

Medicine Creek Reservoir

2004 Fall Survey Summary



Nebraska Game and Parks Commission

John Kilpatrick, Fisheries Biologist

The following text and graphs are the result of netting surveys completed during October of 2004 at Medicine Creek Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Medicine Creek using gill nets, a method commonly used to sample fish found primarily in open water, such as walleye and wipers.

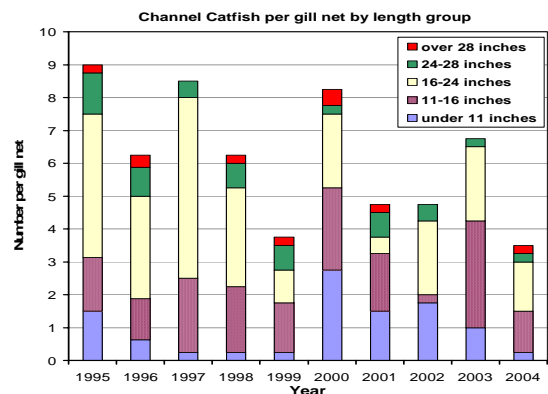
Catch rates for game fish in Medicine Creek Reservoir were about average when compared to other reservoirs in southwestern Nebraska (excluding McConaughy). Overall catch rates for walleye were about average, but no walleye over 20 inches were sampled. Catfish numbers were tied for the lowest among other Southwest reservoirs, but fair numbers of fish over 16 inches were caught. Although overall catch rates for white bass from Medicine Creek were the highest of any other southwest reservoir, numbers of fish over 9 inches were about average. Most of the catch was comprised of fish from 6-9 inches and should provide catchable fish next summer. Wiper numbers were low, but Medicine Creek had the third highest gill net catch of fish over 15 inches among other southwest reservoirs. If overwinter survival is good for white bass, Medicine Creek should provide good white bass fishing for the next couple of years. Walleye, and channel catfish fishing should be fair and Medicine Creek should provide anglers with fair opportunities for larger wipers.

The following graphs show the total 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 graphs illustrating water level elevations and the resulting surface acres in Medicine Creek Reservoir and graphs comparing 2003 gill net catches from other southwest reservoirs. Although the lake level rebounded slightly last year, we remain in a drought and the

current operating water level at Medicine Creek is close to the lowest since it began to fill in 1956. Low lake levels and the accompanying diminished summertime habitat and degraded water quality remain management concerns at Medicine Creek.

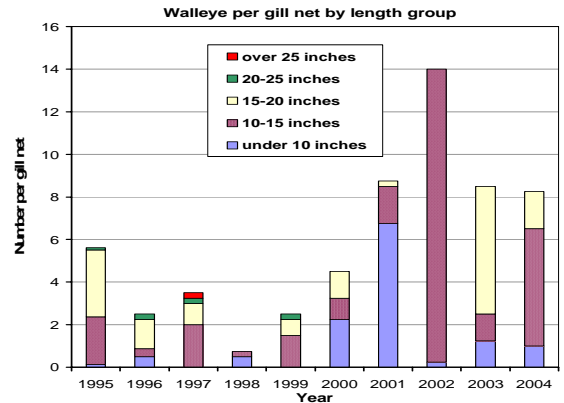
Channel Catfish

Channel catfish gill net catch was down by almost 50% from 2003. The 2004 catch, however, had about average numbers of fish over 16 inches. Numbers of fish sampled over 24 inches remains low, but there are some quality fish in Medicine Creek. Due to the fairly consistent flow into Medicine Creek and good reproductive success of channel catfish, the reservoir is not stocked. However, future declines in the flow of Medicine Creek may have adverse effects on channel catfish recruitment. Angling for channel catfish should be similar to recent years and there are opportunities to catch quality catfish.



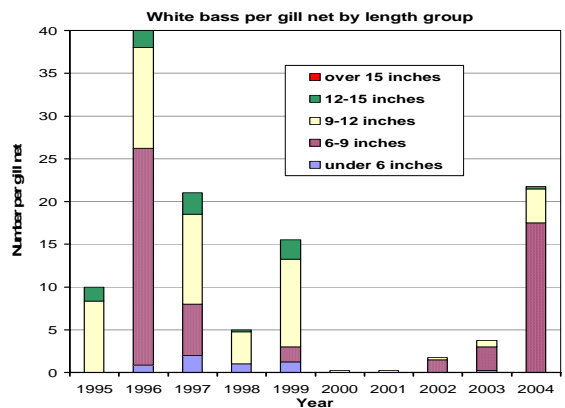
Walleye

Overall walleye gill net catch was similar to 2003, although number of fish larger than 16 inches were less than half. However, the number of fish sampled larger than 16 inches were about average for the past decade. Good numbers of 10-16 inch fish should provide better numbers of harvestable walleye in 2005 in 2006. Walleyes over 20 inches are rarely sampled at Medicine Creek, and none have been sampled since 1999. This is also reflected by the number of Master Angler awards issued for walleye (only 4 since 1994). Catch rates for walleye in Medicine Creek will likely be similar to the previous 3 years, although anglers should catch more keeper-sized fish.



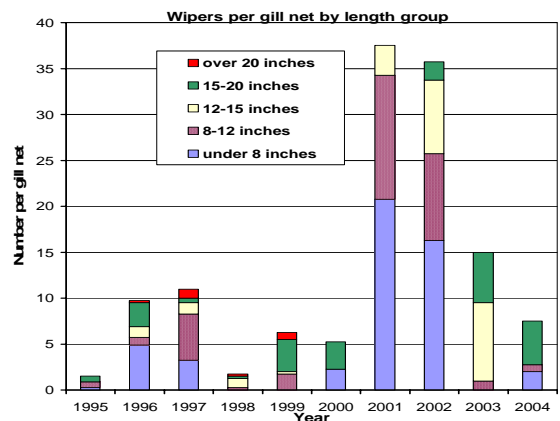
White Bass

White bass gill net catch has been low in Medicine Creek since 1999 for fish larger than 9 inches, but the overall gill net catch rate and the number of fish less than 9 inches was the highest since 1996. If overwinter survival is high for small white bass, catch rates for fish 9-16 inches should remain better than average for 2005 and 2006. Angling should be good in 2005, although few fish larger than 12 inches will likely be caught.

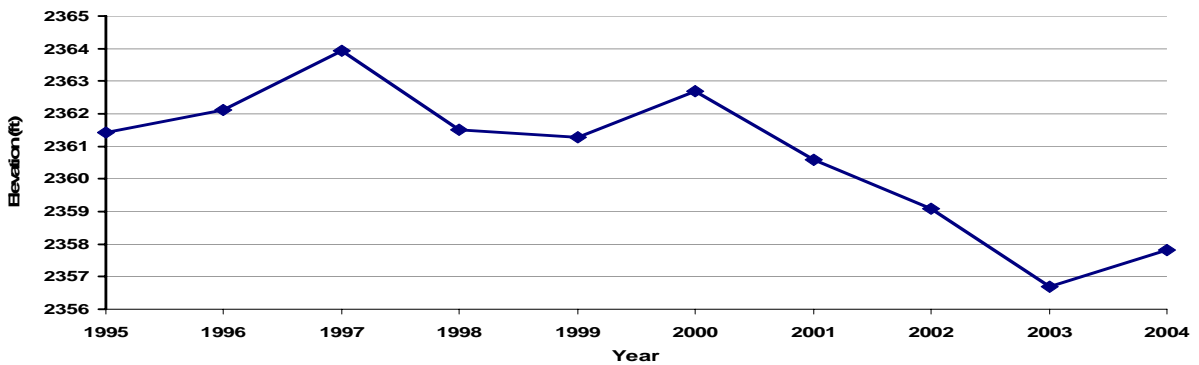


Wipers

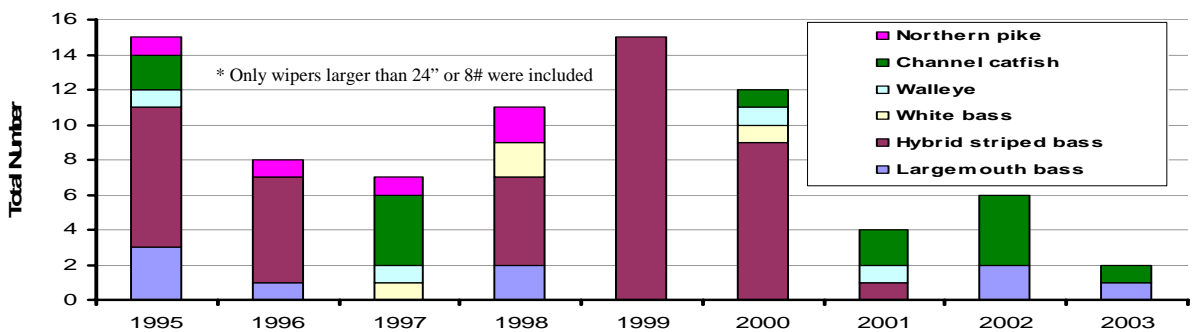
Gill net catch rates for Medicine Creek wipers in 2004 were less than 1/4 of what they were in the extremely high catches of 2001 and 2002, and about half of the 2003 catch. No fish in the 12-16 inch class were sampled, although the number of fish in the 16-20 inch length class were second only to the 2003 sample. However, no fish over 20 inches has been sampled since 1997 and the number of Master Angler awards for wipers had fallen from 15 in 1999, to 9 in 2000, to only 1 in 2001, to 0 in 2002. Catch rates in 2004 should be similar to 2004, with few fish larger than 20 inches being caught. The availability of good water quality remains a management concern, and poor water quality during the summer of 2004 likely resulted in the loss of a percentage of the few wipers in Medicine Creek that were over 20 inches. Anglers should not expect many fish larger than 20 inches and overall catch rates will likely be lower in 2005, although numbers of fish 16-20 inches should remain fair.



Average Elevation, Medicine Creek Reservoir 1995-2004

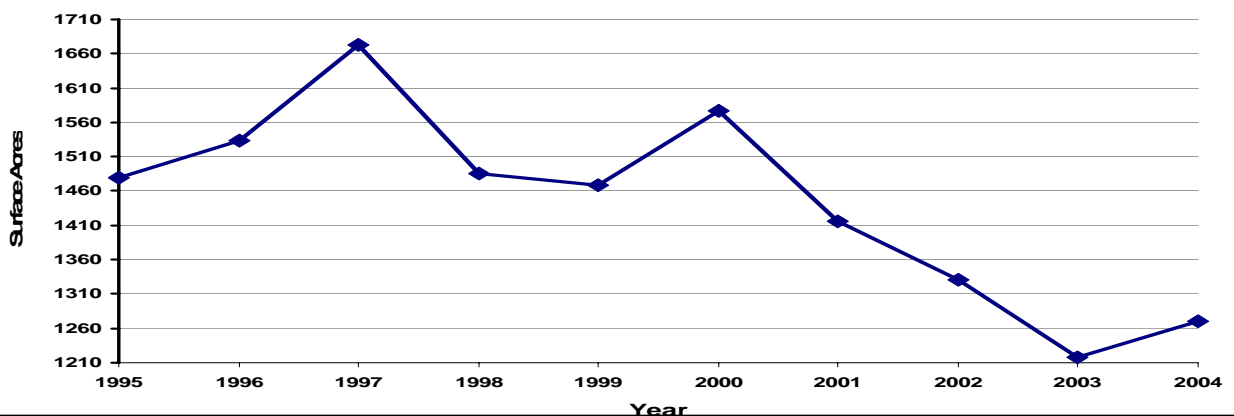


Master Angler Awards, Medicine Creek Reservoir 1995-2003 (2004 data not yet available)

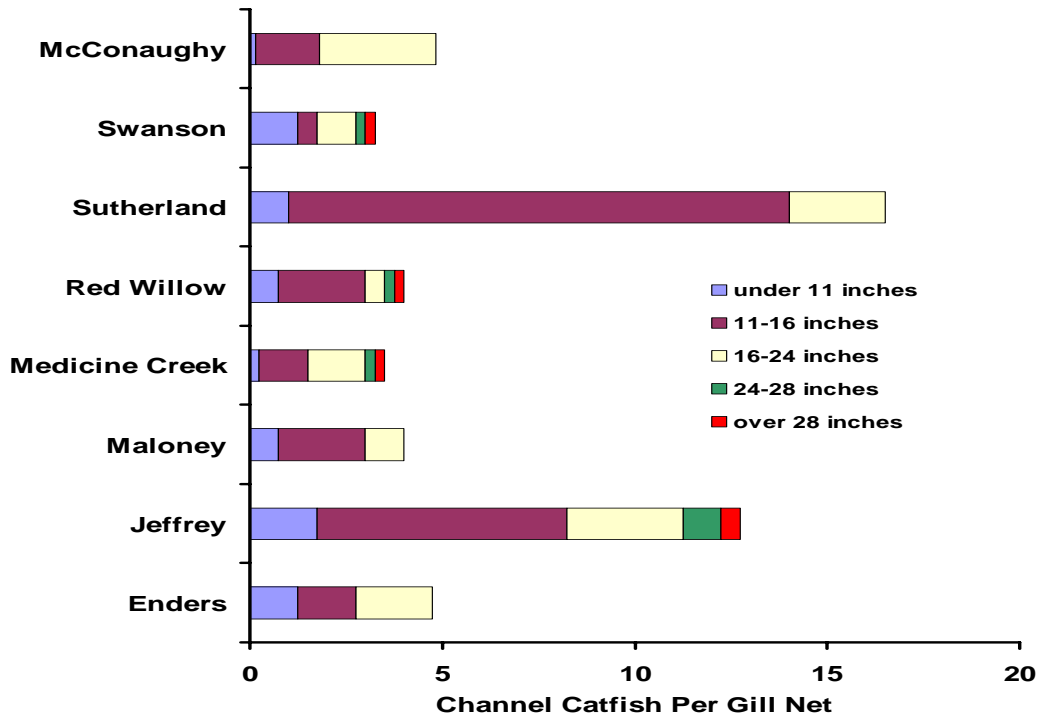


Although Medicine Creek rebounded slightly in 2004, average yearly water levels are at their lowest since the reservoir filled in 1956, with surface acres about 65% of what they were during the early 1990s. Low water levels seem to have impacted the number of master angler (M.A.) fish reported during 2001-2004, with 2004 representing the lowest number of M.A. fish reported in a decade. While the numbers of M.A. 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. Similar to 2002, Largemouth bass and channel catfish were the only two species of fish reported for M.A. awards in 2003, while wipers, walleye, and channel catfish were reported in 2001. Master Angler wipers have declined from 15 fish in 1999 to 9 in 2000 to only 1 in 2001 and 0 in 2002 or 2003. Master angler walleye, northern pike, white bass, smallmouth bass, common carp, freshwater drum, crappie, and flathead catfish are rarely turned in from Medicine Creek Reservoir.

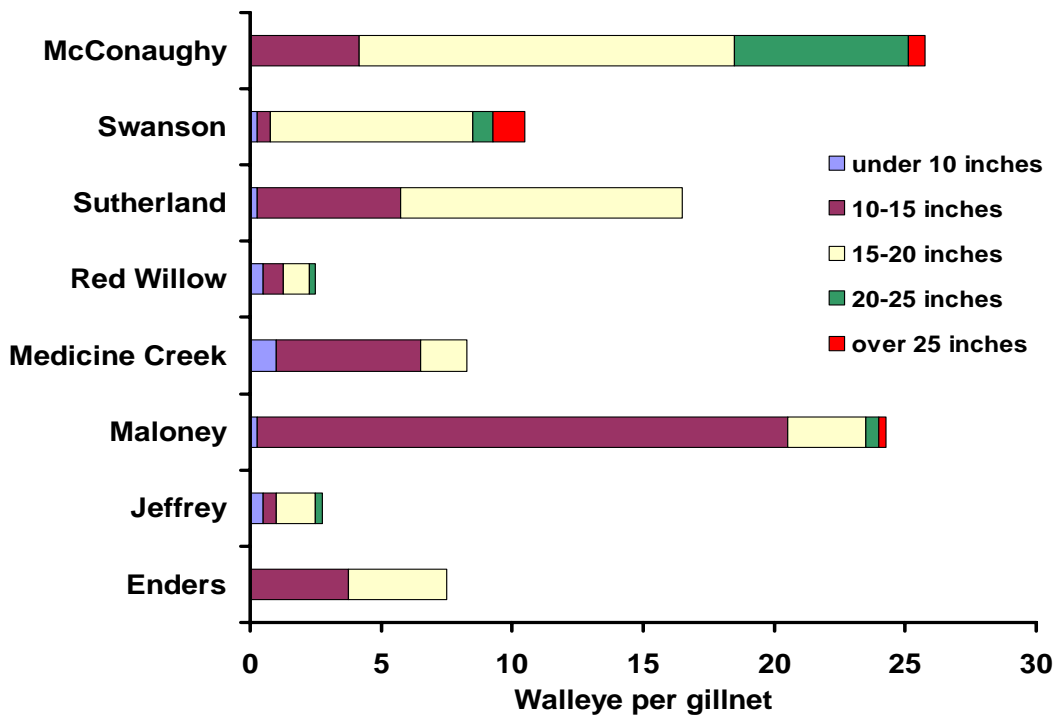
Average Surface Acres, Medicine Creek Reservoir 1995-2004



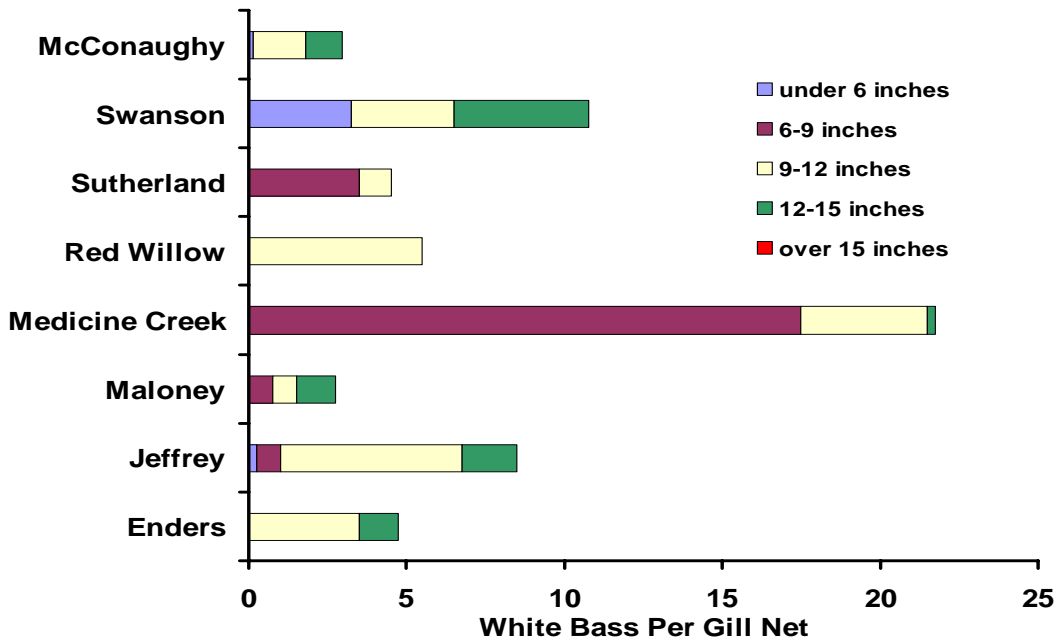
2004 Channel Catfish Gill Net Catch Comparison Between Southwest Reservoirs



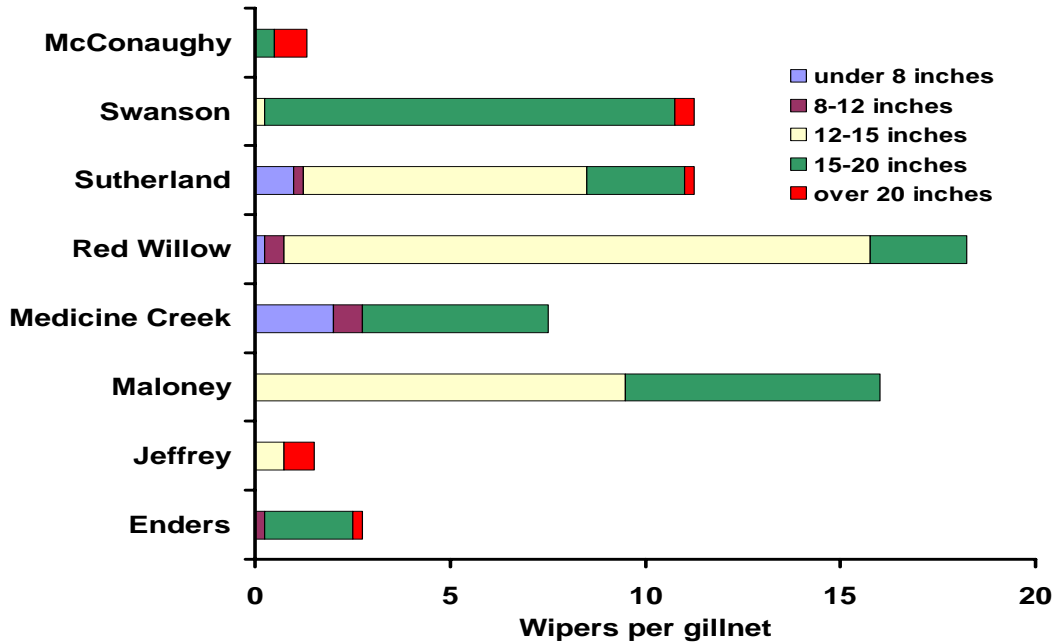
2004 Walleye Gill Net Catch Comparison Between Southwest Reservoirs



2004 White Bass Gill Net Catch Comparison Between Southwest Reservoirs



2004 Hybrid Striped Bass Gill Net Catch Comparison Between Southwest Reservoirs



For additional information on fisheries management at Medicine Creek Reservoir contact:

Darrol Eichner, District Mgr. 308-284-8803, deichner@ngpc.state.ne.us
 Steve Brezenski, Biologist 308-535-8025, brezen@ngpc.state.ne.us
 John Kilpatrick, Biologist 308-535-8025, jkilpatrick@ngpc.state.ne.us
 Mark Staab, Cons. Tech. 308-535-8025, mstaab@ngpc.state.ne.us