



Fisheries and Habitat Conservation

Fish & Wildlife Conservation Offices Fisheries Conservation

America's fish and other aquatic resources are among the *richest* in the world; Fish and Wildlife Conservation Offices are working to keep them that way.

here are almost 400 aquatic species in the United States that either have, or need, special protection in some or part of their natural or historic range. Fish and Wildlife Conservation Offices (FWCOs) work at the intersection between fisheries science and management, developing and using the latest techniques to tackle the nation's most challenging issues in fisheries science, management, and conservation.

SCIENCE

Fisheries science is an integrative approach to understanding the biology, ecology, and economics of a fished species with the goal of sustainable management. Fisheries



Arizona FWCO biologists release traps to monitor endangered Rio Yaqui fish populations.



Electroshocking is an efficient way to measure fish abundance for some freshwater species.

science is an integral component of the Fish and Wildlife Conservation Program and provides a solid basis for the Program's efforts. We:

- conduct stock assessments
- monitor population levels and responses to environmental changes
- map habitat usage
- identify pathogens and diseases
- evaluate population structure using genetics

MANAGEMENT

In managing our nation's fisheries, FWCOs ensure that these vital resources are available for Americans now and in the generations to come. FWCO biologists are proud to have played a critical role in the protection and recovery of many species, including Apache trout. Added to the endangered species list in 1967, the Apache trout was down-listed to threatened and is currently on the verge of becoming the first Federally-threatened fish to be delisted as a result of recovery efforts. In 2008, biologists from the Arizona Fish and Wildlife Conservation Office reintroduced Apache trout into two streams, augmented two additional populations, restored 9 miles of habitat, and mechanically removed non-native trout from four streams.



A Chesapeake Bay FWCO biologist tags a striped bass for a migration study.

Self-sustaining populations now exist in 21 streams, comprising over 140 miles of historic habitat.

CONSERVATION

FWCOs apply scientific data to focus conservation activities on high-priority species and watersheds. We are committed to protecting and maintaining stable populations and healthy habitats and restoring degraded systems and depleted populations. Some recent projects include:

- The Carterville FWCO is providing technical assistance to Mingo National Wildlife Refuge, MO for the reintroduction of the imperiled alligator gar. The National Wildlife Refuge system provides important habitat and refuge to many fish and wildlife populations, as well as, provide a variety of recreational opportunities for the American people.
- In 2007, 65 zebra mussel monitoring assessments



Non-native zebra mussels stifle the growth of native mussels.



FWCO biologists release an 80 inch tagged alligator gar to monitor its movement and home range in Tishomingo National Wildlife Refuge, OK.

were conducted by the New Mexico FWCO to prevent new introductions of the aquatic invader. In New Mexico, lake bound traffic from out-of-state boaters provides for the potential invasions of exotic invertebrates.

- The Columbia River Fisheries Program Office is developing and validating spawning and rearing habitat suitability models for the threatened bull trout in the mainstem and South Fork Walla Walla rivers, WA. This project will provide technical data to improve bull trout recovery efforts and habitat protection.
- In Spring 2008, stream restoration began on a 6-mile

section of the Little Turkey River, IA. National Fish Habitat Action Plan funds are being used to stabilize 3,000 ft. of eroding stream bank for brook trout, slimy sculpin, and southern redbelly dace.



Radio transmitters, like the one attached to this bull trout, provide data on location and habitat utilization.

What is a Native Species?

A native species is a plant or animal that has adapted to a particular environment over many years. These species have evolved together and have specific habitat and tropic ecology links to each other.

Why is Native Conservation Important?

Many native species populations are declining due to degraded habitat and the spread of aquatic nuisance species. Without our help, some of these aquatic natives may never recover and eventually will become extinct. FWCOs work to restore native fisheries and their habitats by barrier removal, nuisance species management, and habitat improvement, among other methods. Conservation of these aquatic natives benefits to our Nation's ecology and economy.

For more information about Fisheries Conservation, contact the U.S. Fish and Wildlife Service's Division of Fisheries and Habitat Conservation at (202) 208-6394 or visit http://www.fws.gov/fisheries/fwco/

> U.S. Fish and Wildlife Service (800) 344-WILD http://www.fws.gov Fall 2008