

# Red Willow Reservoir 2020 Survey Summary



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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.

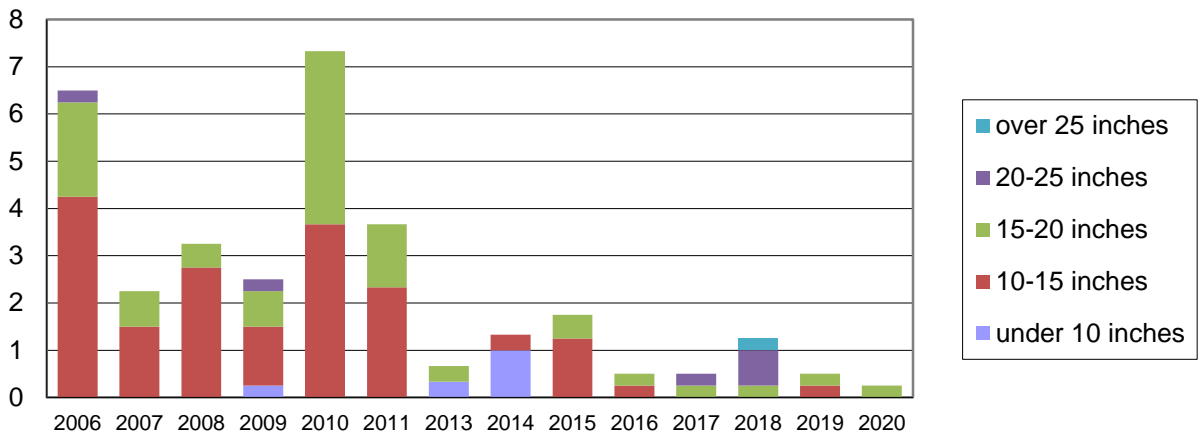
Repair work on the Hugh Butler Dam was completed in 2013 and water levels have taken time to return to where they were prior. As water levels return, expect to see improvement in fish catch rates and size structure in Red Willow.

Walleye and white bass populations have been slow to recover at Red Willow in the years since repairs were finished. Walleye catch rates haven't reached 2 fish per net and were usually under 1 fish per net. In an attempt to provide better opportunity for anglers, saugeye were introduced in 2017. Kansas has been stocking saugeye for several years and have experienced good results in irrigation reservoirs that are similar to Red Willow. Early results have been positive with biologists sampling 2.5 saugeye per net in 2019 and 4.5 per net in 2020. Due to continued success, stocking strategies were changed to only include saugeye with hopes to continue to boost angler opportunity at Red Willow. Alternative walleye stocking strategies could be implemented in the future to help maintain those numbers while saugeye numbers continue to grow. Saugeye and walleye can be difficult to differentiate between but are managed the same so no concern with identification should arise among anglers. There are 1,000,000 saugeye fry and 100,000 saugeye fingerlings requested for spring 2021.

White bass surveys in 2020 continued to be positive with over 8 fish per net sampled. Age distribution data shows three strong year classes in Red Willow from 2018, 2019, and 2020. The 2018 year class is already averaging over 10 inches and should contribute to a quality fishery in 2021. The white bass population looks to be recovering to a more acceptable level after several down years prior to 2019. Wiper numbers have continued to struggle so in 2019 strategies were changed to include fry stockings. Fry stockings have been successful in both Harlan and Swanson in recent years and could help wiper numbers improve in Red Willow. Wiper will continue to be managed as a trophy fishery. There are 175,000 wiper fry requested for spring 2021.

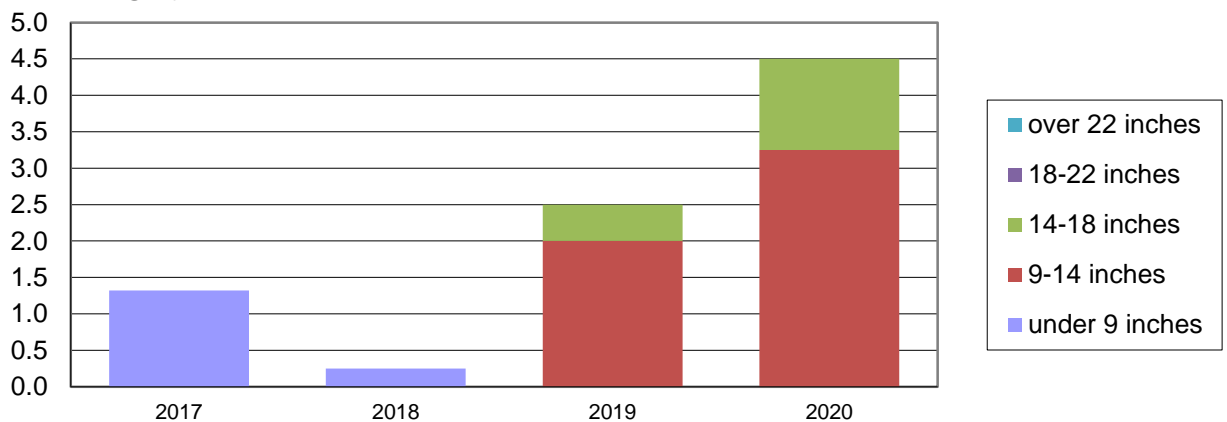
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

## Walleye Catch Per Unit Effort



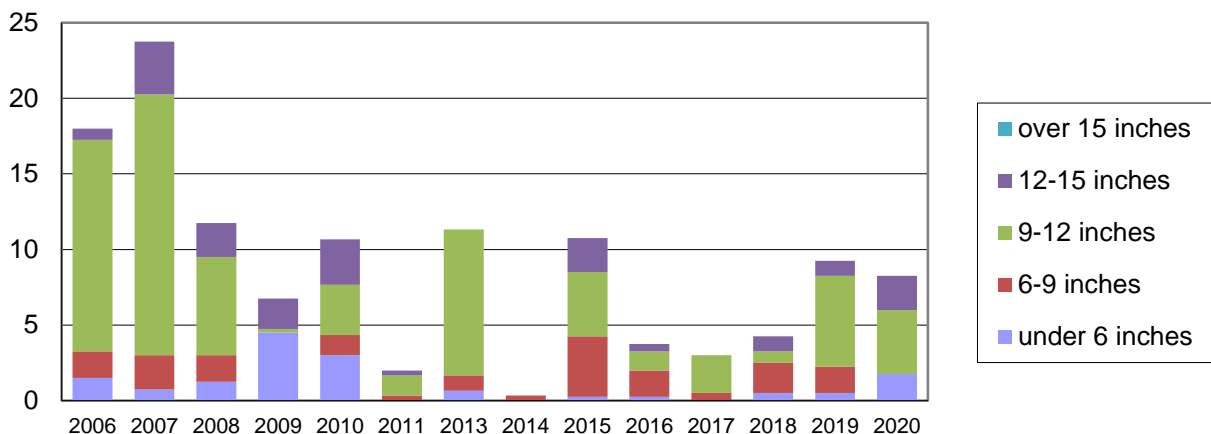
In 2020, less than 1 walleye per net was sampled. Walleye populations have been down in Red Willow since draining for dam repairs. In an effort to improve angling opportunities for walleye anglers, biologists introduced saugeye to Red Willow in 2017. Both walleye and saugeye were stocked in 2017 and 2018. Due to saugeye outperforming them, walleye were removed from stocking plans in 2019 to allow focus on building saugeye populations. Strategies will continue to be evaluated and will be adjusted if deemed necessary. No walleye are requested for 2021.

## Saugeye Catch Per Unit Effort



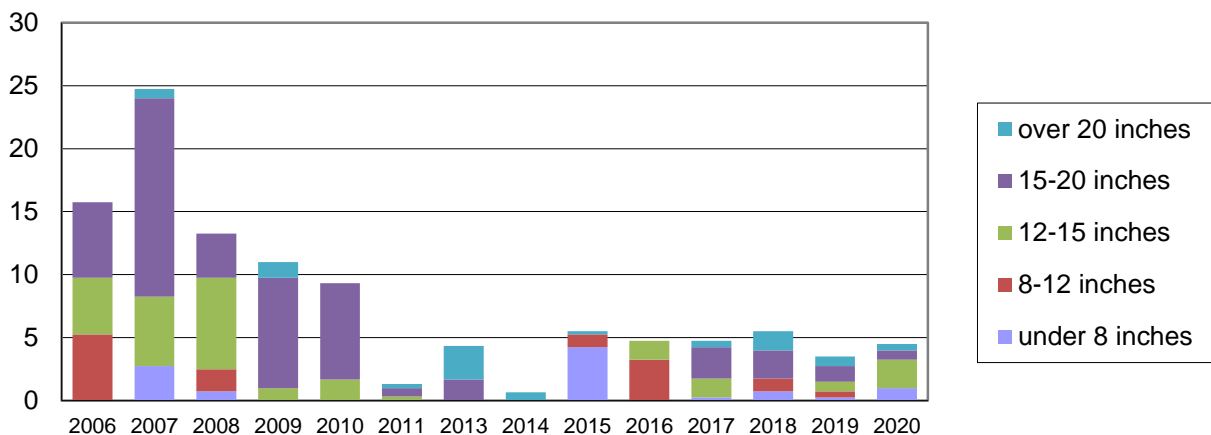
After being introduced in 2017, saugeye have appeared to thrive in Red Willow. In 2019, biologists sampled 2.5 saugeye per net which would have been the best walleye catch since 2011. In 2020, surveys jumped to 4.5 saugeye per net! Age data shows a strong contribution to the population from the first three stockings. Due to saugeye outperforming walleye, they will be the focus of management for the next 3-5 years to allow for further evaluation. There are two saugeye stockings requested for 2021. In early spring, 1,000,000 saugeye fry are requested followed by a request for 100,000 saugeye fingerlings in late spring.

## White Bass Catch Per Unit Effort



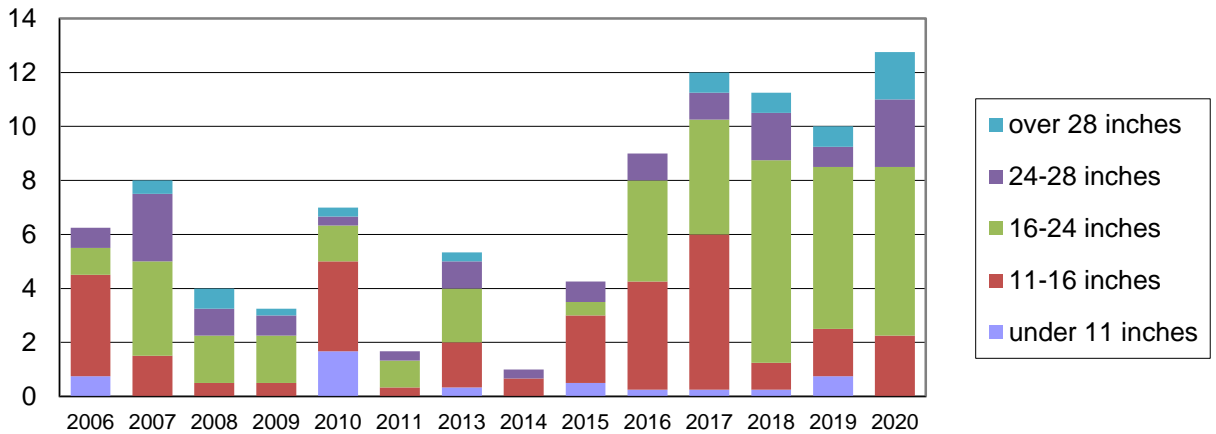
White bass catch rates were very good in 2019 and 2020. Biologists sampled over 8 white bass per net in 2020. Age data shows three strong year classes in Red Willow from 2018, 2019, and 2020. Several fish were sampled between 12-15 inches that will provide a superb fishery in 2021. With ample numbers of juvenile fish behind those adults, white bass fishing should be good in Red Willow for the next few years.

## Wiper Catch Per Unit Effort



Biologists surveyed over 4 wipers per net in 2020. Wiper catch continues to hover right around 5 per net since 2015. In an effort to improve recruitment, wiper fry were stocked in 2019 and 2020. Recent wiper fry stockings in Harlan and Swanson were very successful. Stocking strategy evaluations are ongoing to determine the best method to improve our wiper catch in Red Willow. Age data in 2020 showed contribution from multiple year classes with a few fish sampled over 20 inches. There are 175,000 wiper fry requested for spring 2021.

## Channel Catfish Catch Per Unit Effort



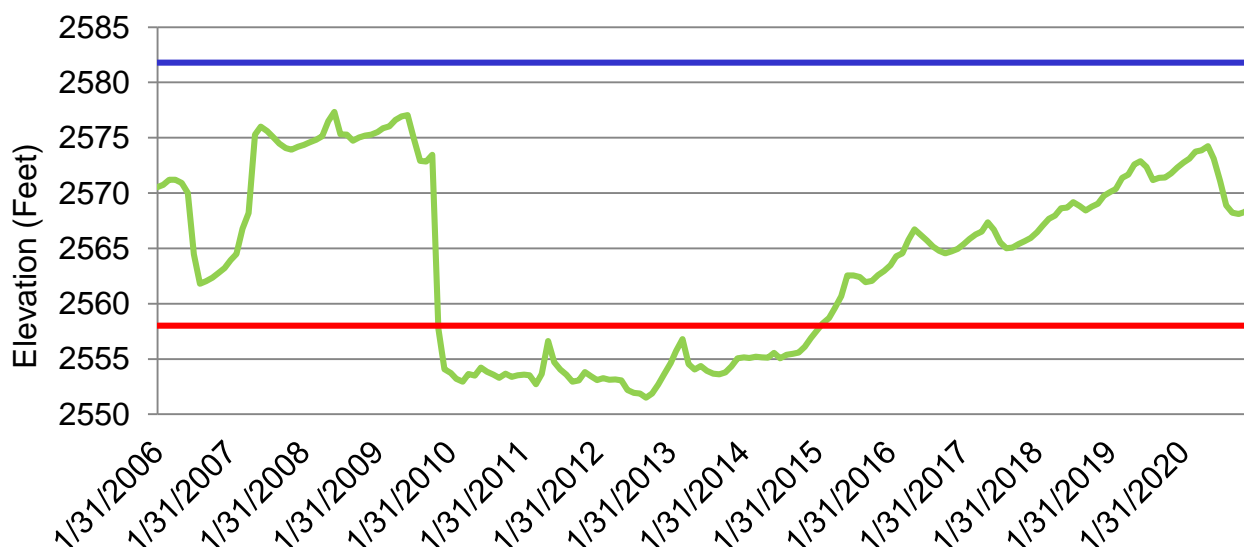
Red Willow continued to produce excellent channel catfish in 2020. Biologists surveyed just under 13 fish per net. Channel catfish populations are stable and show good length distribution for sustained success. Anglers will find several fish over 28 inches and plenty of smaller fish for the frying pan as well. Channel catfish are stocked semiannually to supplement low natural recruitment. There are 5,000 channel catfish requested for 2021.

# Red Willow Reservoir Fish Stocking Summary

Year	Walleye	Channel Catfish	Saugeye	Wiper	Yellow Perch	Largemouth Bass
2020			308,874 (1" & fry)	175,000 (fry)		
2019		7,808 (5")	191,020 (1.25")	175,000 (fry)		
2018	54,926 (1.25")		350,000 (fry)	5,578 (1.25")		
2017	49,998 (1.5")	5,000 (5")	67,200 (1.25")	6,369 (1")	37,944 (1.5")	
2016	42,840 (1.5")					10,008 (3")

Above is a partial table of fish stockings for 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 2006-2020



Water levels have been 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 hyperlink: [Current Elevation](#)



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Aquatic invasive species (AIS) have reached Nebraska! Zebra mussels are currently established in Lewis and Clark Reservoir, Offutt AFB pond, and the Missouri River. Anglers and boaters should be on the look out for personnel performing boat inspections and decontaminations statewide. Follow the link: [Nebraska Invasive Species Program](#) or call 402-472-3133 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.



**Left: Zebra Mussel**  
**Right: Quagga Mussel**