



U.S. Fish & Wildlife Service

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.

There are almost 400 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.

FISHERIES 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 science is an integral component of



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.

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
- test gear efficiency
- evaluate population structure using genetics

MANAGEMENT

Fisheries management is a means of regulating commercial and recreational fishing with the objective of maximizing sustainable yield on fished stocks while protecting the resources from collapse. FWCOs are proud to have played a critical role in the recovery of striped bass, a major commercial and recreational species on the brink. After a moratorium closed the fisheries, FWCOs participated in a coast-wide tagging and hatchery program to study life history characteristics and supplement wild stocks in severely depleted rivers. The fisheries have reopened and striped bass now are reported in record numbers.



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

CONSERVATION

The ultimate mission of the Fish and Wildlife Service is *to conserve, protect, and enhance fish, wildlife, plants, and their habitats*. There is no simple solution to restoring and maintaining aquatic species and their habitats, but the FWCOs work diligently with partners to undertake important projects with on-the-ground results. 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 were conducted by the New Mexico FWCO to prevent new



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.

- 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
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