Enders Reservoir 2022 Survey Summary - GAME

NEBRASKA

- GAME PARKS -

Sean Farrier, Fisheries Biologist

Fish populations are sampled each fall at Enders 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.

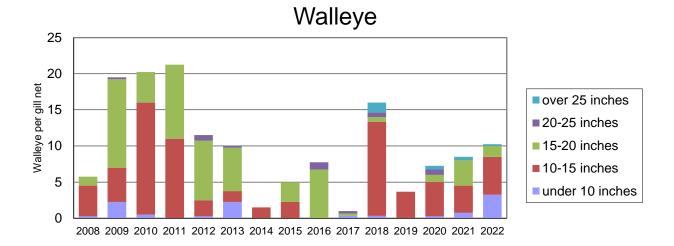
The elevation at Enders has continued to hover around the top of the inactive pool. After Enders fell almost 6 feet in 2014, the lake levels have struggled to return to previously observed elevations. Due to continued, consistent lake elevation levels, a boat ramp improvement project was completed in Fall 2022. Included in the boat ramp project was a new two-lane concrete ramp and kayak launch at No Name Bay and a two-lane concrete ramp, boat dock, and parking area at Area-A. In addition to the boat ramp improvement project, Enders received an upgraded fish cleaning station in Spring 2022.

Walleye catch rates increased to just over 10 per net in 2022. Enders appears to be responding well to the advanced fingerlings that have been stocked in alternate years beginning in 2019. Surveys showed multiple year classes that are pushing up to 20 inches and a few fish over 25 inches. There are 3,500 advanced walleye fingerlings requested for fall 2023.

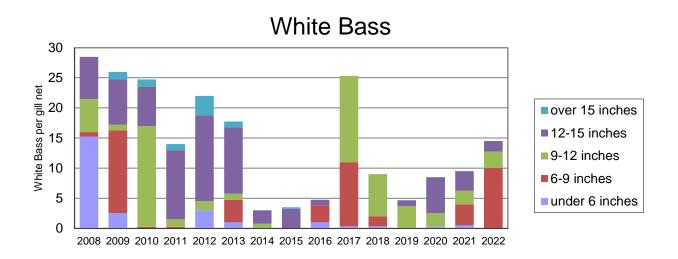
White bass catch continued to improve with just under 15 per net sampled in 2022. Biologists observed a healthy population with multiple year classes and several fish between 12 to 15 inches. There are 10,000 white bass fingerlings requested for late spring 2023. Channel catfish were sampled at just under 5 per net in 2022 and will provide a quality fishery for anglers in 2023. There are 3,500 channel catfish requested for spring 2023.

Enders was home to an extensive fish kill in the fall of 2022 that seemed to impact mainly gizzard shad, crappie, and a few channel catfish. The fish kill was likely caused by a large algal bloom and could have impacts on populations in 2023. Biologists will continue to monitor populations and adjust stockings if deemed necessary.

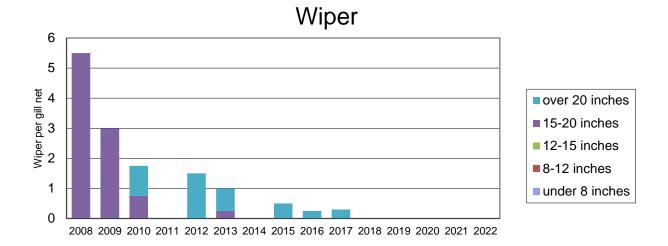
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.



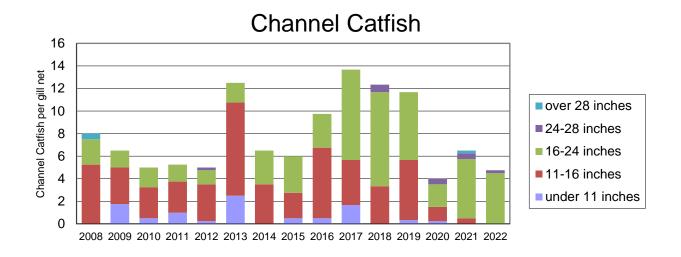
To help boost walleye numbers, the stocking strategy was altered to include advanced fingerlings that are approximately 7.75 inches in length on alternate years. Initial results have been positive with over 10 per net being sampled in 2022. There are 3,500 advanced walleye fingerlings requested for fall 2023.



White bass survey numbers continued to improve in 2022 with just under 15 per net sampled. Length frequency showed a good balance between adult and juvenile fish. To help supplement naturally recruiting white bass in Enders, we have been requesting them annually. There are 10,000 white bass fingerlings requested for spring 2023.



Wipers have not been stocked in Enders since 2005 due to an increased emphasis on white bass production and low water levels. They have not been sampled since one fish was caught in 2017. This suggests the last of the 2005 stocking has either been caught or died from old age. Currently, there are no plans to reintroduce wipers into Enders.



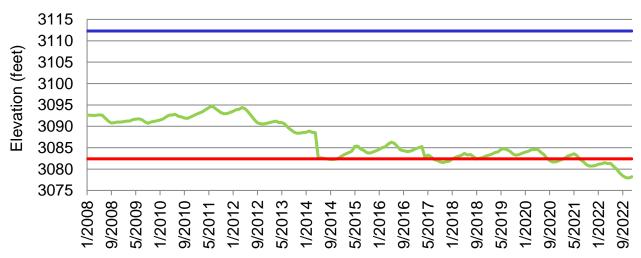
In 2022, channel catfish were sampled at just under 5 per net. Anglers should have a good opportunity to catch channel catfish in 2023. However, stocking strategies will continue to be evaluated and there are 3,500 channel catfish requested for spring 2023.

Enders Reservoir Fish Stocking Summary

Year	Walleye	Channel Catfish	White Bass
2022	625,000 (fry)		
2021	1,997 (9")	3,362 (4.25")	10,114 (1")
2020	33,931 (1")		
2019	3,486 (7.75")		10,380 (1")
2018	750,000 (fry)		9,291 (1.5")

Above is a table of fish stockings over the last 5 years at Enders 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

End of Month Elevation, Enders Reservoir 2008-2022



Water elevation is a constant management concern at Enders Reservoir. The dark blue line indicates the top of the active conservation pool, the green line indicates the end of month elevation, and the red line indicates the top of the inactive pool. Current elevation data can be found at 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