

# Jeffrey Reservoir

## 2012 Fall Survey Summary



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Jeffrey Reservoir is the third canal reservoir downstream from Lakes McConaughy and Ogallala. Water elevation is regulated by Central Nebraska Public Power & Irrigation District (CNPPID) for hydroelectric power generation. Jeffrey Reservoir offers unique fishing opportunities as a result of this functionality. Notice these aspects at [http://www.cnppid.com/Assets/Maps-ShorelinePlan/PDF\\_Images/g-rec-jeffrey.pdf](http://www.cnppid.com/Assets/Maps-ShorelinePlan/PDF_Images/g-rec-jeffrey.pdf) and follow water level fluctuations at [http://www.cnppid.com/Elevation\\_Flows2.htm](http://www.cnppid.com/Elevation_Flows2.htm).

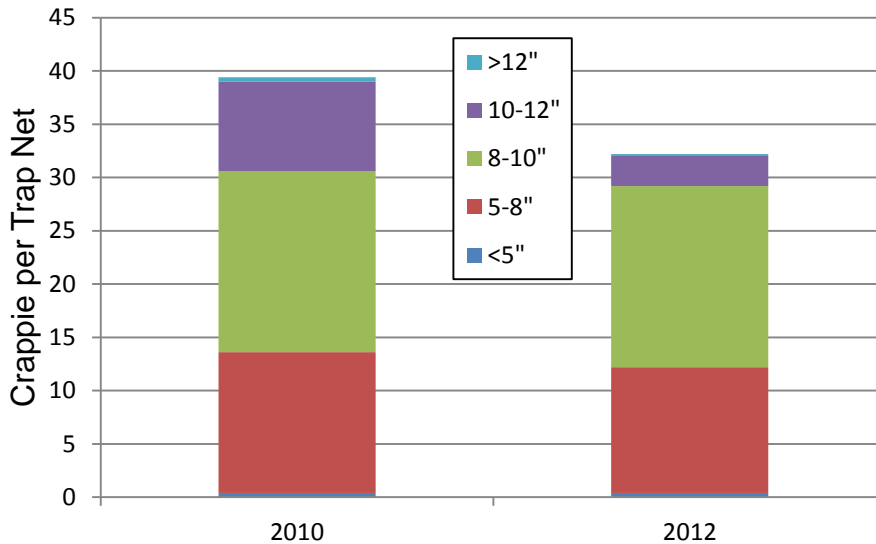
Every fall the fishery at Jeffrey Reservoir is sampled using experimental gill nets, a method commonly used to sample species found primarily in open water, such as walleye, white bass, channel catfish and hybrid striped bass. These nets are made of clear monofilament mesh strung between a weighted line and a floating line. This mesh ranges in size from  $\frac{3}{4}$  of an inch to 3 inches and the nets are typically set perpendicular to the shoreline in 6 to 12 feet of depth during late afternoon with an orange floating buoy on the ends to deter boats from being entangled and for ease of retrieval. Gill nets create an invisible wall in the water column that fish cannot sense so they are entangled by their gills as they attempt to move through this mesh.

Data collected from these surveys allow biologists to evaluate the population density, size structure, and growth rates for several species. This data provides valuable information to guide decision making scenarios that include fish species stocked, stocking rates and fishing regulations. This information also assists Game and Parks staff in guiding anglers to waterbodies that have the desired populations for fishing.

**A change has been made concerning the statewide striped, hybrid & white bass one-over length daily bag limit regulation. As of January 1, 2013 only one may be kept over 16 inches.** This regulation change was made to decrease harvest of hybrid striped bass greater than 16 inches. Access the 2013-2014 fishing guide at <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf> or pick up a print copy at your local vendor or NGPC office.

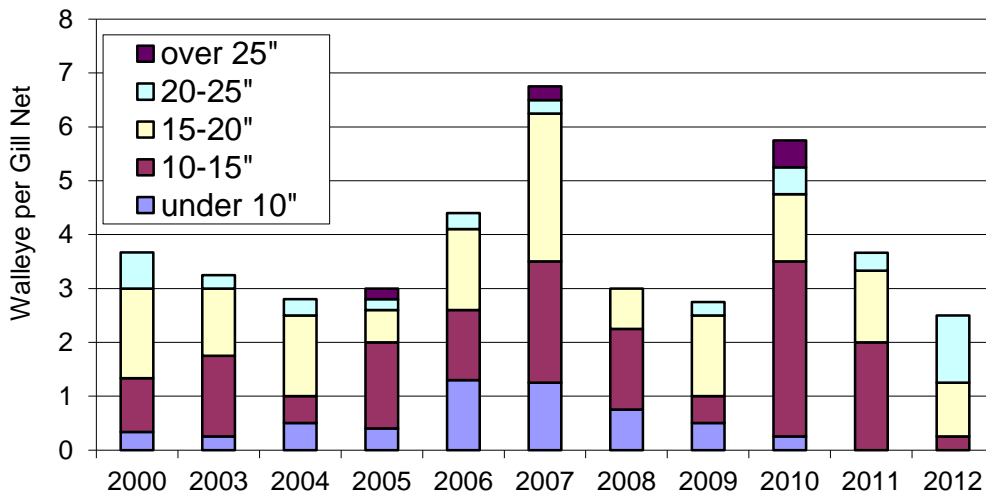
The following text and graphs are the result of the 2012 gill netting survey at Jeffrey Reservoir. Graphs represent number of each species captured per gill net by length group. For comparative purposes it also shows results from previous years.

# Crappie



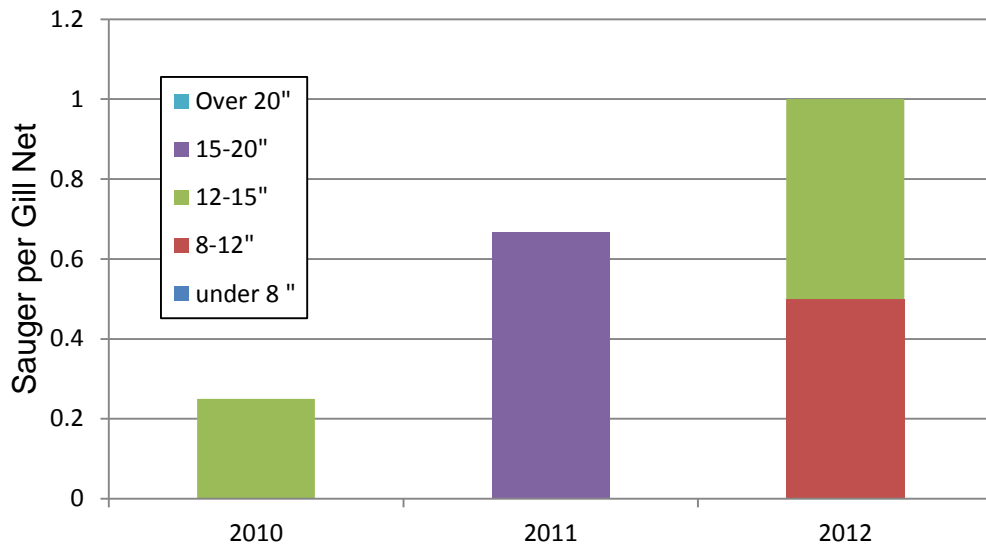
Crappie have only been sampled twice during the fall of recent years. They are sampled using modified fyke nets. The 2012 survey was composed of black (55%) and white crappie (45%). Mean length of black crappie sampled was 7 ½" while white crappie averaged 8 ¾". The largest crappie sampled in 2012 was nearly 13".

# Walleye



Catch rate of walleye at Jeffrey is consistently low compared to other Southwest Nebraska reservoirs. In 2012, less than three walleye per gill net were sampled with a mean length of 19" and the largest being 22 ¼". A stocking request for 38,500 walleye fingerling is in place for 2013.

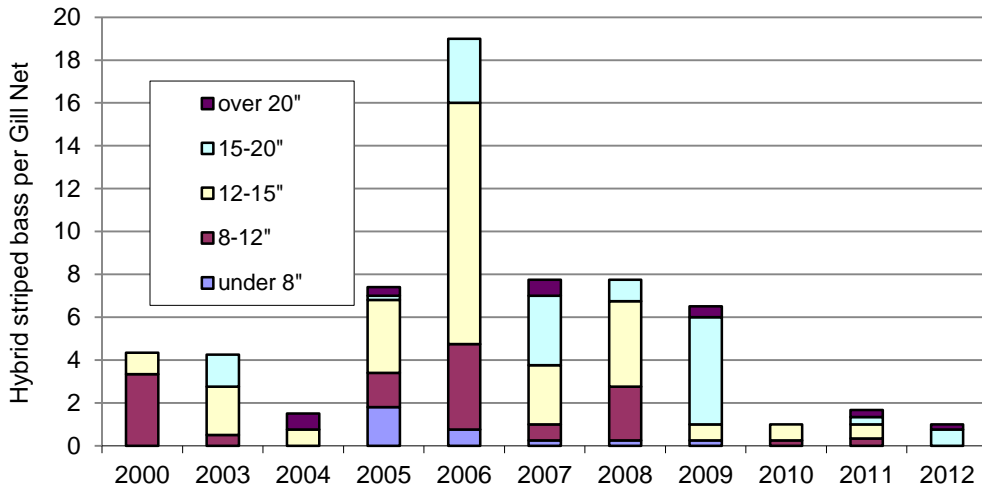
# Sauger



Sauger were first stocked into Jeffrey in 2009. A stocking program is in place for downstream reservoirs such as Midway, Gallagher and Plum Creek as well. Sauger are well adapted to turbid and flowing water so these canal waterbodies should provide good habitat. They can be identified by their compressed shape and the presence of spots on the spinous dorsal fin. Access this online Fish Identification Tool for sauger identification help <http://outdoornebraska.ne.gov/Fishing/guides/identification/default.asp>. Sauger are generally smaller than walleye but should provide another angling opportunity especially for canal anglers. In 2012, four sauger were sampled in total. A stocking request for 27,500 sauger fingerlings is in place for 2013.

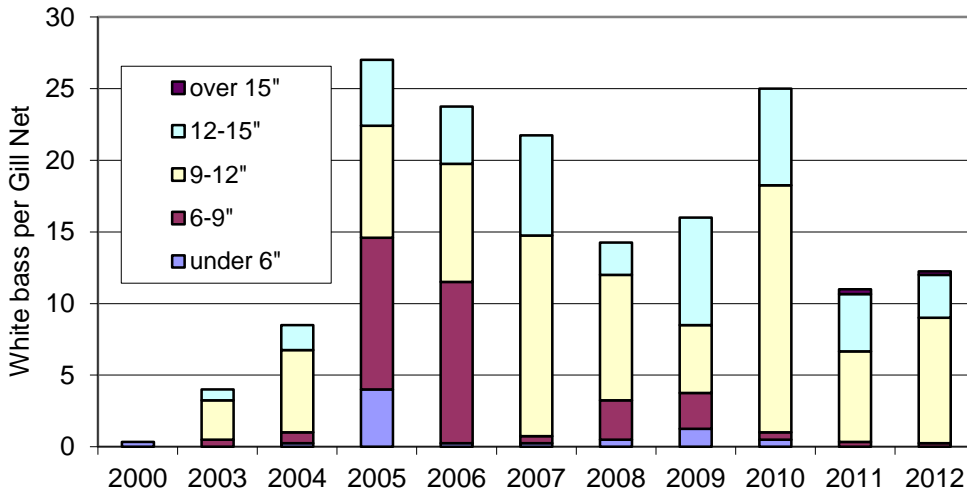


# Hybrid striped bass



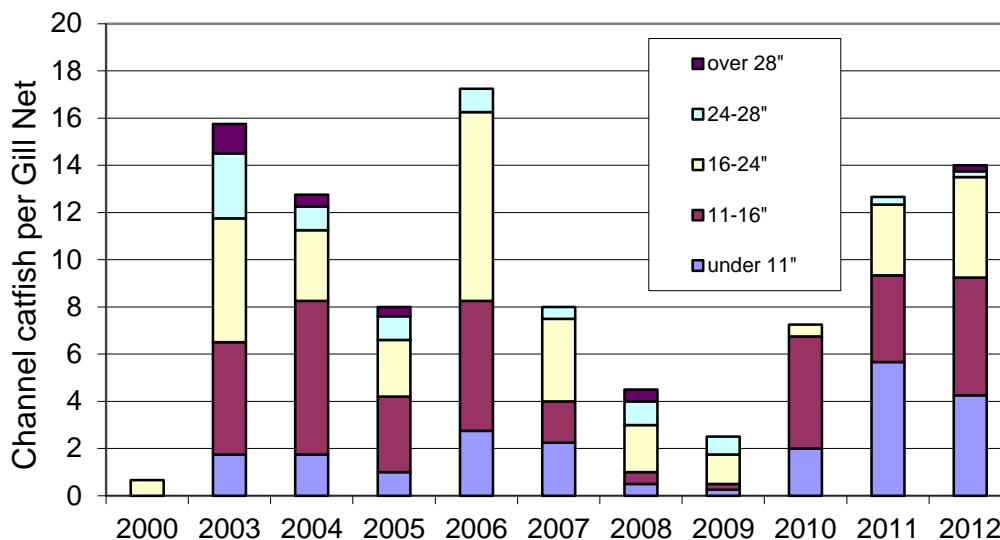
Hybrid striped bass catch rates had been consistent from 2007 to 2009 but have declined recently with only one or two per gill net in 2012. The largest sampled in 2012 was over 27". Jeffrey's hybrid striped bass fishery is managed to provide a low density population of large (>20") individuals. A total of 7,700 hybrid striped bass fingerlings are requested to be stocked in 2013.

# White bass



The overall downward trend in gill net catch rate observed since 2006 stabilized with the 2012 data. Approximately 12 white bass were sampled per gill net with an average length of 11".

# Channel catfish



The 2012 channel catfish sample data continues an observed upward trend in the population. Approximately 14 channel catfish were sampled per gill net with 34% over 16". Catfish anglers should have success catching channel catfish in 2013.

## Note

A Wildlife Management Area (WMA) exists on the east side of the lake and can be located on the map referred to on the first page. This area is NGPC managed to maintain public access to the lake. A concrete boat ramp with floating dock is available and currently maintained by Wildlife and Fisheries personnel from North Platte's District Office. The dock is removed every fall (around November 1<sup>st</sup>) to prevent damage from ice and placed back in the water during early spring. During the winter of 2011/12 the walkway to this dock was vandalized and broken by unknown persons. Repair efforts delayed reinstallation during the spring of 2012.

If you have questions or concerns about the fishery of Jeffrey Reservoir please contact

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# Zebra and Quagga Mussels

Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes and continue to **Clean, Drain and Dry** their equipment and boats prior to launching at a new waterbody. While no mussels have been identified at Jeffrey Reservoir, zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in neighboring states. Monitoring was completed at several Nebraska reservoirs during 2011 and 2012. No evidence of zebra or quagga mussels was found.

Anglers and boaters using Nebraska waters this season need to be aware of **new regulations** dealing with aquatic invasive species. Starting January 1, 2013 the following regulations went into effect to help prevent the spread of unwanted species.

- 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 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.

For more information regarding these new regulations consult the 2013-2014 Fishing Guide at <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf>.

Find more information concerning zebra and quagga mussels at <http://snr.unl.edu/invasives/> and <http://100thmeridian.org/zebras.asp>.

