



# U.S. FISH AND WILDLIFE SERVICE COLUMBIA FISHERY RESOURCES OFFICE ACCOMPLISHMENT REPORT

*...Dedicated to the Conservation of Big River Ecosystems in America's Heartland.*

## AQUATIC SPECIES CONSERVATION AND MANAGEMENT

### USFWS Director and Pallid Sturgeon on the Big Muddy



*Fishery Biologist-Louise Mauldin with pallid sturgeon. From left to right: E.S. Field Supervisor-Charlie Scott, Acting Director-Matt Hogan and Refuge Manager-Tom Bell.*

U.S. Fish and Wildlife Service Acting Director, Matt Hogan met with Columbia FRO on March 31<sup>st</sup>. Mr. Hogan along with representatives of Ecological Services, Private Lands, and the Big Muddy Refuge took a short tour of the Missouri River. The Overton Bottoms unit of the Big Muddy National Fish and Wildlife Refuge was selected due to its close proximity to Columbia and to highlight ongoing cooperative efforts with Army Corps of Engineers. During the tour Mr. Hogan was briefed on the various programs and projects FWS staff were currently working on and was informed of important issues surrounding the Missouri River.

During his visit, Columbia FRO staff set gill nets at Overton Bottoms in an effort to capture pallid sturgeon brood stock for the Pallid Sturgeon Recovery Program. Within a few minutes of leaving the boat ramp, the acting director received a first hand look at a pallid sturgeon captured near a recently constructed pilot chute.



Louise Mauldin describing the difference in shovelnose and pallid sturgeon to Matt Hogan.



The pallid sturgeon was transported to the Missouri Department of Conservation's Blind Pony Fish Hatchery to be used as broodstock in pallid sturgeon recovery efforts. The addition of this wild fish to the broodstock program will augment genetic diversity and provide more offspring for future stocking. Collection of this fish is in keeping with the Native Species Goal of the Fisheries Program Vision for the Future by aiding in recovering fish populations protected under the Endangered Species Act.

Louise M. Mauldin

**Pallid Brood-stock collection for Missouri River Stocking Program**

In late March, Missouri River biologists, hatchery managers and geneticists identified an eminent need to collect pallid sturgeon brood-stock from the Lower Missouri River as an alternative to using fish originating from the Missouri River Upper Basin. Due to the danger in collecting and hauling sturgeon in warm temperatures, the group suggested an immediate effort be made to collect local brood stock to produce progeny for next year's stocking. In response, Columbia FRO shifted its sampling efforts to finding mature pallid sturgeon for propagation at Gavins Point National Fish Hatchery. In the first three days of effort, biologists collected five mature fish for the stocking program. This catch

Biologists Corey Lee, Colby Wrasse and Nick Frohnauer load Missouri River pallid sturgeon brood stock for transport..

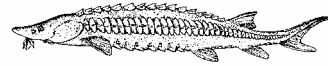


exceeds the previous five months effort which resulted in only 3 adult fish captured. These were the only pallid sturgeon able to be collected and used for propagation from six multi-state crews working from Nebraska to the Mississippi River. Water

temperatures now exceed the safe collection threshold, meaning these fish will be the only available brood-stock from the Lower Missouri to produce pallids for stocking in 2006. A collaborative effort by Missouri Department of Conservation's, Blind Pony Hatchery, allowed fish to be promptly transported to South Dakota.

Endangered pallid sturgeon restoration within the Missouri River will be enhanced by having a 2005 year-class of fish representing genetic diversity from the Lower River. Our crew's ability to identify sites to collect these fish was paramount to quick collection and relationships between State and Federal hatchery partners were strengthened through this important collaborative effort.

Wyatt J. Doyle



## AQUATIC SPECIES CONSERVATION AND MANAGEMENT

### Middle Basin Pallid Sturgeon Work Group

The Middle Basin Pallid Sturgeon Work Group met in March in Kansas City, MO. The purpose for the meeting was to make decisions concerning pallid sturgeon recovery in RPA #4 of the Missouri River (Gavins Pt. Dam to the mouth at St. Louis, MO). The group had a full agenda and made several recommendations to the Pallid Sturgeon Recovery Team. Key recommendations included the suggestion to stock approximately 3,600 pallid sturgeon being raised at the Neosho National Fish Hatchery into RPA #4, the suggestion to stock 6,200 pallid sturgeon being raised at Garrison Dam National Fish Hatchery and Gavins Pt. National Fish Hatchery into RPA #4. Other important outcomes of the meeting included the commitment of the group to seek gravid pallid sturgeon from RPA #4 to serve as a source of local brood stock for producing progeny for stocking. The group will also prioritize the research needs identified in the Ruckelshaus document, and provide genetic questions/concerns for the Recovery Team's genetics advisory panel. Interagency participation in the Middle Basin Pallid Sturgeon Work Group ensures cooperation and agreement for recovery efforts of pallid sturgeon in RPA #4 of the Missouri River. The effort is consistent with and supportive of the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" priorities of the Fisheries Program Vision for the Future.



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*Tracy D. Hill*

### Missouri River Agency Coordination Team Meeting

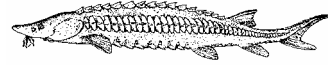


Project Leader Tracy Hill traveled to St. Joseph, MO on March 2<sup>nd</sup> to attend the quarterly meeting of the Missouri River Recovery, Agency Coordination Team (ACT). The meetings are intended to brief the state and federal agencies on the progress of this program. Under the Missouri River Fish and Wildlife Mitigation Project, a variety of aquatic and terrestrial habitats acquired by the Corps have been restored and developed in the Missouri River and its floodplain to enhance habitats for fish and wildlife. Monitoring will enable the ACT to determine whether the mitigation sites are performing as expected. Columbia FRO continues to partner with state agencies to conserve and increase native fish populations in the Missouri River and to identify and take appropriate actions that

will help achieve desired resource goals and outcomes. Participation in this activity is consistent with the "Aquatic Habitat Conservation and Management" component of the Service's Fisheries Program Vision for the Future.

*Tracy D. Hill*





## PARTNERSHIPS AND ACCOUNTABILITY

### Fort Leavenworth, Fishery Survey Winter Field Work Completed

Anecdotal information surfaced that a pallid sturgeon had been captured in Corral Creek, a tributary of the Missouri River that runs through the Army installation. In response, Fort

Leavenworth has contracted with the Columbia FRO to further explore pallid sturgeon presence and community structure in Corral Creek tributary and the adjacent stretch of Missouri River.



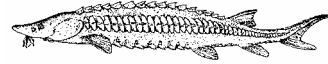
*Blue sucker, species of conservation concern*

The sampling efforts took place during the week of March 1, 2005 including 14 overnight experimental gillnet sets and 11 trammel net drifts. Blue sucker was the most common species captured while trammel netting. Five shovelnose sturgeons were captured with trammel nets. Gillnets caught 21 different species with goldeye being the most abundant. Ninety-six

shovelnose sturgeon and one shovelnose x pallid sturgeon hybrid were captured and a coded wire tagged paddlefish was recaptured. Catch rates and species diversity were comparable to other Missouri River segments for the winter sampling season. Sampling will continue this spring targeting pallid and shovelnose sturgeon in the lower portions of the tributaries, tributary mouths and potential pre-spawn staging areas. A more complete community assessment is also planned for the summer.

Interagency cooperative efforts between the Columbia FRO and Fort Leavenworth may lead to future partnerships with other military installations and is an example of achieving the “Partnership Goal” of the Fisheries Program Vision for the Future.

*Nicholas K. Frohnauer*



### **Presentation at Carnival of Communication**

Fishery Biologist Wyatt Doyle represented participating agencies within the Pallid Sturgeon Monitoring Program by presenting results of pallid sturgeon collection since the programs inception. At the March 5-6 meeting Doyle along with two other state and federal biologists presented additional data in an effort to inform funding agencies, agency leadership and other Missouri River stakeholders about where sampling efforts have taken the program and our vision of the future. The Columbia FRO has been part of pallid sturgeon monitoring since 1999 and continues to provide leadership in recovery of the species.

The ability of Columbia FRO to work in collaboration with multiple agencies and share information to non-scientists promotes accountability and enhances our ability to recover the species through ensured funding and identification of common goals.

*Wyatt J. Doyle*

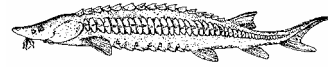
### **Smithton Middle School Career Day**

Fishery Biologist, Jeff Finley, represented the Columbia FRO at Smithton Middle School Career Day on March 8<sup>th</sup>. Students were given a slide show presentation regarding career opportunities within the Fish and Wildlife Service emphasizing fisheries conservation. The 7<sup>th</sup> grade students were then given the opportunity to learn more about the diverse fisheries of the Missouri River in a question and answer session. They were very curious about the specific adaptations of paddlefish, sturgeon, catfish, drum, gar and buffalo to living in a turbid environment. Fiberglass reproductions of native fish were a huge hit. The school is closely located to the Columbia FRO thus prompting many questions about equipment and operations they frequently observe from their classes. Smithton Middle School Faculty expressed a desire to partner with Columbia FRO in initiating a mentoring program.



Outreach opportunities such as these reach beyond the classroom. Children impressed by such programs share their experiences with their families and begin making life choices in their adolescence. By establishing open lines of communication and influencing the leaders of tomorrow with sound science these efforts support the “Partnerships and Accountability” and “Public Use” goals of the Fisheries Program Vision for the Future.

*Jeff M. Finley*



## PUBLIC USE

### **USFWS and Bass Pro Shops- Aquatic Education with New Aquarium in Columbia, MO**



Bass Pro Shops opened a new Sportsman's Warehouse in Columbia, Missouri on Thursday, March 31. The Grand Opening was preceded by an educational forum called "Evening for Conservation" on Wednesday, March 30. The US Fish and Wildlife Service, Missouri Department of Conservation, and Bass Pro Shops partnered to sponsor this event. The new store contains an 11,000 gallon aquarium stocked with fish collected from the Missouri River System and elsewhere. Fishery Biologists Corey Lee and Andy Starostka of the Columbia FRO along with Fish and Wildlife Biologist Andy Roberts of the Columbia Ecological Services Field Office provided interpretive programming to the public informing them about various fish, the aquarium and aquatic resources of the Missouri River. The attendees asked many questions and were eager to learn about the Service's programs involving the Missouri River and its floodplain. The evening was a success with hundreds of people attending the event. Open lines of communication with stakeholders in the Missouri River fishery is critical in establishing an active constituency for aquatic resource conservation. Participating in Public Outreach events such as an Evening for Conservation allows the Columbia FRO to assist the Service's Fishery program with achieving its "Public Use" priority of the Fisheries Program Vision for the Future.

*Corey W. Lee*

### **Celebrating Habitat**

Project Leader Tracy Hill traveled to Washington DC during the week of 7 March to participate in the Celebrating Habitat activities sponsored by the Washington Office Fisheries and Habitat Conservation. The purpose for the week long event was to help educate members of Congress on the important work that the Service's Fisheries program does to conserve, restore, and enhance the nation's aquatic resources. Fisheries and Habitat Conservation set a goal to visit 200 members of Congress to express its appreciation for funding provided in the 2005 budget to restore aquatic habitat. The key message of "Providing Habitat CPR for Healthy Fish and Wildlife, Healthy Habitat, Healthy Economies and Healthy People" was delivered by fisheries staff to over 203 members. In addition to the opportunity to interact with elected officials, the week's activities also included the Second Annual Hook and Cook Reception. The reception capped off the week of "Celebrating Habitat". This event addressed the Fisheries Vision priority for "Public Use".

*Tracy D. Hill*



## LEADERSHIP IN SCIENCE AND TECHNOLOGY

### Pallid Sturgeon Passes Through Gavins Point Dam

Columbia FRO recaptured a 1997 year class pallid sturgeon known to have traveled over 700 miles downstream and through Gavins Point Dam. This represents the 3<sup>rd</sup> stocked pallid sturgeon to have gone through Gavins Point. The other two were captured by the State of Nebraska 200 miles downstream of the dam. Currently, this represents the longest recorded distance a stocked pallid sturgeon has traveled. Other information gathered from this recapture was the lasting effect of latex elastomere marks. It was unknown exactly how long these markings would be visible at the time of tagging. However, this fish was easily detected by its 3 distinct red marks proving this tagging method is viable past eight years. Because the PIT tag used in this fish was corrupted, the colored markings enabled biologists to determine stocking location, survival, age and growth of the fish. The recapture of this fish has provided us with new data from the first pallids stocked in the Lower Missouri River by Gavins Point National Fish Hatchery.

Increasing our understanding of endangered species movements and habits will enable hatcheries and biologists to make better decisions about genetic population issues and stocking success. Implementation of elastomere technology propels our project forward to obtaining better data than what was previously available.



Wyatt J. Doyle

### Technician Receives Animal Care and Chemical Management Training

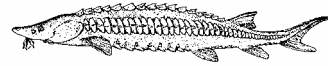


Biological Science Technician Jennifer Johnson of the Columbia FRO completed training offered by the University of Missouri on basic animal care and use and chemical management. The basic animal care course focused on ethics and responsibilities, occupational health and safety, concepts and procedures while caring for animals. The chemical management course presented information regarding identification, acquisition, handling, and disposal of hazardous chemical materials. Topics covered include chemical safety, personal protection, storage, material disposal, and record keeping responsibilities.

This training fulfills the Leadership in Science and Technology component of the Fisheries Program Strategic Vision by providing important tools to aid in conservation and management. Knowledge obtained from the animal care training will be used to ensure that all specimens collected while sampling are given the appropriate care until they are released. Chemical management training provided important information regarding chemical storage, proper handling techniques and proper disposal. This information will be used to properly manage chemicals at the Columbia Fishery Resources Office.

Jennifer L. Johnson





## **Columbia FRO Collaborates with USGS on Sturgeon Research**



Throughout the month of March, Columbia Fishery Resources Office (FRO) continued its partnership with the U.S. Geological Survey’s Columbia Environmental Research Center (USGS). The cooperative efforts of the Columbia FRO and USGS are to conduct pallid sturgeon research on the Missouri River. Both offices are dedicated to recovering this federally endangered species by identifying its biological requirements. Using gill nets, Columbia FRO captured large, gravid female shovelnose sturgeon, a closely related species, for biologists from USGS to implant with sonic transmitters. By following the movements of sturgeon throughout the spring,



*USGS’s Aaron Delonay and Project leader-Tracy Hill surgically implant a telemetry device into a sturgeon.*

biologists will be able to locate their spawning sites. Understanding where sturgeon spawn within the Missouri River is an important step in preserving these crucial habitats. Columbia FRO is also assisting USGS with the recapture of pallid sturgeon previously implanted with sonic transmitters. The recapture of these fish will provide valuable data, allow USGS biologists to replace transmitters if necessary and check the general condition of the fish. By combining resources and working together the Columbia FRO and USGS are able to more effectively and efficiently conduct research on the federally endangered pallid sturgeon of the Missouri River.

The collaborative efforts of Columbia FRO and USGS are a bimodal venture supporting both the “Partnership and Accountability” and the “Leadership in Science and Technology” goals of the Fisheries Program Vision for the Future.

*Colby J. Wrasse*





## WORKFORCE MANAGEMENT

### STEP and Seasonal Jobs Presentation given to MU FASS

Fishery Biologist Andy Starostka provided a presentation to the Fisheries and Aquatic Sciences Society (FASS); the student sub-section of the American Fisheries Society at the University of Missouri-Columbia campus. The two part presentation provided information on opportunities with the STEP program at the Columbia FRO as well as other seasonal natural resources jobs. Andy discussed the how, what and why's of the STEP program along with expected field work experiences and other job opportunities within the USFWS. Andy also presented students with seasonal job opportunities in Alaska, "the great adventure" and shared general information based on his experiences while working there. Seasonal jobs commercial and recreational fishing, fish processing as well as research and management projects were the focus of the second half of the presentation. Following the presentation, Andy answered many questions from students and provided literature packets to those interested in learning more.

Andy's involvement with FASS fosters a genuine concern for developing and mentoring natural resource professionals of tomorrow. His efforts to identify the core competencies needed for the students education, future employment and efforts to recruit employees from a diverse and dedicated student body support the "Workforce Management" goal of the Fisheries Program Vision for the Future.

*Andrew B. Starostka*

### Adams Joins Columbia FRO Crew

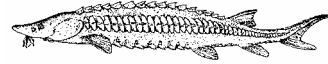


The Columbia FRO welcomed fishery biologist Geno Adams to the staff on March 21, 2005. Geno comes to Columbia from Brookings, South Dakota where he received his M.S. degree in December from South Dakota State University. His Master's work dealt with population characteristics and general movement patterns of lake sturgeon in Rainy Lake, Minnesota and Ontario, Canada. Prior to this, Geno worked as a Biological Technician in Voyageurs National Park in

Northern Minnesota where he participated in research and management projects dealing with the Park's many aquatic resources. Geno received his B.S. degree from Iowa State University in May of 2002. He has previously worked with the Iowa and Minnesota Departments of Natural Resources. Geno's diverse background brings small stream, large lake and small impoundment expertise to the Columbia FRO.

Geno's addition has filled a critical vacancy with an experienced, skillful and dedicated employee; supporting the "Workforce Management" goal of the Fisheries Program Vision for the Future.

*Geno Adams*



### **Columbia FRO Staff**

Tracy D. Hill – Project Leader  
Joanne M. Grady – Assistant Project Leader  
Louise M. Mauldin – Fishery Biologist  
Wyatt J. Doyle – Fishery Biologist  
Andrew B. Starostka – Fishery Biologist  
Corey W. Lee – Fishery Biologist  
Nicholas K. Frohnauer – Fishery Biologist  
Jeff M. Finley – Fishery Biologist  
Geno Adams – Fishery Biologist  
Colby J. Wrasse – Fishery Biologist  
Jennifer L. Johnson – Fisheries Biological Sciences Technician  
Casey L. Bergthold – Fisheries Biological Sciences Technician  
Cliff D. Wilson – Fishery Biologist