

Jeffrey Reservoir 2015 Fall Survey Summary



Jared Lorensen, Fisheries Biologist

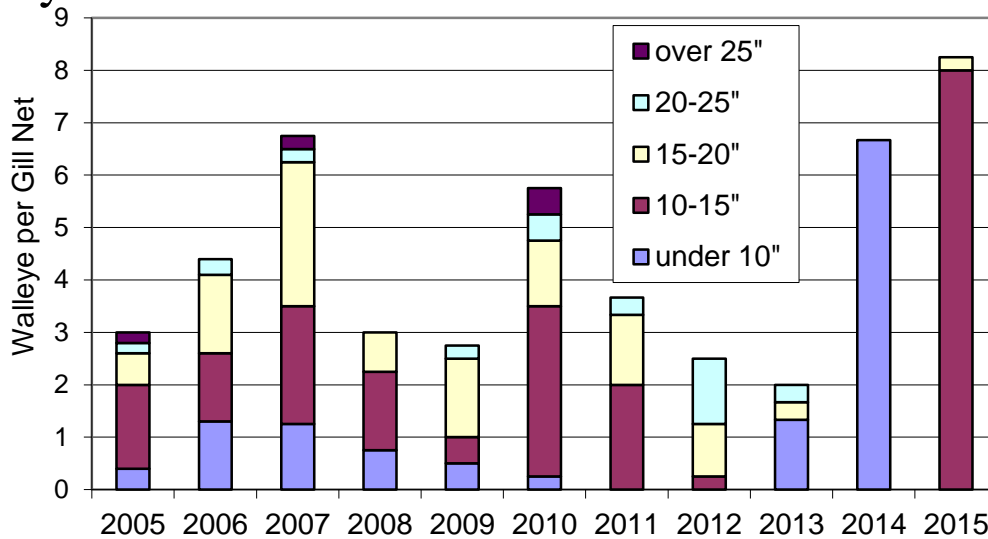
Jeffrey Reservoir is the third canal reservoir downstream from Lakes McConaughy and Ogallala. Water elevation is regulated by Central Nebraska Public Power & Irrigation District (CNPPID) for hydroelectric power generation. Jeffrey Reservoir offers unique fishing opportunities as a result of this functionality. Notice these aspects on [CNPPID's Lake Map](#). A Wildlife Management Area (WMA) exists on the east side of the lake and can be located on the map referred to above. 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 1st) to prevent damage from ice and placed back in the water during early spring.

Information collected from standard surveys allows 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.



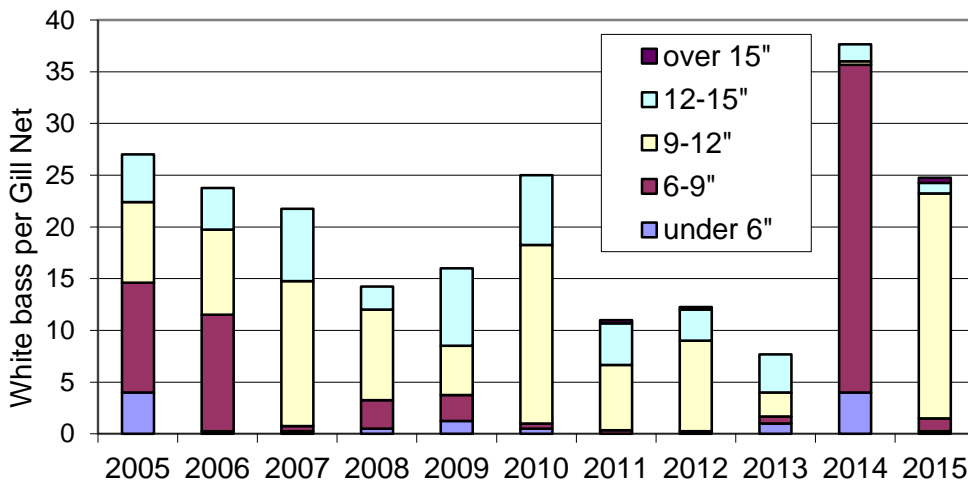
The following text and graphs are the result of the 2015 gill netting survey at Jeffrey Reservoir. Graphs represent number of each species captured per gill net by length group. For comparative purposes it also shows results from previous years.

Walleye



Catch rate of walleye at Jeffrey is consistently lower than other Southwest Nebraska reservoirs but recent stockings seem to be making an improvement in the population. In 2015, eight walleye per gill net were sampled with a mean length of 14". The majority of the sampled walleye were from the 2014 stocking year class.

White bass



The overall downward trend in gill net catch rate observed since 2006 was reversed with the 2014 data and the 2015 data indicates that this rebound is still viable. The observed abundance of small white bass in 2014 has now resulted in an abundance of 9-12" white bass. Approximately 25 white bass were sampled per gill net with an average length of 10.4". White bass are not stocked into Jeffrey as they naturally reproduce and recruit.

With the current abundance of small white bass and hybrid striped bass anglers need to practice identification of these species as hybrid striped bass may reach greater sizes than white bass if allowed to grow. Tips on discriminating between these species can be found on [NGPC's Fish Identification Guide](#) online or a print booklet can be picked up at your local NGPC office.

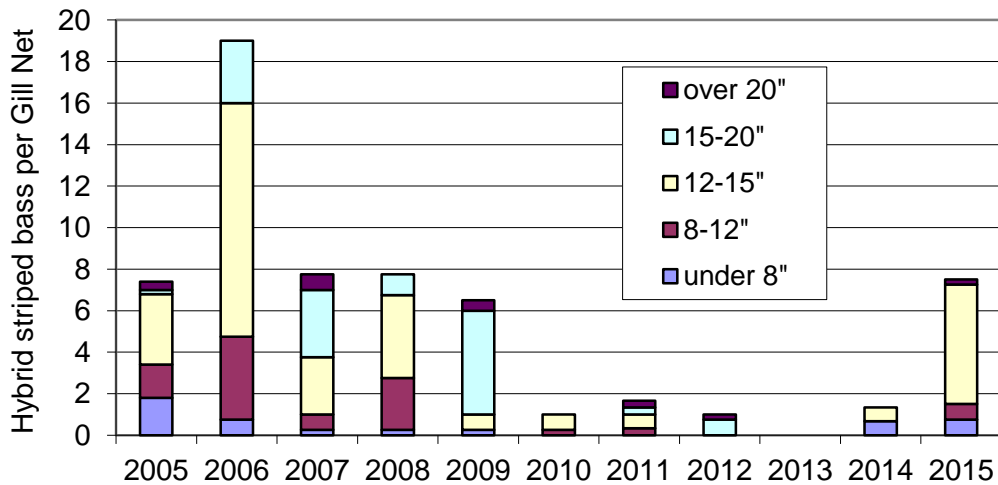


White bass



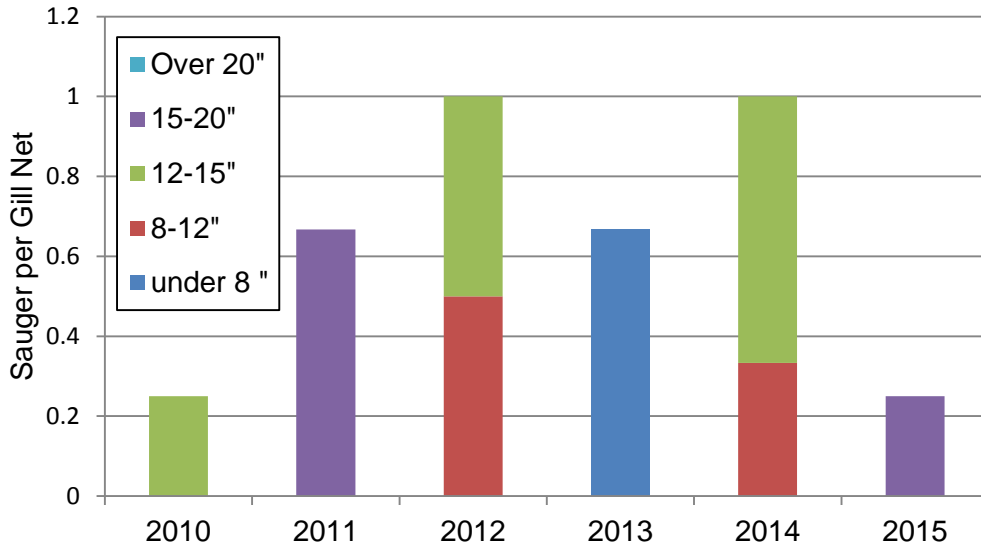
Hybrid striped bass

Hybrid striped bass



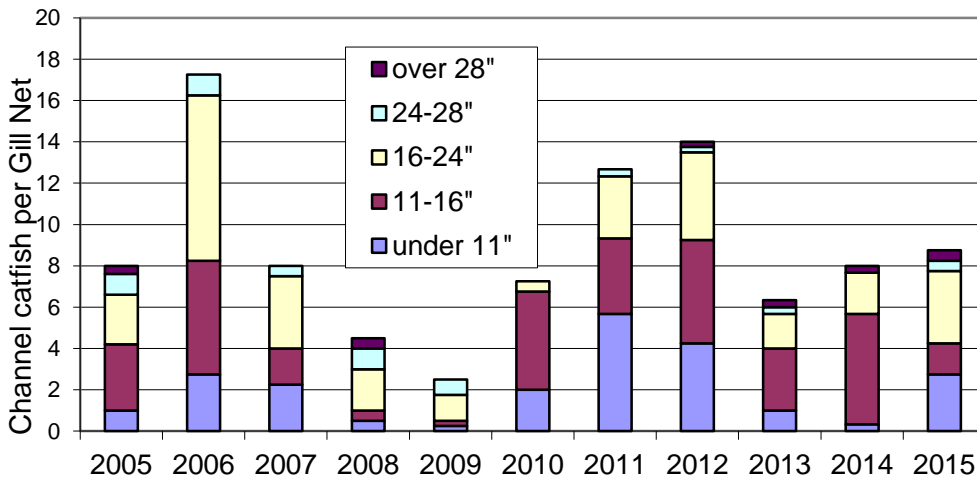
Hybrid striped bass catch rates had been consistent from 2007 through 2009 but have rebounded due to recent stockings. During 2015, seven hybrid striped bass were sampled with 79% greater than 12". Jeffrey's hybrid striped bass fishery is managed to provide a low density population of large individuals as this species will grow to 20" if environment allows.

Sauger



Sauger were first stocked into Jeffrey in 2009. A stocking program is currently in place for downstream reservoirs such as Midway, Gallagher and Plum Creek but sauger have not been stocked into Jeffrey since 2013 as a walleye population is being pursued. Note the low catch rates of sauger displayed by the above graph. Sauger can be identified by their compressed shape and the presence of spots on the spinous dorsal fin. [NGPC's Fish Identification Guide](#) may be accessed online or a copy may be picked up at District Offices to aid in identification of sauger.

Channel catfish



In 2015, nine channel catfish were captured per net with 51% over 16" indicating that the large proportion of 11-16" catfish observed in 2014 are growing well and expanding into the larger length groups. Catfish anglers should have success catching channel catfish during 2016.

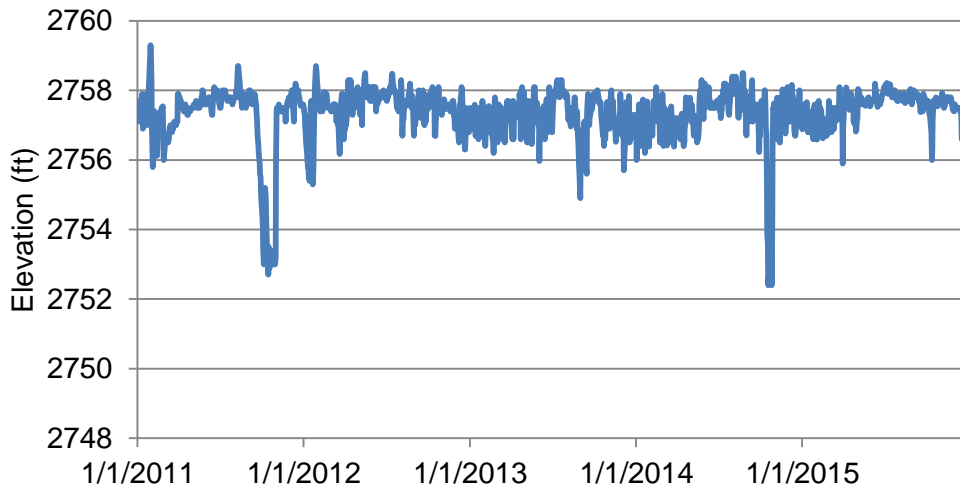


Jeffrey receives stockings from NGPC's Hatchery System nearly every year. Many factors are at play when stocking selections are made. Below you will find Jeffrey's stocking history for the past eleven years excluding some adults stocked during 2009. For more stocking details at Jeffrey and other public waterbodies access [NGPC's Fish Stocking Reports](#) database.

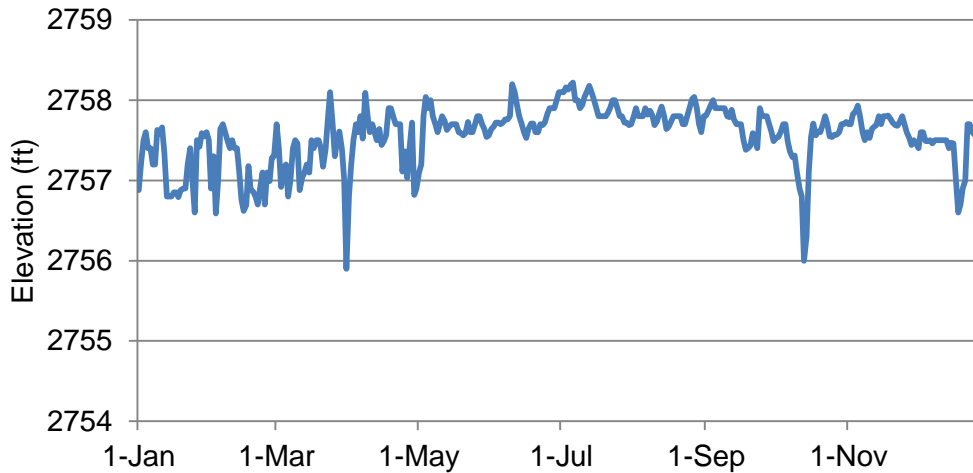
Stocking

<u>Year</u>	<u>Walleye</u>	<u>Hybrid Striped Bass</u>	<u>White crappie</u>	<u>Sauger</u>
2005		8,000-1.25"		
2006	25,132	7,500-1.25"		
2007	25,000-1"	33,000-1.25"		
2008	16,750-1"	7,500-1.25"		
2009		3,035-2"		25,023-1.5"
2010			9,009-1.5"	1,080,770-0.1"
2011				38,688-2"
2012				
2013	38,540-1.25"	7,718-1.2"		52,385-1.25"
2014	54,820-1.5"	6,300-1.3"		
2015	27,500-1.5"	6,300-1.3"		

Jeffrey Water Elevation January 2011 - December 2015



Jeffrey Water Elevation 2015



Jeffrey's water level fluctuates often. Check water fluctuations at [CNPPID's Reservoir/River Data](#) information page.

If you have questions or concerns about Jeffrey's fishery please contact

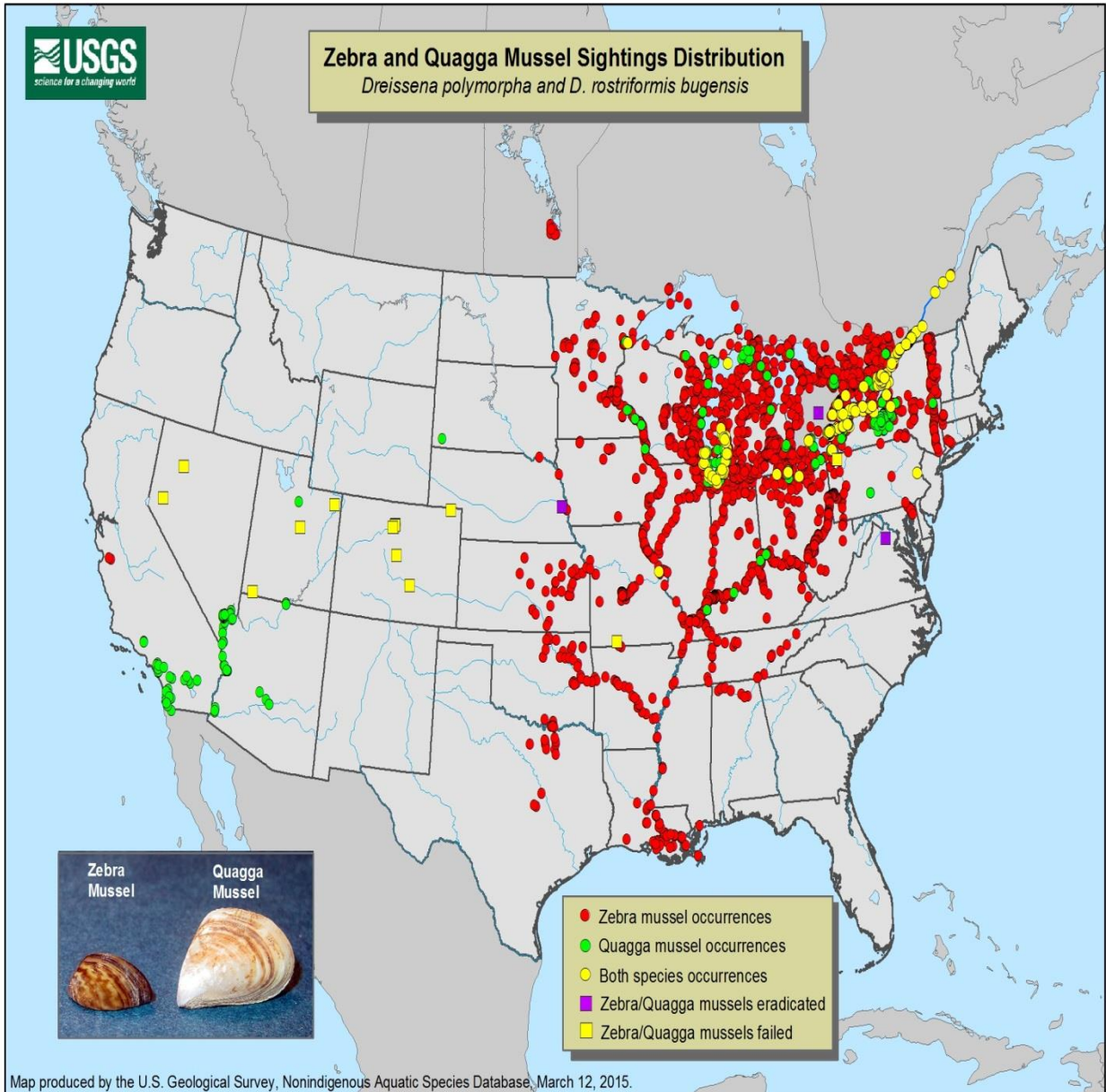
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Aquatic Invasive Species (AIS)

Distribution of invasive zebra and quagga mussels is getting closer and closer to SW Nebraska. The most recent finding was at Lewis and Clark Reservoir in NE Nebraska during 2015. This [map](#) portrays the spread of these invasive mussels and is updated often.



Attention motorboat owners operating in Nebraska:

Starting in 2016, boaters whose motorized watercraft are registered in any state other than Nebraska must purchase and display a \$15 Aquatic Invasive Species (AIS) Stamp each year they launch their boat in Nebraska. The stamp will help fund AIS education and inspection programs.



- Boat inspections for AIS prior to launch in Nebraska are NOT mandatory at this time.
- Personal watercraft registered outside of Nebraska must have this stamp.
- Non-motorized craft registered in any state are exempt from the stamp.
- Stamps are not required for boats registered in Nebraska. A \$5 AIS fee is included on the residents' three-year boat registrations.
- Residents who register their boats in other states must have this stamp before launching in Nebraska.

This stamp is available online at OutdoorNebraska.org or at Nebraska Game and Parks permitting offices.

Learn more about invasive species at neinvasives.com.





STOP AQUATIC HITCHHIKERS!™

According to Nebraska State Law, **it is illegal for watercraft to enter a Nebraska waterbody or leave a launch area while containing water.** This includes all containers, compartments, and equipment that are permanently attached to the watercraft.

AND

All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

Protect Your Waters—Remember to **CLEAN, DRAIN, and DRY!**

