Jeffrey Reservoir 2024 Survey Summary



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Fish populations are sampled each fall at Jeffrey 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 addition to gill nets, trap nets are used to sample near-shore species such as crappie.

Jeffrey Reservoir is located on the CNPPID supply canal south of Brady, NE in Lincoln County. It is a flow through reservoir that provides irrigation for agricultural crops and power generation from the hydroelectric facility at its outlet. Due to this, it experiences high flow rates and periodic elevation changes that makes it challenging for fish stockings and fish retainment.

Walleye catch rates stayed steady with 3 per net in 2024. Surveys showed multiple year classes with over half of the fish sampled over 15 inches. To help support the walleye population, fingerlings are stocked on an annual basis. There are 27,500 walleye fingerlings requested for spring 2025.

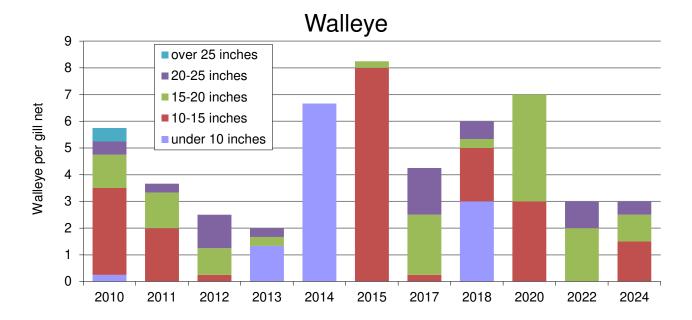
Sauger, a close relative of the walleye that is adapted to turbid, flowing water were also surveyed in Jeffrey Reservoir. Sauger are stocked upstream from the reservoir at various locations in the CNPPID supply canal to help support the population and to provide an alternate brood source for hatchery production of sauger fry and fingerlings. There are 1,000,000 sauger fry and 150,000 fingerlings requested upstream for spring 2025.

Channel catfish were sampled at 12 per net in 2024. Surveys showed multiple year classes with over half of the fish sampled over 16" and will provide a quality fishery for anglers in 2025.

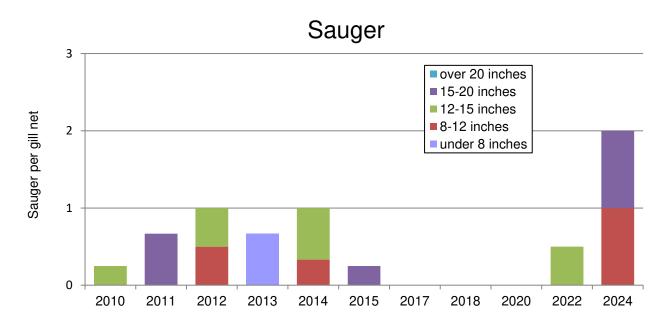
Crappie catch rates increased to over 20 fish per net in 2024. This includes both black and white crappie species. Crappie are sampled using trap nets set from the shore in shallow water. Jeffrey provides a quality crappie fishery for anglers on an annual basis.

White bass and wipers were not sampled in 2024 but were represented in past surveys of the reservoir. Both white bass and wipers have been found in good numbers with different size classes in the past providing a quality fishery. Hopefully, the 2024 netting results are not an indication of a population decline, and future sampling will show improvement. There were 10,250 wiper fingerlings stocked in 2024.

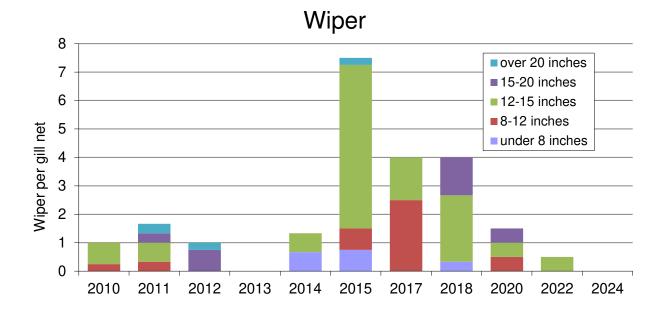
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.



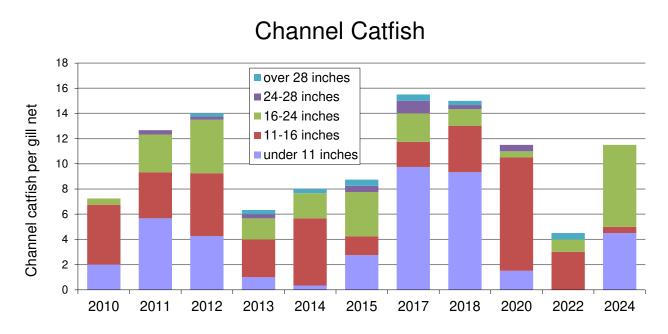
Walleye survey numbers remained consistent with 3 per net sampled in 2024. Half of the fish sampled were over 15 inches providing anglers with harvestable size fish. Walleye are stocked on an annual basis, with 27,500 fingerlings requested for spring of 2025.



To help boost sauger numbers, the stocking strategy involves stocking sauger fry and fingerlings at various locations upstream from Jeffrey in the CNPPID supply canal. Surveys have been encouraging, with multiple year classes sampled in the survey. There are 1,000,000 fry and 150,000 fingerling sauger requested to be stocked upstream of Jeffrey in 2025.

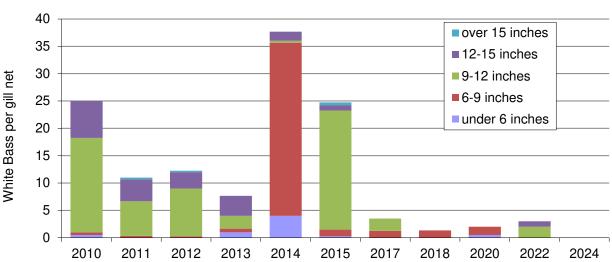


There were no wipers sampled in 2024 but were represented in past surveys with several size classes. To help increase population numbers, wipers were stocked in 2020 and 2024. If sampling trends continue, future wiper stockings may be considered.

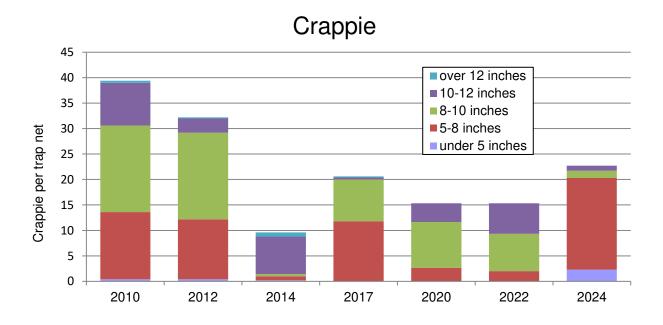


In 2024, channel catfish were sampled at 12 per net. Surveys showed over half of the fish were over 16" providing anglers with numbers of harvestable size fish. New in 2024, channel catfish are now protected with only 1 fish over 30" allowed within the daily bag limit of 10 fish.





No white bass were sampled in 2024 but were sampled in past surveys. Past surveys have showed good numbers of white bass sampled with many harvestable sized fish over 9 inches. White bass are a schooling species, and gill net sampling can be variable from year to year. Natural recruitment varies each year depending on spring temperatures and canal flows. Hopefully the 2024 survey results are not an indication of population decline, and future sampling will show improvement.



In 2024, crappie were sampled at 23 per net which included both black and white crappie species. The survey showed an abundance of young crappie with 2 different size classes sampled along with some larger fish over 10 inches. Jeffrey has been an excellent crappie fishery in the past so with good numbers of young fish showing up in the survey the future looks promising.

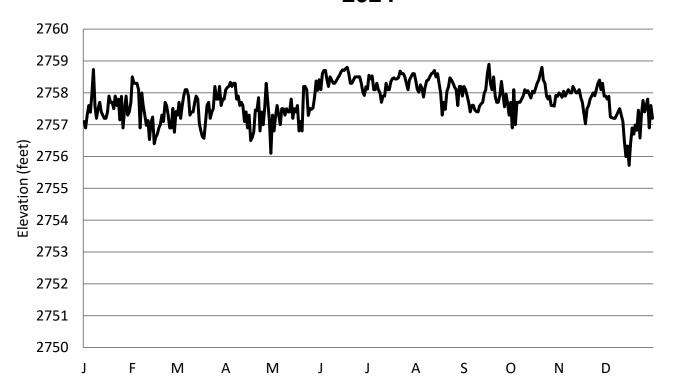
Jeffrey Reservoir Fish Stocking Summary

Year	Walleye	Wiper	Sauger **	Sauger **
2024	34,688 (1")	10,250 (1.75")	1,738,122 (fry)	
2023	27,500 (1")		796,060 (fry)	32,850 (1.5")
2022	27,700 (1.25")		318,000 (fry)	18,400 (1.25")
2021	29,642 (1")		175,000 (fry)	17,757 (1.25")
2020	27,529 (1")	5,000 (1.25")	262,500 (fry)	

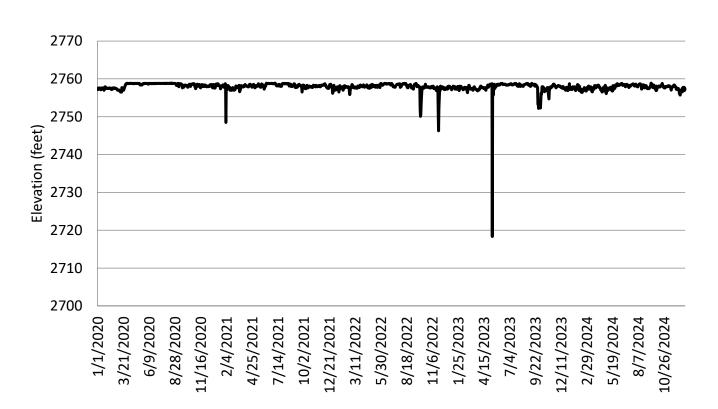
Above is a table of fish stockings over the last 5 years at Jeffrey Reservoir. The species stocked, number stocked, and fish size are presented in the table. Multiple species are stocked annually, and a comprehensive database of fish stockings can be found on the Nebraska Game and Parks website or by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

Stocking Database

^{**}Note: sauger are stocked at various locations in the CNPPID Supply Canal upstream from Jeffrey Reservoir with both fry and fingerlings depending on availability from the North Platte Fish Hatchery.



Jeffrey Reservoir 2010 - 2024



Water elevations can fluctuate daily depending on hydroelectric generation from the Jeffrey hydro plant. The reservoir boating channel has been dredged in the past by CNPPID and marked with navigation buoys. Reservoir navigation is always changing so boaters and fishermen should use caution. Follow water level fluctuations at https://cnppid.com/lake-river-data.



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: 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