



TEXAS

“We have accomplished more through our association with Partners for Fish and Wildlife than we have with any other organization... y’all give the Federal government a good name!” – Evelyn Rhodes, Rhodes Farms, Raymondville, Texas

Mrs. Rhodes is one of the hundreds of Texas landowners who have forged a mutually enjoyable working relationship with the U.S. Fish and Wildlife Service through its Partners for Fish and Wildlife (PFW) Program.

Based upon the increasing number of requests for assistance, we know that this landowner-friendly program has grown in popularity in the Lone Star State each year since its inception in Texas in 1989.

Introduction and General Description

Texas is approximately 95 percent privately owned or otherwise privately controlled, leading to the tremendous potential for private lands habitat conservation work.

Because there is an incredible variation in the many ecosystems and/or vegetational communities found in the State, Texas supports one of the most diverse plant and animal populations in the United States. General ecosystems include the coastal/estuarine areas along the Texas coast, the piney woods of east Texas, the rolling plains of the Panhandle, the cross timbers and grasslands of north central Texas, the hill country of central Texas, the brush country of south Texas, and the arid and mountainous areas of southwest Texas. Each of these areas offers their own unique challenges in trying to accomplish habitat restoration.

There are several national wildlife refuges scattered across the State with the majority located along the

Texas Coast. A goal of the PFW Program in Texas is to restore wildlife habitat near refuges or other permanently protected areas.

The PFW Program in Texas initially targeted wetland habitat for restoration and enhancement work. However, because of landowner interest, the program’s objectives were expanded to include projects that would benefit habitats for all Federal trust resources, including migratory birds and candidate, threatened, or endangered species.

Texas Restoration Activities

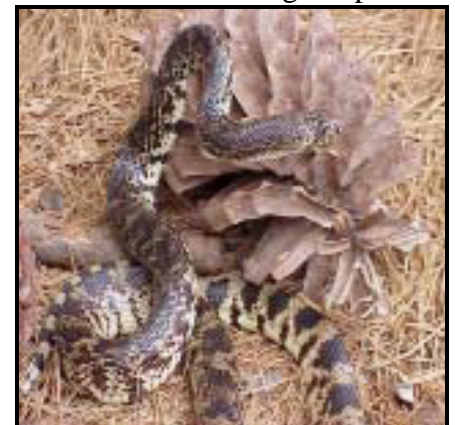
- Wetlands
- Native grassland
- Riparian
- Habitat for imperiled species
- In-stream habitat
- Longleaf pine
- South Texas brush
- Other declining habitats



Habitats of Special Concern

Habitats of special concern include bottomland hardwood and longleaf pine communities in east Texas, the short- and mixed-grass prairies of the Panhandle, coastal wetlands and prairies, the brush country of south Texas, and specific habitats that support federally listed, candidate and other imperiled species.

The PFW Program has worked with landowners and other partners to restore and enhance habitat for several federally listed and candidate species. For example, the restoration of longleaf pine



Louisiana Pine Snake

communities in east Texas has provided habitat for the endangered red-cockaded woodpecker and for the Louisiana pine snake, a candidate species.

The PFW Program is actively involved in restoring habitat for the Arkansas River shiner (a threatened species), the lesser prairie-chicken (a candidate species) and the black-tailed prairie dog (a former candidate species), and for other imperiled species in the Texas Panhandle.



Arkansas River shiner

Also known as the Tamalipan brushland, the brush country of extreme south Texas is a unique ecosystem found nowhere else in the United States. It is estimated that 95 percent of the original ecosystem has been cleared or altered for agriculture and urban development. It is home to 21 threatened or endangered species and 36 species of concern. The Central and Mississippi Flyways come together to funnel millions of neotropical migratory birds to this area, pinched between the Gulf of Mexico and deserts to the west.

It's estimated that less than 1% of the estimated 9,000,000 acres of the coastal prairies region that extends from southwest Louisiana into southern Texas remains in relatively pristine condition. The Attwater's prairie-chicken, an indicator species for the health of the prairie, is on the brink of extinction. The PFW Program assists with the delivery of the Coastal Prairie Conservation Initiative which provides landowners with financial and technical assistance to restore coastal prairie habitat.

To restore wetlands in east Texas (including bottomland hardwood areas) and along the Texas coast, the PFW Program entered into two formal

Agreements with Ducks Unlimited, the Texas Parks and Wildlife Department, and the Natural Resources Conservation Service. As a result, two partnerships known as the Texas Prairie Wetlands Project and the East Texas Wetlands Project were formed. The goal of each of these partnerships is to work with private landowners to reverse the decline in wetland and associated wildlife habitat losses along the Texas coast and in east Texas, respectively.

Threats

Although Texas is still a land of vast open spaces, much of the State's fish and wildlife habitat has been degraded directly or indirectly by human activities. Most of the original native grasslands in the State have been converted to agricultural lands or the native grassland plant communities have been altered by improper livestock grazing.



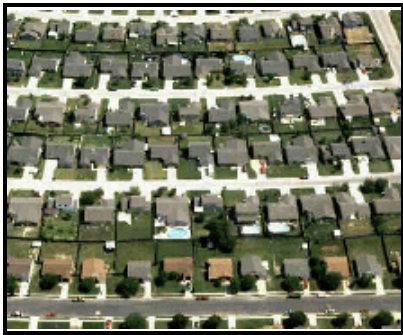
Recently cleared upland forest will be converted to agricultural and urban use.

Thousands of acres of wetlands have been drained or otherwise impacted to promote agriculture practices, development, and for other purposes. It is estimated that Texas has lost more than 50 percent of its original wetlands.

Riparian areas and bottomland hardwood areas have been degraded by improper livestock grazing, logging, and flooded by the many reservoirs constructed in Texas in the 20th century.

Longleaf pine was the predominant forest type of the Southeastern United States. It is estimated that only approximately 45,000 acres remain in Texas covering less than 3 percent of its historic range. Conversion to non-native pine plantations, fire suppression and conversion to other agriculture purposes are the primary threats to this ecosystem.

Many large Texas ranches are being sold and converted into smaller “ranchettes,” contributing to direct habitat loss and to increased habitat fragmentation.



Urban sprawl

“Urban sprawl” poses a significant threat to fish and wildlife populations in general, but in particular in Texas, to several imperiled species and their habitats. For example, habitat for 10 federally listed species in the City of Austin area is at risk for direct or indirect degradation.

Vast stretches of major rivers in Texas, such as the Trinity and Sulphur Rivers, have been channelized or otherwise

altered. These actions have led to problems with river and associated stream incising, lowering of groundwater along associated riparian systems, erosion problems, increased sedimentation in coastal areas, and degradation of water quality.

Conservation Strategies

Wetlands

Because wetlands are critical to the survival of many migratory birds, they are emphasized in the PFW Program. Restoration techniques include plugging drainage ditches and removing levees to restore flood prone areas. Small levees are often constructed to establish shallow- water impoundments which are managed



Restored playa in Texas Panhandle

to promote the growth of native wetland vegetation. In these cases, projects are designed to blend into the landscape to appear as natural as possible. Fencing to control livestock grazing is another restoration techniques often used.

Texas Prairie Wetlands Project: Initiated in 1991, the Texas Prairie Wetland Project is intended to develop wetland projects with private landowners in 28 Texas Gulf Coast counties. This project has been a partnership effort of the Texas Parks

and Wildlife Department, Ducks Unlimited, the Natural Resources Conservation Service and the PFW Program since the beginning.

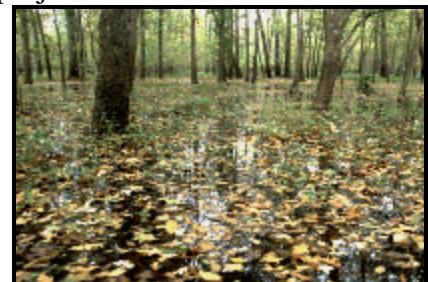


Restored coastal wetland

Accomplishments to date include over 38,000 acres (795 wetland sites) under long-term management agreements with private landowners and over 520,000 additional acres of wetland restoration and management that have resulted from technical assistance provided through the project.

East Texas Wetlands Project:

Initiated in 2001, the objective of the East Texas Wetlands Project is to work with private landowners to restore, enhance, or establish wetlands (including bottomland hardwoods) and associated upland habitats within the Texas portion of the Lower Mississippi Valley Joint Venture (46 counties in east Texas). Accomplishments to date include over 8,000 acres (146 wetland sites) under long-term management agreements with private landowners and over 122,000 additional acres of wetland restoration and management that have resulted from technical assistance provided through the project.



Bottomland hardwood forest wetland in east Texas.

Native Grasslands

With the decline/degradation in native grassland habitats across the United States, there has been a concurrent decline in grassland dependent birds. The PFW Program in Texas is working to reverse that downward trend in bird populations. Grassland restoration projects often involve the conversion of fallow agricultural fields to native grassland communities through the planting of native grasses and forbs (wildflowers and other leafy, non-woody plants).



Native grassland in north Texas, three years after restoration.

To enhance existing degraded grasslands or newly establish grasslands, management techniques include the installation of cross-fences for rotation of livestock between pastures for better forage utilization (followed-up by a grazing management plan), controlled burning, mowing, and invasive species control.

The High Plains/Texas Panhandle: Wildlife in the High Plains of Texas face a multitude of challenges today. The natural fire regime has been altered.



Lesser prairie chicken on lek in Texas Panhandle

Exotic, invasive species such as saltcedar and Russian olive are becoming increasingly common. Key natural components of this former short – and mid-grass grassland ecosystem, such as the bison, are gone. Other species, such as the black-tailed prairie dog, have been removed from much of their historic range. The PFW Program has provided funding to restore and/or enhance the grassland and riparian ecosystems in the High Plains. Aside from implementing habitat improvement projects, PFW Program personnel are also actively involved in intra- and interstate planning efforts in various conservation efforts, such as the Texas Black-Tailed Prairie Dog Working Group and the Lesser Prairie Chicken Interstate Working Group.

Coastal Prairie Conservation Initiative (CPCI): The CPCI is a cooperative effort undertaken by several private landowners, the Coastal Prairies Coalition of the Grazing Lands Conservation Initiative, local Resource Conservation & Development Districts, the Nature Conservancy, Texas Parks & Wildlife Department, the Natural Resources Conservation Service, and the U.S. Fish & Wildlife Service. The objective of the initiative is to provide habitat for viable populations of grassland dependent wildlife species and is accomplished by providing financial, technical, and regulatory assistance to landowners engaged in reclaiming, restoring, and conserving native coastal prairie.



Chemically treated huisache and mesquite (both invasive brush species of grassland) on coastal grassland.

South Texas Brush County

Work in this ecosystem involves efforts to restore the wildlife corridor along the Rio Grande River, connecting fragmented habitat areas, and putting acres back to habitat that can serve as stopover sites during migration. Restoration techniques include planting woody plant species in former agriculture fields and controlling invasive species. The planting of native grasses and forbs is utilized in those areas where a brush savannah was historically the habitat type



Tamaulipan Coastal Brushland

Streams and Riparian Areas

Healthy streams and associated riparian areas support a broad array of plants and animals. These diverse areas support numerous fish and wildlife species, including key game species such as deer and turkey. Migratory

birds use these areas intensively as they migrate through Texas. With proper management riparian areas often have the potential to provide the highest quality wildlife habitat in an area. Simply constructing a fence to control livestock grazing and trampling is often all that is necessary to begin the process of restoring these important ecosystems.

Longleaf Pine Restoration

The longleaf pine community is one of the rarest plant communities remaining in Texas and across the West Gulf Coastal Plain that supports a number of rare animal and other plant species. The longleaf pine is a tree species that produces the highest quality timber of all southern pines and is more insect, disease and fire resistant. The PFW Program began its first longleaf pine restoration project in Texas in 2001 and to date have enrolled approximately 5,000 acres.



Healthy longleaf pine savannah in east Texas

We are seeking to expand this initiative through improved partnering with Texas Forest Service and Texas Parks and Wildlife

Outdoor Classrooms

“Our school has been able to expand our influence and resources through the dedication and expertise enthusiastically offered by the Partners Program.” – Ms. Bobette Heaton, Yellowrose/Crossroads School, Madisonville, Texas

A high priority is placed on educating future generations of Texans on the importance of fish and wildlife habitat. Throughout the State, the PFW Program has participated in projects seeking to educate the public regarding the benefits of wetland and other wildlife habitat by providing funds to develop outdoor environmental classrooms.



Planting of native vegetation at an outdoor classroom, Dallas, Texas.

Invasive Species

With guinea grass in south Texas, Chinese-tallow trees, McCartney rose, and giant salvinia in southeast Texas, water hyacinth and hydrilla in east Texas, salt cedar along water courses in west Texas, and common Bermuda across the state, invasive species are having an increasingly negative affect on fish and wildlife populations in Texas. The PFW Program in Texas places a high priority on projects which seek to control invasive species.



Physical and chemical control of Chinese tallow, an exotic, invasive species

Threatened, Endangered, and Other Imperiled Species

The PFW Program has been active in restoring habitat for declining species in Texas. Several projects intended to benefit federally listed or otherwise imperiled species have already been described. Other imperiled species such as the endangered black-capped vireo and golden-cheeked warbler have benefited from PFW Program activities.



Gated entrance to cave to protect endangered Karst invertebrates, San Antonio, Texas



Invasive Ashe-juniper cut and piled prior to prescribed burning of project area. The end result will be improved habitat for the endangered black-capped vireo and other shrubland dependent species.

Technical assistance

Many landowners are not necessarily interested in receiving cost-share money from the PFW Program or any other entity. They simply want a qualified biologist to spend a little time on their property with them to discuss the best way to manage their property for Federal trust resources specifically and also for wildlife in general. These types of landowner contracts may ultimately produce almost as much on the ground habitat improvement as projects where we actually have signed Private Land Agreements.

Partners

Federal Government Partners

*Natural Resources Conservation Service
Bureau of Reclamation
U.S. Forest Service
Various Local Resource Conservation and
Development Districts*

State Government Partners

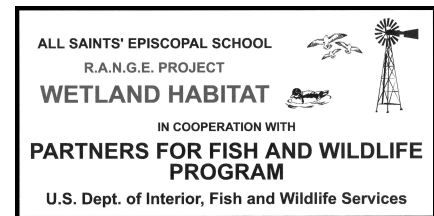
*Texas Parks and Wildlife Department
Texas Forest Service
Texas Tech University
University of Texas at Arlington
Austin College
Texas A&M at Commerce
Texarkana College
Texas State University
West Texas A&M University
Wiley College
Environmental Institute of Houston, University of
Houston, Clear Lake
North Central Texas Community College
University of Texas at San Antonio
Angelo State University
Lower Colorado River Authority*

Local Government Partners

*Various Local Soil and Water Conservation
Districts
Dallas County
Harris County
City of Arlington
City of Granbury
City of Austin
City of Big Springs
City of Fort Worth
City of Dallas
City of Bowie
City of Glenn Heights*

Private Organizations

*Armand Bayou Nature Center
Ducks Unlimited
Heard Museum
Chalk Mountain Wildlife Management Assoc.
Cooks Branch Conservancy
LeTulle Foundation
Austin College
Dallas Nature Center
National Wild Turkey Foundation
Oakridge School
Peregrine Fund
All Saints Episcopal School*



*Texas Buddhist Association
Eastwood Homeowners Association
Reliant Energy
Galveston Bay Foundation
Grayson College
Katy Prairie Conservancy
The Nature Conservancy of Texas
Various School Districts
National Fish and Wildlife Foundation
Northeast Texas Intercultural Alliance
Audubon Society of Texas
Dallas Audubon Society
Houston Audubon Society
Natural Area Preservation Association
Temple Inland Forest Products Corp.
Texas Cave Management Association
Texas Cave Conservancy
Temple Inland Forest Products Corporation
Texas Ornithological Association
Balcones Preserve
Environmental Defense*

Accomplishments

Through FY 2006, the PFW Program in Texas has:

- ◆ Entered into over 1,300 partnerships with private landowners restoring approximately 325,000 acres of fish and wildlife habitat
- ◆ Restored, established, or enhanced approximately 62,000 acres of wetlands
- ◆ Restored or enhanced approximately 188 miles (6,500 acres) of riparian corridors
- ◆ Restored or enhanced approximately 8 miles of in-stream habitat
- ◆ Restored or enhanced approximately 165,000 acres of native grasslands
- ◆ Restored or enhanced approximately 43,000 acres of native shrublands and woodlands
- ◆ Restored or enhanced approximately 49,000 acres of habitat specifically for federally listed and/or candidate species.

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