Red Willow Reservoir 2024 Survey Summary

Logan Dietrich, Fisheries Biologist

Phone: 308-535-8053 Email: logan.dietrich@nebraska.gov



Fish populations are sampled each fall at Red Willow Reservoir using gill nets, a method commonly used to sample fish such as walleye, white bass, channel catfish and wipers. Gill nets are set on approximately the same dates and locations each year to reduce variability.

In response to walleye populations struggling to recover after dam repairs were completed, saugeye were introduced in Red Willow in 2017. Initially stocked alongside walleye, evaluations identified saugeye as the more successful option. Due to the success of saugeye stockings, the decision was made to eliminate walleye stockings for the time being. As a result, walleye have not been observed in fall gill net catches since 2021. However, saugeye continually exceed historical walleye catch rates with just over 3 per net surveyed in 2024. There are 900,000 fry and 45,000 fingerling saugeye requested for spring 2025. These stockings will continue to be evaluated in future years and will be adjusted if necessary.

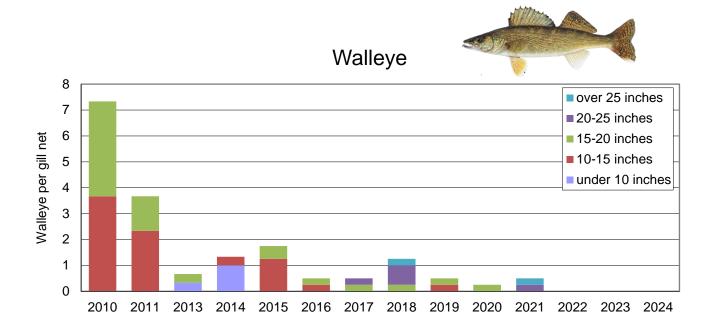
White bass catch rates rebounded in 2024 with just over 8 per net surveyed. Most of the white bass surveyed were between 9 and 12 inches and should provide anglers opportunities at harvestable size fish in 2025. Red Willow wiper catch ranked 2nd in Nebraska in 2024 with just under 22 per net surveyed. Anglers looking to harvest wiper and white bass need to be aware of the new regulation change in 2025. The statewide "one-over" size restriction has been increased from 16 to 18 inches to allow for a longer harvest window when large year classes are available. The statewide daily bag limit of 15 fish is still in observance. To avoid an overabundance, there are no wiper requested for 2025.

After a record crappie survey in 2023, catch returned to a more normal rate in 2024 at just under 45 per net. Anglers will still encounter excellent crappie fishing opportunities in 2025. Red Willow has been included in a multi year evaluation with Medicine Creek to get a better handle on crappie populations in the southwest reservoirs. Results have shown slower growth rates than expected and will continue to be evaluated moving forward.

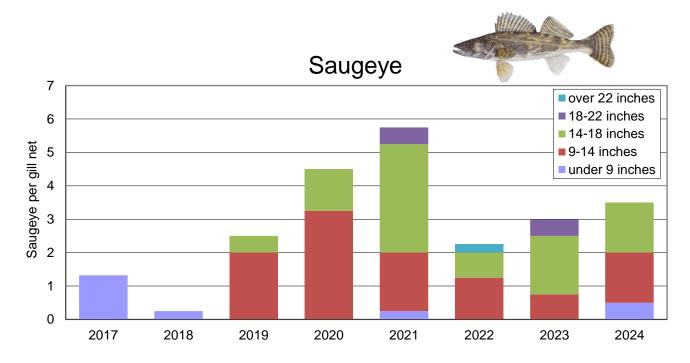
In 2020, the decision was made to introduce tiger muskellunge into Red Willow. They were stocked at 5.25" in 2020, 15" in 2021, and 16" in 2024. These fish have been stocked at a very low rate to provide anglers with trophy opportunities. Biologists handled a few individuals during various surveys in 2024 including fish that surpassed the 34" mark. There are no tiger muskellunge requested for 2025.

After observing an extensive adult gizzard shad die off in 2024, biologists confirmed a decline in gizzard shad densities while surveying sportfish populations last fall. To help recover the reproducing adult population, 300 adult gizzard shad are requested for 2025.

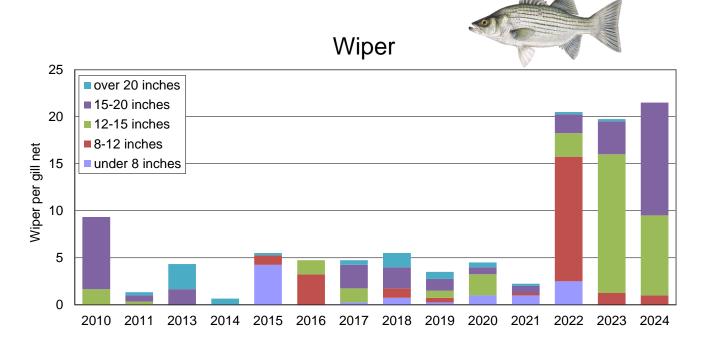
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.



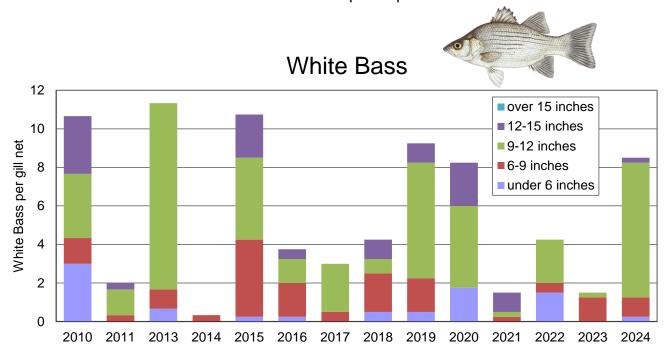
Walleye have not been observed in fall gill net surveys for the past 3 years. Due to saugeye outperforming them since their introduction in 2017, walleye stocking efforts have been paused at Red Willow for the time being. These stockings will continue to be evaluated and adjusted as necessary in the future.



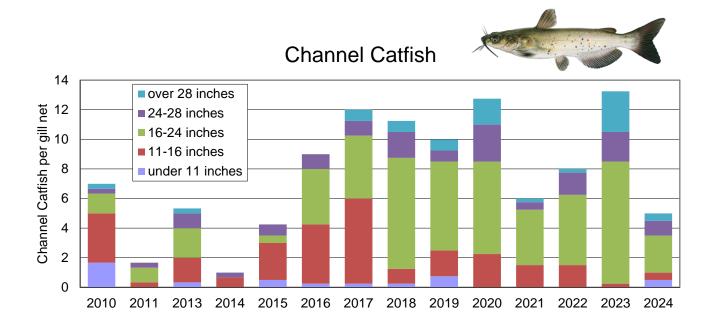
Saugeye catch rates improved in 2024 with just over 3 per net surveyed in fall gill nets. About half the saugeye surveyed in 2024 were between 14 and 18 inches, providing anglers good opportunities in 2025. With the presence of multiple year-classes in Red Willow, the future of the fishery is positive. There are 900,000 fry and 45,000 fingerling saugeye requested for spring 2025.



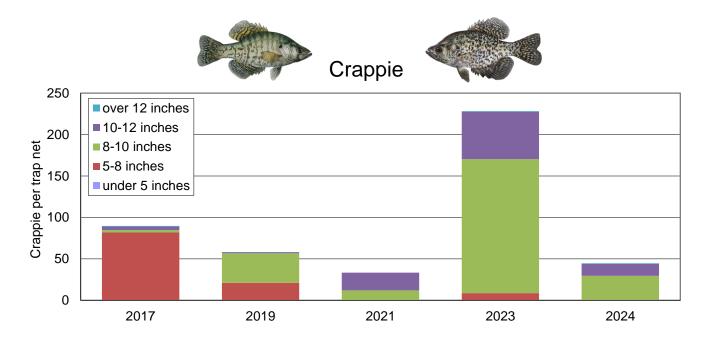
In 2024, wiper catch rates were the highest observed since 2007 with just under 22 per net surveyed. Red Willow wiper catch ranked 2nd out of all Nebraska lakes surveyed in 2024. Anglers looking to target trophy fish should have success as over half the wipers surveyed were between 15 and 20 inches. There are no wiper requested for 2025.



White bass catch rebounded in 2024 with just over 8 per net sampled in fall gill nets. As trend data shows, catch can be variable year to year. However, there appears to be a strong year class between 9 to 12 inches that will provide anglers harvest opportunities in 2025.



Channel catfish catch rates dipped in 2024 to 5 per net. Multiple year-classes were represented in the survey indicating good fishing opportunities with the potential of fish exceeding the 28" mark. As a reminder to anglers looking to harvest channel catfish, only 1 fish over 30" is allowed within the daily bag limit of 5 fish. There are 4,500 channel catfish requested for spring 2025.



In 2024, crappie catch rates returned to normal at just under 45 per trap net sampled. Anglers will still have good opportunities at quality fish with just over 15 per net exceeding the 10" mark. The crappie population in Red Willow will continue to be evaluated on an annual basis with changes being made if necessary.

Red Willow Reservoir Fish Stocking Summary

Year	Channel Walleye Catfish		Saugeye Wiper		Tiger Muskellunge	
2024			500,000 (fry) 50,000 (1")		469 (16")	
2023		5,053 (5")	1,016,000 (fry) 50,000 (1.25")	3,600 (1.25")		
2022			1,000,000 (fry) 100,000 (1.25")	100,000 (fry)		
2021		5,001 (4.25")	1,576,724 (fry) 104,557 (1")	175,000 (fry)	774 (15")	
2020			168,000 (fry) 140,874 (1")	175,000 (fry)	3,622 (5.25")	

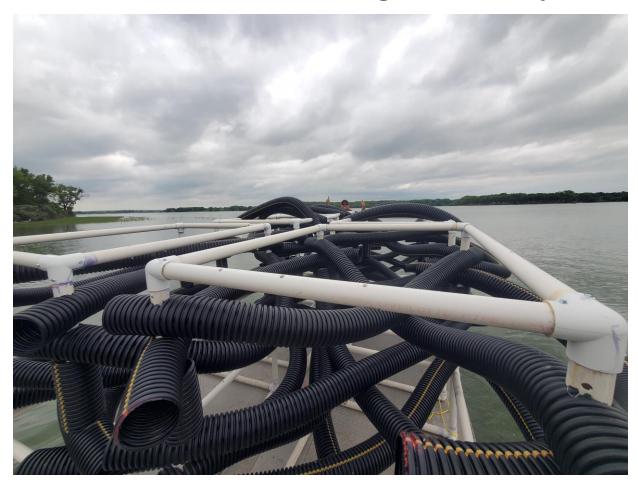
Above is a partial table of fish stockings over the last 5 years at Red Willow Reservoir. The species stocked, number stocked, and fish size are presented in the table. Multiple species are stocked annually at Red Willow and a comprehensive database of fish stockings can be found at the Nebraska Game and Parks website or by following this link. Fish Stocking Database

End of Month Elevation, Red Willow Reservoir 2010-2024



Water levels were extremely low at Red Willow due to structural repairs of the dam that began in 2009. Construction was finished in 2013, and lake elevations have started the road to recovery. The green line indicates end of month elevation, the blue line indicates the top of the conservation pool elevation, and the red line indicates the top of the inactive pool elevation. Current elevation data can be found by following this link. Current Elevation

Southwest Reservoir Georgia Cube Project



As part of a grant awarded by the Bureau of Reclamation a fish attractor project was completed in the Southwest Reservoirs in 2023. Using this funding, a total of 100 Georgia Cubes (25 at each reservoir) were constructed with the help of the McCook Work Ethic Camp. These cubes were placed in deep water to provide structure for fish as reservoir elevations decline in dry years when habitat becomes limited. To create a larger footprint, 6 to 7 cubes were attached to one another and sunk creating four cube complexes in each reservoir that anglers can target. Below are the GPS locations of each cube complex to assist anglers in finding this new structure.

Enders		Medicine Creek		Red Willow		Swanson	
N	W	N	W	N	W	N	W
40.42028	-101.52442	40.39978	-100.23357	40.35930	-100.68447	40.16356	-101.06689
40.42202	-101.52390	40.39761	-100.23526	40.35819	-100.67515	40.16517	-101.06628
40.42833	-101.52896	40.39441	-100.23548	40.35502	-100.68016	40.16706	-101.06657
40.43204	-101.52546	40.38652	-100.22448	40.36283	-100.67201	40.16874	-101.06654



Aquatic invasive species (AIS) have reached Nebraska! Zebra mussels are currently established in Lewis and Clark Reservoir, Lake Yankton, Offutt AFB pond, Beaver Lake, and the Missouri River. Anglers and boaters should be on the look out for personnel performing boat inspections and decontaminations statewide. Please email: ngpc.ais@nebraska.gov or call 402-471-7602 to report any possible AIS sightings or for more information about AIS in Nebraska.

Preventative Steps and Regulations

- It is unlawful for a boat to arrive at or leave any body of water in Nebraska with water other than from a domestic source except for fire-fighting purposes. Drain water before leaving an area.
- It is unlawful for a boat or trailer to arrive or leave a launch area with any aquatic vegetation from that waterbody still attached. Boat blinds cannot use plants listed as invasive species or noxious weeds.
- Wash mud off waders. Felt-sole waders are not allowed.

Nonresident Aquatic Invasive Species Stamp

Motorized watercraft registered outside Nebraska are required to purchase and display the Aquatic Invasive Species Stamp before launching from any Nebraska boat ramp. Stamps must be affixed on the starboard side toward the rear of the boat above the waterline. The fee for each stamp is \$18 dollars and includes the \$3 issuing fee. Stamps can be purchased online or at Nebraska Game and Parks Commission Offices.

Zebra Mussel Quagga Mussel Eurasian Watermilfoil

