# Pittsburg District Fisheries Newsletter

Volume 1, Issue 17

Kansas Dept Wildlife, Parks & Tourism

Fisheries Division

Fall 2018

Written By:

Connor Ossowski, District Fisheries Biologist Kansas Dept. of Wildlife, Parks & Tourism 507 E. 560<sup>th</sup> Ave. Pittsburg, KS 66762 (620) 231-3173 connor.ossowski@ks.gov

# There's a New Sheriff (District Fisheries Biologist) in Town

Hello anglers! My name is Connor Ossowski and I am the new District Fisheries Biologist in the Pittsburg district. I began on July 2 of this summer. I will be managing Cherokee, Crawford, and Neosho counties. I couldn't be more excited to fill the shoes of Rob Friggeri, who was the previous district fisheries biologist in the area. I am sure that he has crossed paths with a lot of you, whether it was at a fishing clinic, hunter education course, or out on the water, and I couldn't be more enthusiastic to build off of the fisheries management that Rob has done throughout the past 39 years in the district. Thank you Rob for all that you have done for southeast Kansas anglers!

I was born and raised in Smith Center. I spent all of my time when I wasn't in school on the shorelines at Glen Elder and Lovewell Reservoirs chasing channel catfish and flathead catfish. I developed a passion for Kansas waters throughout my childhood. I moved to Hastings, Neb. in second grade, but continued to be drawn to Kansas in my spare time for the fishing opportunities the state had to offer.

I attended the University of Nebraska-Lincoln where I received my Bachelor's Degree in Fisheries and Wildlife Biology with a concentration in Fisheries Ecology and Management. All four summers throughout my undergraduate experience, I worked as a summer technician with Scott Waters, district fisheries biologist, in the Glen Elder district for KDWPT.

I continued to work with the University of Nebraska-Lincoln after I graduated as a fisheries research associate. I worked on a Channel Catfish research project on the Red River of the North in Selkirk, Manitoba. We were able to implant transmitters in 120 Channel Catfish and track their movements throughout the Red River of the North and its tributaries. Oh, and I suppose we were able to sample a few fish with a rod and reel as well. It was heaven on earth.

I then was fortunate enough to obtain a permanent position with KDWPT as a fisheries environmental associate based out of the Emporia Research and Survey Office. In this position, I conducted a variety of job duties related to the Aquatic Nuisance Species (ANS) program, fisheries research, and commercial bait program. This was a statewide position, so I was able to travel all across the state. I discovered quickly that the southeast part of Kansas is a special place and a potential landing spot for my career.

I became the district fisheries biologist for the Pittsburg District on July 2 of this summer. I am ecstatic at the fishing opportunities in my district and I can't wait to begin sampling the Mined Land Wildlife Area strip pits, Crawford State Fishing Lake, Neosho State Fishing Lake, Bone Creek Lake, and all of the FISH and CFAP properties. There certainly is ample opportunity for anglers chasing multiple species.





From a boy who loves to fish Kansas waters to becoming a district fisheries biologist for KDWPT, I am excited to serve anglers in the Pittsburg district.

# **Black Bass Sampling** Spring 2018

#### **Bone Creek Lake**

Bone Creek Lake was sampled on May 16, 2018. Water temperature was 76 degrees and it is likely that bass had moved off the shorelines from the spawn to deeper and cooler water. A total of 37 largemouth bass were collected in one hour of electrofishing in comparison to last year's sample of 122 largemouth bass in 2.21 hours of electrofishing. This provides us with a 37 per hour catch rate for largemouth bass in relation to the 46 per hour catch rate from the 2017 sample. The condition of the largemouth bass collected was excellent.



Bass collected from Bone Creek appear to be in excellent condition and sizes up to 21 inches to provide anglers with a quality fishery.

#### **Crawford State Fishing Lake**

Crawford State Fishing Lake was sampled on May 15, 2018. Water temperature was 73 degrees and it is likely that the bass spawn was over and the bass had moved off the shorelines to deeper and cooler water. A total of 63 largemouth bass were collected in 0.83 hour of electrofishing in comparison to last year's sample of 81 largemouth bass in 2.21 hours of electrofishing. This provides us with a 56 per hour catch rate for largemouth bass in relation to the 28 per hour catch rate for largemouth bass in 2017. The condition was excellent. This is good to see as this is the highest catch rate witnessed at Crawford State Fishing Lake since it was infected with largemouth bass virus (LMBV) in 2007. It appears the population is bouncing back to pre-virus levels. This is fantastic news for anglers as the bass fishing will bounce back to where you will cast parallel to the shorelines with a Ned Rig and produce a quality-sized largemouth bass for years to come!

#### **Crawford State Fishing Lake (continued)**

A total of 41 spotted bass were collected in 0.83 hour of electrofishing in comparison to last year's sample of 54 spotted bass in 2.21 hours of electrofishing. This provides us with a catch rate of 35 spotted bass per hour in relation to the 17 spotted bass per hour from the 2017 sample.



Pictured is Rob Friggeri, recently retired district fisheries biologist of the Pittsburg District, holding a largemouth bass collected at Crawford State Fishing Lake in 2016.

#### The more you know....

Electrofishing in the spring is how we evaluate densities (i.e., how many largemouth bass are in the lake), size structure (i.e., how big or small largemouth bass are in the lake), and condition (i.e., how healthy the fish are) of our black bass populations.

## **Neosho State Fishing Lake**

#### Gizzard Shad Research Project

Neosho State Fishing Lake was included in a study to research the influence of gizzard shad to the food web in our small impoundments. Essentially, we want to see how gizzard shad impact the water quality, invertebrates, zooplankton, phytoplankton, and sportfish in our state fishing lakes. Another large component of the study is to see how many and how often throughout the year that largemouth bass, for example, eat gizzard shad.

Neosho State Fishing Lake has gizzard shad and lots of them! Anglers may view gizzard shad as an important food item for sportfish in our impoundments across Kansas. However, in our state fishing lakes that are smaller in size, they tend to lack the predators needed to control the numbers of gizzard shad. This will result in a large biomass of gizzard shad that will compete with sportfish. They will not only crowd out sportfish by taking up space and resources needed for fish growth, but will result in an undesirable fish community for anglers to utilize.

As a district fisheries biologist, my number-one goal is to manage and enhance fishing opportunities for anglers in the district. By selectively removing gizzard shad, we will free up space for largemouth bass, channel catfish, crappie, bluegill, and redear sunfish at Neosho State Fishing Lake to provide anglers with a preferred fish community for years to come.

Feel free to contact me with any questions you may have in regards to the gizzard shad study and selective removal to come this winter at 620-231-3173, or email connor.ossowski@ks.gov.



Pictured is a gizzard shad collected Neosho State Fishing Lake. Gizzard shad from multiple year classes and sizes are in the impoundment.

# Partial Renovation Planned at **Four State Fishing Lakes**

EMPORIA – In a cooperative study with Kansas State University to evaluate the influence of gizzard shad on food webs in small impoundments, the Kansas Department of Wildlife, Parks, and Tourism (KDWPT) will be conducting partial fishery renovations on four impoundments small this winter. Selected impoundments are Neosho State Fishing Lake, Pottawatomie State Fishing Lake No. 1, Shawnee State Fishing Lake, and Washington State Fishing Lake.

In a partial renovation, the fish population is not completely eliminated as it is during a full renovation. The first step in a partial renovation is lowering water levels, which will occur in late October when levels in these four impoundments will be lowered approximately 3 feet below normal lake elevation. When weather conditions permit in November or December, a fish toxicant called Rotenone will be applied at a concentration of 7.5 parts per billion, which is much less than the 40 parts per billion allowed in municipal water supplies. The low-dose of Rotenone is designed to target gizzard shad while not affecting sport fish. No salvage order will be issued, and sport fishing equipment and harvest regulations will remain in effect. However, anglers will be permitted to collect deceased gizzard shad from the shoreline following treatments for personal use only.

Gizzard shad present a challenge to managing small impoundments, which are designed to provide closeto-home fishing opportunities. While many anglers may recognize gizzard shad as a food source for sport fish, this mostly applies to large reservoirs where open-water fish such as walleye and wipers prey on shad. In smaller impoundments, open-water predators are rare or non-existent and gizzard shad populations can expand to levels that cause problems for more desirable sport fish. One example is direct competition for food resources between gizzard shad and young bluegill, which typically favors gizzard shad and causes a reduction in bluegill numbers. These changes can cause a chain reaction in the food web because bluegill are a preferred prey of sport fish like largemouth bass and white crappie. The result is an unsustainable sport fishery.

# Partial Renovation Planned at Four State Fishing Lakes (continued)

When gizzard shad populations exceed acceptable levels, a complete lake renovation is often prescribed to reset the fish community and rebuild a sustainable balance. A complete renovation entails draining the reservoir as much as possible, then treating the remaining water with Rotenone at levels of 2,000-3,000 parts per billion to remove all fish. A major downside of renovation is the amount of time needed for newly-stocked fish to grow to sizes sought by anglers. The partial renovation to remove gizzard shad is a new strategy that shows promise. Other fish species are more tolerant of the chemical, although unintended mortality may occur in a small portion of the population. Reservoirs will be restocked following treatment if larger than expected loss occurs.

Rotenone is a plant-based compound used primarily as an insecticide or piscicide. It is toxic to fish and other gill-breathing animals, but does not harm humans, birds, or other air-breathing animals. Similarly, animals that consume fish exposed to Rotenone will not be affected. Rotenone breaks down rapidly in sunlight and will be undetectable a couple weeks after application.

Each of these reservoirs will be closed to boat traffic on the day of Rotenone application and marked with barricades across boat ramps. Anglers are advised to contact local fisheries biologists for status of the renovations before making any trips this winter.

For more information on the partial renovation projects, contact fisheries biologist Ben Neely at (620) 342-0658 or ben.neely@ks.gov.



# Private Landowners Seeking Fish Management Advice

I spend the majority of my time managing the public waters in the Pittsburg District, but I do enjoy and receive a lot of questions from private landowners about their ponds.

Q: I have an abundance of vegetation in my pond. How do I get rid of it?

A: The first question I will always ask a landowner if they have a vegetation issue is to provide a picture. It is important to identify the aquatic vegetation because different species of aquatic plants require different methods of removal. The size of the pond must also be considered. If a smaller pond is completely covered with aquatic vegetation, removal will be needed. If less than 50 percent of the pond is covered in vegetation and is being managed for fishing, I would not recommend any form of vegetation removal. Aquatic vegetation provides phenomenal habitat for the fish communities in a pond, and most importantly, it adds oxygen to the water.

There are three different forms of removal: chemical, biological, and mechanical. Chemical is the use of the aquatic herbicides to remove the vegetation. It is very important to follow application instructions and to apply in a timely manner. There can be drastic consequences if not done correctly, causing an oxygen depletion resulting in a fish kill. Biological control uses triploid grass carp to remove vegetation. Triploid means that they cannot reproduce. This is important, because if they were diploid, they could reproduce and in high numbers. Mechanical is the physical removal of vegetation with the use of a seine, or a rake. This is labor intensive.

If removal of the vegetation is desired, I can refer you to different forms of aquatic herbicides that you can apply to remove the vegetation. An online resource you can use to identify the aquatic plant is the AquaPlant website provided by Texas A&M AgriLife Extension. The link is as follows: https://aquaplant.tamu.edu.

Another great tool private landowners can use is the Producing Fish and Wildlife in Kansas Ponds book. This can be found at the following link: https://ksoutdoors.com/Fishing/Special-Fishing-Programs-for-You/Pond-Management-Program/Producing-Fish-and-Wildlife-in-Kansas-

#### Mined Land Wildlife Area

The strip pits of the Mined Land Wildlife Area comprise of 1,500 acres of water. With over 250 unique pits, the Mined Land Wildlife Area provides a unique experience for anglers. Each pit has unique habitat, such as coves and submerged trees, and different levels of fishing pressure. If one is willing to portage a canoe, or a kayak, into the pits that are farther away from the road, you may just be surprised with a 5-pound-plus largemouth bass.

Walleye, largemouth bass, spotted bass, channel catfish, flathead catfish, wipers, crappie, rainbow trout, brown trout, bluegill, warmouth, redear sunfish, and spotted gar – where else in the state can you hear brown trout and channel catfish being found in a lake year-round? Look no further than the Mined Land Wildlife Area in Unit No. 30. Rainbow trout are stocked every month from October through March. Channel catfish are stocked every fall across the entire wildlife area. Walleye are periodically stocked to provide anglers with another species to pursue.

Whether you love to fish, or simply like to get outside and enjoy the outdoors paddling a kayak, the Mined Land Wildlife Area is a unique resource in Kansas and a destination for many. I like to consider it the Boundary Waters of the Midwest. There are lots of unique pits to fish and you can spend a weekend portaging with a canoe to different areas to fish. If you can't make the trip up north to the Boundary Waters, you may consider the Mined Land Wildlife Area as a cheaper option for a Boundary Waters experience.

To top it off, three state record fish species were caught on or near the Mined Land Wildlife Area. The channel catfish state record fish was caught on the area that weighed a 36.5 pounds and had a length of 38 inches. The warmouth state record was caught on Unit No. 7 on the Mined Land Wildlife Area that weighed 1.1 pounds and had a length of 10.5 inches. The largemouth bass state record was caught near the area on private water that weighed 11.8 pounds and had a length of 28.5 inches.



## Mined Land Wildlife Area (continued)

The importance of Clean, Drain, and Dry

You hear the term Clean, Drain, and Dry when the topic of aquatic nuisance species (ANS) is discussed. You hear it on radio ads, you see it on the news with jumping Silver and Bighead Carp, and you watch River Monsters and are terrified of the northern snakeheads in Arkansas.

The Mined Land Wildlife Area is a case example of why it is important to clean, drain, and dry your kayaks, fishing equipment, boats, and boat trailers. Back in the late 1990s, Eurasian watermilfoil invaded the strip pits and was discovered in four units and nine individual pits. Currently, it is in hundreds of the pits and in the majority of the units of the wildlife area.

It will be an uphill battle to apply herbicide and control Eurasian watermilfoil on the Mined Land Wildlife Area. But, the silver lining in preventing the spread of the aquatic plant is that you, as anglers, can help! By cleaning, draining, and drying your boat trailers, bait buckets, and fishing equipment from any fragments of the plant, you can help contain the invasive plant.

Bone Creek Lake, Crawford State Fishing Lake, and Neosho State Fishing Lake are nearby water bodies that can potentially be invaded by the invasive plant. Please take proper precautions as it would be not only an eye sore, but affect the fisheries tremendously as well.



Pictured are stems and leaflet counts of Eurasian watermilfoil. It is found in hundreds of the strip pits on the Mined Land Wildlife Area. Please take proper steps by Cleaning, Draining, and Drying all fishing equipment in preventing the spread to nearby water bodies.





Pictured is myself, Connor Ossowski, holding a flathead catfish that we sampled from the Kansas River.



Pictured is myself holding a channel catfish that was caught on the Red River of the North, Selkirk, Manitoba as a part of a collaborative research project between provincial, state. and federal agencies.



Pictured is myself holding a lake sturgeon sampled using gill nets on the Winnipeg River, Manitoba.

## **Pittsburg District Newsletter Last Remarks**

I hope that you enjoyed this edition of the Pittsburg District Newsletter. If you know of anyone who would like to subscribe or wants to know more about the Pittsburg District, you can find the link to sign up here.

I'll be out on the water sampling the district in the coming weeks to assess the populations in Bone Creek Lake, Crawford State Fishing Lake, Neosho State Fishing Lake, Mined Land Wildlife Area, and CFAP properties in the district. The spring edition of the newsletter will include results from the fish sampling and will provide anglers the tools to be able to choose where they would like to fish.

I look forward to speaking with anglers throughout the district. Don't hesitate to drop by the office and chat about latest fishing reports, questions pertaining to the lakes in the district, or sharing photos of your latest catch. As an avid angler myself, you may just run into me out on the water. As always, happy fishing and fishKS!



Connor Ossowski **District Fisheries Biologist** 507 E. 560<sup>th</sup> Pittsburg, KS 66762 (620) 231-3173