



NEW YORK

“This is the best thing the government ever did for me,” said Harold Cole about the 26 acres of restored wetlands on his St. Lawrence County property. Mr. Cole is one of the hundreds of landowners in the county, and among the more than 2,000 in New York, who have joined with the U.S. Fish and Wildlife Service to restore wildlife habitat on their lands. Through its innovative Partners for Fish and Wildlife Program, the Service provides technical advice and funding to help landowners like Mr. Cole realize their goal of making their land a better place for wildlife and in the process a better place for themselves.



Introduction and General Description

The inception of the Partners for Fish and Wildlife program in New York began in 1990 and has been growing at a steady pace ever since. In New York the program has focused on restoring several types of habitats. Most recently, the program has become increasingly involved in restoring in-stream aquatic habitats. Fish and wildlife habitats that were once in a degraded state are now providing important cover, food, water and breeding areas for many species.

New York Activities

- ✓ Wetland restoration
- ✓ Grassland restoration
- ✓ Riparian fencing
- ✓ Bioengineering
- ✓ Restore threatened and endangered species habitat
- ✓ In-stream restoration
- ✓ And others.

Habitats of Special Concern

The Partners Program has worked with other partners to put gates on bat caves so that the bats aren't harassed by visitors to the hibernacula (caves where bats hibernate). Such visits force the animals to expend energy reserves that are needed to get them through their winter hibernation. Other projects have involved clearing areas to plant wild blue lupine, the plant which is relied on by the endangered Karner blue butterfly. The Partners Program concentrates on constructing these projects using a wide variety of funding sources with a typical cost of \$5,000 to \$10,000 per project.

Threats

Lost Habitats

Since settlement in the 1600's, New York's vast forests, wetlands, streams, and grasslands have fueled the State's growth and development. Many of the State's natural resources were greatly diminished or degraded as the landscape was changed to

provide for agriculture and urban development. During this period, 60 percent of the wetlands were drained or filled, 99.9 percent of the native grasslands were converted to other uses, more than 5,000 dams were constructed that blocked fish movement, and miles of stream were channelized. In addition, the extensive northern hardwood and spruce-fir forests were cut and cleared. As these habitats changed, so did the fish and wildlife populations that relied on them; leading to declines in waterfowl, grassland nesting birds, anadromous fish, and many forest dependent species.

Conservation Strategies

Wetlands

The focus on wetlands was due to the importance they play in the lives of so many migratory birds which is the Service's responsibility to protect. Early restoration techniques focused on

returning hydrology to formerly drained wetlands as economically as possible. Drainage tile was broken and small berms and ditch plugs were constructed to block the water from draining the site. These techniques have been refined over the years and now wetland restoration projects are carefully crafted to blend into the landscape and involve a variety of activities such as: creating micro-topography; establishing complexes of small seasonal wetlands; and, restoring larger permanent wetlands to blend into the natural landscape. The cost for this restoration averages about \$700 per acre.

Wetland restoration projects have focused in the Lake Plain, along Lake Ontario, and the St. Lawrence River Valley. This area contains the densest breeding populations of waterfowl in the Northeast as well as having three components of the National Wildlife Refuge System operating in that ecosystem.

Grasslands

Grasslands are required for nesting habitat for many species of migratory birds. 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 led the way by obtaining the first native grass seed drill to work on private lands in the State. Other grassland management techniques include mowing, burning, planting both warm- and cool-season grasses, and invasive species removal. Costs for this work range from \$50 per acre to \$500 per acre, depending on the intensity of the restoration techniques. The focus area for grassland habitat is in the St. Lawrence Valley, which is the largest grassland habitat in the Northeast. This region's grassland and old field habitats support some of the largest nesting populations of grassland bird species in eastern North America.

Streams and Riparian Areas



Restored wetland after five years.

Streams and riparian areas support fish, mussels, amphibians and many other species needed for a diverse community. One restoration technique that is cost effective and valued by natural resource advocates as well as farm groups and landowners is streambank fencing. The Partners Program purchased equipment and provided labor to protect streams from grazing 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 rest-rotation grazing system that allows the profitable yet wildlife friendly use of the land. In-stream work concentrates on the concept of natural channel design that reduces sediment, improves fish and wildlife habitat and cost-effectively creates a stable stream. This is a state-of-the-art approach that requires special expertise but will have outstanding payoff for New York's streams. In-stream projects typically cost \$50 per linear foot of restored stream.

Invasive Species

Purple loosestrife, a European wetland plant, has invaded many wetlands in New York to the point of being the dominant plant in many wetlands. This plant outcompetes most native species, reducing the plant diversity and keeping native wetland plants that provide important food and cover for wildlife from proliferating. Wetland managers have tried to control purple loosestrife with herbicides, water level regulation, hand pulling and covering with black plastic but meeting with very little success.

The Partners Program has worked with Cornell University to release



beetles that feed only on loosestrife which stresses the plant and reduces its vigor so native plants can better compete. Another common invasive plant is multi-flora rose. This plant is common in old pastures and can dominate a grassland in a few years, if not controlled. The Partners Program has worked to reduce multiflora rose invasions of fields to make those fields more attractive for grassland nesting birds. Cost for invasive species projects have ranged from \$50 to \$500 per acre.

Outdoor Classrooms

The Partners Program has worked with schools and nature centers throughout New York State to restore wetlands, grasslands, and

savannah that are used in conjunction with environmental educational programs. In addition, Partners staff frequently provide presentations at these sites to teach about the biological values these habitats provide. The Partners Program leverages funds with many other sources to provide these projects which typically cost the Service about \$5,000 per project.

Farming for Wildlife and Profit

In addition to habitat restoration, the Partners Program also improves the effectiveness of the conservation provisions of the 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 the more extensive funding of the Department of Agriculture with the biological expertise of the Partners Program in order to benefit the public.

The Partners Program recognizes that agricultural lands are more valuable to wildlife than urban development and works with agricultural producers to keep farms both economically and biologically productive. The special expertise of Partners staff has affected more than 1,000,000 acres of private lands enrolled in various USDA conservation programs.



BEFORE: Drained wetland.



AFTER: 20-acre wetland restoration.

Partners

Natural Resources Conservation Service
 Farm Service Agency
 National Fish and Wildlife Foundation
 New York State Department of Environmental Conservation
 State University of New York at Morrisville
 State University of New York, Environmental Science and Forestry
 State University of New York at Brockport
 Town of Mendon
 Town of Dekalb
 Schuyler County EMC
 Cattaraugus County SWCD

Chautaugus County SWCD
 Steuben County SWCD
 Cayuga County SWCD
 Oneida County SWCD
 Franklin County SWCD
 Oswego County SWCD
 Madison County SWCD
 Greene County SWCD
 Chemung County SWCD
 St. Lawrence County SWCD
 Watershed Agriculture Council
 The Nature Conservancy
 Ducks Unlimited
 Audubon Society
 Trout Unlimited
 Pheasants Forever

Ruffed Grouse Society
 Huguenot Society
 Albany Pine Bush
 Camp Saratoga
 Saratoga Land Conservancy
 Mohonk Preserve
 Museum of the Hudson Highlands
 Greenwood Conservancy
 Niagara Mohawk Electric Company
 Great Swamp Conservancy
 Student Conservation Association
 Boy Scouts of America
 St. Lawrence Valley Sportsmen's Club

Accomplishments

- ▶ Over 2,000 people have asked about the program
- ▶ 1,650 landowners visited by Partners staff
- ▶ 481 landowners have had projects completed
- ▶ 9,916 acres of wetland habitat restored
- ▶ 3,371 acres of grassland habitat restored
- ▶ 30 miles of riparian habitat restored
- ▶ 975 sites have been constructed
- ▶ Partners has worked with over 30 partners, including Federal and State agencies, local governments, and private organizations
- ▶ 5 educational facilities have wildlife habitat restored on school grounds to be used as outdoor classrooms

Future Needs

- ▶ Restore or enhance 300,000 acres of wetlands, primarily in the St. Lawrence Valley and Lake Ontario Plain because these are the most productive wetlands used by waterfowl, shorebirds and wading birds, and because they can be effectively restored.
- ▶ Manage/establish 100,000 acres of grassland, especially in the St. Lawrence Valley because this area has the highest densities of grassland nesting birds in eastern North America.
- ▶ Restore, protect, and enhance 10,000 miles of stream habitat, working primarily in the Catskills (the cradle of fly fishing in America) where studies have shown fishing to be worth more than \$9 million to the local economy and in the Finger Lakes area where important streams are in desperate need of habitat improvements.
- ▶ Expand habitat available to species of concern, concentrating in the Albany Pine Bush to benefit the Karner blue butterfly and in the Allegheny drainage area, the most biologically diverse watershed in the Northeast.
- ▶ Work with 500,000 private landowners across New York State to improve habitat on their property.



BEFORE: Trampled, over-grazed stream banks.



AFTER: Dense growth of vegetation one year after livestock fencing was installed.

CONTACT



Carl Schwartz
Partners for Fish and Wildlife Program
U.S. Fish and Wildlife Service
New York Field Office
3817 Luker Road
Cortland, NY 13045
607 753-9334 **607 753-9699 (Fax)**

July 2001