

# Sherman Reservoir

## Fisheries Update — Spring 2024

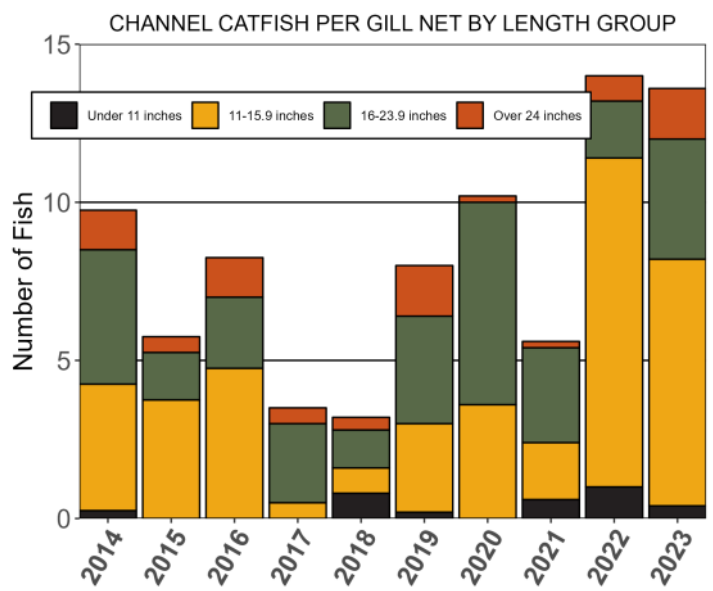
Alex Engel, Fisheries Biologist

The following text and graphs are the result of netting surveys completed during 2023 at Sherman Reservoir. For comparative purposes it also shows results from previous years. Major sportfish populations are sampled each year at Sherman using gill and frame nets. Gill nets are used to sample fish species found primarily in open water, such as walleye and white bass, 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 similar to last fall at Sherman with a catch of 13.6 catfish/net. The 2023 catch was above the ten year average of 8.8 fish/net. There was an increase in abundance of catfish over 16 inches and a slight decline in catfish under 16 inches. The number of large catfish increased compared to 2022. Overall catch remained constant compared to 2022 with a good representation of all size classes. Catfish collected in the netting survey ranged in length from 10.2 to 30.7 inches and had an average length of 17.1 inches. Catfish anglers should continue to experience good angling opportunities at Sherman during 2023.

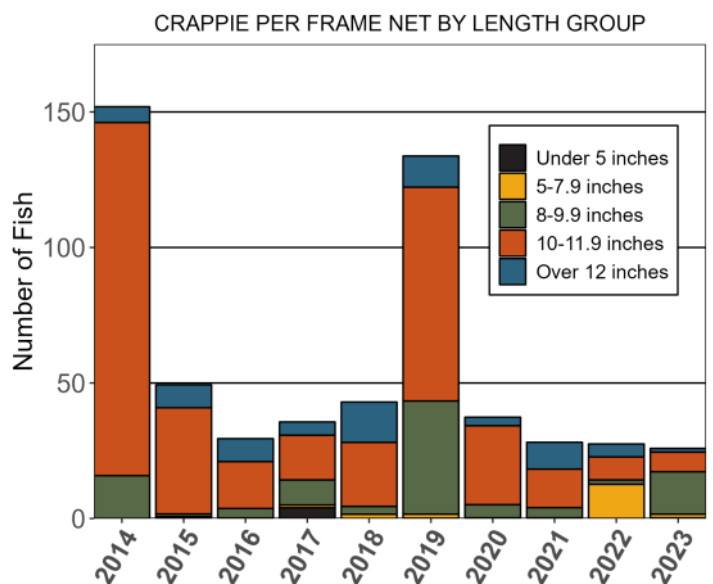
The daily bag limit for channel catfish on Sherman Reservoir is five fish per day.



### Crappie

The spring frame net catch of crappie has varied greatly the past ten years, ranging from a high of 152 to a low of 25.9 fish/net. However, the catch of the past four years has been similar. Crappie populations are normally cyclic, with boom and bust years. Large reservoirs with more stable spring water conditions and excellent cove habitat, such as Sherman, have more consistent crappie recruitment. Ninety-four percent of the crappie caught were white crappie. Only 19% percent of the crappie sampled in the spring were larger than 10 inches however 76% were between 8 to 10 inches. On average it takes four years to grow to 10 inches. Crappie ranged from 3.5 to 13.4 inches with an average length of 9.5 inches. Anglers should expect to have high catch rates of crappie over 10 inches in 2024 as 9-inch fish sampled last spring are now 10 inches or larger.

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

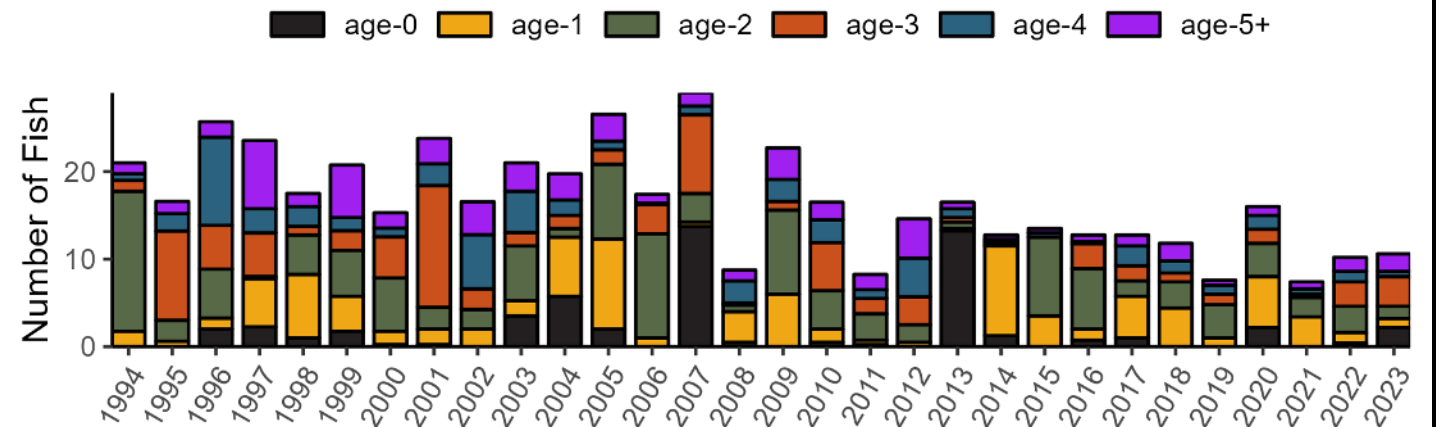
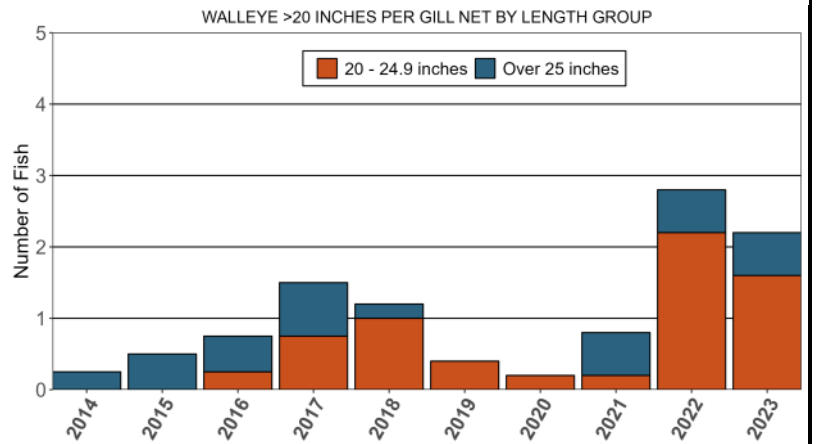
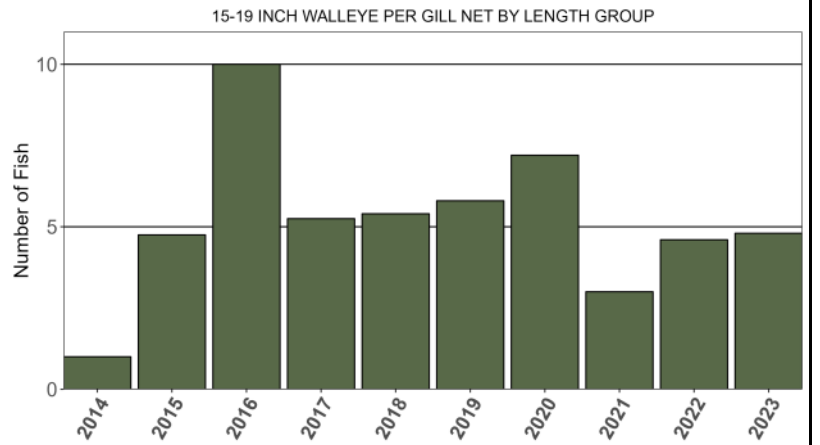
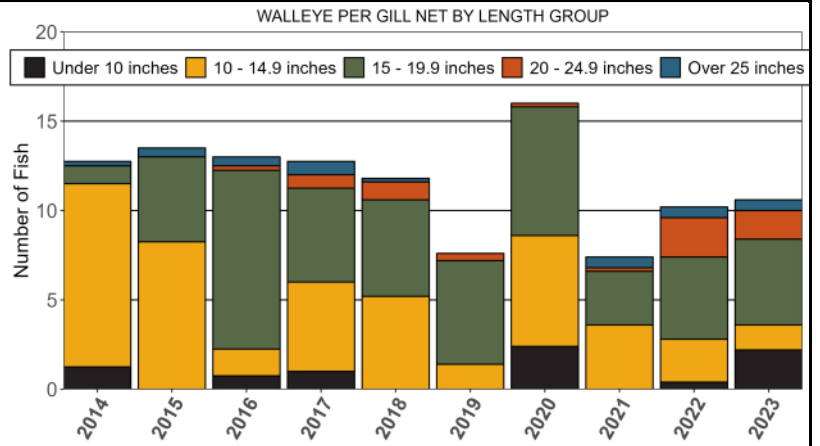


## Walleye

Walleye catch was 10.6 fish per net sampled. In comparison, the ten year average gill net catch at Sherman is 11.6 walleye/net and the long term (34 years) average catch is 16.2 walleye/net. Walleye captured in the 2023 gill netting survey ranged from 7.1 to 27.1 inches with the average length equaling 16.4 inches. There were nine age-classes of walleye sampled; age-0 made up 19%, age-1 comprised 9%, and age-2 fish made up 12% of the sample. Age-3 and age-4 fish made up about 34% of the sampled fish. Fish older than age-5 comprised 26% of the catch.

The yearly catch of 15 to 19.9 inch walleye has averaged 5.8 fish/net. The 2023 catch of 4.8 fish/net was similar to 2022's. Stock contribution of fry and fingerling stockings was assessed in 2023. Fry and fingerlings were marked with oxytetracycline (OTC) to allow biologists to determine which stocking they originated from. A sample of 100 young-of-the-year fish were collected in the fall from the reservoir and outlet canal and analyzed for an OTC mark. Forty percent were determined to be stocked as fry, 6% were stocked as fingerlings, and 54% were from natural recruitment. There was no difference in stock contribution of walleye caught in the reservoir and the canal. Fry and fingerlings are scheduled to be stocked in the spring and age-0 walleye will be analyzed in the fall to determine stock contribution. Overall, walleye abundance in Sherman Reservoir seems stable. Walleye anglers should expect similar catch rates to those of 2023.

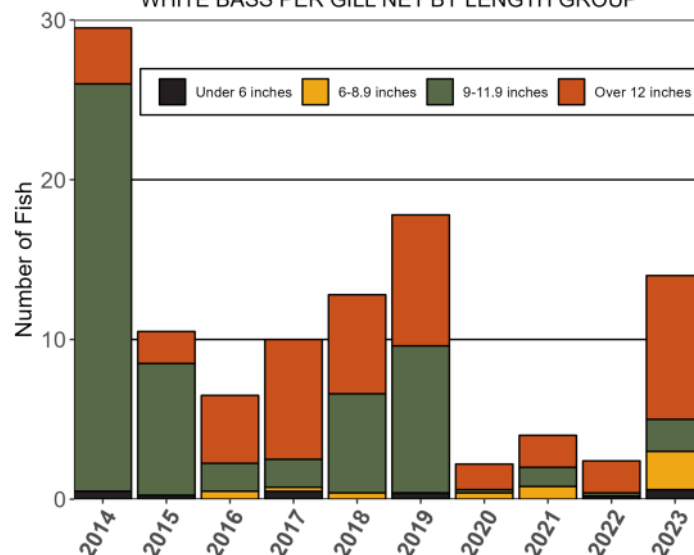
The walleye regulation for Sherman includes a daily bag limit that can include two walleye between 15 inches and not greater than 20 inches and one walleye longer than 28 inches. There is a slot limit protecting walleye 20 through 28 inches.



## White Bass

White bass catch in 2023 experienced a sharp uptick from a low of 2.4 in 2022 to a catch of 14 fish/net in 2023. Four fish higher than the ten year average of 10.6 fish/net. White bass sampled during the 2023 fall gill net survey ranged from 5.1 to 15.4 inches and had an average length of 12.7 inches. Ages of white bass ranged from 0 to 10 years with an average age of 3 years old. Eighty-three percent of the catch consisted of white bass larger than 12 inches. However, fall surveys also found a greater number of white bass 6 to 9 inches compared to the previous 10 years. Fall young of year surveys caught 118 bass per hour indicating a strong 2023 year class. Young of year sampling for white bass and walleye will continue in 2024. White bass anglers should expect to find good white bass fishing at Sherman in 2024.

WHITE BASS PER GILL NET BY LENGTH GROUP



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

Walleye eggs were collected at Sherman in 2023 and spawn operations are planned for 2024. Female walleye are collected using monofilament nylon gill nets during early April. Typically, eight gill nets are set at sunset and reset twice more per night. Female catch was good with 164 caught the first night, 163 the second night, and 69 collected the 3rd night. Approximately 219 quarts of walleye eggs were collected. One hundred male walleye were collected using boat mounted electrofishing along the dam.

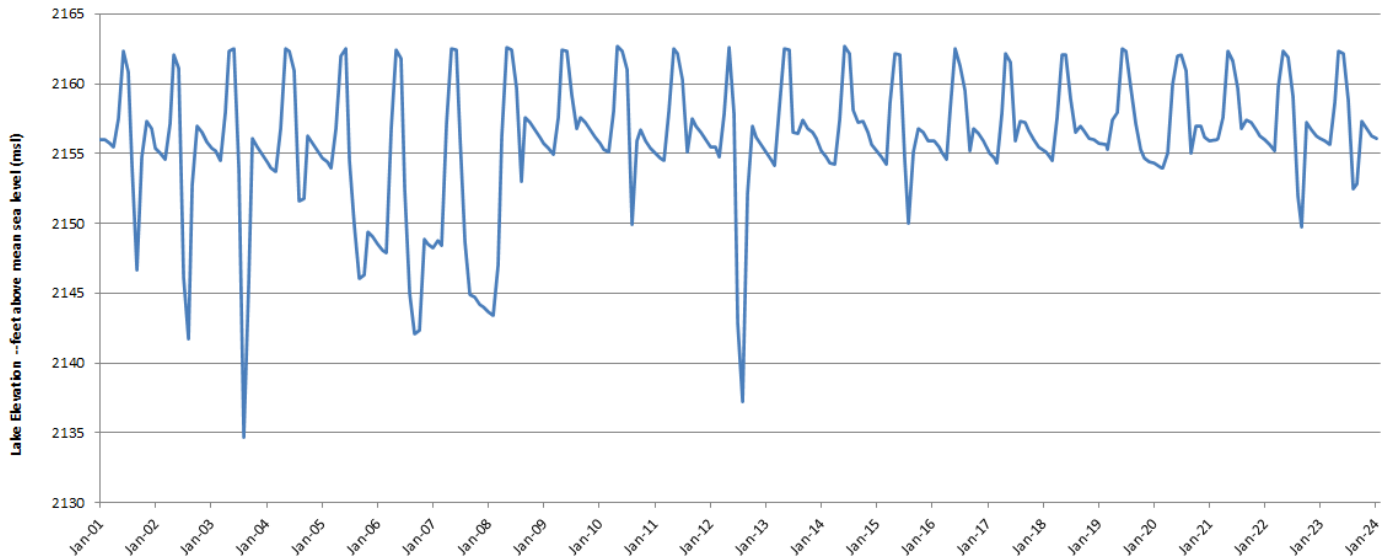
**Anglers are reminded that the water within 150 feet of the dam and the walleye spawning reefs near the west end of the dam are closed to all fishing from sunset to sunrise beginning April 1 and ending April 20.**

Walleye are the only fish species scheduled for stocking at Sherman in 2024. The stocking strategy will be the same as 2022 and 2023 with both fry and fingerlings stocked. Tentative plans call for the stocking of 2.8 million fry (1000/acre) in late April and 144,000 (50/acre) fingerlings in early June.



A detailed contour map of Sherman Reservoir can be found on Nebraska Game and Parks Commission website: <http://outdoornebraska.gov/lakecontourmaps/>

## Sherman End of Month Elevations 2001—2023



Maximum elevation for 2023 was 2,162.3 feet, which was held in the reservoir from May 17 through June 29, a month longer than in 2022. Irrigation drawdown began on June 30th and water dropped to a low elevation of 2,149.5 feet on September 17. Total drawdown for the 2023 irrigation season was 12.8 feet.

Boaters and anglers are reminded to remain vigilant when it comes to aquatic invasive species, especially zebra mussels. **Boaters are required to clean, drain, and dry their boats between lake visits.** The Game and Parks Commission conducts monthly veliger sampling at Sherman Reservoir through the summer months to look for mussels and other invasive species. They have not been detected in the reservoir. Anglers and boaters are reminded to educate themselves on the regulations regarding invasive species and should take the necessary precautions to prevent the introduction or spread of invasive species. Information regarding aquatic invasive species and the regulations that boaters and anglers must follow can be found at <http://outdoornebraska.gov/aquaticinvasivespecies/>



Comparison of quagga (left) and zebra (right) mussel. Michigan Sea Grant.



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.

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