

OKLAHOMA

"I really appreciate the Partners for Fish and Wildlife Program.

I could not have accomplished these goals without the assistance of the U.S. Fish and Wildlife Service. Thank you so very much."

-- Chuck Hatch, Southcentral Oklahoma cattle rancher

Introduction and General Description

The U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program (PFW) was initiated in Oklahoma in 1990. The Partners Program provides technical and financial assistance for the restoration and enhancement of fish and wildlife habitat on private lands, in cooperation with local governments and other entities, including educational institutions.

Initially the program targeted wetlands for restoration and enhancement work. The success of this landowner friendly program encouraged the Partners Program to expand into broader trust resource habitats.



Habitats of Special Concern

In 2006, four Geographic Focus Areas were selected to target critical habitat needs.

Tall Grass Prairie

· Flint hills of NE Oklahoma

Rare Imperiled & Listed Species

- · Eastern Oklahoma Watersheds
- · Karst systems

Mixed Grass Prairie

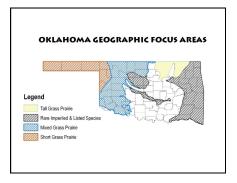
· Portion of Western Oklahoma Consisting of both short and tall grass plant communities

Short Grass Prairie

· Panhandle and portions of adjacent counties

Oklahoma's fish and wildlife habitat is very diverse. PFW projects within the Grassland Prairie Areas will concentrate on improving Lesser and Greater Prairie Chicken habitat. Invasive plant species removal will also be targeted for habitat improvement in all four Geographic Focus Areas. Projects in the Rare Imperiled & Listed species focus areas will target watersheds where habitat restoration projects will benefit federally listed endangered, threatened, or candidate species, including Arkansas River shiner and the Ozark big-eared bat.

The PFW will develop3-4 Outdoor Classrooms yearly.



Threats

Since the land runs of the late 1800's, Oklahoma's vast prairies, wetlands, streams, and forests have been diminished or degraded by development and other human activities. Less than 15 percent of the original bottomland hardwoods remain today in scattered tracts in eastern Oklahoma. Over 70% percent of our original wetlands have been drained or filled. Dam construction and stream channelization also have contributed to wetland loss. Nearly 70% of mixed grass prairie and 99% of tall grass prairies have been lost or degraded due to agricultural development and fire suppression. As a result grassland birds have greatly declined.

In addition, much of the native pine and hardwood forests of eastern

Oklahoma has been lost or fragmented due to agricultural activities, timber harvest and conversion to pine monocultures.

The loss and alteration of these ecosystems has negatively affected many fish and wildlife species to the point of federal listing. In Oklahoma 20 species are federally-listed as threatened or endangered and an additional five are statelisted as threatened or endangered. Three species are candidates for federal listing and 78 are listed in Oklahoma as species of special concern.

Ninety-five percent of the land in Oklahoma is in private ownership. The Partners for Fish and Wildlife Program is the ideal program to enhance and restore fish and wildlife habitat on private lands for a broad array of wildlife species.

Conservation Strategies

Wetlands



Wetland habitat restoration and enhancement on private lands has been a high priority for the Partners Program. Wetlands in Oklahoma provide important migrating, wintering, and breeding habitat for *Invasive Plant Species* a variety of wildlife species. They are also valuable for improving water quality, recharging groundwater supplies, and reducing soil erosion and flood damage. Restoring the hydrology of formerly drained degraded wetlands has been the focus of most restoration projects. The cost of wetland restoration averages between \$400-\$600 per acre.



Sediment is one of the chief pollutants of stream systems in Oklahoma. Changes in land use, including increased pasture clearing, heavy grazing pressure, other agricultural and development activities have all contributed to high stream sediment loads. Sediment loads impact fish, amphibian, macro-invertebrate and mussel productivity. Riparian enhancement and streambank restoration involves grading eroding banks, stabilizing bare soil with erosion control mats and anchors, planting vegetation, and limiting livestock access. Streambed restoration projects have included removal of concrete crossings that block fish passage and installation of box-type structures to improve fish access to upstream habitat. Costs for stream bank restoration are approximately \$40 per foot. Fish passage improvements range from \$5,000

to \$80,000 for each crossing. Fencing riparian areas is a very cost effective technique for managing domestic livestock. The cost for fencing is approximately \$1.50 per foot.

Grasslands



Native grasslands provide essential habitat for many migrating, wintering and nesting bird species. Only 20 to 30 percent of Oklahoma's original prairies remain today, and much of that is rapidly being lost to woody plant encroachment.

The costs associated with grassland restoration ranges from \$7 per acre up to \$350 per acre.





Eastern red cedar and saltcedar have increased in Oklahoma. The invasion of red cedar into the native upland plant communities changes habitat structure and composition which adversely affects native wildlife species. Many bird species, such as prairie chickens, northern bobwhite quail and the endangered black-capped vireo have been negatively affected by trees.

Nearly all riverine and riparian areas of western Oklahoma have been invaded by saltcedar. This exotic plant degrades native wetlands and also reduces stream flow due to the large amount of water the plants use each day. Cost for invasive plant species projects have ranged from \$10-160/acre.

"...the Partners Program is one government program that truly benefits all. Children are our future and environmental studies for children are disappearing. Approximately 2 percent of our children now have an opportunity to work in an outdoor classroom or learn about the environment compared to the early 1900's almost all children had an opportunity to work the land or understand wildlife, so we're asking, please help us to continue to explore and understand their environment." Debbie Straughn, Principal, Deer Creek Elementary School, Statement given at legislative field hearing

Outdoor Classrooms



Since 1993, the Partners for Fish and Wildlife Program has been involved in developing Outdoor Classroom projects throughout Oklahoma. Onehundred and nineteen Outdoor Classrooms, with an emphasis on wetlands and endangered and threatened ecosystems, have been completed or are under



development in Oklahoma. Public interest and awareness of the environment, especially wetlands, is a growing human dimension issue. To successfully educate young people on these resource issues, a "hands on," proactive and interactive Outdoor Classroom provides the ideal structured environment for learning. These projects simultaneously provide long-term educational opportunity, high value fish and wildlife habitat and help build understanding and support for conservation of our Nation's natural resources.

The Partners Program provides \$6,000 per Outdoor Classroom project which is used to leverage funds from many other resources. The total cost for these projects averages nearly \$30,000 each.

B.G. Mercer who restored 10 acres of wetlands on his Creek County farm, made a statement that has been echoed by many landowners who have worked with the Service. "This is a program that works well – Thanks."





Technical and Financial Assistance for:

Wetland Restoration Stream Restoration Outdoor Classrooms Invasive Species Control Native Habitat Restoration Endangered Species Riparian Buffer Protection

For more information contact:

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Partners

Private Landowners Oklahoma Department of Wildlife Conservation Natural Resources Conservation Service **County Conservation Districts** Oklahoma Conservation Commission **Indian Tribes** Oklahoma Water Resources Board The Nature Conservancy Many Cities & Towns Many Oklahoma Schools & Universities And Many Others, such as National Fish and Wildlife Foundation U. S. Army Corps of Engineers Tinker Air Force Base Farm Service Agency Gloss Mountain Conservancy The Nature Conservancy Tulsa Zoo Friends Oklahoma Farm Bureau Kids We Care Spencer Church of Christ Museum of Great Plains Eagle Ridge Institute Noble Foundation Sutton Avian Research Center Team Roundup Williams Company Oklahoma Natural Gas ARKLA. Western Resources Georgia Pacific ANR Pipeline Company Apache Corp. National Wild Turkey Federation



Nature Works in Tulsa

Accomplishments

Since 1990, in Oklahoma alone the Partners for Fish and Wildlife Program in cooperation with many partners, has restored, enhanced or protected:

T	300,000	acres of wildlife habitat
T	25,000	acres of wetland habitat
T	157,000	acres of grassland
T	241	miles of riparian habitat
T	119	outdoor classrooms
\boldsymbol{T}	938	Projects statewide

Future Needs

Restore and enhance 5,000 acres of bottomland hardwood wetlands in Eastern Oklahoma. This essential habitat provides important migrating, wintering and breeding areas for a wide variety of waterfowl, shorebirds, wading birds, song birds and other wetland dependant wildlife species.

Restore, enhance/manage over 300,000 acres of grasslands in the tall, mixed, and short grass regions of Oklahoma. The decline of native grasslands in Oklahoma has affected many wildlife species, and several are being considered for listing under the Endangered Species Act.

Many streams throughout Oklahoma are in need of restoration work. Streambank stabilization, streambed restoration, and riparian management all are needed. An estimated 3,000 - 5,000 miles of degraded streams are in immediate need of restoration work on private lands.

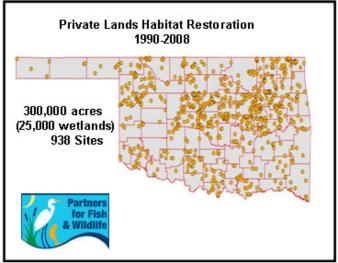
♦ To successfully and appropriately educate children on fish and wildlife natural resource issues, we estimate that 300 schools around the State should complete Outdoor Classroom projects.

The relatively small amount of money appropriated to this program is establishing much needed wildlife habitat in my home State of Oklahoma. I am willing to set aside a portion of my property for the very worthwhile program." Daniel L. Hauser, Tulsa, OK B.G. Mercer who restored 10 acres of wetlands on his Creek County farm, made a statement that has been echoed by many landowners who have worked with the Service. "This is a program that works well – Thanks."

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