Sherman Reservoir 2013 Fall Survey Summary



Brad Eifert, Fisheries Biologist

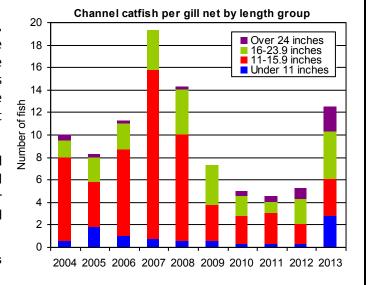
The following text and graphs are the result of netting surveys completed during September 2013 at Sherman Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Sherman using gill and frame nets. Gill nets are used to sample fish species found primarily in open water, such as walleye, while frame nets are used to sample shoreline oriented species, such as crappie. The nets are set each year at approximately the same locations and dates as previous years. This reduces variability and allows for trend comparisons of species abundance and size distribution. 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.

Channel Catfish

Channel catfish abundance was greatly improved in 2013, as the catch of 12.5 fish per net was the highest since 2008. Fish of all size categories were sampled, but the catch of catfish less 11 inches and greater than 24 inches were both the highest observed in the past ten years. The average length of catfish was 17.0 inches and the largest fish collected was 30 inches.

Anglers targeting channel catfish should find improved opportunities this upcoming season at Sherman. Fish of all sizes are available for harvest and the increase in larger fish should improve the chances of catching a trophy-sized channel catfish.

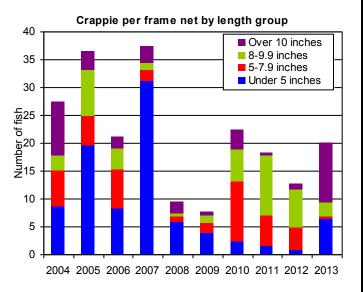
The statewide daily bag limit for channel catfish on reservoirs is five fish per day.



Crappie

Netting results from 2013 revealed the highest catch of crappie greater than 10 inches since 2003. Stable reservoir levels during the summer of 2013 provided ideal growing conditions for crappie, allowing many fish to grow into the harvestable size category. Most of the crappie sample consisted of fish less than 5 inches or greater than 10 inches. Few intermediate sized crappie were sampled, indicating poor recruitment during 2011 and 2012. There looks to be very good crappie reproduction from 2013. Overall, slightly more than 50% of the crappie sampled were larger than 10 inches and the average white crappie was 10.2 inches.

Crappie anglers had fantastic success during the late summer and fall of 2013, which should continue into 2014. The high abundance of fish greater than 10 inches should provide excellent angling opportunities.



Crappie regulations for Sherman Reservoir include a 10-inch minimum length limit and a daily bag limit of 15 fish.

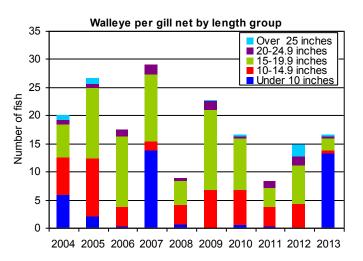
Walleye

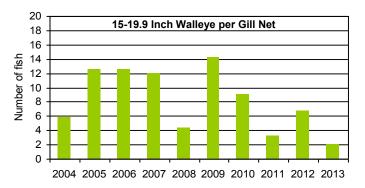
Although the walleye catch was slightly improved in 2013, most of the sampled fish were less than 10 inches. The catch of young-of-the-year fish was the highest since 2007, which should provide excellent angling opportunities in future years. Unfortunately, it appears that there has been relatively poor walleye recruitment since 2010, which has resulted in low abundance of fish from 10 to 20 inches.

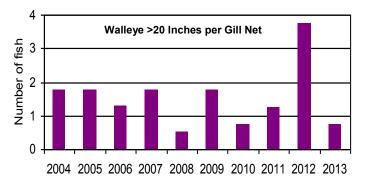
There was also a fairly significant decline in catch of fish greater than 20 inches. The current size limit is designed to protect these fish, so the abundance of these fish is expected to increase over time. Several possible theories exist for the decline in the abundance of the fish greater than 20 inches. One possibility is that increased angler harvest pressure on 15-20 inch walleye, combined with several poor year-classes has left fewer fish available to recruit to the 20-28 inch size group. As natural and angler mortality claims some of the larger fish each year, there has not been enough fish to replace them. Another possibility could be that illegal angler harvest might be a contributing factor, as angler survey results from 2013 indicated fairly high illegal harvest of these protected fish. Finally, it is also possible that netting efforts missed these fish during the fall survey due to uneven distribution within the reservoir of these larger walleve. Likely, the decline in catch of 20-28 inch walleye can probably be attributed in part to all three of these factors. Future sampling efforts and angler catch data will hopefully help to better tell the story.

Due to the high catch of young-of-the-year fish, the average length of walleye collected in the survey was only 10.5 inches. The largest walleye collected was 27.5 inches.

Sampling efforts conducted during the spring walleye spawn period have shown an increase in female walleye abundance and size structure the past several years. On the other hand, there has also been a noticeable decline







in abundance of male walleye. The decline in males can be partially linked to the fact that they are exposed to greater harvest pressure due to their slower growth rates and smaller maximum size. They essentially spend a longer period of time in the harvest slot than the faster growing female walleye. The success of the current walleye regulation depends on having adequate annual recruitment to maintain harvest and still allow some fish to reach the protected slot. Poor recruitment the past several years has reduced overall walleye abundance, but a strong 2013 year-class could help to remedy the situation.

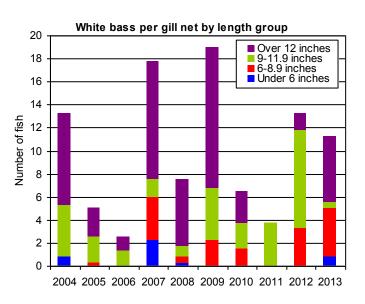
With lower abundance of 15-20 inch walleye, anglers will likely see reduced harvest success during 2014. Catch rates on sub-legal fish should be high and anglers will also probably find good success on 20-26 inch walleye.

The walleye regulation for Sherman includes a daily bag limit that may include two walleye greater than 15 inches but less than 20 inches and one walleye over 28 inches. There is a slot limit protecting walleye 20 through 28 inches.

White Bass

While the overall catch of white bass was slightly lower, there was improvement in the size structure of the population. Successful recruitment of fish from the 2010 and 2011 year-classes have resulted in the highest catch of fish larger than 12 inches since 2009. There were few 9 to 12 inch white bass sampled, likely as a result of poor recruitment caused by extremely low reservoir levels during the summer of 2012. Production in 2013 looks promising as young-of-the-year fish were abundant. Excluding the age-0 fish, the average length of white bass collected in the survey was 12.5 inches and the largest were 14.0 inches.

White bass angling has been relatively poor the past couple years at Sherman, but increased abundance of fish larger than 12 inches should help to improve success during 2014.



The statewide daily bag limit for white bass is 15 fish per day, with only one fish greater than 16 inches.

Sherman Reservoir — Additional Information

Fisheries Division will once again be conducting walleye spawn collections at Sherman during 2014. Depending on weather conditions, spawn collection will begin the last week of March or the first week of April and normally lasts for one to two weeks. Walleye are collected along the dam at night and disturbance to anglers is minimal. During 2013, there were approximately 288 quarts of eggs collected during the three night spawn collection at Sherman Reservoir. Walleye eggs were also collected at Merritt Reservoir. Anglers should also be aware that the water within 150 feet of the dam and the new walleye spawning reef near the west end of the dam is closed to all fishing from sunset to sunrise beginning April 1 and ending April 20.



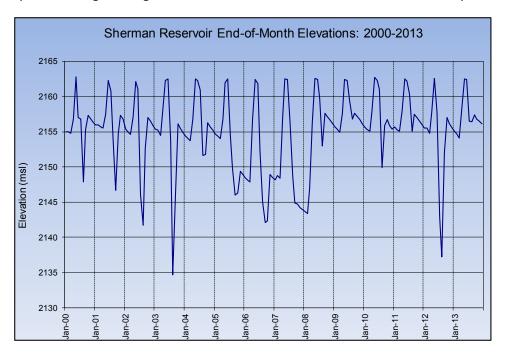
An angler survey will be completed at Sherman Reservoir from April through October 2014. This survey is done in cooperation with the University of Nebraska-Lincoln. The survey has been on-going since 1996 and has provided valuable information on angling pressure, catch rates, harvest rates, and numbers and types of fish caught. Anglers are encouraged to take the time to answer the questions from the creel clerk. Results from the 2013 creel survey can be found here: http://outdoornebraska.gov/fishing/programs/sampling/index.asp



Scheduled fish stockings for 2014 include 140,000 walleye fingerlings.

A detailed bathymetric map of Sherman Reservoir can be found on Nebraska Game and Parks Commission website: http://outdoornebraska.ne.gov/Fishing/programs/lakemapping/lakemapping.asp

Current lake elevations can be found on Farwell Irrigation District's website: http://www.farwellid.org/index.html. A wet spring and timely rains during the irrigation season resulted in a summer drawdown of only 8.4 feet.



Boaters at Sherman Reservoir are reminded to use caution to avoid the rock structures placed in the reservoir, especially during high water when structures may be partially under water. White posts with reflective tape mark all structures, with buoys and lights added at some sites.

Anglers and boaters using Sherman and other Nebraska waters this season need to be aware of regulations that were passed on January 1, 2013 which are designed help prevent the spread or introduction of unwanted species in Nebraska waters.

- Any watercraft that has been on a Nebraska waterbody must drain the lake water from their compartments, equipment or containers before leaving the launch area. It is still illegal to dump baitfish into a Nebraska waterbody.
- Livewells need to be drained prior to leaving a launch area: plan ahead and bring a cooler for harvested fish.
- All aquatic vegetation from that waterbody attached to the watercraft and/or trailer must be removed before leaving the launch area.

Anglers and boaters are encouraged to educate themselves on aquatic invasive species. An excellent source of information regarding invasive species can be found on the University of Nebraska's Invasive Species Project website: http://neinvasives.com/



For additional information about fisheries management at Sherman Reservoir please contact the NGPC Kearney office at 308-865-5310 or by email at the addresses listed below.

District Supervisor: Brad Newcomb, <u>brad.newcomb@nebraska.gov</u>

Biologist: Brad Eifert, brad.eifert@nebraska.gov