

Tribal Youth Crew Week 3 – Fisheries and Aquatic Biology

This week the joint WMAT and ASNFs Tribal Youth Crew worked with Fisheries Biologists Stephanie Coleman and Mark Pisano learning about aquatics. The crew were given photo keys and taught how to identify native fish that occur on Forest and WMAT. Biologists also explained how you can determine what a fish eats and what their niche is in the aquatic community by looking at mouth position and body shape as well as how important different types of fish are in a balanced community.

The Youth Crew worked with biologists to conduct stream habitat and fish surveys for the week of June 30 – July 2 in three streams on Forest. During their time spent completing fish surveys, the crew had to identify, weigh and measure fish. They learned the proper way to handle fish and reduce mortality during surveys. The crew was also gained an understanding in how fish data can be used to show age/size class structure of different species and why that is important. They netted fish while Mark Pisano ran a backpack electrofisher, but did all get the opportunity to try seining for fish. The crew was taught about aquatic diseases, such as chytrid fungus, and shown how to properly disinfect field gear between streams or drainages to prevent the spread of those diseases.



Photo Above. Hiram Kessay, Mark Pisano, Justin Gatewood and crew leader Velda Massey conducting electroshocking surveys.



Photo Left: Hiram Kessay and Geron Beatty seining Campbell Blue Creek for dace and suckers.



Photo Above: Shanaki Hopper, Geron Beatty, and Dheus James identifying fish.

Photo above: Justin Gatewood learning to weigh fish, while Velda Massay records the information.

The crew brought good luck to fish survey efforts and they were able to see two species with federal status: roundtail chub and loach minnow. They had learned their identification skills well enough to know when they found something different and were excited to have Forest Service biologists aid them in the final identification.



Photos Above: Roundtail chub on the left and loach minnow on the right.

On the habitat survey crew, the youth crew measured water quality, identified and measured stream habitat and substrate types, and recorded data. They learned why different habitat types are important and how various fish species utilize them. Stream ecology was a big part of conversations during the week including how stream habitat types and riparian areas function to provide for the needs of a fish community and aquatic macroinvertebrates (bugs). The crew was able to observe how failing culverts

or hanging culverts prevent fish passage and how that can be restored at the Forest's Beaver Creek aquatic organism passage project. Sedimentation was discussed between the three streams, how it changes, why it changes and what potential effects it can have on fish spawning or feeding. The youth crew helped in collecting sedimentation data for a multi-year monitoring effort in the Blue River watershed.

Of course, when you capture a lot of fish it takes a while to identify and measure them all. This group was good at finding ways to entertain themselves during the lulls of fish work. Dheus James and Hiram Kessay searched for frogs calling and then rested their feet for a bit (Bottom Left). Or Hiram trying out a dead cottonwood tree as a potential canoe (Bottom Right). These guys worked hard, but always had a sense of humor even after a 90 degree day in waders.

