

Red Willow Reservoir

2022 Survey Summary



Sean Farrier, Fisheries Biologist

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. Red Willow received an upgraded fish cleaning station in Spring 2022.

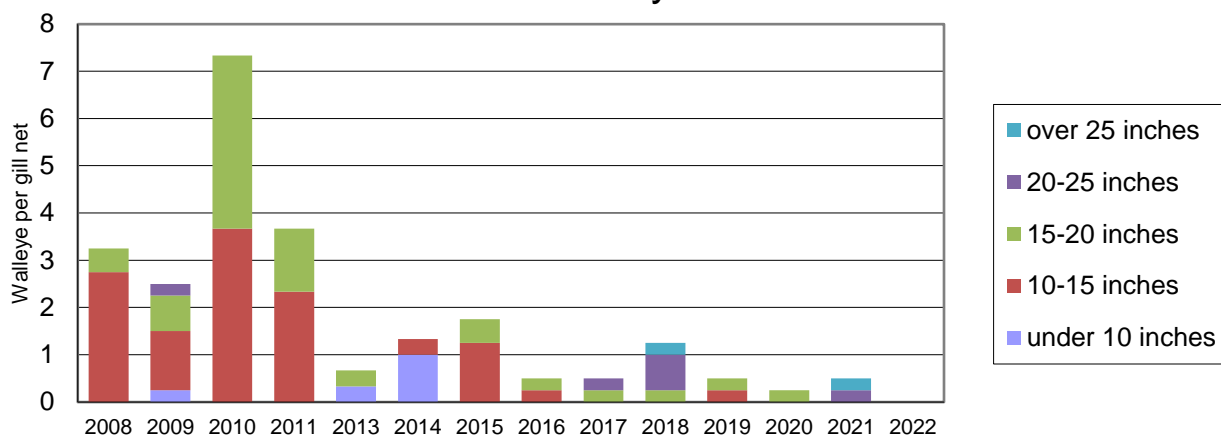
In response to walleye populations struggling to recover after dam repairs were completed, saugeye were introduced to Red Willow in 2017. Initially stocked alongside walleye, evaluations identified saugeye as the more successful option. Due to the overall success of saugeye stockings, the decision was made to eliminate walleye stockings for the time being. Since their introduction, saugeye have consistently exceeded historical walleye catch rates. After seeing steady increases in catch rates from 2019 to 2021, we observed a slight dip to just over 2 saugeye per net in 2022. There are 1,000,000 fry and 50,000 fingerling saugeye requested for spring 2023.

White bass catch rebounded slightly to just over 4 per net in 2022. Included in the 2022 survey was a strong age-0 year class that will provide angling opportunities in future years. After several years of low wiper catch, 2022 catch rates jumped to over 20 per net. Due to recent low catches, we began stocking wiper fry in 2019 with the hope of seeing similar results observed with wiper populations at Harlan and Swanson. Age data in 2022 showed consistent contribution by fry stockings with a large age-1 year class. There are 25,000 wiper fry requested for spring 2023.

In 2020, the decision was made to introduce tiger muskellunge into Red Willow. They were stocked at 5.25 inches in 2020 and 15 inches in 2021. These fish will be stocked at a very low rate and should provide the potential for anglers to catch a trophy fish. The next tiger muskellunge stocking request will not occur until 2024 which will provide biologists the opportunity to evaluate growth of the initial stockings and the overall impact on the existing fishery.

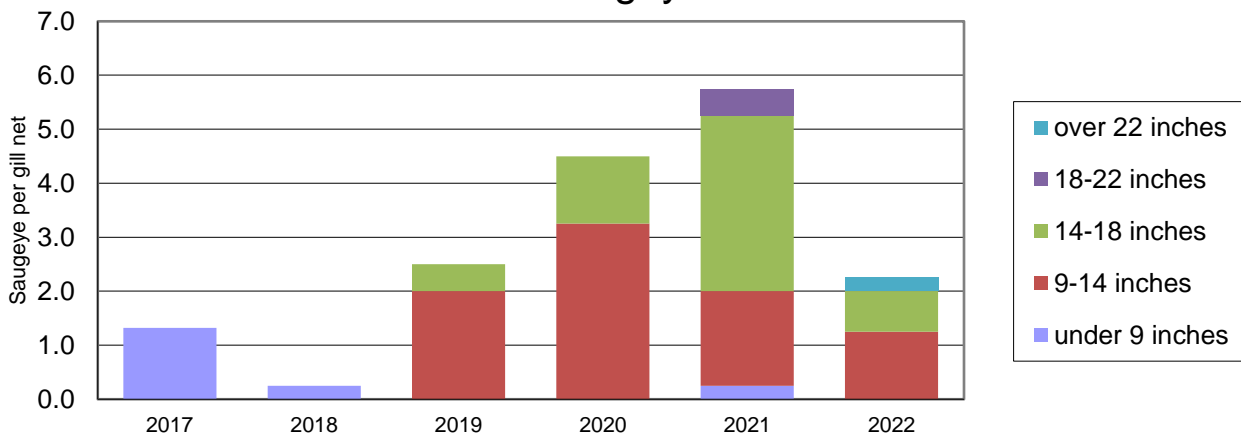
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

Walleye



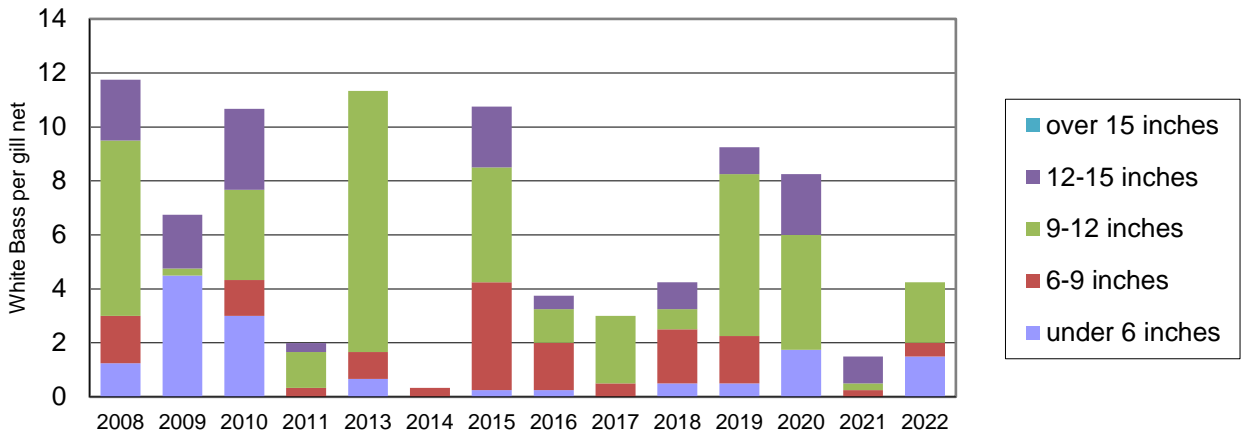
Walleye catch rates have been low in Red Willow since draining for dam repairs. To improve opportunities for walleye anglers, saugeye were introduced to Red Willow in 2017. Both walleye and saugeye were stocked in 2017 and 2018. Due to saugeye outperforming them, walleye were removed from stocking plans 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 2023.

Saugeye



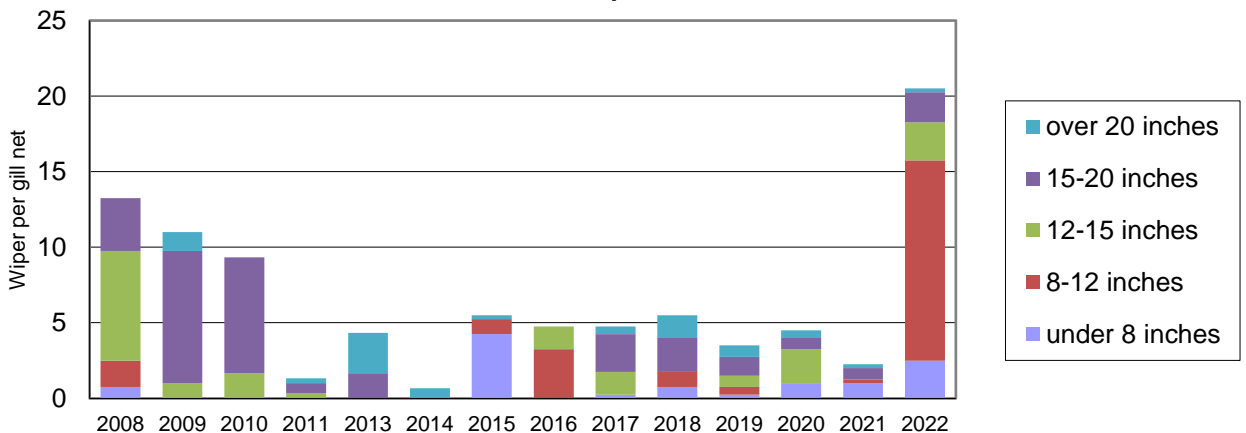
Since their introduction in 2017, saugeye have consistently exceeded historical walleye catch rates in Red Willow. In 2021, surveys jumped to 5.8 saugeye per net, which would have been the 4th highest walleye catch observed since 1994. However, in 2022 catch was just over 2 per net. There are two saugeye stockings requested for 2023. In early spring, 1,000,000 fry are requested followed by a request for 50,000 fingerlings in late spring.

White Bass



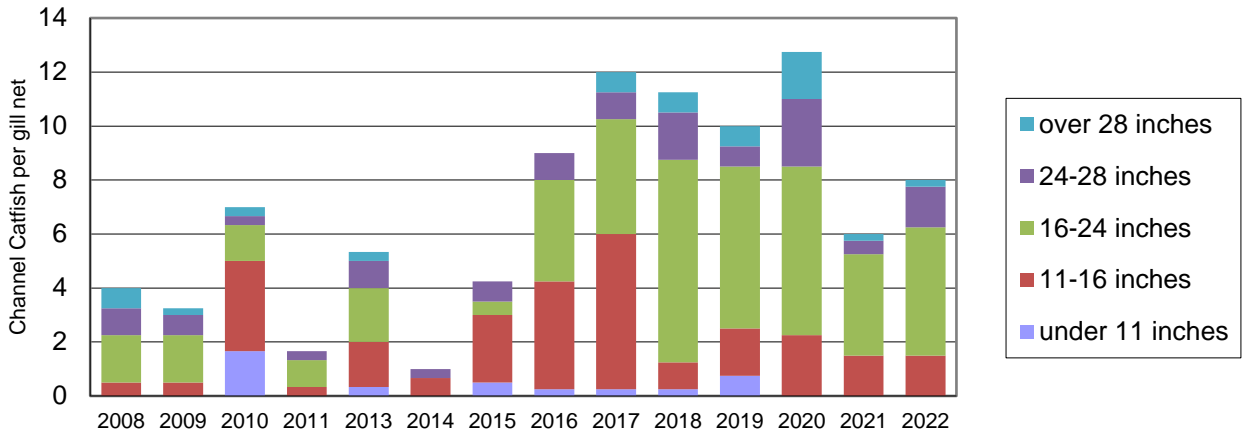
White bass catch rebounded to over 4 per net in 2022. Biologists observed a strong age-0 year class that will provide anglers with opportunities in the coming years. Anglers will also encounter a fair number of adult white bass between 9 to 12 inches in 2023.

Wiper



After several years of low catch, wipers were sampled at just over 20 per net in 2022. It appears fry stockings are helping to improve the inconsistency we were observing with recruitment in past years. We will continue to evaluate the stocking success moving forward. There are 25,000 wiper fry requested for spring 2023.

Channel Catfish



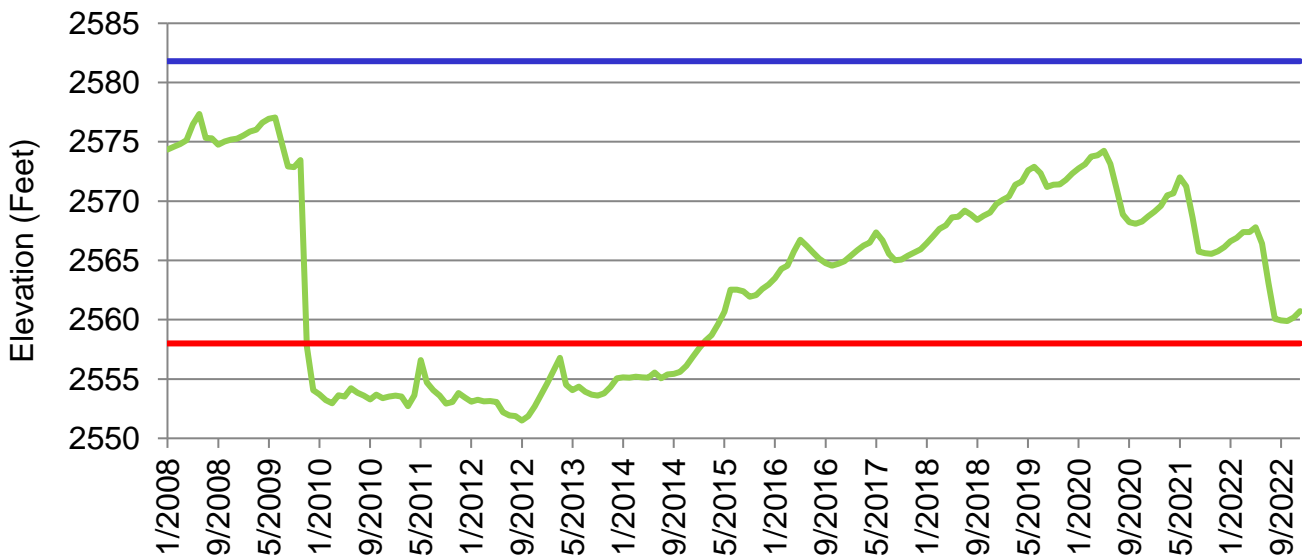
Red Willow continues to produce excellent channel catfish. In 2022, biologists surveyed 8 per net. Channel catfish populations are stable and show good length distribution for sustained success. Anglers will find fish over 28 inches and plenty of smaller fish for the frying pan as well. Channel catfish are stocked semiannually to supplement low natural recruitment. There are 5,000 channel catfish requested for spring 2023.

Red Willow Reservoir Fish Stocking Summary

| Year | Walleye | Channel Catfish | Saugeye | Wiper | Tiger Muskellunge |
|------|-------------------|------------------|----------------------------|------------------|-------------------|
| 2022 | | | 1,100,000 (1.25" & fry) | 100,000 (fry) | |
| 2021 | | 5,001 (4.25") | 1,681,281 (1" & fry) | 175,000 (fry) | 774 (15") |
| 2020 | | | 308,874 (1" & fry) | 175,000 (fry) | 3,622 (5.25") |
| 2019 | | 7,808 (5") | 191,020 (1.25") | 175,000 (fry) | |
| 2018 | 54,926 (1.25") | | 350,000 (fry) | 5,578 (1.25") | |

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 2008-2022



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 hyperlink:

[Current Elevation](#)



Aquatic invasive species (AIS) have reached Nebraska! Zebra mussels are currently established in Lewis and Clark Reservoir, Lake Yankton, Offutt AFB pond, 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.



Left: Zebra Mussel
Right: Quagga Mussel