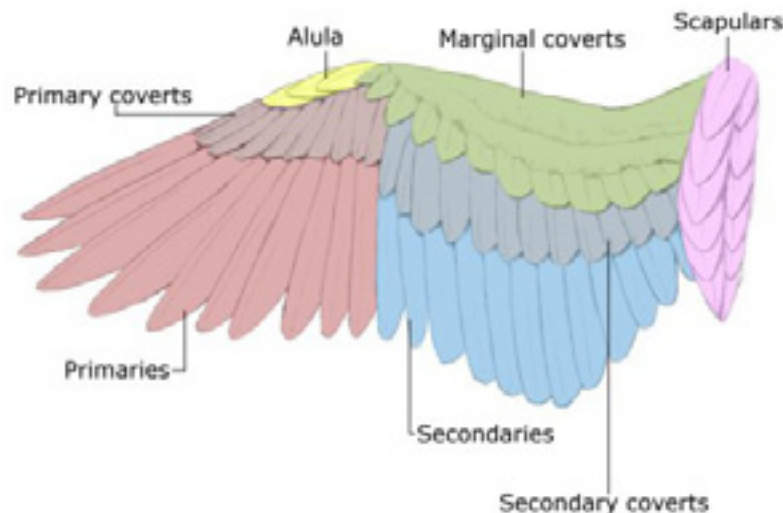
A year-long investigation in which we reviewed literature on the topic, photographed each Indigo Bunting banded, and scored each feather of every bird's wing by color, we are starting to get a handle on the few reliable characteristics that do exist in this species' molt patterns. Most importantly, we have determined that no matter the time of year, older males will always show indigo-colored primary coverts (see the key below), and younger males will not. This allows us to confidently age all Indigo Buntings that we capture – which is more than 100 each year.



Above: An after second year male Indigo Bunting with a wing that does not exhibit the expected fresh indigo feathers.

So why is this important, anyway?

Age is one of the most crucial pieces of information we obtained while banding birds, and therefore accuracy is of the highest importance. Age and sex collectively provide us a picture of the demographics of a population. We want to determine, and track, whether or not there is population growth or decline, especially in species of conservation concern. If, for example, we started seeing very few young birds in a particular species, it would alert us that the breeding population is not reproducing itself. Over just a few years, this could result in a precipitous population decline. The main purpose of a banding station is to identify these trends early, and to warn conservation agencies and land managers who are equipped to take action for species and habitat conservation.





Fall was an excellent season for education and outreach opportunities here at MRBO. In addition to the following “official” events listed here, we also had the pleasure of having individuals or small groups of visitors to our banding stations at Indian Foothills Park and Van Meter State Park on a regular basis. Along with us veterans – Dana and Ethan – who have been working to develop our education program, this fall we had the incredibly valuable aid of intern Ryan Davis and assistant Veronica Mecko, who helped at several of our public and school events.

Once again, throughout the season we found that bird-banding demonstrations were a great tool for engaging people of all ages, followed closely by the experience of using binoculars – an activity that excites elementary school students in particular.

- August 12th: We provided a presentation on bird ID and ecology, and a banding demonstration to 20 teachers at an MDC Nature Unleashed Workshop organized by Education Consultant Cynthia Green.
- August 17th: Thanks to an invitation by Susan Schreck of the Cole Camp Master Naturalists, we held two presentations on Missouri’s birds for 50 attendees of the Missouri State Fair in the Floriculture Building.

Above: A crowd gathers around an MRBO banding demonstration at Dr. Wayne Morton’s Prairie at Cole Camp Prairie Day.

- September 9th: We hosted a station as part of the Centralia 2nd Grade’s annual field day where approximately 120 students saw birds in hand, learned about bird song, and went on guided bird walks.
- September 10th: At the invitation of Foothills Park staff, we had a booth and banding demonstration at Marshall’s Santa Fe Trail Days festival. Festival attendees got close to a Carolina Wren, Black-capped Chickadee, and Magnolia Warbler.
- September 29th: As part of a stream restoration project conducted by inner-city youth, we provided a presentation to the students of Greenworks KC on how and why to monitor birds in restored areas. We *highly* recommend you learn about this program at www.greenworkskc.org.
- September 30th-October 5th: We were honored to be guest speakers at the Missouri Bluebird



Society's Annual Conference. <http://www.missouribird.org>.

- October 2nd: University of Central Missouri students camped at Van Meter State Park and spent the morning with us at the fall migration station. This class lucked out, getting to see a wide diversity of bird species, including the seldom-caught Brown Creeper and Yellow-billed Cuckoo.
- October 8th: This was our second year at Cole Camp's Prairie Day festival, but this year we got the opportunity to band birds on Dr. Wayne Morton's restored prairie just northwest of town. We captured 28 birds that day, including several caught near sunset when a crowd had gathered for the Missouri Prairie Foundation's reception.
- October 20th: Missouri Valley College's Vertebrate Zoology class visited our Foothills Park banding station in Marshall. In addition to seeing several species banded, we discussed the anatomical adaptations and ecology of migrant and resident birds.
- October 29th: University of Central Missouri students invited us to be a part of their public Fall Festival. Once again we were able to show students and visiting families birds in hand. We were excited by the wide variety of captive reptiles brought in by an UCMO student for the event.

Above: Classes from Centralia get a close look at one of Missouri's smallest and most colorful migrants, a Wilson's Warbler. MRBO hosted a station as small groups of the 120 second graders enjoyed their annual field day. **Below:** Educators enjoy a banding demonstration while attending an MDC Nature Unleashed training in Clinton.



- November 3rd-4th and 7th-9th: Working with Nancy Snider at Busch Conservation Area, we provided banding demonstrations and discussions of ornithology to more than 120 students of the Fort Zumwalt School District's Journeys into Expanded Thinking program. These students certainly were gifted, coming armed with extensive background information and probing questions!

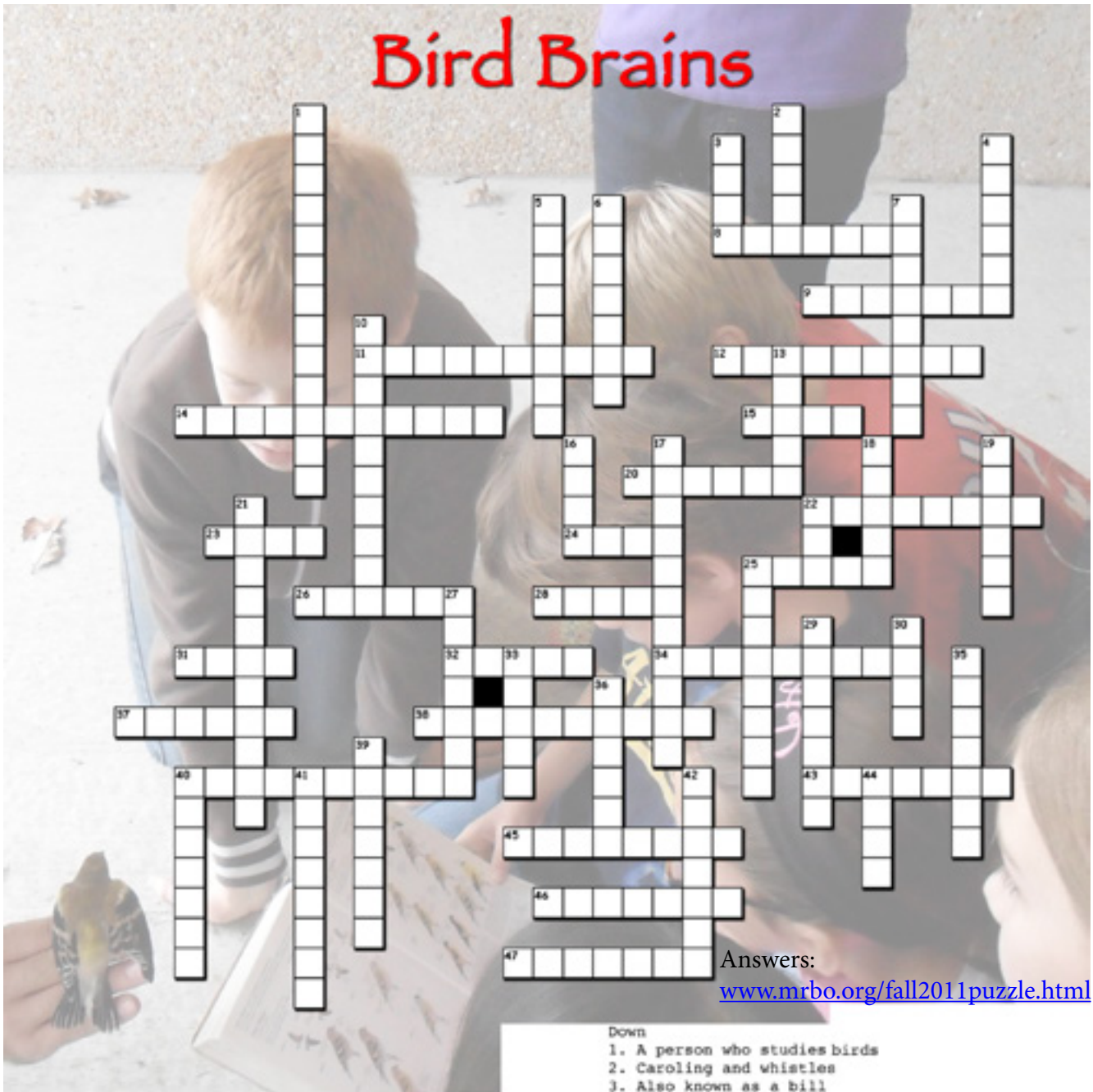
We would like to give a special thank you to Angela Willier of Centralia, Jeanette Kell of St. Peters, Leslie Bilbrey of UCMO, Kate Corwin of Greenworks KC, and Dr. Wayne Morton of Cole Camp for inviting us to be a part of their very special days. Many thanks also to the staff of Indian Foothills Park for giving us the opportunity to conduct three months of fall migration banding - the site allowed great access for residents and students of Marshall.



Top Right: Students from the Fort Zumwalt School District's Journeys into Expanded Thinking program bring their classroom knowledge to the field. **Lower Right:** Children attending The University of Central Missouri's Fall Festival experience a White-breasted Nuthatch.



Bird Brains



Answers:

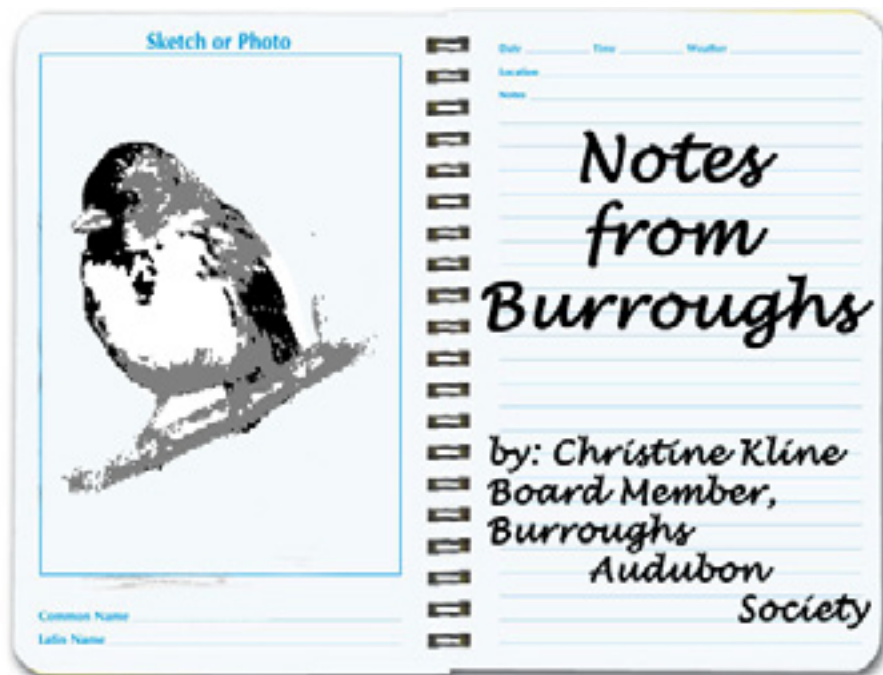
www.mrbo.org/fall2011puzzle.html

Across

8. Also known as a "Sparrow Hawk"
9. A blue bird with a crest
11. Keeping eggs warm
12. Travel anyone?
14. I love nectar from flowers
15. An age related feature
20. The sound of a male turkey
22. I build a nest with a lid, like a Dutch oven
23. A baby turkey
24. I sometimes dabble in water
25. Chips, chirps, seeps, and peeps
26. A use for feathers other than flight
28. Use a beak as a comb
31. A mixture of fat and seeds people can feed to birds
32. A common worm-eating yardbird
34. I'm a symbol of the USA that eats fish
37. Fish form schools, birds form _____
38. Use these to see birds more closely
40. Something you can make that helps birds
43. A tell-tale feature
45. Part of nature's clean-up crew
46. Bird clothing
47. Cracked an egg

Down

1. A person who studies birds
2. Caroling and whistles
3. Also known as a bill
4. A home inside a tree
5. Woodpecker with black plumage and a red crest
6. A method for monitoring birds
7. I'm on Missouri license plates
10. I dive for fish and some think I'm "King"
13. Don't honk at me, I'll honk at you!
16. An animal with feathers
17. I'm a talented singer. Hint: Don't "mock" me.
18. A common backyard bird attractant
19. People "gobble" me up on Thanksgiving
21. Well-known drummers
22. Soft feathers quiet my flight in the night
25. I'm a St. Louis baseball team mascot
27. A raptor of prairies
29. I sometimes meow like a cat
30. A place for hiding eggs
33. A family of baby birds
35. Flying higher and higher without flapping
36. No need to fight, with feathers for _____
39. My bill has a pouch
40. The sound of Prairie Chickens
41. Modified scales that help birds fly
42. A first flight made
44. I'm black and quite smart



Greetings Missouri River Bird Observatory members! If you are anything like us, your eyes light up when you see Dana Ripper or Ethan Duke arriving in your area. Whether they are there to band birds, perform research, educate, or give a presentation we are nothing short of elated to see them. We are delighted that they have invited us to write to you about some of the things we did this past fall.

Like any migration, this past fall has been full of adventures for us here at Burroughs Audubon. We received a presentation from Matt Gearheart from his trip to Australia. Matt is an avid birder and globetrotter and he humored us (as always) with tales of wildlife and landscapes found in "the land down under." While it's fun to drool over the places some can only dream of birding, every now and then it's nice to school ourselves on the little birds found in our own backyard and local conservation areas, state parks, and national

wildlife refuges. So Craig Hensley, fellow bander and Naturalist, gave us a presentation called "Those Little Brown Jobs – Sparrows." Sometimes, it's refreshing to get back to basics. A little schooling seemed proper as fall got underway.

"I cannot count all the times I have done this, but today is another time for wonderment and joy. Of course I am talking about the young girl that is about to help me release a goldfinch (her "favorite bird" mind you)..."
~Craig Hensley

Of course we don't limit ourselves to conservation areas, state parks, and national wildlife refuges. No good birder does. There are back roads, city parks, trails, gardens, and fields. For some of us, these trips are our favorites because they usually pack a delightfully surprising

punch or two. A recent diversion from a typical field that yielded Longspurs and an occasional Prairie Chicken surprised us with a field of 45 Prairie Chickens and a plethora of little Longspurs. Here's to a punch of diversion! There were other little surprises this fall as well – a late Rufous Hummingbird at a backyard feeder, a Swamp Sparrow on a new trail, a Long-eared Owl in a pine tree, and Nelsons and LeConte's Sparrows at a nearby wetland trail. With our fairly slow and tame fall, there were even some late migrants that made us do a double take – an Ibis over Thanksgiving weekend and Cattle Egrets during Eagle Days in December. We've even had an immature Golden Eagle hanging around as well. I imagine the punches will keep packing as we lead even more bird walks and field trips this winter and next spring.

Perhaps one of the most memorable experiences this past fall was during a special program at our library and bird sanctuary in Blue Springs called "Bird in the Hand." To quote Craig Hensley, our leader for this program, "I cannot count all the times I have done this; but today is another time for wonderment and joy. Of course I am talking about the young girl that is about to help me release a goldfinch (her "favorite bird" mind you) -- but even after all those countless other times, it is still a wonderment and joy for me, as well. You see, I am in the business of introducing children (and grown-ups as well) to the beauty and amazement of the natural world."

Being on the Board of Di-



Above: Craig Hensley, fellow bander and naturalist, helps a young boy release a Song Sparrow.

rectors for Burroughs Audubon is a very proud and rewarding volunteer position. I cannot put into words how rewarding it is to open up the world of birding to children and adults. This past fall, I gave a birding

tour to a gentleman from Russia who was living in Israel and working here in Missouri. He hugged me for finding him a Bald Eagle. I received dozens of hugs from two little girls and their Mother who joined me on a hayride and saw a Barred Owl and a Goldfinch. This past summer, I showed a Killdeer to a woman through my spotting scope. She pinched my cheeks until they were numb. She also laughed and cried to me in Spanish. I have no idea what she said, but her excitement of seeing a Killdeer was a 20 on a scale of one to ten. As avid birders, I think we sometimes take the typical birds for granted.

The avid birder may simply flush a field of sparrows and wish they could view each one through their binoculars. But, that's pretty much impossible. I think many of us who are passionate about birds and conservation feel this way about goals and aspirations. We are only one person with a list of goals and aspirations that would take years to achieve. This is why we are stronger as a partnership. Dana and Ethan have been wonderful to us. They have banded and helped educate at International Migratory Bird Day at Squaw Creek National Wildlife Refuge, Wings Over Weston at Weston Bend State Park, and our Burroughs Audubon Library and Bird Sanctuary. We are very impressed with Dana and Ethan and the amount of dedication they can fit into each and every day to make it count for the benefit of our birds. We are proud to call them partners in conservation.

If you're reading this, you must also have a passion or interest in our winged wonders that frequent our backyards or our jewels of the tropics and coastlines that migrate through our area every

year. Take the time to embrace your passions and interests. Share the experience with a friend, your family, and especially your children. We're inviting you to join us on a bird walk, field trip, or even a citizen science activity where you can help us gather research. All of these activities are free and open to everyone of all ages. In January 2012, the Missouri River Bird Observatory will again join us for banding at our Burroughs Audubon Library and Bird Sanctuary. They will also join us for Wings Over Weston at Weston Bend State Park in May 2012. For all those times before, after, and in between, our bird walks and field trips are free to everyone. Bird walks are on the first, third, and last Saturday of each month. Our field trips occur often throughout each season to lots of little birding hotspots. Visit www.burroughs.org for trip details and for ways to keep in touch. We can't wait to see you!

MRBO Mission

To contribute to the conservation of Missouri's migratory and resident birds through scientific research and monitoring, community outreach, and education.

To gather information about avian communities and habitat use that will assist state, federal, and private natural resource managers in their efforts to implement conservation programs.

To provide opportunities for Missouri students to learn about species and habitat conservation.



Join us in conserving Missouri's birds.

You are cordially invited to become a member of the Missouri River Bird Observatory. Your membership is a direct contribution to avian conservation projects and environmental education in Missouri. MRBO members will be recognized on our website and in annual reports, and will be provided with unique field opportunities and special event invitations in addition to the membership benefits detailed below. Membership dues are considered a donation and are tax deductible.

Membership Level

____ Student \$20

____ Individual \$50

____ Supporter \$100

____ Contributor \$250

____ Steward \$500+

Includes

Our seasonal e-newsletter.
MRBO aluminum water bottle.

Our seasonal e-newsletter.
Choice of MRBO coffee mug or hat.

Option of a printed or e-newsletter.
Choice of MRBO T-Shirt, coffee mug, or hat.

Option of a printed or e-newsletter.
Choice of any one MRBO merchandise item.

Option of a printed or e-newsletter.
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To join, please fill out, detach, and send this page along with your personal check to: MRBO Membership, 27331 Highway WW, Marshall, MO 65340.
Please circle your choice of MRBO item and newsletter format where appropriate.
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**You can join, shop for merchandise, or simply browse
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