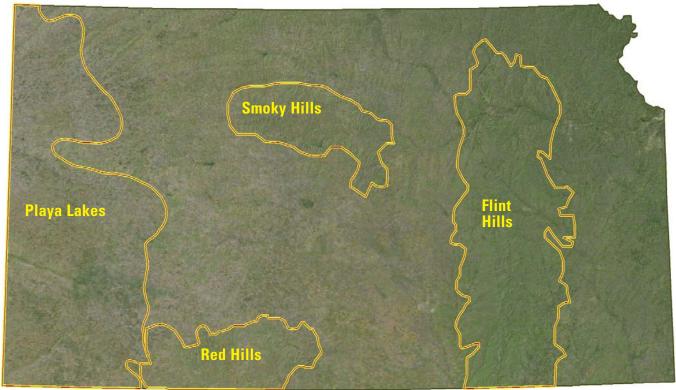
Kansas





Kansas Partners Program Conservation Focus Areas

Introduction

Kansas is known as the "Prairie State." Often, people will drive through Kansas and have the perception of miles and miles of nothing, not even a tree. The lack of trees, cities, and crop fields, or rather, the presence of vast intact grasslands is exactly what makes Kansas unique. This feature of Kansas provides an extraordinary view of the past and what the landscape can continue to look like in the future. The fact that someone can drive and see only miles and miles of unaltered terrain is beauty in, and of, itself. The fact that there are no trees or cropland is what makes the unique character of the prairie and what hosts a vast amount of prairie wildlife. Certain areas of Kansas represent the last stronghold of tallgrass prairie in North America. Many of these

areas are so large they are visible on satellite images. It is in these areas where the most work is needed. With 98% of the state in private land ownership (Kansas Department of Wildlife and Parks 2002), there are ample opportunities for the Partners Program to assist ranchers and farmers with fish and wildlife habitat restoration projects. Over time, invasive species, fragmentation, and poor land management have led to degradation and loss of prairie habitats, contributing to the decline of numerous federal trust species. Through educational efforts and the application of appropriate land management strategies, the more than 17 million acres left in native vegetation can provide much needed habitat for these trust resources.

Geographic Focus Areas

Focus Area Selection

Narrowing 17 million acres of native prairie down to manageable conservation focus areas is a significant task. Input from internal and external partners identified four focus areas within the state: the Flint Hills, Red Hills, Smoky Hills, and Playa Lakes. Stakeholders who assisted the Kansas Partners Program with the strategic planning process are identified in Appendix A.



Red Hills Focus Area

The Red Hills, located in south central Kansas and north central Oklahoma, is dominated by a mixed-grass and sand-sage prairie ecosystem that is dissected by spring-fed streams which meander though the red-tainted canyons and hills. These streams eventually flow into the Medicine and Salt forks of the Arkansas River, which flow directly into Salt Plains National Wildlife Refuge. The region is ecologically important

because it is Kansas' second largest intact tract of native prairie (second only to the Flint Hills), and is home to a number of declining wildlife species which require large, unfragmented tracts of native prairie. The lesser prairie-chicken, numbers of which have dropped almost 90% since the 1800's, is just one of the species the Partners Program is working to conserve in the area.

Threats of fragmentation and invasive species are a major concern in this focus area. A primary interest of the Partners Program is Eastern red cedar control and promoting proper prairie management. This is being done in cooperation with several partners, especially the Comanche Pool Prairie Resource Foundation which is a producer-driven interest

group that promotes proper grassland management within the Red Hills. Ranching is the major land use in the area and ranchers have been receptive to conservation ideas; to date, over 120,000 acres of land have been enhanced.

Priority Species

- Lesser prairie-chicken
- Ferruginous hawk
- Burrowing owl
- Loggerhead shrike
- Grasshopper sparrow
- Baird's sparrow
- Western meadowlark
- Arkansas shiner (Threatened)
- Arkansas darter (Threatened)



Large intact landscapes benefit both wildlife and rural lifestyles. USFWS photo.

Red Hills Focus Area Five-year Targets

Habitat

Upland Restoration/Enhancement: 30,000 acres
Wetland Restoration/Enhancement: 40 acres
River Restoration/Enhancement: 2 miles

Partnerships

• Number of new partners: 40

• Amount of technical assistance: 125 staff days

Primary activities include working with private landowners in the Red Hills and coordinating with the USDA Natural Resources Conservation Service, Kansas Department of Wildlife and Parks, and Comanche Pool Prairie Resource Foundation to affect large tracts of land owned by several landowners involved with several different programs, all with a common goal.

• Percentage of leveraging:

58% landowners and in-kind

34% Service funds

5% other partners (nongovernmental organizations)

3% Kansas Department of Wildlife and Parks

Implementation strategy for partnership objectives: Both upland and wetland objectives will be met by restoration of grasslands and wetlands on cattle ranches. Many stream and wetland areas have been neglected on these ranches and will be a primary target for the Partners Program. Additional partners will be sought through landowner workshops, the Comanche Pool Prairie Resource Foundation, and interested landowners.

Biological Outcomes: Kansas – Red Hills Focus Area, 2007 - 2011

The Partners program worked with the Playa Lakes Joint Venture to model the biological outcomes of the expected five-year habitat restoration target acres for priority birds. Changes in bird abundance on each habitat type were modeled using bird densities from the literature and specific Partners Program habitat restoration and enhancement activities. Results showed a net gain or loss of priority birds from the anticipated treatments of Partners Program projects within each Focus Area. Bird numbers expected to be supported on Partners Program projects were compared to regional bird population goals, illustrating the contribution of each Focus Area to bird population objectives developed for the four major migratory bird initiatives (waterfowl, shorebirds, waterbirds, and landbirds).

Species Used	Habitats Used			
rasshopper Sparrow	Mixed Grass – Few shrubs/high grass			
esser Prairie-Chicken	Mixed Grass – Many shrubs/low grass			
oggerhead Shrike	Other – Other			
	Sand Sage – High Grass			
	Sand Sage – Low Grass			

Estimated Biological Outcomes: Kansas Red Hills Focus Area (Grassland Projects), 2007-2011									
Species (and Habitat)	Current Acres	Future Acres	Carrying Capacity Current	Carrying Capacity Future	Change in Carrying Capacity	% Goal Current	% Goal Future	Change % Goal	
Grasshopper Sparrow – Breeding					0.000.04				
Mixed Grass – Few shrubs/high grass	1.00	22,500.00	0.16	3,663.00	3,662.84	0.00	0.14	0.14	
Mixed Grass – Many shrubs/low									
grass	5,700.00	1.00	191.52	0.03	-191.49	0.01	0.00	-0.01	
Sand Sage – High grass	1.00	75,00.00	0.17	1,283.25	1,283.08	0.00	0.05	0.05	
Sand Sage – Low grass	1,800.00	1.00	63.72	0.04	-63.68	0.00	0.00	0.00	
Grasshopper Sparrow –									
Breeding Totals			255.57	4,946.32	4,690.75	0.01	0.19	0.18	
Lesser Prairie-Chicken – Resident									
Mixed Grass – Few shrubs/high grass	1.00	22,500.00	0.00	102.66	102.65	0.00	0.25	0.25	
Mixed Grass – Many shrubs/low		·							
grass	5,700.00	1.00	26.01	0.00	-26.00	0.06	0.00	-0.06	
Sand Sage – High grass	1.00	7,500.00	0.01	42.71	42.70	0.00	0.11	0.11	
Sand Sage – Low grass	1,800.00	1.00	10.25	0.01	-10.24	0.03	0.00	-0.03	
Lesser Pairie-Chicken –									
Resident Totals			36.27	145.37	109.11	0.09	0.36	0.27	
Loggerhead Shrike									
Mixed Grass — Few shrubs/high grass	1.00	22,500.00	0.00	36.00	36.00	0.00	0.07	0.07	
Mixed Grass – Many shrubs/low	1.50	22,000.00	0.00	00.00	00.00	0.00	0.07	0.07	
grass	5.700.00	1.00	21.09	0.00	-21.09	0.04	0.00	-0.04	
Sand Sage – High grass	1.00	7.500.00	0.00	27.75	27.75	0.00	0.06	0.06	
Sand Sage – Low grass	1.800.00	1.00	6.66	0.00	-6.66	0.00	0.00	-0.01	
Loggerhead Shrike Totals	.,555.56		27.76	63.76	36.00	0.05	0.13	0.08	

Playa Lakes Joint Venture bird habitat models were used to estimate biological performance of anticipated Red Hills Partners Program projects for a subset of priority bird species during the 5-year period.

For grasshopper sparrow, completed projects are expected to support approximately 4,946 breeding birds, which is 0.18% of the population goal for the BCR19 portion of Kansas. Grassland restoration and enhancement actions will greatly increase the carrying capacity of these sites – an increase of 4,691 birds, from 256.

For lesser prairie-chicken, completed projects are expected to support approximately 145 birds, which is approximately 0.27% of the population goal for the BCR19 portion of Kansas. Restoration and enhancement actions on these sites will triple the pre-project population.

For loggerhead shrike, completed projects are expected to support approximately 64 birds, which is 0.08% of the population goal for the BCR19 portion of Kansas. Restoration and enhancement actions will more than double the pre-project population.



Smoky Hills Focus Area

Located in the central part of Kansas, the Smoky Hills Conservation Focus Area is an area of transition from tallgrass to mixed-grass prairie. The Smoky Hills landscape comprises rolling to nearly level tallgrass and mixedgrass prairie, with abundant outcroppings of sandstone and limestone. The sandstone and limestone outcroppings, as well as lack of rainfall, has helped to keep much of this area as native prairie. This landscape still contains large tracts of high quality tallgrass and mixed-grass prairie that are currently used primarily for

grazing. These native prairie pastures provide important seasonal habitat for migrating birds, as well as crucial nesting and brood-rearing habitat for grassland nesting birds such as greater prairie-chicken, upland sandpiper, and Baird's sparrow. The Partners Program is working with ranchers to improve the quality of existing grasslands in the Smoky Hills. A new landowner-driven conservation group, the Post Rock Grazers, formed to address grassland issues such as grazing management, invasive species control, and water quality. The Kansas Partners Program works in partnership with this group to provide technical and financial assistance and to complete projects of mutual interest.

Priority Species

- Upland sandpiper
- Greater prairie-chicken
- Northern harrier
- Ferruginous hawk
- American avocet
- Black tern
- Burrowing owl
- Loggerhead shrike
- Topeka shiner (Endangered)



Rancher (left) visits with Partners Program biologist (Tony Ifland) about a prairie restoration project on his ranch. UFWS Photo.

Smoky Hills Focus Area Five-year Targets

Habitat

- Upland Restoration/Enhancement: 15,000 acres
- Wetland Restoration/Enhancement: 80 acres
- River Restoration/Enhancement: 3 miles

Partnerships

- Number of new partners: 40
- Amount of technical assistance: 75 staff days
- Percentage of leveraging:
 - 40% Service funds
 - 40% landowners and in-kind
 - 20% other partners (nongovernmental organizations, Kansas Department of Wildlife and Parks)

Implementation strategy for partnership objectives: Both upland and wetland objectives will be met by restoration of grasslands and wetlands on cattle ranches. Many stream and wetland areas have been neglected on these ranches and will be a primary target for the Partners Program. Additional partners will be sought through landowner workshops, the Post Rock Grazers, and interested landowners.

Biological Outcomes: Kansas – Smoky Hills Focus Area, 2007 - 2011

The Partners program worked with the Playa Lakes Joint Venture to model the biological outcomes of the expected five-year habitat restoration target acres for priority birds. Changes in bird abundance on each habitat type were modeled using bird densities from the literature and specific Partners Program habitat restoration and enhancement activities. Results showed a net gain or loss of priority birds from the anticipated treatments of Partners Program projects within each Focus Area. Bird numbers expected to be supported on Partners Program projects were compared to regional bird population goals, illustrating the contribution of each Focus Area to bird population objectives developed for the four major migratory bird initiatives (waterfowl, shorebirds, waterbirds, and landbirds).

Kansas – Smoky Hills Focus Area (BCR-19)

Species Used Habitats Used

Greater Pairie-Chicken Cropland – Pasture Loggerhead Shrike Cropland – Wheat

Shorebirds-Nonbreeding-Wetlands Mixed Grass – Few shrubs/high grass Upland Sandpiper Mixed Grass – Many shrubs/low grass

Other – Other

Other Wetlands - Moist-soil unit

Other Wetlands - Saline

Riverine Systems – Wet meadow

Estimated Biological Outcomes:	Kansas –	– Smoky H	ills Focus .	Area (Gras	ssland and	Wetland	Projects), 2	2007-2011
Species (and Habitat)	Current Acres	Future Acres	Carrying Capacity Current	Carrying Capacity Future	Change in Carrying Capacity	% Goal Current	% Goal Future	Change % Goal
Greater Prairie-Chicken – Resident								
Mixed Grass — Few shrubs/high grass Mixed Grass — Many shrubs/low	1.00	15,000.00	0.01	221.11	221.10	0.00	0.28	0.28
grass	7,250.00	1.00	106.87	0.01	-106.86	0.14	0.00	-0.14
Greater Prairie-Chicken – Resident Totals			106.88	221.13	114.24	0.14	0.28	0.14
Loggerhead Shrike – Resident								
Cropland – Pasture	80.00	1.00	0.13	0.00	-0.13	0.00	0.00	0.00
Mixed Grass – Few shrubs/high grass	1.00	15,000.00	0.00	24.00	24.00	0.00	0.05	0.05
Mixed Grass – Many shrubs/low								
grass	7,250.00	1.00	26.83	0.00	-26.82	0.06	0.00	-0.06
Loggerhead Shrike – Resident Totals			26.95	24.01	-2.95	0.06	0.05	-0.01
Shorebirds – Nonbreeding								
Wetland								
Other Wetlands – Moist soil unit	10.00	40.00	1,149.00	4,596.00	3,447.00	0.00	0.02	0.02
Other Wetlands – Saline	15.00	40.00	1,723.50	4,596.00	2,872.50	0.01	0.02	0.01
Shorebirds – Nonbreeding		1.00	0.070.50	0.400.00	C 240 F0	0.04	0.04	0.00
Wetland Totals			2,872.50	9,192.00	6,319.50	0.01	0.04	0.03
Upland Sandpiper – Breeding								
Cropland – Pasture	80.00	1.00	0.37	0.00	-0.36	0.00	0.00	0.00
Mixed Grass – Few shrubs/high grass	1.00	15,000.00	0.01	85.50	85.49	0.00	0.12	0.12
Riverine Systems – Wet meadow	1.00	25.00	0.02	0.39	0.38	0.00	0.00	0.00
Upland Sandpiper – Breeding Totals			0.39	85.90	85.51	0.00	0.12	0.12

Playa Lakes Joint Venture bird habitat models were used to estimate biological performance of anticipated Smoky Hills Partners Program projects for a subset of priority bird species during the 5-year period.

For greater prairie-chicken, completed projects are expected to support approximately 220 breeding birds, which is approximately 0.28% of the population goal for the BCR19 portion of Kansas. Restoration and enhancement actions on these sites will more than double the pre-project population.

For loggerhead shrike, completed projects are expected to support approximately 25 birds, which is 0.05% of the population goal for the BCR19 portion of Kansas, a -0.01% gain.

For migrant shorebirds, completed projects are expected to support more than 9,000 use-days, which is 0.04% of the population goal for the BCR19 portion of Kansas. Wetland restoration and enhancement actions will improve the carrying capacity of these sites by more than 6,300 use days.

For upland sandpiper, completed projects are expected to support approximately 85 breeding birds, which is 0.12% of the population goal for the BCR19 portion of Kansas. Grassland restoration and enhancement actions will greatly increase the carrying capacity of these sites, from virtually no birds before project initiation.



Flint Hills Focus Area

The tallgrass prairie is the most altered ecological community in North America. Of the 142 million acres that once covered the American heartland, less than 3% remains. The greater Flint Hills area of Kansas is by far the largest tallgrass prairie landscape on the continent, with more acres remaining in Kansas than in all the other prairie states and Canadian provinces combined. The shallow soils and rough terrain have managed to keep the plow and other disturbances to a minimum. Even so, a sizable portion of the Flint Hills has been degraded by invasive species, urban sprawl, woody plant encroachment, and continued prairie and ranch fragmentation.

Ranching is king in the Flint Hills, and with over 3 million acres of grassland it is easy to see why. The ranching community in the Flint Hills has many traditions, among which is annual spring burning. This tradition affects about 2.5 million acres and leaves little vegetation for grassland dependent species. The Partners Program is working with several partners to promote heterogeneity, both in burning regime and grazing systems. Lead in this effort is the



Tallgrass prairie restoration project. USFWS Photo.

Tallgrass Legacy Alliance. The Tallgrass Legacy Alliance has enhanced over 150,000 acres of tallgrass prairie in the Flint Hills and is essential to influencing rancher philosophies about grassland management within the area.

Priority Species

- Black rail
- Cerulean warbler
- Henslow's sparrow
- Dickcissel
- Bobolink
- Topeka shiner (Endangered)
- Mead's milkweed (Threatened)



Kansas Partners Program field biologist, Jim Minnerath, works with a private landowner on a Wildlife Extension Agreement. Photo by Bob Culbertson.



Cattle ranching is the primary land use in the Flint Hills of Kansas. The Partners Program works hand-in-hand with the community-based Tallgrass Legacy Alliance to keep intact native prairie grasslands for healthy wildlife populations, rural lifestyles, and viable agricultural production. USFWS Photo.

Flint Hills Focus Area Five-year Targets

Habitat

- Upland Restoration/Enhancement: 35,000 acres
 Wetland Restoration/Enhancement: 100 acres
- River Restoration/Enhancement: 2 miles

Partnerships

- Number of new partners: 50
- Amount of technical assistance: 125 staff days
- Percentage of leveraging:
 - 33% Service funds
 - 33% landowners and in-kind
 - 20% grants
 - 14% other partners (nongovernmental organizations, Kansas Department of Wildlife and Parks)

Implementation strategy for partnership objectives: Both upland and wetland objectives will be met by restoration of grasslands and wetlands on cattle ranches. Many stream and wetland areas have been neglected on these ranches and will be a primary target for the Partners Program. Additional partners will be sought through landowner workshops, Tallgrass Legacy Alliance contacts, and interested landowners.



Playa Lakes Focus Area

Across western Kansas, depressional wetlands store precious water from seasonal rains and provide a temporary oasis to wildlife on the arid landscape. These wetlands, called playas, provide extremely valuable habitat for a large suite of migratory waterfowl, shorebirds, and other waterbirds. Playas are important migratory stopovers for ducks and shorebirds to rest and refuel, some traveling thousands of miles between breeding and wintering grounds.

Precipitation is inconsistent in the playa region and drought is a common occurrence. The resulting wet-dry cycle of playas produces a highly diverse plant community. These plants produce large quantities of nutritious seeds,

essential for waterfowl and other birds during their migration to the wintering grounds.

Historically, many playas have been farmed in some years and are left idle in other years when too wet. In some cases, farmers have received only one successful crop in ten years. The extensive farming of these playas results in a reduction of habitat potential for wildlife, due to siltation and a reduction in invertebrate life. The Partners Program works with farmers and the Kansas Playa Lakes Habitat Improvement Program (KPLHIP). The KPLHIP offers to lease privately owned cropland playas for a ten-year period, in which the playa and a required buffer will not be farmed. The Partners Program provides in-kind support to the lease program and assists landowners in establishing appropriate wetland buffers.

Priority Species

- Lesser prairie-chicken
- Northern pintail
- American bittern
- Long billed curlew
- Burrowing owl
- Texas horned lizard

Playa Lakes Focus Area Five-year Targets

Habitat

- Upland Restoration/Enhancement: 100 acres
- Wetland Restoration/Enhancement: 100 acres
- River Restoration/Enhancement: 0 miles

Partnerships

- Number of new partners: 8
- Amount of technical assistance: 40 staff days
- There is no Partners Program biologist currently stationed in this conservation focus area. Most work will consist of providing technical assistance to Kansas Department of Wildlife and Parks and others to promote the Kansas Playa Lakes Habitat Improvement Program.
- Percentage of leveraging:

50% KPLHIP

17% Service funds

17% landowners and in-kind

16% other partners (nongovernmental organizations, Kansas Department. of Wildlife and Parks)

Implementation strategy for partnership objectives: Both upland and wetland objectives will be met by working with interested landowners and in cooperation with the Kansas Department of Wildlife and Parks. The Kansas Playa Lakes Habitat Improvement Program provides annual payments to landowners and is a very active program. The Partners Program will work with interested landowners to establish grassland buffers surrounding playa sites.



 $Lesser\ prairie-chickens\ enjoy\ the\ benefits\ of\ habitat\ restoration, along\ with\ grazing\ cattle.\ Photo\ by\ Tony\ Ifland,\ USFWS.$

Kansas Statewide Goals



Improve Information Sharing and Communication

The Partners Program staff has an excellent working relationship with many partners and interest groups in Kansas. It is of highest priority to maintain these relationships. This will be done through semi-annual coordination meetings with the USDA Natural Resources Conservation Service, Kansas Department of Wildlife and Parks and Pheasants Forever staff, In addition, Partners Program staff will continue to be active members of the Natural Resources Conservation Service State Technical Committee as well as sub-committee members of the Conservation Reserve, Wetlands Reserve, Grassland Reserve, Environmental Quality Incentives, and Wildlife Habitat Incentives programs. Partners Program staff will continue to be active with nongovernmental organizations such as the Tallgrass Legacy Alliance, Comanche Pool, Prairie Resource Foundation, Post Rock Grazers, The Nature Conservancy, Pheasants Forever, National Wild Turkey Federation and Kansas Alliance for Wetlands and Streams. This will be accomplished by participating in meetings, conferences, and workshops; leading tours; and being involved in educational programs across the state. Partners Program staff will maintain good records of statewide accomplishments, entering and storing data in the Partners Program HabITS database. The Partners Program state coordinator will conduct quality control and quality assurance for project entries, including lists of high priority species and photo documentation for projects.

Five-year Targets

- Participate in 45 workshops (e.g., restoration technique, conservation program update, and science-seminar workshops), ranch tours, conferences, or meetings involving partners.
- Contribute to 10 media events involving the Partners Program.
- Participate in 10 semi-annual coordination meetings with the USDA Natural Resources Conservation Service and Kansas Department of Wildlife and Parks staff.
- Sponsor, or assist in, 15 ranch conferences, workshops, or tours throughout the state.
- Complete 5 school field trips, in support of the Director's priority to re-connect America's youth to the outdoors.

Enhance Our Workforce

Kansas is a diverse state with annual precipitation varying almost 20 inches west to east. This results in dramatic variations in vegetation from east to west. The Partners Program staff are responsible for large geographic areas and must have the knowledge to answer questions about several habitat types. With questions about agriculture, water law, wildlife management, pest control, contracts, and grazing systems, Partners Program staff are required to have a broad knowledge base of several different ecosystems. This knowledge is obtained through experience, mentoring, and training. Providing appropriate training is a must to maintain a highly-motivated staff.

Five-year Targets

- Continue a program whereby Kansas Partners Program staff spend 40 hours in another Kansas Partners Program field biologist's work area to exchange expertise in habitat restoration techniques and current conservation issues.
- Work with Kansas Partners Program staff to update Individual Development Plans and to provide opportunities to achieve identified goals.
- Annually assist Partners Program staff in scheduling pertinent training for state-of-the-art habitat restoration techniques.
- Conduct semi-annual staff meetings to provide policy updates, address issues of concern across the state, and share information through invited guest speakers.
- Provide annual award recognition for outstanding Partners Program staff accomplishments.

Increase Accountability

The Partners Program will use many factors in ranking projects, such as contribution to federal trust species or Kansas Species of Concern and proximity to national wildlife refuges. Projects within the identified four conservation focus areas will be given the highest priority.

Five-year Targets

- Increase by 10% the number of projects within the HabITS database that have accompanying photos.
- Provide program summary updates to partners at semi-annual coordination meetings.
- Work with the Service's HAPET office to develop a Kansas Partners Program GIS database.
- Work with universities and Extension Service to increase monitoring of Partners Program projects.

External Factors

The conversion of native prairie is a major factor that the Partners Program has to anticipate. Whether it is conversion to cropland, cool-season grasses, or urban development, all are real threats to native prairie and may cause fragmentation of large intact grasslands. How much of this actually occurs depends on the ever-changing agricultural community. The fact that the state of Kansas is currently in a drought may also impact the number of projects that landowners may be able to complete. They may not be able to leverage funds for projects if profits are small. Also, an increase in fuel prices drastically impacts contractor prices and reduces the number of acres the Partners Program is able to fund.