## SPRING CREEK IN THE SPRING

## **Cheryl Cheadle**

Volunteer Coordinator, Blue Thum Program, Oklahoma Conservation Commission (previosuly Naturalist with Camp Loughridge)

As spring in NE Oklahoma became warmer, the William Bradford Christian School in Pryor settled on the date of Monday, April 30, 2018, for a fourth and fifth grade "end of year" field trip. Diana Coverdell, parent of two students at Bradford, suggested taking the youngsters to Spring Creek, a state designated "high quality water source" that flows through Delaware, Cherokee, and Mayes counties (Neosho River drainage) until finally entering Ft. Gibson Reservoir. Diana invited me, a naturalist at Camp Loughridge (located in southwest Tulsa), to guide the day's activities

Spring Creek is a chilly Ozark stream, but the children were not shy about jumping in and taking a swim as soon as they arrived. This early expenditure of energy set the stage for play to become an energized investigation. Clean waterways with decent habitat will be filled with life, and Spring Creek did not disappoint. Macroinvertebrates were collected from the riffles including stoneflies, mayflies, caddisflies, riffle beetles, water pennies, crawdads, hellgrammites, snails, midges, and even a leech. Every child spent some time with the small spineless ones.

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Recent rains had left Spring Creek slightly above base flow. The beginner biologists struggled to pull the seine against the flow, and they could not stay ahead of the flow when going the other way. Luckily, there was a little backwater area that was receiving water moving through the gravel, and this offered the perfect place to learn the nuances of fishing with nets. It worked, and the students began making small treks to the center of the backwater and back again, and each pull brought in at least a fish or two, which is encouraging for beginners.

Most of the fishes caught were darters, probably three different species, Slender Madtom (*Noturus exilis*), Brook Sil-



Upper elementary students from the William Bradford Christian School in Pryor gather on a gravel bar at Spring Creek with Cheryl Cheadle (Blue Thumb, formerly of Camp Loughridge) as their field day begins.

## Photos by the author.

Cheryl Cheadle has just returned to the Blue Thumb water quality education program (managed by the Oklahoma Conservation Commission) as the volunteer coordinator. Cheryl worked in Blue Thumb for two decades, then as a naturalist for the Camp Loughridge Outdoor Classroom for two years. Cheryl and the other Blue Thumb staff members work to help young people have meaningful experiences outdoors, experiences that will hopefully lead to the children learning to love and protect nature. Cheryl can be reached at cheryl.cheadle@conservation. ok.gov.



Naturalist Cheryl gives the students a visual, hands-on tour of the creatures found in a kick net in a high quality Ozark stream.



Students use a seine to capture fish from a backwater area at Spring Creek. The introduction of a centuries old field tool like a seine is a refreshing diversion from "screen time."



Students dance to the beat of the rolling water as they encourage creek bugs and even little fishes to be carried into the kick net for a quick study.

verside (Labidesthes sicculus), Cardinal Shiner (Luxilus cardinalis), Central Stoneroller (Campostoma anomalum), and Banded Sculpin (Cottus carolinae). Caught by students fishing with rods and reels (another great part of the day) was a Smallmouth Bass (Micropterus dolomieu) and a Redspot Chub (Nocomis asper). This is just a fraction of the variety of fishes in Spring Creek, but for all of these children, this was an excellent introduction to freshwater fishes. Properly moistened hands were eager to hold and inspect the various fishes, and the students helped each other. While some students held and inspected fish, others kept bending to the creek and adding handfuls of water so that each little captive remained wet. Real cooperation was at work, with the fishes being the center of attention. Each student was gifted with a small net, and once the seine was laid out to dry for the trip back to Tulsa, the small nets became decent replacements, with many small fishes and aquatic insects getting scooped up.

Teachers from the school and parent volunteers watched over the students and participated in the activities. The kids were not shy about playing in the spring-fed creek. None of the adults wanted to swim badly enough to brave the cold water this early in the year. Three cheers for William Bradford Christian School for allowing these children the chance



Cheryl Cheadle with Redspot Chub (*Nocomis asper*) caught by angler Rose, who patiently awaits her chance to hold her fish. Notice the male chub's scratchy breeding tubercles, a testament to his readiness to be a family man.







From top: Banded Sculpin (*Cottus carolinae*), Slender Madtom (*Noturus exilis*), and Brook Silverside (*Labidesthes sicculus*).



This student was thrilled to have caught the day's only sculpin, (Banded Sculpin, Cottus carolinae), and he released the little fish after show and tell. The act of placing the catch of the day back in the stream offers an opportunity to watch the guest of honor disappear back into the environment to which the fish is perfectly suited.



Spring Creek has plenty of Smallmouth Bass (*Micropterus dolomieu*), and these fish are known for being fun and feisty to reel in.

to have a real outdoor experience. Lunch was eaten on a gravel bar, a porta-potty was nearby. There was time for play *and* stream studies—studies in a group, and studies as individuals with small nets, and opportunity to roam.

Regardless of the time of year, health and wellness studies of children across the United States point to children spending as much as 90% of their time indoors. Soccer, baseball, and football practice sessions bring children outside, but these offer no real meaningful chances to connect with nature. Children who spend quality time outside are less likely to be overweight and over-stressed and are more likely to be able to focus on studies and spend the necessary time completing complex tasks in the classroom.

Another big advantage for William Bradford Christian School is the opportunity that such an outdoor experience provides to emphasize the diversity of life on earth. Probably the day could best be summed up in one student's thank you to "Naturalist Cheryl" as she was loading the seine for the trip home. A young lady named Chalise said, "Thank you Miss Cheryl for showing us all the different things that we never knew lived in a creek before."

## ABOUT SPRING CREEK AND CAMP LOUGHRIDGE

Spring Creek is in the Ozarks ecoregion of northeastern Oklahoma. This area is characterized by rolling hills, forests, and gravel bottom, cold, clear streams and rivers. Concerned landowners founded the Spring Creek Coalition in 1994 for the sake of protecting the stream and maintaining it as an exemplary example of an Ozark stream. The Coalition is a force that is constantly working to educate the citizens in the watershed about how to maintain and even improve the stream. Battles fought for the stream in the 20-plus years that the coalition has existed have resulted in educational efforts on the impacts of trout introductions (not a native



This classic Orangethroat Darter (*Etheostoma spectabile*) is common to many of Oklahoma's streams, especially in the eastern part of the state. The students learned that all the bright colors are the male's way of looking for a date on Saturday night. At least two additional darter species were caught, but darter identification is not naturalist Cheryl's strength.

species); protecting riparian zones; managed grazing; water removal; gravel mining; impacts of flooding; and currently the potential negative impacts of poultry operations close



Students take seriously the mandate of keeping hands and creatures moist during study.

to the banks of Spring Creek. For more information about Spring Creek and the Spring Creek Coalition, go to http://www.springcreekok.org.

The Oklahma Conservation Commission has provided stream, river, and lake monitoring and education programs through their Blue Thumb water quality education project since 1992. The Blue Thumb Project uses citiizen scientists throughout the state to gather stream data and inform the public about their role in stream and river protection. Blue Thumb staff and volunteers work together to bring children (and often adults) to places like Spring Creek where they can have the kind of outdoor experience that inspires them to be good stewards of the environment.



