



## Columbia Fishery Resources Office Accomplishment Report

August 2004



### Partnerships and Accountability

#### Asian Carp Workgroup

The Asian Carp Workgroup meeting was held on August 26, 2004. This meeting was a continuation of the Workgroup's spring meeting held in Columbia, Missouri. The Workgroup includes state and federal agencies as well as representatives from the aquaculture industry. A majority of the meeting entailed refining goals and objectives of the Workgroup and the creation of subgroups to tackle specific tasks for the group. The workshop and meetings were an excellent opportunity for Columbia FRO staff to explain how the Service is working in cooperation with state, universities, federal and non-governmental partners to control Asian carp populations and restore pallid sturgeon populations in the Missouri River.

Contact: Andy Starostka

### Aquatic Species Conservation and Management

#### 2003 Summary of Pallid Sturgeon Monitoring Efforts



*Trawling for pallid sturgeon in the Lower Missouri River.*

Columbia FRO continued its efforts to document survival, distribution and habitat use of pallid sturgeon in the Lower Missouri River.

Six wild pallids were collected along with 15 recaptures. This number of pallid captures dwarfs any previous year's catch. Information emerging from the recapture of stocked fish shows in 195 miles of downstream sampling, fish have only been captured within 60 miles of the stocking site. Also, more than one pallid sturgeon has been found at the same sampling site when successive samples were taken. Two adult pallid sturgeon were implanted this year

with ultra-sonic tags for tracking by USGS Columbia Environmental Research Center. One of those fish was recaptured to extract last year's archival tag before re-implanting. Along with pallid sturgeon, 5,512 shovelnose sturgeon, 125 blue suckers, and 58 state endangered lake sturgeon were recaptured this year. Additional modifications to gear and sampling design in the coming year will continue to increase our ability to sample these rare fish.

Contact: Wyatt Doyle

## **Leadership in Science and Technology**

### **New Science Skills to Benefit Pallid Sturgeon Broodstock Collection**

Fishery Biologist Andy Starostka traveled to Madison Wisconsin August 22-26 to attend a Sturgeon Reproductive Biology Workshop and a meeting of the Asian Carp Workgroup held in conjunction with the American Fisheries Society Annual Meeting. The Sturgeon Reproductive workshop was held at the Water Resources Institute in Milwaukee, Wisconsin Sunday August, 22. The morning session consisted of class room lecturing on basic sturgeon reproductive biology and obtaining background information necessary for the afternoon lab practical. The afternoon session focused on sexing and staging lake sturgeon gonads to determine if the fish could be successfully spawned. We also obtained experience using medical grade ultrasound equipment on live sturgeon to determine sex and maturity of gonads. The skills acquired during this workshop will be utilized during the spring 2005 field season when Columbia FRO will attempt to collect wild pallid sturgeon from the Lower Missouri River to use as broodstock in recovery efforts.

Contact: Andy Starostka

## **Aquatic Habitat Conservation and Management**

### **Lower Missouri River side channel evaluation project**

In cooperation with the Big Muddy National Fish and Wildlife Refuge, Columbia FRO staff assessed fish communities in side channels managed by the refuge in the Lower Missouri River. Fish community structure and habitat use vs. habitat availability in relation to river discharge is the focus of this evaluation project. Lisbon chute, Cranberry chute, and Overton chute are the three side channels included in the study. A hatchery reared pallid sturgeon was collected by trammel net in Lisbon chute near the outlet of the side channel. A pallid was also captured by trammel net in the upper half of Cranberry chute. Lisbon chute (RM218) is approximately 2 miles in length and was the first



*Lower Missouri River side channel.*

naturally formed side channel (1996) in the Lower Missouri since the river was developed for flood control, navigation and irrigation. Pallid sturgeon have not been collected in this side channel since 1999. A braided channel with swift velocities is characteristic of the upper half of the side channel and a defined thalweg with low velocities is characteristic of the lower half. Cranberry chute (RM280), a natural remnant, is approximately 0.5 mile in length with swift velocities throughout and is dominated by a sandy substrate. Blue suckers and shovelnose sturgeon are commonly found in and adjacent to this side channel-chute. Both of these side channels, though very different, provide a diversity of habitat for a variety of native fishes. Fish community and habitat data collected from these side channels provide refuge and river managers with sound scientific information that can be used to identify opportunities to increase the quantity and quality of aquatic habitats for native fishes.

Contact: Louise Mauldin

## **Healthy Fish Habitats Workshop**

Project Leader Tracy Hill traveled to Madison Wisconsin on August 22 to attend the Healthy Fish Habitats workshop held in conjunction with the 134<sup>th</sup> Annual Meeting of the American Fisheries Society. The purpose of the meeting was to establish national scientific criteria for measurement of aquatic habitat health throughout North America. Meeting participants formed breakout groups to purpose measures that could be used to quantify aquatic habitat health at various geographic scales. The breakout groups were also asked to provide a list of standardized measures needed to quantify habitat conditions. This workshop was an important component of the National Fish Habitat Initiative. The goal of a National Fish Habitat Initiative is to focus national attention and resources on common priorities to improve aquatic habitat health. Once fully established and implemented the Initiative will foster geographically-focused, locally driven and scientifically based partnerships to protect, restore and enhance aquatic habitats and help reverse declines in aquatic species. Approximately 200 individuals from state, federal, university and nongovernmental organizations participated in the workshop. Service involvement in this initiative provides an opportunity to ensure that habitat conservation and restoration is an integral component of management actions. Aquatic habitat conservation and management is an important focus area of the Strategic Vision for the Service's Fisheries Program.

**Contact: Tracy Hill**

## **Workforce Management**

### **Columbia FRO staff expands professional network**

Project Leader Tracy Hill and Fishery Biologists Louise Mauldin and Andy Starostka attended the 134<sup>th</sup> Annual Meeting of the American Fisheries Society in Madison Wisconsin. The meeting was an excellent opportunity for Columbia FRO staff to explain how the Service is working in cooperation with state, universities, federal and non-governmental partners to restore pallid sturgeon populations and control Asian carp populations in the Missouri River. The AFS conference provided Columbia FRO staff an opportunity to interact with fisheries professionals from across the United States.

**Contact: Andy Starostka**

### **Louise Mauldin receives training in stream restoration**

Prior to the 134<sup>th</sup> Annual Meeting of the American Fisheries Society in Madison, Wisconsin, Columbia FRO Fishery Biologist, Louise Mauldin, attended a river morphology and restoration overview short course instructed by James Gracie of Brightwater, Inc. Topics included classification of streams based on morphological properties, hydrology and hydraulics of rivers, and natural channel restoration approaches. Material was presented using real life examples, case studies, and class exercises. Increased knowledge of river morphology and the processes involved in the development and implementation of restoration projects is beneficial, increasing opportunities for professional achievement by taking a more active or leadership type role in stream restoration projects.

**Contact: Louise Mauldin**