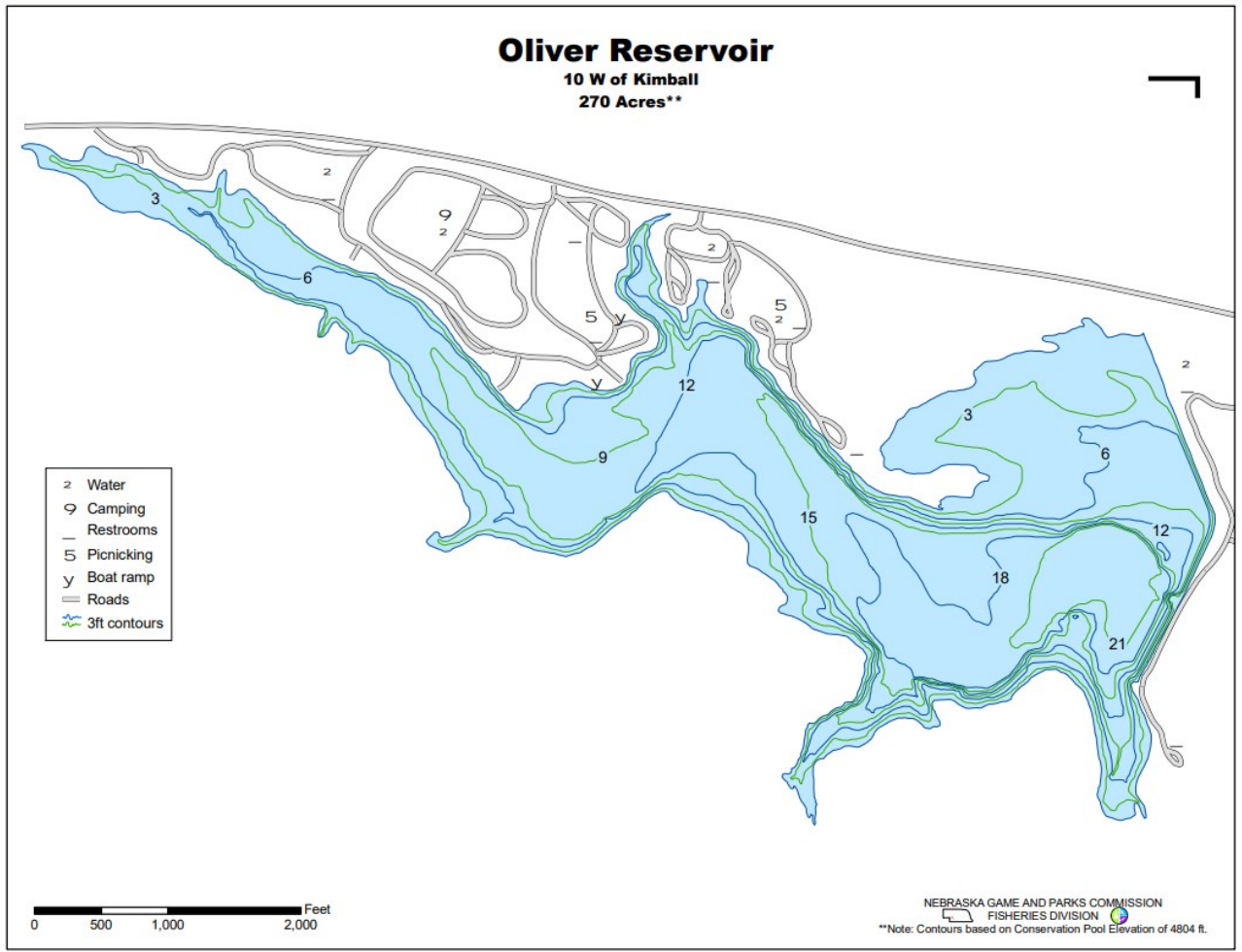


Oliver Reservoir 2023 Fishery Survey Summary



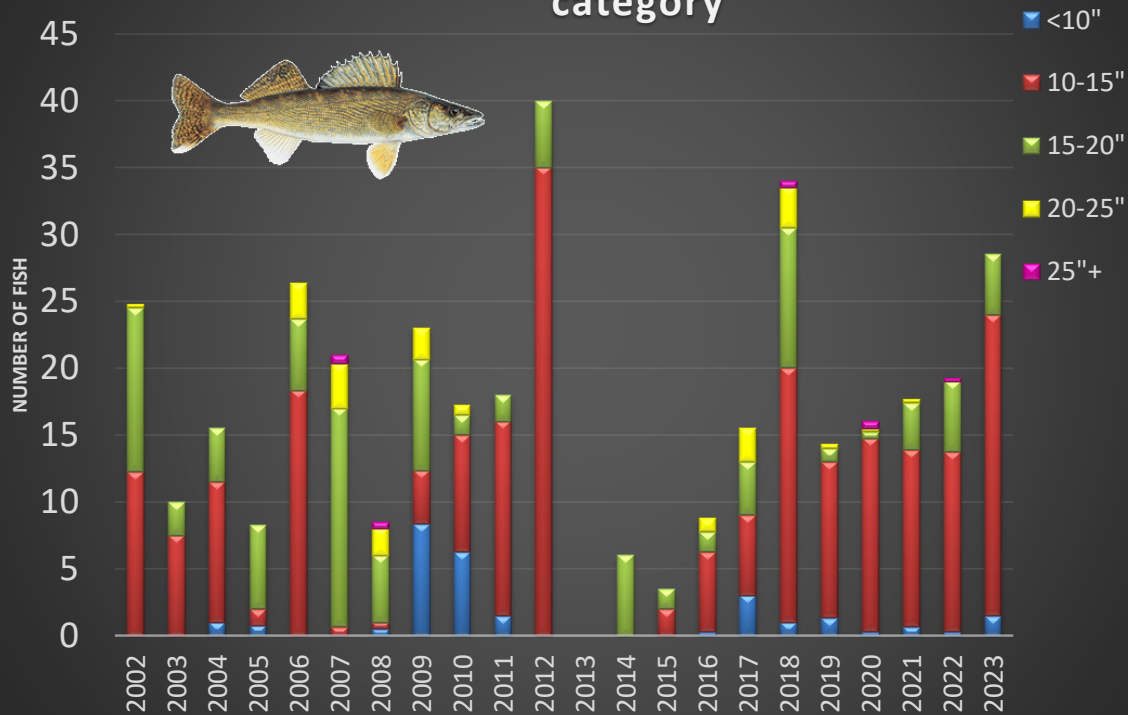
Joe Rydell Fisheries Biologist



Oliver reservoir (Kimball Reservoir) is located 8 miles west of Kimball, Nebraska off highway 30. It is a 264-acre reservoir when full, located on a 917-acre recreation area. Lake elevations are still holding on decent and well above the low levels observed in 2013. South Platte NRD owns and manages the area for recreational activities such as camping, swimming, and fishing with the help from Nebraska Game and Parks to sustain a fishery.

The following text and graphs are the result of fishery surveys completed over the years using frame nets in the spring and gillnets in the fall to monitor trends in fish populations. Gillnets are used to sample fish species that are primarily found in open water such as walleye and channel catfish. Frame nets are set in the spring to target shoreline oriented species such as crappie and northern pike. The nets are set each year at approximately the same locations and dates as previous years to allow for trend comparisons. Oliver Reservoir doesn't get surveyed every year for all species. In 2023, only a fall gillnet survey was run to monitor the walleye and channel catfish population. The last time a spring survey was conducted was 2021.

Oliver Reservoir Walleye per gillnet by length category



Walleye

Walleye abundance at Oliver has been on an increasing trend since 2019. The 2023 survey captured 28.5 walleye per gillnet. After a surge of water in 2014 that nearly filled the reservoir following record low lake levels in 2013, the population has rebounded. Age and growth analysis suggests that fish from age 0 to 5 years old made up the sampled population with most of the catch less than 3 years old. Walleye in Oliver are slower growing and do not reach the minimum length limit of 15 inches until their third or fourth growing season. Body condition was still excellent with a relative weight index of 92.2 for walleye stock length or longer. Larger fish are skinnier than smaller fish likely due to the size of available prey. The average size of walleye collected in the 2023 was 12.7 inches with 15 % of the catch over the minimum length limit of 15 inches.

Walleye Regulation—Daily bag limit of 4 fish 15 inches or longer of which no more than one 22 inches or longer and a possession limit of 8 fish.

Gizzard Shad

Gizzard Shad are a primary prey species in many Nebraska reservoirs and are the main food for predator fish in Oliver Reservoir. Being located in the southern edge of Nebraska, Oliver doesn't experience major shad fish kills as is common in more northern reservoirs and maintains a consistent population for predators. However, gizzard shad don't grow fast in Oliver resulting in smaller size food available for predators such as walleye, crappie, and catfish.

Catfish

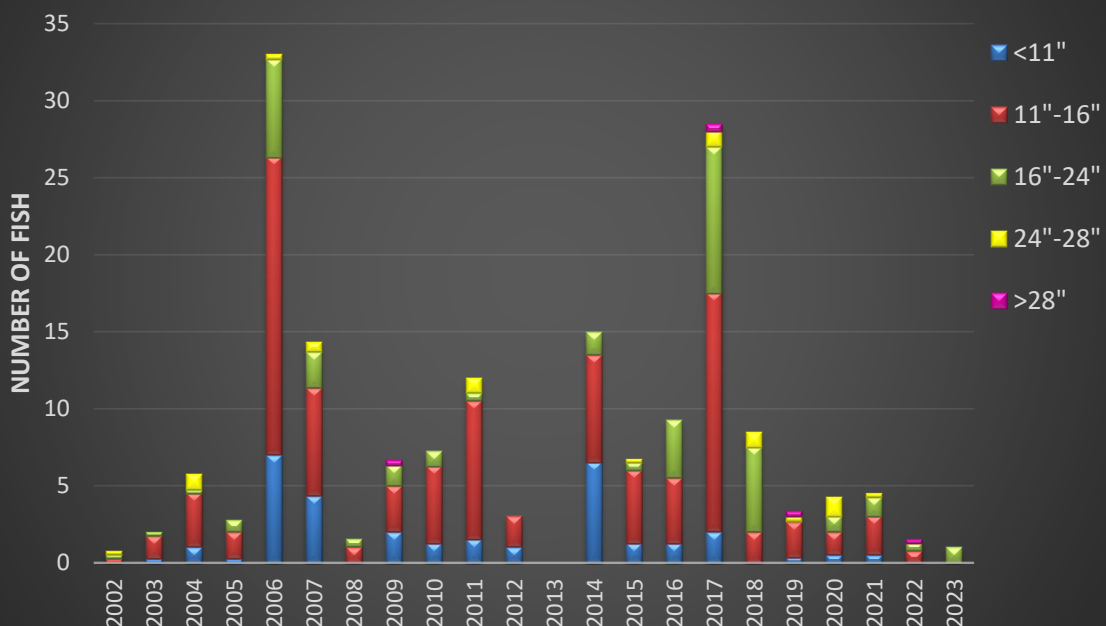
The channel catfish gillnet catch in 2023 remains low at 1 fish per gillnet. Although all catfish collected were between 16 and 19 inches, larger fish are possible.

Oliver gets stocked on an annual basis with 10 inch channel catfish at 4 fish per surface acre of water. The total number stocked may fluctuate with available water levels in the reservoir but is typically around 1,000 fish per year.

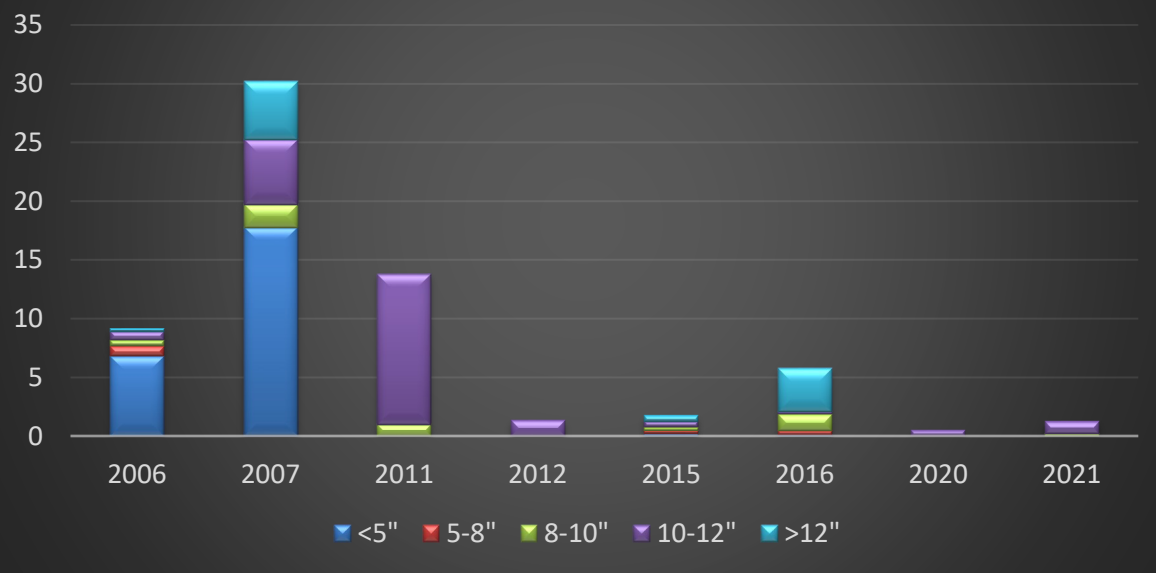
Channel Catfish Regulation—Daily bag limit of 5 fish with a possession limit of 10. **New in 2023, only one channel catfish 30 inches or longer may be included in daily bag limit statewide.**



Channel Catfish catch per gillnet by length category



White Crappie catch per frame net by length category



White Crappie

Crappie were not targeted in Oliver Reservoir in 2023 although a couple did show up in the fall gillnet survey. The Oliver crappie population declined after 2011 and hasn't rebounded. The last spring survey conducted in 2021 only detected 1.25 crappie per frame net. Although the density is low, crappie grow extremely well in Oliver. White crappie collected in 2023 ranged from 9.6 to 12.4 inches.

Crappie are most vulnerable in the spring time as they move into shallow waters to spawn. Popular angling methods include jigs with plastic tails, small crank baits, and live minnows fished with a float or bobber.

Panfish Regulation – Daily bag limit of 15 in combination (yellow perch, crappie, sunfish) with a possession limit of 30.



For additional information about fisheries management at Oliver Reservoir please contact the following personnel by phone or email addresses listed below.

South Platte NRD office: (308)-254-2377
 NGPC District Supervisor: Al Hanson, (308)763-2940 al.hanson@nebraska.gov
 NGPC Fisheries Biologist: Joe Rydell, (308)763-2940 joe.rydell@nebraska.gov
 NGPC Fisheries Biologist: Zac Brashears, (402)376-8080 zac.brashears@nebraska.gov

Invasive Species

Over the past several years invasive species have become a rising concern in Nebraska. It is illegal to either arrive or leave any water body in Nebraska with water other than from a domestic source (water supply system, well or bottled) except for firefighting purposes.



Zebra mussels (pictured right) and quagga mussels are small fingernail-sized mussels and adults are usually ¼ to ½ inches long with alternating yellow and brownish colored stripes on their shell. These mussels can spread in their immature form known as veligers by being transported in bilge, ballast, or live-well water or as adults attached to boat hulls, engines, aquatic vegetation, or other surfaces. Sampling for these veligers occurs statewide from the months of May through September. Although Oliver is not on the standard sampling list, it will get sampled at least once during the peak reproductive stage for zebra mussels in 2024.

Zebra mussels are currently present in Nebraska in Glenn Cunningham Lake, Lake Yankton, Lewis and Clark Reservoir and below Gavins Point Dam in the Missouri River. South Dakota has seen a recent spread of zebra mussels across several easter pothole lakes, up the Missouri River as high as Lake Oahe, and even into Lake Pactola in the Black Hills.

Aquatic vegetation such as Curly-leaf Pondweed and Eurasian Watermilfoil are also invasive species present in Nebraska. Both of these plant species form dense mats of vegetation near the water's surface which make recreational fishing, boating, and swimming difficult. Spread of these plants can happen through stem fragmentation. A single segment of plant material can be transferred to another water body and form a new colony therefore removing any visible plant material from boats and trailers is a must and remember to **CLEAN, DRAIN, and DRY!**

CLEAN- Remove plants, animals, mud and thoroughly wash equipment that came into contact with the water.

DRAIN- Drain all water before leaving, including wells, bilge, ballast, and any parts or equipment that can hold water. Remember to remove all boat plugs before leaving the boat launch area and don't put them back in until ready to launch again.

DRY- Allow all equipment to dry completely before launching into another body of water. Don't fish more than one body of water in a day without drying all equipment first.

For more information on invasive species in Nebraska visit neinvasives.com.



Don't forget to lower your outboard motor to drain all the water from your lower unit before leaving a boat launch facility.

