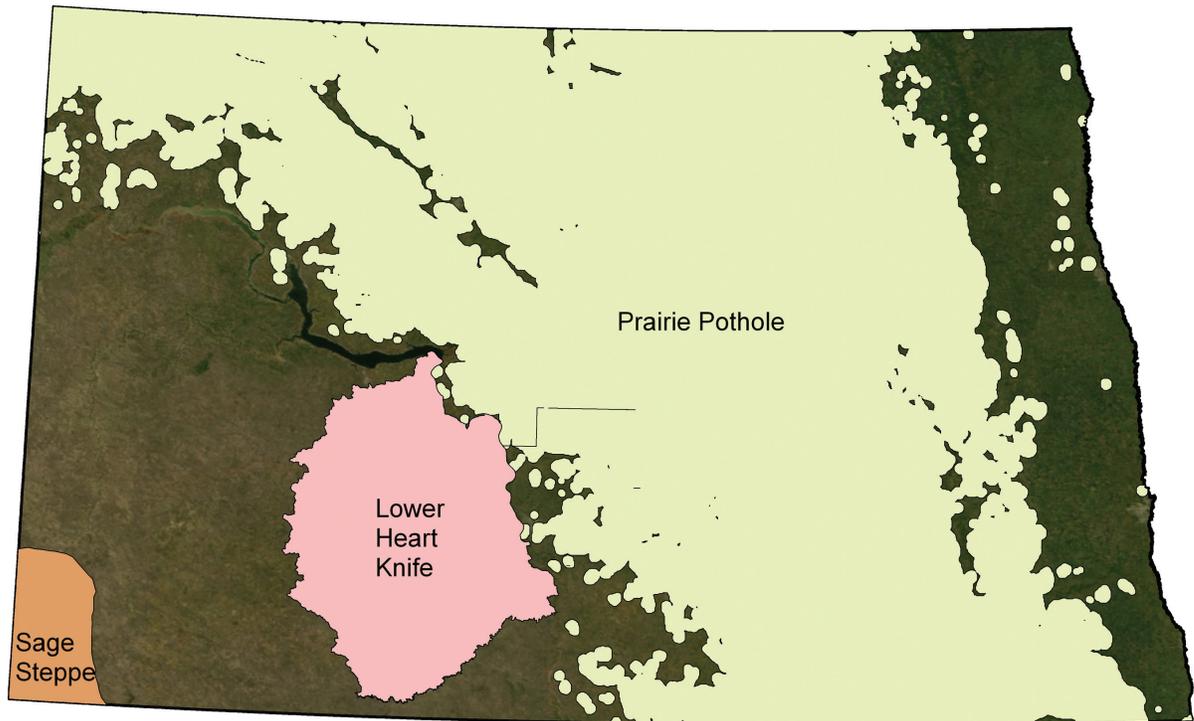


North Dakota



North Dakota Partners Program Conservation Focus Areas

Introduction and Overview

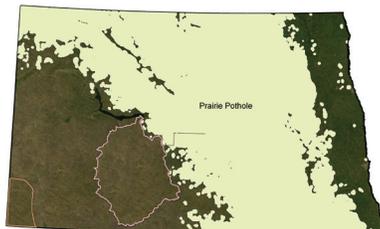
The Prairie Pothole Region (PPR) is legendary as North America's foremost producer of ducks. North Dakota, the top duck producing state in the Nation, lies in the heart of this region. Wetland densities in North Dakota commonly reach as high as 100-150 wetlands per square mile, making it not only an important breeding area for ducks, but also a key breeding and migratory area for over 70 wetland-dependent migratory bird species. With over 90% of North Dakota lands in private ownership, the North Dakota Partners for Fish and Wildlife (PFW) program is one of the U.S. Fish and Wildlife Service's (Service) most important programs in restoring and maintaining wetland and grassland habitat for migratory bird populations in the Central Flyway.

Since 1987, the PFW program has used Federal and donated private funds and acquired North American Wetland Conservation Act (NAWCA) grant dollars to restore, create, and enhance wildlife habitat on more than 265,000 acres of private land in the state (equal to 417 square miles). While the majority of PFW program projects are implemented in strategically-focused areas of important habitat, the PFW program boasts projects in all 52 counties of North Dakota. This is in cooperation with over 2,000 farmers and ranchers, who themselves have donated over \$500,000 in direct payment and hands-on work to develop new habitat and to initiate conservation-oriented agricultural practices that benefit wildlife.

Partnership Involvement in Plan Development

The PFW program coordinated efforts with other federal and state agency, and major non-governmental organization (NGO), stakeholder partners who have been involved in the PFW program strategic plan to date. The PFW program also involved the Service's Ecological Services, Realty, and Fisheries divisions in the PFW focus area determination process. Input provided by the combined expertise of these external and internal partners contributed to the PFW program's identification of focus areas for North Dakota.

Prairie Pothole Region Focus Area



The area that makes up the PPR focus area is 25,382,160 acres, or 56% of the North Dakota land area. The PPR is legendary in its continental importance to waterfowl and other migratory birds. This focus area is the “best of the best” in terms of wetland density in the U.S., with prairie/wetland complexes in densities of up to 150 wetland basins per square mile. These wetland prairie complexes can support greater than 100 duck pairs per square mile. The PPR is currently the priority area for Service Realty acquisitions, as well as for Ducks Unlimited

(DU), a major NGO partner. It is also a North Dakota State Wildlife Action Plan focus area.

Once a vast region of mixed-grass prairie and small, shallow wetlands, the PPR 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 PPR. Particularly in the eastern portion of the PPR, many wetlands have been drained or degraded, and the loss of native prairie has been extensive. Despite these losses, millions of wetlands and large tracts of native prairie still remain. The PPR is 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 Species

- Mallard
- Northern Pintail
- Gadwall
- Northern Shoveler
- Blue-winged Teal
- Canvasback
- Redhead
- Lesser scaup
- Piping plover (Endangered)
- Upland sandpiper
- Sora rail
- Marbled godwit
- Black tern
- Common tern
- LeConte’s sparrow
- Grasshopper sparrow
- Baird’s sparrow
- Sprague’s pipit
- Ferruginous Hawk
- Short-eared owl
- Sedge wren



Wetland densities in North Dakota commonly reach as high as 100-150 wetlands per square mile. USFWS photo.

Prairie Pothole Region Focus Area Five Year Targets

Habitat

- Wetland Restoration: 1,000 acres
- Wetland Establishment: 200 acres
- Grassland Restoration: 8,000 acres
- Grassland Enhancement: 25,000 acres

Partnerships

- Number of new landowner partners: 200 landowners
- Amount of technical assistance: 200 staff days

PFW program staff provide a significant level of technical assistance, through close coordination with USDA, North Dakota Game and Fish Department, and various NGO's, to promote and assist landowners with Farm Bill conservation programs including the Conservation Reserve (CRP), Wetlands Reserve (WRP), Wildlife Habitat Incentives (WHIP), Environmental Quality Incentives (EQIP), and Grassland Reserve (GRP) programs. This level of involvement is estimated to require approximately 200 staff days over the next five years.

- Percentage of leveraging

25% FWS Funds
35% NAWCA Grant Funds
20% Landowner Cash and In-kind
20% Other Partner (NGO, NDGF)

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



Grassland habitat was restored on 205 acres of cropland, protecting and enhancing 39.2 acres of embedded prairie pothole wetlands already protected by a perpetual Service easement. USFWS photo.

Lower Heart/Knife River Focus Area



The area that makes up the Lower Heart/Knife River Focus Area is 3,498,703 acres, or 8%, of the North Dakota land area. This focus area is characterized by transitional zones of mixed cropland and grassland that are threatened by cropland conversion. A PFW program priority is to assist landowners in maintaining their lands in grassland agriculture, primarily accomplished by providing needed water sources (wetland establishment).

The focus area is arid to semi-arid and mostly non-glaciated. Relatively few natural wetlands exist on the landscape. Land use in the area is primarily livestock production, and numerous wetlands have been established for livestock and wildlife. This area of mixed grass prairie has been dramatically altered in the last 100 years, due primarily to human intervention. Once common, native grasslands are seriously threatened and many bird species are declining. The goal of the PFW program is to assist landowners in maintaining their lands in grassland agriculture, primarily by providing needed water sources (wetland establishment).

Focal species for the Lower Heart/Knife River Focus Area include:

- Mallard
- Northern Pintail
- American Wigeon
- Canvasback
- 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



Committee and planning meetings are critical for the PFW program to meet its targets in the Lower Heart/Knife River Focus Area. USFWS Photo.

Lower Heart/Knife Rive Focus Area Five Year Targets

- Wetland Establishment: 400 acres
- Grassland Establishment: 400 acres
- Grassland Enhancement: 3,000 acres
- Riparian Restoration: 3 miles

Partnerships

- Number of new landowner partners: 150 landowners
- Amount of technical assistance: 150 staff days

PFW staff provide a significant level of technical assistance, through close coordination with USDA, North Dakota Game and Fish Department, and various NGO's, to promote and assist landowners with Farm Bill conservation programs including CRP, WRP, WHIP, EQIP, and GRP. This level of involvement is estimated to require approximately 150 staff days over the next five years.

-Percentage of leveraging =

25% FWS Funds
60% NAWCA Grant Funds
12% Landowner Cash and In-kind
3% Other Partner (NGO, NDGF)

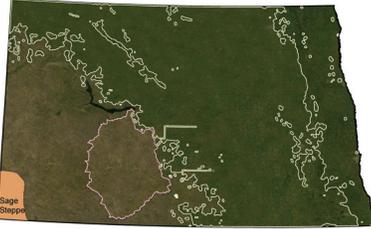
Related Plans

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



ND PFW Biologist gets assistance from NRCS Soil Scientists and their soil sampling truck to determine whether a site has suitable material for dam construction on a PFW wetland creation project. USFWS Photo.

Sage-Steppe Focus Area



The area that makes up the Sage-Steppe Focus Area is 705,124 acres, or 1.5% of the North Dakota land area. This area is characterized primarily by transitional zones of short-grass prairie intermixed with sagebrush in the extreme southwest corner of the state. While almost one-third of the area is in public owned grasslands, the remaining 72% is in privately owned and utilized as pasture. Several threats to sustaining these grazing lands include exotic species invasions, unsustainable

grazing systems and sodbusting. A PFW program priority is to assist landowners in maintaining their lands by promoting healthy rangelands, better plant diversity and invasive weed management. Other planned projects are more specific to sage-grouse management such as planting cropland to native grass-sagebrush mixes and removal of fencing and tagging fences with markers to avoid collisions near sage-grouse leks. This focus area will enhance the opportunity for the PFW program to strengthen its conservation commitment with other organizations and state agencies committed to managing greater sage-grouse and other migratory birds of concern.

Priority Species

- Greater sage-grouse
- Burrowing owl
- Sprague's pipit
- Baird's sparrow Grasshopper sparrow
- Brewer's sparrow
- McCown's longspur
- Chestnut-collared longspur
- Loggerhead shrike



Greater sage-grouse. USFWS photo.

Sage-Steppe Focus Area Five Year Targets

- Upland restoration: 200 acres
- Upland enhancement: 1,500 acres

Partnerships

- Number of new landowner partners: 10 landowners
- Amount of technical assistance: 40 staff days

PFW staff provide a significant level of technical assistance, through close coordination with USDA, North Dakota Game and Fish Department, and various NGO's, to promote and assist landowners with Farm Bill conservation programs including CRP, WHIP, EQIO, and GRP. This level of involvement is estimated to require approximately 40 staff days over the next five years.

-Percentage of leveraging =

60% FWS Funds
30% Landowner Cash and In-kind
10% Other Partner (NGO, NDGF)

Related Plans

Birds of Conservation Concern-USFWS Report
 North American Landbird Conservation Plan
 Northern Great Plains Joint Venture Implementation Plan
 North Dakota State Wildlife Action Plan



Typical greater sage-grouse habitat in North Dakota. USFWS photo

North Dakota Statewide Goals



Improve Information Sharing and Communication

Five Year Targets

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

- Maintain and develop strong and positive partnerships.
- Increase landowner interest in the PFW program.

In 2005, the ND PFW program asked cooperating landowners how they heard about the program. With 400 responses cooperating landowners heard about the PFW program in the following ways:

Prior cooperator, or heard from a neighbor or saw the project	33%
PFW outreach (news articles, direct mailings, presentations)	25%
Referral from a USDA County Office	20%
Referral from a partner organization or agency	12%
Informed by PFW or refuge staff when considering a Service easement	10%

The ND PFW program will use these findings as 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 PFW program Outreach Plan, developed and maintained by the PFW State Coordinator, on an annual basis.

Components of the Outreach Plan will include, at a minimum:

- Measurable objectives for PFW field biologists to revisit prior cooperators;
- Measurable objectives for news article, direct mailing, 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 USDA, North Dakota Game and Fish Department, and DU at the state and local level, and;
- Development and use of outreach materials to promote the PFW program.

Enhance Our Workforce

PFW 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 excellent skills in working with people, particularly landowners. Providing adequate training opportunities and maintaining high morale are integral to retaining a highly-skilled, highly-motivated PFW program workforce.

Five Year Targets

- Annually assist PFW staff to plan and schedule training opportunities.
- Maintain close coordination, at least biweekly, among the PFW state coordinator, North Dakota refuge program supervisors, and PFW staff.
- Increase all-staff meetings from one to a minimum of two, or more, per year.
- Continue sharing weekly schedules / comments among staff.
- Continue to provide high quality project training and materials to PFW staff.
- Initiate a statewide traveling PFW award program to annually recognize the most accomplished PFW program staff person.

Increase Accountability

The PFW 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.
- Continue entering PFW program projects into the GIS data layers and work with the HAPET office to develop models depicting the benefits of PFW program projects.

Biological Outcomes

Estimated waterfowl breeding pair and recruitment benefits for USFWS Partners for Fish and Wildlife wetland and grassland projects in North Dakota focus areas for 2012-2016 (June 2011).

Background: The North Dakota PFW program continues to work closely with a variety of wildlife researchers to quantify biological outcomes in specific PFW focus areas. Most notably, PFW staff have collaborated with the USFWS Region 6 HAPET office to assess duck recruitment and habitat protection outcomes in the PFW Prairie Pothole focus area of North Dakota. Published data and peer reviewed HAPET models were used to model recruitment and habitat protection benefits for five key waterfowl species (mallard, gadwall, blue-winged teal, northern shoveler and northern pintail). It is estimated that PFW projects completed in the next five years will result in positive recruitment and habitat protection benefits to over 350,000 ducks during the term of the associated Wildlife Extension Agreements. More specific recruitment outcomes are described by conservation practice type in the following table.

Estimated Waterfowl Breeding Pair and Recruitment Benefits - North Dakota Focus Areas, 2012-2017

State	Focus Area	Project Type	Class	Target Acres	Term (Yrs)	Annual Pairs ¹	Cumulative Pairs ²	Annual Productivity ³	Cumulative Productivity ⁴
North Dakota									
	> 25 Breeding Duck Pairs East River								
		Wetland Restoration							
			Temporary	50	10	44	440	56	560
			Temporary	150	99	132	13,068	167	16,533
			Seasonal	75	10	77	770	98	980
			Seasonal	225	99	232	22,968	294	29,106
			Semipermanent	125	10	77	770	97	970
			Semipermanent	375	99	230	22,770	291	28,809
			Totals	1,000		792	60,786	1,003	76,958
		Wetland Creation	Semipermanent	200	30	123	3,690	155	4,650
			Totals	200		123	3,690	155	4,650
		Grassland Restoration ⁵	New	4,000	10			868	8,680
				4,000	99			868	85,932
			Totals	8,000				1,736	94,612
		Grassland Enhancement ⁶	Maintenance	25,000	10			5,425	54,250
			Totals	25,000				5,425	54,250
		Grand Totals				9,150		83,190	
						2,460		3,100	
						52,866		144,180	
			Cumulative				64,476		230,470

Considerations

1. 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.
2. The estimated cumulative value of wetland related private lands projects for breeding pairs is $PAIRS = ((Acres\ of\ Wetland) * (Pair\ Value) * (Agreement\ Duration))$.
3. Recruits related to the acres of wetland restored or created by private lands projects are calculated using the estimated number of pairs benefiting from wetland projects and subsequent recruitment derived from Four Square Mile Breeding Waterfowl data. Recruits related to the acres of grassland restored or protected from loss by implementing grazing systems (i.e., enhanced) were derived from scenarios of grassland change using the mallard model for areas in central North and South Dakota and subsequent changes in duck recruitment.
4. The estimated cumulative recruitment value of wetland and grassland related private lands projects for ducks is $WETLAND\ PROJECT\ BASED\ RECRUITS = ((Number\ of\ Breeding\ Duck\ pairs) * (Recruitment\ Value) * (Agreement\ Duration) - (\#\ of\ PAIRS\ because\ there\ are\ no\ 1st\ year\ benefits))$; $GRASSLAND\ PROJECT\ BASED\ RECRUITS = ((Acres\ of\ Grassland) * (Recruitment\ Value) * (Agreement\ Duration))$.
5. Recruits associated with grassland restoration are considered new recruits to the population.
6. Recruits associated with grassland enhancement (i.e., grazing systems) are considered existing recruits protected for the duration of the agreement.

