Swanson Reservoir NEBRASKA 2022 Survey Summary – GAME PARKS – Sean Farrier, Fisheries Biologist

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. Environmental factors can play a strong role in catch data. Due to this variability, biologists look at trends over time when making management decisions.

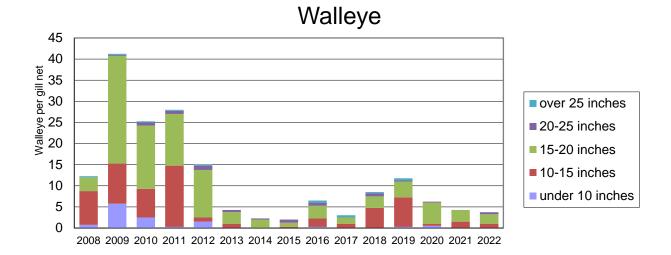
Walleye catch was just under 4 per net in 2022. After positive initial returns on advanced fingerling stockings, it appears we are not getting consistent recruitment out of the alternate year fry stockings. Discussions are ongoing on how to best resolve the issue in the future as we continue to evaluate this stocking strategy. There are 2,300,000 walleye fry requested for spring 2023.

Swanson's white bass catch rates were the highest observed in Nebraska in 2022 at just over 20 per net. The abundance of adults between 12 to 15 inches will provide anglers excellent fishing in 2023. The large wiper year class observed in 2018 surveys is still dominating the population. In 2022, Swanson had the 5th highest wiper catch in the state at just over 18 per net. More than 10 per net of those fish were over 15 inches. For anglers targeting wipers, the number and size structure will provide an excellent opportunity. We will continue to monitor the success of wiper fry stockings to prevent an overabundance of wipers in the future. There are 172,000 wiper fry requested for spring 2023.

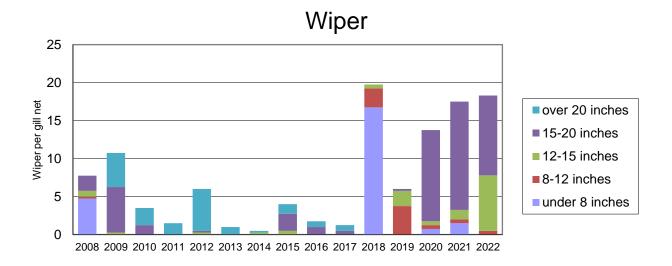
Channel catfish surveys continue to be inconsistent with only 2 per net observed in 2022. There are 7,750 channel catfish requested for fall 2022. Blue catfish survey numbers were low again in 2022 with just under 2 per net being sampled. There are 15,500 blue catfish requested for fall 2023.

Swanson received an upgraded fish cleaning station at Spring Canyon in 2022. The new Barracuda unit is better equipped to handle catfish and is a welcome addition for Swanson anglers.

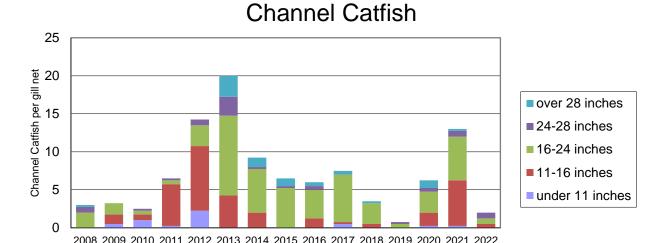
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.



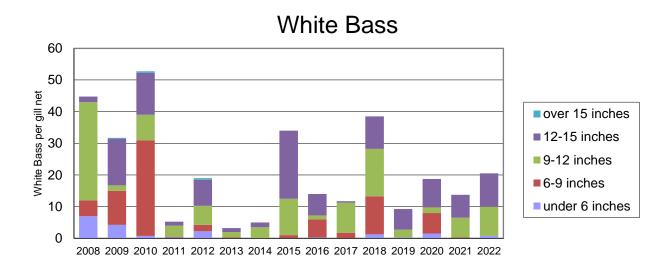
Biologists sampled just under 4 walleye per net in 2022. Several of those fish were over 15 inches. Our alternate year fry stockings have not performed as well as we had hoped. Discussions are ongoing on how to improve our success on years opposite of the advanced fingerling stocking. There are 2,300,000 walleye fry requested for spring 2023.



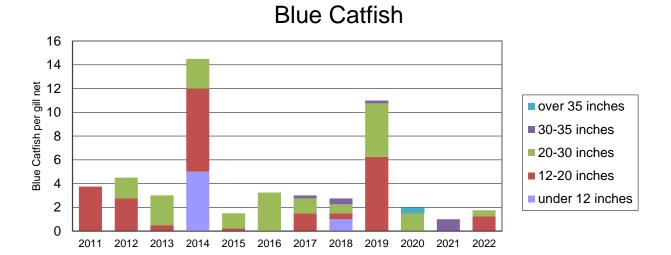
Since including fry stockings in management plans, wiper numbers have been more consistent at Swanson. The large 2018 year class from the initial fry stocking continues to dominate the survey. Biologists will continue to monitor the population and reduce stockings if necessary to prevent an overabundance of wipers. There are 172,000 wiper fry requested for spring 2023.



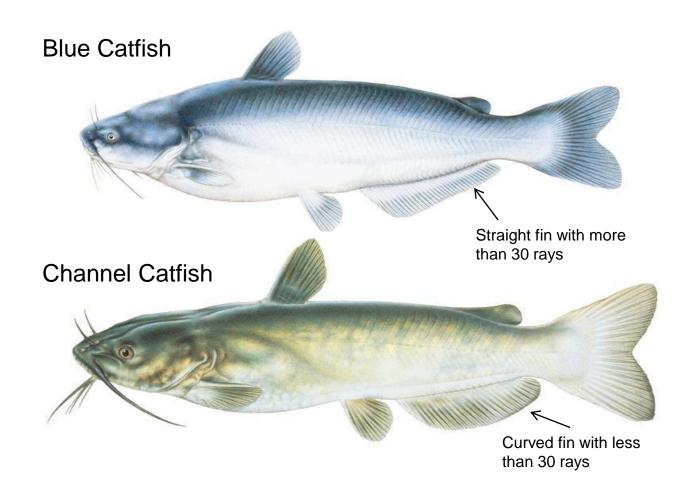
After concerns with the downward trend observed in channel catfish, stocking strategies were adjusted in 2020 to include larger fish. After two consecutive years of stocking the larger fish, the population climbed up to 13 fish per net in 2021. However, catch in 2022 was only 2 per net. Biologists will continue to monitor the situation in 2023 and will adjust stocking plans if deemed necessary. There are 7,750 channel catfish requested for fall 2023.



Swanson produced the highest white bass catch in 2022 of any Nebraska waterbody with just over 20 white bass per net sampled. Included in the 2022 survey were over 10 fish per net between 12 to 15 inches. The outlook for white bass fishing in 2023 is excellent.



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 since then in hopes of reaching that goal. There are 15,500 blue catfish requested for fall 2023. 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.

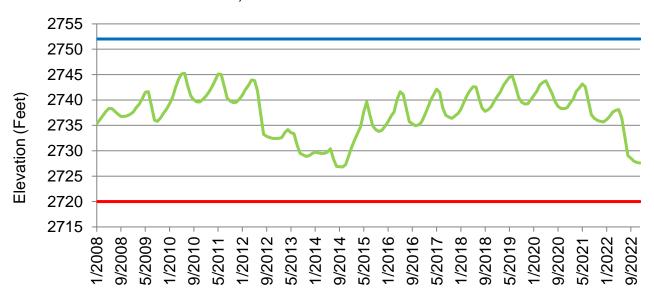


Swanson Reservoir Fish Stocking Summary

Year	Walleye	Wiper	Channel Catfish	Blue Catfish
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)			
2018	13,910 (7")	500,000 (fry)		2,866 (12")

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. Stocking Database

End of Month Elevation, Swanson Reservoir 2008-2022



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: 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