



KENTUCKY

Introduction and General Description

The Commonwealth of Kentucky extends from the Appalachian Mountains and Eastern Coal Fields physiographic province in the east to the Mississippi River and the Jackson Purchase physiographic province in the west. Kentucky has over 89,000 miles of streams that occur within 13 major watersheds. The State's streams support over 200 species of fish, while approximately 35 percent of the 300 species of freshwater mussels known to occur within the United States occur (or occurred) within the State's waters.

The growth in human population and its associated development, along with changes in land use practices, have resulted in significant changes in the State's natural resources. Over 50 percent of the State's former wetlands have been lost, most streams in west Kentucky have been channelized, and 20 percent of the streams across the State have been impounded. Additionally, over 35 percent of the river miles within the State do not meet or only partially meet their water quality designated uses, fish consumption advisories cover almost 800 miles of river, and human water contact is not

advisable in over 80 stream miles.

Habitats of Special Concern

Although the streams of Kentucky support a high diversity of aquatic fauna, many species of freshwater mussels and fish inhabiting the streams are considered rare or are federally listed. Kentucky streams harbor 65 species of fish and mussels that are listed as either federally threatened or endangered or are considered at risk. Many of these species occur within the middle and upper reaches of watersheds that are influenced directly by surface runoff from various land use practices.

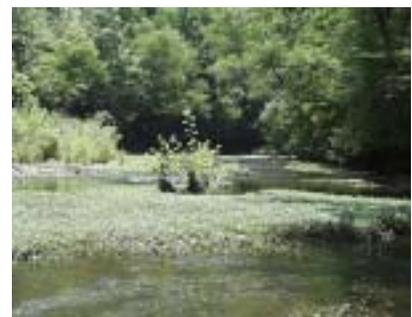
Threats

Habitat loss associated with alteration of stream and riparian habitats and water quality degradation from non-point sources are the greatest threats to aquatic resources within the upper reaches of many watersheds. As you move downstream from the headwaters, you see that point source and multiple use issues increase the complexity of being able to maintain healthy communities of native aquatic organisms.

Conservation Strategies

Partners for Fish and Wildlife conservation activities are concentrated in the headwater reaches of tributary streams due to the benefits that can be derived from only slight modifications in land use practices. The agricultural community holds the greatest potential to improve habitat due to their land management capabilities and a general desire to manage for both profit and wildlife. Additionally, due to the availability of various agricultural programs and incentives, funds can be leveraged to accomplish more restoration work.

Typical Partners Program activities include fencing to exclude livestock from streams, providing alternative water supplies, streambank stabilization, riparian



Rockcastle River

reforestation, and restoration of in-stream habitats. Removing livestock from a stream, providing alternative water supplies, and reforestation of riparian habitat cost approximately \$13,000 per mile in these headwater reaches.

Streambank stabilization and restoration of in-stream habitats is significantly more expensive and can exceed \$50,000 per mile.



Cattle trampling stream banks prior to Partners project.



Site after completion of Partner's project.

Partners

Kentucky Division of Conservation
Kentucky Department of Local Governments
Kentucky Department of Fish and Wildlife Resources
Kentucky State Nature Preserves Commission
Kentucky Division of Water
Kentucky Division of Forestry
Kentucky Chapter of The Nature Conservancy
Environmental Protection Agency
Farm Services Agency
Mammoth Cave National Park
Natural Resources Conservation Service
Tennessee Valley Authority
U.S. Forest Service
U.S. Geological Survey
U.S. Army Corps of Engineers
Buck Creek Working Group
East Kentucky Power
Eastern Kentucky University
Jackson Purchase RC and D
Jackson County Development Association
Northern Jackson County Commission
Powell County School Board
Personal Responsibility in a Desired Environment
Rockcastle River Roundtable
Steele-Reese Foundation
Toyota
Upper Cumberland Waterwatch Group

Accomplishments

The Service's Partners for Fish and Wildlife Program started in earnest within the State of Kentucky in 1998. From 1998 through 2000, 35 landowners have partnered with the Service on habitat restoration activities resulting in the restoration and protection of approximately 14 miles of streams and associated riparian forest.

Future Needs

- 49,000 miles of degraded streams are in need of restoration.
- Over 1,400,000 acres of lost or degraded wetlands are in need of restoration.

CONTACT



J. Brent Harrel
Partners for Fish and Wildlife Program
U.S. Fish and Wildlife Service
3761 Georgetown Road
Frantfort, KY 40601
502 695-0468 (Fax) 502 695-0468

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