

Written By:

Carson Cox, District Fisheries Biologist Kansas Department of Wildlife & Parks 1830 Merchant St., P.O. Box 1525 Emporia, KS 66801 (620) 342-0658 carson.cox@ksoutdoors.com

Crappie Fishing at Fall River?

For those of you who read last spring's edition of the Fall River District Fisheries Newsletter you may remember, I wrote about how the U.S. Army Corps of Engineers (USACE) dam construction project at Oologah Reservoir in Oklahoma impacted the crappie fishing at Fall River Reservoir. Well, the crappie fishing appeared to be messed up again this year, but for a different reason. The USACE utilized federal stimulus dollars to overhaul the Tainter gates on Fall River and Toronto Dams. The Tainter gates are the eight big ones above the water line when the lake is at normal conservation pool (pictured below).



Fall River Reservoir Dam Tainter gate repair 2010.

By the way, the smaller tunnels that are under the water are called sluice gates. I have been there when the engineers inspect the inside of the sluice gates. The water is pumped out of the stilling basin. We seine out all the fish. Game fish are returned to the reservoir. The public is allowed to have the rough fish. Then a couple of brave souls crawl up a ladder and walk inside the sluice gate tunnel with a flash light. As you can see in the picture, the sluice gates don't seal completely tight, so there's water leaking in from the lake. One the lake side, divers position a temporary bulkhead with rubber seal around the sluice gate. Then they raise the gate beneath the temporary bulkhead. The only thing keeping the bulkhead in place is water pressure from the lake. The poor guys who have to inspect the lake side of the gate stand next to the bulkhead while the sluice gate is lowered, effectively sealing them in. It's completely dark except for their flash light, which they use to look at the lake side of the gate. Remember, this whole operation is taking place under the water on the bottom of the reservoir. Boy! What those guys do to keep water in the lake so we can enjoy our fishing.

As part of this repair process, they had to lower the reservoirs two feet below normal conservation pool. This buffer was necessary to give them enough time to put the gates and seals back in place if the water level rose due to a storm event. Most Fall River anglers know



Fall River Reservoir three feet from full.

just how fast the water can rise. The average water retention time in Fall River Reservoir is only 23 days. That means that the entire volume of the reservoir is flushed through the dam about 16 times per year. It's a wonder we keep any fish in the lake at all. But all this inflow of water actually works to the angler's advantage.

High water not only brings in nutrients that result in fast growing crappie, but it swells the reservoir to 10,500 acres which is 4.29 times larger than conservation pool. This floods lots of terrestrial

vegetation which is ideal spawning habitat for not only crappie, but gizzard shad, crappie's primary forage, as well. So picture this *huge* nutrient rich reservoir full of young of the year crappie and gizzard shad. The water level often remains this way for months (2010 water levels graphed below). Then the water level drops, packing all those fish into a little 2,450 acre basin.



That's what makes the crappie fishing great at Fall River Reservoir. So why is the Fall River white crappie population density ranked 15th among Kansas Reservoirs (see *Table 1. Kansas Reservoir White Crappie Fishing Forecast* on page 3)? The fall test netting data was biased low due to low water level in October. The mean depth of Fall River Reservoir is normally 6.4 feet at conservation pool; but since the lake was two feet low for dam repairs, it was nearly impossible to find suitable locations to set trap nets. What's more, the low water conditions appeared to attract crappie to deep channel breaks where trap nets couldn't capture them.

Here's how Fall River Reservoir white crappie compared to other reservoir crappie populations: The Density Rating (number of crappie over eight inches captured per trap net night) was 4.19 and ranked 15th statewide. The Preferred Rating (number of crappie over 10 inches captured per trap net night) was 4.13 and ranked ninth best state wide. The Lunker Rating (number of crappie over 15 inches captured per trap net night) was 1.75 and ranked second best statewide. The biggest white crappie sampled was 2.20 lbs. and was the second largest crappie sampled statewide. Based on fall test netting, Fall River Reservoir had a low density white crappie population. The stock catch per trap net night was nine fish, which was below the management objective of 25. The population size structure was balanced. The PSD (population balance) of 45 was within the objective range of 40 to 70. The RSD-P of 44 exceeded the objective range of 10 to 40. The RSD-M of 19 exceeded the objective range of one to ten. This showed that a high proportion of fish grew to large sizes. Age analysis from scale samples showed that mean lengths at ages two through seven were 6.3-, 11.4-, 12.0-, 13.9-, 14.1-, and 14.5-inches, respectively. Most crappie died by age seven and reached a maximum length of about 14.5 inches.



Fish were in good to excellent condition. Fish condition increased with size. Larger crappie gape size resulted in more prey availability. Mean Wr's were high in or exceeded the objective range of 80 to 100. The population characteristics were greatly influenced as a result of rapid water releases in May. Although eggs were desiccated by falling water levels and fish were flushed out of the reservoir, reduced population density increased growth and condition of remaining fish. High water levels in June also resulted in a high density gizzard shad spawn which was reflected in high Wr's of larger crappie.

Rank	2011 White Crappie	Density Rating	Preferred Rating	Lunker Rating	Biggest Fish (lbs.)
1	HILLSDALE	32.38	10.81	0.50	1.00
2	PERRY	30.75	6.92	0.46	1.19
3	CLINTON	18.50	5.25	0.33	1.03
4	MELVERN	17.00	8.57	1.64	1.32
5	KIRWIN	13.00	5.88	0.63	1.55
6	LOVEWELL	11.90	3.20	0.70	1.28
7	MARION	11.13	3.25	0.13	0.96
8	ELK CITY	9.38	6.31	2.06	1.27
9	GLEN ELDER	8.88	5.72	1.68	2.18
10	BIG HILL	7.00	4.25	0.17	0.86
11	TUTTLE CREEK	6.56	0.69	0.25	1.26
12	COUNCIL GROVE	5.13	3.25	0.56	1.31
13	KANOPOLIS	4.94	1.81	0.19	1.23
14	MILFORD	4.38	2.00	0.50	1.13
15	FALL RIVER	4.19	4.13	1.75	2.20
16	SEBELIUS (NORTON)	3.88	3.13	0.25	0.89
17	TORONTO	2.69	1.44	0.88	2.65
18	LACYGNE	2.50	0.44	0.06	1.25
19	WEBSTER	1.25	1.25	0.06	1.19
20	CEDAR BLUFF	1.20	0.75	0.05	1.17
21	WILSON	0.94	0.47	0.18	1.04
22	CHENEY	0.27	0.07	0.00	0.57

Table 1. Kansas Reservoir White Crappie Fishing Forecast.

So what does all this mean as far as your chances of catching crappie at Fall River Reservoir this spring? Are the days of being able to catch a limit of crappie over one pound over? Have we hit the bottom of the downward trend in catch rates? I still think anglers can catch some very nice stringers of large crappie this spring. Of course it has to rain first and refill the lake now that the dam construction is completed. In the mean time, we've taken advantage of the low water by making a few improvements to the lake to increase your chances of catching some nice fish.

Fall River Reservoir White Crappie Stock Catch per Trap Net Night



A good place to fish for crappie this spring will be around the new brush piles I constructed in Casner Creek Cove this winter. I placed them in areas where crappie were already attracted, especially during the spring spawn. I placed the brush piles in water that will be six feet deep when the lake is at normal conservation pool. The cedar trees I used were very large. So large, in fact, that we had to use a tractor to move them. They were too heavy to move by hand. You should have no problem finding where I put them because they should stick out above the water.



New brush piles on the ice at South Rock Ridge Cove.

As you can see by the photos, the brush piles were placed on the ice on January 28th. The ice was six inches thick that day, but not thick enough. According to the Minnesota DNR web site, five inches of clear ice should be enough to support a snowmobile or ATV. I have no idea how heavy the tree pictured below was, but I guess that it weighed over 1,500 pounds. To place it on the ice, I set an anchor with a pulley out in the cove. I used a rope threaded through the pulley and attached to my truck to pull the tree across the ice. I was amazed at how easily it slid across the ice.



Placing a brush pile in North Rock Ridge Cove.

That's when things got a little scary. When I went out on the ice to retrieve the anchor and untie the rope from the tree, I noticed that the ice had broken around the tree and had settled about a half inch. When I stepped on the broken ice, it bounced up and down with each step like a boat dock floating on water. To make matters more tenuous, I still had to attach four concrete blocks that weighed a total of 152 pounds to the tree trunk. Well the ice floated and I never fell through. Anglers now have ten new brush piles scattered around Casner Creek Cove to attract crappie.

Crappie should really be attracted to the new brush piles. Crappie often spawn in coves that are protected from wave action. They select nesting sites that are over rocks but especially gravel. Their most favored nest sites are near a log or other structure on fine plant roots. The cedar trees placed in Casner Creek Cove have all these attributes and should be real hot spots for catching spawning crappie this spring. If you want to get an early start on the crappie spawn this spring, try fishing in the river. Crappie begin spawning when the water temperature reaches about 60 degrees. On April 5th last spring, the water temperature in Casner Creek Cove on the reservoir was just 59 degrees. The anglers I interviewed there had caught a few crappie, but fishing was slow. Late that afternoon, I measured the water temp at the confluence of Otter Creek and Fall River at 68 degrees, nine degrees warmer! There was some water running in from recent rains, but water level was near normal. I threw a white twister tail jig over the gravel bar, bouncing it on the bottom as I retrieved it, and caught five crappie (several over a pound) and some small white bass in an hour. I'll be going back to the river even earlier this spring.

Improved River Access at Ladd Bridge

If you use the boat ramp at Ladd Bridge on the Fall River above the reservoir, you've seen the destructive force floods have. Flood water can rise 30 feet above the normal level, scouring a hole under the boat ramp and filling the parking lot with feet of mud.



Flood damage to Ladd Bridge boat ramp. The picture above is a testament to the strength of steel reinforced concrete. Despite the huge void under the boat ramp, heavy pickup trucks backing boats down the ramp didn't crack the concrete. Remember the water level was two feet low when this photo was taken.

To help the parking lot drain, a bulldozer widened the area next to the boat ramp. Then a backhoe trenched next to the boat ramp, and 100 tons of limestone rip-rap was placed in the trench. The rip-rap was cleaned with a power washer to help the concrete stick to it. Finally, ten cubic yards of concrete was tamped in the void under the ramp and around the riprap and the surface was smoothed. These efforts should greatly reduce erosion around the boat ramp. As a side benefit, it should provide better footing when launching boats instead of clambering up the muddy bank as before. Most of this work will be under water and won't be seen again until the next drought.



Ladd Bridge boat ramp after repairs

Keeping the Ladd Bridge boat ramp open was only part of the challenge to maintaining river access. The floods washed trees down the river that formed a log jam against the bridge pilings. Each year, I use my 18 foot aluminum jon boat with a 40 hp outboard and a rope to drag the larger trees one at a time past the bridge to keep the channel open. This year, the county also brought in a track-hoe to lift logs off the bridge pilings. Without these continued efforts, a log jam would develop above Ladd Bridge preventing upstream boat traffic. Furthermore, the pressure exerted by the log jam on the bridge pilings could cause the bridge to wash out again. You can still fish around the iron bridge works from the old Ladd Bridge that washed out years ago and lies on the bottom of the river 100 yards downstream from its original location. There's still plenty of big fish out there and it's about time to go get them. Good luck.



2010 log jam above Ladd Bridge.



View above Ladd Bridge after log jam was removed.

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