

# 2023 Education Program Report

### **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.

### **MRBO Staff & Board of Directors**

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Ethan Duke Director/Founder

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Laura Semken Education Coordinator

Tessa Poolman Kansas City Community Conservation Educator



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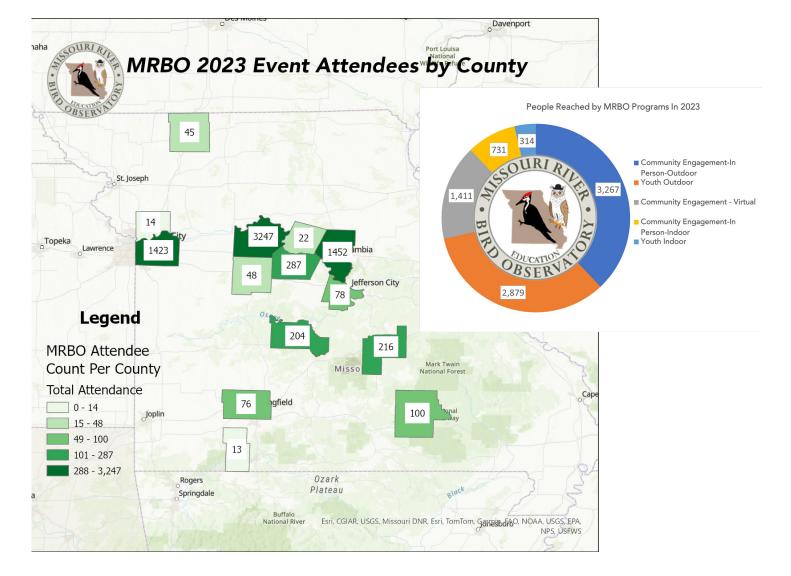
### **MRBO's Core Values**

- Robust data and scientific integrity
- Time-and-cost-efficiency and use of technological innovations
- Fostering the formation of partnerships
- Embracing and encouraging equity, diversity and inclusion
- Empowering and providing opportunities for young people



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## **Meet the MRBO Education Staff**

### **Education Coordinator - Laura Semken**

Laura Semken joined the MRBO team in late February 2023. She is developing the Arrow Rock Nature School and coordinating a wide variety of bird adventures that lead to stewardship action. In her short time at MRBO, she has delivered nature experiences to more than 1,000 Missouri students.

Laura was raised in Kansas City, Lee's Summit, and on a farm on Little Blackwater Creek. As a kid she could be found in a tree, in the creek, smelling wildflowers or on her bike. Not much has changed.

Spending time in the woods, prairies and water led to an art degree from the University of Kansas and then toward a passion to share her love of nature with children. In 2001 she began leading bird hikes and mushroom forays at a wildlife camp in Iowa. In 2011 she went back to school and earned a Masters of Science in Environmental Education and Interpretation from the University of Wisconsin in Stevens Point. Since then she has

been the assistant director for the Iowa Raptor Project, an AmeriCorps VISTA volunteer for Missouri River Relief and a naturalist working for the Louisa County Conservation Board in Iowa.

### **KC Community Conservation Educator - Tessa Poolman**

Tessa Poolman joined the MRBO team in August of 2023, holding a joint position with The Missouri Department of Conservation. This collaborative role hopes to extend MRBO's and MDC's impact in the Kansas City Region. Tessa is working towards providing enriching programs and helping diverse populations foster deeper connections with the nature around them. In Tessa's short time with our team she has delivered environmental education to over 800 Missouri Residents.

Tessa is a true Kansas City native, growing up just north of the river. Since she was young, Tessa has felt a strong connection to nature and extreme compassion towards wildlife. She recently graduated from Pittsburg State University and now holds a Bachelor of Science in Biology with an Emphasis in Wildlife Ecology and Conservation. During her academic journey, Tessa's commitment to the field of conservation was evident through her active involvement as a member of the executive council of the Wildlife and Fisheries Society at Pitt State for two years. She gained practical experience working for the Kansas Department of Wildlife and

Parks at the Southeast Kansas Nature Center, enriching her and others understanding of local wildlife and nature.

With a deep love for her hometown of Kansas City, Tessa is excited to use her knowledge and expertise to connect people of all ages with nature through immersive experiences. Her passion for learning drives her to continuously seek out new information and insights about conservation and biology. Through her role with Missouri River Bird Observatory, Tessa hopes to inspire others to appreciate and preserve the nature around them.

### **Summer Education - Intern Chelsea Mosteller**

Our Education and Outreach Intern for the summer of 2023 was Chelsea Mosteller, a gifted artist with a passion for all things bird. Chelsea has loved nature and birds her whole life and shared this passion with campers and the organization during her internship. As an artist, she led the campers in the nature journaling activity, lending patient guidance to their watercolor exploration. Her enjoyment of mushrooms, creek-walking, and insects also delighted the campers.

The intern's main task is assisting the Camp Director with planning, organizing, preparing, and running the Young Explorers' Camp. This internship is vital in making camp a great experience for all. Thank you, Chelsea!









## **Adult and Family Education Programs**

In 2023, MRBO delivered 48 programs for adult audiences and families, ranging from guided bird walks and natural history hikes to virtual classes and in-person presentations. MRBO staff also took part in many partner events and festivals. Venues included the Kansas City Public Library, the Missouri Natural Resources Conference, the Missouri Waste Control Coalition, America's Grasslands Conference in Cheyenne, Wyoming, Daniel Boone and Missouri River Regional Libraries, the Chicago Ornithological Society, Stream Teams United, the National Association of Interpreters, and the Mizzou Botanic Garden.

Programs were conducted across the state of Missouri and beyond with a total reach of over 2,000 people. Presentations and discussions were delivered on topics such as native plant landscaping, prairie and wetland ecology, and introductory bird ID. We were also given many opportunities to speak to adult audiences about policy issues such as single-use plastics and food system concerns. In November, MRBO was a co-sponsor of two panel discussions entitled Clean Water Now, one held in Columbia and one in Springfield. In partnership with the Conservation Federation of Missouri and the Missouri Birding Society, we hosted the very popular Winter Learning Series (WLS), a weekly virtual event on Monday evenings. The WLS featured different guest speakers each week, all renowned experts in their fields. We received rave reviews about every presentation. Each WLS session had between 150 and 300 registrants, and attendance was over 130 Zoom participants each week.

MRBO also offered many volunteer opportunities to engage adults in our data collection, advocacy, and outreach work. For example,

in partnership with Missouri River Relief, we hosted two plastic brand audits involving 25 volunteers. Brand audit data are submitted to a global report, and volunteers were able to learn more about the origins of the plastic pollution problem.

MRBO's education programs are all science-based and

backed up by firsthand or peerreviewed research. We use our own bird monitoring data combined with environmental and management data from agencies such as the Missouri Department of Natural Resources, the Missouri Department of Conservation, the US Geological Survey, and the Environmental Protection Agency as the foundation of our adult programs. MRBO aims to inform Missourians about conservation issues and inspire them to take positive action on behalf of wildlife and humans.



MRBO's Winter Learning Series 2023, as well as many other webinar recordings, can be found on our channel at YouTube.com/@moriverbirdobs



Panelists Tim Gibbons (Missouri Rural Crisis Center), Chris Jones (author and hydrologist), Jess Piper (political organizer) and Curtis Millsap (local farmer) at the Clean Water Now event in Springfield. MRBO's Ethan Duke presents the results of a CAFO waste data mapping project.

Volunteers collect brand data on plastic trash removed from the Missouri River.



### **Arrow Rock Nature School**



Slater students take off into the prairie near Big Soldier Lake to discover what their net catches.

The Arrow Rock Nature School has fledged. Many years have been spent incubating the plan, growing the support, feeding the dream, and piloting the first year. The concept of an immersive educational experience in nature, where children can be curious, experience firsthand the processes of nature, and discover their connection with nature is a gift worth providing. Rooting children in curiosity helps them develop critical thinking skills which means they are given the skills of how to think instead of being told what to think. With curiosity alive, creativity can flourish. When it's okay to make mistakes, problems can be solved. With this foundation, children can investigate ecological connections and discover how everything in nature is connected; from prairies to forests and the water bodies in between. They are provided opportunities to learn by doing, to learn from each other, work together, play together and learn from the earth.

**Bunceton** 

What is the Arrow Rock Nature School? A place-based learning center for education in nature, located on the grounds of the Lawless Farmstead in Arrow Rock. The Lawless Farmstead is within walking distance of a prairie, a pond, trails through the forest and Arrow Rock. It is equipped to facilitate immersive experiences within these settings for up to 25 students, grades first through eighth. The Arrow Rock Nature School offers flexible programming that can be tailored to meet Missouri Science Standards for all grade school levels.

The Arrow Rock Nature School is made possible because of generous grants and donations from the Buckner Foundation, Patterson Family Foundation, the Bass Pro Outdoor Fund and individuals from the community. We would also like to thank our partner organizations the Missouri Department of Conservation, Missouri State Parks and the Friends of Arrow Rock.

In autumn 2023 the Arrow Rock Nature School hosted six schools over the course of eight days, providing field experiences to 191 students and



Glasgow students did not get pinched by this baby crawfish.

40 adults. Schools included Miami, Slater, Blackwater, Orearville, and Glasgow plus one homeschool group. The Nature School also traveled to Bunceton and Benton Elementary in Marshall, providing three outdoor programs to 114 students and 16 adults.

The Arrow Rock Nature School partners

students participated in tagging and releasing Monarchs.

Blackwater students counting and sorting macroinvertebrates at Big Soldier Lake.

with the Missouri Department of Conservation's Discover Nature School (DNS) program to provide a Field Experience destination. What this means is that if a classroom teacher takes the DNS training, they are provided with place-based science curricula materials that meet the Missouri Science Standards. Lessons are easy to follow and can be adapted to an indoor or outdoor classroom. The capstone lesson encourages teachers to schedule a field trip to an outdoor destination for their students. As a Discover Nature School, students are given reimbursement for bussing expenses for field trips to cultural and natural resources. These field trips are known as Field Experiences. The Arrow Rock Nature School qualifies as a Field Experience for the Discover Nature School program. Schools are encouraged to schedule three full days for their Field



Experience, but programming can be adapted for one full day of immersive outdoor education.

What does a Field Experience look like? The number one goal is to get kids excited about connecting with nature and discovering relationships in nature. First thing in the morning the students are given a brief introduction to the topic to help set the behavior and learning expectations for the day. Then, students get moving, exploring living food webs through immersive, hands-on activities, discovering new connections and building deeper understandings of ecological relationships. Exploration of prairies, ponds, woodlands and wetlands is guided by curricula from the Discover Nature School, Project WET, Project Learning Tree and Project WILD. Each day is organized in such a way as to meet the needs of the students and teachers



organized in such a way as to meet the needs of the students and teachers Blackwater students found a box turtle with time for nature journaling built into every session. Here are a few session while investigating life in a woodland.

**Netting at Big Soldier Pond:** Students will explore the food webs in the pond by catching macroinvertebrates with aquatic nets. Students will create a journal entry with colored pencils, drawing and writing about their observations and then share with other students.

**Exploring Big Spring:** Students will discover what is living in the creek fed by the spring. Students will explore life cycles of insects and be able to assess water quality based on what they find in the creek.

**Woodland Hike:** Students will hike a 2-mile loop focusing on producer, consumer and decomposer relationships in a forest ecosystem. Students will gather an object to observe.

**BEETLES Discovery Swap:** Working in pairs, students will draw their object, make observations and create questions based on their observations. Then pairs will be divided into "experts" and "explorers". Explorers will rotate through each "expert" station, learning about each object, and then they will switch.

**Project WILD Habitracks:** Working in pairs, students will complete a scavenger hunt using map reading skills to find what their animal needs to survive in the forest.

**Scavenger Hunt:** Students will explore the food webs in the prairie by catching insects with nets and completing a Bird Behavior Scavenger Hunt. Students will then have the opportunity to create a journal entry with colored

pencils, drawing and writing about their bird and insect observations and then sharing with other students.

descriptions:

**Prairie Ecology:** Students will discover what is under the prairie and then have a chance to make habitat connections between plants, insects and birds.

**Build a Nest:** Working in pairs, students will choose a bird, explore how it builds a nest and then try to build one on site using nesting materials.

Orearville students discover that macroinvertebrates call the mud at Big Soldier lake habitat.



Miami students found many surprises to excite their curiosity about nature.



Miami students were reminded of the frog life cycle when they caught tadpoles.







## Young Explorers Camp

The 7th Annual Young Explorers Camp was held for two week-long sessions in June 2023. Eleven campers enrolled in the first week and ten campers enrolled in the second week. Campers arrived each morning ready to explore with their backpacks filled with tools to help them engage, observe and reflect on their experiences. Each camper was given a backpack with a Young Explorers Camp t-shirt, water bottle, a journal, ruler, pencils and

colored pencils, a magnifying glass, a bug box, plus a small insect and aquatic net. These items served to facilitate the camper's curiosity to learn from the world, learn from each other and play together. Immersive, hands-on exploration allowed campers to immediately fill gaps in their understanding of how nature functions. Young Explorers Camp activities align with the Missouri Learning Standards and further reinforce concepts our campers are learning in school.



Camper's exploration kit.

We appreciate all the parents, grandparents and caregivers for their support of the Young Explorers Camp. Meeting the campers and getting to explore the world together is a gift.



I caught a fish: Suppertime!

Intense Study: Observing a very small critter.

Catching insects: Was this butterfly sipping cider or sweat?

A frog: Active exploration at its finest!



Prairie Roots: Campers made prairie root boxes and then surprised each other with this hidden root game.



Making Tracks: Campers journeyed to a muddy creek to make these treasures.



Building a nest: Campers enjoyed working together to build a nest.



### **Arrow Rock Natural History Programs**

Hosted 21 programs with 1,062 students plus 143 adults

Arrow Rock contains many unique natural resources, including a freshwater spring, upland and bottomland forests, and a reconstructed prairie. The small village and Arrow Rock State Historic Site have made this area a prime location for wildlife habitat as well as human cultural history. There are nearby salt springs that enabled people to preserve meat and there is chert, a type of stone used to create tools. All of these resources add up to a great program that can ignite a child's imagination and help them understand the value of properly managing our shared natural resources for both wildlife and humans.



Students discover how cold spring water can be!

The Natural Resource Programs are a

partnership between the Friends of Arrow Rock, the State Historic Site, and MRBO. In 2023 more than 1,000 students toured the natural features of our local area and discovered what has made Arrow Rock a place to thrive for both humans and animals for hundreds of years. Highlights of the daily adventure included exploring Big Spring and hearing the history of salt springs in the area. Students also hiked to the Missouri River Bluff to visit a site where chert was historically gathered to create stone tools like arrowheads and axes. By the end of the program, students understood that our shared natural resources are as important to our survival today as they were many years ago.



Exploring the Natural History of Arrow Rock: Students enjoying the beauty of nature in Arrow Rock.





## **Missouri Young Birders Club**

The mission of the Missouri Young Birders Club (MYBC) is to bring together young people to enjoy, experience, and conserve Missouri's birds and other wildlife. MYBC members connect from all over the state during our virtual monthly meetings, and also participate in regional conservation opportunities organized by the chapter leaders.

The goal of the club is to raise awareness of, appreciation for, and engage in actions that help birds. Providing opportunities for youth to enjoy, experience and conserve Missouri's birds and other wildlife can lead to an increase in connection with nature. This connection can in turn lead to more environmentally friendly

behaviors which can benefit both the community and the natural environment.

The club's growth thus far would not have been possible without the help of our adult chapter leaders as well as Missouri Department of Conservation staff, the Missouri State Park staff, and the Missouri Birding Society for taking the topics that the young birders have chosen and creating incredible presentations. Lastly, a huge shout out to all the parents, grandparents, and guardians who help our young birders attend their events. Thank you! You can always learn more about what the Missouri Young Birders Club is up to and how to get involved by visiting

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#### Membership

12 virtual MYBC meetings, 4 Field Trips Participants: 62 youth and 70 adults \* Note: the February MYBC meeting was combined with the Winter Learning Series so the youth/adult numbers were not separated. February Owls had 153 participants. This number is not included above. Current members: 61 New members 2023: 15 MYBC had 24 members in 2021. Since 2021, MYBC has gained 37 members. This is a 154% increase!

#### **Chapter News**

Greater St. Louis Chapter – Our St. Louis Regional Chapter was officially launched in 2020 with the help of members of the St. Louis Audubon Society. Since the beginning of 2023 we have gained seven new members from the greater St. Louis area bringing the chapter to 19 total members! Thank you to chapter leader Kelly Smith and adult mentor Jonah Eckels for guiding this chapter!

**Central Chapter** – Since the beginning of 2023 we have gained two new members to the Central Missouri Chapter bringing its total membership to 23 members. Thank you to chapter leader Veronica Mecko and adult mentors Lottie Bushman and Thomas Carpeuter for guiding this chapter!



MYBC member Levi Hartz presented Wetland Habitats (big and small) for Birds and Other Wildlife at the November MYBC monthly meeting.

**Kansas City Regional Chapter** – The Kansas City Regional Chapter has 11 members. Thank you to Sara Scheil and Tammy Maples for being the chapter leaders and to Evelyn Kirtley and Katie Boord for serving as adult mentors.

**NEW Springfield Chapter** – Since our last MYBC update, we have added a new chapter in Springfield! There are currently five members and we are looking for a new chapter leader to inspire the next generation of young birders.

**NEW Ozark Chapter** – Maramec Springs Park in St. James will be the club "home". This beautiful area will be an amazing place for the chapter to grow. Tausha AuBuchon and Kendra Swee are leading this new chapter. Check out their Facebook page to learn more at Missouri Young Birders Club of the Ozarks. Be sure to join the flock if you live in the Ozark Region!



#### Field Trips

Greater Kansas City Chapter George Owens Nature Park in Jackson County, MO Species Highlights: 13 species were observed including a Brown Creeper

Greater St. Louis Chapter

Wetland Hike at Marais Temp Clair CA in St. Charles, MO Species Highlights: 5 Northern Bobwhite, 2 Northern Harriers, 1 Merlin

#### **Central Missouri Chapter**

Twilight Timberdoodle Hike at Rocky Forks Lake CA in Hallsville, MO

Species Highlights: Heard a Louisiana Waterthrush singing on March 28th, observed the Timberdoodle "Peent" Dance.

#### **Greater Springfield Chapter**

Hummingbird Hike at Nathanael Greene Springfield Botanical Center in Springfield, MO Highlights: Discussed flower shapes and habitat needs for Hummingbirds.

#### **Involvement with Community Science**

MYBC shared 60 eBird lists in 2023 representing 36 counties in Missouri. Maybe next year we can fill every county with one eBird report. MYBC members have reported 262 bird species!

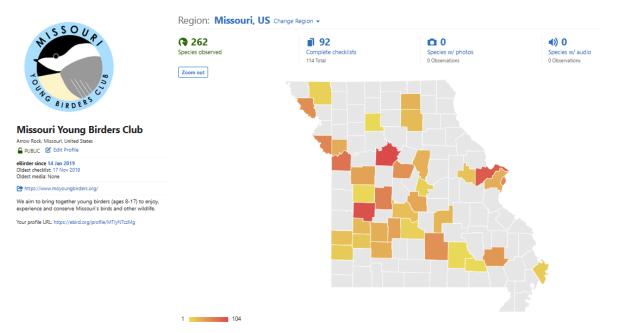
#### **Monthly Meetings**

#### **Topics:**

Winter Sparrows, Owls of the Midwest, Rails, Hummingbirds, Warblers, Swifts and Swallows, Goatsuckers, Herons and Egrets, Woodcocks, Northern Saw-whet Owls, Wetland Birds, plus Raptors and Other Predators.

#### **Guest Presenters:**

Veronica Mecko, Pete Monacell, Bill Eddleman, Michael O'Keefe, Ethan Duke, Levi Hartz, and Edge Wade.



MYBC community science eBird map for 2023. This map shows how many bird lists were submitted to eBird by MYBC. These lists help further scientists' understanding of bird abundance and diversity.



Young birders at Little Creve Coeur Ecological Area



## **Kansas City Community Education**

Number of Events: Programs: 4 Festivals: 3 Total number of people reached: 993

In August of 2023, MRBO welcomed new staff member Tessa Poolman. Serving as the Kansas City Community Conservation Educator, Tessa demonstrates dedication to assisting underserved communities in connecting with nature. Community Conservation, the integration of nature into the city landscape, has recently been emphasized as a strategic goal by the Missouri Department of Conservation. To effectively implement community conservation practices in areas with historically limited access to nature, it is crucial to spend time building trust and relationships within the community. Tessa dedicated a significant portion of her first four months on staff to this endeavor, engaging with various conservation, nature, sustainable, and education organizations, along with community members, organizers, and leaders.

Amidst networking, relationship building, and meetings, Tessa successfully initiated programming in the Kansas City Region and already has multiple programs planned for the new year.

The first program Tessa undertook



KC Community Conservation Educator, Tessa, helping ECOS students sharpen up on their birding skills at Anita B. Gorman Conservation Discovery Center.

was for ECOS Nature Club, hosted by Greenworks KC—a non-profit working to connect city kids with nature through outdoor experiences and project-based learning. Tessa spent two fall semester dates with ECOS students, delivering naturebased education integrated with social and emotional learning practices. Activities included learning to use binoculars, birding outside at the Discovery Center, and using field guides to identify birds.

In the second ECOS program, they were challenged to evaluate how

they felt before and after spending time in nature. After an internal body scan and a quiet observation period outside, students expressed feeling relaxed, calm, and happy, highlighting the positive impact of nature on emotions.

Another program opportunity involved an adult mental health support group, New Frontiers, providing a structured day setting for adults with severe and persistent mental illness. Tessa collaborated with MDC Naturalist Kristen Muelleman for an Introduction to



ECOS students practing their new binocular skills in the bird watching area at Anita B. Gorman Conservation Discovery Center.



ECOS student showing off her artwork. Getting to spend the first half of Club birding, gave her good inspiration for the arts and crafts portion of ECOS Nature Club.



Birding program at the Discovery Center. The program covered bird-related topics and allowed clients to engage with real birds using binoculars. Tessa looks forward to another program with New Frontiers in February.

Tessa's integration into the MDC team was swift, with invitations to help lead public programs. Naturalist Susan Harris welcomed Tessa to co-lead a Community Science program in November, focusing on Project FeederWatch. The program covered various community science apps and detailed Project FeederWatch, emphasizing its importance. Project FeederWatch continues at the Discovery Center on Fridays and Saturdays until the end of April.

#### Festivals

MRBO had the opportunity to be a part of two of MDC's significant events this fall: Get MO Wild and HOWLoween. Get MO Wild is an all-outdoor event designed to offer community members various opportunities to acquire new skills and connect with nature. MRBO hosted a booth featuring informational brochures and the Owl Food Match game, providing kids with the chance to play and win an MRBO sticker.

HOWLoween, an annual event hosted at Anita B. Gorman Conservation Discovery Center by MDC in collaboration with the Kansas City Police Department, offers a trick-or-treat style walk-through for the local community. MRBO, alongside MDC Naturalist Susan Harris and Missouri Master Naturalist Ken Snow, hosted the owl station. This station included owl pellet dissections, the Owl Food Match game, and a Barn Owl finger puppet craft. The owl station proved to be popular among both kids and parents. Community members had the opportunity to learn about the importance of the food chain and the unique diets of owl species in Missouri. MRBO looks forward to participating in both events again in 2024. trust with the community, Tessa dedicated time to tabling at the Lucile H. Bluford branch of the Kansas City Public Library. The table features multiple informational brochures and bird artifacts, sparking curiosity among many community members. An open dialogue allowed patrons and even the library staff to engage with Tessa about her work, the mission of MRBO, and the fascinating world of birds. Stories were shared, questions were asked, and an increased interest in birds emerged during her brief presence. Tessa looks forward to fostering an ongoing open dialogue at the library, creating a space where she can host programs that community members will want to be a part of.



Tessa and Dana at Heartland Conservation Alliance's partner summit in Kansas City! HCA is one of MRBOs partners in the Kansas City area and we are thankful for all the good work they are doing for the community. They both enjoyed and learned a lot from the plenary speakers that night.

In her efforts to connect and build

Tessa leading the Owl Food match game. Attendees got to visit the MRBO table while they are waiting in line to dissect owl pellets. Many of the kids played the game to win a prize and got to color a Barn Owl finger puppet to take home!





The Discovery Center has Project FeederWatch set up on Fridays and Saturdays for anyone from the public to participate in! Its located at the amphitheater which looks out into the bird watching area.



## **Festivals and Events Across the State**

Number of Events Public Festivals: 9 Education Events: 24 Total number of people reached: 1,973 kids and 2,083 adults

#### Festivals:

MRBO helped celebrate the wonder and importance of birds at festivals all across the state as well as in our hometown of Arrow Rock. Some local festivals included the Children's Craft Festival, the Heritage Festival, and the Arrow Rock Village Christmas.

At the Children's Craft Festival around 200 students explored what different owl species in Missouri can eat



and then they chose their favorite owl, made the puppet and provided the appropriate food. Learning about adaptations and survival needs can inspire our future

Missouri Conservation Corps Volunteers: The crew that helped remove invasive bush honeysuckle from Kiwanis Park in Columbia, MO. Photo by: Stephen Bybee

conservationists to conserve habitat for birds.



Sedalia Farmer's Market Pollinator Event: Children proudly display their Busy Bees.

At the Heritage Festival over 150 children and 350 adults visited MRBO's KnOwledge Nest where they explored our Missouri's Natural Habitats Diorama, completed a scavenger hunt and played Match the Bird to the Habitat, an activity designed for the youngest children. Prairie, wetland and woodland plush birds need to find their home. Children decide which habitat the birds thrive in and place the birds in the appropriate habitat.

At the Arrow Rock Village Christmas Festival over 100 children and adults learned



Making puppets at the Children's Craft Festival: Students act out their favorite owl after making a puppet.

about the importance of high energy food for our resident woodland birds. Participants were invited to create a gift for the birds by writing a wish on a stick and then using it to make their own high energy homemade suet wish-sicle (for the birds).

Outreach Events:

Missouri

Education throughout



Heritage Festival Match the Bird: Deciding whether the bird lives in the prairie, wetland or woodland.

MRBO participated in 24 outreach events that led us near and far, from Marshall to Rolla to Springfield to Sedalia to Columbia to Kansas City. Activities ranged from children acting as birds and pollinators to adults contributing to community science and inspiring stewardship.

MRBO partnered with Missouri River Relief during their Missouri River Adventure Camp. Campers hiked the

overlook trail at Eagle Bluffs Conservation Area and explored Bird Language. The highlight was hearing and seeing a male Indigo Bunting singing his heart out along the bluff. We cooed over the beautiful view from the



Campers sharing the wonders of bird watching with each other at Eagle Bluffs Conservation Area.

overlook platform and the Indigo Bunting seemed to be expressing his joy as well.



Another highlight included partnering with the Missouri Conservation Corps to learn about the connection between forest biodiversity, abundance of beneficial insects and improved habitat for birds.

Volunteers then participated in removing bush honeysuckle from the forest, clearing the way for biodiversity to increase and native plants to flourish once again.

In December, MRBO launched a new Christmas Bird Count circle that includes the Grand Pass Conservation Area, Annie and Abel Van Meter State Park and parts of Marshall. Eleven participants counted 78 species with a total bird count of 55,842! Snow Geese accounted for 34,029 of the birds.

Mallards accounted for 5,967 birds. Notable birds included two Loggerhead Shrikes, 210 Green-winged Teal, 350 American Coots, and 88 Red-bellied Woodpeckers.



Christmas Bird Count: Shawn Hawks counting waterfowl at Grand Pass Conservation Area

### Arrow Rock Birds, Bees & Blooms Festival SAVE THE DATE! April 27th, 2024



The 2023 Arrow Rock Birds, Bees, and Blooms was a great success! The original "Birds & Bees Festival" was integrated with the well-established Arrow Rock Garden Market and Vintage Bazaar, which had been a recurring event on the second Saturday of May for the past two decades. The Garden Market showcased a variety of vendors offering plants, crafts, outdoor merchandise, and more. Recognizing the opportunity to incorporate a nature education component and showcase native plants, MRBO collaborated with our partner, Experience Arrow Rock, who graciously permitted us to host the inaugural Birds & Bees Festival alongside the Garden Market in 2019.

In the year 2023, the convergence of the two festivals resulted a vibrant event, now recognized as Birds Bees & Blooms! During this year's festivities, which took place on a splendid Saturday in late April, we were delighted to welcome over

1,000 attendees. These visitors explored almost 40 booths and participated in guided walks focused on birds, plants, and insects. Alongside the vendors showcasing nature-related products, numerous naturalists and conservation organizations presented educational displays and engaging activities for the festival-goers.

### **MRBO's Visitor Center - The BirdHouse**



MRBO's BirdHouse was open to visitors from the end of April through the end of October. During the 2023 season MRBO educated hundreds of visitors about Missouri's natural communities, and of course, birds! The BirdHouse contains a library, educational displays, a gift shop, outdoor viewing area and the KnOWLedge Nest - a natural communities diorama. The BirdHouse will open for the 2024 season on April 27th during the Birds, Bees & Blooms festival.





### Thank You Education Program Sponsors!















