

# Audubon Upper Mississippi River Impact Report

FALL 2023





# Wings of Hope

In the heartland of America, where the prairies meet the forests and rivers wind their way through the landscape, there exists a symphony of life that is as ancient as time itself.

This is a region where the melodious calls of warblers mingle with the haunting hoots of owls, where Bald Eagles soar majestically over the shimmering waters, and where the dance of the Sandhill Cranes marks the changing of seasons. This is the tapestry of avian diversity that we strive to preserve and protect in Minnesota, Iowa and Missouri.

Today we are facing unprecedented challenges: the relentless advance of climate change, ongoing habitat loss, the imperative for more robust conservation policies, and the need for stronger community support and resilience. Survival of the birds that grace our skies, forests, and wetlands now hangs in the balance. Climate change, with its unpredictable weather patterns, habitat disruption, and shifting ecosystems, has pushed avian populations to the brink. The urgency of our work is not merely a choice; it is crucial.

At Audubon, our approach to bird conservation is comprehensive and multifaceted. We use science, advocacy, education, and community engagement to protect birds and conserve critical habitat throughout the Audubon Upper Mississippi River (UMR) region. We activate our members, our chapters, and our communities across the Mississippi River Flyway to take action.

While there is much more to accomplish, we take pride in our journey so far and are excited to share highlights from our work this year in Minnesota, Iowa, and Missouri.

## CONSERVATION HIGHLIGHTS

### Conservation and Science

In the Upper Mississippi River region, our conservation and science work revolves around creating, maintaining and understanding birds and their habitats. Through a multifaceted approach, we tackle conservation challenges through science and on-the-ground action with avian surveys, habitat restoration, and collaboration with private producers. By meticulously restoring and enhancing habitats, we provide safe havens for countless bird species, ensuring their continued survival and ability to thrive. Our avian surveying initiatives enable us to closely monitor populations, identify critical areas for intervention and track the progress of our conservation work. Additionally, our conservation work around grassland restoration and responsible conservation



*Audubon leadership met with local staff at Lake Itasca, the headwaters of the Mississippi River, for a site visit.*



*Cerulean Warblers, who depend on floodplain forest habitat, have declined by more than 60 percent.*

grazing practices helps maintain the delicate balance of this rich and diverse ecosystem. Together, these integrated efforts help safeguard the natural heritage of the Upper Mississippi River region for generations to come.

### **Habitat Restoration - Bottomland Forests of the Upper Mississippi River**

A boat trip to the bottomland forest of the Upper Mississippi River reveals Prothonotary Warblers singing above their tree cavity nests, Wood Ducks flying through gaps in the canopy, and Red-shouldered Hawks soaring up above. These forests are beautiful, dynamic, and, unfortunately, under threat by a changing river and encroaching invasive species like reed canary grass and Japanese hops that inhibit the germination and growth of young trees.

This year, Audubon enhanced 100 acres of floodplain forest at Horseshoe

Bend by planting an estimated 16,000 trees. We also treated 100 acres of invasive Japanese hops in the Root River delta, and 175 acres of invasive species control at Half Moon Landing, Wabasha Fingers, and the Whitewater delta. The species mix for the tree planting was made up of Swamp White Oak, Bitternut Hickory, Kentucky Coffee Tree, River Birch, and Bur Oak, and we are closely monitoring the success rates of this restoration project.

### **Habitat Restoration - Missouri Wet Prairies**

The Audubon Center at Riverlands, in cooperation with the U.S. Army Corps of Engineers St. Louis District, implemented their fifth and sixth Missouri Bird Conservation Initiative (MoBCI) conservation grants. These grants focus on restoring and enhancing the 1,200 acres of wet prairies across the Riverlands Migratory Bird Sanctuary in West

Alton, MO for birds. By the end of the summer, we enhanced 186 acres of wet prairie across our MoBCI projects, planted over 1,600 containerized native plants, and seeded a diverse native mix across 14 acres.

### **Habitat Restoration - Enhancing Grasslands in Minnesota's Important Bird Areas**

In 2023, we began implementation of the Restoring and Enhancing Minnesota's Important Bird Areas-Phase III. This grant from the Minnesota Outdoor Heritage Fund focuses solely on enhancement and restoration projects on permanently conserved lands in Important Bird Areas and Minnesota Prairie Conservation Priority Areas in Northwestern Minnesota. Existing grassland and wetland habitats in Minnesota are a fraction of what they once were, and grassland birds are among bird groups with the steepest decline.

The first phase of a wetland enhancement project managing non-native, invasive hybrid cattail was completed on 403 acres on Glacial Ridge National Wildlife Refuge in 2023. This project focuses on managing aquatic vegetation to reduce the dense cover of hybrid cattail to create more open wetlands that will benefit waterfowl and marsh birds.

### **Avian Surveys – The Common Tern**

The Common Tern is a colonial waterbird whose charisma makes it a joy to watch overhead. Their buoyant grace is displayed as they fly over the water's surface, hover, and then drop below the surface in search of small



fish. Although they are a widespread species whose range stretches from the coastal northeast to the Great Lakes, this species is experiencing population declines in several former strongholds across the coastal and upper Midwest due to water level changes, competition with gulls and other waterbirds, nest predation, and avian influenza.

A historic Common Tern colony was discovered on Pelican Lake in Crow Wing County in 2022. The site was revisited in 2023 and once again Audubon found Common Terns nesting, although we also saw evidence of predation and impacts from humans. We are working with the Minnesota Department of Natural Resources and the landowners to try to protect the colony to ensure they

can nest in relative safety in the years to come.

### Avian Surveys - Bottomland Forests

Audubon completed the second of two years of bird surveys examining bird habitat associations in Reno Bottoms in far Southeastern Minnesota. Data collected will be integrated with the similar surveys of bottomland forests in Minnesota from 2021 and 2022, allowing us to complete our analysis, publish findings, and direct forest management guidelines for birds.

In Saint Louis, we completed the eighth year of surveys in Missouri funded by the U.S. Army Corps of Engineers St. Louis District. This critical science identifies what forest

characteristics different birds select for, and how we can better support them through management.

We are expanding our bird surveys into new regions of Minnesota, Iowa, and Missouri to increase our understanding on how birds respond to bottomland forest management across the variable Upper Mississippi River. We also started a new project conducting bird surveys for the Prairie Island Indian Community. This first of three years of surveys will inform land management decisions by the Tribe.

Between our three projects studying the bird community on the Upper Mississippi River, we identified 7,094 individuals of 91 species. We will complete three additional years of surveys around around the Saint Louis region before publishing our work on those bottomland forests and sharing it with agency partners.

### Audubon Conservation Ranching Comes to Minnesota

Grassland birds have declined over 50% in the past half-century. These declines are tied to many causes, but the loss and degradation of grassland habitats is a driving force. To combat the negative effects of grassland degradations—and to keep grass on the landscape—Audubon has developed the Conservation Ranching Initiative. This market-based conservation approach offers incentives to ranchers for good grassland stewardship through a certification label on beef products. In June, we hired a new grassland ecologist to assist with the certification of ranches in Minnesota.



*Audubon Upper Mississippi River is working to protect Common Tern colonies and assess their reproductive success.*



## Upper Mississippi River Conservation Blueprint

Conservation staff from the National Audubon Science Team partnered with the Audubon Upper Mississippi River team to create a conservation blueprint for birds and their habitats along the Upper Mississippi River. Focusing on 8 habitat types and 21 priority bird species for this region, the UMR Blueprint prioritizes approximately 36 million acres of the region as habitats that will be negatively impacted by climate change, another 35 million acres that may become more important due to climate change, and 18 million critical acres that should be priorities now and in the future. As we move forward and address crucial conservation needs, this blueprint helps guide our conservation priorities and project investments.

## COMMUNITY ENGAGEMENT

### Network

Audubon Upper Mississippi River continues to serve as a vital regional hub, connecting 30 chapters across the tri-state area. Our engagement staff has been proactive in fostering communication and collaboration among chapter leaders. A significant highlight in 2023 was the annual in-person gathering of Minnesota chapter leaders at Northland Arboretum in Baxter, Minnesota. Eighteen attendees representing 10 of the 12 active Audubon chapters in Minnesota participated, sharing out local community successes, and broadly coordinating efforts on behalf of birds and their habitat.

Our regional presence extended to Iowa, where we were actively involved in the annual in-person

board meeting of Iowa Audubon at Ledges State Park in Madrid, Iowa. We continue to support this federation of chapters and bird clubs across the state of Iowa, strengthening our collaborative conservation efforts. In Missouri, engagement staff have been convening online gatherings with chapters and meeting with chapter leaders in their respective communities, further bolstering our outreach.

Our commitment to outreach and raising awareness for bird-friendly

## COMMUNITY ENGAGEMENT

1,346

hours contributed by volunteers, community scientists & Advisory Board Members.

15

interns prepared for further education and careers in conservation and related fields.



Audubon's Chief Conservation Officer, Marshall Johnson, spent a day with this past summer's Flight Crew Interns at Audubon Center at Riverlands, sharing insights about preparing for a career in conservation.



practices remains unwavering. The Lights Out Minnesota program, now in its sixteenth year, has engaged nearly 100 buildings in bird-friendly practices. The program received a fresh branding with a new logo and window decal for participating buildings, underlining our work to reduce bird collisions with buildings. Our involvement in the Minnesota Bird City program, now part of the new Bird City Network, aligns 10 Bird Cities in Minnesota with a broader community of bird-focused conservation initiatives, providing a platform for promotion and collaboration.

We've actively participated in community events, including the Spring Flower Show and Gathering Partners Conference for Master Naturalists at the Minnesota Landscape Arboretum. These events featured the stunning bird photography of Advisory Board member Becky Field, along with materials promoting native plants for birds. Audubon UMR staff were once again invited to partner with the University of Minnesota's Bell Museum, sharing Audubon's new Bird Migration Explorer as part of a Seeing Birds event. Additionally, over 90% of our regional chapters participate in the annual Christmas Bird Count, contributing valuable data to the massive community science event organized by Audubon.

#### CONSERVATION HIGHLIGHTS

## Policy

In 2023, Audubon Upper Mississippi River achieved remarkable success in its policy advocacy efforts at the Minnesota State Capitol,



*Legislative meeting at the Minnesota capitol.*

contributing to a transformative legislative session with the passage of a comprehensive \$2 billion Environment, Natural Resources, Climate, and Energy budget bill. Notably, Audubon received \$340,000 in direct funding for our "Mapping Migratory Bird Pitstops" project, advancing vital conservation science and our understanding of migratory patterns which help to guide future conservation efforts. Additionally, the 2023 Minnesota Legacy bill allocated \$1,034,000 to support Audubon Upper Mississippi River's restoration and enhancement of Minnesota's Important Bird Areas in the St. Croix River Valley.

Our advocacy efforts also played a pivotal role in the constitutional reauthorization of Minnesota's Environment & Natural Resources Trust Fund (ENRTF). Since 1988, the ENRTF has provided approximately \$900 million in funding for over 1,700 projects aimed at conserving and enhancing Minnesota's natural resources. The reauthorization bill, a landmark achievement, seeks voter approval to reaffirm the ENRTF's

constitutional protection and establish a community grant program to promote equity in conservation efforts. A constitutional question will appear on the 2024 ballot, offering voters the opportunity to extend this vital fund and promote inclusive and equitable conservation initiatives.

### Regional Transmission Engagement

Audubon's work in the realm of transmission planning and policy reflects our dedication to preserving vital ecosystems for birds and humans alike. Audubon advocates for a rapid upgrade to the U.S. transmission grid to transition to a clean energy economy and avoid the worst impacts of climate change for birds and people. This includes responsible siting and operation, and through our strategic coalition building, we share the latest science on minimizing impacts through bird-friendly solutions. Our initiatives in Minnesota, Iowa, and soon Missouri underscore our commitment to regional partnerships that facilitate sustainable energy solutions while upholding our mission to protect the





*Nashville Warblers and Tennessee Warblers are both top bird species impacted by window collisions in the Upper Mississippi River region.*

natural world. Through our coalition work, we support the proposed MISO North transmission lines, a crucial step in addressing energy related aspects of climate change.

### Upper Mississippi River Program Policy Work

The UMR team continues to strengthen its influence within the Upper Mississippi River Basin Association, the Navigation & Ecosystem Sustainability Program and the Upper Mississippi River Restoration Project (UMRR). As part of our collaborative efforts with multiple agencies, we are actively working towards integrating birds as habitat indicators in UMRR's long-term resource monitoring. An important milestone in this endeavor was the selection and funding of an avian monitoring science proposal, which marks a significant step in addressing

research needs along the Upper Mississippi River system.

In June, we hosted legislators from Minnesota and Wisconsin, along with federal policy staff, on a boat tour of the Mississippi River's bottomland forests. The event gave legislators the opportunity to see and learn about Audubon's restoration work in these fragile ecosystems and why birds depend upon this areas for breeding and migration.

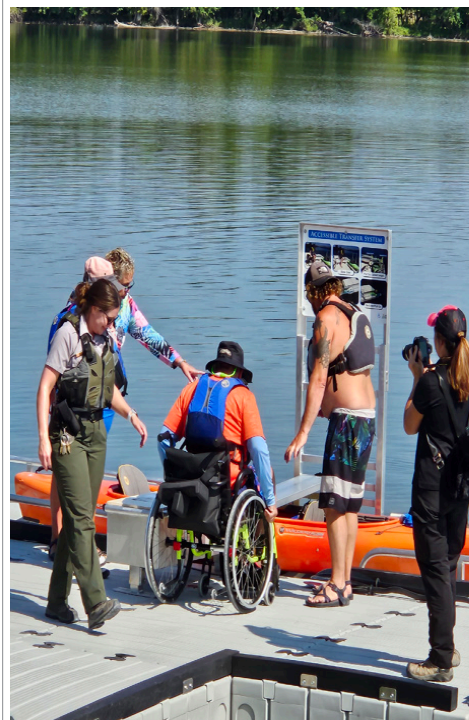
Our team also played a crucial role in supporting the successful expansion of the Middle Mississippi National Wildlife Refuge in Missouri. During a public meeting hosted by the Audubon Center at Riverlands, USFWS staff highlighted the significant impact of Audubon's action alert, which generated the majority of the nearly 3,000 comments received in support of the expansion plan.

## AUDUBON CENTERS

# Riverlands

Opened in 2011, the Audubon Center at Riverlands is one of a network of Audubon Centers in the U.S. located in the 3,700-acre Riverlands Migratory Bird Sanctuary on the banks of the Mississippi River. The Center offers visitors accessible experiences, educational opportunities, a community gathering space, and the knowledge and tools to help protect our vital natural resources.

This September, we celebrated the installation of a new accessible kayak launch at the Center. We are thrilled to provide nature experiences and celebrate this new access made for paddlers on our favorite river.



*Team River Runner member using the new kayak launch at Riverlands.*





*Students and families participate in the Hummingbird Olympics at Little Creek Nature Area.*

## Winter Programs at Riverlands

Birds of Winter, a winter long program available on weekends, offers exciting experiences for visitors to celebrate the overwintering birds at Riverlands. This past winter, nearly 8,000 visitors engaged in activities focused on eagles, swans, raptors, and other waterfowl. New this year, we offered Winter Illumination Walks and partnered with Missouri Department of Conservation to host their Eagle Days programs.

## Helping Cavity Nesting Birds at Riverlands

Roughly 85 bird species use cavities for shelter and nesting. For many of these birds, the loss of natural places for nesting is contributing to their population decline. Fortunately, man-made avian architecture, like nest boxes, can have a positive impact on cavity nesting birds. To address this concern, the Center started the Riverlands Nest Box Program, providing boxes and gourds for birds like Purple Martins, Eastern Bluebirds, and American Kestrels, all which

have nesting quarters throughout the Center as a result. This spring we introduced Wood Duck boxes on the property. These nests are monitored and data is shared with partners like The American Kestrel Partnership and NestWatch.

## Connecting Communities at Riverlands

Throughout the year, the Audubon Center at Riverlands staff partnered with Little Creek Nature Area (LCNA) in Florissant, Missouri to increase access and community engagement in the North County of St. Louis, an under-resourced area of Missouri. During the summer months, LCNA hosts our long-standing Little Creek Summer Camp held in conjunction with the Ferguson-Florissant School District for 3rd - 5th grade students. Throughout the year, Audubon partners with LCNA for special events such as First Saturdays of every month during the school year for family activities. Hands-on inquiry-based activities provide families with experiences which not only cultivate a life-long interest in the natural

world but provide a shared space for community connection.

## Looking Ahead

This year, Audubon Upper Mississippi River mobilized our network across the region in science, policy, and conservation action to make a difference for birds and our communities. While we've made incredible strides, our work is just beginning.

Birds are already feeling the impacts of our rapidly changing climate. This year we'll continue to work to stabilize declining bird populations by restoring the most important places for birds - we hope you'll continue to join us.

Your support allows us to scale up our conservation, policy, and engagement work as we strive to create positive impact with every new year. Thank you for your support of Audubon and your commitment to protecting birds and the places they need, today and tomorrow.

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