Enders Reservoir 2019 Survey Summary

NEBRASKA - GAME PARKS -

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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 hybrid striped bass. Gill nets are set on approximately the same dates and locations each year to reduce variability.

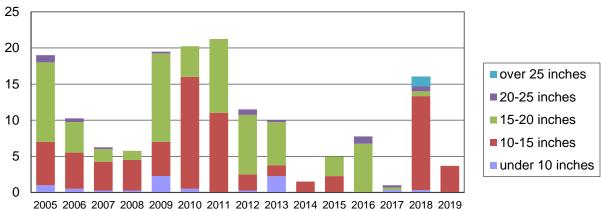
The elevation at Enders has continued to hover around the top of the inactive pool level. After Enders fell almost 6 feet in 2014, the lake levels have struggled to return to previously observed elevations. Both 2018 and 2019 saw a slight increase in elevation before returning to near the inactive pool level. As a result, boat access is still constrained to a primitive gravel boat ramp located in No Name Bay. Four-wheel drive is recommended to launch and load especially following a rain event. Be mindful not to power load onto trailers when exiting on this ramp due to a highly erodible gravel substrate.

Walleye catch rates have been variable at Enders and fell sharply in 2017. However, numbers rebounded in 2018 to the highest observed level since 2011. Catch rates returned to a much lower level in 2019 and highlight a need to continue to evaluate stocking strategies. Staff have been using a fry/fingerling rotation when stocking walleye in an attempt to determine the most viable strategy to improve walleye populations. In 2019, advanced walleye fingerlings with an average length of 7.75 inches were stocked in an attempt to continue to bolster our catch numbers. Walleye fry are requested for spring of 2020. White bass catch rates peaked in 2017 and drastically decreased in 2018 and 2019. White bass fingerlings are requested for late spring 2020.

Channel catfish numbers have remained high for several years. Biologists continue to see 11 plus catfish per net with a good number of larger fish. Overall, anglers should see good numbers of catfish in 2020 and could struggle to find keeper walleye and white bass. Crappie, bluegill, northern pike, largemouth bass, muskellunge and smallmouth bass are also available in limited numbers for anglers seeking other species.

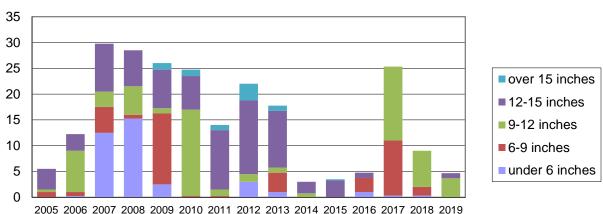
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

Walleye Catch Per Unit Effort



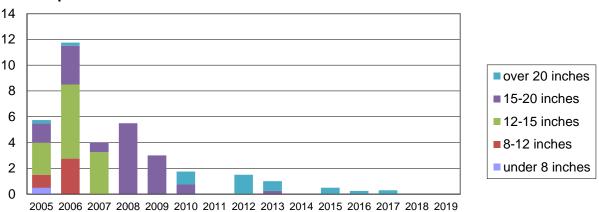
After the sharp decrease in walleye numbers in 2017 populations seemed to rebound in 2018. Unfortunately, biologists observed lower numbers in 2019. A slight increase in water levels in 2019 could have affected catch. To help boost our walleye numbers, our stocking strategy has been altered to include advanced fingerling walleye that are approximately 7.75 inches. The plan moving forward is to stock advanced fish on alternate years due to limited hatchery capacity. There are 625,000 fry requested for 2020.

White Bass Catch Per Unit Effort



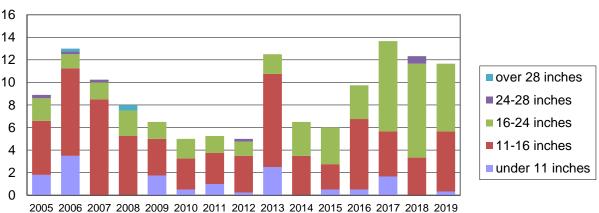
White bass survey numbers decreased in 2018 and again in 2019. Biologists are starting to see larger, more desirable fish. With a slight increase in inflows, the potential for a larger naturally produced year class is present. However, age-0 fish are difficult to sample in standard surveys and should show up in 2020 surveys as age-1's. To help supplement naturally recruiting white bass in Enders we have been stocking white bass annually and have 10,000 white bass fingerlings requested again in 2020.

Wiper Catch Per Unit Effort



Wipers have not been stocked into Enders since 2005 due to an increased emphasis on white bass production and low water levels. Wipers 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.

Channel Catfish Catch Per Unit Effort



Enders continued to produce a quality channel catfish fishery in 2019. Catch shows a good representation of fish in multiple size classes suggesting a stable fishery for the future. In 2019 there were still a healthy number of individuals in the 16-24 inch range for anglers to catch. Biologists also saw an increase in 11-16 inch fish in 2019 that should be approaching the 16-24 inch range in 2020. Also in 2019, a few fish under 11 inches were sampled suggesting some natural recruitment occurring in Enders. No channel catfish are requested for stocking in 2020.

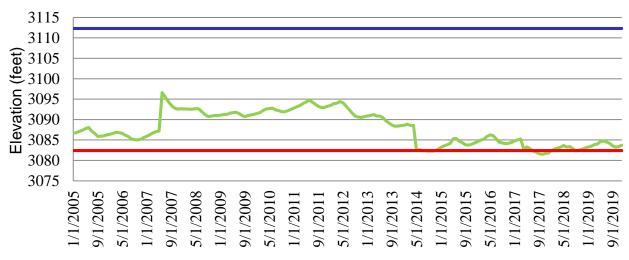
Enders Reservoir Fish Stocking Summary

Year	Walleye	Channel Catfish	White Bass	Muskellunge
2019	3,486 (7.75")		10,380 (1")	
2018	750,000 (fry)		9,291 (1.5")	
2017	70,000 (1.5")	3,500 (5")	10,000 (1")	
2016	1,140,000 (fry)		29,500 (1")	
2015	31,250 (1.5")	1,875 (9.9")		100 (13")

Above is a table of fish stockings for 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 at the Nebraska Game and Parks website or by following the link below.

Stocking Database

End of Month Elevation, Enders Reservoir 2005-2019



Approximately 6 feet of elevation was released in 2014 which left all permanent ramps out of service due to low water levels. A primitive ramp was installed and there is discussion about extending the current launch facilities. In 2019, a temporary increase in elevation was observed before returning to a level slightly above the top of the inactive pool. 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



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Aquatic invasive species (AIS) have reached Nebraska! Zebra mussels are currently established in Lewis and Clark Reservoir, Offutt AFB pond, and the Missouri River. Anglers and boaters should be on the look out for personnel performing boat inspections and decontaminations statewide. Follow the link: Nebraska. 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 \$15 dollars and includes the \$2 issuing fee. Stamps can be purchased online or at Nebraska Game and Parks Commission Offices.



Left: Zebra Mussel Right: Quagga Mussel