U.S. Fish & Wildlife Service

# **Partners for Fish and Wildlife Program**

Mountain-Prairie Region Strategic Plan 2007 – 2011

Cornerstones: Trust Respect Honesty Flexibility Open Communication

Voluntary Private Lands Habitat Restoration



# Mountain-Prairie Region

Message from the Regional Director



As Regional Director of the U.S. Fish and Wildlife Service's (Service), Mountain-Prairie Region, I am pleased to present this Step-down Strategic Plan for the Region's Partners for Fish and Wildlife Program (Partners Program). This year is the 20th anniversary of the Partners Program, and I want to mark this occasion by highlighting how successful and positive the Partners Program's impact in the Region has been to date. Working together, we have accomplished great things, and now look to the future to broaden and strengthen these partnerships.

This plan represents Phase II of a three-part strategic planning process

for the national Partners Program. The step-down plan identifies Focus Areas for each of the eight states in the Mountain-Prairie Region, including five-year habitat restoration and enhancement targets for each state. In addition, the plan includes goals and objectives for strengthening partnerships; improving information sharing and communication; enhancing our workforce; and, increasing accountability. This plan will help guide the Region in making private land habitat restoration decisions that are both fiscally responsible and provide the greatest good to Service Trust resources.

Partners Program staff worked with all key partners, both within and outside the Service, to complete the stepdown plan. The collective insight, expertise, and dedication of these partnership efforts is apparent throughout the plan and further underscores the benefit of working together to advance a shared conservation vision.

The Partners Program is the Service's primary delivery mechanism for on-the-ground habitat restoration and enhancement, across all Service programs. To meet the highest priority habitat needs, the Partners Program staff narrowed their focus to those geographic areas in which we have the greatest opportunity to restore habitat on private land for high priority fish and wildlife species. In some areas, the focus is on recovery of endangered species. In others, the focus is on keeping common species common — reversing downward trends of high priority fish and wildlife species.

One of the largest uses of private land within the Mountain-Prairie Region is working cattle ranches, many of them family-owned and -operated for generations. The people who ranch in our Region are true stewards of the land, and are a major force in accomplishing habitat conservation goals. The Partners Program has provided significant assistance for local, on-the-ground habitat conservation projects in ranching communities and, while I am proud to see that these projects benefit fish and wildlife species, I am equally as proud to know that these projects help maintain traditional rural lifestyles and viable agricultural communities.

The 20th Anniversary of the Partners Program is an opportunity to reflect on just how much we have accomplished. In the Mountain-Prairie Region, Partners Program staff, and our partners, have restored over 1.8 million acres of habitat for high priority fish and wildlife species. These habitat accomplishments are second to none in the Nation. This tremendous work is a direct result of our Region's Partners Program's five ingredients for success: *trust, respect, honesty, flexibility, and open communication*.

Clearly, these accomplishments could not have been realized without the help of our many partners, to whom we are grateful for their generous time, commitment to conservation, contribution of resources, and willingness to work cooperatively with the Service. I look forward to working with all of you throughout the implementation of this 5-year strategic plan. Together we will continue to raise the bar for fish and wildlife habitat conservation and public-private partnership.

Congratulations to each and every one of our Partners Program field staff and their partners on 20 years of success for the Partners Program. Here's to even more productive years in the future!



# U.S. Fish & Wildlife Service

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"I have grandsons that may want to farm and ranch when they grow up. I think that taking care of the land, managing it properly, and working with the Partners Program will allow them to succeed in farming this land and enjoy the wildlife that use it"

Don Hofman, landowner

# Overview of the Mountain-Prairie Region



# Introduction

The Partners for Fish and Wildlife Program (Partners Program) is the U.S. Fish and Wildlife Service's (Service) vanguard for nonregulatory, voluntary citizen and community-based stewardship efforts for fish and wildlife conservation. The strategic plan for the program consists of three parts: Part 1, the "Vision Document," describes the program and its major goals; Part 2 consists of "Regional Step-down Plans," identifies geographic focus areas, accomplishment targets, and anticipated benefits to federal trust species; Part 3, the "National Summary Document," will reflect a national overview of habitat priorities and targets based on the regional step-down plans. This document is the Mountain-Prairie Region's "Step-down Plan."

The Mountain-Prairie Region Partners Program continuously strives to meet the mission of the Service through voluntary private lands habitat restoration and enhancement projects that benefit high priority federal trust resources. Since 1987, the Mountain-Prairie Region has worked with private landowners to restore wetlands, uplands, rivers, and streams — impacting 164,000 acres of wetlands, 1,664,000 acres of uplands, and 1,898 miles of riparian and stream habitats. These restoration accomplishments would not have been possible without the cooperation of the program's more than 12,500 private landowner partners. The Mountain-Prairie Region is proud to step back, take a look at where the Partners Program has been, and thank the many partners who have helped make these projects possible.

With all the successes the Partners Program and its partners have realized, the Mountain-Prairie

Region considers this only the beginning in terms of the potential of the Partners Program — the recent passing of the Partners for Fish and Wildlife Act is one indicator of the potential for the future. The program has continued to grow in the Mountain-Prairie Region and new partners with a strong investment in the Partners Program are excited to head into the future with the Service, to take advantage of these new opportunities. The Mountain-Prairie Region Partners Program plans to take full advantage of these new opportunities and show tremendous results towards achieving the mission of the Service, "Working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people." Additional information on the Partners Program can be found at the program website at http://ecos.fws.gov/partners.

# **Focus Areas**

The Mountain-Prairie Region has had geographic focus areas for the past eight years, and has worked towards completing projects within those focus areas that benefit a suite of high priority federal trust species. These early focus areas were established with a significant amount of stakeholder involvement. During this new strategic planning effort, the Partners Program brought those same stakeholders, and many more, back to the table to discuss how well the focus area concept is working and provide an opportunity to make necessary adjustments. With new available GIS data layers, and increased research and monitoring to determine species population numbers and threats, the Service has more tools available to help

refine the focus areas that are currently in place. These newly developed Regional conservation focus areas will provide great opportunities to benefit high priority fish and wildlife species through private land habitat restoration and enhancement. In addition, acre and river-mile accomplishment goals have been established for each identified focus area, providing a level of expectation and accountability to the American people.

# Strategic Habitat Conservation

Strategic Habitat Conservation (SHC), as defined in the report by the National Ecological Assessment Team, is critical to the on-going success of the Partners Program in the Mountain-Prairie Region. As SHC regional focal areas are established, the Partners Program will assist as applicable opportunities on private land become available.

# Partnerships

Several landscape level, community-based conservation partnerships have been developed with the help of the Partners Program. These partnerships are effective at providing habitat for high priority fish and wildlife species, but also maintain sustainable agricultural communities and rural lifestyles. In addition to working with many private landowner partners, the Mountain-Prairie Region Partners Program works with other agencies, tribal entities, and organizations such as the USDA Natural Resources Conservation Service, Bureau of Land Management, The Nature Conservancy, Ducks Unlimited, and Trout Unlimited.



Native prairie restoration project in Kansas. USFWS Photo.

# **Conserving Habitat**

The Mountain-Prairie Region is distinct among Service regions, as it has the largest percentage of private and tribal agricultural lands. Many of these acres are part of intact landscapes with tremendous fish and wildlife abundance and diversity. While also involved with various recovery efforts, Partners Program biologists work with private landowners to maintain these intact landscapes to keep common species common. This enables the Partners Program to realize the greatest return on investment — habitat restoration and enhancement at a landscape scale to help prevent costly recovery efforts in the future.

# **Native Prairie**

Due to the continued loss of, and increasing threats to, native prairie, this will be a major focus for the Partners Program in the Mountain-Prairie Region. Loss of native grasslands needs to be viewed as a regional, national, and international issue. The program will continue to emphasize increased efforts in tallgrass, shortgrass, and mixed-grass prairie areas. The greatest threats to existing native prairie sites are conversion to row-crop agriculture; encroachment by invasive species, such as Eastern red cedar; development and urban sprawl; and poor grazing management practices.

In addition to increased restoration and enhancement efforts in the tallgrass prairie, accelerated efforts in the shortgrass and mixed-grass prairie will occur. Working with non-governmental organizations, and the Service's grassland easement program, the Partners Program will also assist with efforts to protect native prairie. A major effort will take place in South Dakota to increase native prairie projects and funding available to private landowners for native prairie restoration. With the onset of Roundup-ready soybeans and corn, the ease of tilling and cost effective means of farming has added a huge threat to native prairie resources in the Dakotas. A major, and sustained, effort will be needed to prevent further losses.

Native prairie habitat restoration and enhancement projects will benefit a suite of migratory bird species from the Service's Migratory Bird Focal Species list. Some key species include ferruginous hawk, mountain plover, long-billed curlew, burrowing owl, loggerhead shrike, grasshopper sparrow, Henslow's sparrow, LeConte's sparrow, chestnutcollared longspur, and bobolink. Other species of concern that could benefit from prairie restoration projects include lesser prairiechicken, greater prairie-chicken, northern harrier, and dickcissel. In addition to these high priority bird species, several at-risk plants could benefit from such restoration efforts, including the threatened Mead's milkweed. Additional threatened and endangered species will benefit from these restoration efforts as well, including blackfooted ferret, gray wolf, grizzly bear, and Utah prairie dog.

# Wetlands

Throughout the Mountain-Prairie Region, wetland losses have continued to threaten suites of the Partners Program will make wetland restoration and enhancement one of its highest priorities. To meet this priority goal, the Partners Program will continue to focus efforts in northeast Montana, North Dakota, and South Dakota to restore. enhance, and establish wetlands in the Prairie Pothole Region. These small wetlands, imbedded in prairie grasslands, are critical nesting and brood-rearing habitat for waterfowl, shorebirds, and waterbirds. This extremely valuable complex of habitat types also serves as a major flyway for many wetland-dependent migratory birds that use the prairie potholes as a resting place, as well as a refueling stop, en-route to Alaska and the Canadian Arctic.

In addition to prairie potholes, the Mountain-Prairie Region is also home to Playa Lakes and the Rainwater Basin, both of which provide critical migration and nesting habitat for large numbers of wetland-dependent birds.



Wetland restoration project in North Dakota. USFWS Photo.

waterfowl, shorebird, and other waterbird species. The greatest threats are the draining of wetlands to increase row-crop production, development and urban sprawl, and poor land management practices. To address these threats, Wetland habitat restoration, enhancement, and establishment projects will benefit a suite of migratory bird species identified on the Service's Migratory Bird Focal Species list. Some keys species include trumpeter swan, wood duck, American wigeon, mallard, northern pintail, greater scaup, lesser scaup, whooping crane (Endangered), piping plover (Endangered), snowy plover, marbled godwit, and black tern. Additional efforts will be made to restore habitat for the imperiled boreal toad and Wyoming toad.

# Sagebrush-Steppe

Across the West, sagebrush-steppe habitat losses have resulted in the decline of sage dependent species, most notably the greater sagegrouse. Increased oil and gas development, poor grazing management practices, and years of drought are the primary causes for habitat degradation and loss. The habitat value of sagebrushsteppe could be improved through implementation of grazing plans, mechanical sagebrush treatment (e.g., Dixie harrow, Lawson aerator), grass and forb interseeding, and wetland seep development. This combination of treatments is an effective way to increase and improve habitat for sage grouse. Rotational grazing. cross-fencing, and off-site livestock water sources would be used to increase the grass/forb understory and its overall capacity to provide food and cover. Mechanical sagebrush treatment to open up closed canopy sagebrush habitat, followed by interseeding grasses and forbs, has been a successful method that would be used to enhance sagebrush-steppe habitats across the West. In addition. wetland seep development would be done at selected sites to increase insect production, demonstrated to be especially valuable to sage grouse chicks.

Sagebrush-steppe habitat restoration and enhancement projects will benefit a suite of migratory bird species from the Service's Migratory Bird Focal Species list. These species include ferruginous hawk, mountain plover, long-billed curlew, yellow-billed cuckoo, burrowing owl, short-eared owl, loggerhead shrike, and grasshopper sparrow. Sagebrush obligate species that will benefit



Sagebrush-steppe restortation project in North Park, Colorado. Photo by Bob Timberman, USFWS.

include greater sage-grouse, Gunnison sage-grouse, sage thrasher, sage sparrow, and Brewer's sparrow. Identified restoration efforts would also benefit other threatened, endangered, candidate, or species of concern such as white- and black-tailed prairie dog, blackfooted ferret, and pygmy rabbit.

# In-stream/Riparian (Rivers and Streams)

The Mountain-Prairie Region hosts some of the most critical native trout fisheries in the world. These native fishes, as well as many important native feeder fish, are threatened by diversion of water for irrigation; drought; introduced invasive species of fish and crustaceans; diseases, such as whirling disease; habitat degradation, due to poor grazing practices; development; and overharvest. With large rivers and numerous associated tributaries providing habitats supporting a diverse array of aquatic species, the Mountain-Prairie Region has made river and stream restoration a priority. A great many of the tributaries are part of intact landscapes that still have the

capability of supporting large numbers of native trout and other high priority or at-risk species within the Mountain-Prairie Region. Consequently, efforts expended to restore degraded streams are very worthwhile, and the outcomes are usually immediate — natural dimensions, patterns, and profiles are returned, and fish and aquatic invertebrates respond quickly to the positive changes in river morphology. Extensive reaches of several rivers and streams in Montana, Utah, and Wyoming have been restored plans are to continue these efforts. Project examples include restoring fish passage to in-stream channels.

Partners Program biologists will continue to use state-of-the-art methodology and materials for instream habitat restoration projects. The Mountain-Prairie Region Partners Program stream restoration activities will support recovery efforts for species such as native trout, fluvial Arctic grayling, chub, sucker, and Topeka shiner.

Partners Program staff in the Mountain-Prairie Region work closely with fisheries biologists, within and outside the Service, to assist in the implementation of the National Fish Habitat Initiative. Plans are to increase the program's warm- and cold-water fishery efforts to assist with the goals and objectives identified within the National Fish Habitat Initiative.



Stream restortation project on O'dell Spring Creek in Montana. Photo by Heather Johnson, USFWS.



Landowner discusses removal of invasive Eastern red cedar trees with Tony Ifland, a Kansas Partners Program biologist. Photo by Heather Johnson, USFWS.

The Partners Program has several trained river restoration specialists, leading the nation in terms of expertise in river morphology and innovative techniques in river restoration. The Mountain-Prairie Region continues to invest in river restoration training for Partners Program staff in order to expand involvement in such activities region-wide. Several biologists have acquired advanced levels of river restoration training (e.g., Rosgen methodology) and will be significantly accelerating river restoration efforts within identified focus areas.

In addition to in-stream activities, Mountain-Prairie Region Partners Program biologists will emphasize riparian restoration. Riparian restoration projects have proven extremely valuable, not just for fish and other aquatic species, but migratory birds and water quality as well. These efforts will be continued.

# **Invasive Species**

Invasive species control will continue to be a focus in the Mountain-Prairie Region. During the past three years, the Region's emphasis on invasive species led to the completion of several invasive species control projects. In order to be most effective at preventing the spread of invasive species, additional emphasis will need to be placed on removal of invasive species on neighboring private lands, as well as monitoring and control on sites where habitat restoration and enhancement has already taken place. In the Mountain-Prairie Region, the Partners Program continues to seek additional innovative removal techniques, as well as new outreach efforts at a community level. Both are necessary to successfully achieve short- and long-term control of invasive species.

# Intact Landscapes

The Mountain-Prairie Region encompasses multiple states with thousands of acres of intact landscapes. Because of this, the Service, through its private lands program, has a huge responsibility to the American people to keep these landscapes intact. These landscapes constitute large amounts of high quality habitat for suites of fish and wildlife species. This creates a need for the Partners Program to work closely with the landowners in those areas to restore, enhance, and maintain grasslands, wetlands, and riverine systems. The majority of the private lands within these areas are part of working ranches. To assist in keeping such operations on the land, community-based partnerships have formed, with the Partners Program assisting with both financial and technical assistance.

Urban sprawl continues to threaten rural agricultural communities in the Mountain-Prairie states. The Partners Program has assisted many community-based conservation initiatives, working to maintain rural lifestyles, as well as support wildlife conservation efforts. The Mountain-Prairie Region plans to continue support of these very successful efforts which include the Tallgrass Legacy Alliance and Post Rock Grazers in Kansas, Blackfoot Challenge in Montana, and Sandhills Task Force in Nebraska. The program also plans to continue to think beyond regional boundaries, assisting with the very successful Comanche Pool community conservation initiative in Kansas and Oklahoma. In addition, the Montana Partners Program is working closely with the Kootenai River Network, a bilateral initiative with the Canadian provinces of British

Columbia and Alberta. These efforts extend into Region 1, as well, where a portion of the community-based partnership is taking place in Idaho.

Through these efforts, the Mountain-Prairie Region has the opportunity to not only assist habitat restoration activities, but maintain intact and functional ecosystems, capitalize on efforts to recover at-risk species, and keep common species common. With global climate change altering habitats and creating range expansions of migratory birds and other wildlife, these intact landscapes provide necessary habitat to maintain species populations and prevent further declines. These are valuable partnerships that strive to keep ranchers and farmers on the land and help prevent adverse impacts associated with subdivision,

development, and other forms of land-use conversion that could result in fragmentation and permanent loss of key habitats for federal trust resources.

The Partners Program's focus on maintaining intact landscapes will benefit several species of conservation concern, including the endangered black-footed ferret, gray wolf, and the threatened grizzly bear.



Blackfoot Challenge community-based partnership during a visit by Interior Secretary Dirk Kempthorne. USFWS photo.

# **GEOGRAPHIC FOCUS AREAS**

The concept of conservation focus areas is not new to the Mountain-Prairie Region Partners Program. Eight years ago, the program went through a rigorous region-wide focus area planning effort, identifying those areas within each state that provide the greatest opportunities for Partners Program work on private land habitat restoration. Partners Program state coordinators worked across program lines within the Service, and gathered input from other federal and state agencies, tribal entities, non-governmental organizations, and private individuals. These focus areas were established and have led to excellent results for suites of federal trust resources. In many cases, focus areas were identified to benefit particular threatened and endangered species, where private land habitat restoration was the key to their recovery. Examples include species such as bull trout, grizzly bear, piping plover, whooping crane, and least tern. This has proven to be an extremely valuable approach to maximize the limited Partners Program resources, to do the highest priority projects within the Region.

For this new strategic planning process, the Mountain-Prairie Region realized it was best to reevaluate existing Partners Program focus areas, using the new scientific data and GIS technologies available to them. In addition, working on the landscape on a daily basis, field biologists were aware of new and increased threats to the program as well as added opportunities that weren't available in the past. To aid in the process of evaluating the existing focus areas, and providing guidance to partners assisting with the selection of those areas, the Partners Program management team selected six regional criteria that each state was to use in selecting new focus areas. These criteria are as follows:

- **1. Species Diversity and Trust Responsibilities**
- 2. Intact Landscapes (Fragmentation)
- 3. Threats
- 4. Public Land / Private Land Patterns
- 5. Partnership Opportunities
- 6. Proximity to Service Field Stations

In addition to the six regional criteria, state coordinators were given the option of adding to the criteria and developing their own methods of involving partners in the process. These specifics are identified within the individual state plans that follow.

The final focus area decisions were made state-by-state, rather than at a regional level. This was done purposefully, in order to involve all the key partners and constituents within each state and to take into consideration the land-ownership patterns and opportunities specifically. Where focus areas adjoin along state borders, state coordinators have made the commitment to share restoration techniques, potential challenges, and successes.

# PARTNERS FOR FISH AND WILDLIFE PROGRAM GOALS

The Partners for Fish and Wildlife Program Vision Document identifies five goals to be addressed in the regional step-down plans:

- **1. Conserve Habitat** *Restore and protect priority habitats to increase and maintain federal trust species populations.*
- **2. Broaden and Strengthen Partnerships** Accomplish our work through voluntary partnerships.
- **3.** Împrove Information Sharing and Communication Collaborate and share information and concerns with our partners, stakeholders, potential future partners, decision-makers, and others to protect, restore, and enhance trust resources.
- **4. Enhance our Workforce** The staff of our program is our most important resource. Maintaining and supporting this staff is the key to success in achieving on the ground results for federal trust species.
- **5.** Increase Accountability Measure, assess, and report on the effectiveness, efficiency and fiscal integrity of our habitat conservation programs and activities.





Colorado Partners Program Conservation Focus Areas

# Introduction

To develop Colorado's Partners Program focus areas, critical resource needs were evaluated in relation to many other issues and concerns: opportunities to prevent or reverse habitat fragmentation, synergism with existing or potential partners, threat analysis, and support for National Wildlife Refuge System lands in relationship to Colorado's private lands. Information relating species and habitat occurrences, priority areas for conservation, and presence of potential local partnerships were obtained from the Colorado Division of Wildlife,

Colorado Natural Heritage Program, The Nature Conservancy. Ducks Unlimited, and statewide and local land trusts. Colorado's Comprehensive State Wildlife Conservation Plan, in particular, was used to help guide the planning process. The plan identifies 205 species as meeting the criteria for inclusion as Species of Greatest Conservation Need. Additionally. Colorado Partners Program field biologists participate in a wide range of local working and planning groups. Information from these more localized sources was integrated into the national, regional, and statewide data.

Colorado is home to 29 plant and animal species listed as threatened or endangered under the Endangered Species Act, and 10 species identified as candidates for listing. The Colorado Natural Heritage Program lists 132 species and natural communities as Globally Critically Imperiled (G1) or Imperiled (G2), and 681 species and natural communities as State Critically Imperiled (S1) or Imperiled (S2). Colorado is within portions of the Central and Pacific flyways, and the state provides important nesting and stopover habitat for many migratory bird species.

Although much of Colorado is in state or federal ownership, nearly two-thirds or 38,679,947 acres (60,437 square miles) are in private or local government ownership. It is the intersection between private land ownership and habitat for species in need of conservation action which provides the primary filter and foundation for Partners Program restoration efforts in Colorado. The Executive summary of Colorado's Comprehensive State Wildlife Conservation Plan (Colorado Division of Wildlife 2006) states that, "...the landscape of eastern Colorado — eastern plains river and stream systems (including riparian), tallgrass and midgrass prairie and sagebrush were judged as being among those in the poorest condition to support native species..." Several of the Colorado Partners Program focus areas reflect agreement with the State's conclusion.

Input on general Partners Program direction and future activities was solicited from key partners in a comprehensive 2004 stakeholder meeting. Survey participants are included in Appendix A.

# **Geographic Focus Areas**



# Sage Steppe Focus Area

Working cooperatively with private landowners is paramount to ongoing success in this conservation focus area. Ensuring that each habitat project meets landowner goals, as well as the specific habitat requirements of target wildlife species, provides for continued accomplishments. At present, two Partners Program



The mosaic of various sagebrush age classes provides maximum benefits to a wide range of sagebrush obligate species. Photo by Bob Timberman, USFWS.

field biologists are responsible for implementing projects in this focus area.

The majority of the Sage-Steppe Focus Area is located west of the Continental Divide; the primary exception to this is Jackson County, commonly referred to as North Park. Sagebrush rangelands are located sporadically throughout all of western Colorado. Sage grouse (both Greater and Gunnison) are considered the marquee species for this habitat type.



Male sage grouse within preferred sagebrush-steppe habitat. Photo by Bob Timberman, USFWS.

The distribution and abundance of sage grouse has markedly decreased in recent times, and the species has been extirpated from at least three states and one Canadian province. Sage grouse populations have exhibited long-term declines in this area, declining by 33% over the past 30 to 40 years (Braun 1998). Focus will also be placed on other sagebrush obligate species. including sage thrasher, Brewer's sparrow, and sage sparrow. In addition, Partners Program projects that specifically benefit these obligate species will benefit a wider suite of federal trust species and state species of concern, including northern harrier, vesper sparrow, black-throated sparrow, and kit fox. Other species, typically noted with a more moderate association with sagebrush, will benefit as well, including greentailed towhee, lark sparrow, and Merriam's shrew (Colorado Division of Wildlife 2005).

The restoration of diverse age classes of sagebrush, enhancement of wet meadows, and removal of encroaching pinyon juniper woodlands are thus far the main emphasis of program efforts. Some greater sage-grouse research points to the majority of nesting (70-80%) and early brood-rearing occuring within three miles of lek sites (Bradbury, Vehrencamp, and Gibson 1989; Wakkinen, Reese, and Connelly1992); the program tries to concentrate efforts within this "circle of maximum influence."

Nesting cover objectives include stands of sage with a good

grass/forb understory, generally averaging greater than 20 inches in height (Peterson 1980) and canopy cover of sagebrush around nests ranging from 15 to 38% (Colorado Division of Wildlife 2005).

Habitat restoration/enhancement techniques include grazing management, native grass/forb interseeding, and various mechanical treatments to produce small, irregular shaped openings within stands of heavy canopy sagebrush habitats.

Typically, wet meadows are enhanced by construction of small levees and installation of various irrigation and water control structures. Seeding native forbs along the sage/wet meadow interface is also a commonly used habitat enhancement technique.

#### **Priority Species**

- Greater sage-grouse
- Ferruginous hawk
- Northern harrier
- Sage thrasher
- Green-tailed towhee
- Brewer's sparrow
  - Vesper sparrow
  - Lark sparrow
- Black-throated sparrow
- Sage sparrow

# Sage-Steppe Focus Area Five-year Targets

#### Habitat

- Upland Restoration/Enhancement: 15,000 acres
- Wetland Restoration/Enhancement: 1,200 acres

#### Partnerships

- New landowner partners: 75
- Other new partners: 15
- Amount of technical assistance: 125 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3

# **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterbird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Partners in Flight (Rich et al. 2004)
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- A Conservation Assessment of the Colorado Plateau Ecoregion
- Colorado Important Bird Areas Program
- Greater Sage-grouse Statewide Conservation Plan (in progress)
- Gunnison Sage-grouse Rangewide Conservation Plan
- WAFWA MOU National Sage-grouse Habitat Conservation Strategy
- Intermountain West Joint Venture Coordinated Bird Conservation Plan
- Northern Eagle and Southern Routt Greater Sage-grouse Conservation Plan
- Northwest Colorado Greater Sage-grouse Conservation Plan



# Southwestern Riparian Focus Area

This conservation focus area targets habitat on all private and tribal lands in an area extending south from the Colorado River to the New Mexico state line, and west of the Continental Divide to the Utah state line. It includes the watersheds of the San Juan, Los Pinos-Piedra, La Plata, Mancos, Disappointment Creek, Uncompangre, and Upper and Lower Gunnison rivers.

The program strategy is to take a science-based, ecological approach that addresses critical parameters affecting wetlands throughout southwestern Colorado. The strategy involves three basic components. The first component has several parts: recognizing the diversity of wetland types and the varied environmental processes that support and maintain those wetlands; using a landscape-scale approach that evaluates the varying wetland types comprising wetland complexes of individual watersheds; and delivering projects such as grazing management, wet meadow enhancement, hemi-marsh restoration, as well as employing other restoration techniques to benefit wetland complexes in the watershed. Wetland complexes vary greatly throughout southwestern Colorado and the program has evolved to meet these varying needs.

Secondly, the Partners Program recognizes that wetlands provide habitat for a majority of the region's wildlife species (90% of Colorado's wildlife species use wetlands at some time during their life cycle). Wetlands are one of the most productive and diverse communities within the arid landscapes of southwestern Colorado and thereby warrant significant investment of the program's attention. The program targets the restoration, enhancement, and establishment of wetland habitat to offset the estimated 10 million acres of wetlands lost in Colorado since presettlement times (Dahl 1990).

Thirdly, riparian wetlands are distinctly dependent on the hydrology and associated ground water table of the watershed. Declining ground water tables are a significant threat to wetlands and riparian vegetation. The program addresses threats to ground water tables of riparian corridors by installing a variety of water control structures designed to keep water tables at historic levels, thereby supporting wetlands and native riparian vegetation.

Declining native fish populations have become a recent emphasis of the program. The program works closely with various government entities and nongovernmental organizations to identify habitat needs of native fishes. Fish barriers are installed on private land to protect existing populations of Colorado River cuthroat trout from hybridization with non-native trout. The program also realizes opportunities to work with plains native fishes such as the Colorado pike minnow, humpback chub, and razorback sucker by altering irrigation diversion structures which are currently impeding upstream movement by these species.

# **Priority Species**

- Mallard
- Cinnamon teal
- Northern pintail
- Wilson's phalarope
- Yellow-billed cuckoo (Candidate)
- Southwestern willow flycatcher (Endangered)
- Colorado pike minnow (Endangered)
- Humpback chub (Endangered)
- Razorback sucker (Endangered)



Wetland restoration projects benefit nesting waterfowl, such as this northern pintail hen. Photo by Rick Schnaderbeck, USFWS.

# Southwestern Riparian Focus Area Five-year Targets

# Habitat

- Upland Restoration/Enhancement: 1,500 acres
- Wetland Restoration/Enhancement: 3,000 acres
- Riparian/Stream Restoration/Enhancement: 46 miles
- In-stream Structures: 52

#### Partnerships

- Landowner partners: 50
- Other partners: 15
- Amount of technical assistance: 125 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3

#### **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterbird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Partners in Flight (Rich et al. 2004)
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- Colorado Important Bird Areas Program
- Southwestern Willow Flycatcher Recovery Plan
- Conservation Agreement and Strategy for Colorado River Cutthroat Trout (*Oncorhynchus clarki pleuriticus*) in the States of Colorado, Utah, and Wyoming
- Southwestern Wetlands Focus Area Committee Strategic Plan
- Intermountain West Joint Venture Coordinated Bird Conservation Plan
- The Gunnison Wetlands Focus Area Strategy



Northwest Wetland Riparian Focus Area

Riparian and wetland resources are of particular importance to much of this otherwise arid landscape. This conservation focus area includes the floodplains of the Colorado, White, Yampa, North Platte, and Little Snake rivers, as well as many of the smaller streams within the watersheds. Several of these rivers have relatively unaltered hydrographs which have maintained important riparian and wetland communities in places. The Nature Conservancy and Yampa Valley Land Trust have been targeting riparian areas for conservation easements to protect these valuable habitats. In addition, Arapaho National Wildlife Refuge and Browns Park National Wildlife Refuge are located within the focus area and provide valuable fish and wildlife habitat.

The Partners Program conservation targets for this focus area include the restoration and enhancement of native riparian and wetland plant communities for the primary benefit of migratory bird species. Riparian fencing, wetland restoration, grazing system establishment, and enhancement of native grasses and forbs will constitute the majority of Partners Program efforts. When possible on private lands, projects to restore or protect habitat for native fishes will be pursued.

# **Priority Species**

- Bufflehead
- Western grebe
- Marbled godwit
- Spotted towhee
- Colorado pike minnow (Endangered)
- Humpback chub (Endangered)
- Bonytail chub
- (Endangered) • Razorback sucker
- (Endangered)

# Northwest Wetland-Riparian Focus Area Five-year Targets

# Habitat

- Upland Restoration/Enhancement: 1,500 acres
- Riparian Restoration/Enhancement: 12 miles
- In-stream Structures: 10

# Partnerships

- Number of new landowner partners: 45
- Other partners: 15
- Amount of technical assistance: 125 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3

# **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterbird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Partners in Flight (Rich et al. 2004)
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- Colorado Important Bird Areas Program
- Conservation Agreement and Strategy for Colorado River Cutthroat Trout (Oncorhynchus clarki pleuriticus) in the States of Colorado, Utah, and Wyoming



Riparian restoration benefits Colorado cutthroat trout. Photo by Bob Timberman, USFWS.



Southeastern Colorado Focus Areas

The Partners Program focus areas for southeastern Colorado range over a very broad geographical area and address a number of habitat concerns. The geographical area is made up of mostly shortgrass prairie habitat with transitional mixed-grass prairie, sand sagebrush, pinyon pinejuniper forest, greasewood brushland, and riparian forest. Average annual rainfall varies from 5-21 inches across the landscape. Land use is primarily ranching, haying, and dryland and irrigated farming which presents a diversity of restoration challenges and opportunities.

This area has been divided into three focus areas based on specific target species, critical habitat, landowner interest, and partnership and restoration opportunities. The focus areas are defined as 1) Prairie Streams Focus Area, 2) Sand Sage-Shortgrass Prairie Focus Area, and 3) Playa Wetlands Focus Area. These focus areas overlap to a certain extent and other restoration opportunities exist within their outline which will be pursued over time. Goals established for each focus area are based on a previous three year average, potential internal and external funding, and projected landowner interest. They additionally reflect that resource issues in three focus areas are being addressed simultaneously.

#### **Priority Species**

- Lesser prairie-chicken (Candidate)
- Northern pintail
- Ferruginous hawk
- Mountain plover
- American avocet
- Long-billed curlew
- Burrowing owl
- Loggerhead shrikeArkansas darter
- (Candidate)
- Black-tailed prairie dog

# Southeastern Colorado Focus Areas Five-year Targets

#### Partnerships

- Number of new landowner partners: 50
- Other partners: 15
- Amount of technical assistance: 560 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3

# Biological Outcomes: Colorado Southeastern Colorado Focus Areas

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 conservation focus area. Bird numbers expected to be supported by Partners Program projects were compared to regional bird population goals, illustrating the contribution of each conservation focus area to bird population objectives developed for the four major migratory bird initiatives (waterfowl, shorebirds, waterbirds, and landbirds).

# Colorado Southeastern Colorado Focus Areas

# Species Used ing Owl

Burrowing Owl	CRP – Native
Lesser Prairie-Chicken	Playa – Wet
Loggerhead Shrike	Riverine Systems – Floodplain marsh
Long-billed Curlew	Riverine Systems – Riparian canopy – late successional with understory
Mountain Plover	Riverine Systems – River channel
Shorebirds-Nonbreeding-Wetland	Riverine Systems – Wet meadow
Waterfowl-Nonbreeding	Shortgrass – Few shrubs/low grass
	Shortgrass – Prairie dog town

Habitats Used

Estimated Biological Outcomes: Colorado Southeastern Colorado Focus Areas, 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
Sharahirda Nanbroading								
Playa – Wet	300 00	1/18 00	2 220 00	3 315 20	1 095 20	0.12	0.18	<u>a</u> n n
Biverine Systems – Floodplain marsh	25.00	50.00	2,220.00	48 10	24.05	0.12	0.10	0.00
Riverine Systems – River channel	250.00	250.00	185.00	185.00	0.00	0.01	0.01	0.00
Shorebirds – Nonbreeding								
Wetland Totals			2,429.05	3,548.30	1,119.25	0.13	0.19	0.06
Waterfowl – Nonbreeding (Fall)								
Playa – Wet	300.00	448.00	128,400.00	191,744.00	63,344.00	1.15	1.71	0.56
Riverine Systems – Floodplain marsh	25.00	50.00	33,400.00	66,800.00	33,400.00	0.30	0.60	0.30
Riverine Systems – River channel	250.00	250.00	12,500.00	12,500.00	0.00	0.11	0.11	0.00
Waterfowl – Nonbreeding Fall								
Wetland Totals			174,300.00	271,044.00	96,744.00	1.56	2.42	0.86
Waterfowl – Nonbreeding (Spring)								
Playa – Wet	300.00	448.00	128,400.00	191,744.00	63,344.00	0.35	0.52	0.17
Riverine Systems – Floodplain marsh	25.00	50.00	33,400.00	66,800.00	33,400.00	0.09	0.18	0.09
Riverine Systems – River channel	250.00	250.00	12,500.00	12,500.00	0.00	0.03	0.03	0.00
Waterfowl – Nonbreeding (Spring)								
Wetland Totals			174,300.00	271,044.00	96,744.00	0.47	0.73	0.26

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

For non-breeding shorebirds, completed projects are expected to support approximately 3,548 use days, which is approximately 0.06% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement actions on these sites will improve the carrying capacity of these sites by more than 1,119 use days.

For non-breeding waterfowl (fall), projects are expected to support approximately 271,044 use days, which is 0.86% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement activities will improve the carrying capacity of these sites by approximately 96,744 use days.

For non-breeding waterfowl (spring), projects are expected to support approximately 271,044 use days, which is 0.26% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement activities will improve the carrying capacity of these sites by approximately 96,744 use days.



Native plains fishes, such as the Arkansas darter, benefit from stream restoration projects such as these. Photo by Katy Fitzgerald, USFWS.



**Prairie Streams Focus Area** 

The Prairie Streams Conservation Focus Area is located in portions of El Paso, Elbert, Lincoln, Crowley, Otero, Bent, Kiowa, Prowers, and Pueblo counties in southeastern Colorado. This area is comprised of mostly shortgrass prairie, complemented by playa basins and stream corridors. The waterways in this area are mostly tributaries of the Lower Arkansas watershed, and range from dry creeks to intermittent and perennial flowing streams. The vast majority of streams are intermittent, with water levels and flows dependent on rainfall and spring run-off events.

Stream corridors play a critical role in the life cycle of grassland dependant species, amphibians, plains native fishes, and neotropical migratory birds. Over 60% of neotropical species use riparian areas in the West as stopover areas during migration or for breeding habitat (Kreuper 1993). There are at least 195 species of birds that are confirmed riparian breeders, according to the Colorado Breeding Bird Atlas (Kingery 2000). Native eastern plains fishes are another group of species linked to these systems. These fishes are believed to be declining because of impacts on eastern plains tributaries. Surface

water diversion and dewatering of the Ogallala Aquifer for irrigation and general development are two such impacts. The Arkansas darter, currently a state listed species, is a native eastern plains fish that has been impacted by these activities.

Riparian systems may be impacted by overgrazing, development, fragmentation, diversion, and farming practices. Riparian restoration techniques used by the Partners Program include grazing management, such as fencing, rotational grazing, and employing alternative water sources; instream channel stabilization; and removal of invasive species. The desired biological outcome is to reduce erosion, restore hydrology and stream function, and to promote a diversity of plant species and plant structure within the stream, riparian corridor, and associated uplands.

One estimate is that 95% of riparian habitat in western North America has been lost, altered, or anthropogenically degraded (Ohmart 1994).

This focus area targets the tributaries within the Lower Arkansas River watershed known to support, or have the potential to support, native eastern plains fishes. Landowners within this focus area understand the importance of managing riparian areas for the benefit of wildlife and for use in day-to-day livestock operations.

The goals set for this focus area target in-stream restoration potential within southeastern Colorado, and reflect a recent reemphasis on this resource concern and the need to develop partnerships with private landowners. Additionally, these goals do not consider the strong possibility for grassland and playa restoration within the focus area.

# Prairie Streams Focus Area Five-year Targets

#### Habitat

- Upland Restoration/Enhancement: 150 acres
- Wetland Restoration/Enhancement: 276 acres
- River/Stream Restoration/Enhancement: 14 miles

#### **Primary Partners**

USFWS Private Stewardship Grant, USFWS Challenge Cost Share Grant, North American Wetlands Conservation Act, USDA Natural Resources Conservation Service, Colorado Division of Wildlife, Colorado Association of Conservation Districts, Rocky Mountain Bird Observatory, Colorado Farm Bureau, Prairie and Wetland Focus Area Working Group.

#### **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Colorado Division of Wildlife Arkansas Darter Recovery Plan
- Partners in Flight (Rich et al. 2004)
- Prairie and Wetlands Focus Area Strategic Plan
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- Playa Lakes Joint Venture Planning Effort (in progress)
- The Nature Conservancy Central Shortgrass Prairie Ecoregional Asssessment
- North American Grouse Management Plan (draft)
- Colorado Important Bird Areas Program



#### Sand Sage Shortgrass Prairie Focus Area

The Sand Sage-Shortgrass Prairie Conservation Focus Area is located in portions of Baca, Kiowa, Prowers, and Cheyenne counties in southeastern Colorado. The focus area targets shortgrass prairie, a small area of transitional mixed-grass prairie, and sandy soil areas characterized by sand sageshrub habitat. Lesser prairiechicken, and other high priority grassland species, will benefit from grassland management and restoration in this area. This geographic focus area has other fish and wildlife habitat restoration potential, primarily involving riparian and playa sites.

The majority of the habitat impacts in this focus area, within the grassland mosaic, are a result of fragmentation. While this area is still considered rural on a larger scale, it is significantly fragmented in varying land use patterns including dryland and irrigated farming, ranching, wind power development, oil and gas development, and roads and other infrastructure associated with human populations. These represent substantial impacts for species requiring large tracts of unbroken grassland. Both U.S. Forest Service and Colorado Division of Wildlife inventories show a downward trend in many fish and wildlife populations within Colorado. There has been much effort among locally based federal and state entities to improve

habitat for these at-risk species (e.g., lesser prairie-chicken). Anecdotal information from lesser prairie-chicken lek surveys in Colorado conducted by Colorado Division of Wildlife and Rocky Mountain Bird Observatory may be showing a bird use shift towards an association with existing USDA **Conservation Reserve Program** (CRP) fields. There has been much success in Kansas with interseeding native forbs and legumes into existing CRP fields and this practice has been introduced in Baca County recently by the Partners Program and other entities. In addition, grazing management practices are believed to play a critical role, and are being offered to landowners through various USDA programs and grant sources. The desired impacts of restoration are stabilization of lek site use, reduction of fragmentation pressures, and an increase in numbers of mature birds during annual surveys.



Sand-sage interseeding projects benefit lesser prairie-chicken and other high priority prairie bird species. Photo by Katy Fitzgerald, USFWS.

# Sand Sage-Shortgrass Prairie Focus Area Five-year Targets

# Habitat

• Upland Restoration/Enhancement: 500 acres

# **Primary Partners**

USFWS Private Stewardship Grant, USFWS Challenge Cost Share Grant, USDA Natural Resources Conservation Service, U.S. Forest Service, Colorado Division of Wildlife, Colorado Association of Conservation Districts, Rocky Mountain Bird Observatory, Playa Lakes Joint Venture, North American Wetlands Conservation Act, Prairie and Wetland Focus Area Working Group, Lesser Prairie-Chicken Interstate Working Group, Colorado Farm Bureau.

# **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterfowl Management Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Lesser Prairie-Chicken: A Technical Conservation Assessment, USDA Forest Service
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Lesser Prairie-Chicken Recovery Plan, Colorado Division of Wildlife
- Partners in Flight (Rich et al. 2004)
- Playa Lakes Joint Venture Planning Effort (in progress)
- Prairie and Wetlands Focus Area Strategic Plan
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- The Nature Conservancy Central Shortgrass Prairie Ecoregional Asssessment
- North American Grouse Management Plan (draft)
- Colorado Important Bird Areas Program



# Playa Wetlands Focus Area

The Playa Wetlands Conservation Focus Area is located in portions of El Paso, Elbert, Lincoln, Cheyenne, Kiowa, and Kit Carson counties in southeastern Colorado. This focus area is comprised of mostly shortgrass prairie habitat with some transitional areas of mixed-grass prairie along the northeastern extent. Playas are a prevalent wetland type in this shortgrass prairie ecosystem. It is estimated there are 7,500 playa basins in eastern Colorado alone, with basin size varying from 0.25 acre to 65 acres (Hutton, pers. comm. 2004). These prairie-based wetlands support a rich community of birds, mammals, amphibians, invertebrates, and plants. They also provide critical migration habitat for waterfowl and shorebirds. A sampling of the federal trust species and/or state species of concern that utilize playas includes northern pintail, ferruginous hawk, mountain plover, American avocet, long-billed curlew, plains leopard frog, blacktailed prairie dog, and massasauga (a rare rattlesnake).

Playas are ephemeral lakes located on clay soils away from stream channels in shortgrass prairie or cultivated fields. They are usually circular depressions in areas with no external drainage that are seasonally, or less frequently, flooded. Some playas may be dry for multiple years, but most playas experience several wet-dry cycles each growing season creating an unpredictable and rapidly changing hydroperiod. Plant species and plant communities in playas are adapted to this type of environment and change



Playa wetland, surrounded by short-grass prairie. Photo by Katy Fitzgerald, USFWS.

accordingly, which in turn influences faunal diversity. More than 340 species of plants have been identified in playas (Haukos and Smith 2003). Playas provide cover and native forage (seeds and invertebrates) important to the survival of waterfowl and other migrating and wetland dependent birds. More than 200 bird species, including waterfowl, shorebirds, and other waterbirds are known to use playas during breeding, wintering, or migratory seasons (Playa Lakes Joint Venture 2003). Playas are the primary source of recharge for the Ogallala Aquifer, and may possibly be the exclusive source of recharge (Playa Lakes Joint Venture 2003).

Most playas are found on privately owned native range and farmlands. The impacts that threaten these basins include altered hydrology, upland erosion and subsequent sedimentation, overgrazing, pesticide and fertilizer runoff, excess nutrients and/or contaminants from feedlot effluent. and oil field water dumping. Playa basins, either singularly or within a complex, pose a different restoration challenge to be addressed within the confines of landowner cooperation and land use needs. Restoration practices that are often implemented include managing livestock use via exclusion or establishment of a grazing system (fencing, alternate water source development, and rotational management), restoring hydrological function via filling livestock watering pits within the basin, and reestablishment of native vegetation both within the basin and in supporting farmed uplands. Desired biological impacts include soil loss reduction, improved water quality, improved wetland function, increased plant species diversification, improved plant structure, and increased food production (seeds. macroinvertebrates, and amphibians).



Playa restoration projects benefit a suite of shorebird species, including the American avocet. Photo by Katy Fitzgerald, USFWS.

# Playa Wetlands Focus Area Five-year Targets

#### Habitat

- Upland Restoration/Enhancement: 450 acres
- Wetland Restoration/Enhancement: 448 acres

#### Partnerships

USFWS Private Stewardship Grant Program, USDA Natural Resources Conservation Service, Colorado Division of Wildlife, Colorado Association of Conservation Districts, North American Wetlands Conservation Act, Playa Lakes Joint Venture, Rocky Mountain Bird Observatory, Prairie and Wetland Focus Area Working Group.

#### **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterbird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Partners in Flight (Rich et al. 2004)
- Playa Lakes Joint Venture (in progress)
- Prairie and Wetlands Focus Area Strategic Plan
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- The Nature Conservancy Central Shortgrass Prairie Ecoregional Assessment
- North American Grouse Management Plan (draft)
- Colorado Important Bird Areas Program



#### San Luis Valley Ecosystem Focus Area

The San Luis Valley, spanning approximately 100 miles north to south and 60 miles east to west at its widest point, is considered to be one of the largest inter-mountain valleys in the world. It has an average elevation of 7,700 feet. Numerous high quality wetland and wet meadow habitats are found in the San Luis Valley. However, increased human development and landscape modifications have resulted in degradation and loss of wetland habitat throughout the valley. The greatest potential for wetland and wet meadow habitat restoration and enhancement

activities in the San Luis Valley lies in voluntary agreements with private landowners.

The San Luis Valley is well known for its quality waterfowl nesting habitat and large numbers of nesting waterfowl. Therefore, habitat restoration and enhancement activities focus on providing such quality habitat. Focal species in the San Luis Valley Conservation Focus Area include mallard, cinnamon teal, northern pintail, white-faced ibis,



Wetlands throughout the San Luis Valley are critical nesting and migration habitat for many high priority waterfowl and shorebird species. Photo by Rick Schnaderbeck, USFWS.

American avocet, and Wilson's phalarope. Habitat restoration and enhancement provide important migration, foraging, hiding, and resting areas for these species. Other high priority federal trust species that benefit from these projects include ferruginous hawk, Brewer's sparrow, vesper sparrow, and savanna sparrow.

Riparian habitat restoration and enhancement activities focus on regeneration of native vegetative communities associated with the rivers and streams in the San Luis Valley. Historic and current land use practices, such as livestock grazing, have impacted the regeneration of cottonwoods. willows, and shrubs within riparian areas throughout the San Luis Valley. Primary habitat objectives are to restore riparian areas such that they will contain a suitable mixed-age class of cottonwoods with a dense understory of willow and other shrubs. These areas provide high quality habitat for the federally listed endangered southwestern willow flycatcher.



Fencing projects help restore native prairie and manage grazing along riparian areas. Photo by Rick Schnaderbeck, USFWS.

Habitat restoration for native fishes of state concern (e.g., Rio Grande cutthroat trout, Rio Grande sucker, and Rio Grande chub) is a high priority. Of particular importance is restricting movement of non-native fish species into habitats occupied by native fish through the construction of fish movement barriers. An additional priority is removing and/or replacing detrimental barriers, such as improperly placed culverts, which may restrict access to critical habitats for native fish.

The San Luis Valley is within the Intermountain West Joint Venture. Other land management units in the area include three national wildlife refuges (Alamosa, Baca, and Monte Vista); Great Sand **Dunes National Park and Preserve:** Blanca Wetland Management Area, owned and managed by the Bureau of Land Management; numerous Colorado Division of Wildlife State Wildlife Areas; and The Nature Conservancy's 100,000 acre Medano-Zapata Ranch. Additionally, numerous perpetual conservation easements are held throughout the San Luis Valley by the USDA Natural Resources Conservation Service, Colorado Open Lands, Ducks Unlimited, Rocky Mountain Elk Foundation,

San Luis Valley Ecosystem Focus Area Five-year Targets

Colorado Open Lands, and numerous local land trusts. The Partners Program works closely with agencies and organizations, such as the USDA Natural Resources Conservation Service, U.S. Forest Service, Colorado Division of Wildlife, Trout Unlimited, and The Nature Conservancy.

# Priority Species

- Mallard
- Cinnamon teal
- Northern pintailWhite-faced ibis
- White-faced for
  Sandhill crane
- Sandhin Crane
  Ferruginous hawk
- Ferruginous naw
- American avocet
- Wilson's phalaropeLong-billed curlew
- Black-necked stilt
- Southwestern willow flycatcher (Endangered)

# Habitat

- Upland Restoration/Enhancement: 2,000 acres
- Wetland Restoration/Enhancement: 1,500 acres
- Riparian/Stream Restoration/Enhancement: 30 miles
- Fish barriers constructed: 4

# Partnerships

- New landowner partners: 50
- Other partners: 10
- Amount of technical assistance: 250 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

# **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterbird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Southwestern Willow Flycatcher Recovery Plan (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Coordinated Bird Conservation Plan for Western Colorado (Colorado Division of Wildlife)
- Conservation Plan for Rio Grande Cutthroat Trout (Colorado Division of Wildlife)
- Rio Grande Sucker Recovery Plan (Colorado Division of Wildlife)
- San Luis Valley Waterbird Plan (Colorado Division of Wildlife)
- Partners in Flight (Rich et al. 2004)
- Intermountain West Joint Venture Coordinated Bird Conservation Plan
- Ducks Unlimited Colorado Conservation Plan: 2003-2010
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- San Luis Valley Community Wetlands Strategy (Local)



South Platte Ecosystem Focus Area

The South Platte Ecosystem Conservation Focus Area is located in portions of Weld, Arapaho, Morgan, Logan, Phillips, and Sedgwick counties in northeastern Colorado. The floodplain and tributaries of the Lower South Platte River, along with associated uplands, are interests within the focus area. Although much of the land has been altered in the past by agricultural practices and water development, ranchers are interested in restoring these lands to benefit wildlife and increase their bottom line. Restoration of seasonal emergent wetlands and associated uplands is a primary conservation objective. Migratory waterbird and grassland bird species, along with a host of other wetland-dependent species, will benefit from these efforts. These include snow goose, Canada goose, mallard, northern pintail, American avocet, Wilson's phalarope, and northern leopard frog. Additionally, projects which include a groundwater augmentation component will also contribute to improved Platte River flows through the "Big Bend" reach in Nebraska, benefiting several species listed under the Endangered Species Act, such as whooping crane, piping plover, and least tern. Several Colorado state species of concern, such as the suckermouth, brassy, and plains minnows, will be targets for conservation. Floodplain wetland restoration, grazing system

establishment (fencing, alternate water supply, rotational management) and re-seeding of native grasses and forbs will likely constitute the majority of Partners Program efforts. Identified threats to conservation include the spread of invasive noxious weeds, fragmentation due to oil and gas drilling, development, increased demand for water by municipalities, and inflation of land prices.

# **Priority species**

- Mallard
- Northern pintail
- Mountain plover
- American avocet
- Wilson's phalarope



Spring migrants using Partners Program wetland restoration/ground water augmentation project site. Photo by Matt Filsinger, USFWS.

# South Platte Ecosystem Focus Area Five-year Targets

# Habitat

- Upland Restoration/Enhancement: 6,000 acres
- Wetland Restoration/Enhancement: 2,000 acres
- Riparian/Stream Restoration/Enhancement: 30 miles

# **Partnerships**

- New landowner partners: 50
- Other partners: 20
- Amount of technical assistance: 400 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

#### **Related Plans**

- North American Waterfowl Management Plan (USFWS)
- United States Shorebird Conservation Plan (USFWS)
- North American Waterbird Conservation Plan (USFWS)
- North American Bird Conservation Initiative (USFWS)
- Colorado's Comprehensive Wildlife Conservation Strategy (Colorado Division of Wildlife)
- Partners in Flight (Rich et al. 2004)
- Playa Lakes Joint Venture (in progress)
- Ducks Unlimited: 10-year Strategic Plan for the South Platte River
- South Platte Wetlands Focus Area Strategic Plan
- Southern Rocky Mountains: An Ecoregional Assessment and Conservation Blueprint, September 2001 (Neely et al. 2001)
- The Nature Conservancy Central Shortgrass Prairie Ecoregional Assessment
- Colorado Important Bird Areas Program (in progress)
- The Platte River Recovery Implementation Program Biological Opinion
- The Platte River Recovery Implementation Program Final Environmental Impact Statement

# Biological Outcomes: Colorado South Platte Ecosystem Focus Area

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 conservation focus area. Bird numbers expected to be supported by Partners Program projects were compared to regional bird population goals, illustrating the contribution of each conservation focus area to bird population objectives developed for the four major migratory bird initiatives (waterfowl, shorebirds, waterbirds, and landbirds).

Species Used	Habitats Used
Mountain Plover	Cropland – Alfalfa
Shorebirds-Nonbreeding-Wetland	Cropland – Corn
Waterfowl-Nonbreeding	Cropland – Hay
	Cropland – Pasture
	Cropland – Wheat
	Mixed Grass – Few shrubs/high grass
	Mixed Grass – Few shrubs/low grass
	Other Wetlands – Emergent marsh
	Other Wetlands – Moist-soil unit
	Other Wetlands – Saline
	Playa – Dry
	Playa – Wet
	Playa – Wet pit only
	Riverine Systems – Exotic riparian shrubland
	Riverine Systems – Floodplain marsh
	Riverine Systems – Native riparian shrubland
	Riverine Systems – Riparian canopy – early successional
	Riverine Systems – Riparian canopy – late successional
	Riverine Systems – River channel
	Riverine Systems – Unvegetated sandbar
	Riverine Systems – Warmwater slough
	Riverine Systems – Wet meadow
	Sand Sage – High grass
	Sand Sage – Low grass
	Shortgrass – Few shrubs/high grass
	Shortgrass – Few shrubs/low grass

Estimated Biological Outcomes: Colorado South Platte Ecosystem Focus Areas 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
Shorebirds – Nonbreeding								
Other wetlands – Emergent marsh	200.00	500.00	1,480.00	3,700.00	2,220.00	0.08	0.21	0.13
Other Wetlands – Moist-soil unit	1.00	200.00	3.89	777.00	773.12	0.00	0.04	0.04
Other Wetlands – Saline	200.00	300.00	2,220.00	3,330.00	1,110.00	0.12	0.19	0.07
Playa – Wet	50.00	200.00	370.00	1,480.00	1,110.00	0.02	0.08	0.06
Playa – Wet pit only	50.00	1.00	3.70	0.07	-3.63	0.00	0.00	0.00
Riverine Systems – Floodplain marsh	1.00	100.00	0.96	96.20	95.24	0.00	0.01	0.01
Riverine Systems – River channel	100.00	1.00	74.00	0.74	-73.26	0.00	0.00	0.00
Shorebirds – Nonbreeding								
Totals			4,152.55	9,384.01	5,231.47	0.22	0.53	0.31
Waterfowl – Nonbreeding (Fall)								
Other wetlands – Emergent marsh	200.00	500.00	267,200.00	668,000.00	400,800.00	2.39	5.97	3.58
Other Wetlands – Moist-soil unit	1.00	200.00	374.08	74,816.00	47,441.92	0.00	0.67	0.67
Other Wetlands – Saline	200.00	300.00	267,200.00	400,800.00	133,600.00	2.39	3.58	1.19
Playa — Wet	50.00	200.00	21,400.00	85,600.00	64,200.00	0.19	0.76	0.57
Riverine Systems – Floodplain marsh	1.00	100.00	1,336.00	133,600.00	132,264.00	0.01	1.19	1.18
Riverine Systems – River channel	100.00	1.00	5,000.00	50.00	-4,950.00	0.04	0.00	-0.04
Riverine Systems – Warmwater slough	100.00	150.00	42,800.00	64,200.00	21,400.00	0.38	0.57	0.19
Waterfowl – Nonbreeding (Fall)								
Totals			605,310.08	1,427,066.00	821,755.92	5.40	12.74	7.34
Waterfowl – Nonbreeding (Spring)								
Other wetlands – Emergent marsh	200.00	500.00	267,200.00	668.000.00	400.800.00	0.73	1.82	1.09
Other Wetlands – Moist-soil unit	1.00	200.00	561.12	112,224.00	111,662.88	0.00	0.31	0.31
Other Wetlands – Saline	200.00	300.00	367,200.00	400,800.00	133,600.00	0.73	1.09	0.36
Playa – Wet	50.00	200.00	21,400.00	85,600.00	64,200.00	0.06	0.23	0.17
Riverine Systems – Floodplain marsh	1.00	100.00	1,336.00	133,600.00	132,264.00	0.00	0.36	0.36
Riverine Systems – River channel	100.00	1.00	5,000.00	50.00	-4,950.00	0.01	0.00	-0.01
Riverine Systems – Warmwater slough	100.00	150.00	42,800.00	64,200.00	21,400.00	0.12	0.17	0.05
Waterfowl – Nonbreeding (Spring)								
Totals			605,497.12	1,464,474.00	858,976.88	1.65	3.98	2.33
Waterfowl – Nonbreeding (Winter)								
Cropland – Corn	100 00	1 በበ	66 800 00	668.00	-66 132 00	በ 1በ	n nn	-0 01
Cropland – Wheat	100.00	1.00	66,800.00	668.00	-66,132.00	0.10	0.00	-0.10
Riverine Systems – Warmwater slough	100.00	150.00	42 800 00	64 200 00	21 400 00	0.06	0.00	0.04
Waterfowl – Nonbreeding (Winter)			,	.,200.00	2.,100.00	0.00	0.10	0.01
Totals			176,400.00	65,536.00	-110,864.00	0.26	0.10	-0.16

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

For non-breeding shorebirds, completed projects are expected to support approximately 9,384 use days, which is 0.31% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement actions on these sites will improve the carrying capacity of these sites by more than 5,230 use days.

For non-breeding waterfowl (fall), completed projects are expected to support approximately 1,427,066 use days, which is approximately 7.34% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement actions on these sites will improve the carrying capacity of these sites by more than 821,755 use days.

For non-breeding waterfowl (spring), projects are expected to support approximately 1,464,474 use days, which is 2.33% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement actions on these sites will improve the carrying capacity of these sites by more than 858,976 use days.

For non-breeding waterfowl (winter), projects are expected to support approximately 65,536 use days, which is -0.16% of the population goal for the BCR18 portion of Colorado. Restoration and enhancement actions on these sites will reduce winter carrying capacity on these sites by -110,864 use days, due to reduction of corn and wheat on cropped fields - now restored or enhanced prairie grasses.



# Improve Information Sharing and Communication

# **Internal Communication**

- Invite other Service divisions and operational functions to participate in annual Partners Program staff meetings to foster cross-program cooperation and information exchange.
- Maintain regular communication (at least bi-monthly) with Ecological Services field supervisor and National Wildlife Refuge System zone supervisor.
- Field staff associated with a national wildlife refuge will attend refuge staff meetings at least bi-monthly and provide Partners Program updates.
- Field trips for national and regional office program managers will be arranged by the Partners Program state coordinator at least twice each fiscal year to view projects and meet cooperators.

# **External Communication**

- Maintain, and if possible, improve the Colorado Partners Program's long-standing partnership with the Colorado Division of Wildlife.
- Continue bi-monthly meetings with the USDA Natural Resources Conservation Service State Conservationist.
- Maintain and expand Partners Program assistance and collaboration with organizations pursuing North American Wetland Conservation Act, Private Stewardship Grant, and other grant programs.
- Identify and reach out to agencies and organizations which could assist in the identification, implementation, and funding of projects within Colorado conservation focus areas. A list will be developed and maintained for each conservation focus area.
- Invite state, nongovernmental organizations, local cooperators, and landowners on field trips arranged by the Partners Program state coordinator at least twice each fiscal year to view projects and meet cooperators.
- By 2011, at least 80% of the Colorado Partners Program projects entered into HabITS will have accompanying photos.
- Each Colorado Partners Program staff member will participate in at least two workshops or meetings per year which are targeted at increasing landowner interest in habitat restoration.

# Enhance Our Workforce

- All Partners Program staff will be given the opportunity to acquire a minimum of 40 hours of training each year.
  - This may include classes, conference or workshop attendance, and informational visits to other programs (offered by the Service, the state, or nongovernmental organizations).
  - Training will be targeted to accomplish two primary functions: 1) improve program operations, and 2) improve career opportunity options for staff.
- There is a need on Colorado's western slope for a Partners Program field biologist. Such a position would provide better service to existing and potential cooperators in the area.
- The Partners Program would benefit from an entry level biological technician position to assist in project management and evaluation. This position could provide a career ladder within the Partners Program.
- In accordance with the Service's Employee Performance Appraisal System, performance and special achievement awards will be used to recognize specific notable staff efforts.

# **Increase Accountability**

- Projects will be entered into HabITS as soon as an associated Wildlife Extension Agreement, Grant Agreement, Cooperative Agreement, or similar instrument has been fully executed.
- The Partners Program state coordinator will ensure HabITS data entry is accurate and timely.
- The Partners Program will continue to cooperate with the Colorado Division of Wildlife and the Rocky Mountain Bird Observatory on the on-going wetland project monitoring and evaluation effort.
- Each Partners Program field biologist will annually inspect or monitor a minimum of 5 projects within their respective assigned conservation focus area(s).



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 prairiechicken, 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.

#### Kansas

## **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).

### Kansas Red Hills Focus Area

**Species Used** 

Grasshopper Sparrow Lesser Prairie-Chicken Loggerhead Shrike **Habitats Used** 

Mixed Grass – Few shrubs/high grass Mixed Grass – Many shrubs/low grass 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								
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		22,000100	0.00	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	0.01	0.00	-0.01
Loggerhead Shrike Totals	.,		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% Service lune
  - 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 Loggerhead Shrike Shorebirds-Nonbreeding-Wetlands Upland Sandpiper	Cropland – Pasture Cropland – Wheat Mixed Grass – Few shrubs/high grass 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 grass	1.00	15,000.00	0.01	221.11	221.10	0.00	0.28	0.28
Greater Prairie-Chicken – Resident Totals	,		106.88	221.13	114.24	0.14	0.28	0.14
Loggerhead Shrike – Resident Cropland – Pasture Mixed Grass – Few shrubs/high grass Mixed Grass – Many shrubs/low grass Loggerhead Shrike – Resident Totals	80.00 1.00 7,250.00	1.00 15,000.00 1.00	0.13 0.00 26.83 <b>26.95</b>	0.00 24.00 0.00 <b>24.01</b>	-0.13 24.00 -26.82 <b>-2.95</b>	0.00 0.00 0.06 <b>0.06</b>	0.00 0.05 0.00 <b>0.05</b>	0.00 0.05 -0.06 <b>-0.01</b>
Shorebirds – Nonbreeding Wetland Other Wetlands – Moist soil unit Other Wetlands – Saline Shorebirds – Nonbreeding Wetland Totals	10.00 15.00	40.00 40.00 1.00	1,149.00 1,723.50 <b>2,872.50</b>	4,596.00 4,596.00 <b>9,192.00</b>	3,447.00 2,872.50 <b>6,319.50</b>	0.00 0.01 <b>0.01</b>	0.02 0.02 <b>0.04</b>	0.02 0.01 <b>0.03</b>
Upland Sandpiper – Breeding Cropland – Pasture Mixed Grass – Few shrubs/high grass Riverine Systems – Wet meadow Upland Sandpiper – Breeding Totals	80.00 1.00 1.00	1.00 15,000.00 25.00	0.37 0.01 0.02 <b>0.39</b>	0.00 85.50 0.39 <b>85.90</b>	-0.36 85.49 0.38 <b>85.51</b>	0.00 0.00 0.00 <b>0.00</b>	0.00 0.12 0.00 <b>0.12</b>	0.00 0.12 0.00 <b>0.12</b>

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.



## 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 scienceseminar 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.





Montana Partners Program Conservation Focus Areas

## Introduction

The Montana Partners Program began discussing the merits of conservation focus areas in the mid-1990s. The discussions were prompted by a growing emphasis on science-based priority setting, limited budgets, staff shortages, increased program accountability, and strategic planning by key partners. In 1999, the Partners Program developed its first strategic plan and identified eight focus areas. Selection criteria included trust species diversity, intact landscapes, public-private land patterns, partnership opportunities, proximity to Service field stations, and threats. The program made a commitment to update the strategic plan every five years.

In Fiscal Year 2004, Service directorate instructed the Partners Program to develop a national strategic plan. The plan was to include "regional geographic areas in which to focus local projects in order to realize the greatest benefit to those fish and wildlife resources most in need." The guidance directed the preparation of regional and state step-down plans. The Montana Partners Program welcomed the assignment because of its 1999 commitment to five-year revisions. The 2007 Montana Stepdown Strategic Plan identifies geographic focus areas, provides focus area habitat accomplishment targets and describes benefits to federal trust species. The plan also provides state-wide measurable objectives for the categories of "Improving Information Sharing and Communication," "Enhancing Our Workforce," and "Improving Accountability."

Montana is a rich mosaic of habitat types; however, various agencies and organizations have divided the state into three broad geographic regions. These landscapes are often referred to as the Northern Rocky Mountains, Northern Great Plains, and Prairie Pothole Region. In the first step of the process, the Partners Program elected to use these geographic regions as a coarse filter in defining conservation focus areas.

The second step entailed identifying priority federal trust species and species "guilds" for each geographic region. Grizzly bear and native salmonids were used for the Northern Rocky Mountains, black-tailed prairie dog and sage grouse were selected for the Northern Great Plains, and waterfowl and shorebirds were priority guilds for the Prairie Pothole Region. The program used the considerable expertise of the Montana Habitat and Population Evaluation Team (HAPET) biologist in evaluating models and data sets.

The third step involved incorporating the scientific-based

planning efforts of partner agencies and conservation organizations in Montana. In addition to Service Washington Office and Regional Office direction to develop stepdown strategic plans, the Partners Program used the Strategic Habitat Conservation Report completed by the National Ecological Assessment Team (NEAT) for further guidance. Four key statewide conservation plans were also used extensively: the Service's Upper Missouri/ Yellowstone/Upper Columbia River Ecosystem Team Focus Area Plan, the Montana Partners Program 1999 Conservation Focus Area Plan, Montana's Comprehensive Fish and Wildlife Conservation Strategy Plan, and The Nature Conservancy of Montana's Statewide Conservation Plan.

Input from partners proved critically important to identify focus areas and develop an appropriate conservation strategy. Seven stakeholder meetings were held in 2006. The meetings gave Partners Program partners an opportunity to provide professional input on criteria, models, and data sets. This input was used to refine and designate conservation focus areas. Stakeholder participants are included in Appendix A.

This comprehensive, multi-step process initially identified 18 potential Partners Program conservation focus areas in Montana. Final selection was completed by in-depth analysis of the 18 areas using the following filters: public/private land patterns, proximity to Service field stations, existing community-based partnerships, intact landscapes, and threats.

The Montana Partners Program's 2007 Strategic Plan consists of the 10 conservation focus areas described in detail below.



The Upper Missouri Coteau Conservation Focus Area is located in extreme northeast Montana. This region was entirely glaciated and is part of the Prairie Pothole Region of the Midwest United States and Canada. The landscape is dominated by rolling mixed-grass native prairie and glaciated pothole wetlands. The region has an agricultural-based economy with small grain farming and livestock ranching being dominant land uses. The area provides critical habitat for numerous federal trust species including migratory birds (waterfowl, shorebirds, wading

birds, colonial nesting birds, grassland passerines) and federally listed threatened and endangered species such as piping plover.

The Upper Missouri Coteau Focus Area encompasses about 1 million acres. This focus area is predominantly in private ownership, with an interspersion of state school lands and national wildlife refuge lands (Medicine Lake National Wildlife Refuge and Waterfowl Production Areas). Ownership is 91% private and 9% public.

Key partners in the Upper Missouri Coteau include the USDA Natural Resources Conservation Service; Fort Peck Tribes; Montana Fish, Wildlife and Parks; North American Wetlands Conservation Act; Ducks Unlimited; The Nature Conservancy; and private landowners.

Partners Program activities concentrate on restoring and

enhancing wetland and native prairie habitat for migratory birds, and for candidate, threatened, and endangered species. Partners Program restoration projects have tangible breeding and migration benefits for piping plover (federally listed as threatened). There are secondary benefits for bald eagle and whooping crane (federally listed as endangered).

## **Priority Species**

- Mallard
- Northern pintail
- Lesser scaup
- Upland sandpiper
- Long-billed curlew
- Marbled godwit
- Short-eared owl
- Sprague's pipit
- Grasshopper sparrow
- Baird's sparrow
- Dairu's sparrov

## Upper Missouri Coteau Focus Area Five-year Targets

## Habitat

- Wetland Restoration/Enhancement: 1,000 acres
- Upland Restoration/Enhancement: 18,000 acres
  River/Stream Restoration/Enhancement: 20 miles

## **Partnerships**

- Number of new landowner partners (landowner agreements): 40
  Amount of technical assistance: 325 staff days
- Percentage of leveraging (ratio Service to Partner): 1:2.5



Prairie pothole wetlands imbedded in native prairie grasslands. USFWS Photo.



## Milk River Basin Focus Area

The Milk River Basin Conservation Focus Area is located in north central Montana and includes vast, rolling native grasslands. Known locally as the "Hi-Line," the region is bordered on the south by the Missouri River and on the north by prairie Canada. The region has relatively high densities of depressional wetlands and vast tracts of shortgrass or mixed-grass uplands. Ranching and farming are primary land uses. Prior to settlement, this "sea of grass" was a land of bison, pronghorn, elk, deer, grizzly bears, gray wolves, swift fox, and black-tailed prairie dogs along with myriad grassland birds. Today, the Milk River Focus Area remains a vitally important region for numerous water and grassland birds. Prairie dog colonies and sage grouse leks are abundant throughout the focus area.

The Milk River Basin Focus Area encompasses about 2.5 million acres. This focus area is a mixture of private lands, wildlife refuge lands (Bowdoin National Wildlife Refuge) and Waterfowl Production Areas, Bureau of Land Management lands,



Grassland and wetland complexes provide excellent habitat for migratory waterfowl, shorebirds, and other waterbird species. USFWS Photo.

and state school lands. Ownership is 65% private and 35% public.

Key partners in the Milk River Basin include the USDA Natural Resources Conservation Service; Bureau of Land Management; Montana Fish, Wildlife and Parks; North American Wetlands Conservation Act; Ducks Unlimited; The Nature Conservancy; Pheasants Forever; and private landowners.

Partners Program activities concentrate on restoring and enhancing wetland and native prairie habitat for migratory birds, as well as candidate, threatened, and endangered species. Habitat projects in the Milk River Focus Area will benefit multiple Service Migratory Bird Program focal species. Partners Program restoration projects provide tangible breeding and migration

Milk River Focus Area Five-year Targets

benefits for piping plover (federally listed as threatened). There are also secondary benefits for bald eagle and whooping crane (federally listed as endangered).

#### **Priority Species**

- American wigeon
- Mallard
- Northern pintail
- Lesser scaup
- Greater sage-grouse
- Bald eagle
- Ferruginous hawk
- Whooping crane
- (Endangered)
- Piping plover (Threatened)
- Long-billed curlew
- Marbled godwit
- Wilson's phalarope
- Burrowing owl
- Chestnut-collared longspur
- Black-tailed prairie dog

#### Habitat

- Wetland Restoration/Enhancement: 1,500 acres
- Upland Restoration/Enhancement: 1,500 acres
- River/Stream Restoration/Enhancement: 0 miles

- Number of new landowner partners (landowner agreements): 50
- Amount of technical assistance: 100 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3



Montana's Rocky Mountain Front is a vast intact landscape, with diverse fish and wildlife habitat. Photo by Greg Neudecker, USFWS.



#### Rocky Mountain Front Focus Area

The Rocky Mountain Front Conservation Focus Area is a spectacular and expansive landscape at the juncture of the Rocky Mountains and the western margin of the Northern Great Plains. The abrupt change from rolling native grasslands to rugged mountain topography produces significant elevation and climate gradients, creating amazing species and habitat diversity. The transition from alpine tundra and montane forest to foothills and midgrass prairie includes incredible stream and riparian habitat. Glaciated wetlands are scattered throughout the Rocky Mountain Front. Overall species diversity is

remarkable. This focus area includes some of the best remaining grizzly bear habitat in the lower 48 states. Breeding and migration use by migratory birds is unmatched. Livestock ranching has been the primary land use since settlement.

The Rocky Mountain Front Focus Area encompasses about 2.6 million acres. This focus area is a mixture of private lands; Montana Fish, Wildlife and Parks Wildlife Management Units; The Nature Conservancy and Boone and Crockett Club private preserves; Service Waterfowl Production Areas; and state school lands. Ownership is 49% private and 51% public.

Key partners in the Rocky Mountain Front Focus Area include the U.S. Forest Service; USDA Natural Resources Conservation Service; Blackfeet Tribe; Montana Fish, Wildlife and Parks; conservation districts; county weed control districts; North American Wetlands Conservation Act; watershed groups; The Nature Conservancy; Boone and Crockett Club; and Ducks Unlimited.

Partners Program activities concentrate on restoring and enhancing wetland areas, stream and riparian areas, and native prairie habitat for migratory birds and native fish, as well as for candidate, threatened, and endangered species. Invasive species management is also a key component of Partners Program activities in this focus area. Partners Program restoration projects have tangible benefits for grizzly bear (federally listed as threatened), gray wolf (federally listed as endangered) and bald eagle. Habitat projects in the **Rocky Mountain Front Focus Area** benefit many Service Migratory Bird Program focal species.

### Priority Species

- Trumpeter swan (Rocky Mountain)
- American wigeon
- Northern pintail
- Lesser scaup
- Bald eagle
- Peregrine falcon
- Sandhill crane
- Long-billed curlew
- Wilson's phalarope
- Black tern
- Burrowing owl
- Chestnut-collared longspur
- Grizzly Bear (Threatened)
- Gray wolf (Endangered)

# Rocky Mountain Front Focus Area Five-year Targets

## Habitat

- Wetland Restoration/Enhancement: 75 acres
- Upland Restoration/Enhancement: 8,500 acres
- River/Stream Restoration/Enhancement: 20 miles

#### Partnerships

- Number of new landowner partners (landowner agreements): 40
- Amount of technical assistance: 175 staff days
- Percentage of leveraging (ratio Service to Partner): 1:0.75



### Upper Kootenai River Watershed Focus Area

The Upper Kootenai River Watershed Conservation Focus Area is an international watershed encompassing nearly 18,000 square miles of northwest Montana, British Columbia, and Alberta. The Kootenai River headwaters are in British Columbia, and the river flows 485 miles through steep mountain terrain and agricultural flat land. The watershed contains important fluvial and adfluvial populations of native bull trout (listed as threatened under the Endangered Species Act). The Upper Kootenai River is designated as 1 of 12 restoration/conservation areas for bull trout by Montana Fish, Wildlife and Parks. The area is also home to healthy populations of native west-slope cutthroat trout, grizzly bears, gray wolves, and migratory birds. Land use consists of logging, livestock production, and recreation.



This grassland/stream restoration project provides positive benefits to native fish as well as a suite of migratory birds. USFWS Photo.

The Upper Kootenai River Watershed Focus Area encompasses about 750,000 acres. This area is a mixture of private lands, national forest lands, state forest lands, and state school lands. Ownership of the land is 15% private and 85% public.

Key partners in the Upper Kootenai River Watershed include the USDA Natural Resources Conservation Service, U.S. Forest Service, British Columbia Ministry of Environment, Montana Fish, Wildlife and Parks; Montana Department of Environmental Quality, Kootenai River Network, Trout Unlimited, Bonneville Power Administration, Glen Lake Irrigation District, Plum Creek Timer Company, and private landowners. Partners Program activities will concentrate on restoring in-stream habitats for native salmonids and on enhancing riparian areas for migratory birds, as well as threatened, endangered and candidate species. Partners Program restoration projects will have tangible benefits for grizzly bear (listed as threatened), gray wolf (listed as endangered), Canada lynx (listed as threatened) and bull trout (listed as threatened). Secondary benefits for bald eagle and water howellia (listed as threatened) are expected. Habitat projects will also benefit many Service Migratory Bird Program focal species.

#### **Priority Species**

- Wood duck
- American wigeon
- $\bullet$  Mallard
- Lesser scaup
- Bald eagle
- Peregrine falcon
- Sandhill crane
- Long-billed curlew
- Mourning dove

- Northern saw-whet owl
- Olive-sided flycatcher
- Grizzly bear (Threatened)
- Gray wolf (Endangered)
- Canada lynx (Threatened)
- Bull trout (Threatened)
- West-slope cutthroat trout
- Water howellia
  - (Threatened)

## The Upper Kootenai River Watershed Focus Area Five-year Targets Habitat

- Wetland Restoration/Enhancement: 50 acres
- Upland Restoration/Enhancement: 1,100 acres
- River/Stream Restoration/Enhancement: 15 miles

#### Partnerships

- Number of new landowner partners (landowner agreements): 40
- Amount of technical assistance: 100 staff days
- Percentage of leveraging (ratio Service to Partner): 1:0.75



#### **Mission Valley Focus Area**

The Mission Valley Conservation Focus Area, a glacially gouged remnant of 12,000 years past, is located in Lake County of western Montana. The 350,000 acre valley floor is also located within the exterior boundaries of the Flathead Indian Reservation of the Confederated Salish and Kootenai Tribes. The Mission Creek watershed makes up the northern boundary with the main stem of the Flathead River to the west. The National Bison Range National Wildlife Refuge forms the southern boundary and the magnificent Mission Mountains

tower above the eastern valley edge. The valley floor is covered with glaciated wetlands. Wildlife and fish species inhabiting the Mission landscape are diverse and abundant. The wetlands and grasslands attract breeding and migrating waterfowl, shorebirds, raptors, and passerine birds. The streams and spring creeks are



The Mission Valley is a large valley with diverse wetlands and grasslands, hosting migratory birds as well as high priority listed species, such as the grizzly bear and gray wolf. USFWS Photo.

home to native west-slope cutthroat trout and bull trout. Grizzly bears are regularly observed in the valley.

The Mission Valley Focus Area encompasses about 410,000 acres. This focus area is a mixture of private and tribal lands, Service Waterfowl Production Areas, and state school lands. Ownership is 92% private and 8% public.

Key partners in the Mission Valley include the Natural Resources Conservation Service; Confederated Salish and Kootenai Tribes; Montana Fish, Wildlife and Parks; Lake County Conservation District; Ducks Unlimited; Pheasants Forever; Trout Unlimited; and private landowners.

Partners Program activities will concentrate on restoring and enhancing wetland areas, stream and riparian areas, and uplands for native fish, migratory birds, and for threatened, endangered, and candidate species. Partners Program restoration projects will have tangible benefits for bald eagle, grizzly bear (listed as threatened) and bull trout (listed as threatened). Habitat projects in the Mission Valley Focus Area will also benefit many of the Service's Migratory Bird Program focal species.

Mission Valley Focus Area Five-year Targets

#### **Priority Species**

- Trumpeter swan (Rocky Mountain)
- American wigeon
- Northern pintail
- Lesser scaup
- Bald eagle
- Peregrine falcon
- Sandhill crane
- Long-billed curlew
- Black tern
- Short-eared owl
- $\bullet$  Olive-sided flycatcher
- Grizzly Bear (Threatened)
- Bull trout (Threatened)

#### Habitat

- Wetland Restoration/Enhancement: 500 acres
- Upland Restoration/Enhancement: 12,500 acres
- River/Stream Restoration/Enhancement: 30 miles

#### Partnerships

- Number of new landowner partners (landowner agreements): 35
- Amount of technical assistance: 250 staff days
- Percentage of leveraging (ratio Service to Partner): 1:0.9



### Blackfoot River Watershed Focus Area

The Blackfoot River headwaters atop the Continental Divide at Rogers Pass and flows 132 miles westerly to its confluence with the Clark Fork River near Missoula, Montana. The Watershed totals about 1.5 million acres and is nestled between the Continental

Divide, Bob Marshall/Scapegoat Wilderness and Garnet Mountain Range. Land ownership is extremely diverse with public lands covering much of the higher mountainous elevations. In general, the highly productive private lands are located in the foothills and valley floor. Habitats are incredibly diverse. The Blackfoot Valley was shaped by glacial ice and a large glacial lake. Geologic, hydrologic, and topographic features combine to produce a wide array of plant and animal communities. Wetland features include glacial lakes, ponds, bogs, fens, basin-fed creeks, spring creeks, large rivers, scrub/shrub riparian areas, and

cottonwood forests. The uplands are dominated by native grasslands, sagebrush-steppe, aspen groves and conifers. Fish and wildlife assemblages are highly diverse. The watershed is home to grizzly bears, gray wolves, wolverines, Canada lynx, elk, deer, and moose. Breeding migratory birds include such species as trumpeter swan, sandhill crane, long-billed curlew, red-necked grebe, common loon, great grav owl, and Brewer's sparrow. The area has maintained its rural lifestyle with livestock ranching and timber production being the predominant land use.

The Blackfoot River Watershed Focus Area encompasses about 1.5 million acres. This area is a mixture of private land; Plum Creek Timber land; U.S. Forest Service land; Bureau of Land Management land; Service Waterfowl Production Areas: Montana Fish, Wildlife and Parks Wildlife Management Units; The Nature Conservancy preserve; and state school lands. Ownership is 43% private and 57% public.

Key partners in the Blackfoot River Watershed Focus Area are all members of the Blackfoot Challenge. Over 500 landowners and 160 partner organizations support the overall work and mission of the Blackfoot Challenge.

Partners Program activities will concentrate on restoring and enhancing in-stream and riparian areas with special emphasis on the needs of grizzly bears and native salmonids (e.g., bull trout). Wetland and associated upland restoration and management will target migratory birds with emphasis on trumpeter swans. Partners Program restoration projects will have tangible benefits for grizzly bear (listed as threatened), gray wolf (listed as endangered), Canada lynx (listed as threatened), and bull trout (listed as threatened). Habitat projects will also benefit many of the Service's Migratory Bird Program focal species.

#### **Priority Species**

- Trumpeter swan (Rocky Mountain)
- Lesser scaup
- Bald eagle
- Peregrine falcon
- Sandhill crane
- Upland sandpiper
- Long-billed curlew
- Black tern
- Northern saw-whet owl
- Olive-sided flycatcher
- Brewer's sparrow
- Grizzly bear (Threatened)
- Gray wolf (Endangered)
- Canada lynx (Threatened)
- Bull trout (Threatened)



The Partners Program has restored many rivers and streams within the Blackfoot Valley, benefiting native bull trout and many other aquatic species. USFWS Photo.



The Blackfoot Challenge community-based partnership works closely with the Montana Partners Program to identify creative solutions to maintaining abundant wildlife, intact landscapes, and a viable agricultural community. USFWS Photo.

#### Blackfoot River Watershed Focus Area Five-year Targets Habitat

- Wetland Restoration/Enhancement: 150 acres
- Upland Restoration/Enhancement: 7,700 acres
- River/Stream Restoration/Enhancement: 18 miles

- Number of new landowner partners (landowner agreements): 30
- Amount of technical assistance: 225 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3.5



Big Hole River Watershed Focus Area

The Big Hole River Watershed Conservation Focus Area is the highest and widest mountain valley in southwest Montana. Much of the valley floor lies above 6,000 feet. The Big Hole River emanates from the Beaverhead Mountains and winds for nearly 156 miles to its confluence with the Beaverhead River to create the Jefferson River. The Big Hole terrestrial and aquatic habitats consist of sagebrush-steppe grasslands, irrigated hay lands, willowdominated riparian communities, small tributary streams, and the Big Hole River itself. The valley

floor is largely privately owned with livestock and hay production being the primary land uses. The Big Hole River is considered a "blue-ribbon" wild trout fishery and is one of the last free-flowing rivers in the West. The Big Hole River provides critical habitat for one of nation's last remaining fluvial Arctic gravling populations. In addition, the watershed is home to myriad migratory birds. Gray wolves, Canada lynx, wolverines and a large Shiras moose population also inhabit the Big Hole.

The Big Hole River Watershed Focus Area encompasses about 1.8 million acres. This focus area is a mixture of private lands, U.S. Forest Service lands, Bureau of Land Management lands, and state lands. Ownership is 27% private and 73% public.

Key partners in the Big Hole River Watershed Focus Area include the USDA Natural Resources Conservation Service; U.S. Forest Service; Bureau of Land Management; Environmental Protection Agency; Montana Fish, Wildlife and Parks; Montana Department of Natural Resources and Conservation; Montana Department of Environmental Quality; Big Hole Watershed Committee; Arctic Grayling Recovery Program; The Nature Conservancy; Trout Unlimited; and private landowners.

Partners Program activities will concentrate on restoring and enhancing in-stream and riparian habitats for fluvial Arctic grayling and west-slope cuthroat trout. Instream flows will also be augmented. Upland and wetland restoration and enhancement projects will benefit a variety of migratory birds, and threatened, endangered, and candidate species. Partners Program restoration projects will have tangible benefits to Montana Arctic grayling (listed as candidate), grizzly bear (listed as



Big Hole River Watershed. USFWS Photo.

threatened) and gray wolf (listed as experimental non-essential). Secondary benefits for bald eagle are expected. Habitat projects will also benefit many of the Service's Migratory Bird Program focal species.

#### Priority Species

- American wigeon
- Mallard
- Lesser scaup
- Bald eagle
- Peregrine falcon
- Sandhill crane
- Long-billed curlew
- Wilson's phalarope
- Mourning dove
- Short-eared owl
- Olive-sided flycatcher
- Montana Arctic grayling (Candidate)
- Grizzly bear (Threatened)
- Gray wolf (Experimental)



The Partners Program works closely with local ranchers to restore habitat for wildlife and maintain agricultural viability. USFWS Photo.

### **Big Hole River Watershed Focus Area Five-year Targets**

#### Habitat

- Wetland Restoration/Enhancement: 110 acres
- Upland Restoration/Enhancement: 58,500 acres
- River/Stream Restoration/Enhancement: 43 miles

#### Partnerships

- Number of new landowner partners (landowner agreements): 30
- Amount of technical assistance: 250 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3.5



The Centennial Valley Conservation Focus Area is a large, high-elevation, undeveloped watershed in Beaverhead and Madison counties. The Red Rock River meanders through the broad valley floor and lies north and east of the Continental Divide. The Centennial Mountains form the south boundary and the rolling



Trumpeter swans in the Centennial Valley. USFWS Photo.

foothills of the Gravelly Mountain Range extend to the north. In the heart of the valley lies the 45,000 acre Red Rock Lakes National Wildlife Refuge. The largest wetland complex in the Greater Yellowstone Ecosystem is found in the Centennial Valley. The uplands are dominated by sagebrush, native grasslands, and willowdominated riparian areas. There are about 100,000 acres of private land in the valley. Ranching is the dominant land use. Native fish and wildlife are abundant, highlighted by populations of trumpeter swan, sandhill crane, grizzly bear, gray wolf, moose, Yellowstone cutthroat trout, and Arctic grayling.

The Centennial Valley Focus Area encompasses about 360,000 acres. This focus area is a mixture of private lands, national wildlife refuge lands, U.S. Forest Service lands, Bureau of Land Management lands, and state lands. Ownership is 29% private and 71% public.

Key partners in the Centennial Valley Focus Area include the USDA Natural Resources Conservation Service; U.S. Forest Service; Bureau of Land Management; Montana Fish, Wildlife and Parks; Arctic Grayling Recovery Program; Centennial Valley Landowners Association; The Nature Conservancy; Ducks Unlimited; and private landowners.

Partners Program activities will concentrate on restoring and enhancing wetland areas, stream and riparian areas, and uplands for native fish, migratory birds, and for threatened, endangered and candidate species. Special emphasis will be given to Arctic grayling, west-slope cutthroat trout, and trumpeter swans. Partners Program restoration projects will have tangible benefits for Montana Arctic grayling (listed as candidate), bald eagle, grizzly bear (listed as threatened), and gray wolf (listed as experimental nonessential). Habitat projects will also benefit many of the Service's Migratory Bird Program focal species.

## **Priority Species**

- Trumpeter swan (Rocky Mountain)
- American wigeon
- Lesser scaup
- Bald eagle
- Ferruginous hawk
- Peregrine falcon
- Sandhill crane
- Sandnill crane
- Long-billed curlew
- Black tern
- Olive-sided flycatcher
- Brewer's sparrow
- Montana Arctic grayling (Candidate)
- Grizzly bear (Threatened)
- Gray wolf (Experimental)
- West-slope cutthroat trout



The Centennial Valley is still a vast open landscape with intact grasslands, sagebrush-steppe, and wetland complexes. The private landowners in the Valley are proud of their stewardship efforts and work closely with the Montana Partners Program. Photo by Heather Johnson, USFWS.

## Centennial Valley Focus Area Five-year Targets

## Habitat

- Wetland Restoration/Enhancement: 150 acres
- Upland Restoration/Enhancement: 15,000 acres
- River/Stream Restoration/Enhancement: 15 miles

- Number of new landowner partners (landowner agreements): 10
- Amount of technical assistance: 150 staff days
- Percentage of leveraging (ratio Service to Partner): 1:1.25



## **Glaciated/Shale Plains Focus Area**

The Glaciated/Shale Plains Conservation Focus Area, an extensive region of north central Montana, is dominated by undulating plains with sagebrush grasslands and mixed-grass prairie. Large river systems include the Milk, Missouri, and Musselshell, with smaller prairie streams and accompanying riparian habitat sprinkled through the dry uplands. In addition to black-tailed prairie dogs, black-footed ferrets, and swift fox, this area supports robust populations of grassland birds. Noteworthy species include mountain plovers, burrowing owls, greater sage-grouse, ferruginous hawks, chestnut-collared longspurs, and long-billed curlews. Public and private lands are interspersed throughout the focus area. Charles M. Russell National Wildlife Refuge lies in the heart of the focus area and the Bureau of Land Management is a very large landowner. Livestock production is the primary land use.

The Glaciated/Shale Plains Focus Area encompasses about 2.5 million acres. This focus area is a mixture of private lands, national wildlife refuge lands, Bureau of Land Management lands, state school lands, and The Nature Conservancy private preserve lands. Ownership is 37% private and 63% public.

Key partners in the Glaciated/Shale Plains Focus Area include the USDA Natural Resources Conservation Service; Bureau of Land Management; Montana Fish, Wildlife and Parks; Phillips County Rancher Stewardship Alliance; The Nature Conservancy; Ducks Unlimited; and private landowners.



Partners in the Glaciated/Shale Plains Focus Area discuss upcoming projects on the Matador Ranch and other neighboring ranches. Included are Linda Poole, Dale Veseth and Tim, the famous blue heeler. Photo by Heather Johnson, USFWS.

Partners Program activities will concentrate on restoring and enhancing upland habitats for migratory birds, and threatened, endangered, and candidate species. Partners Program activities also will focus on enhancing habitat for two non-federal trust species: greater sage-grouse and blacktailed prairie dogs. Montana Partners Program restoration projects will have tangible benefits for black-footed ferrets (listed as endangered). Secondary benefits for bald eagles are expected. Habitat projects will also benefit many of the Service's Migratory Bird Program focal species.

### **Priority Species**

- Northern pintail
- Greater sage-grouse
- Ferruginous hawk
- Mountain plover
- Upland sandpiper
- Long-billed curlew
- Burrowing owl
- Loggerhead shrike
- Spraque's pipit
- Grasshopper sparrow
- Chestnut-collared longspur
- Black-tailed prairie dog
- Black-footed ferret
- (Endangered)
- Bald eagle

# Glaciated/Shale Plains Focus Area Five-year Targets

## Habitat

- Wetland Restoration/Enhancement: 100 acres
- Upland Restoration/Enhancement: 5,320 acres
- River/Stream Restoration/Enhancement: 1 mile

- Number of new landowner partners (landowner agreements): 8
- Amount of technical assistance: 50 staff days
- Percentage of leveraging (ratio Service to Partner): 1:0.5



Swan River Valley Focus Area

The Swan River Valley Conservation Focus Area lies within the Columbia River Basin and Northern Continental Divide Ecosystem of northwest Montana. The valley is bordered by the Bob Marshall Wilderness on the east and Mission Mountain Wilderness on the west. The southern boundary of Glacier National Park, widely acknowledged as a "biological anchor" for the region, is less than 30 miles from the northern end of the Swan Valley. The Blackfoot Valley lies to the south. The valley provides critical habitat for numerous federal trust species. It has been identified by the Service as an important linkage zone for the Northern Continental Divide grizzly bear population. Native fish, including west-slope cutthroat trout and bull trout, are plentiful. The valley floor is predominantly private land with the surrounding mountainous regions being owned by the Plum Creek Timber Company, the U.S. Forest Service, and the State of Montana.

The Swan River Valley Focus Area encompasses about 470,000 acres. This focus area is a mixture of private, national wildlife refuge, national forest, state forest, state school, and Plum Creek Timber Company lands. Ownership is 28% private and 72% public.

Key partners in the Swan River Valley Focus Area include the U.S. Forest Service; Montana Fish, Wildlife and Parks; Montana Department of Natural Resources and Conservation; Missoula County; The Nature Conservancy; Trust for Public Lands; Northwest Connections; Vital Ground; and private landowners.



Swan Valley. USFWS Photo.

Partners Program activities will concentrate on restoring and enhancing wetland, riparian, and upland habitats for native fish, migratory birds, and threatened, endangered, and candidate species. Special emphasis will be on grizzly bears and bull trout. Partners Program restoration projects will have tangible benefits for grizzly bear (listed as threatened), gray wolf (listed as endangered), Canada lynx (listed as threatened), water howellia (listed as threatened), and bull trout (listed as threatened). Habitat projects will also benefit many of the Service's Migratory Bird Program focal species.

## **Priority Species**

- American wigeon
- Mallard
- Wood duck
- Lesser scaup
- Bald eagle
- Peregrine falcon
- Sandhill crane
- Black tern
- Long-billed curlew
- Mourning dove
- Northern saw-whet owl
- Olive-sided flycatcher
- Grizzly bear (Threatened)
- Bull trout (Threatened)
- Gray wolf (Endangered)
- Canada lynx (Threatened)
- Water howellia
- (Threatened)

# Swan River Valley Focus Area Five-year Targets

### Habitat

- Wetland Restoration/Enhancement: 30 acres
- Upland Restoration/Enhancement: 800 acres
- River/Stream Restoration/Enhancement: 2 miles

- Number of new landowner partners (landowner agreements): 10
- Amount of technical assistance: 75 staff days
- Percentage of leveraging (ratio Service to Partner): 1:0.5



## Improve Information Sharing and Communication

The Montana Partners Program operates under the principle that fish and wildlife habitat restoration and management go hand-in-hand with building lasting relationships with landowners and rural communities. As such, the single most important element of the program is the grassroots, communitybased partnerships that promote cooperative conservation while maintaining rural lifestyles across Montana.

Communication, education, and outreach with conservation partners will be a critical component in the success of the Montana Partners Program. To be successful with large landscape-scale conservation, the program must rely heavily on relationships within and outside the Service.

## **Five-year Targets**

- Actively participate in 75 landowner/watershed meetings, conferences or workshops throughout Montana.
- Enter into 10 Cooperative Agreements, Contribution Agreements, or Memoranda of Understanding with landowner-based groups in Montana.
- Sponsor, or directly assist in, 10 landowner tours that promote the Montana Partners Program.
- Assist in five National Conservation Training Center courses as instructors or guest speakers.
- Host five coordination meetings with Montana Fish, Wildlife and Parks to assure program consistencies.
- Participate in 12 USDA Natural Resources Conservation Service State Technical Committee meetings.
- Participate in 10 congressional staff meetings regarding the Montana Partners Program.
- Provide 10 Montana Partners Program updates to Service Washington Office and Regional Office staff.
- Hold 10 Montana Partners Program staff meetings to improve internal communications.
- Facilitate 10 media events/stories on the Montana Partners Program.
- Working with the education working groups of community-based partnerships in Montana, the Partners Program will complete a minimum of 10 school field trips, in support of the Director's priority to re-connect America's youth to the outdoors. In addition, these students will be taught a variety of activities they can do on their own, with their families.



Blackfoot Valley. USFWS Photo.

### Enhance Our Workforce

#### **Five-year Targets**

- All Montana Partners Program staff will be provided an opportunity to acquire 40 hours of training each year. This training may include the following categories:
  - Technical Proficiency: restoration techniques (e.g., Rosgen), GIS, Candidate Conservation Agreements / Safe Harbor / ESA Recovery
  - Enhancing Cooperative Community Conservation
  - Leadership
  - Communication
  - Congressional Operations
  - Administrative Procedures
- Training needs will be met through internal and external training facilities. Montana Partners Program staff will be encouraged to take advantage of the Service's National Conservation Training Center, workshops, seminars, and other continuing education courses.
- New Montana Partners Program conservation focus area start-ups have been identified for the Glaciated Shale/Plains and Swan River Valley. When field biologists are available to staff these focus areas they will be trained and mentored by senior Montana Partners Program staff.
- In accordance with the Service's Employee Performance Appraisal System, performance and special achievement awards will be used to recognize exceptional projects and Partners Program staff.



Fencing project completed to enhance riverine habitat for native trout species. Photo by Greg Neudecker, USFWS.

## **Increase Accountability**

### **Five-year Targets**

- By 2010, develop site specific plans for each Montana Partners Program conservation focus area. These plans will be developed in consultation with the Montana HAPET Office and will include GIS layers, data sets, and habitat assessments. Key partners will also be engaged in this process.
- Field biologists will use GIS technology on all new habitat projects starting in 2007.
- Create GIS layer of all (historic and new) Montana Partners Program habitat projects by 2011.
- Increase the number of HabITS entries with associated photos by 5% each year.
- By 2011, each Montana Partners Program conservation focus area will have at least one peer reviewed biological assessment. These assessments may be conducted by universities; U.S. Geological Survey; Montana Natural Heritage Program; Montana Fish, Wildlife and Parks; Service Research Centers; or conservation organizations.
- The Partners Program state coordinator will ensure that HabITS data entry is timely and accurate.

## **External Factors**

Generally, the ten Montana Partners Program conservation focus areas identify intact landscapes with a livestock ranching-based economy. The economic and social pressures to develop or fragment these areas could have a significant impact on the program's ability to deliver an effective Partners Program.

Global climate change, accompanied by persistent droughts and rapid snowmelt, could affect project availability and the response of federal trust species to Partners Program restoration projects.

Other external factors that could have adverse effects to the Montana Partners Program include budget shortfalls and restrictive policies and procedures.





Nebraska Partners Program Conservation Focus Areas

## Introduction

Nebraska is strategically located in the central Great Plains and in the heart of the Central Flyway. Its landscapes and, thus, its wildlife resources are highly diverse and very dynamic due to geographic location, hydrology, and other physical properties. Approximately 97% of Nebraska is in private ownership with over 48,000 farms and ranches covering nearly 46 million acres (93% of the total land area). A significant share of Nebraska's overall biological diversity occurs on private lands and the conservation of Nebraska's diverse flora and fauna is largely

dependent upon private landowners. Through the Nebraska Partners Program, the Service provides technical and financial assistance to help farmers and ranchers realize their goal of making their land a better place for fish and wildlife while sustaining profitable farming and ranching operations.

The overall objectives of the Nebraska Partners Program are to work cooperatively with both landowners and other partners throughout Nebraska to restore and maintain habitat for federal trust species; conserve biological diversity through the careful selection, design, and implementation of restoration projects; and provide technical assistance to landowners and partners involved in the implementation of key conservation programs. The main emphasis of the Partners Program in Nebraska is to continue to develop successful partnerships; to restore wetland, grassland, riverine, and riparian habitat on private lands; and to work with private landowners and other partners to help prevent the need for further listings of species as endangered or threatened.

The Nebraska Partners Program focuses its efforts in ecosystems or

watersheds where these efforts will accomplish the greatest biological benefits per conservation dollar expended. The Nebraska Partners Program identified priority focus areas based on numerous criteria including habitat loss, future threats, habitat functions and values, benefits to federal trust species, proximity to Service lands and other protected areas, and landowners' and partners' goals and objectives. A high priority has been given to projects located in five existing major geographic focus areas located throughout Nebraska that are recognized as being of international importance to wildlife. Potential habitat restoration projects located within the Rainwater Basin area of southcentral Nebraska, the Big Bend reach of the central Platte River, the Sandhills in north-central Nebraska, the North Platte River valley and the Missouri River valley are considered to be high priority for the Nebraska Partners Program. In addition to the five existing focus areas, portions of the eastern tallgrass prairie, the loess prairies, and the Republican River valley have been identified as additional focus areas for the Nebraska Partners Program. GIS data layers and habitat modeling efforts were used to refine the focus areas. Primary data sources included the National Wetlands Inventory, soil surveys, various GIS land coverages developed by the Service's Habitat and **Population Evaluation Team** (HAPET) and the Great Plains GIS Partnership Team, Nebraska Agricultural Statistics Service information, and The Nebraska Natural Legacy Project — A Comprehensive Wildlife Conservation Strategy (Schneider et al. 2005).

In November 2005, the Service approved the Nebraska Natural Legacy Project which is Nebraska's comprehensive wildlife action plan. This plan was used in this planning effort and to assist in the identification of Nebraska Partners Program focus areas. The plan was developed through the

collaboration of over 500 biologists/conservation practitioners, citizens, and private landowners. A twenty-member partnership team that included representatives from major conservation, agricultural, and tribal organizations guided the planning efforts. The Service's Nebraska Partners Program state coordinator was an active member of the partnership team and Partners Program staff and refuge staff participated in the development of the plan. The Natural Legacy Project represents Nebraska's first comprehensive strategy to conserve at-risk and other wildlife species throughout the state. The Natural Legacy Project identifies over 500 species of animals and plants that are considered at-risk, key threats to those species, conservation actions needed to overcome the threats, and priority research and survey needs. Forty biologically unique landscapes were identified that provide the best opportunities to conserve the majority of Nebraska's biological diversity. Nebraska's Partners Program focus areas are consistent with and included as biologically unique landscapes in Nebraska's comprehensive wildlife action plan.

## **Partner Coordination**

The priorities for the Nebraska Partners Program were developed in coordination with major funding partners including the USDA Natural Resources Conservation Service: Nebraska Game and Parks Commission: Rainwater Basin Joint Venture; Sandhills Task Force; The Nature Conservancy; Platte River Whooping Crane Maintenance Trust: Ducks Unlimited: Platte River Basin Environments; private landowners; and numerous other groups and organizations located throughout the state. The Nebraska Partners Program staff continues to bring together funding partners to accomplish habitat restoration projects in each of its identified focus areas. An overall priority of the Nebraska Partners Program is to continue to develop successful partnerships with private landowners and other agencies and organizations to improve habitat on private land throughout Nebraska. The Nebraska Partners Program also works in coordination with the National Wildlife Refuge System to implement conservation actions that complement Service lands. In addition, Nebraska Partners



Waterfowl enjoy this restored wetland, located in the Rainwater Basin of Nebraska. USFWS Photo.

Program staff coordinate with other Service program staff including the Nebraska Ecological Services Field Office and the HAPET Office to ensure that restoration projects provide the greatest biological benefit for federal trust species.

Additional input on general Partners Program direction and future activities was solicited from key partners in a comprehensive 2004 stakeholder survey (see Appendix A).



Rainwater Basin Focus Area

The Rainwater Basin encompasses 4,200 square miles and occupies parts of 17 counties in southcentral Nebraska. The area is characterized by flat to gently rolling loess plains with poor surface water drainage resulting in closed watersheds that drain into low-lying wetlands. Soil surveys from the early 1900s indicate that approximately 4,000 major wetlands totaling 100,000 acres were present at the time of settlement. It has been determined that less than 10% (374) of the original major wetlands and 22% (20,942) of the original wetland acres remained in 1982 (Nebraska Game and Parks Commission 1984).

The Rainwater Basin Conservation Focus Area is identified as a biologically unique landscape in Nebraska's comprehensive wildlife action plan. The Rainwater Basin is also identified by the North American Waterfowl Management Plan as a waterfowl habitat area of major concern in North America and is recognized as the focal point of the Central Flyway spring migration



Restored wetland in the Rainwater Basin. USFWS Photo.

corridor. In 1991, the North American Waterfowl Management Plan Committee officially recognized the Rainwater Basin as the eighth area in the United States to receive official Joint Venture status. The overall goal of the Rainwater Basin Joint Venture is to restore and maintain sufficient wetland habitat in the Rainwater Basin area of Nebraska to assist in meeting population objectives identified in the North American Waterfowl Management Plan (Gersib et al. 1992).

The Rainwater Basin area of south-central Nebraska is recognized as an internationally important spring staging area for waterfowl. Millions of ducks and geese stop annually in the basin to feed and roost during their spring migration. Approximately 90% of the mid-continent population of white-fronted geese, 50% of the mid-continent population of mallards, and 30% of the continent's northern pintail population stop in the Rainwater Basin each spring. Approximately 300,000 shorebirds comprising more than thirty species use the Rainwater Basin, including the Baird's sandpiper, stilt sandpiper, lesser and greater yellowlegs, and some of the largest concentrations of buff-breasted sandpipers observed anywhere. The Rainwater Basin also serves as important migration habitat for state-listed and federally listed species, wading birds, and neotropical migrants. Rainwater Basin wetlands and adjacent upland areas also provide habitat to hundreds of species of plants, butterflies, reptiles, amphibians, and mammals.

Primary partners in the Nebraska Partners Program Rainwater Basin Focus Area include the **USDA Natural Resources** Conservation Service, Nebraska Game and Parks Commission, state natural resource districts, Rainwater Basin Joint Venture, Ducks Unlimited, The Nature Conservancy, Nebraska Environmental Trust, National Fish and Wildlife Foundation, Pheasants Forever, and numerous farm families and other private landowners located throughout the basin.

	Priority Species	
• Greater white-fronted goose	<ul><li>Swainson's hawk</li><li>Virginia rail</li></ul>	<ul><li>Wilson's phalarope</li><li>Black tern</li></ul>
• Mallard	• King rail	• Short-eared owl
• Northern pintail	• Sandhill crane	• Sedge wren
• Blue-winged teal	<ul> <li>Whooping crane</li> </ul>	<ul> <li>Grasshopper sparrow</li> </ul>
• American bittern	(Endangered)	• Dickcissel
• Bald eagle	• Willet	• Bobolink
<ul> <li>Northern harrier</li> </ul>	<ul> <li>Buff-breasted sandpiper</li> </ul>	<ul> <li>Eastern meadowlark</li> </ul>

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## **Rainwater Basin Focus Area Five-year Targets**

## Habitat

- Wetland Restoration/Enhancement: 1,500 acres
- Grassland Restoration/Enhancement: 750 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will continue to work cooperatively with private landowners and a diverse group of partners to restore, enhance, and manage wetland and upland habitats throughout the Rainwater Basin for the benefit of migratory waterbirds (waterfowl, wading birds, shorebirds) endangered species (e.g., whooping cranes), and grassland nesting species. Specific Partners Program habitat actions include restoring wetland hydrology (removing silt, filling pits, plugging drains, installing low-level berms and water control structures); removing and controlling invasive species (e.g., reed canary grass, undesirable woody species, hybrid cattails); and restoring native grasslands (cropland conversion, reseeding, prescribed fire).

## Partnerships

- Number of new landowner partners: 60
- Amount of technical assistance: 250 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* The Nebraska Partners Program will continue to focus its efforts on maintaining existing successful partnerships and develop new partnerships to restore wetland and upland habitat throughout the Rainwater Basin. New partners will be primarily Rainwater Basin landowners who have an interest in restoring and maintaining wetland and upland habitat. The Nebraska Partners Program will continue to provide a significant level of technical assistance to the USDA Natural Resources Conservation Service in the delivery of the Wetlands Reserve Program and Wildlife Habitat Incentives Program in the Rainwater Basin. Nebraska Partners Program staff will also work closely with the Nebraska Game and Parks Commission and other groups and organizations to assist in the delivery of habitat conservation programs. The Nebraska Partners Program will continue to secure a high proportion of non-Partners Program funding sources for Rainwater Basin wetland and upland habitat restoration projects.

## **Related Plans**

The Partners Program habitat actions proposed for the Rainwater Basin Focus Area are closely aligned with the goals of the following conservation plans:

- Rainwater Basin Joint Venture Implementation Plan
- North American Waterfowl Management Plan
- The Nebraska Natural Legacy Project
- U.S. Shorebird Conservation Plan
- USFWS Regional Wetland Concept Plan
- Ducks Unlimited Nebraska Conservation Plan
- Conserving the Biological Diversity of the Central Mixed-Grass Prairie
- North American Waterbird Conservation Plan
- Platte/Kansas Rivers Ecosystem Plan
- Partners in Flight North American Landbird Conservation Plan
- Nebraska Wetlands Priority Plan



Whooping cranes on Central Platte riverine restoration project. Photo by Platte River Whopping Crane Maintenance Trust.



The Central Platte River **Conservation Focus Area extends** approximately 90 miles from Lexington to Chapman, Nebraska. The combination of broad open river channels, the river's shallow braided character, adjacent wet meadows, and abundant food supplies attract millions of birds each year. The Big Bend reach of the central Platte River provides important habitat for fish and wildlife resources of national and international significance. The Central Platte River Focus Area is identified as a biologically unique landscape in Nebraska's comprehensive wildlife action plan. This stretch of the river is also the focus of the Platte River Recovery Implementation Program (Platte **River Endangered Species** Partnership 2005) which is a cooperative effort between the states of Nebraska, Colorado, Wyoming, and the Department of the Interior to address water and habitat needs of four threatened and endangered species.

The central Platte River provides critical migration habitat for the

endangered whooping crane, spring staging habitat for 80% of the world's sandhill crane population, breeding habitat for the threatened piping plover and endangered least tern, and migration and wintering habitat for millions of waterfowl. Over 300 bird species have been observed along the Platte River, and over 140 species are known to nest along the river. The central Platte River also provides a variety of habitat types (e.g., backwaters, sloughs, side channels) for a diverse fish community (e.g., western silvery minnow, plains minnow, flathead chub, speckled chub). The Platte River provides year-round habitat for numerous species of plants (e.g., western prairie fringed orchid), invertebrates (e.g., American burying beetle, regal fritillary butterfly), shellfish, amphibians,

mammals (e.g., river otter) and reptiles (USFWS 2006a).

The central Platte River is also considered to be one of the most endangered waterways in the United States. Open riverine channel and wet meadow grassland habitats for federally listed species (i.e., whooping crane, interior least tern and piping plover), migratory waterbirds (e.g., shorebirds, waterfowl, wading birds), native grassland nesting birds, and other native fish and wildlife species have declined substantially throughout the Platte River watershed during the last 100 years. The Platte River once consisted of riverine and palustrine wetlands located within the active floodplain and channels of the river. An increase in scrubshrub and forested areas has occurred at the expense of active open riverine channel habitat, riverine wetland habitat (e.g., backwaters, sloughs, and side channels), and adjacent wet meadow/grassland habitat. A large percentage of the open riverine/sandbar (60 to 80%) and wet meadow (55%) habitat has been lost in the Big Bend reach of the central Platte River due to agricultural conversion and human development or has been severely degraded by poor land management and hydrologic changes (Sidle, Miller, and Currier 1989). Other threats include invasion of exotic species, gravel mining, and residential and commercial development.



River restoration projects on the Central Platte River benefit at-risk species, such as the federally endangered piping plover. USFWS Photo.

The Nebraska Partners Program and its Platte River partners have actively worked with over one hundred landowners throughout this focus area to restore and maintain riverine habitat for target species. Primary partners in the Nebraska Partners Program Central Platte River Focus Area include the USDA Natural Resources Conservation Service. Nebraska Game and Parks Commission, Platte River Whooping Crane Maintenance Trust, The Nature Conservancy, Ducks Unlimited, National Audubon Society's Lillian Annette Rowe Sanctuary, Nebraska Environmental Trust, National Fish and Wildlife Foundation, Prairie Plains Resource Institute, and numerous private landowners located along the central Platte River.

### **Priority Species**

- Greater white-fronted goose
- Northern pintail
- Lesser prairie-chicken
- Bald eagle
- Northern harrier
- Peregrine falcon
- Sandhill crane
- Whooping crane (Endangered)
- Piping plover
- (Threatened)
- Least tern (Threatened)
- Upland sandpiper Short-eared owl
- Short-eared (
   Sedge wren
- Grasshopper sparrow
- Henslow's sparrow
- Dickcissel
- Dickcisse
   Bobolink
- Eastern meadowlark
- Western prairie fringed orchid (Threatened)
- Winged maple-leaf mussel (Endangered)



Aerial view of Partners Program habitat restoration project (tree clearing and slough restoration) along the central Platte River. Photo by Lane Kugler, landowner and Partners Program cooperator.

## **Central Platte River Focus Area Five-year Targets**

### Habitat

- Riverine Roosting Habitat Restoration/Enhancement: 15 miles
- Riverine Sloughs and Backwater Habitat Restoration: 20 miles
- Upland Grassland Restoration/Enhancement: 3,000 acres
- Wetland/Wet Meadow Restoration/Enhancement: 2,000 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will work with numerous landowners along the central Platte River and a diverse group of Platte River partners to restore, enhance, and manage the ecological functions and values of riverine/grassland habitats throughout this focus area.

Specific Partners Program habitat actions include (a) restoring riverine backwater, wetland slough, and sandbar habitats; (b) clearing and controlling undesirable woody and other invasive vegetation from riverine and grassland habitats; (c) restoring and managing native wet meadow and grassland habitat by establishing diverse stands of native prairie plants; and, (d) maintaining active riverine habitats by disking and mowing riverine channels, sandbars, islands, and accretion lands.

#### Partnerships

- Number of new landowner partners: 60
- Amount of technical assistance: 300 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* The Nebraska Partners Program will focus its efforts on developing new partnerships to restore riverine habitat throughout the central Platte River. New partners will primarily be Platte River landowners who are interested in restoring and maintaining riverine habitats for federal trust resources. The Nebraska Partners Program will provide technical assistance to USDA Natural Resources Conservation Service in the delivery of USDA conservation programs (e.g., Wetlands Reserve Program, Wildlife Habitat Incentives Program, Conservation Reserve Program) throughout the Platte River corridor. Nebraska Partners Program staff also will work closely with the Nebraska Game and Parks Commission, Platte River Whooping Crane Maintenance Trust, and other groups and organizations to assist in the restoration of riverine habitats in a strategic manner. The Nebraska Partners Program will work with its Platte River partners to secure a high proportion of non-Partners Program funding sources for central Platte River habitat restoration projects.

#### **Related Plans**

The Partners Program habitat actions proposed for the Central Platte River Focus Area are closely aligned with the goals of the following conservation plans:

- Nebraska Natural Legacy Project
- U.S. Shorebird Conservation Plan
- USFWS Regional Wetland Concept Plan
- Ducks Unlimited Nebraska Conservation Plan
- Conserving the Biological Diversity of the Central Mixed-Grass Prairie
- North American Waterbird Conservation Plan
- Platte/Kansas Rivers Ecosystem Plan
- Partners in Flight North American Landbird Conservation Plan
- Habitat Management, Restoration, and Acquisition Plan for the Big Bend Reach of the Platte River in Central Nebraska
- The Platte River Recovery Implementation Program Biological Opinion
- The Platte River Recovery Implementation Program Final EIS
- The Platte River Recovery Implementation Program
- Whooping Crane Recovery Plan
- Great Lakes and Northern Great Plains Piping Plover Recovery Plan
- Recovery Plan for the Interior Population of the Least Tern
- Western Prairie Fringed Orchid Recovery Plan
- Nebraska Wetlands Priority Plan


# Nebraska Sandhills Focus Area

The sandhills of Nebraska are a 19,600-square-mile sand dune formation covered by native grasses in north-central Nebraska. The sandhills represent the largest contiguous tract of grassland remaining in the United States and the largest stabilized sand dune area in the Western Hemisphere. The hydrology associated with these sand dunes has created a vast groundwater reservoir and 1.3 million acres of wetlands. This high wetland to grassland ratio (1:10) provides excellent habitat for resident and migratory wildlife and the abundance of wetlands and grasslands makes the area important to both wildlife and ranching. Ranching is the primary economic use, with approximately 94% of the land in private ownership.

The Nebraska Sandhills Focus Area encompasses numerous biologically unique landscapes (e.g., Cherry County Wetlands, Sandhills Alkaline Lakes, Dismal Headwaters, Elkhorn Headwaters) identified in Nebraska's comprehensive wildlife action plan. The sandhills are identified in the North American Waterfowl Management Plan as a waterfowl habitat area of major concern in North America and are considered to be the best duck production area south of the Prairie Pothole Region. In 1991, a sixteen member task force made up of local sandhills ranchers and representatives from the Service. **USDA Natural Resources** Conservation Service, Nebraska Game and Parks Commission. The Nature Conservancy, Nebraska Cattlemen, and the North Central **Resource** Conservation and Development program was formed. The goal of the Sandhills Task Force is to work cooperatively with



 $Members \ of the \ Sandhills \ Task \ Force, and \ their \ partners, \ discuss \ potential \ Partners \ Program \ projects. \\ USFWS \ Photo.$ 

state and federal conservation agencies, nongovernmental organizations, and sandhills landowners to enhance the natural resources in the sandhills by supporting wildlife and profitable ranching.

The sandhills remain as one of the best examples of a functioning prairie landscape in the country. Approximately 700 native plant species have been documented. including several at-risk species (e.g., blowout penstemon, marsh marigold, bog bean). The sandhills provide habitat for 55 species of mammals, 75 species of fish, and 27 species of amphibians and reptiles. Over 300 species of resident and migratory birds have been documented, including large numbers of waterfowl, shorebirds, wading birds, and other wetland and grassland dependent species. The sandhills are considered to be an important breeding site for many native nesting birds including sharp-tailed grouse, greater prairie-chicken, long-billed curlew, upland sandpiper, vesper sparrow, lark bunting, grasshopper sparrow, western meadowlark, American avocet, Trumpeter swan, black tern, ferruginous hawk, and numerous species of ducks.

The Nebraska Partners Program cooperatively works with the Sandhills Task Force and a diverse group of partners to restore and enhance wetland, riparian, stream, and grassland habitat in the sandhills. Primary partners in the Nebraska Sandhills Focus Area include the USDA Natural **Resources** Conservation Service, Nebraska Game and Parks Commission. Sandhills Task Force. The Nature Conservancy, Ducks Unlimited, Nebraska Environmental Trust, National Fish and Wildlife Foundation, Nebraska Cattlemen, North Central Resource Conservation and Development, and numerous ranchers located throughout the sandhills.

# **Priority Species**

- Trumpeter swan
- Mallard
- Northern pintail
- Blue-winged teal
- Gadwall
- Greater prairie-chicken
- American bittern
- Black-crowned night heron
- White-faced ibis
- Northern harrier
- Ferruginous hawk

- Swainson's hawk
- Peregrine falcon • Whooping crane
- (Endangered) • American avocet
- Upland sandpiper • Long-billed curlew
- Black tern
- Short-eared owl
- Burrowing owl
- Bell's vireo

- Vesper sparrow
- Savannah sparrow
- Grasshopper sparrow
- Chesnut-collared longspur
- American burying beetle (Endangered)
- Western prairie fringed orchid (Threatened)
- Blowout penstemon (Endangered)



Wetland and grassland restoration project in the sandhills. USFWS Photo.

# Nebraska Sandhills Focus Area Five-year Targets

# Habitat

- Stream/Riparian Habitat Restoration/Enhancement: 25 miles
- Grassland Habitat Restoration/Enhancement: 65,000 acres
- Wetland/Wet Meadow Restoration/Enhancement: 5,000 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will partner with the Sandhills Task Force and others to work with ranchers throughout the sandhills to restore and enhance wetland, riparian, stream, and native grassland habitats. Specific habitat actions include developing and implementing grazing management plans and wetland, riparian, and stream restorations projects. These projects will be conducted to enhance the sandhills' wetland-grassland ecosystem in a way that sustains profitable private ranching and wildlife and vegetative diversity.

# Partnerships

- Number of new landowner partners: 40
- Amount of technical assistance: 150 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* The Nebraska Partners Program will focus its efforts on maintaining existing partnerships and developing new partnerships to enhance and restore wetland and grassland habitat throughout this focus area. New partners will primarily be sandhills ranchers and other private landowners who are interested in protecting this unique ecosystem for both federal trust resources and the sandhills ranching community. Nebraska Partners Program staff will work closely with the Nebraska Game and Parks Commission, Sandhills Task Force, and other groups and organizations to assist in the restoration of wetland, upland, and stream habitats. In addition, the Nebraska Partners Program will continue to provide technical assistance to the Natural Resources Conservation Service in the delivery of USDA conservation programs (e.g., Environmental Quality Incentives Program, Wetlands Reserve Program, Wildlife Habitat Incentives Program will work with its sandhills partners to secure a high proportion of non-Partners Program funding sources for habitat restoration and enhancement projects.

# **Related Plans**

The Partners Program habitat actions proposed for the Nebraska Sandhills Focus Area are closely aligned with the goals of the following conservation plans:

- Sandhills Management Plan
- Nebraska Natural Legacy Project
- North American Waterfowl Management Plan
- Ducks Unlimited Nebraska Conservation Plan
- Conserving the Biological Diversity of the Central Mixed-Grass Prairie
- U.S. Shorebird Conservation Plan
- Regional Wetland Concept Plan
- North American Waterbird Conservation Plan
- Platte/Kansas Rivers Ecosystem Plan
- Partners in Flight North American Landbird Conservation Plan
- Nebraska Wetlands Priority Plan

Nebraska

# North Platte River Focus Area

The North Platte River and its associated wetlands contain important habitats for a diverse group of wildlife species. Wet meadows, freshwater and alkaline wetlands, river channels, backwater sloughs, oxbows, sandbars, and riverine islands provide important habitats for migrating, wintering, and breeding waterbirds (e.g., waterfowl, shorebirds, wading birds); grassland nesting birds; federally threatened and endangered species; and numerous other wetland- and riverine-dependent species. Over 225 migratory bird species have been documented using habitats found along the North Platte River, including the federally listed whooping crane, least tern, and piping plover. All three species have been well documented within this focus area. The focus area also provides habitat for 2 million ducks and 500,000 geese which use the North Platte River valley to rest and feed during their annual migration. North Platte River wetlands provide important migration habitat for shorebirds and the adjacent alkaline meadows support unique assemblages of insects including tiger beetles, dragonflies, and butterflies. Riverine wetlands located throughout the valley also provide important habitat for numerous species of plants, amphibians, reptiles, and mammals, including the state-listed river otter.

The North Platte River Conservation Focus Area includes portions of two biologically unique landscapes (North Platte River Wetlands BUL and Platte Confluence BUL) identified in Nebraska's comprehensive wildlife action plan. This focus area



Partners Program riverine habitat restoration project along the North Platte River. USFWS Photo.

includes the North Platte River channel and the associated freshwater and alkaline wetland complexes within the river valley extending 180 miles from the Nebraska-Wyoming state line to North Platte, Nebraska. Habitat conditions along the North Platte River have degraded as a result of water management, altered hydrology, consumptive use, and the establishment of invasive species throughout the river corridor. River channels and adjacent riverine wetlands have narrowed and become heavily vegetated with undesirable woody and herbaceous vegetation (e.g., Russian olive, phragmites, reed canary grass, Eastern red cedar).

The overall goal for this focus area is to work with private landowners to restore and enhance riverine habitat (uplands and wetlands) for federal trust fish and wildlife resources found along the North Platte River. The Nebraska Partners Program and its North Platte River partners have actively worked with approximately one hundred landowners throughout this focus area to restore and enhance riverine habitat for target species. Primary partners in the Nebraska Partners Program North Platte River Focus Area

include the USDA Natural Resources Conservation Service; Nebraska Game and Parks Commission; Ducks Unlimited; Nebraska Environmental Trust; Platte River Basin Environments, Inc.; The Nature Conservancy; Pheasants Forever; and numerous private landowners located along the North Platte River.

#### **Priority Species**

- Trumpeter swan
- Mallard
- Blue-winged teal
- Northern pintail
- Greater prairie-chicken
- American bittern
- Black-crowned night heron
- White-faced ibis
- Bald eagle
- Swainson's hawk
- Ferruginous hawk
- Sandhill crane
- Whooping crane (Endangered)
- Mountain plover
- Upland sandpiper
- Long-billed curlew
- Burrowing owl
- Savannah sparrow
- Grasshopper sparrow
- Baird's sparrow
- Lark bunting
- Bobolink

# North Platte River Focus Area Five-year Targets

# Habitat

- Riverine Habitat Restoration (sloughs and backwaters): 15 miles
- Upland Grassland Restoration/Enhancement: 2,000 acres
- Wetland/Wet Meadow Restoration/Enhancement: 3,000 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will work with landowners and a diverse group of North Platte River partners to restore and enhance riverine/grassland habitats throughout this focus area. Specific Partners Program habitat actions include (a) clearing Russian olive, Eastern red cedar, phragmites, and other undesirable invasive woody and herbaceous vegetation from river channels, islands, and accretion lands; (b) restoring backwater sloughs and other wetlands through excavation and installation of water control structures; and, (c) restoring floodplain wet meadow/grasslands by clearing invasive vegetation, renovating wetlands, and developing grazing management systems (fencing, alternate sources of water, etc.) to re-establish and maintain diverse stands of native prairie plants.

## **Partnerships**

- Number of new landowner partners: 40
- Amount of technical assistance: 125 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* A primary emphasis of the Nebraska Partners Program will be to ensure that existing successful partnerships are maintained and that new partnerships to restore riverine wetland and upland habitat throughout this focus area are formed. New partners will primarily be North Platte River landowners who are interested in restoring and maintaining riverine habitats for federal trust fish and wildlife species. Partners Program staff will continue to work closely with the Nebraska Game and Parks Commission, Platte River Basin Environments, Inc., and other groups and organizations to assist in the delivery of habitat projects on private lands throughout the North Platte River valley. The Nebraska Partners Program will also continue to provide a significant level of technical assistance to the USDA Natural Resources Conservation Service in the delivery of the Wetlands Reserve and Wildlife Habitat Incentives programs in this focus area. The Nebraska Partners Program will continue to secure a high proportion of non-Partners Program funding sources for North Platte riverine wetland and upland habitat restoration projects.

# **Related Plans**

The Partners Program habitat actions proposed for the North Platte River Focus Area are closely aligned with the goals of the following conservation plans:

- Nebraska Natural Legacy Project
- Ducks Unlimited Nebraska Conservation Plan
- Ecoregion-Based Conservation in the Central Shortgrass Prairie
- Partners in Flight North American Landbird Conservation Plan
- Platte/Kansas Rivers Ecosystem Plan
- U.S. Shorebird Conservation Plan
- North American Waterbird Conservation Plan
- Nebraska Wetlands Priority Plan
- Regional Wetland Concept Plan



# **Missouri River Focus Area**

The Missouri River Conservation Focus Area includes the Missouri River and its floodplain from the Nebraska/South Dakota border in eastern Boyd County downstream to the Nebraska/Kansas border in Richardson County, Nebraska. A 98-mile stretch of the river from Gavins Point Dam to Ponca State Park is designated as a Wild and Scenic River due to its cultural, economic, and ecological importance. The Missouri River and its associated wetlands from Sioux City to the Nebraska/Kansas border are included as part of the North American Waterfowl Management Plan's Upper Mississippi River and Great Lakes Region Joint Venture. The Missouri River Focus Area is also identified as a biologically unique landscape in Nebraska's comprehensive wildlife action plan.

The Missouri River is a complex of riverine floodplain and palustrine wetlands. Drastic alterations to the channel and the floodplain have occurred throughout much of the river. It has been estimated that approximately 100,000 acres of aquatic habitat and over 65,000 acres of islands and sandbars have been converted to dry-land or navigation channel between Sioux City, Iowa, and the river's confluence with the Mississippi River (LaGrange 2005). It has also been estimated that only approximately 25,000 acres of wetlands remain along the Missouri River in Nebraska.

Despite all the changes that have occurred along the Missouri River, it still provides habitat (although of diminished quality and quantity) for waterfowl, shorebirds, and other fish and wildlife species, especially in the unchannelized reach above Ponca State Park.

Over 250 species of birds and numerous mammal species use the Missouri River and its associated habitats. The Missouri River supports an abundance of fish and wildlife including eleven statelisted species, six of which are also federally listed. The Missouri River is a major stopover for migratory birds traveling the Central Flyway and the combination of river channels, adjacent wetlands, grasslands, and abundant food supplies attract millions of migratory birds each year. The Missouri River and its associated floodplain habitats also provide spawning and nursery areas for many different species of fish and provide year-round habitat for numerous species of plants, invertebrates, mollusks, amphibians, reptiles, and mammals.

The Nebraska Partners Program will continue to actively coordinate and cooperate with its Missouri River partners to work with landowners throughout this focus area to restore and maintain riverine habitat for federal trust fish and wildlife resources. Primary partners involved with the restoration of riverine habitat along the Missouri River in Nebraska include the USDA Natural Resources Conservation Service, U.S. Army Corps of Engineers, National Park Service, Omaha Tribe, Winnebago Tribe, Santee Sioux Tribe, Nebraska Game and Parks Commission, Missouri River Futures Group, Missouri River Life, Ducks Unlimited, state natural resource districts, The Nature Conservancy, Nebraska Environmental Trust, National Fish and Wildlife Foundation, and numerous private landowners located along the Missouri River.

#### **Priority Species**

- Wood duck
- $\bullet$  Mallard
- Blue-winged teal
- Gadwall
- American white pelican
- Bald eagle
- Peregrine falcon
- Piping plover (Endangered)
- Greater vellowlegs
- Least tern (Threatened)
- Bell's vireo
- Dell's villeo
- Cerulean warbler
- Henslow's sparrow
- Bobolink
- Eastern meadowlark
- Pallid sturgeon
- Sturgeon chub
- Sicklefin chub

# Missouri River Focus Area Five-year Targets

## Habitat

- Riverine Habitat Restoration (sloughs and backwaters): 15 miles
- Upland Grassland Restoration/Enhancement: 3,000 acres
- Wetland/Wet Meadow Restoration/Enhancement: 3,000 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will work with landowners and a diverse group of Missouri River partners to restore and enhance the ecological functions and values of riverine/grassland habitats throughout this focus area. Specific Partners Program habitat actions include (a) restoring riverine backwater, wetland slough, and other riverine (e.g., river channel, sandbar, island, riparian) and palustrine wetland habitats; (b) clearing and controlling undesirable woody and other invasive vegetation from riverine and grassland habitats; and (c) restoring and managing native wet meadow and grassland habitats by establishing diverse stands of native prairie plants.

# Partnerships

- Number of new landowner partners: 30
- Amount of technical assistance: 300 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* Nebraska Partners Program staff will continue to work closely with Missouri River Futures, Missouri River Life, and other groups and organizations to assist in the restoration of riverine habitats throughout this focus area. Missouri River Futures is a collaborative effort between agencies to improve communication, understanding, and trust among Missouri River stakeholders. Missouri River Life is a locally led effort that involves landowners, local communities, businesses and natural resource professionals. The goal of this group is to "provide an environmentally sensitive method of protecting and enhancing the river valley to invigorate economic viability of the surrounding area and improve the ecological integrity of the river valley for future generations."

The Nebraska Partners Program will also focus its efforts on developing new partnerships to restore riverine habitat throughout the Missouri River valley. New partners will primarily be Missouri River landowners who are interested in restoring and maintaining riverine habitat for federal trust fish and wildlife resources. The Nebraska Partners Program will also continue to provide a significant level of technical assistance to the USDA Natural Resources Conservation Service in the delivery of the Wetlands Reserve Program, Emergency Wetlands Reserve Program and Wildlife Habitat Incentives Program in this focus area. The Nebraska Partners Program will work with its Missouri River partners to secure a high proportion of non-Partners Program funding sources for Missouri River habitat restoration projects.

# **Related Plans**

The Partners Program habitat actions proposed for the Missouri River Focus Area are closely aligned with the goals of the following conservation plans:

- Nebraska Natural Legacy Project
- Nebraska Wetlands Priority Plan
- Ducks Unlimited Nebraska Conservation Plan
- Terrestrial Natural Communities of Nebraska
- Regional Wetland Concept Plan
- Great Lakes and Northern Great Plains Piping Plover Recovery Plan
- Recovery Plan for the Interior Population of the Least Tern
- Missouri River National Recreational River Management Plan
- Missouri River Biological Opinion
- U.S. Shorebird Conservation Plan
- North American Waterbird Conservation Plan
- Partners in Flight North American Landbird Conservation Plan
- Conservation in a Highly Fragmented Landscape: the Central Tallgrass Prairie Ecoregional Conservation Plan



# **Republican River Focus Area**

The Republican River is a relatively new focus area for the Nebraska Partners Program. The Republican River Conservation Focus Area is located in the southwest corner of Nebraska and includes the stretch of the Republican River from the Colorado-Nebraska state line downstream to the upper end of Swanson Reservoir in Nebraska. The Republican River Focus Area is located within the Sandsage South biologically unique landscape identified in Nebraska's comprehensive wildlife action plan. Historically, the Republican River valley was relatively treeless, with only scattered trees (primarily cottonwoods and willows) found in the floodplain. The grasslands and wetlands that occurred throughout the river valley provided high quality habitat for a diverse mix of wildlife. Thirty-four of the bird species listed in the state's comprehensive wildlife action plan as at-risk species use or have used this area in the past for a portion of their life cycle.

In a relatively short period of time, the Republican River valley has been invaded by populations of Eastern red cedar, Russian olive, and other undesirable herbaceous vegetation. Invasive species have increased dramatically over the last 10 to 30 years and have led to a loss or degradation of

grassland, wetland, cottonwood savannah, and riverine habitats (e.g., sandbars, river channels, sloughs, backwaters) throughout this focus area. These alterations have resulted in a narrower, deeper river channel and a reduction in sandbar, shallow water, and backwater habitats that are critical to species such as least tern, piping plover, and a variety of other native fish and wildlife species. Due to the encroachment and growth of invasive woody species and the loss of sandbar, wetland, and adjacent grassland/wet meadow habitats, migration habitat has also become limited for species such as whooping crane and sandhill crane, as well as shorebirds, wading birds, waterfowl, and other federal trust fish and wildlife species that use prairie riverine habitats.



Partners Program habitat restoration project along the Republican River. USFWS Photo.

The objective of this focus area is to work with private landowners to restore and enhance riverine and adjacent grassland habitats for federal trust fish and wildlife resources along this stretch of the Republican River. Primary partners in the Nebraska Partners Program Republican River Focus Area are the USDA Natural **Resources** Conservation Service, Nebraska Game and Parks Commission, National Wild Turkey Federation, Nebraska Environmental Trust, and numerous private landowners located along this portion of the Republican River valley.

#### **Priority Species** • Wood duck • Prairie falcon • Sandhill crane • American wigeon • Greater prairie-chicken • Piping plover • American bittern (Threatened) • Black-crowned night heron • Least tern (Threatened) • White-faced ibis • Black tern • Yellow-billed cuckoo • Bald eagle • Northern harrier • Short-eared owl • Swainson's hawk • Bell's vireo • Merlin • Yellow-breasted chat • Peregrine falcon • Savannah sparrow

# **Republican River Focus Area Five-year Targets**

# Habitat

- Riverine Habitat Restoration (sloughs and backwaters): 10 miles
- Upland Grassland Restoration/Enhancement: 2,500 acres
- Wetland/Wet Meadow Restoration/Enhancement: 2,500 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will work with its Republican River partners to increase grassland nesting bird densities at project sites by 25% by restoring and enhancing important habitats throughout this focus area. Specific Partners Program habitat actions include (a) clearing Russian olive, Eastern red cedar, phragmites, and other undesirable invasive vegetation from river channels, cottonwood savannahs, wetlands, and grassland habitats; (b) restoring hydrology to palustrine and riverine wetlands; and, (c) implement planned grazing systems (fencing, alternate sources of water, etc.) to re-establish and maintain diverse stands of native prairie plants.

# Partnerships

- Number of new landowner partners: 20
- Amount of technical assistance: 60 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* Nebraska Partners Program staff will work with the USDA Natural Resources Conservation Service, Nebraska Game and Parks Commission, and National Wild Turkey Federation to develop and implement habitat restoration projects throughout this focus area. New partners will primarily be landowners who value grassland, wetland, and riparian habitats along this stretch of the Republican River. Along with financial assistance, the Nebraska Partners Program will provide a limited amount of technical assistance for habitat projects. A primary emphasis will be placed on assisting private landowners with removing invasive species, developing grazing plans, and restoring wetland, grassland, and riverine habitats. A high proportion of non-Partners Program funding sources will be secured for habitat restoration projects throughout this focus area.

# **Related Plans**

The Partners Program habitat actions proposed for the Republican River Focus Area are closely aligned with the goals of the following conservation plans:

- Nebraska Natural Legacy Project
- Ecoregional-Based Conservation in the Central Shortgrass Prairie
- Partners in Flight North American Landbird Conservation Plan
- Terrestrial Natural Communities of Nebraska
- North American Waterbird Conservation Plan



The Loess Prairie is being invaded by Eastern red cedar trees. The Nebraska Partners Program works with private landowners to control the cedar trees, as well as other invasive species. USFWS Photo.



Nebraska Loess Prairie Focus Area

The Loess Prairie area of central Nebraska is a new focus area for the Nebraska Partners Program. The Loess Prairie Conservation Focus Area includes two high priority biologically unique landscapes identified in Nebraska's comprehensive wildlife action plan. This focus area includes the Central Loess Hills and Loess Canyons located in the mixed-grass prairie ecoregion of Nebraska. The Loess Prairie Focus Area consists of rolling to steep loess hills and canyons and consists of a mosaic of mixed-grass prairie and cropland. The Loess Prairie grasslands have been heavily invaded by Eastern red cedar and exotic cool-season grasses in recent decades, and most have been overgrazed in the past. It is estimated that 36% of the Loess Canyons landscape has been invaded by Eastern red cedar, and continues to increase at a rate of 2% per year. At this rate, a large percentage of the region's mixedgrass prairie will be lost in the very near future.

The Loess Prairie landscapes provide important habitat for hundreds of species of plants, statelisted and federally listed species, grassland nesting birds, migratory waterbirds, insects, reptiles, amphibians and mammals. Playa wetlands are scattered throughout the flatter tablelands of the Central Loess Hills and are used by whooping cranes and numerous species of waterbirds during migration. The Loess Canyons contain one of the largest known populations of the endangered American burying beetle.

Nebraska Partners Program efforts throughout the Loess Prairie Focus Area have been relatively minor in the past due to lack of staff and funding. However, over the next five years the Nebraska Partners Program plans to become more active in this focus area. The Nebraska Partners Program will cooperate with Loess Prairie partners to work with landowners throughout this focus area to restore and maintain grassland and wetland habitats for federal trust fish and wildlife resources. Potential partners include the USDA Natural **Resources** Conservation Service. Nebraska Game and Parks Commission, Nebraska Environmental Trust, Pheasants Forever, The Nature Conservancy, National Wild Turkey Federation, Sierra Club, Rocky Mountain Elk Foundation, and numerous private landowners located throughout the Loess Canyons and the Central Loess Hills.

## **Priority Species**

- American wigeon
- Northern pintail
- Greater prairie-chicken
- Bald eagle
- Northern harrier
- Ferruginous hawk
- Swainson's hawk
- Peregrine falcon
- Prairie falcon
- Merlin
- Sandhill crane
- Whooping crane (Endangered)
- Upland sandpiper
- Long-billed curlew
- Yellow-billed cuckoo
- Short-eared owl
- Burrowing owl
- Bell's vireo
- Yellow-breasted chat
- Grasshopper sparrow
- American burying beetle (Endangered)

## Nebraska Loess Prairie Focus Area Five-year Targets Habitat

- Upland Grassland Restoration/Enhancement: 8,000 acres
- Wetland/Wet Meadow Restoration/Enhancement: 300 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will work with its Loess Prairie partners to control invasive species, improve grassland conditions, and promote biodiversity by restoring and enhancing important habitats throughout this focus area. Specific Partners Program habitat actions include (a) clearing Eastern red cedar and other undesirable invasive vegetation from grassland habitat; (b) implementing planned grazing systems to reduce exotic cool-season grasses and improve native plant diversity and vigor; and (c) restoring the hydrology to playa and riverine wetlands.

# Partnerships

- Number of new landowner partners: 30
- Amount of technical assistance: 75 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* Nebraska Partners Program staff will work with partners to develop and implement habitat restoration projects on private lands throughout this area. New partners will primarily be landowners who value grassland, wetland, and riparian habitats. Along with financial assistance, the Nebraska Partners Program will provide a limited amount of technical assistance for habitat projects. A primary emphasis will be placed on assisting private landowners with removing invasive species and restoring grassland, wetland, and riverine habitats. A high proportion of non-Partners Program funding sources will be secured for habitat restoration projects throughout this focus area.

# **Related Plans**

The Partners Program habitat actions proposed for the Loess Prairie Focus Area are closely aligned with the goals of the following conservation plans:

- Nebraska Natural Legacy Project
- Conserving the Biological Diversity of the Central Mixed-Grass Prairie
- Partners in Flight North American Landbird Conservation Plan
- Terrestrial Natural Communities of Nebraska
- Ducks Unlimited Nebraska Conservation Plan



# Nebraska Eastern Tallgrass Prairie Focus Area

The Eastern Tallgrass Prairie **Conservation Focus Area includes** three high priority biologically unique landscapes identified in Nebraska's comprehensive wildlife action plan. This focus area includes the Sandstone Prairies, Southeast Prairies, and the Verdigre-Bazile Creek Watershed, all located in the tallgrass prairie ecoregion of Nebraska. The Sandstone Prairies and Southeast Prairies include the bluffs and breaks along the Little Blue River and Rose Creek in Jefferson and Thayer counties, and the rolling hills of portions of Richardson, Pawnee, Johnson, and Gage counties. The Verdigre-Bazile Creek Watershed includes the watershed of the Verdigris and Bazile creeks in Cedar, Knox, Holt, and Antelope counties.

Grasslands throughout the Great Plains are considered to be some of the most threatened ecosystems on the continent. Over 98% of eastern Nebraska's tallgrass prairie has been lost to conversion to cropland and other development (Sampson and Knopf 1996). The Sandstone Prairies, Southeast Prairies, and the Verdigre-Bazile Creek Watershed contain some of Nebraska's (and the nation's) largest remaining tallgrass prairie remnants. However, most of the remaining prairies have been impacted by intensive grazing and exotic plant invasion (e.g., Eastern red cedar, smooth brome, Kentucky bluegrass) which have degraded many of the sites by reducing biodiversity. The large size of prairie remnants in this focus area makes these landscapes unique and provides an opportunity for landscape scale tallgrass prairie restoration and conservation.

Prairie restoration and enhancement will be completed throughout this focus area to benefit at-risk grassland wildlife species, including grassland nesting birds (e.g., greater prairie-chicken, Henslow's sparrow, dickcissel, bobolink), reptiles (e.g., milk snake, eastern and western hognose snake), insects (e.e., regal fritillary), mammals (e.g., plains pocket mouse), and numerous other species of wildlife found throughout the area. Primary partners include the USDA Natural Resources Conservation Service, Santee Sioux Tribe, Nebraska Game and Parks Commission, Tallgrass Prairie Partnership, Northeast Resource Conservation and Development, Nebraska Game and Parks **Commission**, Northeast Resource Conservation and Development, Nebraska Environmental Trust, Northern Prairie Land Trust, Pheasants Forever, Audubon Nebraska, Wachiska Audubon, Prairie Plains Resource Institute, The Nature Conservancy, state natural resource districts, Nebraska Wildlife Federation, and numerous private landowners located throughout the Eastern Tallgrass Prairie Focus Area.

#### **Priority Species**

- Greater prairie-chicken
- Northern harrier
- Upland sandpiper
- Sedge wren
- Savannah sparrow
- Grasshopper sparrow
- Henslow's sparrow
- Dickcissel
- Bobolink
- Eastern meadowlark
- Western prairie fringed orchid (Threatened)

# Nebraska Eastern Tallgrass Prairie Focus Area Five-year Targets

### Habitat

- Upland Grassland Restoration/Enhancement: 25,000 acres
- Wetland/Wet Meadow Restoration/Enhancement: 2,500 acres

*Implementation strategy for habitat objectives:* The Nebraska Partners Program will work with its Eastern Tallgrass Prairie partners to control invasive species, restore and improve native grassland conditions, and promote biodiversity by restoring and enhancing important habitats throughout this focus area. Specific Partners Program habitat actions include (a) removing invasive species (e.g., Eastern red cedar, smooth brome, Kentucky bluegrass); (b) facilitating landscape scale increases in heterogeneity by implementing innovative management strategies made possible by the removal of trees; (c) improving habitat conditions on large tracts of intact grassland by reducing fragmentation; (d) demonstrating sustainable management of grasslands and associated native woodlands; (e) restoring native plant communities by improving native plant diversity and vigor; and, (f) restoring the hydrology to wetlands.

#### Partnerships

- Number of new landowner partners: 50
- Amount of technical assistance: 200 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* Nebraska Partners Program staff will work with its partners to develop and implement habitat restoration projects on private lands throughout this area. New partners will primarily be landowners located throughout this focus area who are interested in restoring and maintaining native grassland habitats for federal trust fish and wildlife species.

Along with financial assistance, the Nebraska Partners Program will provide technical assistance for habitat projects. Emphasis will be placed on assisting private landowners with removing invasive species and restoring grassland and wetland habitats. A high proportion of non-Partners Program funding sources will be secured for habitat restoration projects throughout this focus area.

## **Related Plans**

The Partners Program habitat actions proposed for the Eastern Tallgrass Prairie Focus Area are closely aligned with the goals of the following conservation plans:

- Nebraska Natural Legacy Project
- Conservation in a Highly Fragmented Landscape: the Central Tallgrass Prairie
- Conserving the Biological Diversity of the Central Mixed-Grass Prairie
- Partners in Flight North American Landbird Conservation Plan
- Terrestrial Natural Communities of Nebraska



# Improve Information Sharing and Communication

A big part of the success of the Partners Program in Nebraska has been the diversity of partners and partnerships (internal and external) that have been developed. Partnerships cannot be successful without effective communication and collaboration. No single entity has the staff or funds available to accomplish conservation goals and objectives at the landscape or ecosystem level on its own.

Nebraska Partners Program staff will participate and support (technically and financially) locally-based conservation partnerships and assist in the development of new partnerships in priority landscapes.

# **Five-year Targets**

- Actively participate in landowner meetings, site visits, conferences, and workshops.
- Make presentations at local, state, and national meetings; conferences; and workshops.
- Conduct field tours and site visits to habitat restoration projects throughout the state to exchange information regarding restoration techniques and funding opportunities.
- Actively participate in the USDA Natural Resources Conservation Service state technical committee as well as Wetlands Reserve Program, Wildlife Habitat Incentives Program, Environmental Quality Incentives Program, Grassland Reserve Program, and Conservation Reserve Program sub-committee meetings.
- Continue to coordinate with the Nebraska Game and Parks Commission to deliver habitat restoration projects on private lands.
- Collaborate and coordinate with the Nebraska Ecological Services Field Office, refuge offices located throughout Nebraska, DeSoto National Wildlife Refuge, Gavins Point National Fish Hatchery, and the Mountain-Prairie Region HAPET Office.
- Continue to improve communications with partners by maintaining a strong presence in a wide variety of work groups and committees and participate with numerous Nebraska stakeholders in the development of strategic landscape planning efforts throughout Nebraska.

# Enhance Our Workforce

The Nebraska Partners Program currently fully funds five full time private lands biologists (including the state coordinator). These private lands biologists are extremely dedicated to working with private landowners and partners to restore federal trust resources on private lands. In order to maintain this high level of professionalism, each Partners Program biologist will have an opportunity to participate in 40 hours of training to improve program operations (e.g., habitat restoration techniques, GIS technology, partnership development) and to improve career opportunities (e.g., research, evaluation, communication, policy). In addition, Partners Program staff will have an opportunity to spend time working with other Partners Program biologists outside of their primary areas of responsibility to share ideas and methods, and to build support and understanding regarding what is occurring in other parts of the state.

# **Five-year Targets**

- Ensure that Nebraska Partners Program staff have the opportunity to acquire a minimum of 40 hours of training each year.
- Maintain a highly-skilled and highly-motivated Partners Program staff.
- Fill vacant positions as identified on the currently approved Nebraska Partners Program organizational chart.

# **Increase Accountability**

#### **Five-year Targets**

- The Nebraska Partners Program will work with the Mountain-Prairie Region HAPET office and the Great Plains GIS Partnership to:
  - Develop GIS coverage and an associated database of all historic Partners Program projects in Nebraska.
  - Develop and field test habitat models that will assist in more strategically targeting Partners Program conservation efforts within the Nebraska Partners Program focus areas.
- All new Partners Program projects will annually be entered into HabITS as soon as the Wildlife Extension Agreements have been fully executed. The state coordinator will continue to ensure that HabITS data is entered correctly and is accurate.
- Nebraska Partners Program staff will continue to provide the state coordinator with accurate information regarding technical assistance efforts throughout their areas of responsibility for inclusion into HabITS.
- Partners Program field staff will be equipped with digital cameras to increase the number of before, during, and after construction photos for projects. This should result in an increase in the number of projects that are entered into HabITS with associated photos.

# **External Factors**

The primary external factors that may influence the Nebraska Partners Program's ability to meet five-year targets is the amount of Partners Program funding available for habitat restoration projects, the amount of Partners Program personnel available to deliver habitat restoration projects throughout the focus areas, and the availability of funding and personnel from the program's diverse group of partners.





North Dakota Partners Program Conservation Focus Areas

# Introduction

The Prairie Pothole Region (PPR) is legendary as North America's foremost producer of ducks. North Dakota, the top duck producing state in the nation, lies in the heart of this region. Wetland densities in North Dakota commonly reach as high as 100-150 basins per square mile, making it not only an important breeding area for ducks, but also a key breeding and migration area for over 70 wetlanddependent migratory bird species. With over 90% of North Dakota lands in private ownership, the North Dakota Partners Program is one of the Service's most important

programs to restore and maintain habitat for migratory bird populations in the Central Flyway.

Since 1987, the Partners Program has matched federal funds with donated private funds and North American Wetland Conservation Act grants to restore, create, and enhance wildlife habitat on more than 200,000 acres of private land in the state (equal to 312 square miles). While the majority of Partners Program projects are implemented in strategically focused areas of important habitat, the program boasts projects in all 52 counties of North Dakota, in cooperation with over 2,000 farmers and ranchers, who themselves have donated over \$0.5 million in direct payment and hands-on work to develop new habitat and to initiate conservation-oriented agricultural practices that benefit wildlife.

The Partners Program is limited only by the amount of funding necessary for projects and the personnel to accomplish them.

## Partnership Involvement in Plan Development

The Partners Program coordinated efforts with other federal and state

agencies, major nongovernmental organizations, and stakeholder partners who have been involved in the Partners Program Strategic Plan to date. The Partners Program also involved the Service's Ecological Services, Realty, and Fisheries divisions in the Partners Program focus area determination process. Input provided by the combined expertise of these external and internal partners contributed to the Partners Program's identification of focus areas for North Dakota.

# The Prairie Pothole Region of North Dakota

The Prairie Pothole Region is legendary in its continental importance to waterfowl and other migratory birds. Its uniqueness lies in the millions of depressional wetlands that constitute one of the richest wetland systems in the world. These "prairie potholes," and their surrounding grasslands, are highly productive and support an incredible diversity of bird life. The Prairie Pothole Region provides breeding habitat for a myriad of wetland and grassland birds, and also supports significant numbers of spring and fall migrants.

Once a vast region of mixed-grass prairie and small, shallow wetlands, the Prairie Pothole Region is now an agrarian system dominated by cropland. Changes in land use have, for the most part, been detrimental to the migratory birds that use the Prairie Pothole Region. Many wetlands have been drained or degraded, and the loss of native prairie, particularly in the eastern portion of the Prairie Pothole Region, has been extensive. Despite these losses, millions of wetlands and large tracts of native prairie still remain. The Prairie Pothole Region is one of the most altered, yet also one of the most important, migratory bird habitats in the Western Hemisphere. It is the backbone of North America's "duck factory," and supplies critical habitat for many wetland- and

grassland-dependent migratory birds.



## Priority Prairie Pothole Region Focus Area

The area that makes up the Priority Prairie Pothole Region Focus Area is 7,609,848 acres, or 17% of the North Dakota land area. This focus area is the "best of the best" of the U.S. portion of the Prairie Pothole Region. Prairie/wetland complexes with densities of up to 150 wetland basins per square mile can support more than 65 duck pairs per square mile. It is currently the priority area for Service Realty acquisitions, as well as conservation efforts by Ducks Unlimited, a major partner. It is also a North Dakota State Wildlife Action Plan Focus Area.

# Priority Species

- American wigeon
- Mallard
- Lesser scaup
- Piping plover (Threatened)
- Upland sandpiper
- Marbled godwit
- Wilson's phalarope
- Black tern
- LeConte's sparrow

"When the Service offered to help restore this wetland, we decided that this was a way we could leave a wildlife legacy for generations to follow."

 Ray Heupel,
3rd generation farmer near Medina, ND



Wetland densities in the Prairie Pothole Region of North Dakota commonly reach 100-150 basins per square mile. USFWS Photo.



Three generations of this ranching family will benefit from Partners Program assistance in developing a long-term rotational grazing system. Projects like this keep grasslands from being converted to cropland. USFWS Photo.

**Priority Prairie Pothole Region Focus Area Five-year Targets** 

# Habitat

- Wetland Restoration: 750 acres
- Wetland Establishment: 100 acres
- Grassland Restoration/Enhancement: 22,250 acres

# Partnerships

- Number of new landowner partners: 200
- Amount of technical assistance: 150 staff days
  - Partners Program staff provide a significant level of technical assistance, through close coordination with the U.S. Department of Agriculture, North Dakota Game and Fish Department, and various nongovernmental organizations, to promote and assist landowners with Farm Bill conservation programs including the Conservation Reserve, Wetlands Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Grassland Reserve programs.
- Percentage of leveraging:
  - 47% North American Wetlands Conservation Act grant funds
  - 38% other partner (North Dakota Game and Fish Department, nongovernmental organizations) 10% landowner cash and in-kind
  - 5% Service funds

# **Related Plans**

- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan
- Northern Prairie and Parkland Waterbird Conservation Plan
- Prairie Pothole Joint Venture Implementation Plan
- North Dakota State Wildlife Action Plan



Whooping cranes and tundra swans take advantage of wetland habitat, restored by the Partners Program, on their fall migration to Texas. Photo by Jerome Negaard.



# General Prairie Pothole Region Focus Area

The area that makes up the General Prairie Pothole Region Focus Area is13,345,454 acres, or 29% of North Dakota's land area. This focus area contains some of the highest quality wetland habitat in the United States. The General Prairie Pothole Region Focus Area,



Shallow prairie potholes restored by the Partners Program provide important breeding and migration habitat to mallards and many other species of wildlife. USFWS photo.

with prairie/wetland complexes having densities of up to 80 wetland basins per square mile, can support more than 20 duck pairs per square mile. This area includes the bulk of identified Partners in Flight Bird Conservation Areas, covers key areas of habitat for federally listed threatened and endangered species, and includes 10 of the 14 primary focus areas in the North Dakota State Wildlife Action Plan.

#### **Priority Species**

- American wigeon
- Mallard
- Northern pintail
- Ferruginous hawk
- Yellow rail
- Marbled godwit
- Black tern
- Common tern
- Short-eared owl
- Sedge wren
- Sprague's pipit
- Baird's sparrow
- Grasshopper sparrow
- Chestnut-collared longspur
- Bobolink

#### General Prairie Pothole Region Focus Area Five-year Targets Habitat

- Wetland Restoration: 1,100 acres
- Wetland Establishment: 150 acres
- Grassland Restoration/Enhancement: 33,500 acres

# Partnerships

- Number of new landowner partners: 300
- Amount of technical assistance: 200 staff days
  - Partners Program staff provide a significant level of technical assistance, through close coordination with the U.S. Department of Agriculture, North Dakota Game and Fish Department, and various nongovernmental organizations, to promote and assist landowners with Farm Bill conservation programs, including the Conservation Reserve, Wetlands Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Grassland Reserve programs.
- Percentage of leveraging:

47% North American Wetlands Conservation Act grant funds

38% other partner (North Dakota Game and Fish Department, nongovernmental organizations) 10% landowner cash and in-kind 5% Service funds

#### **Related Plans**

- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan
- Northern Prairie and Parkland Waterbird Conservation Plan
- Prairie Pothole Joint Venture Implementation Plan
- North Dakota State Wildlife Action Plan



This 3.5 acre wetland, established by the Partners Program, is indicative of the type of projects and habitat in the Northern Great Plains Focus Area. Photo by Monte Ellingson, USFWS.



## **Northern Great Plains Focus Area**

The area that makes up the Northern Great Plains Conservation Focus Area is 6,329,561 acres, or 14%, of the North Dakota land area. The focus area is characterized by transitional zones of mixed cropland and grassland that are threatened by cropland conversion.

The focus area is arid to semi-arid and mostly unglaciated. Relatively few natural wetlands exist on the landscape. Grazing is a primary land use in the area. Numerous wetlands have been established for livestock and wildlife. This area of shortgrass and mixed-grass prairie has been dramatically altered in the last 100 years, due primarily to human intervention. Once common, native grasslands are now seriously threatened, and many bird species are declining. The goal of the Partners Program is to assist landowners in maintaining their lands in grassland agriculture, primarily by providing needed water sources (wetland restoration and establishment) associated with livestock production.

# **Priority species**

- Mallard
- Ferruginous hawk
- Marbled godwit
- Black-billed cuckoo
- Short-eared owl
- Burrowing owl
- Loggerhead shrike
- Sedge wren
- Sprague's pipit
- Baird's sparrow
- Grasshopper sparrow
- Chestnut-collared longspur
- Bobolink



Nearly all Partners Program projects start at the landowner's kitchen table. Photo by Jared Newton, Ducks Unlimited.

# Northern Great Plains Focus Area Five-year Targets

## Habitat

- Wetland Restoration: 75 acres
- Wetland Establishment: 1,125 acres
- Riparian Restoration: 3 miles

# Partnerships

- Number of new landowner partners: 200
- Amount of technical assistance: 150 staff days
  - Partners Program staff provide a significant level of technical assistance, through close coordination with the U.S. Department of Agriculture, North Dakota Game and Fish Department, and various nongovernmental organizations to promote and assist landowners with Farm Bill conservation programs including the Conservation Reserve, Wetlands Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Grassland Reserve programs.
- Percentage of leveraging:
  - 47% North American Wetlands Conservation Act grant funds
  - 38% other partner (North Dakota Game and Fish Department, nongovernmental organizations) 10% landowner cash and in-kind
  - 5% Service funds

# **Related Plans**

- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan
- Northern Prairie and Parkland Waterbird Conservation Plan
- Prairie Pothole Joint Venture Implementation Plan
- North Dakota State Wildlife Action Plan

# North Dakota Statewide Goals and Biological Outcomes



# Improve Information Sharing and Communication

# **Five-year Targets**

Communication and outreach are integral to the success of the Partners Program. In this regard, the program has two primary objectives:

- Maintain and develop strong and positive partnerships.
- Increase landowner interest in the Partners Program.

In order to develop strategies for these objectives, Partners Program staff looked to a process begun in 2005, in which the Partners Program asked cooperating landowners how they heard about the program. Of 400 responses generated thus far, cooperating landowners heard about the Partners Program in the following ways:

- Prior cooperator, or heard from a neighbor or saw a project: 33%
- Partners Program outreach (news articles, direct mailings, presentations): 25%
- Referral from a USDA county office: 20%
- Referral from a partner organization or agency: 12%
- Informed by Partners Program or refuge staff when considering a Service easement: 10%

These findings are the basis for strategies to improve information sharing and communication over the next five years. Strategies for the two objectives will be outlined in a Partners Program outreach plan, developed and maintained by the Partners Program state coordinator, on an annual basis. Components of the outreach plan will include the following, at minimum:

- Measurable objectives for Partners Program field biologists to revisit prior cooperators.
- Measurable objectives for news articles, direct mailings, and participation/presentation tasks with agricultural groups.
- Establishment of demonstration sites in highly visible areas.
- Measurable objectives for contact events and program updates with partners, particularly the U.S. Department of Agriculture, North Dakota Game and Fish Department, and Ducks Unlimited at the state and local level.
- Development and use of outreach materials to promote the Partners Program.



Partners Program staff actively participate in USDA Natural Resources Conservation Service State Technical Committee meetings, one of many technical assistance activities undertaken by the Partners Program. Photo by NRCS.

# Enhance Our Workforce

Partners Program staff are some of the most dedicated and highly-motivated personnel in the Service. Their positions require that they have a general knowledge of many aspects of wildlife management, agriculture, contract negotiation and administration, as well as an uncommon ability to "sell" the program to private landowners. Providing adequate training opportunities, and maintaining high morale, are integral to retaining a highly skilled, highly motivated Partners Program workforce.

# **Five-year Targets**

- Annually assist Partners Program staff to plan and schedule training opportunities.
- Maintain close coordination, at least biweekly, among the Partners Program state coordinator, North Dakota refuge program supervisors, and Partners Program staff.
- Initiate an effort, whereby Partners Program biologists spend one week minimum with a Partners Program biologist in another geographic area to share ideas and methods and build intra-staff support.
- Increase all-staff meetings from one to a minimum of two, per year.
- Continue sharing weekly schedules/comments among Partners Program staff.
- Continue to provide high quality project training and materials to Partners Program staff.
- Initiate a statewide traveling Partners Program award program to annually recognize the most accomplished Partners Program staff person.



This landowner stands proudly before a 59-acre grass restoration project accomplished in partnership between the North Dakota Game and Fish Department and Partners Program. Photo by Dan Duchscherer, USFWS.



A successful mallard nest in restored grassland is the reward for Partners Program biologists. Photo by Charles Loesch, USFWS.

# Increase Accountability

The Partners Program will direct its efforts in identified geographic focus areas, and prioritize habitat restoration projects based on the level of contribution to the conservation of federal trust resources. Consideration will also be given to state-listed species of concern and related habitat needs as identified in the North Dakota State Wildlife Action Plan.

# **Five-year Targets**

- Provide more frequent and in-depth summary updates to major partners.
- Increase the number of return visits made to prior cooperators to assure completed projects are functioning as intended, gather anecdotal information on wildlife use, and cooperate in additional projects that will enhance what has already been done.
- Increase HabITS reporting speed, efficiency, and photo submission.
- Work with South Dakota Partners Program staff and the HAPET office in modeling wildlife benefits of Partners Program projects.



North Dakota consistently ranks between first and third each year, nationwide, in production of eight major crops. Because of the emphasis on agriculture, Partners Program accomplishments are often measured one acre at a time. Photo by Kevin Willis, USFWS.

# **Biological Outcomes**

# Estimated waterfowl breeding pair and recruitment benefits for Partners Program wetland and grassland projects in North Dakota focus areas for 2007-2011. (4 May 2007)

The North Dakota Partners Program continues to work closely with a variety of wildlife researchers to quantify biological outcomes in specific focus areas. Most notably, Partners Program staff have collaborated with the USGS Northern Prairie Wildlife Research Center and the Service's Region 6 Habitat and Population Evaluation Team (HAPET) office to estimate duck recruitment on Partners Program projects in both the Priority PPR and General PPR focus areas. Published data and peer reviewed HAPET models were used to forecast the recruitment of five key waterfowl species (mallard, gadwall, blue-winged teal, northern shoveler and northern pintail) in these two focus areas. It is estimated that Partners Program projects completed in the next five years will result in positive recruitment benefits to over 250,000 ducks during the course of the Partners Program Wildlife Extension Agreements. HAPET continues its work on new models that will be applied to Partners Program project data to estimate benefits to other avian species including waterbirds, shorebirds, and grassland songbirds. More specific recruitment outcomes are described by Partners Program focus area and conservation practice type in the following table.

Estimated \	ated Waterfowl Breeding Pair and Recruitment Benefits				nefits	North	Dakota Focus Areas, 2007 2011			
State	Focus Area	Project Type	Class	Target Number	Target Acres	Term (Yrs)	Annual Pairs <sup>1</sup>	Cumulative Pairs <sup>2</sup>	Annual Productivity <sup>3</sup>	Cumulative Productivity⁴
North Dakota	Priority PPR (>60 Duck Pairs)	Wetland Restoration	Temporary Temporary Seasonal Seasonal Semipermanent Semipermanent <b>Totals</b>	51 94 70 130 5 10 <b>360</b>	35 65 210 390 17 33 <b>750</b>	10 99 10 99 10 99	42 77 260 483 12 23	416 7,641 2,599 47,785 120 2,308 <b>60,868</b>	55 102 345 640 16 31	509 10,052 3,185 62,861 147 3,036 <b>79,790</b>
		Wetland Creation	Semipermanent	25	100	30	71	2,119	94	2,738
			Totals	25	100			2,119		2,738
		Grassland Restoration⁵	New Totals	65 10 <b>75</b>	2,650 350 <b>3,000</b>	10 99			575 76	5,751 7,519 <b>13,270</b>
		Grassland Enhancement <sup>6,7</sup>	Maintenance	35	17,500	10			3,798	37,975
			Totals	35	17,500					37,975
	General PPR (>20-60 Duck Pairs)	Wetland Restoration	Temporary Temporary Seasonal Seasonal Semipermanent Semipermanent <b>Totals</b>	75 140 105 195 5 10 <b>530</b>	51 94 315 585 19 36 <b>1,100</b>	10 99 10 99 10 99	43 80 279 518 9 17	435 7,937 2,787 51,234 88 1,646 <b>64,127</b>	58 106 369 686 12 22	533 10,442 3,415 67,399 108 2,165 <b>84,062</b>
		Wetland Creation	Semipermanent	35	150	30	69	2,078	92	2,686
		orodion	Totals	35	150			2,078		2,686
		Grassland Restoration	New Totals	95 15 <b>110</b>	3,975 525 <b>4,500</b>	10 99			863 114	8,626 11,279 <b>19,904</b>
		Grassland Enhancement	Maintenance	50	17,500	10			3,798	37,975
			Totals	50	17,500					37,975
		Wetland Restoration Wetland Creation <b>Totals</b>		890 60 <b>950</b>	1,850 250 <b>2,100</b>			124,995 4,197 <b>129,192</b>		163,851 5,424 <b>169,275</b>
		Grassland Restoration Grassland Enhancement <b>Totals</b>		110 50 <b>160</b>	4,500 17,500 <b>22,000</b>					33,174 75,950 <b>109.124</b>
			Grand Totals	1st 10 10-30 Y	Years Years		1,982 1,337	19,818 26,748	11,850 1,963	117,851 39,114

# **Considerations:**

When reviewing the totals, note that the distribution of wetland and/or grassland resources in limited term versus perpetual agreements can significantly affect the cumulative benefits. Similarly, the target distribution of wetland classes will also affect the numbers of pairs that are modeled to benefit from the projects.

Duck breeding pair values per acre of wetland were estimated for each focus area by summing the number of total pairs for the focus area by wetland class, and dividing by the total acres of wetland for the respective class.

<sup>2</sup> The estimated cumulative value of wetland related private lands projects for breeding pairs is PAIRS = ((Acres of Wetland) \* (Pair Value) \* (Agreement Duration)).

<sup>3</sup> Recruits related to the acres of wetland restored or created are calculated using the estimated number of pairs attracted to project wetlands and subsequent recruitment derived from Four Square Mile Breeding Waterfowl data 1998-2006 (Wangler and Reynolds 2007). Recruits related to the acres of grassland restored or protected from loss by implementing grazing systems (i.e., enhanced) were derived from simulating grassland change using the mallard model for areas in central North and South Dakota and subsequent changes in duck recruitment. These results were extrapolated to 4 other upland nesting duck species.

<sup>4</sup> The estimated cumulative recruitment value of wetland and grassland related private lands projects for ducks is
WETLAND PROJECT BASED RECRUITS = ((Number of Breeding Duck Pairs) \* (Recruitment Value) \* (Agreement Duration)
- (# of PAIRS because there are no 1st year benefits)); GRASSLAND PROJECT BASED RECRUITS = ((Acres of Grassland) \* (Recruitment Value) \* (Agreement Duration)).

<sup>5</sup> Recruits associated with grassland restoration are considered new recruits to the population.

<sup>6</sup> Recruits associated with grassland enhancement (i.e., grazing systems) are considered existing recruits protected for the duration of the agreement (i.e., prevention of population decline).

<sup>7</sup> The value of grassland and impacts on recruitment is related to the breeding duck density for the area where the grass is either restored or enhanced. The models used for recruitment were derived for areas with relatively high duck density; consequently, the recruits associated with lower duck density priority areas may be overestimated.





# Introduction

# **Focus Area Selection**

South Dakota's landscape is largely defined by rolling grasslands interspersed with a wide variety of wetland and riparian features. The primary philosophy of the South Dakota Partners Program is to maintain and restore this unique mix of habitats by providing conservation solutions that work for both landscapes and private landowners. South Dakota's Partners Program focus areas are a composite result of this philosophy and ongoing conservation work with over four thousand individual landowners. In most cases, the

technical demarcation of focus area boundaries formalized and fine tuned broader Partners Program conservation initiatives that have been ongoing for over 15 years. A variety of long term data sets and GIS layers were utilized to further refine the four focus areas. Primary data sources included the National Wetlands Inventory, various GIS land coverage products, South Dakota Agricultural Statistics Service information, South Dakota Comprehensive Wildlife Conservation Plan (South Dakota Department of Game, Fish and Parks 2005), and waterfowl breeding pair distribution maps developed by the Service's

Mountain-Prairie Region Habitat and Population Evaluation Team (HAPET) office.

# **Partner Coordination**

The Partners Program has a long history of collaborating with a wide variety of funding partners to develop conservation actions for priority habitats. Most notable among these efforts is the development of multi-partner grant initiatives funded via the North American Wetlands Conservation Act (NAWCA). Since 1991, the Partners Program has served as a catalyst to bring together dozens of funding partners and millions of dollars to work in biologically based NAWCA project areas. As such. South Dakota NAWCA project areas provided a primary basis for determining the locations of Partners Program focus areas. Most recently, further consultation occurred with key partners to formalize these areas as Partners Program focus areas. Primary partners involved with this process include the South Dakota Department of Game, Fish and Parks: South Dakota Association of Conservation Districts: North Central Resource Conservation and Development Association; and Pheasants Forever.

Further input on general Partners Program direction and future activities was solicited from key partners in a comprehensive 2004 stakeholder survey. The Partners Program works closely with other National Wildlife Refuge System divisions to implement conservation actions that complement Service lands. As part of the 2004 Partners Program stakeholder survey, comments and guidance were actively solicited from Service Realty, Wetland Management District, and National Wildlife Refuge staff.

South Dakota

## Tallgrass Coteau Focus Area

The South Dakota Tallgrass Coteau Conservation Focus Area is characterized by high wetland densities, diverse bird communities and some of the largest remaining tracts of northern tallgrass prairie in the nation (U.S. Fish and Wildlife Service 2000a). In addition to its nationally recognized importance for breeding waterfowl, "I am proud of my parents, grandparents, and greatgrandmother for what they endured to keep our place together and raise their families here – all the while caring for this land as they cared for the family. I believe that these acres of rolling prairie with numerous wetlands and native wildlife are a part of us and we have become a permanent part of it."

"We hope we're doing some good things on the land, and we're helping our livelihood by improving our carrying capacity and gain from our cattle."

– Neil Bien,

South Dakota Rancher, Marshall County

Neil has had 17 different on-the-ground habitat restoration projects completed on his land, in partnership with the Partners Program.

this area hosts hundreds of species of plants, butterflies, reptiles, amphibians, and mammals. The focus area is within the core of, and is considered one of the most ecologically unique portions of, the Prairie Pothole Joint Venture.

In an effort to save the grassland character of the region, the Partners Program has joined a diverse cadre of partners to foster a sustainable grassland economy, based primarily on family livestock ranching. The Partners Program has developed an integrated system of habitat conservation programs designed to simultaneously benefit the grazing lands needed by ranchers and the vital wetland and grassland landscapes needed by a wide variety of federal trust species. Specific Partners Program habitat actions include restoring grasslands and wetlands, implementing beneficial grazing systems, establishing wetlands, and prescribing voluntary conservation easements.

# Priority Species

#### Mallard

- Northern pintail
- Virginia rail
- American avocet
- Black tern
- Grasshopper sparrow
- LeConte's sparrow
- Chestnut-collared longspur
- Bobolink
- Western meadowlark
- Topeka shiner
- (Endangered)



Wetland restoration projects benefit migratory bird focal species such as mallard, northern pintail, and black tern.

# South Dakota Tallgrass Coteau Focus Area Five-year Targets

## Habitat

- Grassland Restoration: 2,500 acres
- Grassland Enhancement: 22,500 acres
- Wetland Restoration: 525 acres
- Wetland Establishment: 125 acres

*Implementation strategy for habitat objectives:* Grassland objectives will be met by expanding the number of projects completed with livestock producers, primarily cattle ranchers. Wetland objectives will be primarily addressed by restoring wetlands in partnership with landowners who own and manage land for non-agricultural purposes.

# Partnerships

- Number of new landowner partners: 200
- Amount of technical assistance: 150 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* New partners will primarily be landowners who value grassland and wetland habitats. Along with financial assistance, the Partners Program also provides a significant amount of technical assistance for habitat projects. A primary emphasis will be placed on assisting ranchers with developing grazing management plans for their livestock operations. The Partners Program will continue to secure a high proportion of non-Partners Program funding sources for habitat projects. This will be accomplished through a combination of grant writing, non-federal partner contributions, and consideration of landowner financial and in-kind involvement in habitat projects.

# **Primary Partners**

Sisseton-Wahpeton Sioux Tribe; South Dakota Department of Game, Fish and Parks; South Dakota Association of Conservation Districts; Ducks Unlimited; Delta Waterfowl; Pheasants Forever; East Dakota Water Development District; South Dakota Izaak Walton League; and hundreds of private landowners.

# **Related Plans**

- North American Waterfowl Management Plan
- National Partners in Flight Plan (Rich et al. 2004, Pashley et al. 2000)
- Northern plains/pothole portion of the U.S. Shorebird Conservation Plan (Skagen and Thompson 2001)
- North American Waterbird Conservation Plan (Beyersbergen, Niemuth, and Norton 2004; Kushlan et al. 2002).

All of these conservation efforts endorse landscape-scale habitat work as an effective vehicle for bird conservation. The Partners Program strives to meet this goal by protecting, restoring, and enhancing some of the largest remaining grassland/wetland complexes in the nation.



BEFORE.



AFTER. A proud landowner and his wetland restoration project. USFWS Photo.



# Mixed Grass Coteau Focus Area

The biological core of the South Dakota Mixed Grass Coteau Conservation Focus Area is a contiguous tract of over 2,000 square miles of relatively unfragmented grassland-wetland habitat that can host over 100 breeding duck pairs per square mile. This is the largest tract of such high quality habitat in the nation, and has been identified as a critically important waterfowl breeding region (Prairie Pothole Joint Venture 2005). Preserving this unfragmented landscape as a viable "recruitment source" for all suites of prairie nesting birds has been identified as an urgent priority for the Service, Delta Waterfowl, and Ducks Unlimited. While many of the habitat actions in this focus area are designed to conserve waterfowl breeding habitat, they also have direct benefits to a wide spectrum of ground-nesting birds. These mutual benefits are especially vital to grassland-nesting passerines which are considered to be one of the most imperiled bird guilds in North America (Peterjohn and Sauer 1999).

#### **Priority Species**

- Blue-winged teal
- Northern pintail
- Northern harrier
- Ferruginous hawk
- Marbled godwit
- Wilson's phalarope
- Sedge wren
- Savannah sparrow
- Dickcissel
- Bobolink

Along with its biological significance, this region is widely recognized as the national focal point for the growing debate regarding ongoing loss of native prairie. Thousands of acres of native prairie are annually converted to cropland in the focus area. The conversion of native prairie grasslands to cropland has recently drawn a wide degree of interest from academia (Conner et al. 2001), ecologists (Ogg 2006), policy analysts (U.S. Government Accountability Office 2003), and wildlife conservationists (Higgins et al. 2002). The Partners Program actively works with all interests in the focus area to promote sustainable land uses that benefit both landowners and landscapes. The primary goal of the Partners

Program in the focus area is to maintain and restore landscape characteristics associated with high bird recruitment in the face of a rapidly changing agricultural economy.

It is widely supported that the most viable technique for conserving the unique habitats of this region is to forge new and accelerated partnerships with the local ranching community (Higgins et al. 2002). Partners Program actions intended to benefit both ranchers and wildlife include restoring grassland and wetlands, implementing beneficial grazing systems, establishing wetlands, and prescribing voluntary conservation easements.



Native prairie restoration benefits grassland birds as well as waterfowl species that use uplands for nest ing. USFWS Photo.

# Mixed Grass Coteau Focus Area Five-year Targets

## Habitat

- Grassland Restoration: 3,300 acres
- Grassland Enhancement: 35,000 acres
- Wetland Restoration: 450 acres
- Wetland Establishment: 250 acres

*Implementation strategy for habitat objectives:* Grassland objectives will be met by expanding the number of grazing management projects completed with livestock producers, primarily cattle ranchers. Wetland objectives will be primarily addressed by restoring wetlands in partnership with landowners who own and manage land for livestock ranching.

# Partnerships

- Number of new landowner partners: 250
- Amount of technical assistance: 150 staff days
- Percentage of leveraging: 70% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* New partners will primarily be landowners who value grassland habitats for livestock grazing. Along with financial assistance, a significant amount of technical assistance will also be provided for habitat projects. A primary emphasis will be placed on assisting ranchers with developing grazing management plans for their operations. The Partners Program will continue to secure a high proportion of non-Partners Program funding sources for habitat projects. This will be accomplished through a combination of grant writing, non-federal partner contributions, and consideration of landowner financial and in-kind involvement in habitat projects.

# **Primary Partners**

Primary partners in these efforts include South Dakota Department of Game, Fish and Parks; South Dakota Association of Conservation Districts; Ducks Unlimited; Pheasants Forever; Delta Waterfowl; South Dakota Izaak Walton League; North Central Resource Conservation and Development Association; and hundreds of private landowners.

# **Related Plans**

Partners Program habitat actions proposed for this unique region are closely aligned with the goals of the North American Waterfowl Management Plan (North American Waterfowl Management Plan Committee 2004), appropriate regional sections of the National Partners in Flight Plan (Rich et al. 2004; Pashely et al. 2000), northern plains/pothole portion of the U.S. Shorebird Conservation Plan (Skagen and Thompson 2001), and North American Waterbird Conservation Plan (Beyersbergen, Niemuth, and Norton 2004; Kushlan et al. 2002).

All of these conservation efforts endorse strategically targeted, landscape-scale habitat work as an effective vehicle for conservation, especially for birds. For example, the 2004 northern prairie and parkland portion of the North American Waterbird Conservation Plan notes that two priority habitat needs are to (1) "prevent wetland loss through legal protection, acquisition, and conservation easements," and (2) "prevent upland loss through legal protection, agricultural program incentives, acquisition and conservation easements." Likewise, the 2000 northern mixed-grass prairie portion of the national Partners in Flight Plan (Pashely et al. 2000) notes that "Maintenance of large un-fragmented grassland ecosystems is the conservation objective for the coteau areas where agriculture is not dominant." The Partners Program strives to further this philosophy primarily by partnering with family ranchers.



# Southern Plains Focus Area

The South Dakota Southern Plains Conservation Focus Area is characterized by large native grassland tracts and the highest natural wetland densities in western South Dakota (Rieger et al. 2006). Partners Program efforts within this focus area are largely based upon the conservation goals of the North American Waterfowl Management Plan 2004, National Partners in Flight Plan (Rich et al. 2004; Pashley et al. 2000), Northern Great Plains Joint Venture Concept Plan 2001, and Northern Great



Healthy wetlands and grasslands combine to provide optimum conditions for nesting waterfowl. USFWS Photo.

**Plains Joint Venture** Implementation Plan (Pool and Austin 2006). All of these plans endorse landscape-scale habitat work as an effective vehicle for conservation, particularly for migratory birds.

# **Priority Species**

- American wigeon
- Northern pintail
- Ferruginous hawk
- Virginia rail
- Wilson's phalarope
- Long-billed curlew
- Short-eared owl
- Lark sparrow
- Savannah sparrow
- Chestnut-collared longspur
- Lark bunting



Wetland establishment projects benefit wildlife, while also providing a source of water for livestock - a win-win for both wildlife and ranchers. USFWS Photo.

Working with ranchers to maintain and restore grasslands is widely recognized as the most effective way to conserve habitat for federal trust species in this region. The 2001 concept plan for the Northern Great Plains Joint Venture notes that, "Preservation of a ranching lifestyle is considered critical to maintaining prairie ecosystems because of the dependence on grass and other natural features."

Likewise, the Partners in Flight conservation plan (Pashley et al. 2000) for this portion of South Dakota notes that, "Maintenance of a ranching economy here is compatible with the needs of grassland birds and should be the highest conservation priority." The Partners Program supports this philosophy by providing a wide variety of conservation options to assist ranchers in meeting their grassland stewardship goals. Specific conservation practices delivered by the Partners Program include rotational grazing systems, native grassland restoration, and wetland establishment. Groundnesting songbirds, shorebirds, and waterfowl receive particularly high benefits from Partners Program grassland conservation efforts.



Ruddy ducks and other waterfowl species enjoy this new wetland restoration project. USFWS Photo.

# **Southern Plains Focus Area Five-year Targets**

### Habitat

- Wetland Establishment: 150 acres
- Grassland Restoration: 300 acres
- Grassland Enhancement: 20,000 acres

*Implementation strategy for habitat objectives:* Wetland objectives will be primarily addressed by establishing multiple-purpose wetlands that provide trust species benefits and provide ranchers with additional options for livestock water and grazing management. Grassland objectives will be met by expanding the number of grazing management projects completed with livestock producers, primarily cattle ranchers.

## Partnerships

- Number of new landowner partners: 100
- Amount of technical assistance: 75 staff days
- Percentage of leveraging: 60% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* New partners will primarily be landowners who value grassland habitats for livestock grazing. Along with financial assistance, the Partners Program also provides a significant amount of technical assistance for habitat projects. A primary emphasis will be placed on assisting ranchers with developing grazing management plans for their operations. The Partners Program will continue to secure a high proportion of non-Partners Program funding sources for habitat projects. This will be accomplished through a combination of grant writing, non-federal partner contributions, and consideration of landowner financial and in-kind involvement in habitat projects.

#### **Primary Partners**

A diverse group of partners have joined the Partners Program to conserve this unique landscape by fostering a sustainable grassland economy based on livestock ranching. Primary partners in this effort include Lower Brule Sioux Tribe; South Dakota Department of Game, Fish and Parks; South Dakota Association of Conservation Districts; Ducks Unlimited; Pheasants Forever; North Central Resource Conservation and Development Association; and hundreds of private landowners. These entities work together to strive to maintain a viable grassland-wetland landscape that meets the long term needs of the resource and livelihoods of the landowners.



Wetland establishment in the Southern Plains Focus Area. USFWS Photo.


## **High Plains Focus Area**

The South Dakota High Plains Conservation Focus Area is characterized by large native grassland tracts interspersed with a wide variety of riparian features (Rieger et al. 2006). Within this arid portion of the state, the Partners Program works closely with landowners to carefully craft habitat plans that provide mutual benefits for ranching and wildlife conservation. For example, wetland establishment provides wildlife habitat and also serves as vital livestock watering sources. The 2001 concept plan for the Northern Great Plains Joint Venture notes that, "Shallow-water impoundments provide several positive benefits to the Northern Great Plains Joint Venture landscape. In the broadest terms, they help to keep ranchers in the business of growing grass instead of converting grasslands to tillage agriculture." Other typical

conservation actions offered via the Partners Program include riparian fencing, rotational grazing systems, and native grassland restoration.

#### **Priority Species**

- American wigeon
- Northern pintail
- Black-billed cuckoo
- Loggerhead shrike
- Sprague's pipit
- Chestnut-collared longspur



Wetlands, imbedded in grassland and sagebrush-steppe, provide habitat for numerous species of wetland and upland wildlife. USFWS Photo.

## **High Plains Focus Area Five-year Targets**

#### Habitat

- Wetland Establishment: 150 acres
- Riparian Restoration/Enhancement: 6 miles
- Grassland Restoration: 250 acres
- Grassland Enhancement: 10,000 acres

*Implementation strategy for habitat objectives:* Riparian objectives will be reached by continuing to expand riparian based partnerships throughout the focus area. Specifically, the Partners Program will continue to work closely with local conservation districts to identify strategic riparian restoration locations and funding opportunities. Wetland objectives will be addressed primarily by establishing multiple-purpose wetlands that provide trust species benefits and provide ranchers with additional options for livestock water and grazing management. Grassland objectives will be met by expanding the number of grazing management projects completed with livestock producers, primarily cattle ranchers.

#### **Partnerships**

- Number of new landowner partners: 150
- Amount of technical assistance: 75 staff days
- Percentage of leveraging: 60% or more of non-Partners Program sources

*Implementation strategy for partnership objectives:* New partners will be primarily landowners who value grassland and riparian habitats. Along with financial assistance, the Partners Program also provides a significant amount of technical assistance for habitat projects. A primary emphasis will be placed on assisting ranchers with developing grazing management and riparian deferment plans for their operations. The Partners Program will continue to secure a high proportion of non-Partners Program funding sources for habitat projects. This will be accomplished through a combination of grant writing, non-federal partner contributions, and consideration of landowner financial and in-kind involvement in habitat projects.

#### **Primary Partners**

Primary partners assisting the Partners Program in the High Plains Focus Area include South Dakota Department of Game, Fish and Parks; South Dakota Association of Conservation Districts; Ducks Unlimited; Pheasants Forever; North Central Resource Conservation and Development Association; National Fish and Wildlife Foundation; and hundreds of private landowners.

#### **Related Plans**

Partners Program efforts within this focus area are closely aligned with the conservation goals of the 2004 North American Waterfowl Management Plan., National Partners in Flight Plan (Rich et al. 2004, Pashely et al. 2000), 2001 Northern Great Plains Joint Venture Concept Plan, and Northern Great Plains Joint Venture Implementation Plan (Pool and Austin 2006). All of these bird conservation efforts endorse landscape-scale habitat work as an effective vehicle for bird conservation.

## South Dakota Statewide Goals and Biological Outcomes



## Improve Information Sharing and Communication

## **Five-year Targets**

- Maintain and develop strong and positive partnerships.
- Increase landowner interest in the Partners Program.
- Actively participate in 50 landowner meetings, conferences, workshops, or symposia sponsored by other conservation interests throughout South Dakota.
- Make Partners Program-related presentations at 10 national meetings, conferences, workshops, or symposia.
- Sponsor, or directly assist in the implementation of 10 landowner conferences, workshops, or symposia throughout South Dakota.
- Provide five Partners Program updates to both the Prairie Pothole Joint Venture and the Northern Great Plains Joint Venture.
- Participate in five meetings each of the Service's National Farm Conservation Programs Working Group, Northern Great Plains Working Group, and Dakota Working Group.
- Host three Partners Program partner coordination and award recognition events throughout South Dakota.
- Facilitate 10 media events/news articles on the South Dakota Partners Program.
- Conduct 5 school field trips, in support of the Director's priority to re-connect America's youth to the outdoors.

*Implementation Strategy:* The primary vehicle for improved communication with landowner groups will be the ongoing relationship between the Partners Program and the South Dakota Association of Conservation Districts. Partners Program staff routinely participate in county-level conservation district functions, and this relationship is the basis for many multi-partner funding agreements. In addition, the Partners Program will maintain an active presence in the USDA Natural Resources Conservation Service's State Technical Committee. In addition, Partners Program staff are standing members of Technical Committee sub-committees for the Wetlands Reserve, Grassland Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Conservation Reserve programs.

The Partners Program will continue to improve communications at the regional and national levels by maintaining a strong presence in a wide variety of private land- and agriculture-related work groups and committees. Specifically, Partners Program staff are standing members of the Service's Farm Conservation Programs Working Group, Northern Great Plains Working Group, and the technical committees of both the Prairie Pothole Joint Venture and Northern Great Plains Joint Venture.

## **Enhance Our Workforce**

#### **Five-year Targets**

- Annually provide each Partners Program biologist 25 hours of training on state-of-the-art habitat restoration and GIS techniques.
- Annually provide each Partners Program biologist 15 hours of training on recent developments in natural resource conservation policy and research.
- Annually provide award recognition for two key Partners Program accomplishments.
- Strategically place new Partners Program biologists in initial positions where they can be effectively mentored by senior Partners Program staff.

*Implementation Strategy:* Most Partners Program training needs will be met through the annual state-wide Partners Program staff meeting. This typically functions as a week-long session that provides a mix of policy updates, technical training, and guest presentations. These sessions also have input from key partners throughout South Dakota. Ad hoc meetings and training sessions will be held, as necessary. The current Partners Program organizational chart has biological science technician positions approved for key locations throughout the state; all are currently considered unfunded positions. In the future, when staffing these positions, a primary consideration will be locating new staff where they can best be mentored by senior Partners Program field biologists.



Partners Program Biologist, Joe Nichols, talks to a local school group about wildlife and their associated habitats. USFWS Photo.

#### **Increase Accountability**

#### **Five-year Targets**

- Develop a GIS layer and associated database of the more than 4,000 Partners Program projects, completed between 1986-2006, throughout the Prairie Pothole Joint Venture portion of South Dakota.
- Annually enter a minimum of 300 new Partners Program projects in the Private Lands GIS as developed and administered by the Mountain-Prairie Region HAPET office.
- Empirically quantify specified trust species benefits of all Partners Program projects in the Prairie Pothole Joint Venture portion of South Dakota.
- Consult on 2 University level field research projects with direct benefits to the Partners Program.
- Increase the number of HabITS entries, with associated photos, by 5% each year.

*Implementation Strategy:* The Partners Program will continue to actively work with Pheasants Forever to develop GIS coverage and an associated database of all historic Partners Program projects in the Prairie Pothole Joint Venture portion of South Dakota. A 2005 cooperative agreement forms the basis of this ongoing effort. In addition, all new Partners Program projects will annually be entered into a Service approved GIS system. GIS information will then be the basis for quantifying trust species benefits of Partners Program projects. The Partners Program will work closely with the Mountain-Prairie Region HAPET office to model species benefits. Initial benefits will be quantified for Partners Program wetland projects and their use by mallard, gadwall, northern pintail, northern shoveler, and blue-winged teal. Partners Program staff have a long history of coordinating with researchers at South Dakota State University. This relationship will continue with a proximate emphasis on grassland management techniques that are both economically viable and ecologically sustainable. Assurances will be taken that all Partners Program field staff have state-of-the-art digital cameras, while increasing the number of project photographs will be addressed at annual staff meetings. Partners Program staff will continue to actively work with Ducks Unlimited to develop and field test grassland risk models that will assist in more strategically targeting Partners Program grassland conservation efforts.

#### **External Factors**

The agricultural landscape of South Dakota is currently going through a period of significant change (South Dakota Agricultural Statistics Service 2006). Economic and technological realities are transforming much of the landscape from native grassland used for ranching to tillage agriculture. While this is occurring throughout the northern Great Plains, the pattern of change is particularly evident in central South Dakota. For example, in the May/June 2004 issue of *Ducks Unlimited* magazine a feature article on the future of native prairie noted that the loss of native grasslands is "...most acute in central South Dakota where biotech crops and world demand are fueling the destruction of tens of thousands of acres of prime pintail breeding habitat." The primary external factors that are driving this type of landscape change also directly impact the Partners Program's ability to effectively promote grassland and wetland conservation. The conservation philosophy of the Partners Program is largely based upon working with ranchers who have a shared vision of grassland and wetland conservation. This type of landowner partnership is widely supported as the most efficient way to conserve large grassland/ wetland landscapes (Higgins, Naugle, and Forman 2002), but its effectiveness can certainly be impacted by the external realities of a rapidly changing agricultural economy.

## **Biological Outcomes**

Estimated waterfowl breeding pair and recruitment benefits for Partners Program wetland and grassland projects in South Dakota focus areas for 2007-2011. (4 May 2007)

The South Dakota Partners Program continues to work closely with a variety of wildlife researchers to quantify biological outcomes in specific focus areas. Most notably, Partners Program staff have collaborated with the USGS Northern Prairie Wildlife Research Center and the Service's Region 6 HAPET office to estimate duck recruitment on Partners Program projects in both the Tallgrass Coteau and Mixed Grass Coteau focus areas. Published data and peer reviewed HAPET models were used to forecast the recruitment of five key waterfowl species (mallard, gadwall, northern pintail, northern shoveler, and blue-winged teal) in these two focus areas. It is estimated that Partners Program projects completed in the next five years will result in positive recruitment benefits to over 250,000 ducks during the course of the Partners Program focus area and conservation practice type in the following table.

Estimated \	Naterfowl B	Breeding Pair	<sup>-</sup> and Recruitm	ent Benefits		South Dakota Focus Areas,		2007 2011	
State	Focus Area	Project Type	Class	Target Acres	Term (Yrs)	Annual Pairs <sup>1</sup>	Cumulative Pairs²	Annual Productivity <sup>3</sup>	Cumulative Productivity⁴
South Dakota	Tallgrass Coteau	Wetland Restoration	Temporary Temporary Seasonal Seasonal Semipermanent Semipermanent <b>Totals</b>	16 10 94 63 205 137 <b>525</b>	10 99 10 99 10 99	9 6 74 50 83 56	93 578 740 4,907 834 5,517 <b>12,669</b>	12 7 94 63 106 71	109 725 862 6,161 972 6,927 <b>15,757</b>
		Wetland Creation	Semipermanent	125	10	51	508	64	593
		Grassland Restoration⁵	New Totals	1,000 1,500 <b>2,500</b>	10 99		508	217 326	2,170 32,225 <b>34,395</b>
		Grassland Enhancement <sup>6,7</sup>	Maintenance Totals	22,500	10			4,883	48,825 <b>48,825</b>
	Mixed Grass Coteau	Wetland Restoration	Temporary Temporary Seasonal Seasonal Semipermanent Semipermanent <b>Totals</b>	14 9 81 54 175 117 <b>450</b>	10 99 10 99 10 99	28 18 143 95 125 83	282 1,792 1,429 9,434 1,246 8,249 <b>22,433</b>	36 23 181 121 158 105	328 2,249 1,666 11,845 1,453 10,357 <b>27,898</b>
		Wetland Creation	Semipermanent Totals	250 <b>250</b>	10	250	2,500 <b>2,500</b>	316	2,914 <b>2,914</b>
		Grassland Restoration	New Totals	1,320 1,980 <b>3,300</b>	10 99			286 430	2,864 42,536 <b>45,401</b>
		Grassland Enhancement	Maintenance Totals	35,000 <b>35,000</b>	10			7,595	75,950 <b>75,950</b>
		Wetland Restoration Wetland Creation		975 375			35,102 3,008		43,655 3,507
		Totals Grassland		1,350			38,110		47,161
		Restoration Grassland Enhancement <b>Totals</b>		3,300 35,000 <b>38,300</b>					204,570 124,775
			Grand Totals	1st 10 Years Remaining Years Cumulative		1,071 308	10,711 27,399 <b>38,110</b>	15,092 1,145	150,154 101,578 <b>251.732</b>

## **Considerations:**

When reviewing the totals, note that the distribution of wetland and/or grassland resources in limited term verus perpetual agreements can significantly affect the cumulative benefits. Similarly, the target distribution of wetland classes will also affect the numbers of pairs that are modeled to benefit from the projects.

<sup>1</sup> Duck breeding pair values per acre of wetland were estimated for each focus area by summing the number of total pairs for the focus area by wetland class, and dividing by the total acres of wetland for the respective class.

- <sup>2</sup> The estimated cumulative value of wetland related private lands projects for breeding pairs is PAIRS = ((Acres of Wetland) \* (Pair Value) \* (Agreement Duration)).
- <sup>3</sup> Recruits related to the acres of wetland restored or created are calculated using the estimated number of pairs attracted to project wetlands and subsequent recruitment derived from Four Square Mile Breeding Waterfowl data 1998-2006 (Wangler and Reynolds 2007). Recruits related to the acres of grassland restored or protected from loss by implementing grazing systems (i.e., enhanced) were derived from simulating grassland change using the mallard model for areas in central North and South Dakota and subsequent changes in duck recruitment. These results were extrapolated to 4 other upland nesting duck species.
- <sup>4</sup> The estimated cumulative recruitment value of wetland and grassland related private lands projects for ducks is WETLAND PROJECT BASED RECRUITS = ((Number of Breeding Duck Pairs) \* (Recruitment Value) \* (Agreement Duration) - (# of PAIRS because there are no 1st year benefits)); GRASSLAND PROJECT BASED RECRUITS = ((Acres of Grassland) \* (Recruitment Value) \* (Agreement Duration)).
- <sup>5</sup> Recruits associated with grassland restoration are considered new recruits to the population.
- <sup>6</sup> Recruits associated with grassland enhancement (i.e., grazing systems) are considered existing recruits protected for the duration of the agreement (i.e., prevention of population decline).
- <sup>7</sup> The value of grassland and impacts on recruitment is related to the breeding duck density for the area where the grass is either restored or enhanced. The models used for recruitment were derived for areas with relatively high duck density; consequently, the recruits associated with lower duck density priority areas may be overestimated.

# Utah





Utah Partners Program Conservation Focus Areas

## Introduction

Utah is the 13th largest state in the nation, but only approximately 20% (16,980 square miles or 10,867,200 acres) of its land base is privately owned (Utah facts). Still, the distribution of private land ownership represents considerable fish and wildlife habitat restoration potential.

Utah is the second driest state in the nation, receiving an annual average 13 inches of precipitation (Water facts). The dry climate makes lakes, streams, and springs places of critical importance for both humans and federal trust resources. Privately owned property along these water rich areas is often critical habitat for Service trust species. Sagebrushsteppe habitat, associated with low precipitation zones, is another valuable habitat type to numerous Service trust species.

Despite the low amount of precipitation, Utah has an important wetland habitat component primarily located around the Great Salt Lake, recognized as the 4th largest terminal lake in the world. This wetland complex provides valuable habitat to migrating and resident waterfowl and shorebirds. The Great Salt Lake wetland area has one of the world's largest whitefaced ibis colonies located within its associated wetlands, as well as one of the top three American white pelican colonies on Gunnison Island. The Great Salt Lake has also been designated as a Western Hemispheric Shorebird Reserve Network site, recognizing the area's importance to provide critical habitat needs for at least 500,000 shorebirds annually.

Threats to key habitats include establishment of invasive species, housing development along the Wasatch front and along the eastern side of the Great Salt Lake wetland area, channel alterations affecting instream and riparian habitats, and loss of plant communities due to current and past agricultural land use practices.



Long-billed curlews are one of many high priority shorebird species that benefit from both wetland and grassland habitat restoration projects. USFWS Photo.

Focus areas were developed using the following criteria:

- Species diversity and trust responsibility
- Delineation of intact landscapes
- Threats
- Public land/private land
- relationships and patternsPartnership opportunities
- Farthership opportunities

The development of focus areas also involved input from the following entities:

- Service's Salt Lake City Ecological Services Field Office
- USDA Natural Resources Conservation Service
- Utah Division of Wildlife Resources
- Utah Association of Conservation Districts
- Farm Bureau



Bear River and Weber River Focus Area

The Bear River and Weber River Watersheds Conservation Focus Area is located in the northeast portion of the state. This area contains wetland, shrub-steppe, stream, and riparian habitats. The Partners Program's main goal is to work with private landowners owning rangeland within this focus area.

#### **Priority Species**

- Greater sage-grouse
- Black-necked stilt
- American avocet
- Long-billed curlew
- Bonneville cutthroat trout

#### Primary Habitat Restoration and Enhancement Efforts

- Upland Restoration – Seeding
  - Grazing Management
  - Invasive Species Control
  - Sagebrush Management
- Stream and Riparian Restoration
  - Channel Re-design
  - Riparian Plantings
  - Invasive Species Control
  - Grazing Management
- Wetland Restoration and Enhancement – Silt Removal
  - Silt Kemoval
  - Dike Construction



This river restoration project benefits Bonneville cutthroat trout as well as many riparian-nesting neotropical migratory birds. USFWS Photo.

## Bear River and Weber River Watersheds Focus Area Five-year Targets

#### Habitat

- Wetland Restoration/Enhancement: 45 acres
- Upland Restoration/Enhancement: 2,100 acres
- Stream/Riparian Restoration/Enhancement: 1.5 miles

#### Partnerships

- Number of private landowners: 15
- Number of new partners (in addition to landowners): 1
- Percentage of leveraging (ratio Service to Partner): 1:3

#### **Related Plans**

- Intermountain West Joint Venture 2005
- Coordinated Implementation Plan for Bird Conservation in Utah (Utah Steering Committee 2005)
- Partners in Flight physiographic regions (Pashley et al. 2000)
  - Basin and Range
  - Utah Mountains
  - Wyoming Basin
- Utah Comprehensive Wildlife Conservation Strategy (Gorell et al. 2005)
- Range-Wide Conservation Agreement and Strategy for Bonneville Cutthroat Trout (Lentsch et al. 2000)
- Conservation Assessment of Greater Sage-grouse and Sagebrush Habitat (Connelly et al. 2004)



## Great Salt Lake Focus Area

The Great Salt Lake Conservation Focus Area contains the Great Salt Lake and its associated wetland complexes. Wetland types include wet meadow, emergent marsh, submergent marsh, and playa. The Bear River Migratory Bird Refuge is located within this focus area and



Wetland complexes provide valuable habitat for American avocets and other shorebirds.  $USFWS\ Photo.$ 

many Partners Program projects have already been completed in the vicinity of this refuge. The Partners Program's main goal is to work with private landowners along the shore of the Great Salt Lake and around its associated wetlands.

#### **Priority Species**

- Cinnamon teal
- Snowy plover
- Black-necked stilt
- American avocet
- Long-billed curlew

## Primary Habitat Restoration and Enhancement Activities

- Wetland Restoration and Enhancement
  - Installing or replacing water control structures and water delivery systems
- Construction of shallow water impoundments to prolong season of use and utilize spring runoff
- Control of non-native phragmites and tamarisk

## Great Salt Lake Focus Area Five-year Targets

#### Habitat

- Wetland Restoration: 40 acres
- Upland Restoration: 375 acres

#### **Partnerships**

- Number of private landowners: 10
- Number of new partners (in addition to landowners): 2
- Percentage of leveraging (ratio Service to Partner): 1:3

- Intermountain West Joint Venture 2005
- Western Hemispheric Shorebird Reserve Network
- Intermountain West Regional Shorebird Plan (Oring, Neel, and Oring 2006)
- Coordinated Implementation Plan for Bird Conservation in Utah
- Partners in Flight physiographic regions – Basin and Range
- Utah Comprehensive Wildlife Conservation Strategy
- North American Waterfowl Management Plan 2004



#### **Grouse Creek Focus Area**

The Grouse Creek Conservation Focus Area contains the Grouse Creek and Pilot mountain ranges, situated in the northwest portion of the state. The primary habitat types that restoration efforts focus on include sagebrush-steppe communities, riparian and stream areas, and natural spring areas. A significant amount of upland sagebrush work is done in conjunction with the USDA Natural Resources Conservation Service, the Utah Division of Wild life Resources, as well as local sage-grouse working groups.

#### **Priority Species**

- Greater sage-grouse
- Sage sparrow
- Boreal toad
- Yellowstone cutthroat trout
- Least chub
- Lahontan cutthroat trout\*
- \*Although not native to Utah, the Lahontan cutthroat trout is a federally listed threatened species found in two small Utah streams. Work has been done to use these populations to stock Nevada waters, where it is a native species, as part of a recovery program.

#### Primary Habitat Restoration and Enhancement Activities

- Upland Restoration and Enhancement
- Seeding
- Sagebrush Management
- Grazing Management
- Riparian and Stream Restoration
  - Grazing Management
- Construction of small ponds



These large intact landscapes of sagebrush-steppe habitat are critical habitat for sagebrush obligate species, such as greater sage-grouse and sage sparrow. USFWS Photo.

## Grouse Creek Focus Area Five-year Targets

#### Habitat

- Upland Restoration/Enhancement: 700 acres
- Riparian Restoration: 0.25 miles

#### Partnerships

- Number of private landowners: 5
- Number of new partners (in addition to landowners): 1
- Percentage of leveraging (ratio Service to Partner): 1:3

- Intermountain West Joint Venture
- Coordinated Implementation Plan for Bird Conservation in Utah
- Partners in Flight physiographic regions
  - Basin and Range
- Utah Comprehensive Wildlife Conservation Strategy
- Box Elder Adaptive Resource Management Plan
- Conservation Assessment of Greater Sage-grouse and Sagebrush Habitat
- Boreal toad (Bufo boreas boreas) Conservation Plan in the State of Utah (Hogrefe et al. 2005)
- Conservation agreement and strategy for least chub (*Iotichthys phlegethontis*) in the State of Utah (Bailey, Wilson, and Anderson 2005)



## Southeastern Focus Area

The Southeastern Conservation Focus Area is located in the area of Utah near Monticello, extending to the Colorado border. Primary habitat restoration efforts focus on upland sagebrush communities and small irrigated areas.

## **Priority Species**

- $\bullet$  Greater sage-grouse
- Gunnison sage-grouse (only located in this area and an adjacent area in Colorado)
- Sage thrasher
- Sage sparrow

## **Primary Habitat Restoration and Enhancement Activities**

- Upland Restoration and Enhancement
  - Seeding
  - Sagebrush Management
- Grazing Management • Riparian and Stream
  - Restoration
- Grazing Management
- Construction of small ponds and establishment of small wet meadows



Sagebrush-steppe and wet meadows provide breeding, resting, and feeding habitat for the greater sage-grouse. Photo by Utah Division of Wildlife Resources.

## Southeastern Focus Area Five-year Targets

#### Habitat

• Upland Restoration/Enhancement: 15 acres

#### Partnerships

- Number of private landowners: 5
- Number of new partners (in addition to landowners): 2
- Amount of technical assistance: 29 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3

- Intermountain West Joint Venture
- Coordinated Implementation Plan for Bird Conservation in Utah
- Partners in Flight physiographic regions
  - Colorado Plateau
- Utah Comprehensive Wildlife Conservation Strategy
- Gunnison Sage-grouse (Centrocercus minimus) Conservation Plan, San Juan County, Utah



Utah prairie dogs benefit from habitat restoration projects in the Western Colorado Plateau. Photo by Utah Division of Wildlife Resources.



Western Colorado Plateau and Sevier River Focus Area

The Western Colorado Plateau and Sevier River Conservation Focus Area is located in the central part of Utah. The primary habitat types that restoration efforts focus on sagebrush-steppe communities, wet meadow communities, and riparian/stream habitats.

#### **Priority Species**

- Greater sage-grouse
- Leatherside chub
- Columbia spotted frog
- Utah prairie dog
- (Threatened)

#### Primary Habitat Restoration and Enhancement Activities

- Upland restoration
  - Seeding
  - Grazing Management
  - Invasive Species Control
- Sagebrush Management
- Stream and Riparian Restoration
  - Channel Re-design
  - Riparian Plantings
  - Invasive Species Control
    Grazing Management
- Wetland Restoration and Enhancement
  - Silt Removal
- Dike Construction

## Western Colorado Plateau and Sevier River Focus Area Five-year Targets

## Habitat

- Upland Restoration/Enhancement: 245 acres
- Wetland Restoration/Enhancement: 5 acres
- Reparian/Stream Restoration: 0.25 miles

## Partnerships

- Number of private landowners: 5
- Number of new partners (in addition to landowners): 1
- Amount of technical assistance: 13 staff days
- Percentage of leveraging (ratio Service to Partner): 1:3

- Intermountain West Joint Venture 2005
- Coordinated Implementation Plan for Bird Conservation in Utah
- Partners in Flight physiographic regions
  - Colorado Plateau
  - Utah Mountains
- Utah Comprehensive Wildlife Conservation Strategy
- Conservation Agreement and Strategy for Spotted Frog (Perkins and Lentsch 1998)



## Improve Information Sharing and Communication

## **Five-year Targets**

- Participate in all USDA Natural Resources Conservation Service State Technical Committee meetings. Provide Service representation to USDA Natural Resources Conservation Service and USDA Farm Service Agency on Farm Bill conservation program administration and delivery.
- Attend other state-wide meetings including the following:
  - Intermountain West Joint Venture annual meeting
    - Sage-grouse working group meetings (minimum of two per year)
    - Northern Utah working group meetings (minimum of one per year)
- Develop Cooperative Agreement with Utah Division of Wildlife Resources to share funding and available resources for projects benefiting federal trust species.
- Coordinate with other Service offices to consolidate efforts for Service trust species.
- Develop a Service trust species list for Utah.
- 75% of projects reported in HabITS will have accompanying project photos.
- Complete Partners Program annual report detailing number of technical assistance contacts.
- Produce a minimum of one popular publication each year highlighting Partners Program projects in Utah.
- Meet with and provide information to other interested Service offices detailing Partners Program work in Utah.
- Share habitat restoration accomplishment data with other agencies/organizations.

## Enhance Our Workforce

The Utah Partners Program currently funds one full-time biologist. There is no state coordinator for Utah. Because of this lack of staffing, the biologist is responsible for all the on-the-ground field work, technical assistance, and administrative assignments. This poses a difficult situation and prevents the Utah Partners Program from functioning at minimum capacity.

To address the habitat restoration and enhancement needs for high priority federal trust resources in Utah, new conservation focus areas have been identified. Although they have been identified, additional staffing is needed to meet the habitat goals for these areas. New staffing would immediately be able to begin on-the-ground habitat restoration projects, as landowner contacts have been made and there are many interested landowners within these identified conservation focus areas.

## **Five-year Targets**

- Complete a minimum of 40 hours training each year
  - Media and public outreach training
  - Grant writing training
  - Resource-oriented training such as GIS, census techniques, etc.
- Leadership program
  - Attend leadership training and share experiences through job shadowing
  - Temporary details to work with other programs and branches within and outside the Service
- In accordance with the Service's Employee Performance Appraisal System, performance and special achievement awards will be used to recognize exceptional projects and staff efforts.
- Increase current staff by one field biologist and one state coordinator to achieve minimum staffing capacity for the Utah Partners Program.

#### Increase Accountability

**Five-year Targets** 

- Achieve 90% habitat restoration/enhancement project accomplishments within identified Partners Program focus areas.
- 100% of projects are linked to trust species in HabITS.
- Projects reported in HabITS will have accompanying project photos
  - 75% of projects will contain "before restoration" photo documentation in HabITS
  - 50% of projects will contain "after restoration" photo documentation within three years of being entered into HabITS
  - Conduct follow-up inspection of 50% of projects within three years of project completion and have inspection entered into HabITS.

Program focus areas.

• 95% accuracy for data entry into HabITS.

Program focus areas.

• Complete 100% HabITS data entry by established due date each fiscal year.

## External Factors

There are several external factors that could have adverse effects to the Utah Partners Program. One significant external factor would be the lack of staff and project funds to adequately meet the five-year targets. In order to fully meet the goals and objectives identified within this plan, the Utah Partners Program will need at least one additional field biologist to allow for a minimum staffing capacity for Partners Program operations. Opportunities to expand on-the-ground habitat restoration into new focus areas have been identified. Many landowners have expressed interest in completing habitat restoration and enhancement projects on their lands. Partnerships that have been formed throughout the state can easily be expanded to accommodate additional work within these identified focus areas. Without the expansion of the Utah Partners Program, several at-risk species will continue to be imperiled, due to habitat degradation from urban sprawl, poor grazing management practices, surface mining, and energy development.



## **Regional Objectives**

- Maintain intact landscapes to benefit suites of federal trust species.
- Restore or enhance habitat for threatened, endangered, and candidate species.
- Restore and enhance habitat for native trout species.
- Restore and enhance habitat for migratory birds of conservation concern, as identified in Service migratory bird conservation plans (e.g., U.S. Shorebird Conservation Plan, North American Waterfowl Management Plan) and on the Migratory Bird Focal Species List.
- Help keep populations of federal trust species at stable population levels to avoid costly recovery efforts.
- Build upon goals and objectives of the National Wildlife Refuge System by restoring and enhancing private lands adjacent to Service lands.
- Seek out opportunities to maximize restoration efforts on private lands by working with partners to leverage resources.
- Be proactive and visionary in determining the threats to federal trust species, and focus efforts to restore or enhance private lands that can reduce those threats.

## **Regional Conservation Habitat Five year Targets**

- Wetland Restoration/Enhancement: 36,469 acres
- Wetland Establishment: 2,050 acres
- Upland Restoration/Enhancement: 584,905 acres
- River/Stream/Riparian Restoration/Enhancement: 654 miles
- Fish Passage: 66 structures

## **Key Strategic Activities**

- Continue involvement, and seek new opportunities, with community-based conservation partnerships such as the Tallgrass Legacy Alliance and Post Rock Grazers in Kansas, Blackfoot Challenge in Montana, and Sandhills Task Force in Nebraska.
- Continue to promote program hallmarks that emphasize trust, respect, honesty, flexibility, and open communication with all partners.
- Maintain delegation of authority for landowner agreement development at the field level.
- Work cross-program to benefit high priority federal trust species.

## **Broaden and Strengthen Partnerships**

The Mountain-Prairie Partners Program has achieved tremendous success over the past 20 years. Such success comes from the countless number of agency, tribal, conservation organization, industry and, most importantly, individual private landowner cooperators that have joined forces to put habitat restoration projects on the ground. The Mountain-Prairie Region provides habitat for many high priority fish and wildlife species of conservation concern. Such landscapes will aid in keeping common species common, thus helping to prevent costly recovery efforts. Monitoring activities undertaken by numerous program partners will assist in quantifying outcomes resulting from habitat improvement efforts. The Mountain-Prairie Region Partners Program also extends a huge thank-you to its many internal Service partners who have assisted in setting and accomplishing fish and wildlife habitat goals. Their guidance and leadership have helped the Partners Program staff maximize efficiencies and work towards the greatest good for Service trust resources.

With State Wildlife Strategies now in place, the Mountain-Prairie Region Partners Program will assist state natural resource agencies to implement the plans by strengthening partnerships, providing technical assistance, and working on projects of mutual interest to help leverage resources within geographic focus areas.

There is a tremendous amount of tribal land within the Mountain-Prairie Region, much of which is high priority habitat for key fish and wildlife species. Tribal partnerships have always been strong in the Mountain-Prairie Region; however, an added emphasis will be placed on enhancing these partnerships to work on habitat restoration projects of mutual interest.

As new Partners Program focus areas are established in the Mountain-Prairie Region, field biologists will initiate new partnerships with private landowners, as well as increase partnerships with agencies, tribal entities, nongovernmental organizations, and industries. The Partners Program welcomes new, innovative ideas to reach conservation goals and objectives, as identified within the Strategic Plan.

#### **Regional Partnership Five-year Targets**

- Number of new landowner partners: 2,676
- Number of new additional partners: 97
- Amount of Technical Assistance: 6,372 staff days

#### Landscape-level Conservation Partnerships

The Partners Program plans to continue the community-based conservation initiatives already on-going, and begin a number of new ones in identified Partners Program focus areas. Several states within the Mountain-Prairie Region have focus areas where there is currently minimal development, but increasing land use pressures. Urban sprawl continues to threaten rural agricultural communities in the Mountain-Prairie states. The Partners Program has assisted many community-based conservation initiatives, working to maintain rural lifestyles as well as to support wildlife conservation efforts. The Mountain-Prairie Region plans to continue support of these very successful efforts, such as the Tallgrass Legacy Alliance and Post Rock Grazers in Kansas, Blackfoot Challenge in Montana, and Sandhills Task Force in Nebraska. The Partners Program also will continue to think beyond regional boundaries, assisting with the very successful Comanche Pool Prairie Resource Fondation community conservation initiative that spans parts of Kansas and Oklahoma, and the Kootenai River Network that reaches, internationally, into British Columbia. The Mountain-Prairie Region Partners Program also plans to develop new landscape-scale initiatives for sagebrush-steppe habitat, benefiting a suite of sagebrush obligate species, particularly greater and Gunnison sage-grouse.

### Improve Information Sharing and Communication

The Mountain-Prairie Region Partners Program has recognized that the only way to restore habitat for high priority fish and wildlife species is to work with a broad range of partners. Partners Program biologists have made trust, respect, honesty, flexibility, and open communication the cornerstones of the program. Partners Program field biologists are highly skilled individuals with a willingness to share expertise with private landowners, and their many partners, to achieve common goals. These efforts are accomplished in a variety of formal, and informal, ways depending on the needs of the partners and the resource issues at hand.

Partners Program state coordinators and field biologists provide a tremendous amount of technical assistance to private landowners, other federal and state agencies, tribal entities, nongovernmental organizations, and industry. While often difficult to quantify, the results can be seen in a multitude of ways. Partners Program staff assist the USDA Natural Resources Conservation Service and Farm Service Agency to support delivery of very popular Farm Bill conservation programs. The Partners Program will continue these efforts.

The Partners Program is recognized as one of the best tools available to restore habitat for listed and candidate species on private lands. Partners Program biologists work closely with Service Endangered Species, Fisheries, and Migratory Bird Management program staff to identify those private lands that host high priority species of conservation concern and determine the types of land treatment projects that can best facilitate their recovery. These efforts will continue to be emphasized. Current efforts to increase communication and find ways to work closer on candidate conservation initiatives will be a focus for the Mountain-Prairie Region. In addition, efforts to complement National Wildlife Refuge System goals and objectives, by working with private landowners adjacent to a refuge, will expand the "refuge" for key wildlife species even farther.

Throughout the Region, the Partners Program has a number of long-term partnerships with individual landowners who may have been involved with the Partners Program at some earlier time, and now have become "repeat customers." In North and South Dakota, numerous landowners having Partners Program agreements in place are electing to enter into perpetual habitat protection through the Service's grassland and wetland easement program. This type of long-term commitment to the Service's private landowner partners will continue to be an important aspect of the far-reaching impacts of the Partners Program in the Mountain-Prairie Region. Working together with the Division of Realty, fish and wildlife habitat protection will continue to be a vision for Partners Program staff. Through cross-program communication and collaboration, the Partners Program will continue to assist other programs in sharing information with private landowners about all Service programs. The Partners Program will continue to seek out ways to do this across program lines.

To address the Director's priority of getting American youth into the outdoors, and re-connecting them to nature, the Mountain-Prairie Region Partners Program plans to conduct a variety of field trips with school groups. Partners Program field biologists will work with teachers to share hands-on outdoor experiences that will educate them on habitat needs for wildlife species in their backyards. They will teach them a variety of activities that they can do on their own, with their brothers and sisters, to encourage them to connect with the natural world.

## **Enhance Our Workforce**

The Partners Program in the Mountain-Prairie Region is a national role model in terms of effective and efficient program delivery. The Mountain-Prairie Region has been fortunate in that some of its states are fully staffed and operating at capacity (e.g., North and South Dakota). However, several states are below, or well below, operational capacity for truly effective program delivery. Utah and Wyoming are currently at such minimal operating levels that it is impossible to focus private land habitat restoration efforts from a state-wide perspective. Opportunities to make significant contributions to species recovery in the sagebrush-steppe regions of Utah, Wyoming, and Montana are extremely difficult, due to lack of staffing in key focus areas. Addressing habitat degradation and loss will be critical in overall efforts to benefit key species, such as greater sage-grouse. Additional staff to complete restoration and enhancement projects in identified greater sage-grouse habitats could preclude the need to list this species of conservation concern.

The Partners Program in the Mountain-Prairie Region is uniquely positioned to assist many other Service programs with their conservation goals. While a significant number of states in the country have an exploding human population base, the Mountain-Prairie states have experienced a much slower rate of growth. The eight states that make up the Mountain-Prairie Region are relatively large in size, with a primarily agricultural or rural focus. There are large contiguous blocks of priority wildlife habitat owned and occupied by working cattle ranches. These intact landscapes host a tremendous amount of fish and wildlife resources and have prevented many species from being listed as threatened or endangered and, in fact, share credit for having kept common species common.

The loss of these habitats would be devastating to various Service goals and objectives, and to the American people. The Partners Program has been a huge catalyst to keeping these natural landscapes intact – funding through private landowner agreements has helped keep rural communities alive by assisting with sustainable rural lifestyles and viable agricultural economies. In times of declining budgets, the Service needs to focus on doing the right things in the right places. As such, emphasis needs to be placed on working in intact landscapes, where the greatest differences can be made. Efforts need to be focused, and where private landowner funds have been made available, these funds need to be expended wisely. Geographic focus areas have been identified where high priority efforts have, and will continue to, take place.

Training will be a requirement for all employees within the Partners Program. Leadership and guidance will be provided by supervisors to encourage Individual Development Plans that provide a vision for employee career advancement, so that each employee is challenged and maintains expertise that is on the cutting edge of habitat restoration techniques, partnership development, mapping capabilities, management, and policy. Each employee will have training identified as an annual performance element; supervisors will meet with their staff regularly to ensure training opportunities have been identified and deadlines for course registration have been met.

## Increase Accountability

The Mountain-Prairie Region will continue to designate a Regional HabITS database coordinator and an active participant on the National HabITS Working Group. In addition, the Regional HabITS database coordinator will work closely with Partners Program state coordinators, and other field staff who enter HabITS data, to ensure quality control and quality assurance. The Mountain-Prairie Region Partners Program has strong regional directorate support to put Partners Program funding on the ground for private land habitat restoration. The Partners Program has made, and will continue to make, a strong commitment to ensure Partners Program national policy is met and that private land habitat restoration continues to be the purpose and goal of the program.

Management control reviews will take place at least once in each focus area in the Region, throughout the five-year step-down strategic planning period (fiscal years 2007-2011). This management control review team will vary each year, and will include Regional Office representatives from various programs.

## Partners For Fish and Wildlife Act

The Partners for Fish and Wildlife Act was signed into law in 2006, enabling the Partners Program an excellent opportunity to provide additional assistance to private landowners and meet the mission of the Service. Having this new organic legislation provides a unique opportunity to demonstrate the effectiveness of the Partners Program to restore habitat for species of conservation concern. The Mountain-Prairie Region plans to work across program lines to ensure that habitat restoration funds are administered in the most efficient manner and within identified geographic focus areas that have the ability to achieve the most good for federal trust resources, and are supporting rural lifestyles and intact landscapes. An added emphasis on quality and timely reporting will help maintain good two-way communication between the Partners Program and the other regional Service programs. Partners Program staff will be kept informed of regional priorities involving other Service programs, and maintain a working knowledge of identified species of conservation concern for the Migratory Birds, Ecological Services, and Fisheries programs. Added diligence will be placed on working within designated geographic focus areas, establishing long-term partnerships, and achieving habitat restoration goals and objectives.

Partners Program staff have been working to establish new partnerships with nongovernmental organizations and universities to monitor and measure the successes of Partners Program habitat restoration projects, and their effectiveness at increasing populations of high priority federal trust species. These partnership efforts will be continued, and new innovative ways to enhance these partnerships will be emphasized.

There were many strong supporters of the Partners for Fish and Wildlife Act. These long-standing, as well as new, partners need to be recognized for their program support. Innovative ways to recognize partners will be developed and implemented, ensuring that partners are aware that each Partners Program accomplishment is something shared, both in terms of effort and credit.

With the Partners Program celebrating its 20th anniversary, this is a good time to step back to look at where the program has been, and to have a strong vision for the future. It is the vision and philosophy of the Mountain-Prairie Region Partners Program to "raise the bar," looking for those examples of where the Partners Program is most successful and finding ways to replicate those models across the nation.



Although the Mountain-Prairie Region Partners Program has accomplished a lot in the past 20 years. The Program plans to raise the bar once again. USFWS Photo.





Wyoming Partners Program Conservation Focus Areas

## Introduction

Wyoming is where the Great Plains meets the Rocky Mountains; it is situated astride the Continental Divide and provides the headwaters for 4 major river systems - the Colorado, Missouri, Great Basin, and Columbia. Wyoming encompasses approximately 62 million acres of which 48% is federal, 42% is private, 6% is state, and 4% is tribal. Historic homestead patterns have resulted in private ownership being more homogeneous across the eastern plains and restricted primarily to valley floors and river corridors in western mountainous regions. The Nature Conservancy has identified 52 distinct habitat

types or ecological systems within the state's borders, providing a diversity of habitats for more than 800 species of fish and wildlife.

Agriculture is a major industry and primary land use; approximately 9,300 farms and ranches exist in Wyoming, averaging 3,472 acres in size. It is not uncommon to work with landowners that either own and/or operate ranches exceeding 50,000 acres. As a result, fish and wildlife resources and associated habitats are incredibly diverse on a single ranch or farm, providing a variety of habitat improvement opportunities. The Partners Program targets fish and wildlife species or habitats for migratory trust species; federally threatened,

endangered, and candidate species; Wyoming Game and Fish Department Species of Special Concern identified in the Native Species Status Matrix; and tribaldesignated species of importance or cultural significance.

Several landscape prioritization efforts have taken place since the Partners Program's inception. As in most states early on, program delivery for exposure was statewide. As the program grew in popularity with landowners and stakeholders, it became apparent that a collaborative approach was needed to more effectively target habitat restoration efforts. Priority areas were initially developed based on large-scale watersheds, with biologists' working knowledge at the state and local level. As technology and information transfer improved with time, especially remote sensing and habitat and species mapping, focus areas became much more refined. Today, conservation focus areas are a blend of local biologists' working knowledge and geographic information, including trust species occurrence, land ownership patterns, emerging threats, partnership opportunities, presence of refuge and unique lands, and tribal trust responsibilities. The result is the emergence of eight conservation focus areas. Wyoming consists of two Partners Program staff located within the Wind River and Goshen Hole focus areas. Staffed conservation focus areas receive approximately 70% of Partners Program staff time; the

remaining 30% is split among the Bear River, Laramie Plains, Upper Green River, Powder/Tongue Rivers, and Black Hills Mixed Grass focus areas. A limited presence is maintained in unstaffed focus areas building program awareness and partner relationships until such time additional program expansion can occur.

Focus area development and refinement incorporated extensive stakeholder knowledge base and existing ongoing planning efforts of several organizations, such as the USDA Natural Resources Conservation Service; Shoshone and Arapaho Tribes (A Plan for the Management of Wildlife on the Wind River Reservation, Wind River Fisheries Management Plan -Lowland Lakes, Reservoirs, Rivers and Streams); Wyoming Game and Fish Department (Wildlife and Fisheries Strategic Plans and Comprehensive Wildlife Conservation Strategy); local conservation districts; The Nature Conservancy (ecoregional planning process); Ducks Unlimited; Audubon (Important Bird Areas); and Partners in Flight and Intermountain West Joint Venture's Wyoming Plans. In addition to daily interaction with stakeholders and the assistance they have already provided in developing Partners Program priority areas, a follow up survey was sent to individual stakeholders asking for specific input in this strategic planning process.



Greater sage-grouse and other sagebrush obligate species benefit from sagebrush-steppe partnership activities. USFWS Photo.



## **Bear River Focus Area**

The Bear River Conservation Focus Area encompasses 322,844 acres of which 64.5% is in public ownership and 35.5% in private. The upper Bear River, with its broad willow-dominated floodplain and adjacent grass and sagebrush uplands makes up the heart of this priority area. Primary Partners Program activities center on wetland, riparian, and stream restoration. Partners that have assisted in project development include USDA Natural Resources Conservation Service, Wyoming Game and Fish Department, Uinta County Conservation District,

Trout Unlimited, Ducks Unlimited, and individual private landowners.

Several native fish species of concern that inhabit the 630 miles of perennial streams include the leatherside chub, mountain sucker and, most notably, the Bonneville cutthroat trout. For a species to attain special concern status by the Wyoming Game and Fish Department, the population is facing declining habitats, is physically isolated, or is at extremely low density throughout its historic range. Specific and ongoing threats to these species include stream modification, urban expansion, declining riparian health, and de-watering. The focus of Partners Program fisheries projects is to remove fish passage barriers, increase available habitat, and improve stream stability using natural channel design.

Approximately 24,000 acres of palustrine wetlands, mainly located within the broad floodplains of the Bear River and its tributaries, are home to several species of concern including the white-faced ibis, greater sandhill crane, and Wilson's phalarope. Since 2000, 56 acres of palustrine emergent wetland habitat have been restored and 430 acres of wet meadow habitat have been enhanced for migratory waterbirds. In addition, 7,900 feet of willow riparian habitat have been improved through livestock management and off-site water developments. Urban expansion is the primary threat to wetland habitats in the valley.

### **Priority Species**

- Mallard
- Northern pintail
- Greater sage-grouse
- White-faced ibis
- Sandhill crane
- Black-necked stilt
- American avocet
- Wilson's phalarope
- Bonneville cutthroat trout
- Leatherside chub
- Mountain sucker



Palustrine wetlands provide excellent habitat for high priority waterfowl, shorebird, and waterbird species. Photo by Mark Hogan, USFWS.

## **Bear River Focus Area Five-year Targets**

### Habitat

- Wetland Restoration/Enhancement: 60 acres
- Riparian/Stream Restoration/Enhancement: 31 acres (including 5,200 feet of in-stream work and fish barrier removal)

## Partnerships

- Number of private landowners: 5
- Amount of technical assistance: 15 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

## **Related Plans**

- Intermountain West Joint Venture Wyoming Plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- The Nature Conservancy, Rocky Mountain Eco-regional Plan and Wyoming Basins Ecoregional Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans
- Audubon Important Bird Areas of Wyoming



#### Upper Green River Corridor Focus Area

The 503,163-acre Upper Green **River Corridor Conservation Focus** Area is bordered by the Wind River Mountain Range to the north, Gros Ventre and Wyoming mountain ranges to the west, and the mesa lands to the south. The Upper Green River is a biologically complex and diverse landscape, ranging from 13,000-foot peaks and alpine habitats to 7,000-foot arid, high elevation desert. Positioned between several mountain ranges, the Upper Green River is well known for critical grizzly bear, wolf, moose, and elk habitat, as well as shorebird and waterfowl migration corridors.

The most striking feature of this glacially formed valley is the 53,000 acres of palustrine emergent wetlands and lakes which provide breeding habitat for waterfowl, shorebirds, and waterbirds, including trumpeter swans and common loons. Since 2000, 47.5 acres of palustrine emergent wetland have been restored, with 623 acres of surrounding upland habitat improved through grazing management agreements. Threats to wetland habitats in the valley are drainage, nutrient loading, and subdivision. This part of Sublette County has experienced significant population growth with the current oil and gas boom of the Pinedale Anticline and the Jonah Field.

The valley floor and surrounding foothills are predominately sagebrush-steppe and grassland totaling 310,000 acres. The area is considered primary habitat for greater sage-grouse and is currently facing significant threat from subdivision and extraction industries. Several local land trusts are currently securing conservation easements to maintain open space, migration corridors and unfragmented habitats.

Extensive ribbons of riparian and wet meadow habitats exist along the Green and New Fork rivers and their tributaries, providing important multi-layered structure for migrating and resident riparian avian species. Riparian communities are of great importance to western wildlife. These areas cover only 2-3% of the land surface, yet 75% of Wyoming's wildlife rely on these limited habitats for all or part of their life cycles. The Partners Program has worked with several landowners to construct fence to manage livestock on 2.4 miles of riparian habitat.

Streams and rivers of the Upper Green are home to native fishes like the Colorado cutthroat trout. mountain whitefish, and mountain sucker. Irrigation diversions, road crossings, and dewatering are the major threats to these species. To date, the Partners Program's role has been providing technical assistance to landowners and agencies on stream restoration and fish passage design. There is much interest in this area for improving fish habitat and the Partners Program will continue to explore opportunities with partners.

#### **Priority Species**

- Trumpeter swan
- Greater sage-grouse
- Common loon
- Ferruginous hawk
- Green-tailed towhee
- Vesper sparrow
- Colorado cutthroat trout
- Grizzly bear
- Gray wolf



Wetland, grassland, sagebrush-steppe complexes provide ideal habitat for migratory waterfowl and shorebirds, as well as resident species such as grouse. Photo by Mark Hogan, USFWS.

## Upper Green River Corridor Focus Area Five-year Targets Habitat

- Wetland Restoration/Enhancement: 60 acres
- Riparian/Stream Restoration/Enhancement: 26.6 miles (includes 3,000 feet of in-stream work and fish barrier removal)

#### Partnerships

- Number of private landowners: 5
- Amount of technical assistance: 10 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

- Intermountain West Joint Venture Wyoming plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- The Nature Conservancy, Rocky Mountain Eco-regional Plan and Wyoming Basins Ecoregional Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans



Oil and gas development threatens wildlife habitat by creating roads, wells, and gravel pads, which fragment habitat and create enough disturbance that sensitive wildlife species (e.g., greater sagegrouse) are on the decline. USFWS Photo.



#### Upper Sweetwater/Red Desert Focus Area

The Upper Sweetwater/Red **Desert** Conservation Focus Area was developed over the past few years. Agencies and conservation organizations have identified several terrestrial and aquatic species at risk which inhabit riparian, wetland, and sagebrush communities within this focus area. The Nature Conservancy has identified 29 known rare plant species, eight rare animal species and 18 priority communities under its ecoregional planning process. Similarly, Partners in Flight has developed a priority species classification system which

identifies species that clearly need conservation action based on declining population trends and/or significant habitat loss.

The 706,000-acre Upper Sweetwater/Red Desert Conservation Focus Area is in a high elevation setting, characterized by sagebrush steppe containing numerous playa wetlands, springs, ephemeral and perennial streams, and riparian corridors. Riparian corridors are dominated by either a shrub layer of willow, thin leaf alder and chokecherry, or an herbaceous layer of sedge, rush, and grass species. Land ownership is 93% public and 7% private. Like in much of the West, rivers, streams, lakes, and wetlands are in private ownership. Primary land use is livestock grazing, and a unique feature of this landscape is the lack of fencing which benefits migratory big-game animals like moose, elk, and pronghorn. However, it leaves landowners and land mangers little control over grazing patterns and during the warm summer months livestock move off the large

expanse of uplands and spend a significant amount of time around permanent water sources such as riparian corridors, wet meadows, and playa lakes. Much of the Partners Program work has concentrated on fencing and excluding/limiting livestock access to riparian habitats and other water sources on private land while minimizing the influence of fencing on migratory resident wildlife. Since 2000, approximately 28.5 miles of riparian habitat and 88,000 acres of sagebrush steppe have been improved through grazing system development. The catalyst for the priority area is the greater sage-grouse. Along with improving sagebrush/grass plant communities for suitable nesting habitat, Partners Program projects are aimed at improving wet meadow and riparian habitat quality for brood rearing and late summer habitats for sage grouse chicks.

Improperly designed roads and road crossings, irrigation diversions, and historic gold mining practices have all contributed to stream channel, wet meadow, and



Vast open grasslands, sagebrush-steppe, wetlands, and riparian areas provide an ideal mix of habitat to host abundant wildlife. Native fish, upland and wetland migratory bird species, as well as resident grouse all benefit. Photo by Mark Hogan, USFWS.

riparian degradation. In 2005, roughly 3.4 miles of stream restoration were completed for native fishes. Indirect benefits from stream restoration include raised water table and bank storage; as well as wetland, wet meadow, and riparian habitat improvement.

#### **Priority Species**

- Mallard
- Gadwall
- Greater sage-grouse
- Bald eagle
- Northern harrier
- Ferruginous hawk
- Mountain plover
- American avocet
- Burrowing owl
- Willow flycatcher
- Veerv
- Wilson's warbler
- Sage thrasher
- Yellowstone cutthroat trout

## Upper Sweetwater/Red Desert Focus Area Five-year Targets

#### Habitat

- Wetland Restoration/Enhancement: 100 acres
- Riparian/Stream Restoration/Enhancement: 40.3 miles (includes 1,500 feet of in-stream work and fish barrier removal)

#### Partnerships

- Number of private landowners: 10
- Amount of technical assistance: 15 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

#### **Related Plans**

- Intermountain West Joint Venture Wyoming Plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- The Nature Conservancy, Rocky Mountain Eco-regional Plan and Wyoming Basins Ecoregional Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans



#### Wind River Focus Area

Included in the 2.1-million-acre Wind River Conservation Focus Area is the Wind River Reservation, Ocean Lake drift plain, and upper Wind River drainage. Granite peaks, tilt bed formation foothills, and broad valley floor characterize the Wind River basin. Over 3,000 miles of low elevation perennial streams exist, creating extensive areas of nearly level to gently sloping landforms. As a result, the basin is one of the leading agricultural regions in the state with more than 260,000 acres of irrigated crop and hay lands. Sagebrush and grassland make up the majority of the area at 1.7 million acres, with

livestock production being the primary land use in the valley. Of the total land base in this focus area, tribal lands make up 63%, private lands 27%, and public lands 10%.

In 1998, a Memorandum of Understanding was signed

between the Service and Shoshone and Arapaho Tribes to jointly work on habitat projects for tribally designated fish and wildlife species of cultural importance. With the Tribes being the major landowner in the Wind River Drainage, and having a broad spectrum of culturally significant fish and



Restored wetlands provide habitat for a diversity of waterfowl species. Photo by Mark Hogan, USFWS.

wildlife species, it's not uncommon to have a stream/riparian improvement project targeting Yellowstone cutthroat trout and willow flycatcher that also benefits moose and grizzly bear. Habitat restoration efforts have concentrated on palustrine emergent wetland, sagebrushsteppe, cottonwood gallery, willow riparian, and riverine habitats.

Shaped by glaciation, the Wind River Mountains contain high elevation lakes, ponds, and wetlands that provide breeding habitat for waterfowl such as ringnecked duck, lesser scaup, and bufflehead. The predominant feature of this focus area, the valley floor, holds 43,618 acres of palustrine emergent wetlands, either associated with river floodplains, flood irrigation wastewater, or wind blown depressions. Higher density wetlands occur in three distinctive locations and individual wetland priority areas have been

established for the Wind River. Since 1998, partnerships with the USDA Natural Resources Conservation Service, Tribes, private landowners, Ducks Unlimited, Water for Wildlife, Wind River Alliance, Marathon Oil, and Popo Agie Conservation District have led to the restoration of more than 580 acres of wetland habitat.

Native fish declines are well documented and are chiefly a result of non-native species introductions, habitat degradation, dewatering, and fish barriers. For example, prior to European settlement, the Yellowstone cutthroat trout occupied the largest geographic range of the 14 recognized cutthroat trout subspecies (Varley and Gresswell 1988; Behnke 1992). Varley and Gresswell estimated 10% of fluvial historic habitats still contain the subspecies. In general, all cutthroat trout populations are highly fragmented and restricted to headwater environments where

public ownership and relative inaccessibility have moderated detrimental impacts. Restoring lower elevation habitat and improving fish passage are the objectives of the Partners Program. Since 2000, 11 fish barriers have been removed, 14 miles of river habitat have been opened for fish passage, and three miles of riverine habitat have been restored for the benefit of Yellowstone cutthroat trout, ling, and other native fishes.

## **Priority species**

- Mallard
- Lesser scaup
- Bald eagle
- Osprey
- Willow flycatcher
- Yellowstone cutthroat trout
- Grizzly bear
- Gray wolf



River restoration project completed on the Popo Agie River. Photo by Mark Hogan, USFWS.

## Wind River Focus Area Five-year Targets

## Habitat

- Wetland Restoration/Enhancement: 350 acres
- Upland Restoration/Enhancement: 20,000 acres
- Riparian/Stream Restoration/Enhancement: 68 miles (includes 15,000 feet of in-stream work and fish barrier removal)

## Partnerships

- Number of private landowners: 40
- Amount of technical assistance: 75 staff days
- Percentage of leveraging (ratio Service to Partner): 1:5

#### **Related Plans**

- A Plan for the Management of Wildlife on the Wind River Reservation U.S. Fish and Wildlife Service
- Wind River Management Plan Lowland Lakes and Reservoirs
- Wind River Management Plan Rivers and Streams
- Intermountain West Joint Venture Wyoming Plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- The Nature Conservancy, Rocky Mountain Eco-regional Plan and Wyoming Basins Ecoregional Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game bird and Mammal Plans
- Audubon Important Bird Areas of Wyoming



## Laramie Plains Focus Area

Positioned between the Laramie and Medicine Bow mountain ranges, the Laramie Plains Conservation Focus Area encompasses 2.5 million acres of high elevation mixed-grass prairie and sagebrush communities. The plains and associated aquatic systems are relatively intact with only 136,000 acres of irrigated hay or croplands; the primary land use is livestock production. The most common threat to fish and wildlife habitat is fragmentation from residential development and urban sprawl. The Shirley Basin is included in this focus area, and is known for its large white-tailed prairie dog colonies, occurrence of swift fox, and successful blackfooted ferret reintroductions. More than 101,000 acres of shallow lakes and wetlands are scattered throughout the basin, providing migration and nesting habitat for waterfowl and water birds. Located in the southern portion of the Laramie Plains, Mortenson



Shallow water wetlands, imbedded in thousands of acres of dry upland sagebrush-steppe and short-grass prairie, are key nesting, stopover, and feeding sites for a variety of waterfowl and shorebird species. Photo by Mark Hogan, USFWS.

Lake National Wildlife Refuge and Bamforth National Wildlife Refuge are nestled into a geologic wind blown hollow of higher density wetland sites.

Mortenson Lake National Wildlife Refuge is home to the endangered Wyoming toad, extirpated from its historic range by the early 1990s and recently reintroduced into Refuge as well as restored wetlands and wet meadows of the Partners Program's Buford Foundation Project. A blanket Safe Harbor Agreement has been completed for the area and other reintroduction sites are planned.

More than 14,000 acres of cottonwood gallery and willow riparian corridors provide habitat for a variety of neotropical migrants in this high elevation plain. Seventy-three avian species have been identified as using riparian habitats and, as such, serve as indicators of riparian health. Several of the riparian obligate and dependant avian species, like the willow flycatcher and yellow-billed cuckoo, are some of the most imperiled species in Wyoming. One of the best ways to help the largest number of bird species and other wildlife in Wyoming is by maintaining or improving riparian habitats. Most common threats to riparian health are subdivision, over-grazing, stream down-cutting and invasive species. The Partners Program recently partnered with Rock Creek Weed Coordinated Resource Management to develop an integrated pest management strategy for controlling invasive weed species within a 25-mile-long project area. Invasive weed species have reduced or degraded native

riparian and wet meadow habitats for several species of concern, such as wood peewee, willow flycatcher, warbling vireo, and orangecrowned warbler. Biological, mechanical, and chemical control methods have been utilized to manage or eliminate invasive species. Follow-up grazing management plans, the replanting of shrub and herb layers, fencing, and off-site water developments are practices employed to improve riparian health.

With the help of several partners, Partners Program restoration efforts have concentrated on wetland, riparian, and stream habitats for threatened and endangered species, state species of concern and migratory trust species. Partners include the USDA Natural Resources Conservation Service, U.S. Forest



River restoration projects provide key habitat for native trout. Photo by Mark Hogan, USFWS.

Service, Wyoming Game and Fish Department, Medicine Bow and Laramie Rivers conservation districts, Wyoming Wildlife Trust Fund, Carbon County Weed and Pest, Ducks Unlimited, and Trout Unlimited.

#### **Priority Species**

- Mallard
- Northern pintail
- Mountain plover
- Wilson's phalarope
- Yellow-billed cuckoo
- Willow flycatcher
- Warbling vireo
- Orange-crowned warbler
- Wyoming toad
- White-tailed prairie dog
- Swift fox
- Black-footed ferret

## Laramie Plains Focus Area Five-year Targets

## Habitat

- Wetland Restoration/Enhancement: 100 acres
- Upland Restoration/Enhancement: 10,000 acres
- Riparian/Stream Restoration/Enhancement: 32 miles (includes 10,000 feet of in-stream work and fish barrier removal)

#### Partnerships

- Number of private landowners: 25
- Amount of technical assistance: 15 staff days
- Percentage of leveraging (ratio Service to Partner): 1:5

#### **Related Plans**

- Intermountain West Joint Venture Wyoming Plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans
- Audubon Important Bird Areas of Wyoming
- Rock, Foote, and Wagonhound Creek Coordinated Resource Management Plan



## **Goshen Hole Focus Area**

The Goshen Hole Lowlands is a great widening of the North Platte River Valley defined by a 400-500 foot escarpment to the west and south. A part of the Great Plains, the land is undulating to rolling, and the dominant land cover is short, mid and tall grasses. The Goshen Hole Conservation Focus Area has a land area of 861,000 acres, of which 15% is used for irrigated cropland, 15% for dry land cropland, and 60% rangeland. Farmland is concentrated in the center of the lowland and contains the highest wetland densities. As a



Partners Program biologists work with farmers to restore wetlands previously drained for crop production. Photo by Mark Hogan, USFWS.

result, draining and land leveling for cropping account for the greatest causes of wetland losses and continues to be the largest threat. Focus has been on restoring wetland and adjacent shortgrass upland habitats for an assortment of ground-nesting species including mountain plover, McCown's longspur, bobolink, and a variety of waterfowl and shorebirds. Since 2000, roughly 400 acres of wetland habitat and more than 1000 acres of upland habitat have been restored with partners, including the USDA Natural Resources Conservation Service, Wyoming Game and Fish Department, and Ducks Unlimited.
Goshen Hole contains critical riparian habitat for the endangered Preble's meadow jumping mouse and wet meadow habitat for the threatened Ute ladies'-tresses. More than four miles of habitat have been improved through Partners Program projects using practices such as fencing, off-site water development, grazing plans, grassland seeding, and native shrub planting.

## **Priority Species**

- Mallard
- Northern pintail
- Mountain plover
- American avocet
- Long-billed curlew
- McCown's longspur
- Bobolink
- Preble's meadow jumping mouse (Endangered)
- Ute ladies'-tresses (Threatened)

# Goshen Hole Focus Area Five-year Targets

# Habitat

- Wetland Restoration/Enhancement: 300 acres
- Upland Restoration/Enhancement: 2,000 acres
- Riparian/Stream Restoration/Enhancement: 15.3 miles (includes 1,500 feet of in-stream work and fish barrier removal)

## Partnerships

- Number of private landowners: 40
- Amount of technical assistance: 25 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

#### **Related Plans**

- Intermountain West Joint Venture Wyoming Plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans
- Audubon Important Bird Areas of Wyoming



Goshen Hole Lowlands. Photo by Mark Hogan, USFWS.



# Black Hills Mixed Grass Focus Area

Taking in portions of Crook and Weston counties, the Black Hills Mixed Grass Conservation Focus Area contains the forest edge and periphery grass and sagebrush lands around the Black Hills. Being the largest priority area in the state at 2.9 million acres, and with 78% in private ownership, many habitat restoration and enhancement opportunities exist for imperiled grassland species. The southern extent of the focus area includes a small segment of Thunder Basin National Grasslands, known for ferruginous hawks, Swift fox, sage grouse,

burrowing owls, and black-tailed prairie dogs.

Breeding populations of most upland birds, within the grassland and sagebrush-steppe communities. have well documented declines related to a number of complex habitat quality and quantity factors including climate change. More than 80% of the landscape within this focus area remains intact creating a situation in which private landowners will play a key role in providing suitable habitat for these declining species. Partners Program efforts have concentrated on improving these habitats by constructing livestock fencing and water developments, and developing grazing management plans for the benefit of grass and sage dependent species. Implementing grazing strategies or systems allows landowners to move away from season-long grazing patterns toward a rotational system that benefits grass, sage, and forb production.

Threats in the focus area are mainly in the form of habitat fragmentation from subdivision and energy extraction industries; approximately 12% of the land base has been human modified by urban expansion, mining, and agriculture. Habitat restoration partners include the USDA Natural Resources Conservation Service, Wyoming Game and Fish Department, Crook and Weston conservation districts, Ducks Unlimited, and private land owners.

#### **Priority Species**

- Northern pintail
- Greater sage-grouse
- Golden eagle
- Ferruginous hawk
- Greater sandhill crane
- Mountain plover
- Burrowing owl
- Brewer's sparrow
- Western silvery minnow
- Lake chub
- Swift fox
- Black-tailed prairie dog



Wetland restoration project within mixed-grass prairie. Photo by Mark Hogan, USFWS.

# Black Hills Mixed Grass Focus Area Five-year Targets

# Habitat

- Wetland Restoration/Enhancement: 200 acres
- Upland Restoration/Enhancement: 5,000 acres
- Riparian/Stream Restoration/Enhancement: 10 miles

# Partnerships

- Number of private landowners: 20
- Amount of technical assistance: 25 staff days
- Percentage of leveraging (ratio Service to Partner): 1:4

# **Related Plans**

- Northern Great Plains Joint Venture
- Wyoming Partners in Flight Wyoming Conservation Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans
- Audubon Important Bird Areas of Wyoming



Riparian grazing systems help maintain healthy meandering stream channels. Photo by Mark Hogan, USFWS.



Fowuei/Toligue Rivers Focus Area

Starting at the eastern slope of the Big Horn Mountains and extending to the Powder River, this area catches considerable summertime precipitation and more closely resembles the southern Rockies in vegetative land cover. Mixed grass and sagebrush make up more than 92% of the area, and roughly 80% is in private ownership. Wetlands are commonly found in association with floodplain and riparian habitats. The Powder River is distinctive in that it is one of the few remaining prairie rivers that is free flowing, unregulated by dams or diversions. The Powder River remains relatively intact with endemic fish species, like the sturgeon chub, adapted to turbid water conditions and low summertime flows. Emerging concerns are the effects of higher quality water being added to the system from extractive industries. Closer to the Big Horns, coldwater fisheries are facing threats from irrigation diversions, dewatering, and channel degradation from roads, culverts and subdivisions. The Partners Program and interested partners are replacing fish barriers with in-stream cross-vane structures that allow fish passage at all flow levels. In association with these activities, more than 250 acres of floodplain wetlands have been restored, enhanced, or

established providing habitat for waterfowl, other waterbirds, and native fishes.

The Partners Program has worked extensively to improve more than 19,000 acres of upland habitat and 40 miles of riparian habitat by means of livestock fencing, off-site water developments, and grazing management systems. In 2005, with coalbed natural gas industry support and assistance, the Service, USDA Natural Resources Conservation Service, Wyoming Game and Fish Department, and Lake DeSmet Conservation District developed the Johnson County Sagebrush Habitat Improvement Project. This initiative was the first to implement and test methods to rapidly produce habitat inventories and information for private landowners using a combination of geographic information and on-the-



River restoration projects benefit native fish species, as well as riparian nesting neotropical migratory birds. Photo by Mark Hogan, USFWS.

ground data collection. From these inventories, rangeland and habitat management plans were developed that benefit sage grouse and other sagebrush-dependent species of concern. Phase one has recently been completed, targeting 40,000 acres of sagebrush habitat for grazing plans, mechanical treatments, forb plantings, livestock fencing, and water developments.

#### **Priority species**

- Northern pintail
- Greater sage-grouse
- Greater sandhill crane
- Wilson's phalarope
- Sage thrasher
- Sage sparrow
- Yellowstone cutthroat trout
- Sturgeon chub
- Sauger
- Shovelnose sturgeon

## Powder/Tongue Rivers Focus Area Five-year Targets

#### Habitat

- Wetland Restoration/Enhancement: 100 acres
- Upland Restoration/Enhancement: 50,000 acres
- Riparian/Stream Restoration/Enhancement: 17 miles (includes 10,000 feet of in-stream work and fish barrier removal)

#### **Partnerships**

- Number of private landowners: 40
- Amount of technical assistance: 15 staff days
- Percentage of leveraging (ratio Service to Partner): 1:7

#### **Related Plans**

- Northern Great Plains Joint Venture Wyoming Plan
- The Nature Conservancy, Rocky Mountain Eco-regional Plan and Wyoming Basins Ecoregional Plan
- Wyoming Partners in Flight Wyoming Conservation Plan
- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan and Intermountain West Joint Venture Region Shorebird Plan
- Wyoming Game and Fish Strategic Habitat Plan, Terrestrial, Aquatic, Non-game Bird and Mammal Plans
- Audubon Important Bird Areas of Wyoming



# Improve Information Sharing and Communication

Funding and technical assistance to Partners Program partners generally has been directed to the project level. State-level networking and coordination varies as opportunities and emerging issues may develop.

# **Five-year Targets**

- Maintain working relationships with partners and stakeholders on individual habitat restoration planning documents.
- Provide partners with an annual accomplishment report.
- Improve congressional outreach with project-related field tours.
- Develop statewide stream restoration and screening guidelines.
- Develop statewide wetland restoration guidelines.
- Initiate state-level landowner and/or partner award/recognition program.

# Enhance Our Workforce

The Wyoming Partners Program currently funds two full-time staff, including one field biologist and the state coordinator. In order to maintain a high level of professionalism, each Partners Program staff member will receive, at a minimum, 40 hours of training annually. Training may be in the areas of habitat restoration techniques, GIS, advanced partnership development, communication, and policy/administration.

Wyoming has identified new conservation focus areas that currently have no Partners Program staff to accomplish habitat restoration projects. In order to address the needs of these focus areas, additional staff will be needed. Partnership opportunities already exist within these new focus areas; if additional field staff is added to the Wyoming program, on-the-ground habitat restoration projects can begin immediately. There are already many interested landowners who are eager to undertake habitat restoration projects on their lands.

In accordance with the Service's Employee Performance Appraisal System, performance and special achievement awards will be used to recognize exceptional projects and staff efforts.

# **Five-year Targets**

- Complete a minimum of 40 hours training each year, in any of the following areas:
  - Habitat restoration techniques (e.g., Rosgen method river restoration)
    - Leadership
    - Outreach and communication
    - Partnerships
  - Policy and administration
- Increase current staffing levels to three full-time equivalents, to achieve minimum staffing capacity for the Wyoming Partners Program.
- Use Partners Program state office location in Lander as a mentoring site for new entry-level Partners Program staff.
- Continue to refine prioritization process.
- Develop long-term funding options with Partners Program partner assistance.

#### Increase Accountability

#### **Five-year Targets**

- Implement an annual status review process for a minimum of 5% of all currently active habitat restoration projects.
- Input HabITS entries on a quarterly basis and provide photos with each completed project.

# **External Factors**

The Wyoming conservation focus areas generally involve intact landscapes, with ranching as the primary land use. The economic and social pressures to develop or fragment these areas could have a significant impact on the Partners Program's ability to deliver habitat projects in an effective and efficient manner. Oil and gas development continues to threaten these intact landscapes and has negative impacts on federal trust species. Impacts to Bureau of Land Management lands can also have an impact on the Wyoming Partners Program's ability to deliver an effective private lands habitat restoration effort. Many cattle producers rely on Bureau of Land Management cattle grazing leases for summer pasture. The grazing leases increase the acres of available forage while also taking pressure off their own land, saving that forage for winter pasture or supplemental hay. With the large increase in oil and gas leases in the past few years, there is additional pressure to the ranch economy, potentially putting small producers out of business. Large Wyoming ranches provide a tremendous amount of habitat for broad suites of high priority federal trust resources. The Partners Program has the partnerships in place (i.e., willing landowners and organizations) to expand the delivery of the private lands habitat restoration program to address many of these threats to fish and wildlife populations.

Wyoming has been in a long-term drought, putting stress on cattle ranchers because of low forage yield, minimal available water, and record high temperatures. In addition, fuel, equipment, and supply costs continue to escalate. This has reduced the ability for private landowners to assist with matching funds for habitat restoration projects. If drought continues, and prices stay high for fuel and supplies, this will ultimately reduce how much the Partners Program can stretch its program base funds.

# Appendix A: Stakeholders

Mountain-Prairie Region Stakeholders involved with the Strategic Planning Process

# Colorado

- Key landowners
- USDA Natural Resources Conservation Service
- Colorado Division of Wildlife
- Ducks Unlimited
- The Nature Conservancy
- Colorado Open Lands
- Rocky Mountain Bird Observatory
- South Park Wetland Focus Group
- Owl Mountain Partnership
- Pheasants Forever

# Kansas

- Key landowners
- USFWS Refuge Project Leaders (Kansas)
- USDA Natural Resources Conservation Service
- USDA Farm Service Agency
- U.S. Army Corps of Engineers
- Kansas Department of Wildlife and Parks
- Kansas Association of Conservation Districts
- Tallgrass Legacy Alliance
- Comanche Pool Prairie Resource Foundation
- Kansas Livestock Association
- Kansas Farm Bureau
- The Nature Conservancy
- Pheasants Forever
- Ducks Unlimited
- Watershed Management Institute
- Westar Energy
- Fort Riley Conservation Team
- Kansas Biological Survey

# Montana

- Key landowners
- UŠFWS Partners Program Field Biologists (Montana)
- USFWS Refuge Project Leaders (Montana)
- USFWS Ecological Services Field Office (Montana)
- USFWS Realty Division (Montana)
- USFWS Fisheries Division Montana)
- USFWS Invasive Species Program (Montana)
- USDA Natural Resources Conservation Service
- Bureau of Land Management
- Montana Fish, Wildlife and Parks
- Ducks Unlimited
- Trout Unlimited
- The Nature Conservancy
- Pheasants Forever
- Montana Wetlands Legacy
- Sonoran Institute

# Nebraska

- Key landowners
- USFWS Ecological Services Field Office (Nebraska) Trout Unlimited
- USFWS Rainwater Basin Wetland Management District

- USDA Natural Resources Conservation Service
- Nebraska Game and Parks Commission
- Papio Missouri River Natural Resource District
- Rainwater Basin Joint Venture
- Sandhills Task Force
- The Nature Conservancy
- Platte River Whooping Crane Maintenance Trust
- Ducks Unlimited
- National Audubon's Lillian Annette Rowe Sanctuary
- Prairie Plains Resource Institute

# North Dakota

- Key landowners
- USDA Natural Resources Conservation Service
- North Dakota Game and Fish Department
- Prairie Pothole Joint Venture
- Northern Great Plains Joint Venture
- Delta Waterfowl Foundation
- Ducks Unlimited
- Pheasants Forever
- North Dakota Natural Resources Trust
- Audubon Dakota
- The Nature Conservancy
- North Dakota Action Group
- North Dakota Wildlife Federation

# South Dakota

- Key landowners
- Lower Brule Sioux Tribe
- South Dakota Department of Game, Fish and Parks
- South Dakota Association of Conservation Districts
- North Central Resource Conservation and Development Association
- Ducks Unlimited
- Pheasants Forever
- The Nature Conservancy
- Delta Waterfowl
- Audubon-Dakota Chapter
- Northern Prairie Land Trust
- East Dakota Water Development

# Utah

- Key landowners
- USDA Natural Resources Conservation Service
- Utah Division of Wildlife Resources
- Utah Association of Conservation Districts

# Wyoming

Audubon

- Key landowners
- USDANatural Resources Conservation Service

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• Wind River Indian Reservation

• Hellyer Limited Partnership

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# Appendix C: Glossary of Terms

**Baseline:** Characterizes existing conditions before an action begins. Establishes a benchmark against which the success of the activity or project can be measured.

**Candidate Species:** Any species for which the U.S. Fish and Wildlife Service has enough information to propose the species for listing under the Endangered Species Act.

**Conservation:** Any single or group of actions or decisions that are made to support the fish and wildlife values of a habitat. For the purposes of this document, it is intended to be an all inclusive term including (but not limited to) restoration, enhancement, establishment, maintenance, protection, monitoring, outreach, coordination, assessment, and education for fish and wildlife habitat values.

**Conservation Focus Area:** For the purpose of this document, priority private land habitat areas within the Mountain-Prairie Region where the Partners for Fish and Wildlife program will direct most of its program activities over the next five years (2007-2011).

**Effectiveness:** Determines whether the activity or project has had the desired effect on selected indicators or performance criteria.

**Endangered Species:** Any species which is in danger of extinction throughout all or a significant portion of its range, and is federally listed as "endangered" under the Endangered Species Act.

**Enhancement:** The manipulation of physical, chemical, or biological characteristics of existing habitat to change specific functions.

**Establishment:** The manipulation of physical, chemical, or biological characteristics of a habitat to create and maintain habitat that did not previously exist.

**Federal Trust Resources:** The group of species including migratory birds, threatened and endangered species, inter-jurisdictional fish, marine mammals, and species of international concern, for which the Service has a specific legal mandate.

**Federally Listed Species:** A species that has been given federal protection in accordance with Section 4 of the Endangered Species Act.

Focus Area: See Conservation Focus Area.

**G1**: Regarding the NatureServe global conservation status ranks, a G1 species is "critically imperiled," or at risk of extinction due to extreme rarity, very steep declines, or other factors.

**62**: Regarding the NatureServe global conservation status ranks, a G2 species is "imperiled," or at a high risk of extinction due to a very restricted range, very few populations, steep declines, or other factors.

**Habitat Improvement:** Any habitat restoration, enhancement, or establishment intended to increase the suitability of an area for a species or community.

**Imperiled:** Any species that is at high risk for extinction due to a very restricted range, few populations, steep declines, or other factors.

**Invasive Species:** A species that grows and spreads rapidly, establishes over large areas, and persists in areas where it is not wanted. A nonnative (alien, exotic) invasive species is one that has been introduced to a location outside its native or natural range.

**Maintenance:** The periodic additional work involving the manipulation of the physical, chemical, or biological characteristics present that is critical for the continuing success of a restoration process.

**Monitoring:** The collection and assessment of repeated observations or measurements over time to evaluate the effectiveness of actions.

**Partnership:** A group of people and/or organizations that have formed a relationship to promote an activity or idea.

**Protection:** A long-term action to safeguard habitats of significant importance to fish and wildlife species.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning the natural functions to lost or degraded landscapes.

**Science-based**: Founded in information that has been subject to the application of an objective scientific methodology, generally assumed to include rules for concept formation, observation, experimentation, and the validation of hypotheses, and enhanced by review of peers with expertise in the subject matter. **Species of Concern:** A species listed for conservation action in state wildlife action plans or other referenced strategic planning documents.

**Stakeholder:** An individual, group of people, and/or organization that have an interest in an activity or idea.

**Technical Assistance:** Collaboration, facilitation, or consultation that relates to a habitat conservation, restoration, or enhancement initiative.

**Threatened Species:** Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and is federally listed as "threatened" under the Endangered Species Act.

# **Acessibility Information**

Equal opportunity to participate in and benefit from programs and activities of the U.S. Fish and Wildlife Service is available to all individuals regardless of physical or mental ability. Dial 7-1-1 for a free connection to the State transfer relay service for TTY and voice calls to and from the speech and hearing impaired. For more information, please contact the Partners for Fish and Wildlife staff at 303 / 236-4316, or the U. S. Department of the Interior, Office of Equal Opportunity, 1849 C Street, NW, Washington, D.C. 200240. Partners for Fish and Wildlife Program PO Box 25486, MS 60130 Denver Federal Center Denver, Colorado 80225-0486 303 / 236 4316 303 / 236 4792 fax www.fws.gov/mountain-prairie/pfw

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