Swanson Reservoir 2023 Survey Summary

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Fish populations are sampled each fall at Swanson 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.

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Walleye catch continued to decline in 2023 with just under 2 per net surveyed. Beginning in 2018 at Swanson, we started an evaluation of advanced fingerling stockings paired with fry stockings on alternate years. Since that time advanced fingerlings were stocked in 2018, 2020, and 2022. Fry were stocked in 2019, 2021, and 2023 and have had limited success. Unfortunately, since starting this stocking strategy we have observed a stairstep decline in our fall walleye catch rates. In response, we are making a change in 2024 to a different strategy that we are optimistic will provide anglers with more opportunities at Swanson. This spring we will be stocking saugeye in Swanson for the first time with 3,264,000 fry and 326,400 fingerlings requested. These stockings will be evaluated in the fall of 2024, and we will continue to monitor the situation closely in the years to come.

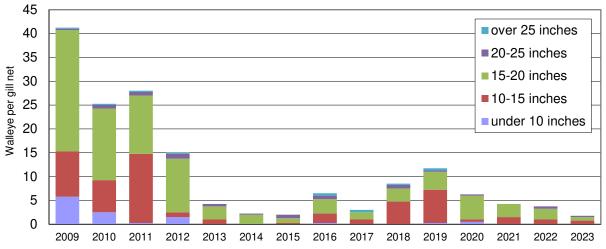
After leading the state in 2022, white bass catch rates dipped to just over 4 per net in 2023. Most of the fish sampled were between 12 and 15 inches and will provide a trophy fishery if anglers can find them. The large wiper year class observed in 2018 surveys is still dominating the population. In 2023, Swanson had the 3rd highest wiper catch in the state at just over 22 per net. Nearly 20 per net of those fish were between 15 and 20 inches. For anglers targeting wipers, the number and size structure will provide an excellent opportunity. There are no wipers requested for 2024.

Channel catfish surveys continue to be inconsistent with just over 4 per net observed in 2023. There are no channel catfish requested for 2024. Blue catfish survey numbers were low again in 2023 with just over 2 per net being sampled. There are 16,320 blue catfish requested for fall 2024.

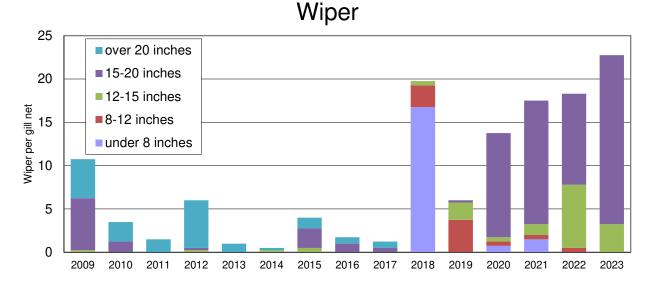
Swanson had an aquatic habitat project completed in 2023. Rock shoals were constructed at the water line and will provide improved shallow water habitat.

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

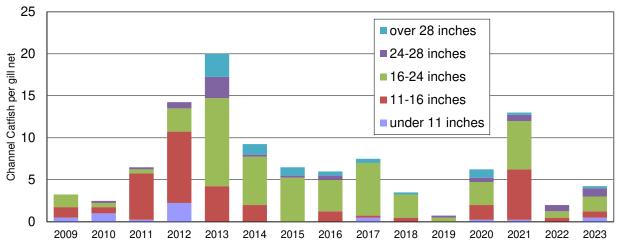


Biologists sampled just under 2 walleye per net in 2023. The continued decline of this population has prompted a change in management strategies in 2024. This spring we will be stocking saugeye in Swanson for the first time with 3,264,000 fry and 326,400 fingerlings requested.

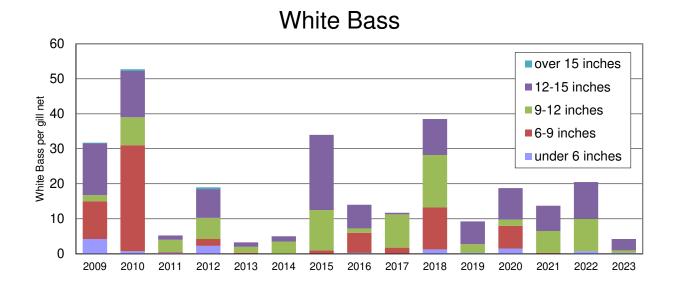


Since including fry stockings in management plans, wiper numbers have been more consistent at Swanson. The large 2018 year class from the initial fry stocking continues to dominate the survey. Biologists will continue to monitor the population and reduce stockings if necessary to prevent an overabundance of wipers. There are no wiper requested for 2024.

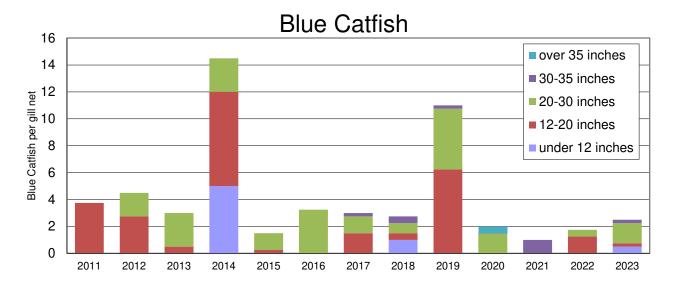
Channel Catfish



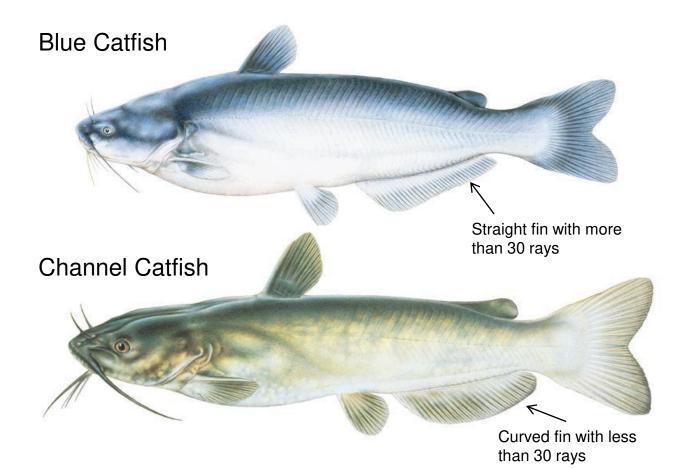
After concerns with the downward trend observed in channel catfish, stocking strategies were adjusted in 2020 to include larger fish. After two consecutive years of stocking the larger fish, the population climbed up to 13 fish per net in 2021. After a dip in 2022, just over 4 fish per net were surveyed in 2023. There are no channel catfish requested for 2024. New in 2024, channel catfish are now protected with only 1 fish over 30" allowed within the daily bag limit of 5 fish.



After having the top catch rate in Nebraska in 2022, white bass catch declined to just over 4 fish per net in 2023 at Swanson. Most fish caught were between 12 and 15 inches and will provide a trophy fishery if anglers can find them.



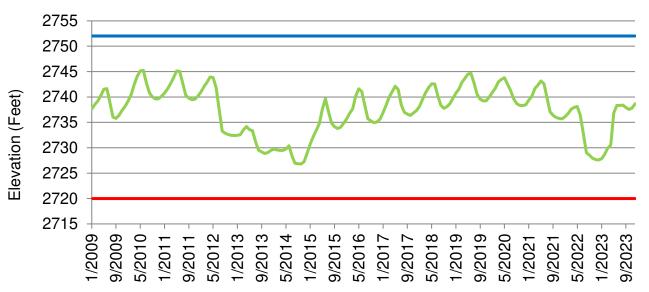
Blue catfish were introduced to Swanson in 2008, with the goal of providing a unique trophy fishing opportunity for catfish anglers in southwest Nebraska. Blue catfish have been requested regularly to achieve that goal. There are 16,320 blue catfish requested for fall 2024. It is important that anglers take care to positively identify catfish that are harvested due to blue catfish being managed under different regulations than channel catfish. Due to natural variation in color, catfish species are most easily identified based on the anal fin.



Swanson Reservoir Fish Stocking Summary

Year	Walleye	Wiper	Channel Catfish	Blue Catfish
2023	3,196,300 (fry)	200,000 (fry)	15,181 (10.25")	15,500 (6")
2022	14,968 (8")			20,389 (5")
2021	2,186,188 (fry)	425,000 (fry)	7,375 (10")	5,750 (4")
2020	13,512 (7.5")	17,500 (1")	9,000 (10.5")	
2019	2,200,000 (fry)			

Above is a table of fish stockings over the last 5 years at Swanson Reservoir. The species stocked, number stocked, and fish size are presented in the table. Multiple species are stocked annually at Swanson and a comprehensive database of fish stockings can be found at the Nebraska Game and Parks website or by following the link below. <u>Stocking Database</u>



End of Month Elevation, Swanson Reservoir 2009-2023

Water elevation is a constant management concern at Swanson Reservoir. The dark blue line indicates the top of the active conservation pool, the green line indicates the end of month reservoir elevation, and the red line indicates the top of the inactive pool. More detailed information and current reservoir elevation data can be obtained by following this link: <u>Current Elevation</u>

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.

En	ders	Medici	ne Creek	Red \	Nillow	Swa	inson
Ν	W	Ν	W	Ν	W	Ν	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

Rock Shoal Project



In 2023, a rock shoal project was completed at Swanson Reservoir using Title 28 funding provided by the Bureau of Reclamation and NGPC Aquatic Habitat Funds. In total, 43 shoals were constructed in groups of 6 or 7. Below are GPS locations of the Rock Shoals to make them easier for anglers to target as water levels rise.

N	W	N	W	N	W	N	W
40.16877	-101.10218	40.17105	-101.07474	40.17058	-101.07886	40.17012	-101.08156
40.16884	-101.10200	40.17105	-101.07453	40.17062	-101.07875	40.17009	-101.08135
40.16891	-101.10182	40.17106	-101.07434	40.17085	-101.07756	40.17011	-101.08115
40.16901	-101.10161	40.16825	-101.10481	40.17089	-101.07731	40.17013	-101.08089
40.15172	-101.08165	40.16827	-101.10459	40.17090	-101.07711	40.17015	-101.08069
40.15159	-101.08173	40.16830	-101.10442	40.17093	-101.07693	40.17005	-101.08140
40.15150	-101.08187	40.16833	-101.10423	40.17100	-101.07672	40.17034	-101.07967
40.15137	-101.08204	40.16835	-101.10404	40.17102	-101.07648	40.17042	-101.07939
40.15127	-101.08219	40.16839	-101.10380	40.17106	-101.07544	40.17047	-101.07928
40.15110	-101.08261	40.16863	-101.10260	40.17107	-101.07519	40.17052	-101.07909
40.15107	-101.08281	40.16872	-101.10237	40.17106	-101.07498		



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.



Left: Zebra Mussel Right: Quagga Mussel