El Dorado District Fisheries

Volume 12, Issue 1

KDWPT Fisheries Division Newsletter

Fall 2020

Recent District Happenings

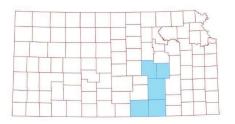
Summer 2020 is winding down. It has definitely been an interesting year. Fishing proved to be a very popular pastime at all waters within the El Dorado District, as well as across the entire state, as people sought activities that met a myriad of requirements put in place due to a pandemic. Federal reservoirs, State Fishing Lakes, and Community Lakes all saw increased use as Kansans got back to the great outdoors as many other functions and venues were closed. High quality fishing opportunities were waiting for those looking to unplug from the rat race and plug in to nature.

The high water of 2019 created good year classes of both forage fish and sport fish in El Dorado and Marion reservoirs. Due to the increased outflow to evacuate flood waters the US Army Corps of Engineers conducted inspections on the stilling basins of both reservoirs. These inspections required the dewatering of the stilling basins and downstream relocation of any fish. These inspections are a regular occurrence but having both reservoir stilling basins dewatered in the same year is rare.

Water temperatures are dropping as we move towards the end of September and fishing is improving. Bass fishing at the SFLs has been improving recently and white bass and wiper activity in the reservoirs is picking up.

It's still too early to think about storing those rods and winterizing the boat! Get out on the water and experience some great fall fishing!





Blue Catfish Tagging Project Underway at El Dorado Res

By Ben Neely, KDWPT Fisheries Research Biologist, Emporia

Blue catfish – native to major river basins in eastern Kansas – can reach massive sizes. Kansas' current state record was caught from the Missouri River, weighing in at more than 100 pounds. As blue catfish populations become established in Kansas' largest reservoirs, popularity of this species among anglers also continues to grow. One such growing fishery can be found in El Dorado Reservoir.

While many anglers might associate El Dorado Reservoir with monster walleye, hard-fighting wipers, or slab crappie, blue catfish are developing a following in the 8,000-acre impoundment. Blue catfish were introduced into El Dorado Reservoir in 2004 to establish an additional predatory fish population and to provide anglers with a new sport fishing opportunity. Annual stockings occurred for six years, creating a population that first exhibited natural recruitment in 2009. As the population grew, it became apparent that the fishery would benefit from harvest of smaller fish. In 2016, KDWPT implemented a 25- to 35-inch protected slot length limit, five fish daily creel limit, and a maximum of two fish over 35 inches.

Continued Page 2...



Blue Catfish Tagging...continued.

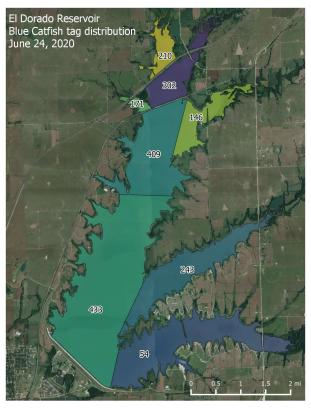
As with any new regulation, data is needed to gauge effectiveness. To collect this data, KDWPT Fisheries biologists have tagged nearly 2,000 blue catfish in El Dorado Reservoir. Tags will appear as a small yellow vinyl tube beneath the fish's dorsal fin. Each tag will display an ID number unique to that fish and a phone number to call to report the catch, (620) 342-0658. Biologists hope to gain information about the area's blue catfish population size, entrainment through the dam, and the fish's susceptibility to harvest.

Success of this project is dependent on anglers reporting the tagged fish they capture. Information needed during the call will be the length of the fish, date, tag number, and whether the fish was kept or released. Anglers who report their tagged catch will receive an award as compensation for their participation.

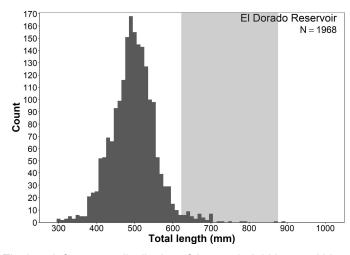
Anglers should note that tagged blue catfish that are not legal for harvest must be returned to the water immediately after recording the tag information. If the tagged catfish is legal for harvest, anglers may keep or release the fish. Because part of this study is to evaluate harvest patterns, biologists encourage anglers not to let the presence of a tag influence their decision to keep or release the fish.

If you find a tagged blue catfish on the end of your line, please take the time to call it in. Data collected from these fish are invaluable to fisheries biologists and will only improve angling success in the future.





Number of blue catfish captured, tagged, and released in different areas of the reservoir.



The length frequency distribution of the nearly 2,000 tagged blue catfish is shown above. The shaded portion of the graph designates the 25 to 35 inch protective slot limit. Many of the blue catfish encountered during the tagging effort were between 18 and 21 inches and available for angler harvest.

Blue Catfish Tagging...continued.

KDWPT fisheries biologists completed the sampling for the mark and recapture portion of the study August 3-6. During these four days, over 100 sites were sampled. All blue catfish were measured and examined for the presence of a tag. Data collected from this segment of the project will provide information needed to calculate blue catfish population estimates within the reservoir.

Current efforts are focusing on obtaining age and growth data for the El Dorado blue catfish. Once completed, this portion of the project will provide great insight into this population and how quickly the fish are growing. Kansas blue catfish are quite slow growing when compared to other Kansas sportfish. Fortunately, blue catfish are much longer lived than Kansas crappie, walleye, and largemouth bass so what they lack in fast growth they make up for with their longevity.

Kansas Walleye Initiative Update

The goal of the Kansas Walleye Initiative is short and to the point—More and Bigger walleye for Kansas anglers. There's been a lot of activity within the KWI, so much so that it's sometimes difficult to keep up with it all!

We have put together a fact sheet to consolidate the progress and accomplishments occurring within the Culture Section of KDWPT. The KWI Fact Sheet is included on pages 4 and 5 of this newsletter.

As a last-minute update, groundbreaking for the construction of the Meade State Fish Hatchery walleye production building occurred last week!

Keep checking in! Things are happening!



Kansas Department of Wildlife, Parks, & Tourism Kansas Walleye Initiative Fact Sheet Culture Focus



What is the KWI?

In early 2015, a group of KDWPT Fisheries Biologists, Fish Culture Biologists, Fish Research Biologists, and Human Dimensions Specialists met to discuss Kansas walleye management. The goal? More and Bigger walleye for Kansas anglers! Past and present walleye programs, projects, and protocols were reviewed, analyzed, and modified if needed. Future goals and objectives for Kansas walleye programs were set and plans devised to meet them. The Kansas Walleye Initiative was born!



Historically, KDWPT stocked two sizes of walleye---fry and fingerling. Recent research showed that survival was much higher for stocked fingerlings that were at least 1.7 inches in length. A 1.7-inch walleye has fully formed scales making it more durable during the rigors of harvest, loading, transport, and stocking. KDWPT hatcheries immediately began growing fish to this new target size to increase survival of stocked fingerlings. The KWI also produced new fry stocking guidelines. Timing, frequency, location, and stocking protocols were updated to ensure the best possible recruitment from fry stockings.





KWI Impacts on Kansas Walleye Production

The exciting Intermediate Walleye Production Program resulted from the addition of larviculture systems at the Milford and Meade hatcheries. The larger a fish is at the time of stocking, the better the survival. The Intermediate Walleye Production Program produces 8-inch and larger walleye. KDWPT hatcheries acquired a wide variety of specialty equipment and intensive rearing units to facilitate the goals of the KWI that initiated intensive walleye production. The Milford and Meade hatcheries have seen the most upgrades for intermediate walleye production. In the past, walleye fingerlings were grown from fry in outside rearing ponds and fed upon a natural diet of zooplankton. Walleve raised in the intermediate program are trained to consume a pelleted diet during the indoor tank rearing, where all water parameters can be closely monitored and regulated. Larger numbers of walleye can be grown in smaller areas with greater control as earthen ponds can be replaced with indoor grow out tanks. The larviculture systems start with walleye fry. Phase I produces the 1.7-inch fingerlings in 35 days and these fish are used to meet stocking requests in lakes and reservoirs. Some of the fish from Phase I continue into Phase II where feeding and growth continues. At the end of Phase II, fish are graded by size and enter final grow out in Phase III. Phase III produces 8-inch and larger walleye ready for stocking at 180 days post hatch. This new KWI walleye production capacity is additional to the historical production which continues to produce fry and fingerling walleye, sauger, and saugeye through conventional culture methods. See the table below for increased KWI walleye production totals. KDWPT plans to continue expansion and refinement of the larviculture systems and Intermediate Walleye Production Program to keep pace with fingerling and intermediate walleye stocking demands.

Kansas Department of Wildlife, Parks, & Tourism Kansas Walleye Initiative Fact Sheet Culture Focus



KWI Culture Highlights:

- \$280K annual KDWPT budget enhancement for KWI for feed, utility costs, and the purchase of fingerlings from the private sector
- \$225,000 in equipment enhancements and upgrades at Milford Hatchery
- \$2 million walleye production building being added at Meade Hatchery
- . Pond sealing project at Meade Hatchery increased pond space available for rearing fingerlings
- Began producing >8-inch intermediate walleye for stocking in addition to fry and fingerlings
- Met goal of all fingerling production exceeding 1.7 inches prior to stocking
- Added 20 jar hatching rack system to allow hatching of eggs at Meade Hatchery
- Added two full-time employees and extra funding for temporary employees to cover additional workload of increased walleye production

Milford and Meade Fish Hatcheries	Increased Production Through KWI
Eggs Hatched	15 million
Phase I (1.7" fingerlings)	457,000
Phase II (3.5" fingerlings)	134,500
Phase III (>8" intermediates)	105,000









The KDWPT Fisheries Division would like to thank the KDWPT Commission for its continued support of the Kansas Walleye Initiative.

April 2020



Livewell full of recently sampled El Dorado blue catfish



Smallmouth bass at Winfield City Lake



Flathead catfish at Marion Reservoir

Last Cast!

In addition to the El Dorado blue catfish tagging project there are a couple of other fisheries research projects occurring. The four-year KSU Food Web study which includes Butler and Cowley SFLs, as well as other waters across the state, will conclude this year. This study is examining lakes from the phytoplankton at the base of the food chain all the way up through the top predators. The ESU Crappie Research Project is taking a statewide look at 43 crappie fisheries evaluating the population dynamics and the influence of harvest regulations. El Dorado District waters that are included in the crappie project are El Dorado and Marion reservoirs, Butler SFL, Marion County Lake, and Winfield City Lake. The results of these research projects provide valuable data that assists in the management of Kansas fisheries.

District Fisheries Biologists from across the state have been writing newsletters to keep anglers up to date on local projects, sampling results, and status of fish populations. You can find all published newsletters online at

https://ksoutdoors.com/KDWPT-Info/News/Newsletters . You can also find the online map to Kansas public fishing areas and placed fish habitat structures at http://www.ksoutdoors.com/fishhabitatmap .

As always, if you know someone who might like to subscribe to the newsletter, they can do so <u>HERE</u>. If you would like to unsubscribe, please send your info to <u>Contact Us</u> with "unsubscribe El Dorado District Fisheries newsletter" and we'll get you taken off the list. If you have any questions or comments or story ideas feel free to send them in!

Fish On!

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