

Ellsworth District Fisheries



Kansas Department of Wildlife, Parks & Tourism Fisheries Division

SPECIAL EDITION

SPECIAL EDITION WILSON RESERVOIR WALLEYE



The Walleye population at Wilson Reservoir is a highly sought-after fishery. It was listed as the most preferred reservoir for walleye fishing in the Kansas Department of Wildlife, Parks, and Tourism’s 2013 Licensed Angler Survey (Table 1).

Table 1. Rank of the most preferred reservoirs to fish for Walleye in Kansas according to the 2013 Kansas Licensed Angler Survey.

Rank	Reservoir
1	Wilson
2	Milford
3	Glen Elder
4	Kanopolis
5	Cheney
6	El Dorado
7	Hillsdale
8	Marion
9	Kirwin
10	Melvern
11	Cedar Bluff

The population has remained strong for many years and fishing forecast ratings, based on fall netting samples, have ranked in the top 5 for at least the last decade.

Wilson is one of only a handful of Kansas reservoirs that typically experiences consistent natural reproduction of Walleye. Natural recruitment means without the assistance of stocking. Despite this, drought conditions from 2012-2016 limited their success. The reservoir refilled in 2016. Consequently, this caused a rapid explosion (Figure 1) of the White Perch population, an aquatic nuisance fish that reproduces in extremely high numbers and is prolific at eating fish eggs and juveniles but also disturbs nests, ultimately complicating natural recruitment of Walleye in some cases.

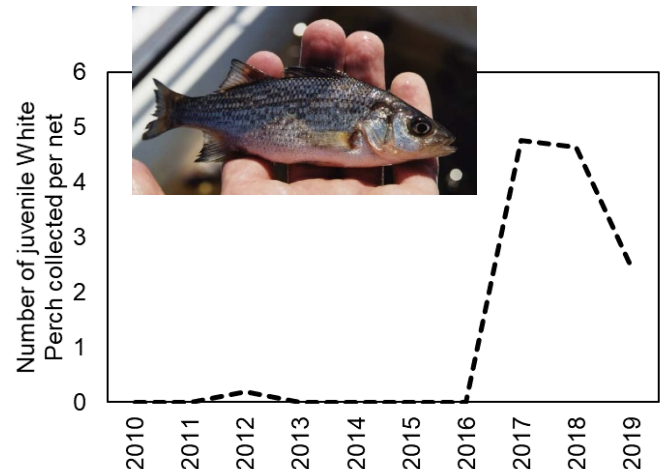


Figure 1. Number of White Perch less than 5 inches in total length collected in fall gill nets at Wilson Reservoir from 2010 to 2019. Numbers were adjusted due to net bias.

The Walleye population began aging from 2017 through 2019 and consisted mostly of large adults. Natural recruitment was nearly non-existent in 2017 and 2018 (See figures on final page). The department began stocking Walleye in 2018 and 2019 in response. The 2018 stocking of 4.9 million fry was unsuccessful. Fry are smaller than the size of a pencil eraser but the simplest and most inexpensive size of fish to stock. Sometimes it works great and sometimes it doesn’t. The 2019 stockings consisted of 4.5 million fry, 53,000 fingerlings (2 inches in length), and 9,000 intermediates (7-9 inches in length, Figure 2). Those stockings, likely in combination, worked well.



Figure 2. Intermediate Walleye stocked into Wilson Reservoir in October, 2019.

The population received another boost in 2020 as natural recruitment occurred this past spring. We were unable to stock any Walleye this year due to a shortfall in production brought on by the COVID-19 Pandemic. It turns out that it wasn't needed and the population reproduced anyway. Our 2020 fall netting samples reveals a population consisting of juvenile Walleye (age-0), age-1 Walleye, and plenty of large, adult Walleye. The numbers collected in nets was incredible. We collected the highest number of Walleye that we ever have in the 11 years of using a new style of gill net (Figure 3.). Walleye fishing at Wilson Reservoir should be back on track for the spring of 2021.

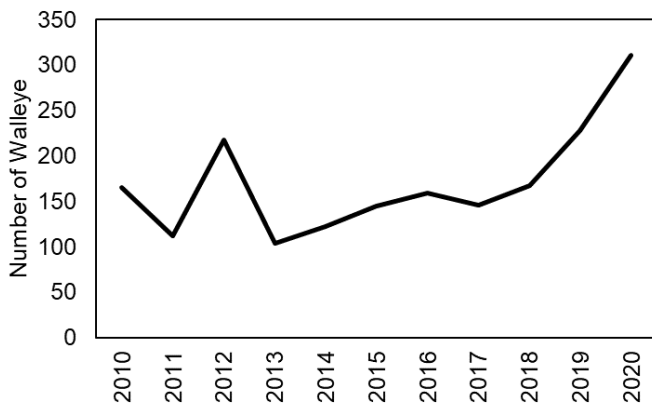


Figure 3. Number of Walleye collected in gill nets at Wilson Reservoir from 2010 – 2020.

Yes, it is still difficult to catch Walleye in traditional ways. Many anglers have quit dragging and jigging earthworms due to the constant interactions with White Perch. Some have switched to mostly artificial baits and trolling. Others have had more success with using jerkbaits and

“WE COLLECTED THE HIGHEST NUMBER OF WALLEYE THAT WE EVER HAVE ...”

crankbaits (Figure 4) in shallow water, oftentimes casting in and around the Common Reed Grass. With submerged reed grass nearly gone, thanks to the 2019 flood, more traditional techniques might be successful again in 2021.



Figure 4. Wes Fleming with a 20-inch Walleye caught off Lucas Point with a crankbait.

Get out there this fall and winter. If you can't make it, make sure you're prepared for next Spring. It is shaping up to be an excellent one! We will need something to look forward to after a year riddled with a pandemic and election madness, among other things that will mar 2020 as one of the worst years for many Americans in recent history. Although you might not have noticed while you were on the lake.

Check out the next page for a detailed look at how the Walleye population has changed over the last 6 years. Note: Walleye at Wilson typically reach 13 inches their first year and 16 inches by the end of their second year. Anything left of the dotted line indicates recruitment from the previous spring***

