### **Enders Reservoir 2015 Survey Summary**

NEBRASKA

- GAME PARKS -

Caleb Huber, Fisheries Biologist

Fish populations are sampled each fall at Enders Reservoir using gill nets, a method commonly used to sample fish found in open water, 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. However, environmental factors can play a strong role in catch rate and composition data. Due to this variability biologists look at trends over time when making most management decisions rather than kneejerk decisions based on one data point.

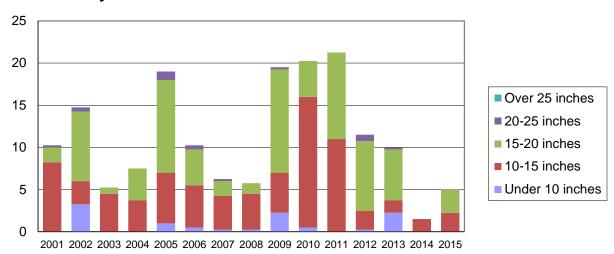
The elevation at Enders was lowered almost 6 feet in 2014 due to compact compliance requirements. The most noticeable effect of the drawdown has been that all the permanent boat launch facilities are suffering from decreased service. A temporary boat ramp is located across the dam at Catfish Cove. This facility consists of a gravel ramps, a floating dock, restroom, and a limited parking area. Four wheel drive is recommended to launch and load especially following a rain event.

Survey numbers remain below average during this period of low water. Biologists have continued to actively manage the reservoir, including fish stockings, while taking the lower elevation into account. A combination of the following factors; loss of nursery habitat, decreased recruitment, and increased angler harvest may also be negatively affecting the fish populations. Personnel sampled 5 walleye per net in 2015. In an effort to combat these challenging conditions, walleye stockings will alternate between fry and fingerling stockings in an attempt to determine what strategy will be most effective for the current conditions. Walleye fry are requested in 2016 and fingerlings were stocked in 2015.

In addition to walleye, there are several other species of interest to anglers at Enders Reservoir. Biologists surveyed 4 white bass per net in 2015 and 6 catfish per net. It is also important to note that muskellunge are stocked in very low numbers to provide a unique fishery and as a control for rough fish such as common carp and carpsuckers. Crappie, bluegill, northern pike, largemouth bass and smallmouth bass are also available in limited numbers for angler seeking other species.

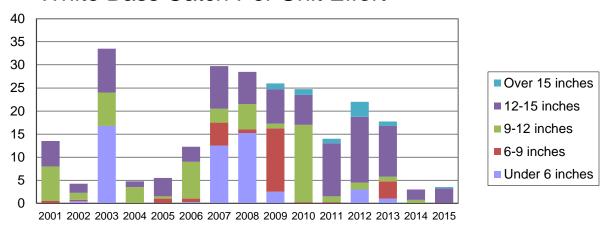
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2015 summary graphs of some local waterbodies for comparison.

### Walleye Catch Per Unit Effort



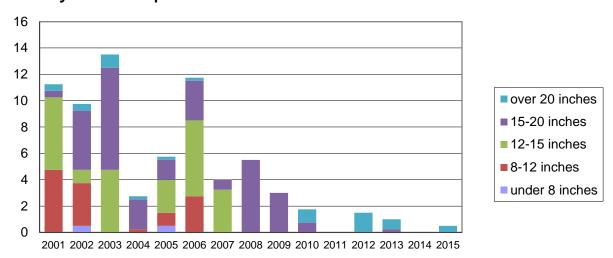
Walleye numbers peaked at Enders in 2011 and have been declining to a low of one fish per net in 2014. In an effort to address this issue biologists have implemented a stocking strategy that alternates between fry and fingerling stocking annually. In 2015, personnel sampled 5 walleye per net. Approximately half of the fish sampled were greater than the 15 inch minimum length limit. It is hard to predict the future of the walleye fishery at Enders due to the lack of age zero fish however, there should be a limited number of harvestable walleye in 2016.

### White Bass Catch Per Unit Effort



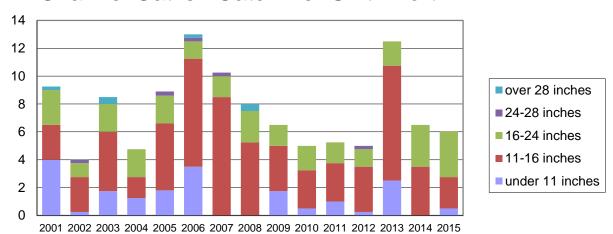
Biologists sampled 4 fish per net in 2015. Numbers dropped sharply in 2014 and have not recovered. Numbers of age-0 fish have also been absent in surveys since 2008. Managers plan to request a white bass stocking in 2016 if fish are available in an attempt so supplemental natural recruitment of white bass. It is possible that recruitment of white bass has slumped due to the lack of inflows and suitable spawning habitat.

### 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. There were no wipers sampled in 2014 and only two wipers total in 2015, 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



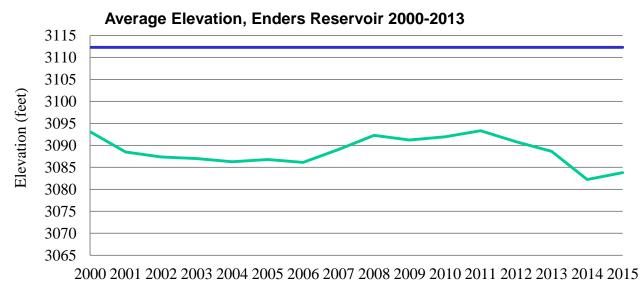
Personnel sampled 6 channel catfish per net in 2015. Approximately half of the fish surveyed were in the 16-24 inch length category. Anglers should continue to have good success for harvestable channel catfish in 2016. Channel catfish are stocked regularly at Enders to supplement the lack of natural reproduction. There were 1875 fish stocked in 2015 that had an average length of 10 inches.

#### **Enders Reservoir Fish Stocking Summary**

Year	Walleye	Channel Catfish	White Bass	Muskellunge
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")
2012	963,263 (Fry)		1,000,000 (Fry)	
2011	1,637,506 (Fry)	12,047 (10.5")		758 (12")

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



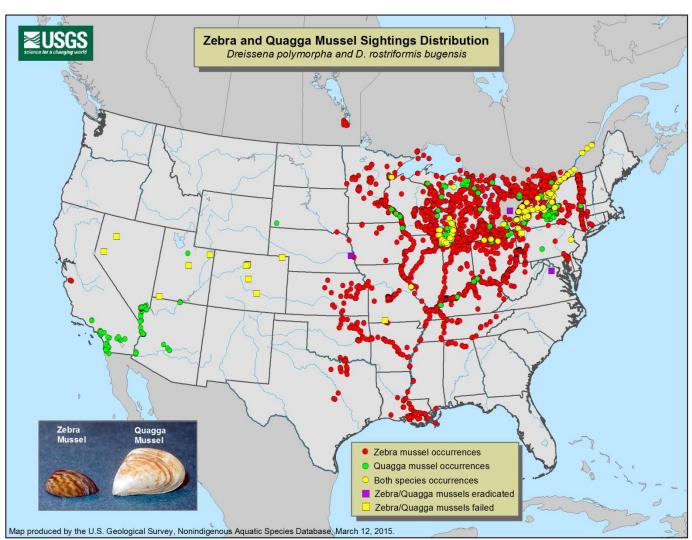
Water levels remain a management concern and contribute to reduced habitat quality, recreational opportunities, and fishing quality at Enders Reservoir. Approximately 6 feet of elevation was released in 2014 which left all permanent ramps out of service due to low water levels. A primitive ramp was installed and there is discussion about extending the current launch facilities. The dark blue line indicates the top of the active conservation pool and current elevation data can be found at this link: Current Elevation.



## 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. Beginning in 2016 anglers and boaters should be on the look out for personnel performing boat inspections and decontaminations statewide. The spread of AIS can be prevented using the Clean, Drain, and Dry technique. Before leaving any water body make sure to drain or dump any standing water and remove debris that might be attached to the boat or trailer. If possible allow the watercraft to completely dry before launching at another area. Follow the link:

Nebraska Invasives Species Program or call 402-472-3133 to report any possible AIS sightings or for more information about AIS in Nebraska.

# Attention motorboat owners operating in Nebraska:

Starting in 2016, boaters whose motorized watercraft are registered in any state other than Nebraska must purchase and display a \$15 Aquatic Invasive Species (AIS) Stamp each year they launch their boat in Nebraska. The stamp will help fund AIS education and inspection programs.





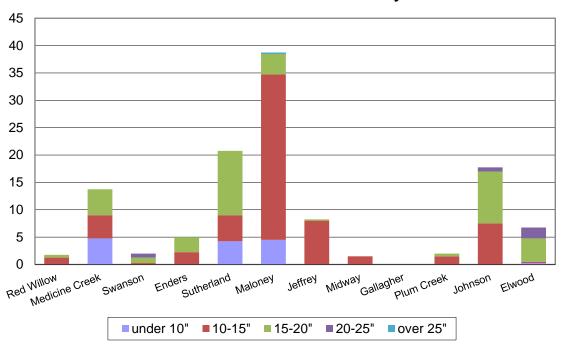
- . Boat inspections for AIS prior to launch in Nebraska are NOT mandatory at this time.
- Personal watercraft registered outside of Nebraska must have this stamp.
- · Non-motorized craft registered in any state are exempt from the stamp.
- Stamps are not required for boats registered in Nebraska. A \$5 AIS fee is included on the residents' three-year boat registrations.
- Residents who register their boats in other states must have this stamp before launching in Nebraska.

This stamp is available online at OutdoorNebraska.org or at Nebraska Game and Parks permitting offices.

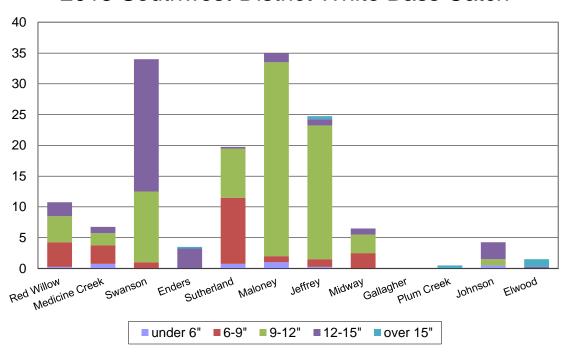
Learn more about invasive species at neinvasives.com.



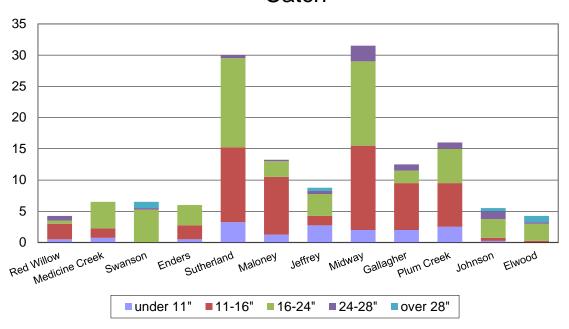
### 2015 Southwest District Walleye Catch



### 2015 Southwest District White Bass Catch



## 2015 Southwest District Channel Catfish Catch



### 2015 Southwest District Wiper Catch

