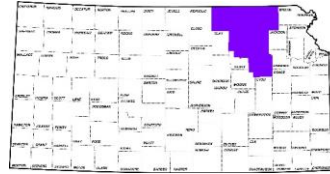


Manhattan Fisheries Newsletter

Special Edition 2021:
Blue Catfish Update



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The Blue Catfish at Tuttle Creek are booming, so time for a change

Nearly 20 years after the first blue catfish stocking at Tuttle Creek Reservoir, it is believed the population is finally established enough to encourage angler harvest.

It is common in Kansas to protect new blue catfish populations with a 35-inch minimum length limit until they can grow to maturity and begin reproducing on their own. Natural reproduction of blue catfish in Tuttle Creek Reservoir was documented for the first time in 2016. Since then, there has been some additional spawning success, including a large year-class produced in the 2019 flood.



Annual fish sampling data suggests the blue catfish population has established a strong

foundation in the lake, but the species still has potential to expand into the fishery. At this point, it is believed that angler harvest will not substantially hinder future expansion of the species if there are some restrictions on the harvest of large adult fish. Therefore, new regulations have been proposed and are currently working through the approval process that would go in effect for the 2022 fishing season. This proposal involves changes to both the creel and length regulations for blue catfish at Tuttle Creek Reservoir and are intended to allow more harvest opportunities for anglers while protecting the species into the future.

The first recommendation is changing the daily creel limit of blue catfish from 5 fish per day to 10 fish per day. Tuttle Creek Reservoir has a lower rate of angler usage than many other lakes in Kansas and therefore it is believed that the lake can support a higher daily creel limit on blue catfish. In addition, angler harvest of blue catfish will assist in reducing the possibility that the species will overpopulate. As the species continues to reproduce and expand into the fishery, maintaining a proper balance of blue catfish density to promote good growth rates of

the species will likely be the most difficult aspect to sustain long-term, especially in this dynamic lake that has a tendency to flood.

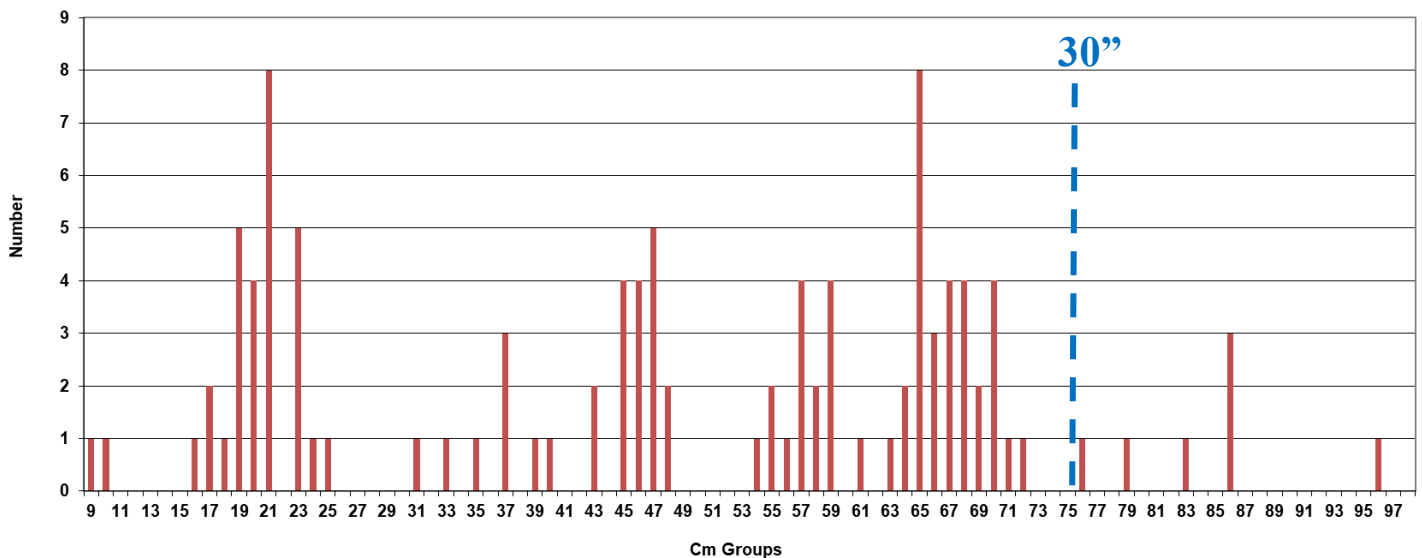
The second recommendation is the replacement of the 35-inch minimum length limit with a new length regulation of only one blue catfish longer than 30 inches can be harvested each day. This change will allow anglers the opportunity to harvest far more blue catfish as most of the fish in the lake are less than 30 inches. Furthermore, this length restriction will hopefully prevent the overharvest of the large, sexually mature blue catfish while still allowing anglers to take a trophy fish home if they choose too. The determination of a 30-inch benchmark was assisted by the 2010 Kansas Catfish Angler Survey (thanks to all those who responded!) where an average of survey respondents considered blue catfish a trophy at 31 inches. From the statewide fish sampling database, a 30-inch blue catfish averages 12 pounds in Kansas lakes.

The proposed wording for the new blue catfish regulation will read: **10 fish daily creel limit, may include only one fish 30 inches or longer.**

If this regulation change is adopted, then impacts will be monitored through continuation of annual fish sampling efforts to assure that the change was not detrimental to the fishery while serving the desires of local anglers.



Snapshot of Blue Catfish Lengths from August of 2020



What is exciting to a Fisheries Biologist?

At Tuttle Creek Reservoir we have an expanding blue catfish population , we have a proposal for a brand-new type of harvest regulation , and we have the potential for some great fishing opportunities coming soon . Ok, so now what? Time for a big fish study!

When it comes to Blue Catfish management in Kansas, KDWPT biologist are still figuring things out. This fish is relatively new to most Kansas lakes, plus the species can take a long time to get established from stockings. Furthermore, Blue Catfish are performing differently in our lakes compared to other lakes around the country. That's why we are still in the learning phase here in KS, but that also makes it fun for us biologists. Frustrating too at times as we are going to make mistakes as we go along.

Right now, we have a great opportunity at Tuttle Creek to learn about the early years after Blue Catfish begin reproducing and the following rapid expansion into the system. The next few years will also be a great opportunity to evaluate how the new fishing regulations will affect both the Blue Catfish population and angler interactions with them.

One of the key pieces to evaluating all this will be a new fish tagging study at the lake. We first did an in-depth study like this at Milford Lake in 2018 and then we replicated it at Eldorado Lake last year. Now it is Tuttle Creek's turn.

First step in this study is to tag about 2,000 Blue Catfish in spring of 2021. To date, we have tagged 1,819 with a small yellow plastic tube inserted just below the dorsal fin. The exposed part of the tag will have a unique identification number for each fish, along with a phone number to report if an angler catches it.



Next step is to give the recently tagged fish six weeks to move about the lake and do regular fishy things. Waiting is the hard part for me.



Vanessa from the Research Office showing off a good one while boats in the background still netting more.

Third step involves a large-scale recapture event, where KDWPT staff electrofish throughout the entire lake collecting Blue Catfish. This will give us lots of interesting information, such as fish movement, growth, and habitat preference. The most substantial insight will be gaining an estimate of how many fish are in the lake. This is determined by a ratio of how many tagged fish vs untagged fish we collect. It involves a lot of fancy math that thankfully our very smart Research Team takes care of.



Electrofishing is a very effective tool for collecting Blue Catfish. Brett driving the boat. Robbie and Katie netting the fish and having a good time.



The final step in this process never really ends. As time goes on, KDWPT biologist will evaluate angler catches of tagged Blue Catfish as reports come in. This will give us all sorts of fascinating insight into angler/fish relationships, such as: what size Blue Catfish do local anglers prefer to harvest, what time of year is the species most susceptible to angling, and are some sizes of fish more likely to be angled than others. In addition, the angler reports of tagged Blue Catfish will be crucial in evaluating movements of the species. People go fishing in a lot more places than we sample, so we will be interested in all the locations where these fish are being caught. From the Milford Lake tagging study, two tagged fish were caught 60 miles upstream of the lake! What will the Tuttle Creek study tell us about fish movement in that system?

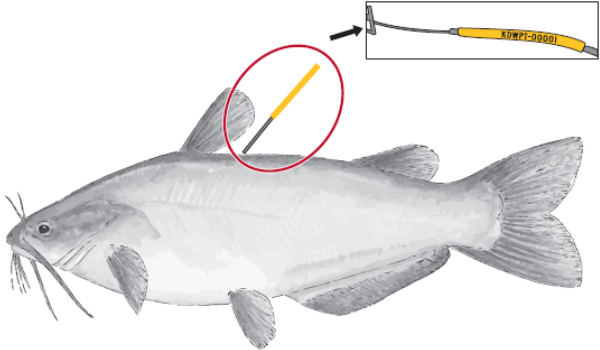
What to do if you are a lucky angler that catches one of these tagged fish? Most importantly is reporting that catch which can be done by calling the number on the tag which is 620-342-0658. This is the number for our Emporia Research Office that will be handling reports of tagged fish. If you have questions about this study, then you can call me at the Tuttle Creek State Park Office at 785-539-7941. The Emporia Research Office also takes care of mailing out the rewards for when an angler reports a tag catch. We call it a reward, but it is really our show of appreciation for reporting a tag. Currently the reward is either a Blue Catfish t-shirt or a Blue Catfish neck gator, but we are currently working on some new "thank you" swag.

When reporting a tagged fish, we will request the general location where it was caught, date caught, tag number, and whether the fish was kept or released. If the fish is not legal to harvest, anglers should return it to the water after recording the tag number (picture is good option). If the fish is legal to harvest, anglers can either harvest or release the fish. Because part of this study is evaluating harvest patterns, we encourage anglers to not let the presence of a tag influence their decision to harvest or release the fish, so do what you would normally do.

I do truly appreciate all who report the tagged fish they catch. And I want to thank you for reading about the new Blue Catfish regulation proposal and about the new tagging study at Tuttle Creek Lake. Hopefully both are a huge success.

ATTENTION ANGLERS

To better understand blue catfish populations in Kansas, a tagging study is being conducted by Kansas Department of Wildlife, Parks, and Tourism. Tagged fish will have a tag inserted near the dorsal fin. If you catch one of these tagged catfish, there is a reward for reporting the tag.



If you catch a tagged blue catfish, please contact the KDWPT Emporia Research Office at 620-342-0658. Please note the length of your fish and the five-digit tag number. Your reward will be mailed to you after KDWPT processes your tag return.

Signs that have been placed around the lake.



Billy tagging a healthy 22" fish and then showing off a much fatter one.

