

The Rectrix

A seasonal newsletter of the Missouri River Bird Observatory Volume 8 No. 4. December 2018



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



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Front cover:
"Little Lady"
by Kelley McKay
Fuemmeler

Seasons Greetings from the MRBO Directors!

Dear MRBO Supporters and Friends,

It's hard to believe that it has already been a year since we last wrote a Season's Greetings note for this newsletter. 2018 flew by. MRBO has done a lot of exciting things this year and as usual so much of what we've been able to accomplish is due to our excellent staff and seasonal technicians! We are very thankful for the continuing employment of Education Coordinator Paige Witek and Field Project Leader Erik Ost. Because of them, we have not only been able to further develop our education and monitoring programs, we have been able to increase MRBO's presence in new conservation collaboratives and advocacy efforts. The education program was greatly enhanced this year by Intern Klee Bruce, and the grassland and wetland bird monitoring projects were made possible by field technicians Eric Hall, Mark VanderVen, Jarrod Messman, Carl LaRiccica, Carly Stumpner and Patrick Clark.



*MRBO Directors Dana Ripper & Ethan Duke
with friend Northern Saw-whet Owl*

We would like to take this opportunity to express our appreciation for MRBO's supporters. There is literally no way the organization would be operating at its current capacity if it weren't for your financial contributions. Late 2017 and all of 2018 saw a great increase in the number of individuals and small organizations that support MRBO, and the associated funding made it possible for us to guarantee the continuation and increase of high-quality education programs in 2019 and beyond. Our current goals as an organization include expanding the community outreach, landowner relations, and conservation advocacy aspects of our work. We would also like to increase our capacity to provide high quality, low cost avian population monitoring to Missouri's various land management agencies and their counterparts in adjacent states. No growth or expansion in these pursuits of MRBO's mission would be possible without our supporters' contributions.

In this spirit, we would like to wish all of you a very pleasant and nature-filled holiday season.

Sincerely,

Dana & Ethan

Left: MRBO 2018 Spring and Summer Field & Education Crews. Right: MRBO 2018 Fall Migration Crew



The following individuals have joined MRBO or renewed their support since the publication of our May newsletter.

Our Thanks to New & Renewing MRBO Supporters

Bart Carter & Mary Wight-Carter, Midlothian TX
Ellen & Michael Merriman, Mission Hills KS
Whitney & Debbie Kerr, Prairie Village KS
Brad & Linda Nicholson, Kansas City MO
Tom Tucker (photo this page)
& Tina Yochum-Magaz, Kansas City MO
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Veronica Mecko, Jefferson City MO

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Buckner Foundation, Saline County MO
The Audubon Society of Missouri
River Bluffs Audubon Society, Jefferson City MO
Columbia Audubon Society, Columbia MO
Burroughs Audubon Society of Greater Kansas City

The Missouri Young Birders' Club

~Paige Witek, Education Coordinator



Remember when you first got into birds? It probably started with one experience or one bird that sparked a fascination and then grew through other experiences and the support of the birding community. Wouldn't it be great if you had gotten into birds sooner? Think of how much better your ID skills would be! Maybe your love of birds started at a young age, but for me and for many folks that I know, the spark didn't happen until later in life.

The Missouri Young Birders Club (MYBC) is a chance for young Missourians to ignite a passion for birds and the outdoors, and be able to share that passion with their peers.



The first young birders club in the US was started by six students in Ohio with the assistance of the Black Swamp Bird Observatory. They formed what is known as the Ohio Young Birders Club. Since then, young birders' clubs have sprung up all over the country with the help of the YBC Toolkit developed by the Black Swamp Bird Observatory and the Cornell Lab of Ornithology. This spring the Missouri River Bird Observatory hosted the Spring Meeting for the Audubon Society of Missouri. During the Spring Meeting, professionals from all over the state, and outside the state, gathered at a workshop to launch the Missouri Young Birders Club (MYBC). The MYBC is a new program starting out under the umbrella of the Missouri River Bird Observatory and its mission is to bring together young Missourians to enjoy, experience and conserve Missouri's birds and other wildlife. The MYBC is part of a framework called the Young Birders Network (YBN). The YBN, a community of young birders and Young Birders Clubs from all over the United States and the world, aims to provide all the resources a young birder needs to have a life with birds. It is. The YBN thrives under the philosophy that Young Birders Clubs encourage the next generation of naturalists to grow their interest in the natural world.

MRBO first got the idea to start a young birders club in the state a few years ago, but it wasn't until this spring that the idea became a reality. We aimed to start a Young Birders Club because Young Birders Clubs increase awareness and appreciation of the natural world and instill a conservation ethic in their members. Many young adults cite young birders clubs, camps, and other networking groups as a turning point for them in their career development. Young birders often have trouble finding similarly-minded peers and YBCs fill this niche.

Our vision for the Missouri Young Birders Club is to have a club that is by kids and for kids. Empowering Missouri's youth is a large part of the MYBC mission. Youth members will be involved in making decisions for all aspects of the club, as well as have the opportunity to mentor younger naturalists. The club will provide field trips to local birding areas and opportunities for members to get involved with various aspects of conservation. Currently, we are recruiting students ages 8 to 17 years old. The goal is to establish local chapters in different regions of the state (Ex: Kansas City Region, St. Louis Region, Central, Southwest, Southeast, Ozarks). Local chapters will be guided and chaperoned by adult members, but spearheaded by youth members. MYBC will also have a conservation focus. Members will not only be able to enjoy and experience Missouri's birds, but also take action to conserve their habitats. Examples of how this can be accomplished are assisting with habitat restoration projects and taking part in citizen-science programs such as eBird and FeederWatch. Our hope is to not only involve young Missouri birders, but any young person looking to enjoy the outdoors with their peers. We hope to involve students interested in art, music, design, technology, sports, cooking and any other interest they may have in addition to their interest the natural world. With this hope in mind, we will be hosting various events designed to attract young audiences with a wide diversity of interests.

Although this is a big undertaking we have already gotten a lot accomplished. There is a MYBC website (www.moyoungbirders.org), as well as a Facebook page and an Instagram account. Many promotional brochures and flyers have been distributed at various events and functions across the state. Featured on these materials, and at the top of this article, is a logo designed by Chelsea Mosteller of Columbia, a young birder who is also a talented artist and photographer. We have acquired 10 new Field Guides to hand out to any young birder that signs up to be a member, because we want every member to have access to the resources they need to go birding not only with MYBC, but also on their own time.



In addition to the progress made above, we recently had our first MYBC field trip! It was held at the Riverlands Migratory Bird Sanctuary in Alton, MO (St. Louis Region). The trip was organized through St. Louis Audubon Society. A big shout out to Karen Meyer and Mary Dueren for coordinating this field trip and making it happen! Another shout out to Bill Rowe for accompanying us and getting the word out! We had two young birders at the event and even though our numbers were small, we had a fun, bird-filled trip. Birds observed include Trumpeter and Tundra Swans, a Baird's Sandpiper and a Long-tailed Duck. We are in the planning process for another field trip in the St. Louis Region, as well as the Springfield area and the Kansas City Region!

A great deal has been accomplished since that first workshop in the spring, but there is still a long way to go. If you are interested, there are many ways to help:

Promote MYBC! This could be at events you are volunteering at or spreading the word to any young Missourian you may know who might be interested. Ask Paige if you need promotional materials.

Donate new field guides for new MYBC members.

Donate old quality binoculars and/or scopes.

Lead a field trip in your area!

Let Paige know of any contact information to present in schools and/or clubs about this opportunity for students.

And if you are really ambitious – *take the lead in starting a chapter in your region!*

With your help, we can make the Missouri Young Birders Club a statewide phenomenon in which we bring together students of different backgrounds to enjoy, experience and conserve Missouri's birds and other wildlife. Please don't hesitate to contact MYBC State Coordinator, Paige Witek, to find out more about how to get involved! Email: paige.witek@mrbo.org



2018 - A Truly Fantastic Year for E&O

This year has been a fantastically productive one for the Missouri River Bird Observatory's Education and Outreach Program. We hosted and/or participated in a total of 105 events reaching over 5,500 Missourians! We were able to meet and engage with many different audiences with K-12 students accounting for over half of our total attendance numbers. Highlights of this year include record numbers for the Natural History Tours with Friends of Arrow Rock, the second summer of Young Explorers' Club and the launch of the Missouri Young Birders Club! There were so many great moments of exploration and revelation for both participants and leaders. Please remember that none of this would be possible without all your generous support! We are truly grateful to be able to enrich people's lives with the magic of birds. Read on to learn more about what the MRBO Education and Outreach Department has been up to, just the past couple of months! And don't forget to check out our upcoming events on page 15.



FESTIVALS:

Hummingbird Festival at George Owens Nature Park in Independence, MO

On Sept. 8th, it was all about hummingbirds with over 400 people in attendance. Paige led a Hummingbird Migration Challenge and former MRBO employee Veronica Mecko, one of only two licensed hummingbird banders in Missouri, banded a few hummers!

Monarch Madness at Weldon Spring Site in St. Charles, MO

On Sept. 15th, Paige led a booth involving the Great Migration Challenge, as well as held a screening of *The Guardians*: a documentary about an indigenous community fighting to protect the forest in Mexico where the monarch butterfly winters.

Children's Heritage Craft Festival in Arrow Rock, MO

On Sept. 25th, Ethan, Paige and Dana hosted a booth describing how birds have always been a part of our heritage through the art of nest box building. We were able to speak with over 500 students!

Prairie Jubilee at Prairie State Park

On Sept. 29th, Paige and the Grasslands Field Crew hosted a booth at Prairie Jubilee, as well as leading Bird Hikes through the prairie. Not many birds were spotted on the hikes, but participants enjoyed learning about other aspects of the prairie – from botany to invertebrates - from our expert field crew!

Heritage Craft Festival in Arrow Rock, MO

On Oct. 13th, Ethan and Erik manned the booth at our 5th Craft Fest to teach visitors about how birds and building nest boxes are a part of our heritage. On Oct. 14th, Paige and MRBO intern Klee joined them, along with volunteer Dianne Van Dien. Dianne, a vulture expert, brought along a glass model of a Turkey Vulture stomach to demonstrate how vulture stomach acid works!

Pelican Days at Riverlands at the Audubon Center at Riverlands

On Oct. 13th, Paige and MRBO Intern, Klee Bruce, hosted a booth at the Pelican Days event at Riverlands to promote a St. Louis Chapter of Missouri Young Birders Club. The highlight was the uproar of enjoyment as a flock of pelicans flew over!



WORKSHOPS:

Flying WILD Workshop at MRBO Office

On August 11th, MRBO hosted five educators, including elementary school teachers and State Parks interpreters, to learn how to incorporate bird-related activities in their programming through the use of the Flying WILD resource book.



Master Naturalist Training for Hi-Lonesome Chapter in Cole Camp, MO

On Oct. 2nd, Dana presented on rare, irruptive and little known birds of Missouri as an advanced training topic for the Hi-Lonesome Master Naturalists.

Nicholas Beazley Air Museum Native Planting Work Day in Marshall, MO

On Oct. 18th, the MRBO crew and a few dedicated volunteers visited the Native Prairie Planting next to the Nicholas Beazley Air Museum to perform necessary maintenance. We plan to host future community outreach and youth education events on this diverse two acres.

PRESENTATIONS:

Show Me Summit on Aging and Health in St. Charles, MO

On Sept. 11th, Dana and Paige presented on "Birding for Wellness" for various agencies involved with the Missouri Association with Area Agencies on Aging.

River Bluffs Audubon Society in Jefferson City, MO

On Sept. 13th, Dana, Ethan and Paige presented on MRBO's Education Program and introduced the Missouri Young Birders Club to the River Bluffs Audubon Society.

Paddle MO Birds of the River Program in Herman, MO

On Sept. 19th, Paige joined the paddlers of Paddle MO, organized by Missouri Stream Team, to give a program on "Birds of the Missouri River". Paddlers learned fascinating facts about birds they may see on the Missouri River and it turns out that they saw quite a few on their river journey!



Banding Presentation for Burr Oak Woods Nature Center Volunteers

On Oct. 17th, Dana presented details about our Backyard Banding program to volunteers with Burr Oak Woods Nature Center for them to better assist with the banding demonstrations that we hold there every winter.



YOUTH PROGRAMS:

Columbia Audubon Society Bird Walk for Children in Columbia, MO

On Sept. 23rd, Paige joined Lottie Bushman and Bill Mees on a Bird Walk focused on inviting young birders. We had two young birders in attendance and amongst other great birds, had a wonderful look at a Red-shouldered Hawk consuming its prey!

5th Grade Field Trip at MDC Clinton Office

On Oct. 3rd, Paige held a station to help out with a 5th Grade Field Trip for a school from Adrien, MO. Paige and the students discussed how to identify birds, how to use a field guide and binoculars and then went on a search for wild birds!

Band with Nature at Columbia Audubon Nature Sanctuary

On Oct 8th and 11th, Dana, Ethan and Paige provided the Bird Banding Station at Columbia Audubon Society's event, Band with Nature. Every 2nd grader in Columbia is rotated through various stations to learn more about birds and their adaptations!

5th Grade Field Trip at Knob Noster State Park

On Oct. 30th, Paige assisted with another Field Trip with 5th graders from Green Ridge Elementary School. At the 'bird station' students played the Great Migration Challenge, learned how to use binoculars and went on a short birding walk.

SENIOR PROGRAMS:

Platte Senior Services Program in Kansas City, MO

On Nov. 5th, Paige gave a presentation on "Basic Bird ID and Common Winter Birds" for seniors at Platte Senior Services. There was a lot of interest in various Missouri birds!

Eldon Senior Center Program in Eldon, MO

On Nov. 7th, Paige presented to seniors at Eldon Senior Center about "Bird Migration and Basic Bird ID". Many were fascinated by the various methods birds use to find their way while migrating.



NORTHERN SAW-WHET OWL BANDING:

Oct. 27th – Nov. 12th at MRBO's Arrow Rock office

This Northern Saw-whet Owl Banding season didn't have many owls on any single night, but we did have an owl almost every night we ran! The good news is even though our events were not well attended by owls, they were well attended by people! We had a total of 89 visitors this season! Toot toot!

You can read more about our Northern Saw-whet Owl Banding program on page 11.



You are invited to MRBO's Upcoming Events!

January 5th, February 2nd and March 16th. Join us at Burr Oak Woods Nature Center for bird banding! 10 a.m. - 1 p.m. If the weather is too cold to handle birds, we will resight birds from previous banding sessions.

New Year's Day, 2019
Meet us at the Arrow Rock State Historic Site for a First Day Hike! 8 - 10:30 a.m..
We will follow the River Landing Trail to the Missouri River, enjoying birds along the way.
<https://mostateparks.com/event/70431/first-day-birding-hike>

December 27th at the Anita B. Gorman Discovery Center in Kansas City, a MRBO banding demonstration will be part of a three-day public birding program! 11 a.m. - 3 p.m.

January 12th, February 9th and March 2nd All are welcome at the Winter Banding Series at Burroughs Audubon Library, Blue Springs. Join us from 10 a.m. - 1 p.m!

January 19th and February 16th. Perk up a winter's day with bird banding and viewing in the Bird Garden at Birds-I-View, Jefferson City. 10 a.m. - 1 p.m.

February 23rd. MRBO returns to the wonderful Springfield Nature Center for an afternoon of banding. This is a great place to learn about birds and every other critter in Missouri! 1-4 p.m.



Left: At Burr Oak Woods, brothers display their Bird Buddy release certificates while their sisters release another bird.

Right: One of two Red-breasted Nuthatches banded at Burr Oak in November

You can always check out all of our upcoming events at mrbo.org



Species Profile: Red-Breasted Nuthatch

~Paige Witek, Education Coordinator



Photo by Cal Gesmundo, Cornell Lab of Ornithology

This issue's species profile highlights a bird that does not live in Missouri year-round, but when it is here it is easily found despite its small size: the Red-breasted Nuthatch. This winter, compared to previous winters, Red-breasted Nuthatches are far more common – it is an irruption year! Our office has had at least two Red-breasted Nuthatches at our feeders so far. I hope that many of you are able to enjoy this enthusiastic little bird at your feeders or in your outdoor adventures throughout the winter. Keep reading to find out more about this visitor from the north.

Scientific Name: *Sitta canadensis*
Alpha Code: RBNU

Order: Passeriformes

Appearance: Red-breasted Nuthatches are small, compact birds with short tails, almost no necks and a sharp bill. Their bodies

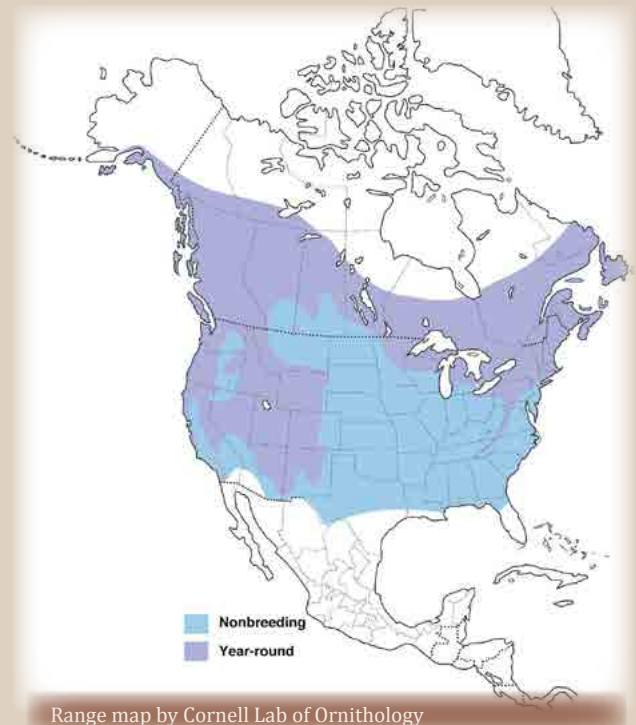
are blue-gray above and rusty below. Their heads are simply marked with a black crown, white eyebrow and black eyeline. Females have browner caps and paler rusty underparts.

Vocalizations: The main vocalization that you will hear from the Red-breasted Nuthatch is their excited *honk-honk* calls which sound like tiny tin horns being honked in the treetops. The honk call can be given by both sexes as a way of communicating between the pair. During confrontations, chases or copulation, nuthatches may make a *phew* call, and agitated birds sometimes make a wrenlike scolding call.

Range and Habitat: Red-breasted Nuthatches are year-round residents of Canada and certain parts of the Northeast, as well as higher elevations of Appalachia, the Rockies, and along the West Coast. This nuthatch's wintering grounds can fluctuate in the U.S. dramatically year to year, especially in the east. Typically, these birds remain more northern, but on an irruption year, like this year, they can be seen in usually high numbers throughout the northern and eastern U.S.

Red-breasted Nuthatches prefer coniferous forests of spruce, fir, pine, hemlock, larch and red cedar. Eastern populations use more deciduous woods, including aspen, birch, poplar, oak, maple and basswood. During irruptive winters like this one, nuthatches may use habitats such as orchards, scrub, parks, plantations, and shade trees.

Irruption Years: As stated above, on an irruption year, Red-breasted Nuthatches can be seen in unusually high numbers throughout the northern and eastern U.S.. Simply comparing eBird reports from 2017 with those of 2018 one can see that they are very different. The invasion is most likely due to a lack of spruce seeds in the bird's typical winter range. That's been the case in past irruption years, and food scarcity or competition is often what drives irruptions for other Boreal species, including Snowy Owls.



Range map by Cornell Lab of Ornithology

Adaptations and Behaviors: Red-breasted Nuthatches can look like tree acrobats as they move quickly and in any direction across tree trunks and branches. Red-breasted and White-breasted Nuthatches are the only species of bird in Missouri that you will see move down and sideways on trees. When moving downward they typically zigzag by using their large claw located on their one backward-pointing toe on both feet. When agitated, the males may call at each other while pointing their heads up, fluttering their wings, and swiveling back and forth. They typically only fly short distances at a time, with an undulating pattern.



Photo by Erik Ost, MRBO field project leader

Diet: In summer, Red-breasted Nuthatches eat mainly insects and other arthropods such as beetles, caterpillars, spiders and ants. In fall and winter, they eat conifer seeds, including seeds they cached earlier in the year. They also eat from feeders, taking peanuts, sunflower seeds and suet.

Reproduction: Male Red-breasted Nuthatches court females by turning their backs to them, singing, and swaying from side to side with crest feathers raised, or by flying together in an exaggerated display of slowly fluttering wings or long glides. Nuthatches are among the few non-woodpeckers that excavate their own nest cavities from solid wood. Males will feed females while the females excavate the nest cavity. Nests are usually built in completely dead trees, dead parts of live trees, and trees with broken tops. Excavation can take up to 18 days for a cavity that is between 2.5 and 8 inches deep. Both males and females apply conifer resin to the entrance to help protect from predators. They typically have 1 brood

per year with a clutch size of 2-8 eggs. Incubation period lasts 12-13 days and the nestling period is 18-21 days.

Conservation Status: Red-breasted Nuthatches are common and their populations increased throughout most of their range between 1966 and 2014, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 20 million with 64% spending some part of the year in the U.S., and 62% in Canada.

Northern Saw-whet Owl Update

~Dana Ripper, MRBO Director

Many of our readers may be aware that each fall MRBO operates a Northern Saw-whet Owl (NSWO) banding station and invites public visitation. Our attempts at catching this mysterious, charismatic species began in 2010. For the first few years we experimented with capturing NSWO in different places around Missouri, traveling a great deal to areas with promising habitat to try one or two nights during the late fall and winter. In addition to the core MRBO stations in central Missouri and our “traveling satellite” stations, bander Veronica Mecko operated her own MRBO-affiliated owl stations in northern Missouri from 2014-2016.

After having a few successful nights in Arrow Rock in 2014 and 2015, the main MRBO station was moved permanently to our office in Arrow Rock in fall of 2016. This was exciting for two reasons: Arrow Rock is quite a good place to catch these small owls, and our office has ample room to welcome visitors each night we are in operation. The 2016 season spoiled us, with 51 owls captured in just 11 nights of operation. 2017 was lower, with 29 owls captured in 18 nights. The fall of 2018 was extremely slow, with 12 nights of operation resulting in just 10 new owls banded!



Photo by Steve Garr

All of us at MRBO are happy with every owl season, regardless of the overall numbers. Why? Lots of reasons:

- It feels like a miracle whenever we get to see a single owl!
- Prior to MRBO's banding project, only about 50 NSWO had ever been documented in Missouri.
- We've gotten to work with other Midwestern banders who are also trying to fill in gaps about NSWO movement in the region, including colleagues in Iowa, Arkansas, and other parts of Missouri.
- We get to host tons of great people, most of whom get to see at least one owl in their time with us.

Between all of the many locations around Missouri where MRBO has attempted to trap owls since 2010, the total number of owls banded is now 224. We have also captured seven owls originally banded in other states and have had banders in Iowa, Wisconsin, Michigan and Ontario capture owls that we had banded previously here in Missouri.

A Year-to-Year Comparison of MRBO's Northern Saw-whet Owl banding in Missouri



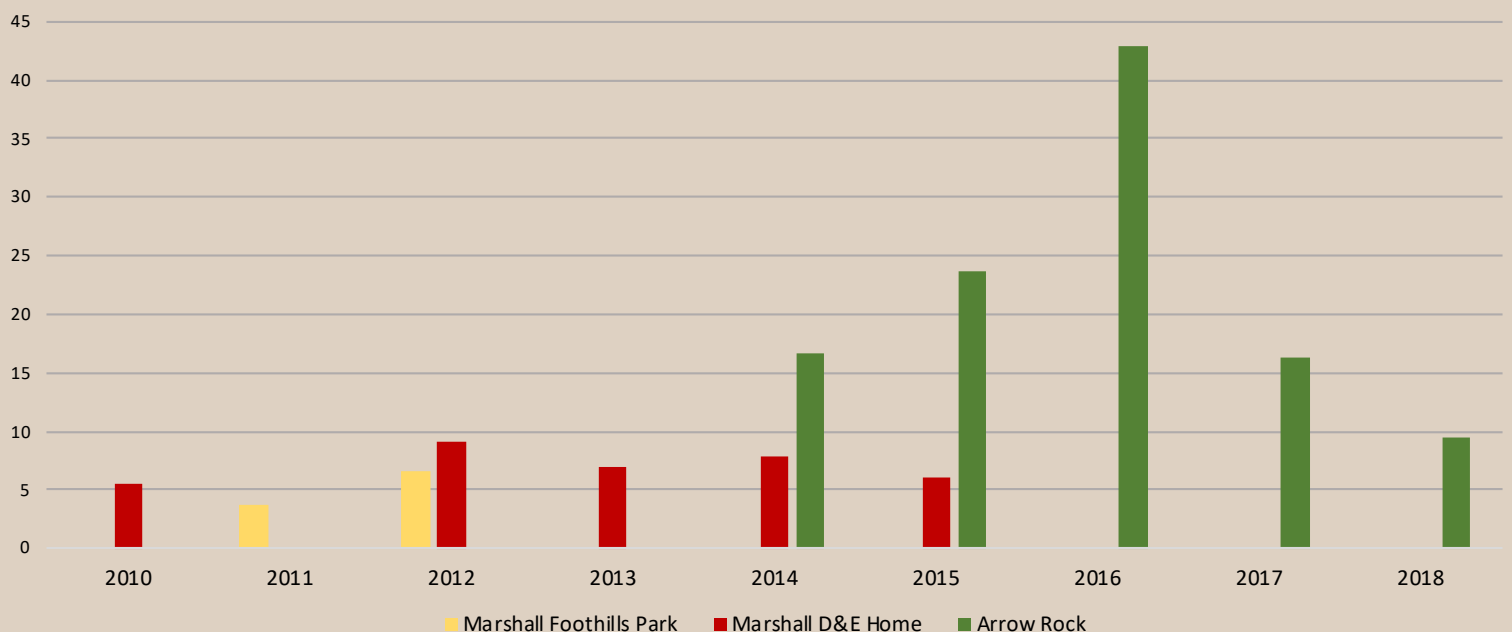
The chart to the left displays MRBO's NSWOW banding location and effort information as well as the number of captures. The reader can see how over the years we have narrowed our efforts down to one banding station location in Missouri.

The graph below displays the capture rates for just our central Missouri banding stations - Marshall's Indian Foothills Park, MRBO Directors Dana and Ethan's home in Marshall, and Arrow Rock State Historic Site. Note that 2016 was a high capture year for stations across the entire midwestern and eastern US.

Birds per net hour or **birds per 100 net hours** are measures that banders use to describe their overall capture rate in the context of their effort. One net hour = one 12-meter mistnet being open for an hour. Therefore, at our Arrow Rock station, where we run three mistnets for four hours, our nightly total is 12 net hours. This allows for a standardized comparison of capture rates across years even when we run a different number of nets, or a greater or fewer number of nights, between years.

2010	2011	2012
Nights: 4	Nights: 31	Nights: 43
Locations: 2	Locations: 8	Locations: 10
Net Hours: 57	Net Hours: 605	Net Hours: 670
Owls Banded: 11	Owls Banded: 23	Owls Banded: 47
2013	2014	2015
Nights: 20	Nights: 24	Nights: 11
Locations: 2	Locations: 5	Locations: 3
Net Hours: 235	Net Hours: 256	Net Hours: 119
Owls Banded: 14	Owls Banded: 18	Owls Banded: 12
2016	2017	2018
Nights: 14	Nights: 18	Nights: 12
Locations: 2	Locations: 2	Locations: 1
Net Hours: 142	Net Hours: 196	Net Hours: 136
Owls Banded: 59	Owls Banded: 29	Owls Banded: 10

Owls captured at central Missouri stations 2010-2018
Numbers are expressed as birds per 100 net hours



Notes from the Field

~Erik Ost, Field Project Leader



Above: Le Conte's Sparrow. Below: Savanna Sparrow
Both at Wah'Kon-Tah Prairie Conservation Area



FALL MIGRATION ON SOUTHWEST MISSOURI GRASSLANDS

From September 1st to November 15th, three MRBO field technicians conducted line-transect surveys on three of the Missouri Department of Conservation's (MDC) grassland areas. The grassland portions of Wah'Kon-Tah Prairie and Monegaw Prairie in Cedar County and Linscomb Wildlife Area in St. Clair County were surveyed repetitively on a rotating basis throughout the 10-week period. Monegaw was a new addition to the fall migration surveys this year as in the past two years, only Wah'Kon-Tah and Linscomb were surveyed. On each survey morning, MRBO technicians surveyed five to six 400 meter transects. In total, almost 13,000 detections were made and often these detections consisted of groups and flocks of birds – resulting in almost 20,000 birds documented!

One of the reasons MRBO is surveying during the fall is to determine what species are using Missouri grasslands during the non-breeding season and if they prefer particular management regimes and microhabitat types. Migratory and wintering habitats are almost as important as breeding grounds because they provide critical sources of food and cover for birds that need to recover from the high-energy demands of migration. Another reason MRBO conducts these surveys is to help monitor population densities. Since most native species have seen population declines in response to a myriad of anthropogenic alterations of the landscape, these surveys provide a way to measure rates of population loss or gain for specific species or the bird community as a whole. In addition, because these surveys are conducted on land that is managed by the MDC, we can factor in land management practices like prescribed burns and high-clipping into our analyses so we can better understand how they influence what

birds occupy habitats. While we are still in the process of conducting these types of analyses, there are immediate observations that can be made based off just this season's results. There are also season highlights and unexpected species encountered during this season's surveys.

Season highlights included days where thousands of Snow Geese were flying overhead in early November. There was also a time in mid-October when we were getting rain and south winds for a week. All of the technicians noticed that many of the sparrow species appeared right after that poor migratory weather and when I say they appeared, I mean they REALLY made an entrance! There were multitudes of Song and Swamp Sparrows and then the White-crowned and White-throated Sparrows arrived in high numbers as well. It was interesting to see how weather played a strong role in their arrival.

Seeing Barn Owls every morning for the first couple weeks in September was a highlight for all of the technicians, especially considering how few documented sightings there are in the area. Flushing up an American Bittern from an isolated marsh pool was also an exciting encounter! The Short-eared Owls that were intermittently documented at Wah'Kon-Tah were always a nice surprise too. Speaking of surprises, nothing surprised us more than coveys of quail that would spring up all around when one of us made an innocent step too close for their comfort!

One Greater Prairie-Chicken was detected at Wah'Kon-Tah and that was a treat. However, we recorded multiple sightings in the fall of 2017 so only seeing one chicken was not as



Braving an early snow

pleasing as many birders would think. Although we expected to see more Greater Prairie-Chickens, we did see a lot of expected birds this fall. Almost all of the migratory and wintering sparrows were seen, including American Tree, Clay-colored, Le Conte's, Savannah, Vesper, Lark, White-throated, White-crowned, Fox, Song, Lincoln's and Swamp Sparrow. It's amazing to see how many types of sparrows will use the same type of habitat during the fall season. Brush piles were notorious for hosting a variety of sparrow species. Wrens were one family that we expected to see a lot of during migration and at one point House Wrens were the most common detection. Sedge Wrens and Marsh Wrens were also plentiful and the Marsh Wren detections weren't restricted to the marshy areas within the conservation boundaries either. Our expectations for witnessing passage migrants and wintering species, as well as the departure of breeding species, aligned with eBird reports for the area. This included when we'd see migrating warblers pass through such as Nashville and Orange-crowned Warblers and when we would stop seeing Dickcissels and Common Yellowthroats.



Garter Snake

There were often detections that seemed to stray from the normal migration pattern as well. We heard vireos in November and saw sandpipers in October! We also had a Bobolink detected in October. Similar to detections that were unexpected because of the date, there were also detections that were unexpected because of the type of habitat the species was found in. One example was a Mourning Warbler; typically found in shrubby second growth, an individual was found in an upland native prairie plot. Sora, belonging to the rail family, were also detected several times in the grassland and sometimes they weren't at all close to any riparian zones.

Although we focused our senses on birds, we saw lots of other wildlife on the prairies too. We encountered snakes such as black rat and eastern garter snakes, turtles like three-toed and ornate box turtles, lots of frogs of big and small, spiders, butterflies, coyotes, deer, and more!



Mouse nest built on an old American Goldfinch nest

NORTHERN BOBWHITE COVEY COUNTS

In October, MRBO also assisted with National Bobwhite Conservation Initiative's fall quail covey counts in Dade and Lewis Counties. All six MRBO employees conducted point-count surveys throughout mid-to-late October early in the morning when quail are known to vocalize; which is about 30 minutes before sunrise each morning. If you haven't tried to go out and hear fall coveys calling in the morning, I'd recommend doing so. If the weather and habitat is accommodating, you may hear several coveys all start calling at around the same time for minute or so. It is almost like they are like an alarm clock going off at approximately half-an-hour before sunrise.

This was the second year MRBO helped with this project. A lot of the point count locations were in fescue fields or old agriculture plots that were isolated from human sourced noise. It was very peaceful and because we got to the points 45 minutes before sunrise, we were able to listen to the diurnal world wake up and watch the sun rise. To be a part of the transition that takes place outside from nighttime to daytime for a couple weeks was rewarding. Because we were only marking quail vocalizations/sightings and not all birds, it was much more relaxing than our typical surveys. The owl calls were one of the best part of being out early in the morning. Collectively, we had five species of owls that we encountered during quail surveys – Barn, Barred, Eastern-screech, Great Horned, and Short-eared Owl. Overall, this project is a fun one and allowed the MRBO team to travel to new places in Missouri. Lewis County is near the Iowa/Illinois border and it was a treat to make it up to the small town of Monticello and explore that area's natural environment.





Hope is The Thing With Feathers

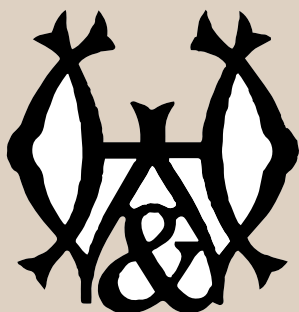
The Missouri River Bird Observatory's
Third Annual Photography Contest



We invite you to submit your favorite Missouri bird photos to MRBO's *Hope is the Thing With Feathers* photography contest. The contest runs from 1 November – 31 December 2018.

Contest entry fee is \$25 per photo for adults, \$10 for youth. All entry fees benefit the MRBO education program. The contest is only open to amateur photographers.

Contest Prizes, sponsored by our local Wood & Huston Bank!



Grand Prize: \$1000!

1st Place: \$500

2nd Place: \$200

3rd Place: \$100

Director's Choice: \$100

Youth (10-17 years of age as of 11/1/18): \$100

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Hope is the thing with feathers
That perches in the soul
And sings the tune without the words
And never stops at all

And sweetest in the gale is heard
And sore must be the storm
That could abash the little bird
That kept so many warm

I've heard it in the chilliest land
And on the strangest sea
Yet, never, in extremity
It asked a crumb of me.

-Emily Dickinson, 1830-1886

For all details, contest rules, and
submission guidelines visit:
mrbo.org/2018photocontest

Pictured here from 2017 contest: Grand Prize Winner Jun Zuo's "Taking Off" (background).
Youth Winner Chelsea Mostellar's "Mallard Feathers" (above right).
2nd Place Winner George Albright's "I Was Just Leaving" (above).



"Two Cardinals in Snow" by K-Cee Colburn
"Weathering the Storm Together" by Lisa Hostetter

