



FISHERIES STREAMS AND RIVERS NEWSLETTER

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The Stream Fisheries Program provides high-quality fisheries information for management purposes and applies the results of research to improve fish populations, habitat, and fishing.

Smallmouth Bass Sampling

During the month of July, I sampled Crooked Creek smallmouth bass with staff from AGFC Fisheries District II and the Trout Program. Arkansas Tech University (Professor Charlie Gagen and graduate student Michael Young) also assisted with collecting fish. We performed mark-recapture population estimates. Sampling was very different from past years. The fish seemed to be directionally moving downriver during our sampling, which biases the results. This was bad news for making population estimates. The good news is that we learned a little about fish behavior in Crooked Creek.



Above: ATU graduate student Michael Young with Crooked Creek smallmouth bass.

Size structure of fish captured continued to be very good. Since fish were moving downriver, our site below Kelly's Slab proved to be highly productive, with biomass ~ 130 kg/ha (similar to lbs/acre). I usually consider an excellent smallmouth population to have 30-50 kg/ha. Biomass over 100 kg/ha is highly unusual for a smallmouth bass population. It is usually more typical of a trout population which are at a lower trophic level.

In August, I also sampled the Cossatot River with Drew Wilson, AGFC District VII Fisheries Supervisor. Due to an old, failing camera...I don't have any pictures.

Ageing Stream Fishes

This summer I pulled, sectioned, and read otoliths from smallmouth bass from Crooked Creek and Big Piney River. I used the "Sam Henry Method" (AGFC Fisheries Management Biologist) to thin section otoliths.



Above: The oldest fish from Crooked Creek, which was an 8 year-old, 16.5-inch smallmouth bass.

I read over 150 otoliths. I found spotted bass much easier to age than smallmouth bass. Shadow bass and green sunfish were also easy to age.

Eleven Point River Hellbender Sampling

I searched the Eleven Point River for the Ozark Hellbender with the AGFC Statewide Herpetologist, Kelly Irwin. I really enjoyed this trip, in that it was very different from my normal duties. I finally figured out what type of rocks these critters really like to live under. I actually caught a few. The downside of this story is that many biologists believe the Ozark Hellbender is in decline, and have disappeared from the Spring River. I can't tell you how strong the pain feels in my heart to know these magnificent animals are declining, and could be gone from the earth while under our watch. I rejoiced every time we found an animal! Recovering these animals is going to take a lot of public education, and everyone in the AGFC Fisheries Division should thank Kelly, along with Stream Team biologist Stephen O'Neal, for all the "on the ground" conservation they've done at the Eleven Point River.



Above: The first Ozark Hellbender I found.

Catfish Tagging Study Update

So far, 17% of all channel catfish tagged and stocked have been caught, and 33% of the high-reward tags (\$100) have been reported. AGFC lakes have the highest exploitation (> 50%), followed by streams, and then Corps lakes. I ordered 3,700 Carlin-Dangler tags to tag stocked channel catfish this year, so that we can evaluate our catfish stocking program. If you should catch one of these tagged catfish, be sure to send/give us your correct address so that we can quickly respond to your letter.

Catfish Management Plan

This past August, I presented the Catfish Management Plan to the Arkansas Game and Fish Commission. This is the first time a catfish

plan had been presented to the full Commission. It's about time "Mr. Whiskers" went big time!

Other Stuff

I spent half a day cleaning and bleaching my electrofishing boat after sampling Bayou Meto last fall. I did this before I went to sample Crooked Creek. Cleaning and sterilization is needed to make sure unwanted pests don't get transferred between waters. Although there are times my job is fun, cleaning off Bayou Meto mud was not one of them.

I attend a lot of meetings, and I'll give you a sample of them from this summer: I attended a Rector Brake (Arkansas River) meeting held by the U.S. Army Corps of Engineers, I participated in the SARP (Southeastern Aquatics Resource Partnership) Science and Data technical team, and SIFN (Southern Instream Flow Network) conference calls. I attended an instream-flow meeting held by Josh Duzan of The Nature Conservancy, I attended a public meeting with the Arkansas Commercial Fishermen and Shelltaker's Association, attended the Fisheries Division staff meeting at the Fred Berry Nature Center in Yellville, and attended a Fisheries Division stream sampling protocols meeting.

Biologists often need to spend time reading and studying before accomplishing a task. I spent a lot of time reviewing backcalculation methods of fish growth. I ordered a video on ageing techniques for bass and catfish, and a computer program to assist with backcalculations. I reviewed the Mississippi River Paddlefish Study report, and reviewed and commented on environmental assessment documents for the proposed Little Alum Fork Saline River Dam. I watched safety videos concerning ATV use and chain saw use, and reviewed Mississippi River gravel permits, and filled out two MICRA paddlefish surveys. I read a book on the decline of the American Eel, and reviewed the smallmouth bass genetics report by Auburn.

I took a two week vacation to Ireland. That was fun!!! Last, but not least, I hired retired fisheries biologist Carl Perrin as a 500 hour extra help laborer. Carl has 37 years of experience as a fisheries biologist in AGFC District X. He is a great field hand for me. Carl took over one year off before deciding to come back to work part-time.