



WEST VIRGINIA

“The Partners program creates a win-win situation for everyone including the environment,” said Jane Tabb about the 17 acres of wetland and 4,800 feet of stream restored on the family dairy farm in Jefferson County. Jane Tabb represents one of 30 landowners in West Virginia who have joined with the U.S. Fish and Wildlife Service to restore fish and wildlife habitat on their land.

Through its innovative Partners for Fish and Wildlife Program, the Service provides technical advice, funding, and construction assistance to help landowners realize their goals of making their land a better place for fish and wildlife, a more profitable farm, and an aesthetically pleasing place to live.



Wood duck pair

Introduction and General Description

The Partners for Fish and Wildlife Program in West Virginia began in 1993, primarily as a wetland restoration program. In 1998, the Partners Program began assisting with riparian (streamside) restoration efforts throughout the State. The Program now includes woodland restoration and warm-season grass establishment. Fish and wildlife habitats that were once in a degraded state are now providing important cover, food, water and breeding areas for many species.

West Virginia Activities

- U Wetland restoration
- U Riparian fencing
- U Woodland fencing
- U Grassland restoration
- U In-stream restoration
- U Revegetation assistance

Habitats of Special

Concern

Wetland restoration continues to be a high priority for the Partners Program in West Virginia. While wetland restoration opportunities are limited in West Virginia, riparian and stream restoration potential are very high. There are thousands of miles of streams open to unrestricted livestock grazing and thousands of miles of streambanks and stream channels that are unstable.

Our priorities and approximate costs are:

Riparian Habitat -
\$600/acre and
\$5,000/mile

Wetlands - \$1,000/acre

Forests - \$300/acre

Native Warm-season Grasslands - \$300/acre

In-stream and Streamside -
\$300,000/mile

Waiting List

A total of 32 projects to restore 240 acres of wetland, riparian, and upland habitat and 15 miles of streambank are currently awaiting construction.



Patterson Creek channel and streamside vegetation, 2 years after restoration, Grant County

Threats

Lost Habitats

West Virginia is mountainous and nearly 70 percent is forested. Remaining wetlands make up less than one percent of the State and are largely confined to Canaan Valley in Tucker County, Meadow River in Greenbrier County and floodplains statewide. West Virginia has likely lost over half its wetlands to agricultural drainage since European settlement in the 1700s. Urban development continues to reduce wetland acreage statewide. Native grasslands, though never abundant, have all but been eliminated by European grass varieties, agricultural conversion and forest succession. Streamside habitats have been lost or degraded by severe flooding, development, agriculture, and dredging. To a lesser extent, woodlands are degraded by livestock grazing. As a result, fish and wildlife populations that are dependent on these habitats have declined.



**Restored wetland, Shabb Farm,
Mason County**

Conservation Strategies

Wetlands

Wetlands play an important role in the life support functions of migratory birds that are a trust resource of the Service. Restoration techniques focus on returning hydrology to formerly drained wetlands as economically as possible: drainage tiles broken and small berms and ditch plugs constructed to block the water from draining the site. Wetland restoration projects are carefully crafted to blend into the landscape and involve such methods as creating microtopography (i.e., little ridges and swales), establishing complexes of small seasonal wetlands, and restoring larger permanent wetlands.

Wetland restoration projects have been concentrated in the vicinities of the Ohio River Islands National Wildlife Refuge, the Canaan Valley National Wildlife Refuge, and the Chesapeake Bay drainage

of West Virginia. These areas contain some of the best migratory waterfowl habitat in the State.

Riparian Areas and Streams

Streams and riparian areas support fish, mussels, amphibians and many other species of wildlife enjoyed by West Virginians. Many of our streams and streamside areas have become unstable due to unrestricted livestock grazing. Others have been repeatedly channelized after flood events, further adding to their instability. Unstable streambanks and stream channels will lead to future flooding problems, poor water quality, and reductions in fish and wildlife populations.

Stream bank fencing is one restoration technique that is cost effective and valued by farm groups and landowners. The West Virginia Partners Program installs fencing to protect streams from livestock. Along with sediment and nutrient reduction in the stream, excellent habitat is provided for both fish and wildlife. The landowner benefits from having a quality fence to use as part of a rotational grazing system that allows the profitable yet wildlife-friendly use of the land. To date, streambank stabilization efforts have largely utilized bio-engineering techniques such as root wads, "bio-logs," and re-vegetation. Efforts to expand the program to include a state-of-the-art approach called "natural channel design" are forthcoming as the special

expertise necessary to implement this approach is being acquired by field biologists. These techniques roughly cost one third of rip-rap channel projects and are a virtually permanent solution. The payoff for West Virginia streams, landowners, and fish and wildlife will be outstanding when this part of the program is implemented.



Restored riparian (streamside) zone along Bullskin Run, Jefferson County

Upland Forests

Forests provide excellent habitat for neotropical migrant songbirds, threatened and endangered species, and game species. The Partners Program works with landowners to manage livestock access to forests.

Grasslands

Many species of migratory birds need grasslands for nesting. The decline of grasslands in the Northeast is directly correlated with the decline of species such as bobolink and eastern meadowlark. The Partners Program has worked with several landowners to establish warm-season grass stands. Some of these stands have been established purely for use by wildlife. Other stands have a dual purpose for grassland bird nesting habitat in the spring and livestock forage in the summer, when cool-season grass pastures are dormant.

Deep-rooted warm-season grasses help in the State's drought prone regions.

Endangered Species

The Partners Program has worked with the Endangered Species Program to install gates on bat cave entrances so that the bats aren't disturbed during their winter hibernation. Disturbances during hibernation forces the bats to expend energy reserves needed to get them through the winter.

Farming for Wildlife and Profit

In addition to habitat restoration, the Partners Program also improves the effectiveness of the conservation programs administered by the U.S. Department of Agriculture by providing the technical expertise needed to evaluate which projects are best for fish and wildlife, demonstrating as well as recommending management and restoration techniques and providing data that lets the Federal funds be used most effectively. This relationship combines funding from the Department of Agriculture with the biological expertise of the Partners Program to maximize public benefits.

The Partners Program works with agricultural producers to keep farms both economically and biologically productive.

Partners

Natural Resources Conservation Service
Farm Service Agency
U.S. Geological Survey-Biological Resources
 Division-Leetown Science Center
West Virginia Division of Natural Resources
West Virginia Soil Conservation Agency
Potomac Valley Soil Conservation District
Eastern Panhandle Soil Conservation District
Ducks Unlimited
Trout Unlimited
The Mountain Institute
The Nature Conservancy
Pheasants Forever

Accomplishments

- < Over 100 landowners have been visited by a Partners Program representative.
- < 30 landowners have had projects completed.
- < 514 acres of wetland and riparian habitat have been restored.
- < 17 miles of stream bank have been restored.



South Fork of Potts Creek - Bank erosion due to cattle overuse.

Future Needs

- C Restore 15,000 acres of riparian habitat and 10,000 acres of forest.
- C Restore 10,000 miles of stream habitat primarily in the upper Potomac River drainage.
- C Restore or enhance 10,000 acres of wetlands.
- C Establish 1,000 acres of warm-season grasses.
- C Work with 2,000 private landowners across West Virginia to improve fish and wildlife habitat on their property.



Same stream bank after reseeding and fence installation to manage cattle access to the creek.

CONTACT



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