

Spunky Creek; Hwy 412
SE SE SE Section: 31-20N-15E
Rogers County
N 36° 9' 45.4"
W 95° 44' 43.05"
WBID#: OK121500-02-0480K

Spunky Creek is located in northeast Oklahoma in Rogers County. The testing site is right off of Highway 412, south of Catoosa. It is within the Central Irregular Plain ecoregion. The creek runs south to north and drains into the Verdigris River. The land surrounding the creek is used for various things like neighborhood development, pasture land, and urban areas. To the east of the creek are naturally wooded areas. The watershed of Spunky Creek is approximately 22 square miles.

The habitat of Spunky Creek has been assessed twice, once in 2004 and again in 2007. Spunky Creek is fairly straight at the monitoring site, but further upstream it becomes curvy. There is little erosion taking place in the creek. This creek has a more laidback, slow flow. The creek has few riffles where the water flows over the rocks. Scattered along the creek banks are various varieties of trees and shrubs. These trees and shrubs help prevent the bank from falling in and keep it stable as well as providing shade for the creek. Within the creek are some logs, rocks, clumps of roots, and plants to give the organisms cover. The bottom of the stream has adequate amounts of material such as twigs and leaves. The depth of the pools in the creek ranges from shallow to waist deep.

There have been two fish collections from Spunky Creek, also in 2004 and again in 2007. Both times the fish were collected the creek received the same score and was missing some of the most sensitive species. During the second collection a total of 844 fish were collected. Within the collection there were a total of 22 different species. There were 8 kinds of sunfish which were Green, Warmouth, Orangespotted, Bluegill, Longear, and Redear sunfish, Largemouth bass, and White crappie. There were 2 types of darter/benthic species; Orangethroat darter and Logperch. There were 2 intolerant species; Suckermouth minnows and a Spotted sucker. The fish collection from Spunky Creek in 2007 was 82% as good as the high quality average for the ecoregion. This means that the creek is missing some of the more sensitive species of fish.

Bugs were collected from Spunky Creek in the winters of 2005 and 2007 and in the summers from 2004 through 2007. Both winter collections have been better than the average high quality stream in the Central Irregular Plains ecoregion with a greater diversity of taxa and more sensitive species. Summer collections have been missing the sensitive taxa. The summer scores have increased from 50% in 2005 to 79% in 2007. It appears that the quality of the summer bug collections has been steadily increasing.

Spunky Creek has been tested monthly from September 25, 2003 to present for water temperature, dissolved oxygen, oxygen saturation, pH, nitrate, nitrites, ammonia, orthophosphates, and chloride. Soluble nitrogen is often below the detection level of the tests with a median of 0.68 mg/L, well within the normal range. Orthophosphate phosphorus is a little high; median value of 0.065 mg/L P. Chloride and pH are normal. The median oxygen saturation is 79%, on the low side of normal. Considering the low flows in Spunky Creek, this is not of concern.

Spunky Creek was tested 16 times for bacteria during the summers of 2004-2008.

The *E. coli* reading exceeded the safe levels for swimming twice over the four year time span. The readings were high on August 25, 2005 and July 11, 2007.

Spunky Creek is located in Central Oklahoma in Rogers County. The testing site is right off Highway 412 south of Catoosa. The creek is slow flowing with little erosion. The trees and shrubs growing along the bank help to prevent the bank from crumbling and falling in. The fish collection from the creek was 82% as good as the high quality average for the region. This means that the stream is lacking some of the sensitive fish. Bugs were collected in the summer and winter. The winter collections have been comparable to pristine conditions, while the summer collections appear to be improving over the years of study and are now 79% of the high quality average. This means that in the summer the streams are lacking some of the more sensitive bugs. The water chemistry has been normal with the exception of the oxygen saturation being slightly low and the orthophosphate levels being slightly high. The water has been tested multiple times for bacteria during the summertimes but only twice were the levels too high to be safe for swimming. While Spunky Creek is not pristine, it appears to be a healthy stream, especially considering that there are urban areas in the watershed.

Written by:
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