

Enders Reservoir

2009 Survey Summary



Nebraska Game and Parks Commission

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The following text and graphs describe the total number of select species caught per gill net and the relative abundance of fish within several length categories. For comparative purposes, results from previous years are also shown. Fish populations are sampled at Enders using gill nets, a method commonly used to sample fish found primarily in open water, such as walleye and white bass. These nets are set on approximately the same date and location each year to reduce variability and allow for trend comparisons of species abundance and size distributions. Environmental factors can play a strong role in catch rate and composition, however. Also included are graphs depicting water storage, master angler awards and graphs comparing Enders survey data to other Southwest reservoirs.

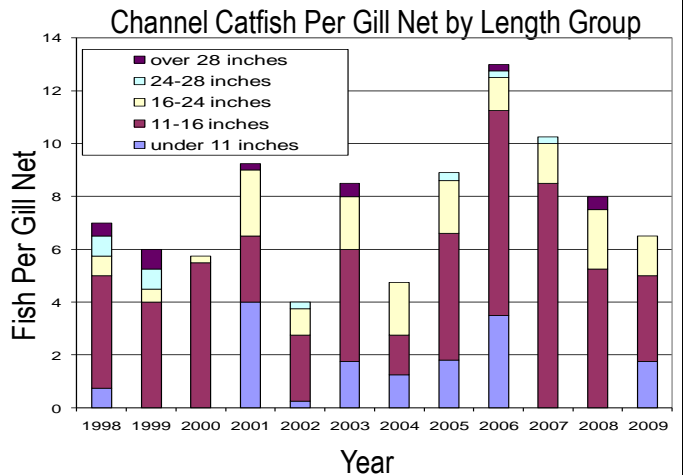
Water levels remain a management concern and contribute to reduced habitat quality, recreational opportunities, and fishing quality at Enders Reservoir. Since 1998, water levels have dropped at Enders Reservoir. Currently the reservoir is operating at a low but stable level and has not released water for irrigation since 2002. NGPC's 2009 survey data may indicate a lingering benefit from the increased water levels that occurred from 2006 to 2008.

In fall 2009 high numbers of walleye, white bass and catfish were sampled at Enders. In 2010 walleye angling opportunities could be greater or at least comparable to that experienced in 2009. An increase in gill net catch rate was observed in 2009 with most fish sampled being in the 15-20 inch range. Anglers typically experience success on walleye while drifting flats on the upper end of the reservoir from mid-May through June. White bass angling should be comparable to the past couple years with numbers remaining stable and a similar abundance of 12-15 inch fish. Channel catfish numbers were high but a large proportion sampled were less than 16 inches. Wiper numbers were down but some sizable individuals remain.

Smallmouth bass and muskellunge populations are additional components of the Enders fishery. Smallmouth bass can be caught throughout the year along the dam and rocky points. A supplemental stocking of 500, 6-15-inch, adult smallmouth bass was made in September of 2009. Muskellunge were introduced to Enders in 2006 and have grown to lengths greater than 30 inches.

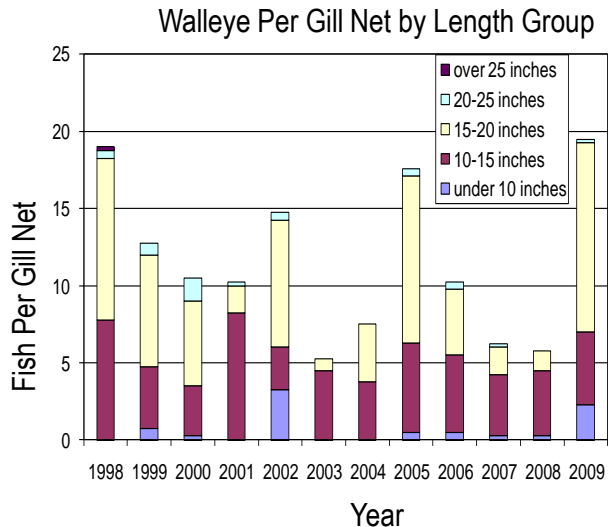
Channel Catfish

Channel catfish numbers have been on a slight decline since 2006 but the 2009 catch rate was the highest among the four Southwest reservoirs. The bulk of individuals were in the 11-16 inch length category and a number of 16-24 inch individuals were sampled. These medium-sized fish are perfect for the frying pan. Channel catfish approximately 10 inches in length were stocked at a rate of 12 per surface acre in 2009. Enders will receive channel catfish stocking again in 2011 or 2012.



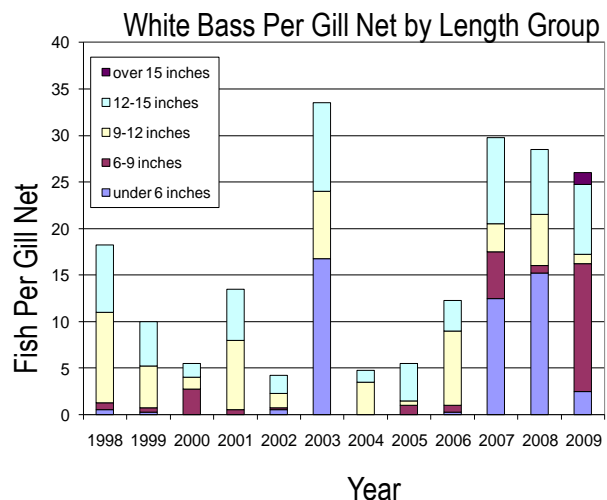
Walleye

Catch rates spiked in 2009. Increased water levels experienced during 2007 and 2008 may have enhanced recruitment after shoreline vegetation was flooded. The size structure of walleye captured reveals a large proportion of "legal keepers" along with a consistent number of 10-15 inch individuals. Mean length increased from 13 inches in 2008 to 14.3 inches in 2009. This spike may predict above average walleye fishing in 2010. Approximately 900,000 walleye fry will be stocked in 2010.



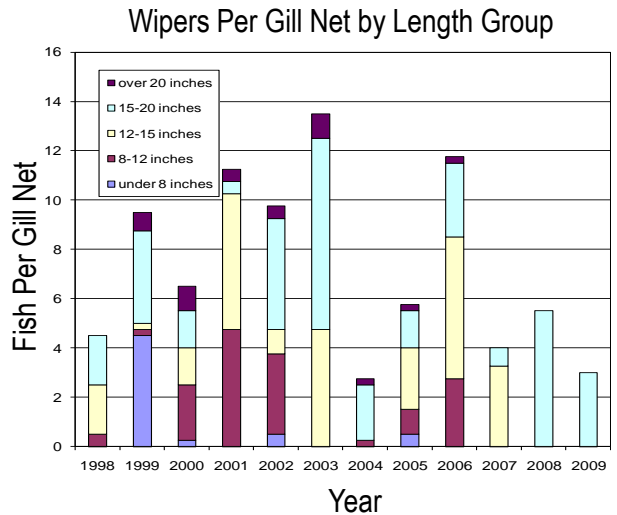
White Bass

Survey data for white bass has been very impressive over the last three years. Survey data indicates that Enders has one of the best white bass populations of the Southwest reservoirs. In addition to high catch numbers the size structure of white bass was desirable with approximately one third over nine inches. The increased water levels of 2007 and 2008 encouraged recruitment of young individuals that are now present as 6-9 inch fish. Mean length increased from 8.2 inches in 2008 to 9.4 inches in 2009. Enders should provide a great white bass fishery in 2010.

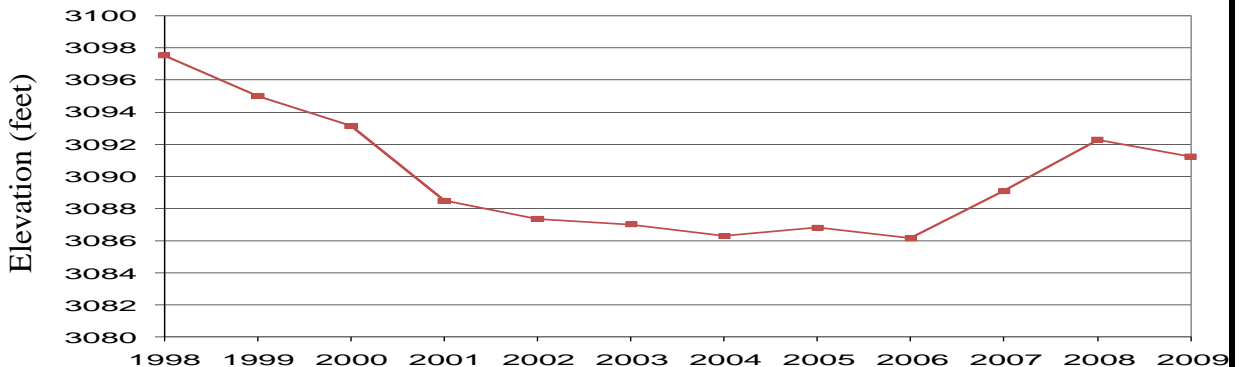


Wipers

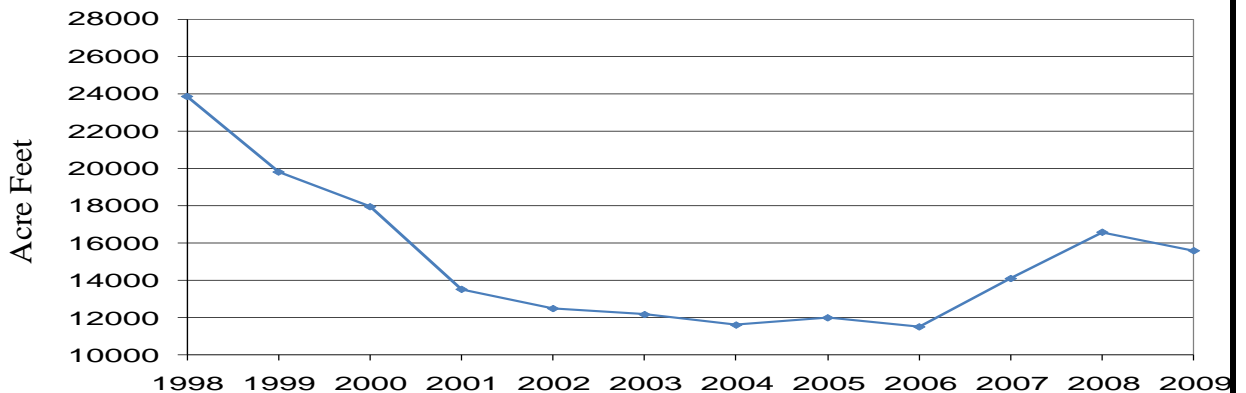
Wiper stockings have been reduced at Enders. This decision was made based on these three factors, 1) white bass recruitment continues to naturally supply a temperate bass fishery, 2) angler survey data revealed that most wipers were being harvested as white bass, and 3) these angler surveys indicate that demand for wipers was low. The remaining wipers are quite large but quantity is low.



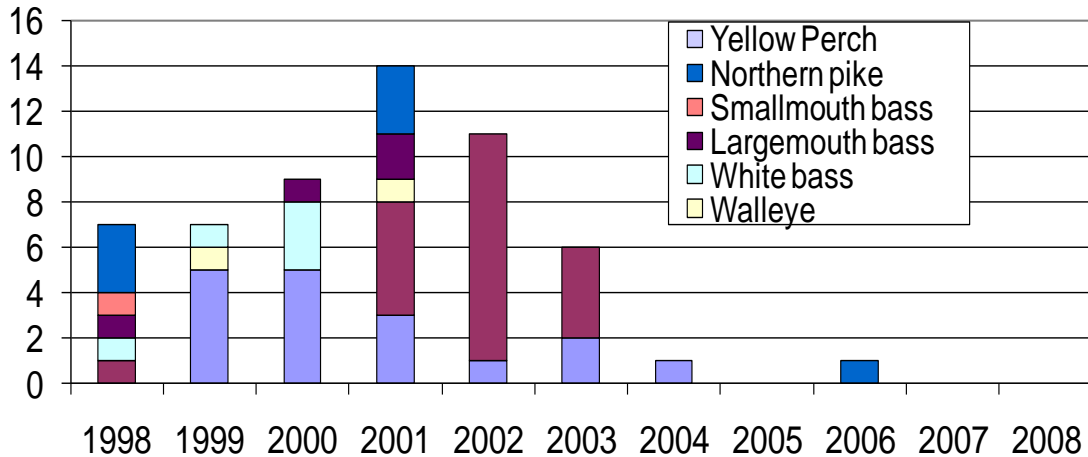
Average Elevation, Enders Reservoir 1998-2009



Average Yearly Storage, Enders Reservoir 1998-2009



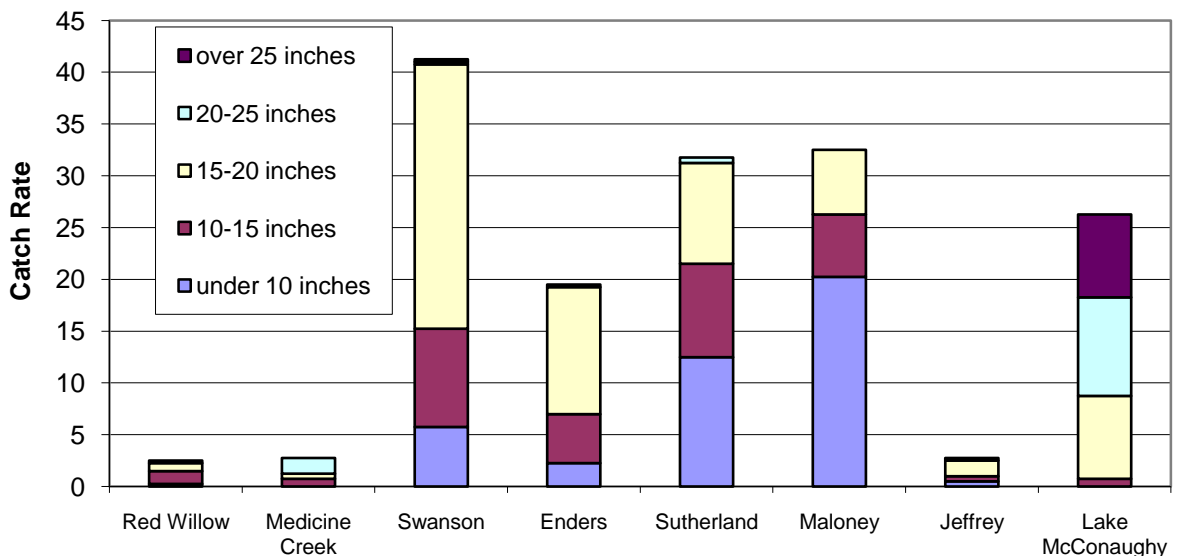
Master Angler Awards, Enders Reservoir 1998-2008 (2009 data not yet available)



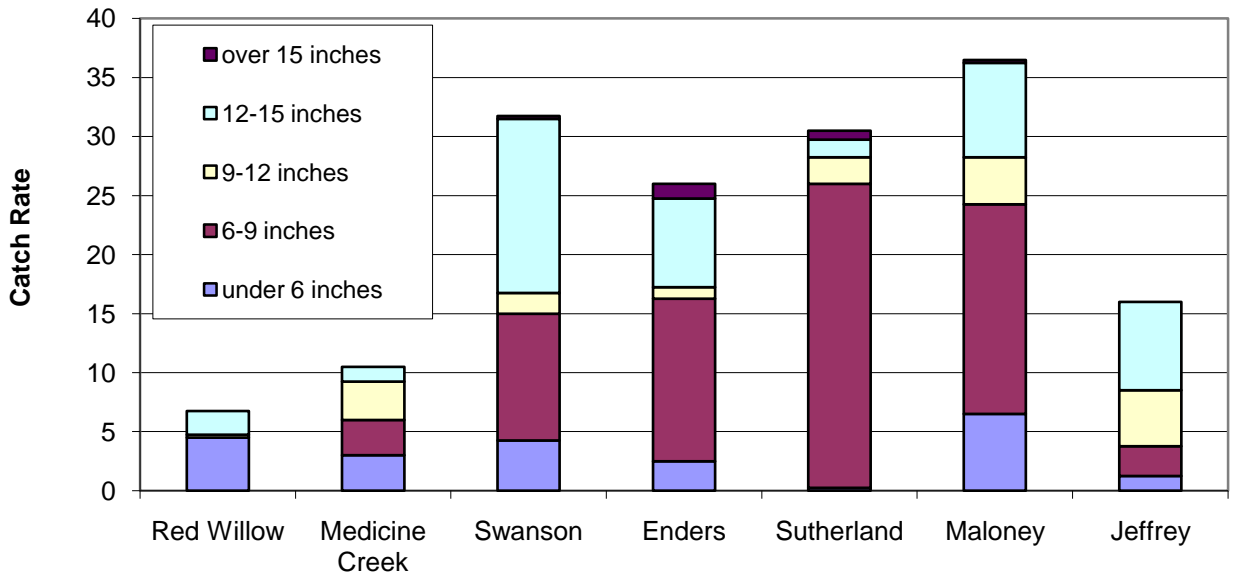
While the numbers of master angler awards given may not necessarily represent the true number of large fish caught (but not reported), the information is often useful for evaluating catch trends. In 2008, there were zero master angler awards reported from Enders.

The following graphs compare 2009 walleye, white bass, wiper and channel catfish gill net catch rates between Southwest District reservoirs.

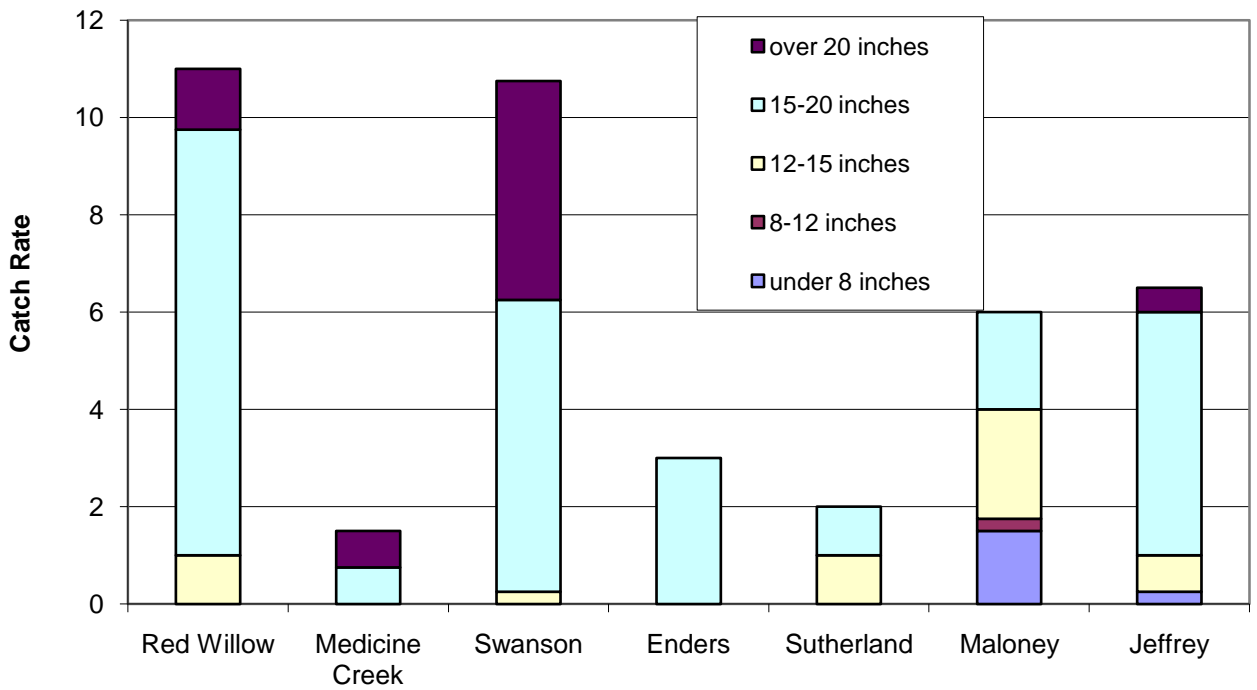
Walleye



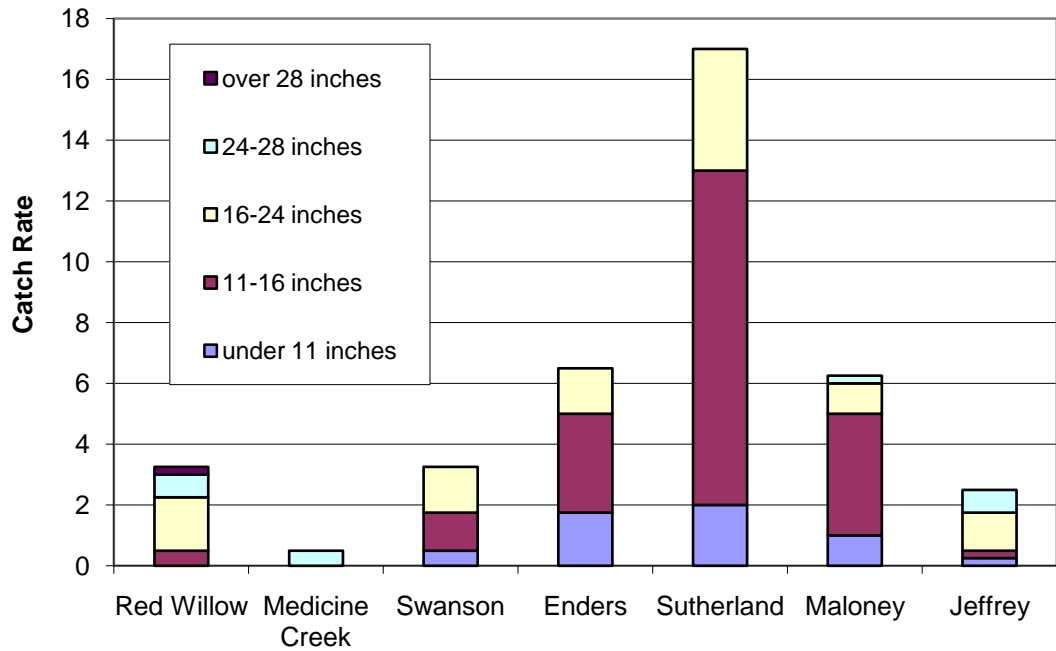
White Bass



Wiper



Channel catfish



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