# **Lawrence District Fisheries**

#### **KDWPT Fisheries Division Newsletter**

#### Spring 2018

#### Fall Test Netting Summary

Netting at Clinton and Melvern revealed more adult crappie were caught during 2017 than 2016. Many of these crappie were small, so anglers will likely have to wade through a lot of small fish to find keepers in 2018. Young of the year (YOY) crappie production was not as high in 2017 as it was in 2016, but was still good. Survival of these young fish should improve these fisheries. Channel catfish at both reservoirs looked good, with a little better size than has been present in recent years. White bass numbers fell at both reservoirs, but size continued to be impressive with some fish around 17 inches in length. Good numbers of sauger were observed at Clinton, but walleve numbers at both Clinton and Melvern need improvement. Clinton wiper numbers held steady and size continues to improve, with some reports of fish over 10 pounds caught in 2017. Some indications of successful blue catfish spawning activity in recent years were noted at both Clinton and Melvern. Fishing forecast information is available online at www.ksoutdoors.com; click on "Fishing Reports and Forecasts" under the "Fishing" tab. The table below shows some of the noteworthy statewide ranks achieved by Clinton and Melvern compared to other reservoirs using 2017 sampling data.

Table 1. Statewide ranks of selected species at Clinton and<br/>Melvern Reservoir based on 2017 sample data.

Lake	Clinton	Melvern
Channel catfish	1	5
Smallmouth bass		5
White bass	8	
White crappie	7	





## **Small Lake Netting Summaries**

Carbondale City Lake, Douglas SFL, Lonestar Lake, Melvern River Pond, Osage SFL and Lake Shawnee were all sampled this past fall. All waters could be considered fair places to fish for bluegill; but Lonestar, Melvern River Pond, and Lake Shawnee are the best. Anglers pursuing crappie should go to Carbondale, Melvern River Pond, Douglas SFL or Osage SFL; although other lakes had quality fish, as well. All of these lakes, except Carbondale City Lake receive annual stockings to maintain channel catfish populations. Carbondale is unusual because it currently has a selfsustaining channel catfish population. However, all of these waters have decent channel catfish angling. Carbondale and Melvern River Pond had the highest number of channel catfish, and the River Pond had the biggest fish. Redear sunfish, or shellcracker as they are sometimes referred to because of their fondness for crushing and eating snails, were found in fishable numbers in three lakes: Melvern River Pond, Douglas SFL and Lonestar. Douglas SFL had the higher abundance, but the River Pond had the best combination of numbers and size. Saugeve were found in two district lakes: Carbondale City Lake and Douglas State Fishing Lake. Carbondale had the best population, but Douglas had some big fish measuring over 22 inches. Keep in mind that saugeye have only been stocked once at Douglas SFL so density is low. On the other hand, saugeye are normally stocked every year at Carbondale, so the density is much higher. Wiper are stocked primarily into four district small lake waters, including Carbondale City Lake, Lonestar Lake, Melvern River Pond, and Osage SFL. None of these waters had very good wiper populations based upon fall test netting.



## Small Lake Statewide Ranks

Under the small lakes (10 to 1,200 acres) heading in the Fishing Forecast, several district lakes earned distinction. Depending upon the species, there may be close to 70 or more waters in competition. Rankings of note are listed below. These lakes would be some of the better lakes to fish for species identified in the table.

Table 2. Notable Statewide Rankings for Small Lakes. Carb=Carbondale, DGSL = Douglas SFL, Lone = Lonestar, River = Melvern River Pond, Shaw = Lake Shawnee.

Rank	Carb	DGSL	Lone	River	Shaw
Bluegill			11	16	14
C Cat	6	7			
LM Bass		5			
WCrappie	3			10	
Saugeye	8				
Redear		1	5	4	



### **Black Bass Sampling Summary**

Black bass (largemouth, smallmouth and spotted) sampled during the spring of 2017 at selected district lakes are listed in the table below. Anglers can use the table to help decide where to fish based upon their interests. Anglers wishing to fish lakes where they have the best chance to catch bass 15 inches long and longer should target Melvern River Pond, Lake Shawnee, Lonestar Lake and Douglas SFL. Anglers not caring about size of bass they catch should choose Douglas SFL, Lonestar Lake, Lake Shawnee and Osage SFL, based on the catch rate of bass 8 inches long or longer in the table. As you can see, Douglas SFL, Lonestar Lake, and Lake Shawnee are on both lists indicating that they have the best of both criteria – high catch rate and high quality size.



Table 1. Black Bass Summary based on 2017 sample data (numbers depict catch per hour of electrofishing).

Lake	# > 8"	# > 12"	# > 15"
Clinton	9	5	1
Melvern	14	11	3
Carbondale CL	97	42	8
Douglas SFL	162	107	10
Lonestar	151	53	12
Melvern River Pond	55	43	21
Osage SFL	105	34	2
Lake Shawnee	144	71	16

# **Gizzard Shad Production at Clinton and Melvern Reservoirs**

Gizzard shad are the most important prey fish species at Clinton and Melvern reservoirs. Generally, when gizzard shad production is good at a reservoir, the fishery flourishes. Every summer 20 sites are electrofished at each of these two reservoirs to assess young of the year (YOY) gizzard shad production. Abundance is important, as the more prey available to predators the better they survive and grow. Equally important is size. If YOY shad are too large for predators to feed on, then they will not provide a benefit. Smaller predators, such as crappie require small shad (i.e. 1-4 inches in length), they cannot do anything with shad that are 6 inches long (larger predators can, but usually not crappie, unless they are exceptionally large).

High numbers of 2- to 3.5-inch shad were sampled at Clinton, which should provide excellent forage for crappie and all other predators in the lake.

Moderate numbers of two different sizes of shad were captured at Melvern. One group ranged from 2-3.5 inches, whereas; the larger group measured between 5 and 7 inches in length. Higher abundance would have been better, but overall the sample was not too bad, considering how dismal the prey situation was a few years ago during the drought.



# Results of Summer Blue Catfish Electrofishing at Clinton and Melvern Reservoirs

Blue catfish were stocked at Clinton Reservoir seven of eight years from 2006 – 2013 to try to establish this species. Attributes of blue catfish are many, but probably the main one is their ability to attain large size (more than 100 pounds), and that was one of the reasons for stocking them into Clinton. Blue catfish are slow to reach sexual maturity, sometimes taking as long as seven years, so these fisheries can take awhile to develop. Summer electrofishing samples were taken at 10 locations. Blue catfish were observed at seven sites. Fish ranged from 16 to 31 inches long and 2.2 to 15.2 pounds. The population continues to age and get larger, but no young fish were observed.

Sampling at Melvern revealed fewer fish. Only one older fish was sampled, and it was 22 inches long and weighed 4.6 pounds. But the exciting news is that some (n=8) small fish, probably oneyear-olds, were sampled. These juveniles ranged from about 6.5 to 8.8 inches in length, and marked the first time in several years that any fish this small definitely came from natural production (i.e. were not stocked). Hopefully protection of blue catfish with the 35-inch minimum length limit will help enhance production of blues for years to come.



#### **Clinton Reservoir Creel Survey**

A March through October creel survey was conducted to assess harvest characteristics at Clinton Reservoir in 2017. Most pressure, use, and harvest parameters were higher than historical averages. A total of 63,866 anglers exerted 158,587 hours of fishing effort. A total of 166,071 fish were harvested and another 173,707 were released. Anglers preferred crappie, followed by channel catfish and walleye. Crappie led the way in number and pounds harvested, followed by channel catfish and white bass in number; in terms of weight channel catfish was second and wiper was third. Crappie were most important, as far as, fish released, followed by white bass and wiper. A total of 15,180 hours of fishing effort was expended by 11,738 anglers in the outlet. White bass had the highest harvest by number followed by channel catfish and white crappie. Most pounds harvested by species in descending order were: wiper, channel catfish and white bass.

# 2017 Melvern Rearing Pond Results

About 600 pounds of fathead minnows were stocked into the rearing pond during March. These minnows provided much of the feed for largemouth bass. In addition, more than 100 adult sunfish were stocked during April to produce additional prey. A total of 6,078 largemouth bass fingerlings were stocked in May. The pond was harvested November 4. Bass had grown well, averaging 8.7 inches in length and 0.32 pounds in weight. A total of 2,059 of these bass were stocked at three locations at Melvern Reservoir in an effort to increase density. Thanks to the U.S. Army Corps of Engineers (CORPS), KDWPT, East Kansas Bassmasters Club, and the young bass anglers with Kickback Bass Club for assisting with the harvest. Special thanks goes to Curtis Keller, Melvern CORPS, for taking care of the pond on a day-to-day basis, especially cleaning the sock (a barrier to exclude wild fish from entering the pond). And a special thanks goes to to John Tucker, KDWPT, for spending the night with the pond the night before the harvest to monitor water levels.











## **2017 Stockings**

Stockings are utilized to improve fisheries by introducing a new species to a water body to perhaps occupy an unfilled niche (space) in the ecosystem, or to maintain fishable stocks of an already established species, or to manipulate a component of the fishery, usually through predation. In urban areas, catchablesize channel catfish are stocked multiple times during the year to provide anglers with something to catch, as these small lakes can get rapidly "fished out." More than 9,600 pounds of channel catfish were stocked in these waters in the Lawrence District in 2017. State and community lakes sometimes need help, too. Approximately 21,841 channel catfish, 265,000 saugeye, 366,000 walleye, and 2,345 wiper were stocked in these lakes within the district. Finally, 32,107 largemouth bass, 708,828 sauger, and 7.1 million walleye were stocked into district reservoirs. These stockings are vital to maintaining or improving existing fisheries. Many thanks to our hard-working KDWPT hatchery staff and contractors who make it all happen!

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