



Photo by Charles Mills



Prairie Restoration for Grassland Birds at the Stuttgart Municipal Airport  
Important Bird Area

Restoration of 252 acres of prairie at Stuttgart Airport through prescribed fire, non-native plant control, and rubble removal will benefit 13 prairie bird Species of Greatest Conservation Need. This project continues a landmark collaborative working towards the long-term goal of a 2,000-acre core of contiguous native grassland suitable for the reintroduction of the Greater Prairie-Chicken to Arkansas.

**Project Leader**

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**Project Budget**

SWG Amount Requested: \$93,021  
Match Amount Provided: \$50,835  
Total Amount of Project: \$143,856

## Project Statement

**A. Need:** Habitat loss and fragmentation have contributed to more precipitous population declines of prairie birds than any other avian guild. Only 0.1 percent of the original 320,000 acres of native prairie remains in the Grand Prairie region of eastern Arkansas. There are species that cannot thrive without a large block of prairie. The Greater Prairie-Chicken, which was extirpated from Arkansas in the 1930s, requires a 2,000-acre core of habitat within a larger landscape of smaller restored and remnant prairies.

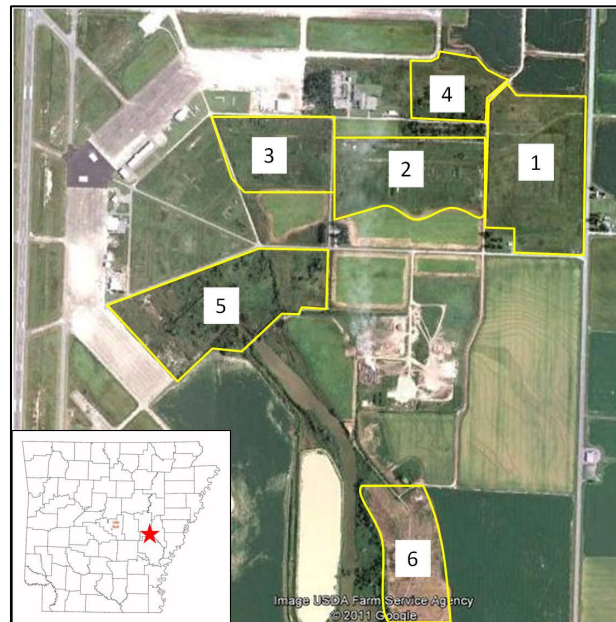
Core to Grand Prairie restoration is the availability of Grand Prairie genotype native warm season grass seed. The production of native warm season grass seed is constrained by limited acreage of efficiently accessible seeds as well as by the availability of resources for harvesting and processing seeds. Increasing acreage planted with local genotype seed will exponentially increase the amount of seed available for restoring the Grand Prairie region.

**B. Location:** The project is located at Stuttgart Municipal Airport (2,560 acres), in Prairie County, within Arkansas' Grand Prairie region and the Mississippi Alluvial Plain ecoregion. The National Audubon Society recognizes this site as an Important Bird Area for extant SGCN such as Smith's Longspur, Short-eared Owl, Sedge Wren, Bell's Vireo, Painted Bunting, and Henslow's Sparrow.

**C. Objectives:** Audubon's goal is to provide habitat for 13 prairie bird SGCN by restoring 252 acres of prairie. Audubon's objectives are to:

- Restore a prescribed fire regimen to encourage regeneration of native plant species that support SGCN.
- Reduce the cover of non-native shrubs to less than 10 percent of current acreage.
- Improve habitat for the presence and dispersal of prairie bird SGCN.

**D. Approach:** Audubon proposes to restore 252 of the identified 2,000 core acres. This builds upon a landmark collaborative effort initiated in 2003 by Arkansas Game & Fish Commission (AGFC), Arkansas Natural Heritage Commission, U.S. Fish & Wildlife Service, Arkansas Forestry Commission (AFC), Audubon Arkansas, and the City of Stuttgart. Non-native shrub control is vital for successful restoration; prescribed fires will not penetrate dense thickets, and some thickets grow out of concrete foundations where fire will not reach them. Audubon will use mechanical and chemical means to control non-native woody shrubs, such as Chinese privet and saltbush, on 121 acres (map plots 2-5). Native shrubs such as deciduous holly and plum will not be cut to provide wildlife habitat. Plots 4 and 5 have especially dense thickets that have not been treated. This along with annual prescribed fires will achieve long-term goals.



Concurrently, the Arkansas Forestry Commission (AFC) will burn 235 acres (map plots 1-3, 5, 6). The AFC will conduct annual burns to promote germination of grasses and forbs. The City of Stuttgart will remove rubble from 50 acres (map plot 5). Restoration activities will not affect World War II era building foundations deemed important cultural resources for the area.

This project expands current prairie restoration at the airport. To date, 235 acres (map plots 1-3, 5, 6) have been treated through prescribed fire, woody and herbaceous non-native plant control, building-rubble removal, or seeding Grand Prairie genotype native warm season grasses. This work was previously supported by a SWG, Partners for Fish and Wildlife, and in-kind work by the agencies involved.

Audubon staff and volunteers will conduct transect surveys through five restoration plots (map plots 1-3, 5, 6) three times each winter and twice each summer. These data will be combined with data from annual surveys initiated in 2003. Preliminary results indicate that Loggerhead Shrike, Sedge Wren, and Le Conte’s Sparrows have increased. Northern Bobwhites are stable. Painted Bunting and Bell’s Vireo numbers, while always small, have declined.

Audubon and AGFC will hold a technical field demonstration day for farmers adjacent to the airport and other prairie tracts. It will focus on benefits to grassland birds, native warm season grasses, planting techniques, and how to enroll private lands in cost-share conservation programs. Private lands conservation will help achieve long-term goals.

**E. Expected Results & Benefits:** Restoration will create the vegetation structure and composition that supports SGCN (Table 1) and also encourages colonization of SGCN that have been extirpated.

Within two to three years the restored prairie will increase the amount of Grand Prairie genotype seed available for seeding efforts at the airport and elsewhere in the region. This project is key to moving forward the long-term plan for a 2,000-acre core of contiguous prairie that can support Greater Prairie-Chicken reintroduction.

<p>Table 1. SGCN that will benefit from the project. All except Greater Prairie-Chicken and Grasshopper Sparrow have been recorded at Stuttgart Airport.</p>
<p>Greater Prairie-Chicken Northern Bobwhite Northern Harrier Barn Owl Short-eared Owl Loggerhead Shrike Bell’s Vireo Sedge Wren Painted Bunting Grasshopper Sparrow Le Conte’s Sparrow Henslow’s Sparrow Smith’s Longspur</p>

**F. Budget**

	Year 1	Year 2	Match	Total
Salaries				
Project Leader, 20% FTE	\$9,211	\$9,211		\$18,421
Field Programs Coordinator, 20%, FTE	\$7,706	\$7,706		\$15,412
Field Projects Coordinator, 20% FTE	\$6,270	\$6,270		\$12,540
VP and State Executive Director, 3% FTE			\$4,920	\$4,920
Fringe Benefits (35%)	\$8,115	\$8,115	\$1,722	\$17,953
Volunteers			\$15,343	\$15,343
AGFC Workshop			\$3,000	\$3,000
Contractor - heavy equipment			\$10,350	\$10,350
Travel	\$5,957	\$5,957		\$11,913
Supplies			\$3,500	\$3,500
Other	\$500			\$500
AFC prescribed burns and shrub control			\$12,000	\$12,000
<b>Total Direct Costs</b>	<b>\$37,758</b>	<b>\$37,258</b>		<b>\$75,017</b>
Indirect Costs (24%)*	\$ 9,062	\$ 8,942		\$18,004
<b>TOTAL PROJECT COSTS</b>	<b>\$46,820</b>	<b>\$46,200</b>	<b>\$50,835</b>	<b>\$143,856</b>

\* National Audubon Society has applied to the U.S. Department of the Interior for a 24% indirect cost rate.

## Qualifications

**Daniel Scheiman, Ph.D., Project Leader**, is Audubon Arkansas's Bird Conservation Director and will serve as lead manager responsible for project success and has responsibility for fiscal, contractual, and staff oversight on project implementation. He provides technical expertise on bird habitat requirements, surveys birds, and will assist with planning and implementation. Dr. Scheiman manages multiple federal, state, and private grants. Under various SWGs he has monitored for SGCN including Bewick's Wrens, marshbirds, and grassland birds (at Stuttgart Airport). He received his B.S. from Cornell University, M.S. from Eastern Illinois University, and Ph.D. from Purdue University in ornithology.

**Brent Kelley, Field Programs Coordinator**, is responsible for planning and execution of woody vegetation control. Since 2006, Mr. Kelley has coordinated and managed multiple field projects, including habitat management at state Natural Areas, reforestation for the Ivory-billed Woodpecker, fish and mussel sampling on Fourche Creek, wetland restoration in Fourche Bottoms, grassland restoration in Northwest Arkansas, wildlife habitat improvements at Waste Management's Two Pine Landfill, and stream-bank stabilization in the Fourche Creek Watershed. He oversees construction and volunteer mobilization of the AGFC-funded Wildlife Observation Trail at the Audubon Center. He is certified in the use of a chainsaw, and has a permit to purchase and use non-commercial restricted-use pesticides. He has a B.S. in Botany and M.S. in Forest Entomology from the University of Arkansas at Fayetteville.

**Jonathan Young, Field Projects Coordinator**, will assist with project planning and field operations. Mr. Young has assisted with multiple field projects, including invasive species control and habitat management at state Natural Areas, reforestation for the Ivory-billed Woodpecker, fish and mussel sampling on Fourche Creek, wetland restoration in Fourche Bottoms, wildlife habitat improvements at Waste Management's Two Pine Landfill, and native warm season grass production for socially disadvantaged farmers. He has a B.S. in Biology from University of Arkansas at Little Rock.

**Ellen Fennell, Executive Director and Vice President**, has responsibility for the integrity of both programmatic and fiscal project management. Ms. Fennell was appointed director of Audubon Arkansas in May of 2011. She works with Audubon's Board of Directors to establish policy to implement Audubon's mission in the state, and oversees management of all programs operated by Audubon in Arkansas. Prior to assuming her directorial duties, Ms. Fennell served as Director of Development for nine years for Audubon Arkansas. Ms. Fennell has over 25 years of experience in program development, implementation, and management. Prior to Audubon, Ms. Fennell held management positions at The Nature Conservancy, Winrock International and Heifer International. Ms. Fennell holds a B.A in English from Rhodes College in Memphis, TN.