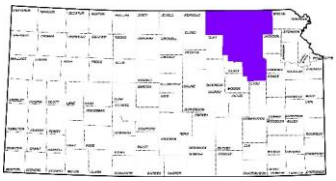
Tuttle Creek Fisheries Newsletter Spring 2019

Kansas Department of Wildlife, Parks and Tourism



Ely Sprenkle
District Fisheries Biologist
ely.sprenkle@ks.gov
ksoutdoors.com

Tuttle Creek State Park
5800A River Pond Rd
Manhattan, KS 66502
(785) 539-7941

Fishing Forecast for the Manhattan District

Every year, KDWPT fisheries biologist conduct standardized sampling to evaluate fish populations around the State. We do this to help us better manage these populations but also so we can share this information with anglers. You can access this information at https://ksoutdoors.com/Fishing/Fishing-Forecast

The fishing forecast page has a link to each of the most popular sportfish species. After clicking on a species, you then choose the type of water body: lake, pond, or reservoir. Then you are taken to a table that has data for 2018 which is just a simplified format of the sampling results that we use to evaluate fish populations.

Ben holding a couple of white bass from Jeffrey Auxiliary Lake. Next time I need to get pictures of some of the bigger fish.

One useful component of this data is the ranking of how many fish were collected per net, which is how we evaluate abundance from most to least. For an example see the table below for white bass in lakes. The New Herington City Lake had the most white bass over 9 inches per net at 19.25. However, if you were an angler seeking larger white bass then you might be more interested in Jeffrey Auxiliary Lake that had the highest catch rate of white bass over 15 inches at 2.75 fish per net.

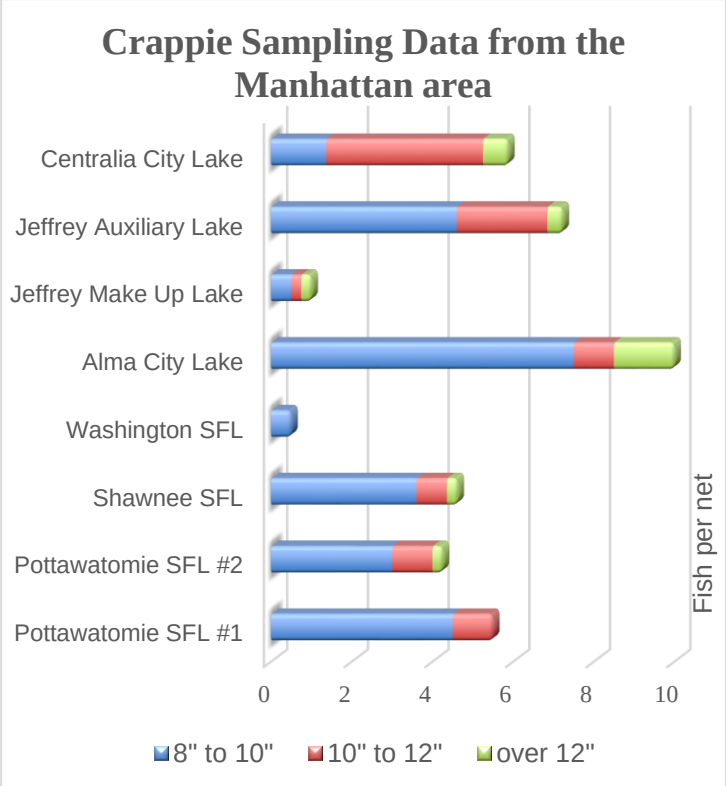
Water	Density	Preferred	Lunker
	(>9")	(>12")	(>15")
HERINGTON CITY LAKE-NEW	19.25	11.25	0.50
JEFFREY ENG. CTR.- AUX. MAKEUP LAKE	16.13	9.63	2.75
HOLTON - BANNER CREEK LAKE	10.88	6.25	0.63
WINFIELD CITY LAKE	7.10	4.80	0.00
JEFFREY ENERGY CENTER - MAKE UP LAKE	6.00	4.00	0.50
MARION COUNTY LAKE	3.50	3.50	0.00
PAOLA CITY LAKE	3.17	3.00	0.17
CHASE SFL	2.25	1.00	0.00
GEARY SFL	2.00	1.00	0.50

If you do not find a lake you are looking for on these tables then species abundance may have been very low or the lake may not have been sampled that year. This is the case for Tuttle Creek Reservoir as the lake was more than 20

Continued on page 2

feet high during the fall sampling season which prevented us from collecting the majority of the annual fish data in 2018. Missing a year of trend data can drive a fisheries biologist a little crazy, but sometimes that's just the way it goes.

On this page is a graph for crappie abundance and size structure from lakes that I sampled in 2018. This is the same type of data found on the Fishing Forecast page but presented in graphical form. Each bar color represents how many crappie were collected per net for each length group. Fish less than 8 inches were not included. Sample data for white crappie and black crappie have been combined for a better representation of what is available to anglers.



The number of fish collected per net does not always tell the whole story so I have included a short narrative for each lake.

Centralia City Lake has been one of the best crappie lakes in the state for several years. Sample abundance in 2018 fell from the historic highs seen the previous two years, but there are still great numbers of fish over 10 inches.

White crappie on left and black crappie on right

From Centralia City Lake

Crappie numbers have traditionally been low at Jeffrey Auxiliary Lake, but the 2018 sample abundance was the highest ever recorded at the lake due to improved habitat conditions. Angler reported catch rates of crappie continue to be low for a lake of this size but it has been trending upwards the last few years.

The crappie population at Jeffrey Make Up Lake has crashed due to poor spawning success from 2012 to 2016. However, sampling recorded moderately successful spawns in 2017 and 2018 which will hopefully improve angling success in the future.

Alma City Lake has been providing a decent crappie fishery for a small lake. However, I believe the 2018 numbers were artificially high due to low water conditions concentrating fish during the time of sampling.

Of the four state fishing lakes that I sample, Washington SFL had the lowest number of crappie per net, which indicates that a lot of fish were flushed out during some high precipitation events in that area. For more than a decade Shawnee SFL has struggled to grow larger crappie, but there has been improvement in the size structure the last two years. Pott#2 data shows the lake is maintaining a modest crappie population. The high numbers of smaller fish at Pott#1 shows that the population is recovering after several down years.

I hope you are able to utilize our forecast data to help you find some good fishing holes this year!

Where's the brush?

One of the jobs of KDWPT fisheries biologist is to create the brush piles that anglers like to fish around. We still sink big trees with concrete blocks, but now we also use pvc cube structures that will hopefully last longer.

Putting a buoy over a large brush pile to mark its location has been common practice, but this can be a maintenance pain as ice sheets tend to drag them away and now zebra mussels can accumulate on the buoys enough to weigh them down.

Zebra mussel encrusted brush pile at Jeffrey Auxiliary Lake

Another way we let anglers know about the location of fish habitat is to provide GPS coordinates. If you stop by the Tuttle Creek State Park office, then grab yourself one of the flyers with the GPS coordinates for habitat locations placed by KDWPT and with locations generously shared by The Riley County Fish & Game Association. I have included an image of this flyer at the end of this newsletter or feel free to come into the office and ask for a copy.

KDWPT provides an interactive map on our webpage that is intended to show all public fishing locations around the state. This map can be useful in locating private ponds open to public fishing through our F.I.S.H. program or finding out of the way river access spots. This map has recently been improved to include brush pile and pvc cube locations, which will hopefully help anglers find these good fishing spots. In addition, some lakes have contour lines overlaid from bathymetric maps that KDWPT biologist have been creating in recent years.

The included image is of Shawnee State Fishing Lake taken directly from the interactive map page. The contour depth lines are in blue. There are three orange dots in the southern end of the lake that signify where brush piles have been sunk at the lake. Clicking on the orange dots will provide a brief description of the habitat type.

You can access this map at the F.I.S.H. atlas page at ksoutdoors.com or simply clicking here. Make sure to check out all the different types of public fishing access locations on the map to see if there is any fishing spots in your area that you might not know about. Good Luck!

An experimental change in regulations to hopefully make bigger sunfish

A statewide evaluation of bluegill populations shows that public impoundments are struggling to provide bigger bluegill for anglers. Producing good numbers of harvestable bluegills has been a longstanding goal of KDWPT Fisheries Division as it would be popular with anglers, but many efforts have failed to make dramatic improvements in bluegill size characteristics. Most lakes are able to produce sufficient year-classes due to good spawning success, but larger bluegills are just few in number.

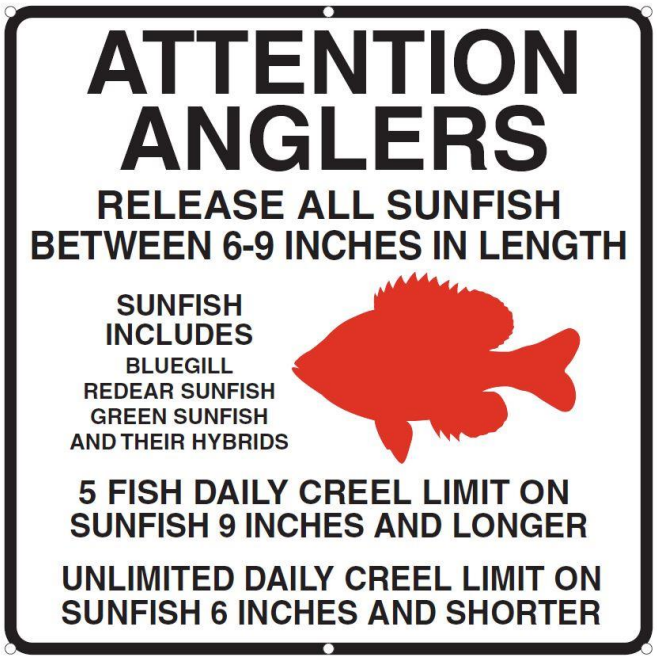
A shining example of this is Pottawatomie State Fishing Lake #2. In the last 30 years of trap net sampling at the lake, only 3 bluegill larger than 8 inches have been collected. That is just dreadfully bad. I have never been able to figure out why the lake fails to grow bigger bluegill as the lake has pretty good habitat for the species.

Length limit regulations on the size of fish legal to harvest has been shown to improve the size structure of other species in Kansas. A good example of this is the impacts of minimum length limits on walleye populations to increase the average size of walleye in a lake.

In a statewide effort to explore and evaluate if a regulation change could improve panfish angling opportunities, KDWPT has developed an experimental slot length limit starting in 2019. The lakes selected for this evaluation are Jewell State Fishing Lake, Lake Lenexa, Miami State Fishing Lake and locally at Pottawatomie State Fishing Lake #2.

This new slot limit will be in effect for bluegill, redear sunfish, green sunfish and their hybrids. The regulation calls for the release of all of these sunfish species from 6 inches to 9 inches. The creel limit of fish over 9 inches is five per day and there is still unlimited daily harvest of fish less than 6 inches.

The intent of this regulation change is to allow more bluegill and redear sunfish to achieve a larger size for anglers seeking fish for consumption. In addition, the regulation will still allow anglers that primarily collect panfish to be used as bait to still be able to utilize this resource. The hope is this regulation change will be appealing to both types of anglers targeting sunfish at these lakes. However, like I mentioned earlier, bigger bluegill are in short supply at Pott#2 so anglers seeking bluegill fillets will likely be disappointed in the short term.



The above sign will be placed around the lake to inform anglers of the rule change. Panfish populations will be closely monitored to document any changes to abundance or size structure. After the evaluation period, if the new regulation has not been beneficial to the fishery then it will likely be changed back to the prior lack of additional regulations on sunfish at Pott#2. Tight lines and thanks for reading.

Pictures from sampling conducted in 2018

Crappie, walleye and a giant grass carp from scenic Alma City Lake. Of course I had to pose with the biggest fish.

Saw some nice sized redear sunfish at Shawnee State Fishing Lake and starting to see bigger crappie there too.

Night shocking walleye at Jeffrey Make Up Lake. The population is greatly improved and fishing should be good there this year.

More Pictures from fall 2018 sampling

Another giant crappie from Pottawatomie State Fishing Lake #2 at 17 ½ inches and 2.8 pounds. The overall crappie population is just ok at the lake but I see one of these giants there about every year.

Pictures from a very sunny day and then from a dreary day at Jeffrey Auxiliary Lake. The crappie population is on the way up and there are good numbers of bigger channel catfish. Decent wiper population to go with great numbers of big white bass. Walleye are finally improving due to recent stocking success but harvest is still expected to be low in 2019.

Pictures from sampling conducted in fall of 2018

Lots of pictures from Centralia City Lake. I wish I remembered to take this many pictures at all the other lakes.

Night shocking at Centralia to evaluate stocking success of saugeye and training up the new biologist at Milford at the same time. Population is looking great.

Centralia City Lake has a low level population of fat wipers. They are stocked in the lake to help keep the gizzard shad population in check.

Centralia City Lake has been one of the best channel catfish lakes around for most of the last decade. The population took a step backward in 2018 but would still be considered a good fishing destination for the species.

A big THANK YOU to everyone that helped me last fall and smiled big for the camera: Adam, Ben, Brett, Bryon, Danny, Luke and Nathan.

Manhattan District fish habitat locations

Location Description	Habitat Type	GPS Coordinates			
		Decimal Degrees		Degrees Minutes	
Tuttle Creek River Pond					
West bank	4 cubes & brush	39.249533	-96.586950	N 39 14.972	W 96 35.217
SW dock	3 cubes	39.248517	-96.586917	N 39 14.911	W 96 35.215
North ramp dock	2 cubes & brush	39.253150	-96.585100	N 39 15.189	W 96 35.106
Submerged hump	4 cubes	39.252733	-96.583717	N 39 15.164	W 96 35.023
Tuttle Creek Lake - placed by Riley Co. Fish & Game Association					
Marina Cove	1 cube	39.281283	-96.592350	N 39 16.877	W 96 35.541
Marina Cove	1 cube	39.281533	-96.592083	N 39 16.892	W 96 35.525
Marina Cove	1 cube	39.281550	-96.591967	N 39 16.893	W 96 35.518
Marina Cove	brush	39.278950	-96.592350	N 39 16.737	W 96 35.541
Elk's Cove	1 cube	39.265883	-96.586150	N 39 15.953	W 96 35.169
Carnahan Point	brush	39.317310	-96.634790	N 39 19.039	W 96 38.087
Stockdale Cove	brush	39.299200	-96.668530	N 39 17.952	W 96 40.112
McIntyre Cove	brush	39.289540	-96.591650	N 39 17.372	W 96 35.499
Pottawatomie State Fishing Lake #1					
South pier	1 cube	39.468683	-96.408150	N 39 28.121	W 96 24.489
East pier	1 cube	39.470717	-96.408133	N 39 28.243	W 96 24.488
NE pier	1 cube	39.471417	-96.408700	N 39 28.285	W 96 24.522
Habitat buoy	cedar trees	39.469150	-96.408480	N 39 28.149	W 96 24.509
Pottawatomie State Fishing Lake #2					
Habitat buoy	brush pile	39.230667	-96.528833	N 39 13.840	W 96 31.730
North Dock	2 cubes	39.231333	-96.528433	N 39 13.880	W 96 31.706
South Dock	3 cubes	39.228750	-96.527817	N 39 13.725	W 96 31.669
Pottawatomie Cross Creek Lake					
North Pier	1 cube	39.410100	-96.091733	N 39 24.606	W 96 05.504
South Pier	1 cube	39.409767	-96.092250	N 39 24.586	W 96 05.535
Middle lake	3 cubes	39.409983	-96.091400	N 39 24.599	W 96 05.484
Middle lake	2 cubes	39.409700	-96.090717	N 39 24.582	W 96 05.443
Alma City Lake					
South bank	4 cubes & brush	38.978267	-96.260883	N 38 58.696	W 96 15.653

Manhattan District fish habitat locations

Location Description	Habitat Type	GPS Coordinates			
		Decimal Degrees		Degrees Minutes	
Jeffrey Make-Up Lake					
South of dock	9 cubes	39.264250	-96.133000	N 39 15.855	W 96 07.980
Jeffrey Auxiliary Lake					
Dock	4 cubes	39.247583	-96.152600	N 39 14.855	W 96 09.156
East of ramp	brush pile	39.248367	-96.151600	N 39 14.902	W 96 09.096
Shawnee State Fishing Lake					
East end of dam	cedar trees	39.200351	-95.801881	N 39 12.021	W 95 48.113
West end of dam	cedar trees	39.200640	-95.805438	N 39 12.038	W 95 48.326
Out from ramp	brush pile	39.201053	-95.801924	N 39 12.063	W 95 48.115
Washington State Fishing Lake					
North end of dam	3 cubes	39.925217	-97.117833	N 39 55.513	W 97 07.070
Centralia City Lake					
West dock	3 cubes	39.701833	-96.159867	N 39 42.110	W 96 09.592
Main point pier	3 cubes	39.705033	-96.153767	N 39 42.302	W 96 09.226
North beach pier	3 cubes	39.701050	-96.151133	N 39 42.063	W 96 09.068
South beach pier	1 cube	39.699817	-96.150867	N 39 41.989	W 96 09.052
South road bridge	5 cubes	39.696683	-96.152117	N 39 41.801	W 96 09.127
Hump by dam	7 cubes	39.705150	-96.158600	N 39 42.309	W 96 09.516
West shore	3 cubes	39.701067	-96.159750	N 39 42.064	W 96 09.585

If you find any errors or missing habitat then please let me know at ely.sprenkle@ks.gov

If you need a different GPS coordinate format than what is listed here then you can convert these numbers at http://boulter.com/gps/

This handout will be updated periodically as new habitat is placed or older habitat is lost.
Dated 11/30/2018