

Volume 12 No. 2, Summer 2022

The Rectrix

A Newsletter of the Missouri River



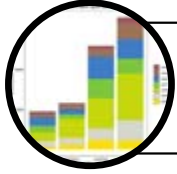
rectrix lek-triks| noun. (pl. -trices) any of the larger feathers in a bird's tail, used for steering in flight.

Our Mission



Conservation

To contribute to the conservation of Missouri's migratory and resident birds through scientific research, education, and conservation policy advocacy.



Science

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.



Education & Outreach

To provide opportunities for people of all ages to learn about species and their habitats.



Advocacy

To advocate for sound, science-based conservation policies that benefit birds, other wildlife and environmental quality.

In this Issue of the *Rectrix*

Science

MRBO Science Happenings.	4
Guest Article - Federal Grant-funded Motus Tagging Return	
Amazing Detections in Missouri.	6
Grassland and Prairie Surveys.	8

Education

Education Extravaganzas	10
Kiddos Immersed in the Outdoors	11
Newest Nature School Buzz.	12

Advocacy

Saving the Birds in KC!	13
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In the Community

BirdHouse Opening and Final Farewells.	14
Thanks to MRBO's Supporters.	15



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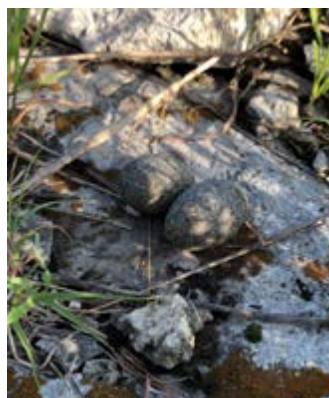
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Cover photo: Common Nighthawk Hatchlings by Matt Longabaugh

Back cover photo: Common Nighthawk Nest by Erik Ost

Greetings from the MRBO Directors



Dear MRBO supporters,

A great deal has happened here at Missouri River Bird Observatory since we last gave you an organizational update in the December 2021 newsletter! (The April 2022 version of The Rectrix, as always, was entirely devoted to coverage of the annual photo contest).

The biggest news is that we are pleased to welcome new employees to three very important positions with MRBO. If you didn't catch them on the MRBO e-newsletter last month, you will meet Operations Assistant Marlee Dodson, Education Coordinator Jen Dummer, and Nature School Coordinator Jordan Lane on the following page. They bring an exciting combination of experience, skill, and dedication to conservation to their roles. The Operations Assistant and Nature School Coordinator positions are new ones for MRBO, while Jen will be replacing our current Education Coordinator, Paige Witek. We are very sad to say goodbye to both Paige and MRBO's Field Project Leader, Erik Ost. Erik recently completed a GIS degree and is now working for a highly respected ecological contracting firm. We will miss Paige and Erik very much but were lucky to have them for almost five years – especially since both started in seasonal positions!

Another recent event was the opening of "the BirdHouse," MRBO's visitor center on Main Street in Arrow Rock. In April, we had a grand opening event for members of the Arrow Rock community, and then a ribbon-cutting ceremony with the Chamber of Commerce. The facility includes a library, sitting room overlooking the backyard feeders, a small gift shop, and an educational area for kids called the Knowledge Nest. The BirdHouse is now open Friday, Saturday, and Sunday from 11 a.m. to 2:30 p.m.

In late February, we had the opportunity to travel to Costa Rica, where Dana assisted with the exciting Motus tracking project discussed on page 6. For a week, a small team of researchers from the Missouri Department of Conservation and the Central American conservation nonprofit SELVA target-trapped Golden-winged Warblers and Wood Thrushes at two sites in Costa Rica's central valley. The goal was to outfit birds with Motus tags to track their migratory journeys. Both species are experiencing population declines and determining important migration stop-over locations is key to continued conservation efforts.

MRBO supporters will be familiar with our field work here in Missouri and in eastern Kansas. Since 2012, each year we have systematically surveyed tens of thousands of acres of wetland and prairie. MRBO now has a dataset that includes around 200,000 bird detections in each habitat type. These data allow us to examine the effects of habitat management and provide recommendations to landowners interested in maintaining or increasing their avian diversity and abundance. Since 2015 we have also been running a nest-monitoring project on two prairies in southwest Missouri. Surveys are typically conducted from April to June; nest-monitoring takes place from early May to the end of July. This year, with the exception of few sites, MRBO is "taking a year off" of field work and conducting intensive data analyses. In addition to providing valuable information about bird populations and response to management, these analyses will help us improve the field projects which will resume in 2023.



Finally, the MRBO staff have been engaging in more education and outreach events since early Spring. We had a successful Birds & Bees Festival in early May followed by many programs for elementary and middle school students in Arrow Rock, have hosted educational booths and several festivals around the state, and are currently in the midst of the Young Explorers Camp, our summer day camp program. There have also been a number of Missouri Young Birders Club meetings and events. All of this has been possible thanks to all of the current and former MRBO staff mentioned above, along with the support of you, the MRBO supporters.



We hope that everyone enjoyed Missouri's nice, long, birdy spring and that the summer will bring us many new fledglings!

Warm regards,
Dana & Ethan



A warm welcome to new staff members!



Marlee Dodson - Operations Assistant

Marlee Dodson is originally from north-central Illinois where she grew up until she moved to Missouri for college. Her love for the outdoors began as a young girl bird watching, foraging for wild mushrooms, hunting, fishing, and camping with her dad. Marlee received her B.S. in Science from the Missouri University of Science and Technology in 2016.

She spent the last 7 years working with endangered pallid sturgeon for the United States Geological Survey. Marlee started as MRBO's Operations Assistant in March of 2022. She enjoys all things outdoors and conservation and has a small farm with her husband just north of Sedalia, Missouri.

As Operations Assistant, Marlee will help coordinate every aspect of MRBO's work!

Jen Dummer - Born in Salt Lake City, Utah, Jen has always had an interest in the natural world. Being raised with dogs, parrots and riding horses only furthered her interest in a career with animals, but which ones in particular? After reading a book by Konrad Lorenz, considered to be the father of imprinting theory, and discovering how incredibly different birds must be in order to fly, Jen found her path. While working towards her degree in zoology at Weber State University in Ogden, Utah, Jen was fortunate to volunteer with the Wildlife Rehabilitation Center of Northern Utah. It was there that she found her passion for education. Her volunteerism quickly turned into a paid position in which she was able to reach thousands of children and adults during formal and informal education shows, speak out against adding a Utah crow hunt, and most importantly work to reconnect people to nature. In 2017 she graduated with a bachelors in zoology and a minor in environmental sociology. Now in 2022 Jen is truly honored to become part of the Missouri River Bird Observatory team as the new Education Coordinator.



Jen Dummer - Education Coordinator



Jordan Lane holds a Bachelor's degree in Biology from Central Methodist University. While he was there he dipped his toes in every animal science class he could find, including the class that started his passion for birding - ornithology. Before that he was a motivated young Marine working at MCAS Miramar at VMFAT-101 as an Aviation Ordnanceman. Today he is finishing up his one-year contract with Marshall Public Schools as the Industrial Arts teacher, and preparing himself to be the Nature School Coordinator for MRBO. Every time he talks to people about this new opportunity a cheeky grin covers his face because this is his dream job, helping people learn about nature in nature!





Science

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

MRBO Science Happenings

Ethan Duke, MRBO Director/Founder/IT Department

In 2022, we dialed back our survey work to focus on analysis of our decade of grassland and wetland bird data. Much of our survey work has been accomplished for long-term monitoring projects in our most imperiled habitats. We hope to continue this work with a renewed focus on meeting the most pressing information needs of stakeholders while harnessing the full potential of our unique data.

Wetlands

This spring we provided a report for the Conservation Effects Assessment Project (CEAP) to the United States Department of Agriculture(USDA)/Natural Resources Conservation Service(NRCS). Just this month we presented an overview of that report to NRCS staff. We developed a workflow for this project which connected our bird, water level, and coarse habitat data to analyze bird use of available water level depths and habitat on private wetlands we've surveyed in Missouri. Erik Ost (GIS/Mapping) and Jelisa Oliveras (Analysis) did the bulk of the heavy lifting on this project and Marlee Dodson helped with the report. It's been an exciting project as we have just begun to harness the potential of our massive and unique spatially explicit data.

We demonstrated the great potential of this spatially explicit bird data collection system in concert with wetland design data provided by Wetland Emphasis Team (WET) biologists and look forward to further analysis of habitat using remote sensing data.



CEAP Report

Grasslands

We've used our grassland bird data to generate bird-friendliness scores for all grassland properties surveyed for several years. Our monitoring projects have provided density estimates paired with conservation value scores that have been reliable and robust metrics for keeping a finger on the pulse of grassland birds in Missouri for a decade. Like the wetlands data, we hope to harness this data for further analysis incorporating other geographic datasets. We will also reconstruct our study design to focus on both long-term monitoring and data that helps partners reach their specific goals in their priority geographies.

The Upshot

In general, MRBO has proven how we can harness our spatial bird data to provide insights beyond those possible with conventionally-collected data. Perhaps just as importantly, we've also developed workflows which greatly increase efficiency when it comes to analysis. We publish our georeferenced bird data to the cloud as feature services where it can be consumed by opensource software capable of running the latest statistical analysis. These singular data services can be joined with remote data or other georeferenced data for unlimited, iterative analysis processes and with greater ease than conventional data workflows.

Currently, we are reorganizing all our cloud-based data sources for more simplified accessibility for our partners as well as more useful outputs for the public.



Guest Article - Federal Grant-funded Motus Tagging Returns Amazing Detections in Missouri

Sarah Kendrick, U.S. Fish and Wildlife Service Migratory Bird Biologist

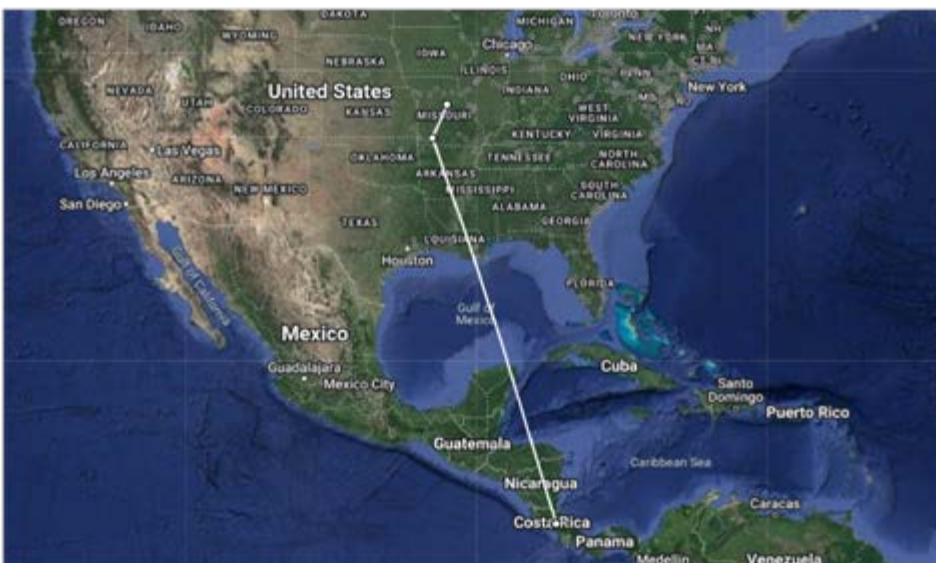
In my previous role as state ornithologist with the Missouri Department of Conservation (MDC), one of the grants that I led to increase Motus stations in the state, Midwest region, and the Neotropics was a U.S. Fish and Wildlife Service Competitive State Wildlife Grant with nine other partners – state agencies, universities (many of whom are MMN members), and organizations like SELVA, a non-profit in Colombia dedicated to bird conservation efforts and learning more about bird migration. This grant is placing 60 new Motus stations across eight Midwestern states and Mexico, Costa Rica, and Colombia and supports three Motus-tagging research projects.

One of these research projects was a partnership with MDC and SELVA to deploy 50 tags – 25 Motus tags on Golden-winged Warbler and 25 on Wood Thrush on the wintering grounds pre-migration. To execute this grant objective, I traveled to Costa Rica in early March to deploy as many tags as we could in a week with SELVA's Nick Bayly and Costa Rican partner Paz Irola and Ernesto Carman. On the trip in a week, we tagged five Wood Thrush and four Golden-winged Warblers at various sites.



The Columbia Motus Station at Moss-Waters Memorial Wildlife Area on Old Hwy 63 south of Stadium Blvd.

Bear with me for some continued background. In late 2021, a Motus station was purchased by Columbia Audubon Society in honor of Brad Jacobs and placed in Columbia in partnership with the Missouri Department of Conservation. Brad Jacobs was the previous ornithologist at MDC and a major advocate for studying and investing in full life-cycle conservation, especially by state agencies via the Association of Fish and Wildlife Agencies' Southern Wings Program; Brad passed away in May 2020. This Columbia Motus station was placed on December 30 (a news story about the effort was [published by the Columbia Missourian](#)) and awaited its first detection this spring.



Pathway of Golden-winged Warbler detection on the Columbia Motus Station. Tagged on Mar. 5 in Costa Rica, detected on May 1 at Hurley station and May 8 at Columbia station.

The first detection came on May 8 – and it was a male Golden-winged Warbler that our group tagged on March 5 in Ernesto Carman's bird-friendly coffee farm, Finca Cristina.





This male Golden-winged Warbler was tagged in Costa Rica by SELVA and MDC and later detected on two Missouri Motus stations, including Columbia on May 8. Motus tag on the bird in right photo.

This bird has been detected **twice** in Missouri – first on May 1 on the Hurley station in southwest Missouri and the May 8 detection at Columbia. Not only are these detections mind-blowingly coincidental, but they also give us data on a seven-day stop-over on spring migration for this bird. The bird stopped in Missouri, possibly in Ozark forest, to refuel and regain energy along its journey north. Our strategy for tagging these birds pre-migration is to increase the probability of later detections as they move north toward our more numerous receivers on spring migration since there are more Motus stations in the U.S. and Canada than down

on the wintering grounds. Another goal of the southern Motus array is to capture potential movements of birds through our contiguous blocks of Ozark forest that we suspect are serving as stop-over habitat for forest birds – these detections (and others) on our Motus stations are helping us to validate these assumptions with data.

A second male Golden-winged Warbler that partners Paz Irola and Ernesto Carman tagged after our team left Costa Rica has been detected at another Motus station in Missouri at the MDC Southwest Regional Office in Springfield on April 29; that bird was tagged March 29 in Costa Rica.

A third male that our group caught and processed on March 5 was also detected in Iowa on May 12 *on a new station funded by the C-SWG and placed by partner Anna Buckardt Thomas!*

Last but not least, two *female* Golden-winged Warblers that Paz and Ernesto tagged in late February and March were detected at stations in northern and southern Missouri!

These detections provide further evidence that the more Motus stations you have across the landscape in strategic arrays, the more we can learn about migration ecology and the more tags will be deployed across that network **together**.



From left: Maria de la Paz of SELVA; Kristen Heath-Acre of the University of Missouri; Sarah Kendrick now of the US Fish & Wildlife Service; Dana Ripper of the Missouri River Bird Observatory.



Grassland and Prairie Surveys

Dana Ripper, MRBO Director/Founder

As mentioned in the letter from the Directors, MRBO is doing very little field work this year and focusing on the analysis of our large existing datasets. However, there are a few partner organizations for which we are pleased to conduct surveys. These are the Bobolink Foundation and associated 3CP Partnership in the Flint Hills of Kansas, the Missouri Prairie Foundation (MPF), and the Audubon Conservation Ranching program in cooperation with Powell Gardens. All of the properties are unique, important examples of native prairie managed by conservation-minded stewards.

The surveys follow our robust protocol of line transects systematically placed on properties for comprehensive coverage. Observers walk the transects at a pace of about one mile per hour and record every bird seen or heard directly into ESRI's Field Maps app. Using this method results in spatially-explicit (i.e. mapped) bird detections throughout each property. 2022 is the first year of surveys on the Powell Gardens properties and on MPF's Thoh-dah Prairie. The sites in Kansas and MPF's Sheldon Cook Memorial Meadow have been surveyed in previous years. The repetition of surveys across several years allows us to examine trends in bird populations and individual species' responses to ongoing management.

Our thanks to former MRBOers Matt Longabaugh and Alex Marine who returned to help with surveys this year!



A cloudy day in the Kansas Flint Hills. May 23rd, 2022



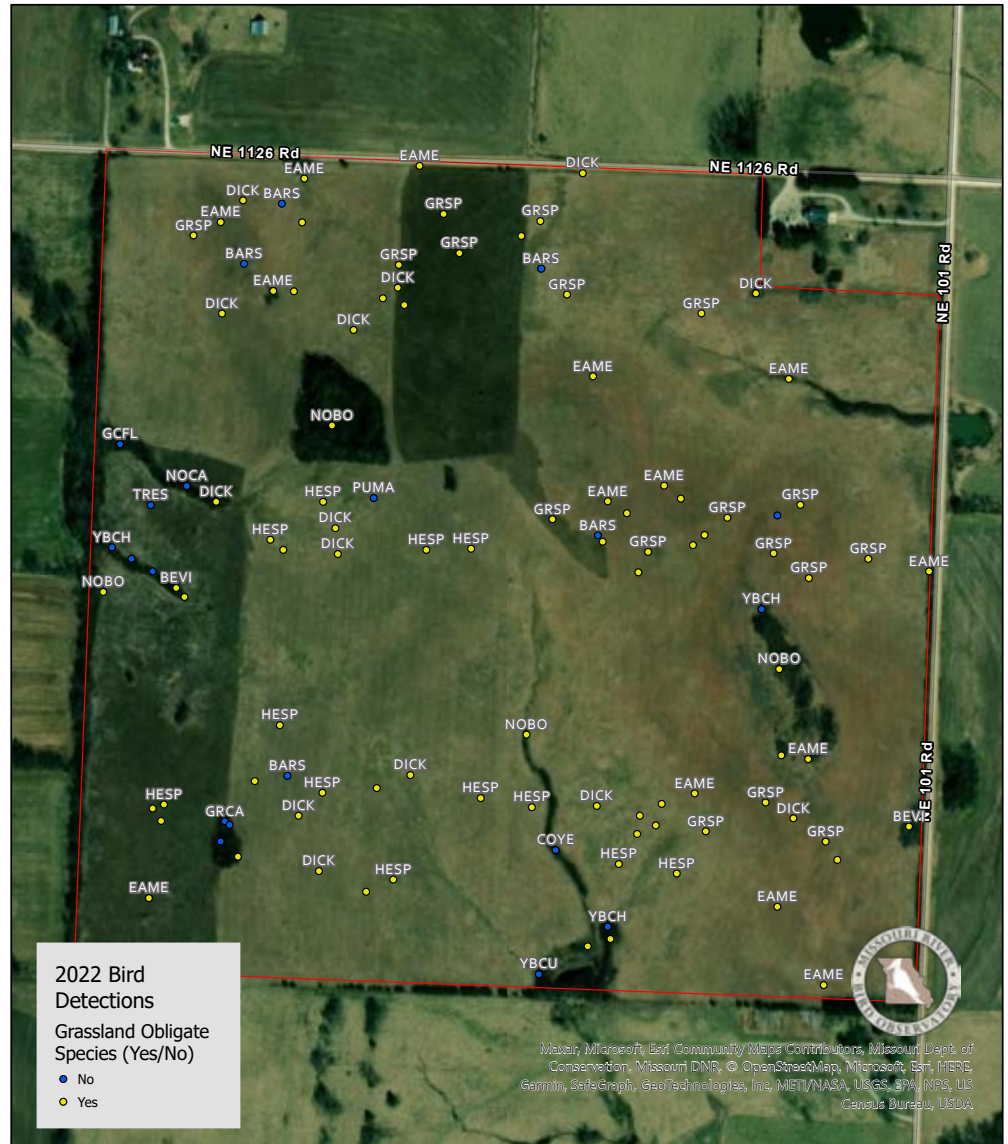
Henslow's Sparrow by Matt Longabaugh



Dickcissel by Erik Ost



Grasshopper Sparrow by Erik Ost

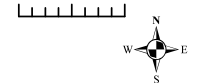


Grassland Bird Survey Results 2022

Property: Thon-dah Prairie



0 0.007 0.13 Kilometers



Above: A bird detection map showing the locations of every individual seen and heard during a survey of MPF's Thoh-dah Prairie on June 7th, 2022. One can see how Grasshopper Sparrows (GRSP) tend to cluster in some areas, while Henslow's Sparrow (HESP) occur in others. This reflects differences in microhabitat; specifically, Grasshopper Sparrow prefers recently burned areas with patches of bare ground, while Henslow's Sparrow prefers slightly thicker vegetation and some ground litter (i.e. last year's vegetation). The photo to the right is illustrative of the visible difference between burned and unburned areas of Thoh-dah.





Education

To contribute to conservation by providing opportunities for Missourians of all ages to spend more time outdoors and to learn about species and habitat conservation.

Education Extravaganzas

Paige Witek, MRBO Education Coordinator

MRBO Visits Fayette Falcon Club

On Monday, May 2nd, most of our staff traveled to Daly Elementary School to put on a field day of sorts for their Monday program, the Fayette Falcon Club. The field day quickly turned to a gym day as the rain poured down, but it was still a great day! The kids got to explore what it was like to be a bird parent by taking part in a relay race. They explored the different bird sounds, including learning about what the differences are between bird songs and calls. At their last station, they got to learn more about adaptation by learning about how birds' beaks are adapted to the food they eat. At the end of the program, everyone came together to practice using binoculars by trying to identify pictures of birds from far away! Each student went home with a poster about Missouri's backyard birds. It was a great event of learning and laughs. Thanks for a great program Fayette Falcon Club!



Arrow Rock Natural and Cultural History Programs

This spring Arrow Rock School Programs returned! In partnership with the Friends of Arrow Rock and the Arrow Rock State Historic Site, our staff hosted a total of nine Natural History Hikes to teach visiting schools about how our cultural history and the natural resources in an area are connected. The students learn about what an ecosystem is, what ecosystems are in Arrow Rock, the natural resources those ecosystems hold, and how those ecosystems have changed over time. The students get to explore the Big Spring and learn why Arrow Rock is called Arrow Rock!

Birds & Bees Festiva

Our annual Birds and Bees Festival in conjunction with the Arrow Rock Garden Market and Vintage Bazaar was back in full swing this year! We estimated a total of over 500 visitors. More importantly, we got reports of insightful, informative conversations between guests and booth hosts. Many participants were able to see a variety of native birds on our bird walks. Both kids and adults got to explore insects during guided insect explorations. We had good food, good conversations, and lots learning. We would like to say thank you to all who helped make this festival happen.



Wah'Kon-Tah Prairie Days

This May you would have found MRBO staff hosting a booth during Prairie Days at Wah'Kon-Tah Prairie in Cedar and St. Clair County! This is a two-day event, with schools visiting on Friday and the public participating on Saturday. On Friday, we taught the visiting students about the birds that call the prairie home. They were taught about the ecology and identification of the Northern Bobwhite, Henslow's Sparrow, Eastern Meadowlark, Dickcissel, and Loggerhead Shrike. We, of course, talked about prairie birds and their nests at our booth, but we also gave a presentation on bird conservation in the morning and the afternoon. It was a wonderful day on the prairie for fun and learning.

Academy Montessori Internationale Students Visit Arrow Rock

Also this May, the Missouri River Bird Observatory staff was pleased to welcome students from the Academy Montessori Internationale in Kansas City to Arrow Rock for a day of bird knowledge and fun. The students first arrived at the historic Lawless House where they witnessed a bird banding demonstration and asked very insightful questions. We banded a Brown-headed Cowbird and a Downy Woodpecker! After the banding demonstration, the students opened their ears to discover the bird sounds of Arrow Rock. They then learned how to use binoculars to look for birds and MRBO staff took them on a birding walk. Everyone got great looks at the pair of Mississippi Kites that have resided in town each breeding season. We finished up the day with a round of an activity called, "The Great Migration Challenge". For the activity the students pretend to be migratory birds and move through stations encountering the many obstacles birds experience during long-distance migration. Thank you to those at the Academy that helped make this trip possible. We hope to see you again next year!



MRBO Summer Camp Offers Immersion in Nature

Jen Dummer, MRBO Education Coordinator

It's that time of year again! Time to highlight our wonderful Young Explores Camp!!

This year each of our explores adopted a tree for the week. With names like: "Jeff", "Coconut" and "Karen"; our explorers spent several days getting to know their trees through games, sketches and their senses. They closed the week with a quiet moment gazing up through the canopies to the blue sky beyond. As camp came to an end, they each hugged their tree or said a heartfelt goodbye having formed a unique relationship to "Jerry" or "Bruce" through deep understanding and respect for all that trees do for us in our continued survival as humans.



We explored the watery world beneath The Big Spring where our young campers used tweezers, magnifying glasses, nets and collection jars to find and separate underwater crawdads, water boatman, water striders, small fish and even damselfly larvae into ice cube trays while learning about how streams are sampled for pollution and cleanliness.

It wouldn't be a Young Explorers experience without fishing at Soldiers Pond! Everyone spread out along the quiet and still morning shore; some struggling with casting the perfect line for only a short minute before giant smiles and laughter indicated success. Worms were plentiful and the hands of our fishing guide kept busy; willing to divide the squiggly worms into the perfect fish morsels and wrap them around the hook to the delight of the children. Although there was no luck in catching "dinner" that morning, our brave explorers fought through predators, fisherman and fish ladders while learning how difficult migration can be for the Atlantic Salmon, instilling appreciation and compassion for hardships overcome when attempting to get back to the spawning grounds of their birth.

What is beneath the forest floor acting as a giant information system not unlike the internet? Mycelium. Mycelium are small white fibers

that weave their way under the forest floor surrounding the roots of trees and other flora, decomposing organic matter to be recycled again and again. They enable trees to send nutrients to suffering trees and send warnings to surrounding trees if disease or pests are becoming uncontrollable. A new vocabulary word for our explorers, they quickly discovered that these fine fibers produced mushrooms. While hunting for mushrooms along the River Trail they stared intently at these sometimes alien looking fungi while reading over dichotomous keys to classify each. One of our most popular exploration activities, the children asked for the classification keys to be sent to parents so they could use them at home.

None of this would be possible without the generous support from grants and donations. Thank you for supporting the Missouri River Bird Observatory in creating these memorable and educational experiences for our youth.



To all of those who donated their precious time to make a difference in the lives of our young explorers and to create a truly memorable experience for them: we sincerely appreciate all your hard work, your genuine passion and willingness to reach out and touch the minds of our future.

To all our young explorers this year: Thank you so much for embarking on our weeklong nature adventure. We've learned so much together and found compassion, knowledge and connections to the world around us. It's a world without electronics, games and housebound technology and instead a world filled with birdsong, giant crawdads and colorful lichen. We wondered together, we discovered together, and we put our new knowledge to the test. It was a wonderful journey. We hope that you will join us again next year for a new experience.



Nature School Buzz

Jordan Lane, MRBO Nature School Coordinator

The wheels of creation for the Missouri River Bird Observatory (MRBO) Nature School are starting to roll! Our end goal is to provide schools, teachers, and parents new ways for students to learn about Missouri's flora and fauna while aligning with the Missouri Learning Standards. Currently I am working with the MRBO staff and our Board of Directors Education Committee to model the Arrow Rock Nature School after the Boone County Nature School. The first step is to develop a survey for our local schools to better gauge our communities' needs. With this information, we will be able to determine the number of schools and programs we can tackle in order to start developing this wonderful program.



One of the many exciting programs we hope to include at our Nature School (located at the Lawless House property in Arrow Rock) is a service-learning project involving sustainable farming. Students and adults would use practical applications in botany and agriculture to care for native edible plants and locally sourced bees on a weekly basis. One idea for this program would be to use first person interpretation. Imagine Mr. and Mrs. Lawless showing men, women, and children the joys and hardships at the Lawless homestead. This educational experience would include historical learning opportunities as well as science-based learning objectives, such as ecology and how native communities can live with small farm-based homesteads.

The three graphics on this page were created by one of MRBO's very treasured volunteers, Kim Borgman. They are representative of the design and functionality that will be incorporated into the pavilion so that it is reflective of the historic period and current ambiance of the Lawless House.





Advocacy

To contribute to conservation by advocating for sound, science-based conservation policy that benefits birds, other wildlife and environmental quality.

Saving the Birds in KC!

Dana Ripper, MRBO Director/Founder



A Common Yellowthroat that struck the Link shown to the right.

BirdSafe Kansas City Program Update

MRBO staff and volunteers just finished the spring 2022 season of BirdSafeKC surveys. This was the seventh season for the project; surveys began in spring 2019 and have continued each spring and fall. From early April to mid-June 2022, BirdSafe volunteers conducted 133 surveys, resulting in the documentation of 142 carcasses due to window collisions (an average of 1.07 carcasses/survey over the course of the season). This rate has varied considerably across spring survey seasons. Previous years' BirdSafeKC results have been 0.42 carcasses/survey in 2019; 0.36 carcasses/survey in 2020; 1.3 carcasses/survey in 2021.

In April and May, the project made great strides in advocating solutions to bird collisions via discussions with representatives of the Hallmark Corporation. Two particular locations within Hallmark's complex at Crown Center experience very high rates of bird mortality, and

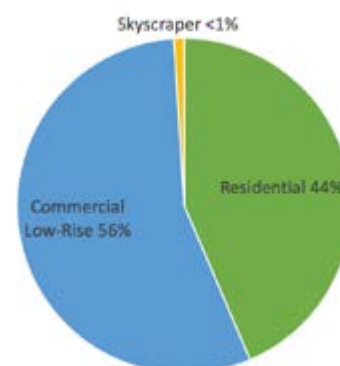
BirdSafeKC coordinators have been working to raise the company's awareness for some time. This season, we connected several times with Hallmark's EARTH team, a volunteer collaborative across the company in which interested employees take part in sustainability actions. We toured the high-strike sites with EARTH team members, and are working with Hallmark to develop a mitigation strategy! Given the background and product focus of Hallmark, we anticipate that the window treatments will be artistic, attractive, and creative, adding to the aesthetics of Crown Center.



One of the Links (an elevated pedestrian walkway) at Crown Center. The portion of the Link shown here has one of the highest collision rates in the BirdSafeKC sample.

Ending Bird Collisions on Residential Windows

While BirdSafeKC is both a scientific data collection and advocacy program that focuses on low-rise commercial buildings in Kansas City, MRBO also advocates for all residents of single- and multi-family homes and apartments to take action on bird collisions. Due to the high number of residences across the country, a significant percentage of bird collisions occur on homes (please see graphs, right). There are many easy, affordable ways to stop bird collisions with your home windows. Please see BirdSafeKC's Residential Solutions information at <https://www.birdsafekc.org/residential-solutions/>. You can also check out our daytime and nighttime solutions factsheets at: <https://www.birdsafekc.org/resources/>.



Data from Loss et al. (2014)
The Condor 116(1): 8-23.

Our thanks to Spring '22 volunteers

DeAnn Gregory
Brett Creason
Hilary Noonan
Gail Goeke
Kathleen Pine
Briana Anderson
Katie Boord
Karen Townsend
Steve Rinne
Nicole LaPlante
Heartland Conservation
Alliance Nature Action
Crew



A Big Farewell and New Beginnings



We bid a fond farewell to Education Coordinator Paige Witek and Field Project Leader Erik Ost. Erik started with MRBO as a wetlands technician in 2016, returned to work on the grasslands project in 2017, and began coordinating all of our field projects as leader in 2018. Paige began as a seasonal educator in 2017, and became MRBO's first full-time Education Coordinator in early 2018. We so appreciate their years of service. Paige and Erik had critical roles in building the organization during formative years and developed many important programs such as the Missouri Young Birders Club, the grassland bird nest-monitoring project, the Young Explorers Camp, and the Conservation Effects Assessment Project.

(Directors' Note:
WE WILL MISS YOU!! -Dana & Ethan)



**MRBO's visitor
center is now OPEN!**

**MRBO's BirdHouse had
an official ribbon-cutting
ceremony on April 14th!**

**Come visit us soon,
we are open Friday-
Sunday
11-2:30.**





Thank you for your Support

The following individuals and organizations have provided support since the publication of our Winter 2021 newsletter. We give thanks to them and to all who have supported the Missouri River Bird Observatory! YOU make our work possible.

Ann Earley & Bob Siemer
Anne Barker
Arline Borchers
Bill & Jennifer True
Bill Moran
Bob & Pat Perry
Buckner Foundation
Burroughs Audubon Society of Greater KC
Caroline Kenner
Cathie Forbes
Chanteil Sniff
Chet Breitwiser & Rodney Starns
Chris Moors
Christie Collins
Dana Hines
Dave & Janice Erickson
David & Jennifer Ulrich
David Foote
David Galat
David Risberg Memorial Grant
Donna & John Huston
Donnie & Kim Nichols
Dylan Enderle
Edward Milbank
Elizabeth Fuemmeler
Ellen Frank
Ernest & Judy Smith
Gene Gardner & Liz Cook
Greater Ozarks Audubon Society
Hilary Peck
Jan Steele

Jeff Cantrell
Jennifer Dyer
John Canaday
Julie Fisher
Kade Bruce
Kalen Brady
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Linda Garrison
Lisa Richter
Lori Amaral
Lori Wolter
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Murr Swain
Myra & Truman Christopher
Nancy Blossom
Ozark Gateway Audubon Society
Pat & Charlie Cooper

Paul & Kim Ratcliffe
Rad Widmer
Randy Haas
Randy Schiller
Regina & Steve Garr
River Bluffs Audubon Society
Robert Hansen
Ryan Enderle
Sandy & Marty Selby
Sarah Beier Hobbs
Sarah Singh
Scott Gibbs
Shelby Gregory
Steve Johnson
Steve Schnarr
Steven Byers
Sue & Dan Kelly
Sue Yates
Susan Eidson
Susan Tillman
Suzanne & Brad Wright
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