



U.S. FISH AND WILDLIFE SERVICE

COLUMBIA FISH AND WILDLIFE CONSERVATION OFFICE

ACCOMPLISHMENT REPORT

...Dedicated to Conserving Big River Ecosystems in America's Heartland.

Partnerships and Accountability

Columbia FWCO Field Crew Become First Responders

As part of required and continuing training, FWS personnel must be certified in First Aid and CPR. Though these skills are hopefully seldom needed, we are prepared to use these skills should an emergency event occur. These skills were recently put to the test for one of Columbia Fish and Wildlife Conservation Office (FWCO) field crews.

While traveling to Atchison, Kansas to conduct field work on the Missouri River, field crews were first to arrive at a single car accident. The vehicle had failed to negotiate a tight corner and was involved in a head on collision with a concrete bridge rail. The collision totaled the full-sized pickup deploying the airbags and caused non-life threatening injuries to both the occupants. Assistance consisted of surveying the accident site for other potential hazards, providing First Aid for a suspected broken arm and a broken nose. Due to the traumatic nature of the event, mental support for the distressed individuals was also an important role for the first responders until other help arrived on the scene.

To ensure necessary First Aid supplies and equipment are always on hand, Columbia FWCO with assistance from Boone County Emergency Medical Technicians assembled advanced First Aid kits. These kits are housed in orange Pelican cases that are waterproof and durable enough that they can be taken with field crews on the road, in the field and on rivers while performing assigned duties at all times. Our Missouri River crews are frequently located more than an hour from the closest boat ramp; in the case of a medical emergency we need these kits to care for our staff. These kits provided all the needed items for this situation in one organized location.

Safety and the wellness of both employees and the public is an important role for all in the USFWS. This incident provides evidence that crews are willing, as well as have, the training and resources available to render assistance when called upon.

Andy Starostka



Columbia Getting a Jump on 2010 W.O.W.

Cliff Wilson and Wyatt Doyle represented the Columbia FWCO at the biannual Wonders Of Wildlife (W.O.W.) board meeting. At the meeting, board members discussed the success of the five 2009, W.O.W. events held in Missouri at Cassville, St. Louis, Kansas City, Springfield and Columbia. Columbia FWCO hosted the second Columbia W.O.W. event last month and more than doubled their participants from previous year. Coordinating the 2010 Columbia W.O.W. event will be a full-time job in the months leading up to the classes and this group of veteran planners are the support structure needed to coordinate the event. The meeting quickly gained steam as the group discussed how to implement the W.O.W. school outside of Missouri. W.O.W., an NGO sponsored by Bass Pro, has a full-time organizer that helps offices like ours organize events that teach hands-on “how to” classes taught by natural resource employees and local citizens. The program had its start over 10 years ago in Cassville, Missouri and has slowly grown to the point where it is poised to help natural resource agency offices outside of Missouri develop programs for their own local communities. Without the structure and support of the program in place, our office could never have developed its own unique Missouri River outdoor school. As we have become involved with the school we became inspired to help it grow and flourish in other areas. The soul purpose of this program is to reconnect people with the outdoors and we now see various ways we can help cultivate and facilitate that effort on the largest scale possible. The W.O.W. classroom has become a pathway by which we as the Service can integrate our vision of reconnecting people with nature, while allowing all our talented staff to share their wealth of knowledge with others in our community.



A young man enjoys fishing at the 2009 Columbia W. O. W. event.

Cliff Wilson and Wyatt Doyle

Boy Scout Troop 4 meet fish of the Big Muddy

Scouts and troop leaders of Boy Scout Troop 4 were able to get up close and personal with various fish species of the lower Missouri River while camping along it’s banks near Columbia, Missouri on June 13. The scouts, many for the first time, were able to see and touch several fish including: freshwater drum, grass carp, shovelnose sturgeon, channel and flathead catfish, and smallmouth buffalo. The scouts were able to learn about sampling with hoop nets, which were set the day before. Topics such as native and nonnative fish ecology and biology, big river ecology and finally natural resource concerns related to the lower Missouri River were also discussed with Fisheries Biologist Andy Starostka and Fisheries Technician Jonathan Spurgeon.





As part of the requirements for the fish and wildlife merit badge, fish were dissected to determine what they had been eating and to showcase a few unique physical characteristics. Troop leaders and scouts alike were particularly interested in the grass carp's pharyngeal teeth (throat teeth). Grass carp use these structures to shred vegetation which comprises the majority of their diet. Freshwater drum were also dissected and their otoliths were removed. The otoliths (ear bones) of drum are unusually large with an "L" shaped groove and are commonly called lucky bones. These lucky bones were given to scouts as prizes for answering questions from the Missouri River ecology discussion.

Many of the scouts live a short driving distance from the Big Muddy yet they have never been to the banks of this unique and threatened resource. The general public continues to perceive the lower Missouri River as dangerous, dirty, and polluted. This outreach event gave these youth and adults an opportunity to learn about and appreciate the Missouri river's rich recreational potential and diverse fish community.

The U.S. Fish and Wildlife Service acknowledges that providing awareness and educating others remains crucial to our efforts to conserve, protect and enhance our nation's aquatic resources. Our effort in reaching out to these outstanding young people demonstrates our commitment to develop tomorrow's scientists in keeping with the Partnerships and Accountability Goal of the "Fisheries Program Vision for the Future".

Andy Starostka

Aquatic Habitat Conservation and Management

Columbia Begins Sampling at Dalbey Bottoms on lower Missouri River

Dalbey Bottoms is located on the Missouri River between northwest Missouri and northeast Kansas near river mile (RM) 417. The U.S. Army Corps of Engineers proposed to build a side channel chute as part of the Missouri River Recovery Plan to restore habitat for pallid sturgeon. Columbia FWCO and the Army Corps are cooperating to study Missouri River habitat at Dalbey Bottoms before and after construction to assess the ecological impact of the constructed chute on pallid sturgeon and other native Missouri River fishes. Biologists from Columbia FWCO completed the first round of sampling at Dalbey during the last week of June. Despite several weeks of high water we caught over 450 fish, 38 of which were young of the year sturgeon. Construction of the chute is scheduled for the winter of 2009, but we plan to return for several sampling trips to complete pre-construction monitoring this summer and autumn. This cooperative effort provides an avenue to apply adaptive management and supports the Service's Strategic Habitat Conservation program.

Adam McDaniel and Clayton Ridenour



Aquatic Species Conservation and Management

Little Fish, Big Surprise

After seven years of sampling fish on the big rivers of the Midwest, I thought I had seen just about all these rivers had to offer. Catching endangered pallid sturgeon, prehistoric lake sturgeon, and monstrous catfish, had become just another day at the office. But when you least expect it these murky waters and their mysterious fish will surprise you.

The big surprise this year has been the impressive number of young-of-year paddlefish turning up in our trawl nets on the Missouri River. In years past we've collected small paddlefish, but never in these numbers. We don't have an exact count at this time, but it is safe to say that we have collected several hundred young-of-year paddlefish this spring. On some occasions we had fifty, or more, small "spoonbills" in a single trawl sample. Everywhere we dropped a net this spring we seemed to be catching juvenile paddlefish.



Trawling with small mesh nets, such as the one in this picture, can be effective for sampling young-of-year paddlefish.

So the obvious question is "Why?" What seemingly made this spring such a successful year for paddlefish spawning? Did this spring's high water trigger a mass spawning event? Did high water in 2007 and 2008 lead to increased paddlefish food (plankton) in the river, which in turn improved paddlefish condition and fecundity? Have stockings and conservation efforts increased paddlefish numbers to the point where they have reached a critical mass needed for an outstanding spawn? Or is it a combination of these factors, or maybe something else entirely? This is all just speculation, but whatever the reason it appears that it was a banner year for paddlefish spawning.

Paddlefish are not rare in Missouri, but they are ranked as vulnerable in the state, and a great amount of effort has been spent to ensure the continued existence of the species.

Paddlefish populations in Missouri are robust enough to support a recreational snagging season, which is incredibly popular with anglers.



Young-of-year paddlefish ranging in size from 20 - 60 mm collected during the spring of 2009.

While paddlefish in Missouri seem to be doing pretty well, half a world away the Chinese paddlefish is struggling for survival. In fact some scientists fear this close relative to the American paddlefish may already be extinct, as no adult Chinese paddlefish have been reported since 2003 and no

juveniles have been collected since 1995. It is believed that a combination of overfishing and dam construction has led to the demise of this fish. Hopefully enough Chinese paddlefish remain to make recovery of the species possible.



Perhaps what we have learned about American paddlefish populations, propagation, and conservation can be used as a model of recovery for the Chinese paddlefish. In light of the plight of the Chinese paddlefish and other ancient fishes around the world, we should be thankful that we have a relatively stable population of prehistoric paddlefish here in Missouri for everyone to enjoy.

Colby Wrasse

Public Use

Desoto Refuge Fest is a Success in 2009

On June 7th, Columbia FWCO's Brian Elkington and Mark Corio took part in Refuge Fest at DeSoto National Wildlife Refuge. Refuge Fest, initially started



Mark Corio describes to Refuge Fest participants just how big a Largemouth Bass' mouth is in relation to its body. If our mouths were that big, we would be able to swallow our shoulders!

in 2001 to encourage fishing at DeSoto Lake, is a great opportunity for outreach and education. Working together with DeSoto NWR staff, the Pottawattamie County Conservation Board, the Army Corps of Engineers, American Family Insurance

and many more organizations made this event a huge success. Bass Pro Shops and Tracker Boats provided educational excursions and clinics ranging from archery to boating and fishing. They also donated prizes for the carp fishing contest.



Brian Elkington displays a flathead catfish to awe-inspired onlookers of all ages.

Raptor Recovery Nebraska offered the chance to see and learn about raptors from the region. Friends of Boyer Chute and DeSoto NWR provided concession stands and live music. This event is held annually the first Saturday in June. Refuge Fest is

a great opportunity to talk to the public about what we do. We displayed sampling nets, a measuring board and scale, and 'Louweeza', our electrofishing boat. Live fish were also displayed for adults and children alike to handle. There were many flyers, handouts as well as a fish identification puzzle for the public to enjoy. We also discussed the plight of the pallid sturgeon and recovery efforts. New this year, however, the participants in refuge fest had to get an attendance card initialed at each of the stations they visited in order to be entered for a drawing at the end of the day; and were allowed to pick which stations they visited. Even with more stations than signatures required, the attendance at the electrofishing boat was high enough that the presenters barely even had enough time to get away and grab lunch.

There was an excellent turnout of participants at the 9th annual Refuge Fest. It was a beautiful day and a fun time was had by all! The Columbia FWCO looks forward to participating in this event for years to come.

Mark Corio and Brian Elkington





Adventurers Club Learns about the Missouri River

Many of the kids couldn't help but scream out of excitement upon seeing the live fish. Columbia FWCO's Brian Elkington, Adam McDaniel and Madeline Pletta were invited to Fairview Elementary in Columbia, MO to teach kids about the Missouri River. We brought with us a wide array of fish and a common snapping turtle to show them. Many of the kids there that day had not been fishing and were enthralled by the slimy, squirmy fish as we tried to explain what each one was and how they all co-exist. We also provided some of the fishing gear we use to sample fish such as gillnets, hoop nets and fyke nets, but it didn't take long before everyone had found their way to the fish tanks.



Adam McDaniel tells kids and faculty alike about the many interesting species of fish that occur in the Missouri River.

The students and faculty were fascinated at how similar a shortnose gar, with a mouth full of teeth, resembles an alligator. Few kids wanted to hold the gar but a young and feisty smallmouth buffalo provided the group with plenty of excitement. The kids got to see first hand how a snapping turtle gets its name when Brian fed the turtle some silver carp fillets and it ripped the fillet from his grasp with little effort. Overall the event proved to be a great success with the Adventurers Club as they have asked us to introduce their students to fishes of the Missouri River again in the future.

Brian Elkington and Adam McDaniel

Workforce Management

Columbia FWCO adds another MOCC Instructor

Fish biologist Andy Starostka traveled to Onalaska, Wisconsin to attend a Motorboat Operator Instructor Certification Course (MOICC) held at the LaCrosse FWCO. Several Region 3 personnel, as well as other Department of Interior employees, attended this week-long training session. Completion of this course allows Andy to teach Motorboat Operator Certification Courses (MOCC) with experienced lead instructors.

The instructor course consisted of all components that comprise the standard MOCC class including classroom, on the water and pool portions as well as items to improve public speaking and effective teaching. All items of the classroom portion were covered including each student providing a presentation of one portion of the class to their peers. Other portions included time in the pool with personal flotation devices (PFD's), survival gear and rescue techniques. On the water portion of the class was held on the Black River and demonstrated skills such as high and low speed boat handling, trailering, fire suppression and water rescue activities.

The high safety standards set forth by the Department of the Interior require all motorboat operators complete MOCC. Each course requires several instructors and boats to ensure all components are thoroughly covered and each student is able to safely operate a boat.



This course stressed the importance of safety and clear communication on the water and supports the “Workforce Management” goal of the ‘Fisheries Program Vision for the Future’.

Andy Starostka

Columbia FWCO Welcomes a new Biological Science Technician

Darlena Oberkirsch recently joined the Columbia FWCO as a biological science technician in late June, 2009. She came to us from the Natural Resource Branch located on Fort Leonard Wood, Missouri, where she worked as a fisheries technician on a contract from Colorado State University. As a fisheries technician, Darlena’s main duties were electrofishing impoundments and the two rivers that run across Fort Leonard Wood conducting angler survey’s, stocking channel catfish in the impoundments reserved for anglers and trout in the Stone Mill Spring. Other duties assigned were organizing and running Catfish Derbies, Trout Derbies, and outreach programs to several of the local schools. Darlena also developed several database programs enabling data to be captured more efficiently and for data to be analyzed and imported into several different reports.



Darlena and Kaitlyn Oberkirsch dip netting for macro invertebrates at Fort Leonard Wood, Missouri as part of Career Day.

Darlena received her Bachelors of Science Degree in Biology from Drury University in Springfield, Missouri and plans to attend the University of Missouri, Columbia, to obtain her Masters Degree in Fish and Wildlife Management. She is really enjoying the opportunity to expand her knowledge of fisheries management and the techniques used here at the USFWS.

Darlena Oberkirsch

Columbia FWCO Welcomes CARE Student Employees

Columbia FWCO is proud to introduce three new summer employees. Chris Roseberry, Josh Tharp and Riaz Helfer come to us through a local student job placement program for middle and high school students called Career Awareness Related Experience (CARE). These students are paid by the city of Columbia but gain valuable hands-on experience while assisting our field crews with equipment repair and maintenance, as well as field data collection. This is the fourth year our office has received student help from the CARE organization. Welcome to our office, gentlemen!

Chris Roseberry

I am Chris Roseberry, I’m 15 years old and I am a sophomore. My hobbies are football, basketball, baseball and also rugby. I like to be helpful and do what I can for my community. What I



Chris Roseberry proudly poses in front of one the trucks he has just washed.





like about this job is that I learn something new everyday and getting to do the stuff I learned on my own. I like to use the power washer when my colleagues and I are washing the boats and trucks. I like fixing the nets because it helps the biologists get their job done easier and more efficiently. I like when we learn different ways to say fishes names in different countries. I want to learn more about the U. S. Fish & Wildlife around the United States and the other offices. I would like to know how to use the nets that we fix. I would also like to learn the differences between a catfish and a silver carp and all other fish in the Missouri River. From my experience here, I want to take with me all the things that I have learned and the friendships I have built with others. I also treasure all the moments I had here with my new family and I am proud to say it. Peace.

Josh Tharp

Josh Tharp is 14 years old and will be starting his freshman year at Hallsville High School. He joined Columbia FWCO in the middle of June. He enjoys fishing and hunting in his spare time. He has hunted for two years and has fished all of his life. He camps and spends his summers outdoors. He currently plays on a local baseball team and likes to hang out with friends. The part of the job that he likes most is fixing the nets. He would like to learn what a real fisheries person does on an average day. He would also like to go out on the river and learn how to use the nets that he has been mending for the past month. To be able to have a job like this and to



Josh gets to hold his first federally endangered pallid sturgeon caught in a trammel net on the Missouri River.

be in this environment is an outstanding achievement in his life.

Riaz Helfer

Riaz Helfer joined Columbia FWCO for the first time in June 2009. A fifteen year-old, this sophomore is interested in his school subjects, which include math, sciences, history, and foreign languages. He also is on the Quiz Bowl team and enjoys reading, memorizing Harry Potter trivia facts and playing soccer and Ultimate Frisbee with his friends. So far, he has most enjoyed mending gill nets while listening to interesting anecdotes of the Missouri (which include ducks being drowned by snapping turtles and beavers biting through nets).

He hopes that he will be able to tell some anecdotes of his own after going to the Missouri River as well as learning how to catch and identify different fish. He greatly believes that time on the river would teach him much about fish and wildlife for these reasons, but even when he is at the boat barn he learns many handy skills (e.g. changing tires and bearings, and



Riaz hard at work scanning in old fisheries slides.



washing boats and trucks with new (at least to him) equipment). Basically, Columbia FWCO is a great learning experience and since joining it, Riaz has learned much already and hopes that he will learn even more, and perhaps even more than that when he gets into the field. Though he already was an advocate for conserving the wild, Columbia FWCO has taught him more about it and how to better channel his efforts for improving America.

Patty Herman, Chris Roseberry, Josh Tharp and Riaz Helfer

Columbia FWCO Staff

Project Leader: Tracy D. Hill
Administrative Assistant: Debra Turner
Branch Chiefs: Wyatt Doyle, Joanne Grady
Team Leaders: Andy Starostka
Crew Leaders: Brian Elkington, Andy Plauck, Clayton Ridenour, Joshua Schloesser, Cliff Wilson
Lead Technicians: Patty Herman, Joe McMullen, Colby Wrasse

Technicians: Adam McDaniel, Darlena Oberkirsch, Aaron Walker
STEP Student: Nicholas Cole, Mark Corio, Tony Overmann, Madeline Pletta, Chris Scheppers, Jonathan Spurgeon
Experience Works: George Fadler
CARES Students: Riaz Helfer, Chris Roseberry, Josh Tharp

