Enders Reservoir 2017 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.

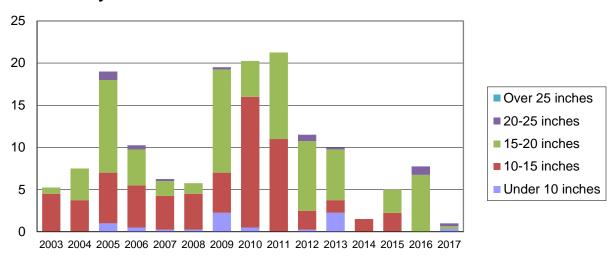
The elevation at Enders fell almost 6 feet in 2014 and lake levels have improved modestly through 2016. However, water levels fell again in 2017 to comparable elevations seen in 2014. Boat access is still constrained to a primitive gravel boat ramp located in No Name Bay. Four-wheel drive is recommended to launch and load especially following a rain event.

Walleye catch rates have been variable at Enders and fell sharply in 2017. Staff have been using a fry/fingerling rotation when stocking walleye in an attempt to determine the most viable strategy to improve walleye populations. Walleye fry are requested for spring of 2018. White bass catch rates showed a strong increase from 5 fish per net in 2016 to 25 fish per net in 2017. The caveat is that all white bass sampled in 2017 were less than 12 inches long. Most anglers prefer larger fish but it is encouraging to see the increase in numbers. Size structure will only improve as fish grow over the next couple of seasons.

Channel catfish have been on the increase at Enders for several years now. Biologists sampled 13 fish per net in 2017. The most exciting data from 2017 is the number of larger catfish in Enders. Overall, angling should be fair to good for white bass and catfish and poor for walleye in 2018. Crappie, bluegill, northern pike, largemouth bass and smallmouth bass are also available in limited numbers for angler seeking other species.

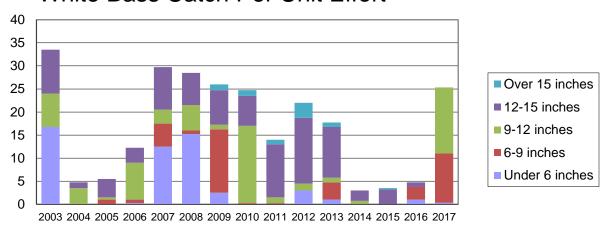
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2017 summary graphs of some local waterbodies for comparison.

Walleye Catch Per Unit Effort



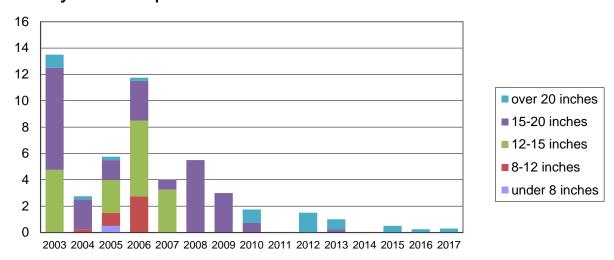
Walleye numbers at Enders have been variable in recent years peaking in 2011 and quickly falling in 2014. It appeared that populations were on the rebound in 2015 and 2016 but populations again fell sharply in 2017 paired with a decrease in reservoir elevation. Biologists caught a 1 fish per net in 2017. There were several size groups represented in the sample but the sample size was low enough that it is hard to say much about the current walleye fishery. Walleye are stocked annually and there are 625,000 fry requested for 2018.

White Bass Catch Per Unit Effort



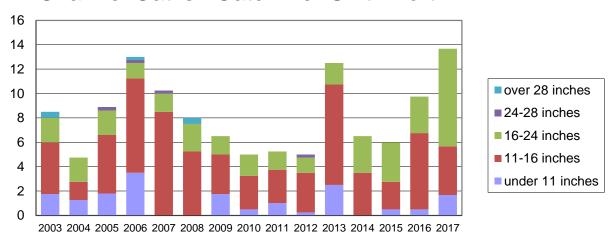
White bass survey numbers were strongly improved in 2017. Biologists sampled 25 white bass per gill net in 2017. The size structure of fish were evenly divided between two length groups. The age data from this survey indicates that all of the fish sampled are from the 2015 year class which means they are naturally produced fish. White bass fingerlings were stocked in 2016 and 2017 and are requested for 2018.

Hybrid Striped Bass 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. There were no wipers sampled in 2014 and only one fish in 2017, which indicates that there are very few wipers remaining in Enders. The few remaining wipers are trophy fish over 20 inches long. There are currently no plans to reintroduce wipers at this time.

Channel Catfish Catch Per Unit Effort



Biologists sampled 13 channel catfish per net in 2017. The size structure has progressed to a point where there are good numbers of fish in the 16-24 inch size class. The data suggests that catfish angling should be good in 2018. Channel catfish are stocked regularly at Enders to supplement the lack of natural reproduction. There were 3500 fish stocked in 2017 that had an average length of 5 inches.

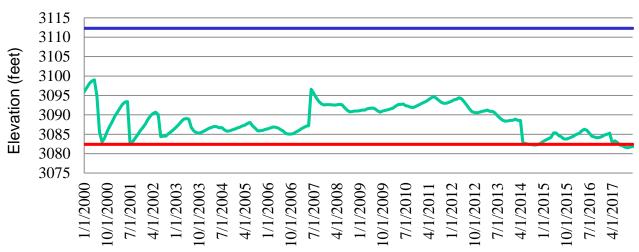
Enders Reservoir Fish Stocking Summary

Year	Walleye	Channel Catfish	White Bass	Muskellunge
2017	70,000 (1.5")	3,500 (5")	10,000 (1")	
2016	1,114,000 (fry)		29,500 (1")	
2015	31,250 (1.5")	1875 (9.9")		100 (13")
2014	1,172,488 (Fry)			
2013	1,890,400 (Fry)	4262 (10.5")		502 (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.

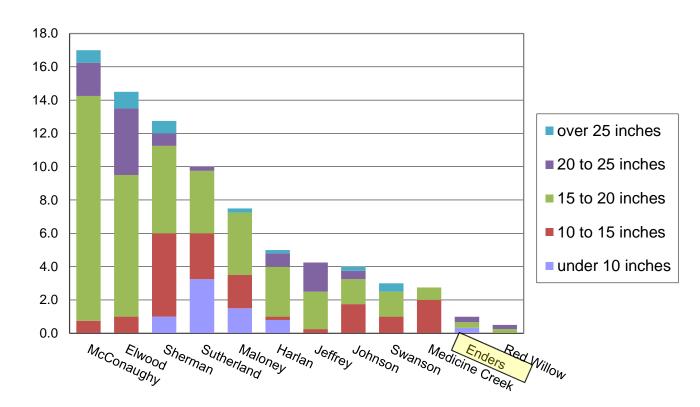
Stocking Database

End of Month Elevation, Enders Reservoir 2010-2017

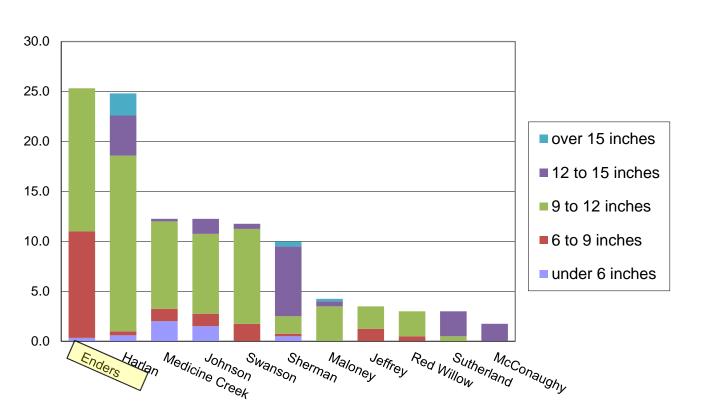


Approximately 6 feet of elevation was released in 2014 which left all permanent ramps out of service due to low water levels. A primitive ramp was installed and there is discussion about extending the current launch facilities. Water levels fell again in 2017 and it is unlikely that there will be improvement in the coming years. 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:

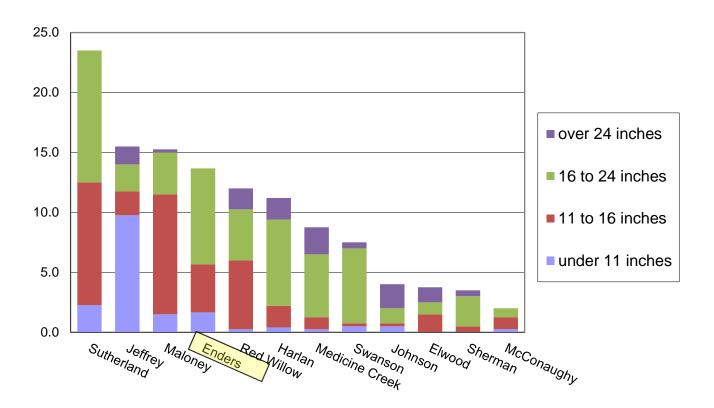
Southwest District Walleye 2017



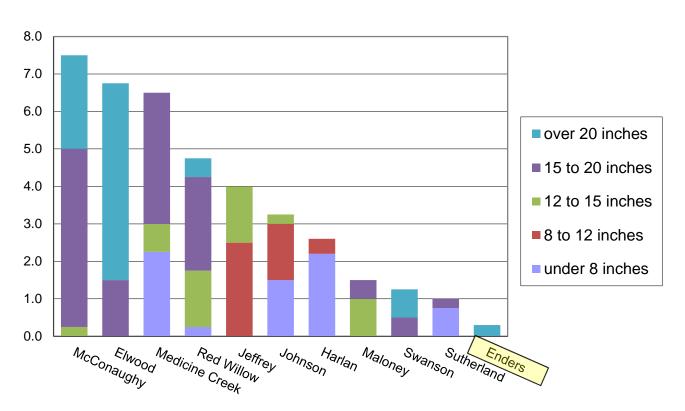
Southwest District White Bass 2017



Southwest District Channel Catfish 2017



Southwest District Wiper 2017





STOP AQUATIC HITCHHIKERS!

Prevent the transport of nuisance species. Clean <u>all</u> recreational equipment.

www.ProtectYourWaters.net

Aquatic invasive species (AIS) have reached Nebraska! Zebra mussels are currently established in Lewis and Clark Reservoir, Offut 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