

# Tuttle Creek Fisheries Newsletter Summer 2015

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## Black Bass Sampling Results

For a lot of Kansas anglers, spring is an important time of year to capitalize on some good fishing. For fisheries biologist, spring marks the time of year for bass sampling. When water temperatures are in the 60's, fisheries biologists around the state are getting out on local lakes to evaluate black bass populations. Bass are collected with an electrofishing boat that puts electricity into the water. Fish are temporarily stunned by the electrified field in front of the boat that allows them to be netted and put into a holding tank. The fish are then counted, weighed, measured and then released.

Fisheries biologists use the data collected from the spring sampling effort to evaluate how black bass populations are doing in every lake sampled. After crunching the numbers, some characteristics of the fish populations emerge. An important value for evaluating a bass population is species abundance, which is expressed by how many fish are collected per hour of electrofishing.

Another evaluation is the size structure of the fish population. A healthy bass population will have a wide variety of fish sizes. Lots of small fish means there has been good spawning success in recent years. Decent numbers of medium to larger bass indicates the population is not stunted and fish are growing well. Catching big bass is always popular, so it is nice to have some really big ones around.

On the next page there is a graph for largemouth bass and one for smallmouth bass for all lakes sampled in the Manhattan District in 2015. Very small fish were not included in these tables and the lakes are in no particular order. Hopefully these graphs will help you better understand local bass populations and find good places to fish.



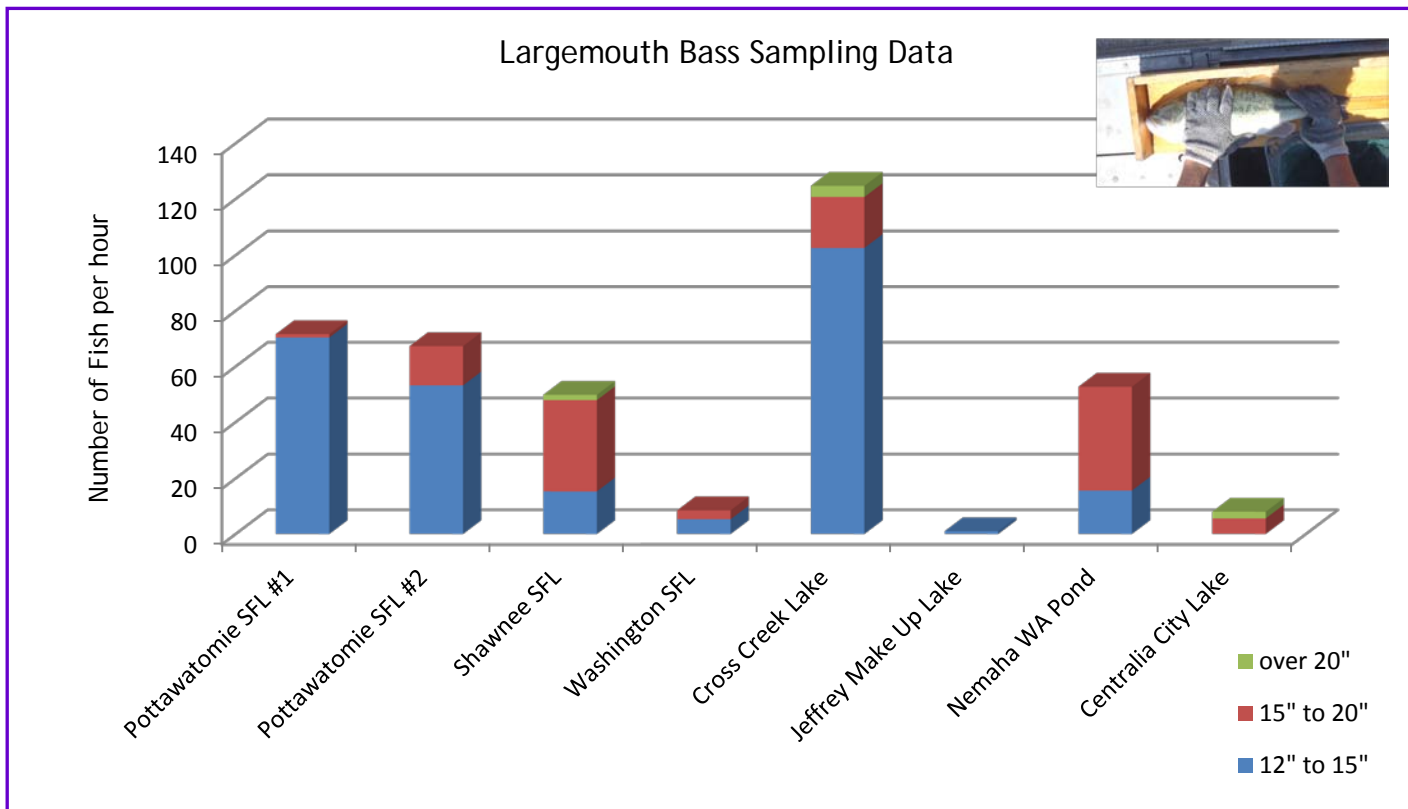
Smallmouth Bass on the left and  
Largemouth Bass on the right  
from Jeffrey Make Up Lake



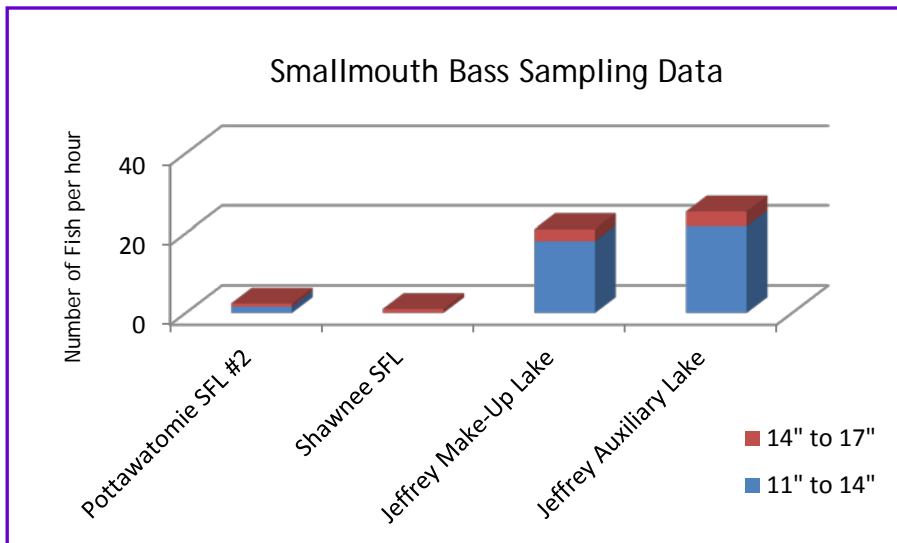
Electrofishing boat

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### Black Bass Sampling Results



The above graph shows how many bass were sampled per hour from three different length groups; blue for 12 to 15 inches, red for 15 to 20 inches, and green for fish over 20 inches. Looking at this graph can give you a quick comparison of bass populations at area lakes. Pottawatomie State Fishing Lake #1 has high numbers of smaller fish, with a few bigger ones around. The number of bass over 12 inches at Pottawatomie SFL #2 has improved the last few years, but I did not sample any over 20 inches this year. Shawnee SFL has a well rounded population with a few really big fish. Washington SFL has a population that is recovering and is currently dominated by fish less than 12 inches. Cross Creek Lake in Pottawatomie County had the most fish per hour and good numbers of big fish. The pond at Nemaha Wildlife Area is dominated by one big year class of largemouth bass and most of the fish are from 14 to 18 inches. Electrofishing samples at Jeffrey Make Up Lake and Centralia City Lake have been quite low and indicates poor largemouth bass spawning success in recent years. Jeffrey Auxiliary Lake did not make the graph because no largemouth bass over 12 inches were collected. However, we did sample lots of little ones, so hopefully the population will make some good improvements in the next few years.



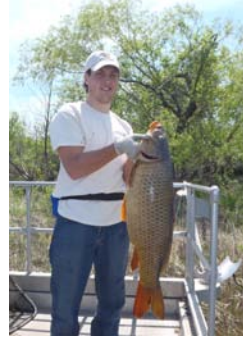
The graph on the left shows that the best local fishing spots for smallmouth bass are the two Jeffrey Energy Center Lakes. Both lakes offer some really good catch and release fisheries. Pottawatomie SFL #2 usually has moderate numbers of smallmouth bass, but the population is down some this year. Smallmouth were stocked into Shawnee State Fishing Lake in 2012, and only time will tell if these fish will successfully spawn at the lake.

Hopefully, looking at these graphs will help you figure out where to go on your next bass fishing adventure. Good Luck!

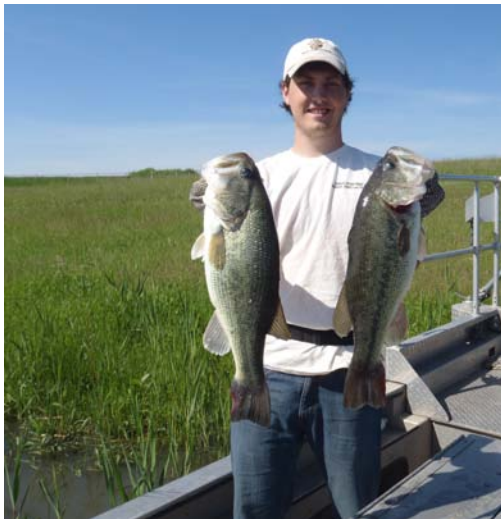


Some pictures from sampling in spring of 2015

Pottawatomie SFL#2



Shawnee State Fishing Lake



Centralia City Lake

Cross Creek Lake



Washington SFL



Jeffrey Make-Up Lake



## What's that at Pottawatomie SFL #1?



I occasionally get calls of a monster in Pottawatomie State Fishing Lake #1. Well, I have never seen a monster at the lake, but I do know of something unusual going on there. The lake is home to a destratification unit, which is not a common site around here. It is comprised of a large air pump that pushes air into a tube at the bottom of the lake. The tube has a spiral in the middle of it and as the air goes up it draws water off the bottom and brings it to the surface. This process prevents the lake from stratifying or forming a thermocline during the summer. Hence the name: destratification unit. Operating this unit periodically during the summer helps bolster basic productivity at the lake, increase fish growth and helps prevent the lake from being over-run with aquatic vegetation.

If you were at the lake in the summer of 2014, then you might have noticed that the aquatic vegetation was rather thick that year. The destratification unit was not operational because an airline had broken halfway out to one of the sunken tubes. To get it back online, the tube was brought to the surface with the aid of SCUBA equipment and some strong backs. The 40 year old airline was replaced and the tube was returned to the bottom of the lake. The unit has been operating well in 2015 and has prevented aquatic vegetation from being a major issue this year.



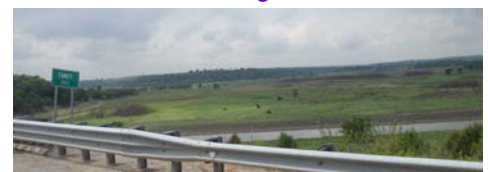
A Thank You to all the strong backs that helped with this.

## High water levels at Tuttle Creek

We got a lot of rain this spring and a lot of it ended up in Tuttle Creek Reservoir. The lake went from 2 foot above conservation pool on June 4<sup>th</sup> to a crest of 36 feet high on June 19<sup>th</sup>. For the next twenty days release rates were above 19,000 cubic feet per second. This got the lake back down to ten feet above normal by July 10<sup>th</sup>. Release rates varied from 5,000 cfs to 10,000 cfs over the next twelve days to get the lake back down to close to conservation pool by July 22<sup>nd</sup>. Historically, a flood event like this flushes a lot of fish out of the reservoir. Blue catfish sampling this summer indicates that their numbers have not been greatly impacted. Fall netting will reveal how the other fish species in Tuttle Creek have been affected and the details will be available in the spring edition of this newsletter. Thanks for reading!



A view West from Fancy Creek Bridge



June

August