



The LMVJV 2023 Year in Review



Lower Mississippi Valley

JOINT VENTURE

www.lmvjv.org

Science and Conservation Planning Tools

Developing a Wetland Complex Model *and* Next Generation Conservation Leaders

Our Waterfowl Working Group's Wetland Complex Committee was assisted by U.S. Fish and Wildlife Service Directorate Fellows Program Intern, Lauren Lyon, to develop the LMVJV's first ever spatially explicit habitat model for non-breeding waterfowl beginning in Summer 2023. An annotated literature review, conceptual model, and Beta model output were finalized by the end of Lauren's internship. However, Lauren and the Wetland Complex Committee continued revising and improving the model to produce version 1.0 in early December. The committee and Working Group will continue to update model inputs and functions, with publication of the model expected in 2024.

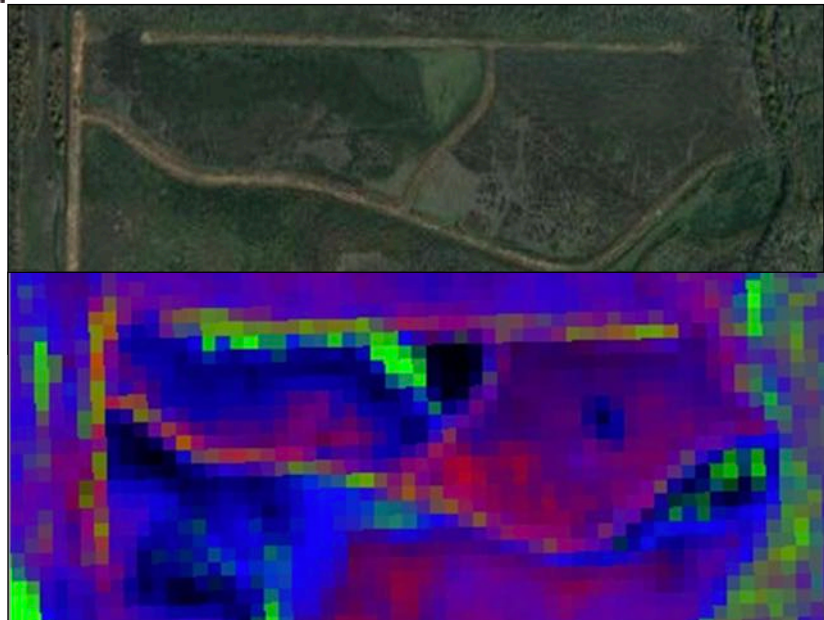


Remote Emergent Wetland Assessment Opens New Doors for LMVJV Conservation Planning and Monitoring

Thanks to Ducks Unlimited and many partner biologists for review and input, the LMVJV has a reliable means of assessing emergent wetland habitat across the region. JV partners can utilize publicly available Google Earth Engine data to **identify emergent wetland habitat remotely**, leaning on the expertise of DU's Mike Mitchell. This new capability allows us to better assess habitat for secretive marshbirds, which include rails, grebes, bitterns, and coots.

Forest Hydrology Working Group Off and Running

Threats to and opportunities for advancing habitat conservation across the LMVJV center around hydrological processes and connections within our forests. Recognizing this, the LMVJV Management Board established the Forest Hydrology Working Group in November, Chaired by Dr. Sammy King. Operating within its **broad purpose**, the WG will convene in early 2024 to assist in coordinating ongoing and expanded surface and subsurface hydrological monitoring in Arkansas.



Science and Conservation Planning Tools



The Secret Lives of Rails

As elusive over the life of our partnership as the birds themselves, population and habitat objectives for six high priority marsh birds are now available! Relying on available science, partner expertise, and the newly-developed **persistent emergent wetland assessment tool**, LMVJV partners can now plan and execute habitat conservation for this group of birds with a real sense of the scope and scale of the challenge. Next steps include consideration of management practices to benefit marsh birds.

King Rail Science on the Rise

Several current investigations into King Rail habitat use and suitability within the LMVJV provide great promise for crafting and deploying conservation work that can make a difference. This work spans a continuum of scale from presence and habitat associations using automated recording units (University of Arkansas Monticello; Dr. Douglass Osborne grad student, Gabby Hargrove), to movement and space use via marked birds (Forbes Biological Station, University of Illinois; Dr. Auriel Fournier grad student, Jess Schmit), to development of an LMVJV-specific habitat suitability model (University of Missouri; Dr. Lisa Webb post-doctoral student, Dr. Dustin Brewer). LMVJV Senior Science Coordinator, Dr. Anne Mini, will continue to work with these researchers and the rest of the Waterbird Working Group as King Rail objectives and conservation strategies are refined.



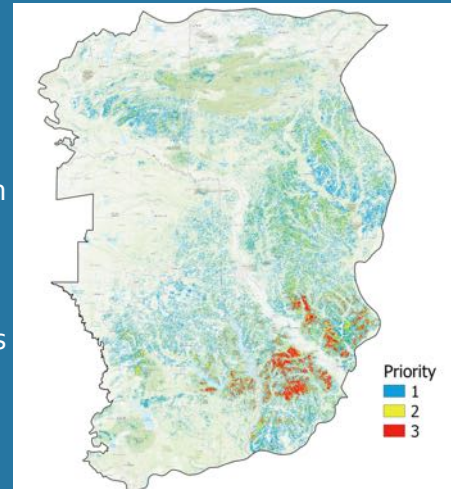
The Open Pine Landscape Restoration RCPP

(Regional Conservation Partnership Program)

An example of science-based conservation delivery

1. Science: Improved Decision Support

Our dated Open Pine Bird Habitat Decision Support Model for the West Gulf Coastal Plain & Ouachita (WGCP), first developed in 2011, was revised in 2023 providing much-needed guidance to multiple bird conservation efforts across Arkansas, Louisiana, Oklahoma, and Texas. The **new open pine model** is built upon ensemble species distribution model (ESM) outputs developed by researchers at Mississippi State University for three open pine priority bird species: Bachman's Sparrow, Brown-headed Nuthatch, and Red-cockaded Woodpecker. Conservation Delivery Network (CDN) and RCPP partners are already working to incorporate this new (and much improved) information into key delivery prioritization maps.



2. Delivery: Common Goal Partnerships & Funding

The Arkansas-Louisiana CDN developed a proposal with 19 partners to create the **Open Pine Landscape Restoration RCPP** focused on wildlife habitat and working forestlands. Priority areas were defined using the bird habitat model and other data, and the \$5.9 million dollar program exceeded expectations in its first two years:



- RCPP sign-up in 2021 was very high attracting many landowners new to Farm Bill conservation programs (about 25% in both states). Our initial sign-up of 2,456 new acres of private lands was matched by 9,806 acres of open pine habitat management/improvements on public lands in AR-LA.
- Beginning in 2022, the participation of social science researchers at Univ. of AR Monticello and Univ. of AR, Pine Bluff— an Historically Black University—and their “Keeping It in The Family” program expanded our connections with non-traditional landowners and Historically Underserved producers.
- During the second year of this 5-year project, 30,500 acres of pine savanna and native prairie habitat were established and/or enhanced through prescribed fire, forest stand improvement, and restoration of rare and declining plant communities across the RCPP's 8 focal Arkansas counties and 8 focal Louisiana parishes.

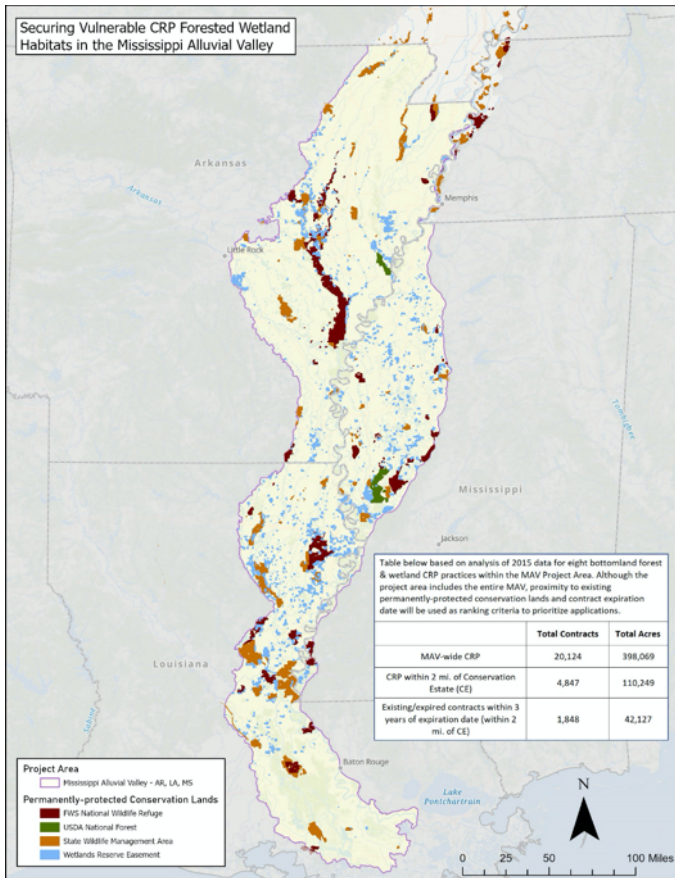
3. Capacity & Outreach: A New Conservation Delivery Coordinator and a Field Day

Austin Klais became the LMVJV's newest WGCP Conservation Delivery Coordinator in 2023. He is a key member guiding partner staff to deliver projects under the “Open Pine Restoration” RCPP project in Arkansas and Louisiana. Austin has a B.S. in Wildlife & Fisheries Management from Arkansas Tech University, more than 5 years USDA Farm Bill program experience, and facilitated NFWF's 4-year Morehouse Family Forest Initiative, a precursor to the Open Pine RCPP. He loves to assist with prescribed burns and help people connect with the habitats upon which wildlife depend.



The USDA NRCS, D'arbonne Soil & Water Conservation District, and the LMVJV partnered for an Upland Wildlife Habitat Field Tour in Union Parish, LA in the heart of the Open Pine Restoration RCPP area (see photo above), highlighting Todd Sherwin's work to promote native herbaceous vegetation in his fields and forested habitats for the benefit of birds including quail, turkey, woodcock, and dove.

Conservation Delivery & Funding



Expiring CRP Bottomland Hardwood & Wetland Habitat Achievements Will be Protected Through Innovative RCPP

The U.S. Dept. of Agriculture (USDA) awarded LMJV partners a \$25,000,000 grant for a new Lower Mississippi Alluvial Valley (LMAV)-focused Regional Conservation Partnership Program (RCPP). The Mississippi River Trust is lead partner collaborating with the **Tri-state Conservation Partnership** (TCP). Specifically, the LMAV RCPP project will address the real possibility for many tracts, which have been restored through the Conservation Reserve Program, to be converted back to conventional agricultural production, resulting in the loss of USDA’s restoration investment in the tracts. The fully funded project, titled “Protecting and Enhancing Wildlife Habitat and Water Quality of Conservation Reserve Program Tracts under Threat of Conversion in the Lower Mississippi Alluvial Valley,” will seek to permanently protect and enhance approximately 7,500 acres of vulnerable CRP bottomland hardwood and wetland tracts through perpetual U.S.-held conservation easements in high priority zones within the LMAV of Arkansas, Louisiana, and Mississippi.



NETX CDN Habitat Incentive Program Better than Ever: Record-breaking 2023

This year was a record breaker for receipt of funding requests under the **Northeast Texas Conservation Delivery Network’s Habitat Incentive Program!** With 63 project proposals received, valued at approximately \$850,000, the program is seeking industry and other funding to supplement the \$300,000 currently available for HIP projects. Since its inception in 2017, the program has exceeded \$1MM and 25,000 acres of conservation work.



LMJV Partners Aided by Louisiana Outdoors Forever

The LMJV partners’ “Wildlife Habitat Conservation Through Rx Fire” proposal to the **Louisiana Outdoors Forever** (LOF) program was approved, sending an additional \$200,000 to the northern Louisiana parishes targeted by the JV’s Open Pine Landscape Restoration RCPP (see p. 3). The JV project was one of 13 approved as part of the LOF’s inaugural investment of \$10 million, which leveraged additional matching funds, bringing the LOF’s first year total to \$37.9 million.

Conservation Delivery & Funding

Partners Elucidate Cost Savings of Wetlands Reserve

Conservation benefits of the NRCS Wetlands Reserve Easement (WRE) Program are well-documented, especially for wetlands and birds. A Wildlife Mississippi-sponsored **economic assessment** demonstrates that the net cost of the program is significantly less than the published program costs suggest, due to:

- avoided federal outlays for commodity programs,
- avoided federal outlays for crop insurance premium subsidies, and
- avoided supplemental disaster assistance.

The report estimates that from 1990 to 2023, 2.9 million acres enrolled in WRE provided a direct economic benefit of \$8.4 billion!



Estimated Cost Avoidance Benefits of
WETLAND RESERVE EASEMENTS

WREP – Achieving a Decade-long Milestone for Critical Habitat in the Mississippi Alluvial Valley

The Tri-state Conservation Partnership is currently enjoying significant success achieved through the Natural Resources Conservation Service's (NRCS) **Wetland Reserve Enhancement Partnership** (WREP) program. Guided by LMVJV bird priorities, WREP funding has been awarded to restore well over 40,000 acres of forested wetlands within the length of the Mississippi River batture from 2012 to 2023. In addition, since 2015 WREP funding has been awarded to restore more than 22,000 acres within priority regions of the MAV outside the batture in AR, LA and MS. Together, these bring the total MAV WREP restoration and protection acres (completed and ongoing) to well over 60,000!



Inflation Reduction Act (IRA) Funds Make Their Way to the Lower Miss Region

The U.S. Fish and Wildlife Service was directly appropriated \$250 million in new funding under the Inflation Reduction Act of 2022 (IRA) for significant climate and conservation projects. A Lower Mississippi River Valley Nature-based Resiliency - Arkansas, Louisiana, Mississippi, Tennessee focal area received approval for \$20MM of the total funding in 2023. These projects will help rebuild and restore units of the National Wildlife Refuge System and State Wildlife Management areas; support the work of the Service and its conservation partners; and help local, state, and Tribal communities tackle the climate crisis while advancing endangered species priorities and environmental justice. Project activity in this region will focus on some of our highest conservation priorities on and around our State WMAs and NWRs and endeavor to provide benefits to historically underserved communities.

Communication, Education & Outreach

Wetland Conservation Icon and Mentor, Leigh Fredrickson, Recognized as LMJV Conservation Champion

“A pioneer of wetland management” and “the father of wetland management,” are just a few of the phrases used to describe Dr. Leigh Fredrickson. Unsurprisingly, his wife Judy is equally passionate about wetlands and land stewardship. Leigh has an extraordinary history in conservation, dedicating the past 60 years to this pursuit. Together, Leigh and Judy have managed and enhanced just shy of 200 acres in Stoddard County, MO, for wildlife, pollinators, and carbon sequestration. From their efforts has echoed the unmistakable call of the bobwhite quail—a sound that, Leigh and Judy agree, was virtually absent for years.



Tri-state Conservation Partnership Hosts USDA Easement Program Division Tour

The TCP hosted a tour in late winter of Wetland Reserve (WRE/WRP) sites in AR, LA, and MS for the USDA's Washington Office (WO) Easement Program Division (EPD) staff. The tour's primary purpose was to familiarize the WO EPD staff with work performed through NRCS easement programs and partnerships in the Mississippi Alluvial Valley (MAV). It provided NRCS leaders and other partners in the three states an opportunity to learn more about WO EPD priorities, goals, and objectives for the program.

LMJV Supports Students with North American Duck Symposium Stipends

Surplus funds from the 2022 LMJV Waterfowl Symposium have enabled five travel awards for students to attend the 2024 North American Duck Symposium in Portland, Oregon (February 5-9, 2024). Stipends in the amount of \$250 were awarded to Dylan Bakner, Zack Loken, Nick Mastro, John Veon, and Reid Viegut. They are conducting research within or very near the LMJV geography. Recipients will attend and present either a poster or oral presentation at the 2024 North American Duck Symposium.



Communication, Education & Outreach

Conservation Delivery Network (CDN) Field Tours Provide for Networking and Exchange of Ideas Across the LMVJV



Northeast Texas CDN

The Gus Engeling Wildlife Management Area was the location for a field tour in June 2023. This workshop covered topics including plants, upland game bird management, deer management, wildlife diseases, reptile/amphibian management and songbird management—all pertinent to the Post-Oak Savannah Eco-region.

Native Prairies Association of Texas hosted a prairie tour in June to highlight their NE Texas Talbot Brothers and Mary Talbot Prairies. Presentations focused on native grassland restoration, management, and grazing —helping NETX CDN partners to continue building strong native grassland components in their conservation programs.

The Boggy Slough Conservation Area hosted a field tour in September covering establishment and management of open pine habitat on a variety of sites, with discussions on native understory, thinning and prescribed fire.



Arkansas MAV CDN

The Arkansas MAV CDN meets every winter and summer to provide a forum for conservation delivery professionals working in the region to share updates on conservation priorities, research, projects, and funding opportunities. In February 2023, CDN participants benefited from a number of topical presentations on the subject of “Forest and Wetlands Stewardship,” and in September the action moved to the field with tours of Cache River bottomland hardwood plantations.



Louisiana-Mississippi CDN

In December, the LA-MS CDN hosted a **Desired Forest Conditions for Wildlife** tour in northeast LA, which highlighted migratory bird habitat in the Mississippi Alluvial Valley. The tour focused on forest management treatments that result in structural forest attributes that are explicitly linked to wildlife needs.

2023 LMJV Year in Review Photo Credits
(Listed top to bottom)

- Cover: "Mississippi Rise" courtesy of Wildlife Mississippi
- page 1: Pair of mallards-Pixabay, Mississippi flooded timber-Dale Yocum
- page 2: Sora Rail-Bill Stripling, King Rail-Bill Stripling, Open pine in Wafer Creek, LA-Keith McKnight
- page 3: Union Parish field day-Stephanie Paul/NRCS
- page 4: Boggy Slough understory-Keith McKnight, Prescribed fire-USFWS,
- page 5: Bottomland hardwoods-Keith McKnight
- page 6: Dr. Leigh Fredrickson and Judy Fredrickson-Keith McKnight, EPD-WO tour-Steve Brock, LMJV Waterfowl Symposium-Keith McKnight
- page 7: Cache River-Steve Brock, Tour of Gus Engeling WMA-Taylor Garrison/TPWD, Boggy Slough tour-Keith McKnight
- Page 8: Open pine with prescribed fire-Austin Klais

Recommended citation: LMJV. 2023 Year in Review. <https://www.lmvjv.org/>

