Enders Reservoir 2012 Survey Summary



Nebraska Game and Parks Commission

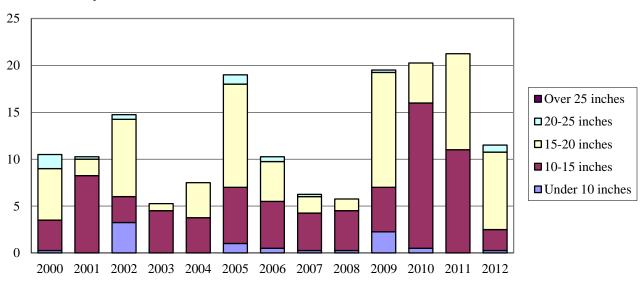
Caleb Huber, Fisheries Biologist

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 and allow for trend comparisons of species abundance and size distributions. However, environmental factors can play a strong role in catch rate and composition.

Water levels at Enders increased beginning in 2007 and due to those increases we have seen substantial improvements to the fishery. Increased water levels flood terrestrial vegetation which increases productivity and provides nursery habitat for juvenile fish. There has been a strong year class of white bass that corresponds to this time period that has been tracking through the system. Biologist sampled 22 white bass per net in 2012 and three fourths of those fish are greater than fifteen inches long. (Its important to note that only one white bass or wiper over 16 inches may be kept per day beginning in 2013). In addition to white bass, walleye numbers have been good. Walleye fry are stocked annually at Enders and seem to be showing strong recruitment. However there is a weak year class from 2011 which is most likely due to a strong cold front that moved through at the time fish were stocked. Biologists sampled 11 fish per net in 2012. Most of those fish were over fifteen inches. There were low numbers of 10-15 inch fish due to poor recruitment discussed above. Channel catfish numbers are fair and stable. Biologist sampled 5 fish per net in 2010, 2011, and 2012. These numbers are about average for the Southwest portion of the state and may seem low to some but anglers are fairly successful based on creel data.

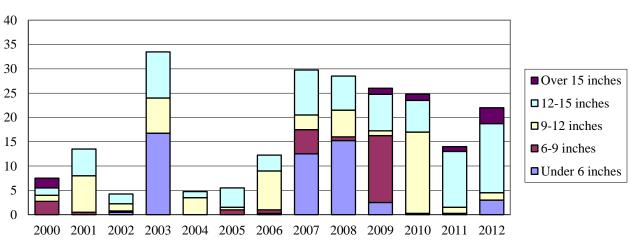
Angler usage sagged a little in 2012 compared to 2011. In total, there were 6,389 anglers and 28,602 angler hours in 2011 which dropped to 6,008 anglers and 24,972 hours respectively. Even though usage was down in 2012 there was a strong increase in total catch, harvest, and catch per hour in 2012 for several species. There was an estimated 3,887 walleye, 4,744 white bass, and 1,455 catfish harvested in 2012

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 is a table of recent angler use survey data from 2011 and 2012. This data is the result of angler interviews taken by creel clerks during their interviews with local anglers



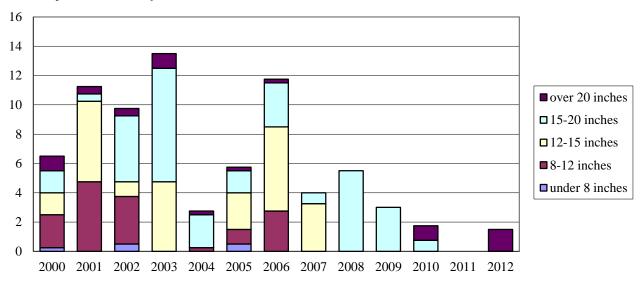
Walleye Catch Per Unit Effort

Walleye catch rates have improved at Enders beginning in 2009. The survey data from 2012 still indicates good numbers of harvestable walleyes but it also appears that the 2011 year class is weak. Walleye are stocked annually at Enders so this weak year class should not have long lasting implications for the fishery. Currently there are 1.7 million walleye fry requested for 2013.



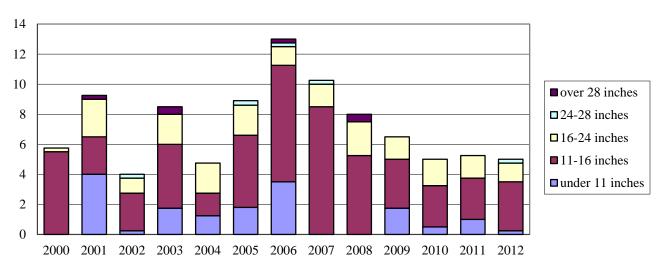
White Bass Catch Per Unit Effort

Biologists sampled 22 white bass per net in 2012. Over half of those fish were in the 12-15 inches length group with a few fish over 15 inches. There appears to be a new year class in the 2012 survey which is good news as recent recruitment has been poor.



Hybrid Striped Bass Catch Per Unit Effort

Hybrid striped bass have not been stocked into Enders since 2005 due to an increased emphasis on white bass production. Very few wipers were sampled in 2012. There are currently no plans to reintroduce wipers.



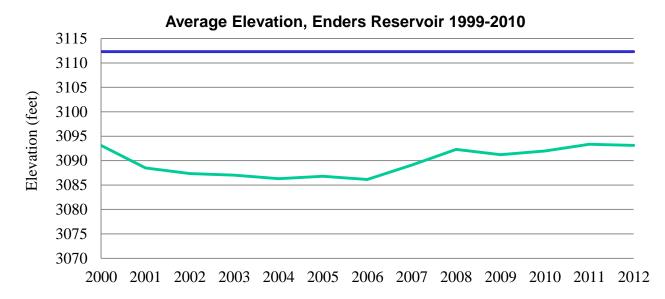
Channel Catfish Catch Per Unit Effort

Channel catfish numbers have been stable at 5 fish per net for a few years. There is a good size structure with a fourth of the population over 16 inches. Anglers should have fair success with the opportunity to harvest fish for the frying pan. Channel catfish are stocked on alternating years. Currently there are 4250 10 inch fish requested for 2013

2012 Angler Use Summary

Species	Year	Total Catch	Harvest Number	Total Catch/hr	Harvest/ hr	Release/ hr
Channel catfish	2012	4,388	1,455	0.61	0.3856	0.2244
	2011	3,987	2,044	0.33	0.2231	0.1107
Wiper	2012	414	95	0.00	0.0000	0.0000
	2011	339	169	0.00	0.0005	0.0000
Walleye	2012	7,709	3,887	0.49	0.2543	0.2450
	2011	5,555	845	0.38	0.0650	0.3152
White Bass	2012	6,656	4,744	0.41	0.3464	0.0684
	2011	7,764	3,594	0.61	0.3771	0.2383

An angler survey was conducted at Enders in 2012. The survey is conducted from April through October and estimates that there was a total of 24,972 angling hours and 6,008 anglers during this period. Of those surveyed, 7% sought channel catfish, 50% sought walleye, 17% white bass, and 0% sought wipers.



Water levels remain a management concern and contribute to reduced habitat quality, recreational opportunities, and fishing quality at Enders Reservoir. Currently the reservoir is operating at a low but stable level and has not released water for irrigation use since 2002. The dark blue line indicates the top of the active conservation pool.