



UTAH

Introduction and General Description

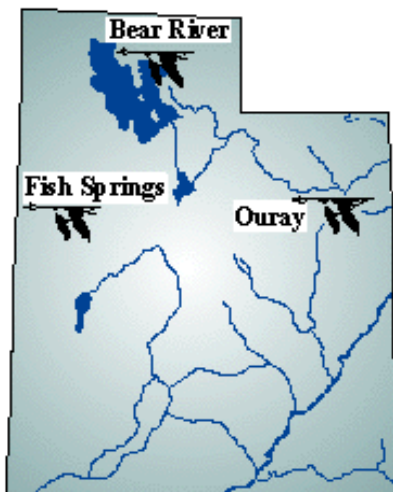
Utah is the 11th largest State in the Nation with 81 percent of the land base owned by Federal or State agencies. Opportunities for the Partners for Fish and Program in Utah are still extensive because private landowners control over 18,000 square miles of the most critical habitats for numerous wildlife species.

Utah is the second driest State in the nation, so riparian and wetland projects are a high priority. These areas are an extremely valuable but limited resource.

Utah Partner's Activities

- ✓ Riparian restoration
- ✓ Wetland restoration
- ✓ In-stream restoration
- ✓ Rangeland restoration
- ✓ Noxious plant management

The Partners Program is administered from the Bear River Migratory Bird Refuge.



Wildlife Benefiting from Partners Assistance

Waterfowl -- 50 percent of the breeding cinnamon teal in North America nest in Utah.



Cinnamon teal Photo courtesy of Paul Pemberton

Shorebirds -- The Great Salt Lake ecosystem was designated as a site of hemispheric importance by the Western Hemisphere Shorebird Reserve Network.



Feeding shorebirds

Native Fish--Three different species of cutthroat trout are found in Utah streams.



Bonneville cutthroat trout

Amphibians -- spotted frog
Neotropical migratory birds – common yellowthroat

Mammals -- Utah prairie dog
Resident birds -- Gunnison sage grouse

Habitats of Special Concern

Riparian and In-stream Habitat

These two habitats are required by native fish populations and many neotropical migratory birds, and are important to the residents of Utah for water quality. Both components are required for the system to function properly; one habitat cannot exist without the other.

Wetland habitat

Although only 1.5 percent of the State is classified as wetlands, there are wetlands in Utah. The Great Salt Lake system provides critical migrational habitat as well as breeding habitat for shorebirds and waterfowl. This system is home to the largest breeding population of white-faced ibis in North America.

Wetlands are also scattered throughout the western portion of Utah. Many of these wetlands are spring fed and are small oases in an area that typically receives 7 inches or less of annual precipitation.

Two Species of Concern that inhabit these areas are the spotted frog and the least chub.

Upland/Rangeland

Ranchers own large tracts of property and contribute significantly to wildlife habitat. Rangeland is important for various resident wildlife such as Gunnison sage grouse, greater sage grouse, numerous neotropical migrants, and the Utah prairie dog.

Threats

When settlers moved west into Utah, they altered streams to provide water for irrigation of crops, haylands, and pastureland. The diversion of water from streams increased until entire streams were, and still are, de-watered during the summer months.

Dams were constructed to store water for irrigation and public drinking water. Entire streams have been diverted from one watershed to another so that the water storage potential in existing reservoirs could be increased. Water manipulation had an impact on riparian areas and in stream habitat.

Streams were heavily utilized by sheep and cattle as they provided a water source, shade, and longer period of forage production.

Spraying willows with herbicides was a common practice to remove them from the streambanks. Settlers mistakenly thought that trees were removing vast amounts of water from the streams.

Woody vegetation was also eradicated to increase the amount of grass growing along the streambanks. These practices resulted in a loss of riparian habitat and streambank collapse over time.

Loss of riparian and in-stream habitat was also experienced over the years as streams were straightened in attempts to improve flow and reduce flooding of adjacent croplands and pastures.

Currently, development is the greatest threat to Utah wetlands and the associated upland habitat around the Great Salt Lake. Eighty-five percent of the State's population live within the area containing 75 percent of the wetlands. In the 2000 census, Utah was ranked 4th in overall percentage of population growth. The counties bordering the Great Salt Lake have increased in population by an average of 24 percent, and the development of more housing and industry has risen accordingly.

Upland habitat or rangeland has decreased in diversity and health over the years. Invading cheatgrass caused a decline in range health. Fire suppression allowed various shrubs and trees to expand and compete with native grasses and forbs. Native rangeland has been plowed, sprayed, and planted with non-native species in efforts to increase livestock forage production.

Conservation Strategies

Wetland Habitat Work

Duck clubs are very common around the Great Salt Lake, and a majority of the wetland preservation work has been done in conjunction with these clubs. The main focus of the Partners Program while working with the clubs has been to improve their water management capability to provide habitat for waterfowl and shorebirds by:

- Constructing additional dikes to subdivide existing impoundments
- Repairing existing dikes



Constructing new dikes

Another area for wetland work has been in the western part of Utah. These isolated wetlands are vital to numerous types of wildlife. One such species benefitting from this work is the spotted frog.



Spotted frog

Wetland restoration or enhancement work costs about \$650/ acre to complete.

Riparian and In-stream Habitat Work

This habitat type is extremely valuable for wildlife, livestock, and the general public. It provides a much needed water source as well as shade and canopy cover. Native fish are still found throughout numerous watersheds, and restoration efforts are focused within these areas.

Some of the problems associated with this habitat type is loss of the riparian vegetation and the degradation of streambanks resulting in increased water temperature and decreased water quality.

Many landowners have realized the benefits associated with a healthy stream system. Benefits such as reduced erosion, better water quality, improved fishing opportunities, and improved forage production are all sources of pride for landowners when they participate in stream and riparian restoration efforts.



Restored in-stream and riparian habitat. *Photo courtesy of Utah Division of Wildlife Resources, Don Wiley*

Riparian and in-stream restoration activities cost about \$16 per linear foot to complete.

Rangeland/Upland Restoration Activities

Past management techniques for rangeland improvement included discing up sagebrush and seeding single species stands of crested wheatgrass. This practice is changing, and landowners are interested in re-seeding these areas to provide a wider variety of forbs and grasses. Many areas containing native sagebrush have become climax communities with limited species in the understory.

Mechanical treatment is one method used to reestablish a more diverse plant community in these areas. One such mechanical treatment used by a rancher involves the use of an aerator.



An area treated with the aerator.

The aerator crushes the old decadent sagebrush leaving behind residual litter and small flexible woody plants while established grasses and forbs. If there is limited plant variety in the understory, seeding can also be done in conjunction with the aerator.

Grass seedings are also being done

around the Great Salt Lake to provide nesting habitat. Much of the current upland habitat is infested with cheatgrass and other noxious weeds.

Grass seeding with native grass seed costs approximately \$40 per acre.



An aerator with seeder attachment. *Photo courtesy of Deseret Land and Livestock*







No-till grass seeding.

Partners

Ambassador Duck Club
Canada Goose Club
Confederate Tribe of the Goshutes
Ducks Unlimited
Environmental Protection Agency
Forest Service
Goose Pasture, Inc.
Idaho Game and Fish
Natural Resources Conservation Service
Rocky Mountain Elk Foundation
Spring Creek Middle School
Summer Memorial Park Foundation
The Nature Conservancy
Trout Unlimited
Utah Conservation Districts
Utah Department of Natural Resources
Utah Division of Wildlife
Utah Extension Service
Utah State University

Accomplishments

From 1991 through 2000, 67 landowners have participated in the Utah Partners for Fish and Wildlife Program. With landowner cooperation and funding assistance from other agencies, the following have been accomplished:

-  Wetland restoration - 2,389 acres
-  Wetland creation - 2,158 acres
-  Riparian/In-stream habitat restoration - 11.9 miles
-  Upland enhancement - 3,280 acres

Future Needs

It is anticipated that the Partners Program will continue working with private landowners well into the future.

Potential restoration work in Utah:

- Native trout streams - 800 miles
- Wetland work - 90,000 acres
- Range/upland restoration - 250 million acres

In Utah, the Partners for Fish and Wildlife Program's main objective is to help landowners improve upon management techniques, learn new techniques, help them implement these techniques, and then monitor projects to see if they are attaining the goals of the landowners and the Fish and Wildlife Service.



Evening on the marsh

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