

# The Rectrix

A seasonal newsletter of the Missouri River Bird Observatory

Volume 8 No. 2. Spring 2018



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





# Letter from a MRBO Director

Dear MRBO Members and Friends,

I'm amazed that spring has already come around again – but very glad! While it was very nice to have a “real” winter here in Missouri, and I love the cold, I was ready for a change of season. As I write this in mid-April, the wetland bird survey project is already in full swing. We have 62 wetland sites to survey this year, ranging in size from 30 to 4,000 acres. Each site gets surveyed once during migration and once during breeding season. Our excellent survey crew is already making major progress and documenting many hundreds of birds, particularly waterfowl and shorebirds.

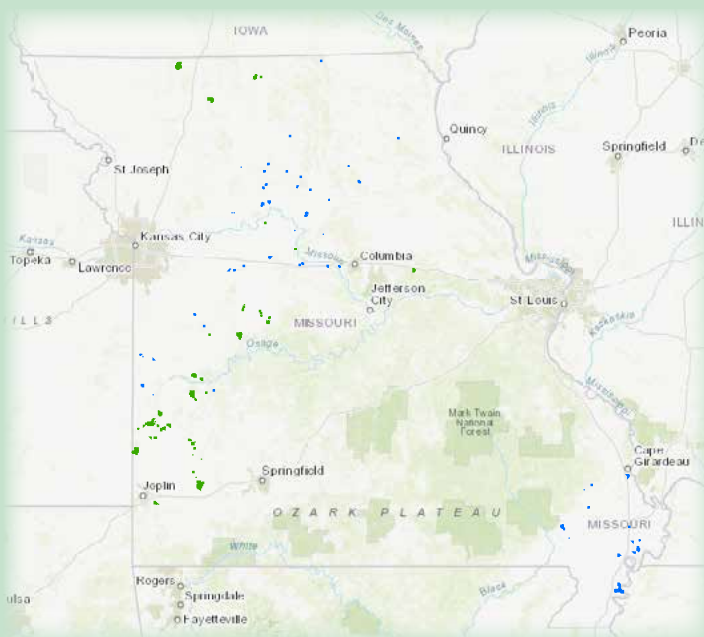
Beginning in mid-May, another crew will begin surveying grassland birds on 35 sites across the western half of Missouri. Surveys will continue throughout the breeding season even as the crew starts searching for and monitoring nests. This year's grassland crew leader, Erik Ost, has written a delightful article on the nest-searching project that you can read about in this newsletter.

Even as the grassland and wetland surveys operate, MRBO continues to do a variety of education and outreach programs. The events are spearheaded and largely conducted by our Education Coordinator, Paige Witek, but all MRBO staff take part over the course of the season. Often surveyors will take part in youth education events, and both the grassland and wetland crews are constantly involved in private landowner outreach.

Each year, Ethan and I are enormously grateful to our staff. MRBO is a small organization with a very large scope of work, and that is only possibly because of our excellent employees. I think that we have assembled an outstanding group this year and I am excited to not only see the project results as they come in, but to simply spend time with our staff members. Each of them brings a unique background and skill set to the projects, but they all have two things in common – they are great at bird ID and they have a passion for conservation.

I hope you enjoy this issue of *The Retrix*.

We have recently decided to go with a standard format which we will follow in all newsletters other than the photo contest edition. Each issue, you will find a species profile highlighting a particular bird, an update from one of the projects, a “conservation topic” that focuses on an important current policy or philosophy subject, an update from the education and outreach program, and a map of upcoming events. We would love to hear feedback on any of the articles in *The Rectrix*, field questions about any conservation or bird-related topic or to provide more information events you can attend.



This year's grassland (green) and wetland (blue) survey sites

## Permanent Staff

**Dana Ripper**  
Director

**Ethan Duke**

Assistant Director

**Paige Witek**

Education Coordinator

## Seasonal Staff

**Erik Ost**

Grassland Project  
Crew Leader

**Carl La Riccia**

Grassland Technician

**Jarrold Messman**

Grassland Technician

**Eric Hall**

Wetland Technician

**Mark VanderVen**

Wetland Technician

## ON THE COVER:

FEMALE RED-WINGED  
BLACKBIRD BY  
GEORGE ALBRIGHT

**MRBO**

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## Our Mission

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



I wish you a wonderful spring migration and nesting season!

Sincerely,

Dana Ripper, MRBO Director

# *A Warm Welcome to MRBO's 2018 Field Staff*

## *Wetland Bird Surveyors*

Eric Hall grew up in Pittsburgh, Pennsylvania. His education and initial work experiences were in social work, but since childhood he has enjoyed watching birds and exploring nature, and it is those things that have become his passions. Doing fieldwork for bird research projects has been a great opportunity to learn more about birds (especially bird behavior and song), and to see new and interesting regions and habitats. Eric has worked on Breeding Bird Atlas projects in numerous states, most recently in Minnesota, where he did surveys in the northern forests. Eric spent the past winter as a volunteer bird surveyor for U.S. Fish and Wildlife Service in Mississippi, where he gained an appreciation for the Delta Region's distinctive birdlife. The position involved working with refuge staff to learn more about birdlife in sloughs, bayous, bottomland forests, and grasslands. It was also an opportunity to work with the public, lead bird walks, and talk about birds and nature.



Mark VanderVen became fascinated with bird names at the age of five, and an interest in what birds look like shortly followed. His memorable field experiences include paddling for several months in a Florida swamp in search of the Ivory-billed Woodpecker and driving along transmission lines in the Mojave Desert monitoring raven nests. His students in his Natural History of Northwestern Birds class at Western Washington University have pointed out to him that he's identified no fewer than six species as "my favorite bird" over the course of a weekend. A recent highlight for Mark was writing questions for and hosting a "Beers for Birds" fundraising pub quiz for the Seattle Audubon Society. Mark hopes to launch a bird observatory in southwestern Pennsylvania with a few of his talented friends.

## *Grassland Bird Survey and Nest-monitoring Crew*

Carl LaRiccia was born and raised in Columbus, Ohio. He graduated in June of 2017 with a B.S. in Field and Wildlife Biology from California Polytechnic State University. His interest in birds was sparked by a high school biology teacher and avid birder, but was solidified by a three-month volunteer stint in Ecuador. Carl has worked with sound pollution and light pollution studies and with undergrads, teaching them to ID birds. He is most interested in avian behavior and hopes to pursue it in graduate school this coming fall.



Jarrod Messman is graduating this year with a B.S. in Wildlife Ecology and Conservation from Northwest Missouri State University. Originally from Unionville, Missouri, Jarrod has always been an outdoorsman through hunting, fishing, and camping. He has recently become interested in wildlife and landscape photography, which makes it easier to get more connected with his surroundings. Jarrod became interested in birds when he first took an ornithology course and fell in love with the diversity and global spread of birds. That class drove him to get his first field job through University of Nebraska Lincoln and now to MRBO.

Erik Ost was born in Maryland and raised in Northern Virginia. He graduated with a B.S. in Organismal Biology from Christopher Newport University in 2015. Growing up hiking and traveling to National Parks he developed a connection with nature and wildlife. During an Ornithology course in college, he found a passion for birding and avian conservation. His love of wildlife and commitment to conservation brought him to MRBO. Erik was a Wetland Surveyor in 2016, a Grassland Bird Technician in 2017, and will be the 2018 Grassland Field Crew Leader. MRBO is happy to welcome him back!





# Species Profile: Ruby-Crowned Kinglet



Male Ruby-Crowned Kinglet.  
Photo by Paul Jacyk, Cornell Lab of Ornithology.

**SCIENTIFIC NAME:** *Regulus calendula*

**ALPHA CODE:** RCKI

**IDENTIFICATION:** The Ruby-crowned Kinglet is a tiny songbird with an equally tiny insect-eating bill. They are olive-green overall with a prominent white eyering. They have a white wing-bar with a black bar just below. Adult males have a brilliant red crown that is often concealed, but they will flash it when excited. A key behavior of this species is how it flicks its wings frequently while darting quickly through mid-level foliage.

## **HABITAT: Forests**

These birds like to hang out in spruce-fir forests in the northwestern U.S. and across Canada. They also live in mixed woods, isolated trees in meadows, coniferous and deciduous forests, mountain-shrub habitat, and floodplain forests of oak, pine, spruce or aspen.

## **DIET: Insectivorous**

Ruby-crowned Kinglets prey on spiders, pseudoscorpions, and many types of insects, including aphids, wasps, ants, and bark beetles. They will also eat small amounts of seeds and fruit, including poison-oak berries and the pulp of dogwood berries. Metabolic studies suggest that these tiny birds only use about 10 calories per day!

## **NESTING: Globe-shaped Tree Nest**

Ruby-crowned Kinglets make their nest in trees, sometimes as high up as 100 feet. The females choose a nest site near the tree trunk or suspended from small twigs and branchlets. Their nest sites are often hidden by overhanging foliage. It takes the female five days to build the nest, making trips every five minutes or so to gather materials. Ruby-crowned Kinglets like to use grasses, feathers, mosses, spider webs and cocoon silk for the outer structure and fur for the inner lining. When completed, the nest is about 4 inches wide and 5-6 inches deep. The nest is made to be elastic enough that it can stretch as the brood grows! Breeding pairs of Ruby-crowned Kinglets stay together until their chicks fledge, which equals about two months.



Female Ruby-Crowned Kinglet.  
Photo by Evan Lipton, Cornell Lab of Ornithology.

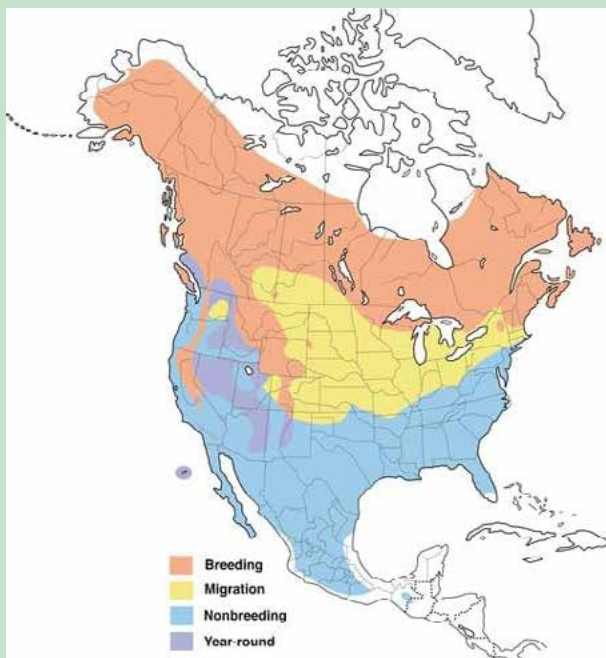
## **FUN FACT:**

The Ruby-crowned Kinglet can lay up to 12 eggs in a single nest. Although the eggs weigh only about a fiftieth of an ounce, an entire clutch can weigh as much as the female herself!

## **CONSERVATION: Low Concern**

According to the North American Breeding Bird Survey, Ruby-crowned Kinglets are common and overall, despite regional increases and declines, their numbers were stable between 1966 and 2015. Kinglets seem to handle human disturbance and habitat fragmentation fairly well, though logging and wildfire may reduce their numbers.

**Resources:** *All About Birds*, Cornell Lab of Ornithology, [www.allaboutbirds.org/guide/Ruby-crowned\\_Kinglet/id](http://www.allaboutbirds.org/guide/Ruby-crowned_Kinglet/id).



Range map by Birds of North America. <https://birdsna.org/>

# MRBO's Grassland Bird Nest-searching and Monitoring Project

By Erik Ost, Grassland Project Crew Leader

2017 was the second year that Missouri River Bird Observatory conducted a nest searching and monitoring project aimed at studying the effects of patch-burn grazing (prescribed/controlled burning and grazing by ruminants) on grassland obligate bird species' nesting success. In collaboration with Missouri Department of Conservation, this project is part of a broader experiment to study the impact of patch-burn grazing (PBG) on flora and fauna of Missouri grasslands. Because this is only the second season we have conducted this study, we thus far have an insufficient amount of data to show any strong relationships between PBG practices and nesting success. Therefore, this article is to provide information about how we operated our nest searching and monitoring project while also shedding light on some of the struggles and triumphs experienced over the season.

Native grasslands in Missouri have been reduced significantly since their emergence after the last ice age ~11,000 years ago. At one time, 15 million acres, or approximately 1/3 of the state, was covered by native grasslands. This coverage has been reduced to less than 80,000 acres. Historically, wildfires and nomadic animal grazing contributed to the maintenance of this grassland ecosystem since their presence prevented woodier vegetation and other mid-successional growth to become established. Since westward expansion by European settlers, the occurrence of wildfires and wild nomadic grazers has diminished significantly. This lack of disturbance has led to a gradual transformation of ecosystem from grassland to forest. Twentieth century conversion of land for agricultural and commercial purposes has also contributed to the decrease in grasslands.

With the loss of grasslands comes the loss of birds that call this environment their home. Many species breed exclusively on America's prairie grasslands and thus have been directly affected by its reductions. The restoration of grasslands is necessary to conserve these species dependent on this ecosystem. Management practices like prescribed fires and controlled grazing mimic nature's ways to ensure grassland survival. Therefore, the project we are involved in is important for a fuller understanding of the relationship between PBG and grassland-obligate bird species in Missouri.



The grazed (above) and ungrazed (below) study units at Wah'Kon-Tah Prairie



The target species our efforts included Bell's Vireo, Dickcissel, Eastern Meadowlark, Field Sparrow, Grasshopper Sparrow, and Henslow's Sparrow. All of these species have had dramatic population reductions, largely in response to the loss of their grassland habitat. Our nest-searching and monitoring wasn't restricted to just these species, however. Many other bird species lived within the study site because the area wasn't entirely prairie vegetation. A pond, marshy area, and patches of dense shrubby vegetation all resided within the project area. In these habitats, we found nests from 14 other species!



Wah'Kon-Tah Prairie (red) and the study unit boundaries (yellow and blue)

In 2017, Wah'Kon-Tah Prairie was selected as the nest-monitoring study site. Wah'Kon-Tah Prairie is a conservation area with over 3,000 acres of protected land and lies in St. Clair and Cedar County, located a few miles northeast of El Dorado Springs, MO. Specifically, our efforts were confined to an area north of Highway 82 and west of road SW 1001. The area was broken up into two distinct sections: a grazed area, which had 52 cattle present over the entire season and a non-grazed area, which simply lacked the grazing cattle. Both portions were of similar size, with the grazed unit being ~154 acres and the non-grazed unit being ~138 acres. Additionally, within both units there were areas where a controlled burn had taken place. Approximately one third of each unit was burned early in the spring. The presence of large, gently rolling hills were shared between both units, as were the thick draws of dense and shrubby vegetation. There were significant differences in plant species present. Most likely due to the presence of grazers, the grazed unit had almost no evidence of Bergamot, Gray Headed Coneflower, Purple Headed Coneflower, Eastern Gamma Grass, and other common prairie plants native to Missouri. The grazed unit had more warm season grasses that were noticeably shorter compared to the non-grazed unit by the end of the season. There were also a lot more wild blackberry plants in the grazed unit.



Wild Bergamot





Male Blue Grosbeak in song

We started this project on the 14<sup>th</sup> of May and ended it on the 30<sup>th</sup> of July. We conducted our work almost every day within this time period and started around daybreak. Sometimes our start time would vary due to early-morning fog that would linger and soak the vegetation. Our protocol requires that we minimize the amount of damage we inflict on the vegetation and when the flora is wet it is much easier to cause long term damage. Our protocol also benefits the nests since wet, trampled vegetation is more likely to make a path, thus inviting predators to follow it to any nests. We ceased our searching efforts when the temperature became too hot, as it is stressful for nesting birds if they are disturbed when the temperature is high.

The methods we used in searching for nests were simple and changed slightly depending on the species. The first (and most frequently used) method is haphazard walking. This method is simply walking while scanning for birds that flush off the ground. Once flushed we would then comb through that area. This was the most often used method since the

search area was large and, depending on the scheduled (already discovered) nests to check, it could require a couple miles of walking and haphazard walking was used between known locations.

The second method is staking-out an area where an adult was seen with food or nesting material. Artificial blinds or nearby vegetation were used to provide cover while we waited and observed where the adult landed. We would then move to that area and this would usually result in that same bird flushing from the vicinity. Wherever the bird flushed was typically a nest.

The third method is rope-dragging. Rope-dragging is a method by which two people walk parallel to each other while both holding an end of the same rope that has metal cans suspended from it, intermittently placed between the ends. The cans dangle and brush the top of the vegetation while clanking against each other, provoking any birds that may lie between the searchers or in the nearby area to flush up. This method is good for covering a large area but is problematic when there are more obstacles caused by woodier vegetation and bramble that can hook the rope or get tangled in the cans that dangle.

The last search method used for our target species we call the bait-and-lure. For this method, two searchers are near each other and when a female adult bird is chipping or there is an adult with food or nesting material, one searcher hides while the other searcher elicits the gaze of the adult by walking away. Ideally, once the searcher is far enough away, the adult will feel comfortable enough to return to the nest and have forgotten about the other searcher who is watching from their hideout.

Once a nest was found, the location was logged using ArcGIS's "Collector" application on an iPad. For subsequent checks, which occurred every 3 days, we used this application to guide us to the nest vicinity as the application has a GPS and a map of the study area stored within. We used this app for other aspects of the project as well. Nest observation data, such as the contents from each check and photos of nests/nestlings were stored using the app and all could be done while in the field. All of these data were then uploaded later to an online database. After entering the location in Collector, the surrounding area was flagged with black tape to guide us back to the nest's exact spot because the geo-tagged location of the nest portrayed on the iPad was sometimes not enough to navigate us to the nest without risk of trampling it while searching for it.

Nest searching is a challenging and time-intensive activity. Trying to locate our target species' nests provided much frustration but also great satisfaction when successful. Prairies do not have as many distinguishable features as other environments such as forests and wetlands, making navigation a challenge. Most of the target species nest right above the ground, ranging from a couple of centimeters off the ground to about two feet. Almost all target species' nests found were discovered by looking down toward the ground and coupled by actively brushing vegetation that obscured the nest. One target species' nest was found differently: Bell's Vireo nests are unlike the rest of the target species' in that they build nests that hang from branches of small trees. Although, they too were often obscured by tree leaves and surrounding brush, making them challenging to find.



Bell's Vireo nest

The monitoring portion of the project was bittersweet. It was fun to see eggs progress into fledglings, but unfortunately there were more nests that failed than succeeded. In fact, almost 74% of the nests we monitored failed. We classified a nest a failure if no fledglings were produced of that species for that nest cycle. Many of the nests that failed were likely caused by incidents of predation. We deemed a nest's failure was caused by predation if all of the contents were gone and the age of the nestlings did not warrant fledging. Many of the nests depredated did not show signs of disturbances which suggests snakes were responsible but some of the nests looked as though a mammal had clawed the nest apart or down in order to access the contents. Despite predation being a large part of nest failure, many other variables can cause a nest failure. Extreme weather like flooding and high winds, parents being eaten or killed, and traffic by cattle or vehicles are some of the otherways nests failed this season.

Our presence impacts nest success of the birds we monitor so we try to mitigate this effect through various methods. We checked nests every 3 days and when we did so we attempted to leave as little trace as possible. This means not accessing the nest from the same direction every time and also walking past the nest once checked so to prevent a scent “dead end” that would provoke olfactory-adept predators to linger and check out the area. We also tried to limit the amount of time we were at the nest to a minimum. We work hard to minimize our scent left, reduce stress on the parents caused by our presence, and to lessen disturbance of the parents’ incubating or feeding rhythm.



A Dickcissel nest with eggs

In total, we monitored over 120 nests in 2017. The species with the highest number of nests found was Dickcissel. This was the same species for which we found the most nests at Taberville Prairie Conservation Area in 2016. Surprisingly, even with similarly sized search areas, there was a large discrepancy between the abundance of Dickcissels in Wah’Kon-Tah (26) and Taberville (106). In 2016, it seemed like Dickcissels were everywhere! While walking to and from current nests that were being monitored there was a good chance you’d flush up a female Dickcissel and find a nest. This year, there were only two or three pairs of Dickcissels in the grazed unit and about nine in the non-grazed unit. One reason why we found more Dickcissel nests than any other species may be because they tended to be the least vigilant of the target species. Meaning, they would return to their nest to continue feeding or incubating under conditions that other species would still be reluctant to return. We would still need to make an effort to conceal ourselves while always being a distance away from the nest area but often less so than other species.



Gray Catbird nest with newly-hatched young

The runner-up species’ nest found at Wah’Kon-Tah was Gray Catbird. Although this was a non-target species, this species was prolific wherever there were shrubby draws and islands of thick brush. Gray Catbirds build nests about five feet off the ground and are easy to identify because they are a tall clump of stacked sticks with a fine lining of twigs in the cup of the nest. It is obvious to spot if you part the exterior layer of a bush’s foliage and scan within. Gray Catbird mothers are also always near their nest and will produce an alarming meowing call when you are near it. Even though this species was not a target, it was easy to find. So, whenever I got frustrated from a failed stake-out of another species’ nest I would poke around in the draws and most likely find a Gray Catbird nest.

Field Sparrows nests were found in similar vegetation to Dickcissel nests, often using the base of a woody plant or shrub for structural support. They tended to nest in areas where there were a lower density of grasses compared to Dickcissel nest habitat. This type of habitat was more prominent in the grazed unit and more than half of the Field Sparrow nests were found in a concentrated area within the grazed unit where there was a lot of exposed earth. This species’ nests were found primarily through the stake-out method. Field Sparrows were a little more vigilant than Dickcissels so it usually took longer to find the nest. Despite the added vigilance, only one out of the thirteen Field Sparrow nests monitored successfully produced fledglings.



Field sparrow nests with eggs (above) and six-day-old nestlings (below)

Bell’s Vireo nests were the easiest target species’ nests to find this season. Mentioned before, Bell’s Vireo nests are unlike others because they require some vegetation with height and branches because they build a cup nest that is suspended from branches. On Wah’Kon-Tah, this species almost exclusively nests in sumac trees. Therefore, if you were by a grove of sumacs and heard a Bell’s Vireo calling there would be a good chance a nest was nearby. An efficient method for searching for these nests is to lower yourself beneath the sumac canopy and just scan below the canopy line for a hanging basket nest.

The most difficult nest to find this season was that of the Eastern Meadowlark. The fact that we did not find any is a testament to this challenge. We can blame part of this on the lack of abundance of meadowlarks in the search areas, as there were probably only five breeding pairs of meadowlarks within the whole search area. Eastern Meadowlarks are notoriously vigilant and alert when it comes to their nest’s safety. A few times I watched a pair for close to an hour; while entirely concealed in a seated blind, and almost like clockwork the pair would alternate calling at ~1 second intervals. The female would have a mouthful of food the entire time but still would refuse to go to the nest. It also seemed like they became more skittish with the high amount of traffic their territory sustained (due to our efforts and MDC researchers) and so would flush off the nest far away from where we would be, making it extremely frustrating to deduce where the nest could be!







Grasshopper Sparrow nestlings

After Eastern Meadowlarks, Grasshopper and Henslow's Sparrow nests were the most difficult to find. We did find more of these species' nests than last year, but this is most likely due to the high abundance of these species at the 2017 study site compared to 2016's. These two sparrows belong to the same genus *Ammodramus* and they share similar behavior characteristics that categorize them as notoriously stealthy birds. They both feed on the ground and spend more time moving through the underbrush rather than flying. The females, which do the incubating, will jump off the nest and scurry on the ground when disturbed. Thus, there aren't as many chances to locate the nest based off where the female was visually spotted flushing up off the ground. These birds will chip while leading you toward them, no doubt also away from their nest. They also hesitate to return to the nest for some time and when they do it usually won't be by directly landing from the air to the nest area. Almost all the *Ammodramus* sparrow nests found were discovered by the same method, which was combing through the area where one had flushed up. This was rare, but because there were plenty of Henslow's and Grasshopper Sparrows there were many opportunities. The only exception was in the finding of one Grasshopper Sparrow nest which was detected by observing a female Grasshopper Sparrow with food land and then take off without food. I searched the area where I thought the sparrow had taken off but couldn't find it. After I saw her land with food the second time I hustled over to the area and she flushed while making the "wounded wing wobble" as I like to call it. This is when a bird flutters while keeping one wing limp to act like they are wounded. They do this to solicit the attention of a predator in an attempt to distract the predator and draw them away from their young. I searched the area and sure enough found a nest with four nestlings inside!

In total we found eight active *Ammodramus* nests but only one had successfully produced fledglings. All others were either abandoned or preyed upon. The Grasshopper Sparrow nest I just described finding turned out to be that sole successful nest. One interesting note is how frequently the female was absent during a nest check. After the initial nest location, most times we checked the nest there was no sign of a female either by sight or sound.

Both of these sparrow species are particular when it comes to their nesting habitat. Henslow's Sparrows usually build nests at the base of a tuft of grass and prefer the surrounding vegetation to be dense with variable height. Grasshopper Sparrows like areas with shorter vegetation that is also sparser. Many more Grasshopper Sparrows were present in the grazed unit than the non-grazed unit. All of the *Ammodramus* sparrow nests were found in the grazed unit. This possibly suggests that the presence of grazers may contribute to a more conducive breeding habitat for these sparrow species.



Henslow's Sparrow nest with eggs



Dickcissel nestlings

There were many enjoyable aspects to nest monitoring - the foremost being the observation of cute baby birds! Young hatchlings would often be just skin and beak and then about eight or nine days later most species' nestlings were fully covered in feathers and ready to fledge! It was pleasing to watch younger nestlings beg for food when we would check the nest. The snapshot sound my phone would make when I took a photo almost always provoked a young nestling to beg for food. Although, it is important to note that once the nestlings had matured enough to open their eyes this behavior stopped. Once they had the use of their eyes they behaved in the opposite manner, so that when their nest was approached they contracted their body to look as small as possible. It always made me grin when I saw a nest with nestlings that were practically spilling over the top of the nest and whom were still as a stone with their eyes agape watching me!

Finding a nest was also very rewarding! No matter if it was found instantly by luck or if it required hours of staking-out, finding a nest was always extremely pleasing. As we became more familiar with what each species preferred to nest in at the study site, we became better nest searchers. Therefore, we were finding more target species' nests towards the end of the season when fewer and fewer individuals were starting nest cycles. I cannot wait for the 2018 season to start because I had such a good time and the feeling you get from finding nests is addictive!

The 2016 and 2017 seasons have provided important data that will help contribute to the preservation and restoration of Missouri grassland bird species. In itself, this year's data demonstrates the low breeding success of grassland birds. Similarly to the pilot year in 2016, the sample size of grassland obligate species' nests found was relatively low, which is why continuation of this project is important in order to gather enough data to provide stronger relationships and analyses. Each year, we adapt and evolve our protocols and techniques for this project and so I am confident that this year's study will be even more successful than 2017's.



# Education & Outreach Update



MRBO Educator Paige Witek with a Brown Creeper captured at a Backyard Banding event.

This winter we conducted a plethora of educational and outreach events. Since MRBO now has a full-time educator, Paige Witek, we were able to accomplish more than ever! Please enjoy the following list of some of the programs that MRBO accomplished this winter and stay tuned for the events yet to come.

## Winter Banding Series

### November – March

Each winter MRBO bands birds to demonstrate scientific methods as well as allow the public to observe birds up close and learn more about their ecology. MRBO conducted demonstrations at Burroughs Audubon Library in Blue Springs, Burr Oak Woods Nature Center in Blue Springs, Birds-I-View in Jefferson City and Springfield Nature Center in Springfield. As a part of our Backyard Banding program, we also banded birds at two private residences. MRBO's Backyard Banding program occurs November – March and our staff visit different locations and color-band birds at backyard bird-feeding stations. This year we had very little luck with weather. Many of these events had to be rescheduled or cancelled due to unfavorable banding conditions, road

conditions and illness. We didn't let that stop us as we still accomplished a great deal!

## Northern Saw-whet Owl Program for Burroughs Audubon Society Jan. 16<sup>th</sup> in Kansas City

MRBO staff headed to the Anita B. Gorman Nature Center for the Burroughs Audubon Chapter meeting to discuss our work with Northern Saw-whet Owls. The presentation, given by Paige, included a quiz to share all the amazing adaptations that owls possess, as well as discuss MRBO's past and current research concerning this small owl.



Young visitors view a Tufted Titmouse at Burroughs Audubon Library

## Bird Photography Exhibit

### Feb. 9<sup>th</sup> – March 25<sup>th</sup> in Arrow Rock

Many of you are aware that this year MRBO held a photo contest, "*Hope is the Thing with Feathers*". All of the photographs were featured in our last issue of *The Retrix*. The top 50 photographs were printed on canvas and displayed in an exhibit in the Arrow Rock State Historic Site Visitors' Center. An exhibit opening was held on Feb. 9<sup>th</sup> at which many of the photographers were able to see their work displayed. The exhibit raised awareness among Arrow Rock visitors for the beauty and diversity of Missouri's birds.

## Birds-I-View Education Seminar

### Feb. 16<sup>th</sup> in Jefferson City

Ethan and Paige gave a presentation on MRBO's education program the evening after a banding demonstration at Birds-I-View store in Jefferson City.

They discussed MRBO's past programming, what we are currently up to and what we hope to accomplish in the future, including expanding our summer camp, Young Explorers' Club and establishing the Missouri Young Birders Club.

## Arrow Rock Bluebird Box Workshop and Presentation

### Feb. 17<sup>th</sup>

This year MRBO took part in the Missouri Bluebird Society's Nest Box Grant Program. This program requires establishing and enhancing nest box trails on public lands within the state of Missouri, and has as one of its goals the education of the local community about Bluebirds and other native cavity-nesting species. Through this program MRBO has established two nest boxes behind our office with the objective that the Young Explorers' Club will take part in the monitoring and maintenance of the boxes. Paige gave a public presentation on nest boxes and the birds that inhabit them at the Arrow Rock State Historic Site Visitor Center auditorium. Afterwards, MRBO staff demonstrated how to install a nest box with



Hope is the Thing with Feathers photography exhibit at Arrow Rock State Historic Site



pole and predator-proof baffle at the Lawless House.

### **Conservation Eating Program for Missouri Master Naturalists Feb. 19<sup>th</sup> in Springfield**

Dana presented on our nation's food system at the monthly Missouri Master Naturalists program, Springfield Chapter. She discussed how our food choices impact the environment and conservation and how to vote with your fork. The event was attended by over 70 Master Naturalists and guests.

### **Interface 2018**

#### **Feb 23<sup>rd</sup> at Tar-Tar-A Resort in Lake of the Ozarks**

Interface is a statewide conference for Missouri teachers to help better incorporate STEM (Science, Technology, Engineering and Math) into their curricula. Paige and MDC Education Consultant Cynthia Green gave seminars focused how birds are fantastic engineers and architects through their nest building. The program consisted of a brief presentation, nest building and a game of Jeop-birdy, a trivia game from the Flying WILD program. Thirty elementary school teachers came away with tools for incorporating birds into their STEM program.



Bluebird Nestbox Workshop at Arrow Rock

### **Native Plant Presentation for Raytown Garden Club**

#### **March 6<sup>th</sup> in Raytown**

Paige visited the Raytown Garden Club to give a presentation on how to attract birds to your garden. The presentation focused on native plants and their role in avian ecology.



Paige presenting the many ways to help birds.  
Photo: Kate Corwin of Green Works in KC

### **Caring for Birds Program**

#### **March 10<sup>th</sup> at Green Works in Kansas City**

Green Works is a great organization focused on environmental education and workforce development for urban youth. Paige was joined by Kimberly Hess of Lakeside Nature Center to give a presentation on how to help birds. Paige discussed bird populations, MRBO's field work, and everyday ways to help birds by providing food, water, cover and nesting spaces. Kimberly brought live birds and discussed Lakeside's rehabilitation program and what to do if you find an injured bird.

### **Adaptation Artistry Program for Higbee Elementary 3<sup>rd</sup> and 4<sup>th</sup> Graders**

#### **March 23<sup>rd</sup> in Higbee, Randolph County**

Paige visited Higbee Elementary to give a program on bird vocalizations. However, due to weather constraints, the program was moved inside and the students learned about bird adaptations. The students were then able to create their own bird deciding where it will live, what it will eat, and what it will look like. Paige was also able to throw in a few bird calls at the end!

### **Conservation Day at the Capitol**

#### **March 27<sup>th</sup> at the State Capitol in Jefferson City**

The Conservation Federation of Missouri (CFM) hosts this event every year for CFM affiliates to set up outreach booths in the rotunda of the Capitol building to demonstrate all the great conservation work that Missouri organizations are doing and why this is important. Paige was present at MRBO's booth and you may have her on the radio!

### **Prairie Birds in Spring Presentation for Missouri Master Naturalists**

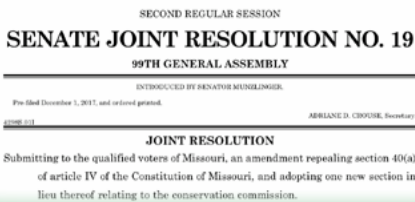
#### **April 4<sup>th</sup> in Cole Camp**

Paige presented on what bird species and behaviors to look for on the prairie in spring for the Missouri Master Naturalists Hi-Lonesome Chapter. She also included a review of what people can do to help migratory and breeding birds.



# Conservation Topic: Current Missouri Legislation

by Dana Ripper, MRBO Director



As I recently wrote in an extensive blog (<http://mrbo.org/while-we-were-sleeping/>), those of us who pay attention to the news are rather engrossed with the shenanigans occurring almost daily in Washington D.C.. Wildlife conservationists across the nation can do little more than look on in dismay as our public lands and natural resource protections are assaulted regularly by the Department of the Interior and the EPA. However, there is much to be concerned about here in Missouri, and we conservation-minded Missourians have a far better chance at affecting home-grown policy and legislation than we do at affecting change on the national level. Thanks to the Conservation Federation of Missouri (CFM; [confedmo.org](http://confedmo.org)), of which MRBO is an affiliate member, conservation-related legislation coming out of Jefferson City has been examined and summarized. I would like to take this chance to inform MRBO members about these proposed policies.

*House Joint Resolution 87 (sponsored by Chuck Bayse, District 47): Proposes a constitutional amendment to allow non-resident landowners of 75 acres or more to receive resident landowner hunting and fishing privileges.*

This bill would not only result in a loss of important revenue to the Missouri Department of Conservation from non-resident license fees, it circumvents the constitutional mandate of the Conservation Commission to set hunting limits and fees. Therefore the topic should be brought before the Commission as opposed to proposing an amendment to the Constitution of the State of Missouri. In 2015, upon first proposing this bill, the sponsor freely admitted that it was to benefit his brother, a California businessman who occasionally hunts on his Missouri property. HJR-87 has passed the House Conservation and Natural Resources Committee (6-3) and will appear before voters on the November general election ballot.

*House Joint Resolution 95 (sponsored by Justin Hill, District 108 with 26 co-sponsors), House Joint Resolution 70 (sponsored by Jay Houghton, District 43) and Senate Joint Resolution 19 (sponsored by Brian Munzlinger, District 18): Propose constitutional amendments to modify the membership of the Conservation Commission, and to modify the membership composition and terms of service of Conservation Commissioners.* In 1936, Missourians voted for the establishment of a four-member, apolitical Conservation Commission to oversee the management of the state's fish and wildlife. *Apolitical* is the key word. All of these proposed Constitutional Amendments seek to politicize the Conservation Commission by either making its members represent particular geographic districts of Missouri (HJR 70 and SJR 19) or have them be sitting members of Congress appointed by the Missouri House Speaker and Senate Majority leader (HJR 95). There is no compelling reason for altering the size or composition of the Conservation Commission; such an action will ensure that the currently impartial actions of the Commission become politically motivated and biased.

*House Joint Resolution 71 (sponsored by Jay Houghton, District 43, cosponsored by Dave Muntzel, District 48) and Senate Joint Resolution 20 (sponsored by Brian Munzlinger, District 18): propose to amend the Constitution to require that the sales tax dedicated to conservation purposes be resubmitted to the voters for approval every 10 years. House Joint Resolution 71 (sponsored by Mike Moon, District 157): proposes to amend the Constitution to require a vote on the sales tax every six years.*

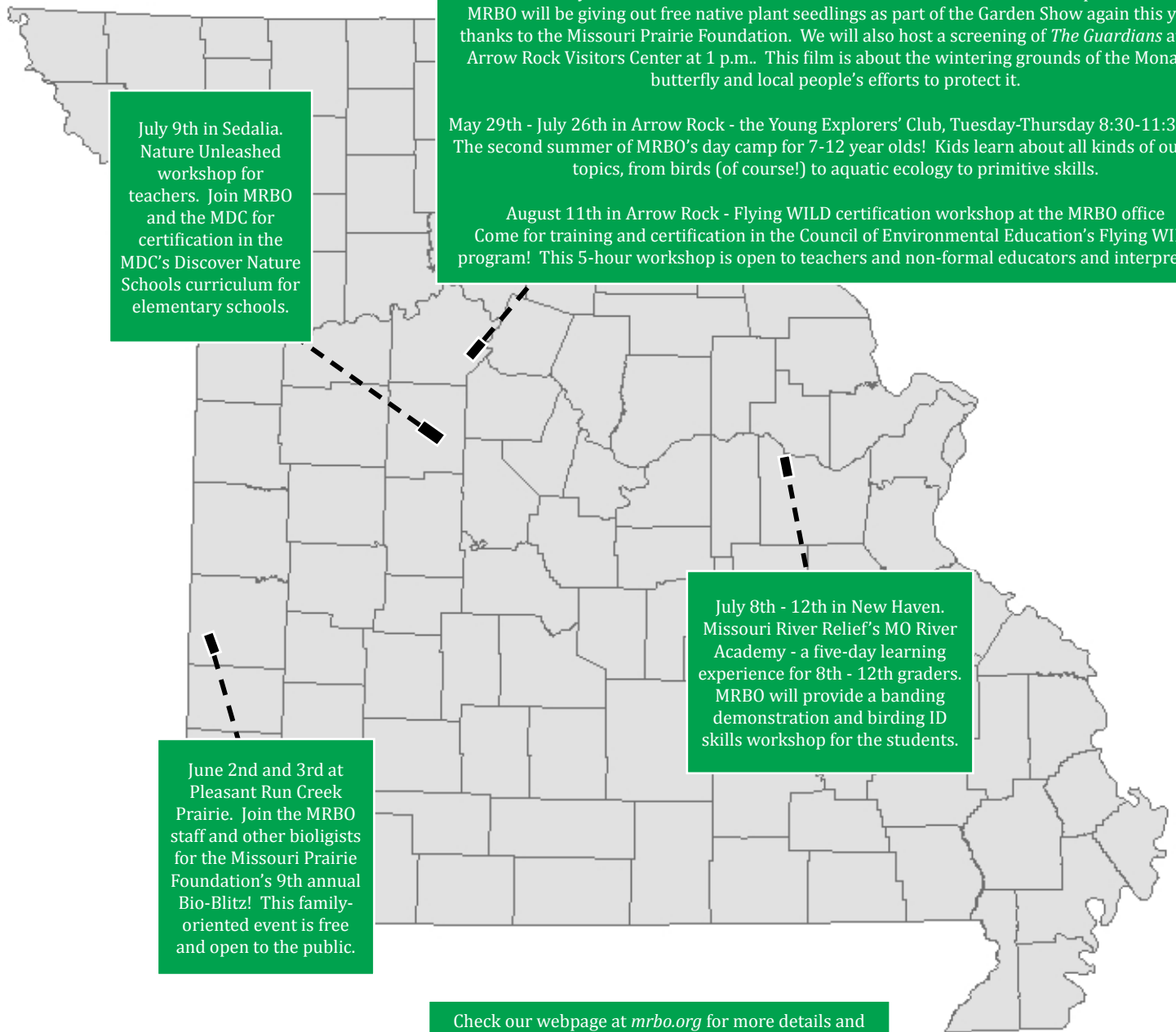
The Missouri Department of Conservation is hailed by conservationists across the country for its ability to implement long-term management strategies that benefit our state's wildlife and natural resources. This is possible because of the 1/8 of a penny sales tax that was voted into law in 1976 to support the MDC's operations. This tiny percentage of retail transactions is not noticed by consumers but represents a large and stable funding source for conservation. Quite simply, there is no reason to change the existing rule. CFM points out three factors to consider: 1) the amount of money involved relative to the state budget is less than 1%, 2) the cost of periodic ballots for re-authorization, both in time and dollars to the state would be significant, and 3) failure to re-authorize the sales tax would result in a catastrophic collapse of conservation related activities and service, closure of facilities, and lay-offs of employees, as the budgetary burden would rest on permit revenues and federal re-imbursements. Any difference in need would have to come from general revenue. Also importantly, the people established this dedicated funding by initiative petition. If the people feel the need to re-visit how the Department of Conservation is funded, we believe the people should be the body that initiates the change, not the legislature.

There are also several bills in the Missouri legislature that pertain to industrial agriculture. As many MRBO readers are aware, there are very strong links between agriculture and wildlife conservation. Policies that favor corporate control of Missouri land and agricultural practices, and increases in factory farm-based pollution, are generally detrimental to wildlife and their habitats. The Missouri Rural Crisis Center, an organization that advocates for policies benefitting small family farms and community-based control of local land decisions, provides summaries regarding current Missouri legislation ([morural.org](http://morural.org)). Currently in the Missouri legislature are two bills of concern.

*House Bill 1614 (sponsored by Bill Reiboldt, District 160, co-sponsored by Warren Love, District 125) and Senate Bill 627 (sponsored by Brian Munzlinger, District 18): prohibit any political subdivision from enacting any regulation relating to the use of seed or fertilizers.* Under this rule, any town, county or other entity cannot enact an ordinance specifying the distance from the nearest property line that an agricultural operation can spread its waste or fertilizer. For instance, my home town of Marshall would be unable to enact its own rule specifying that operators cannot spread hog effluent any closer than 100 feet from my home or a local waterway (the current state law is 50 feet). These bills support the activities of corporate livestock operations and deny local communities and municipalities the ability to make their own decisions on the matter. HB 1614 passed the Missouri House (109 to 39) on March 13<sup>th</sup> and passed the Senate Agriculture, Food Production and Outdoor Resources Committee on April 9<sup>th</sup>. SB 627 passed the Senate on March 8<sup>th</sup> and is currently in the Senate Committee on Agriculture Policy.



# Upcoming Events



July 9th in Sedalia. Nature Unleashed workshop for teachers. Join MRBO and the MDC for certification in the MDC's Discover Nature Schools curriculum for elementary schools.

May 12th in Arrow Rock - the Arrow Rock Garden Show, 10 a.m. - 4 p.m. MRBO will be giving out free native plant seedlings as part of the Garden Show again this year, thanks to the Missouri Prairie Foundation. We will also host a screening of *The Guardians* at the Arrow Rock Visitors Center at 1 p.m.. This film is about the wintering grounds of the Monarch butterfly and local people's efforts to protect it.

May 29th - July 26th in Arrow Rock - the Young Explorers' Club, Tuesday-Thursday 8:30-11:30 a.m. The second summer of MRBO's day camp for 7-12 year olds! Kids learn about all kinds of outdoor topics, from birds (of course!) to aquatic ecology to primitive skills.

August 11th in Arrow Rock - Flying WILD certification workshop at the MRBO office. Come for training and certification in the Council of Environmental Education's Flying WILD program! This 5-hour workshop is open to teachers and non-formal educators and interpreters.

July 8th - 12th in New Haven. Missouri River Relief's MO River Academy - a five-day learning experience for 8th - 12th graders. MRBO will provide a banding demonstration and birding ID skills workshop for the students.

June 2nd and 3rd at Pleasant Run Creek Prairie. Join the MRBO staff and other biologists for the Missouri Prairie Foundation's 9th annual Bio-Blitz! This family-oriented event is free and open to the public.

Check our webpage at [mrbo.org](http://mrbo.org) for more details and updates as new events are added!

## New & Renewing Members

Donna & John Huston, Marshall MO

Bob & Pat Perry, Rolla MO

Frederick Thompson, Kansas City MO

Betsy Garrett, Columbia MO

Kathy Borgman, Arrow Rock MO

Tom Tucker and Tina Yochum-Magaz, Kansas City MO

Mark Belwood, Marshall MO

Brad & Suzanne Wright, Columbia MO

Valerie Vreeland & Charlie Yazak, Wellsville NY

Lori Kleekamp, Martasville MO



Outstanding contributions to MRBO's Education Program

River Bluffs Audubon Society, Jefferson City MO  
Burroughs Audubon Society of Greater Kansas City  
Mrs. Pat Jones, Williamsburg MO