

Jeffrey Reservoir

2013 Fall Survey Summary

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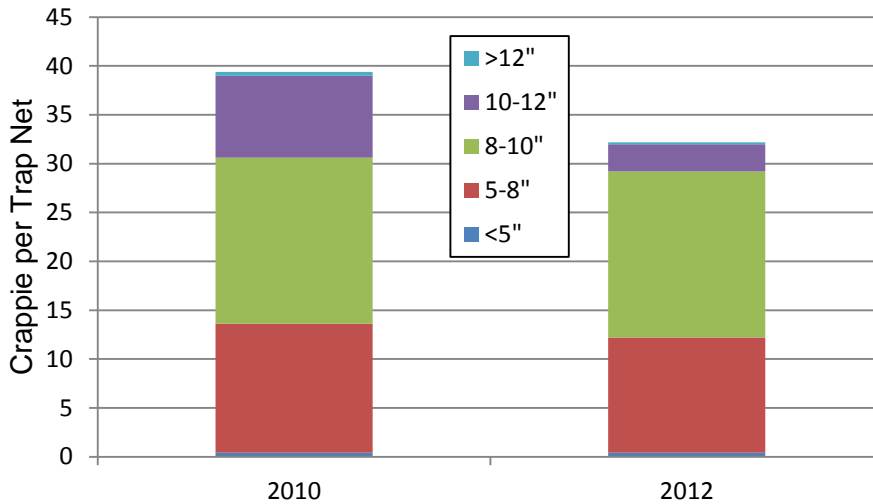
Jeffrey Reservoir is the third canal reservoir downstream from Lakes McConaughy and Ogallala. Water elevation is regulated by Central Nebraska Public Power & Irrigation District (CNPPID) for hydroelectric power generation. Jeffrey Reservoir offers unique fishing opportunities as a result of this functionality.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



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.

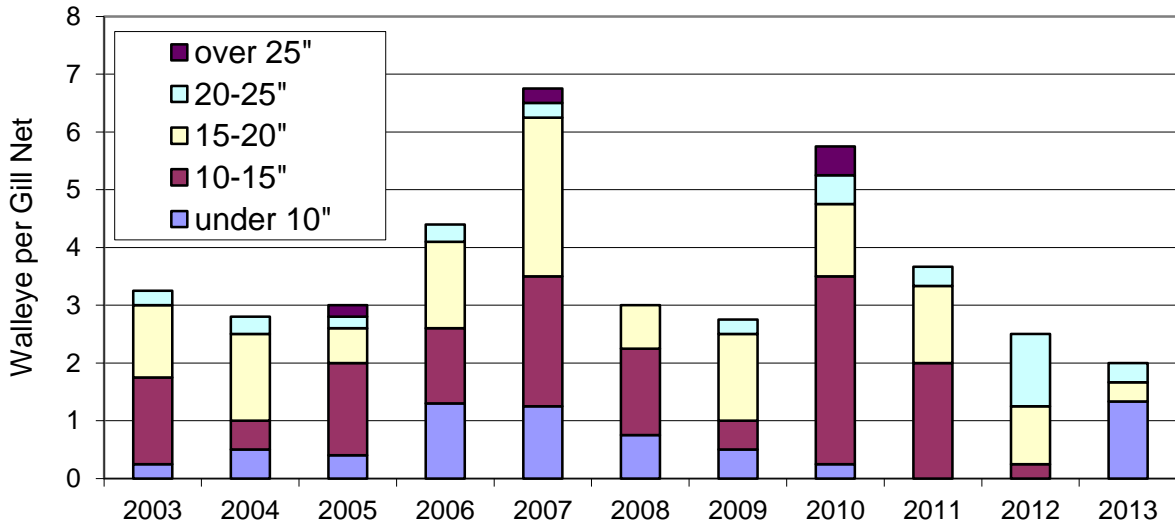
The following text and graphs are the result of the 2013 gill netting survey at Jeffrey Reservoir. Graphs represent number of each species captured per gill net by length group. For comparative purposes it also shows results from previous years.

Crappie



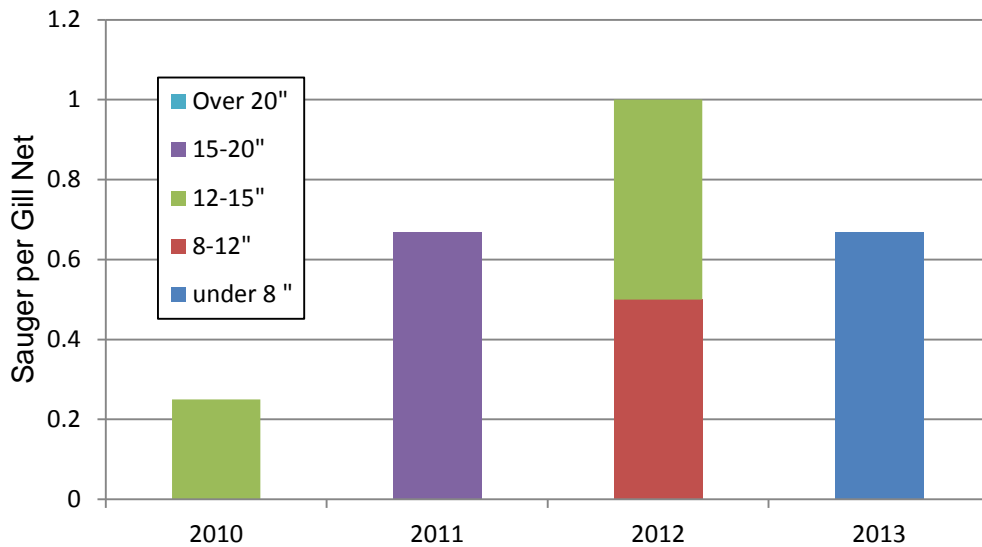
Crappie have been sampled twice during the fall of recent years. They are sampled using modified fyke nets. The 2012 survey was composed of black (55%) and white crappie (45%). Mean length of black crappie sampled was 7 ½" while white crappie averaged 8 ¾". The largest crappie sampled in 2012 was nearly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

Walleye



Catch rate of walleye at Jeffrey is consistently low compared to other Southwest Nebraska reservoirs. In 2013, two walleye per gill net were sampled with a mean length of 12.5" with the largest being 22". The majority of the sampled walleye were from the 2012 stocking year class. A stocking request for 38,500 walleye fingerling is in place for 2014.

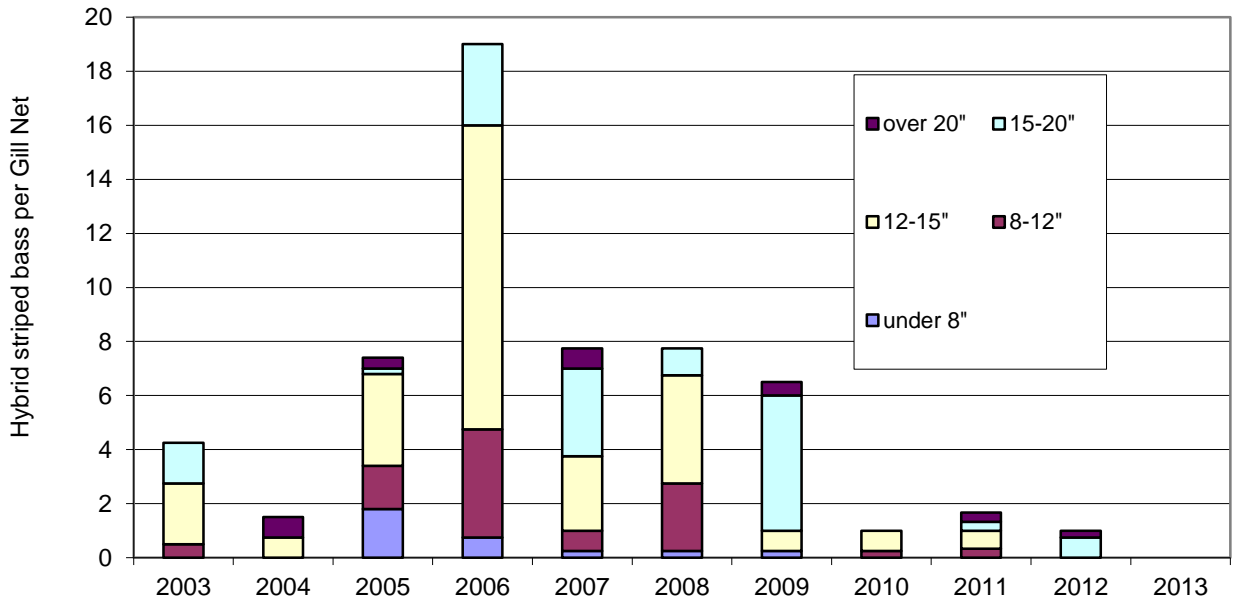
Sauger



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. Angling success is typically observed below canal checks during March. Sauger 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>. In 2013, two sauger were sampled in total at Jeffrey. A stocking request for 27,500 sauger fingerlings is in place for 2014.

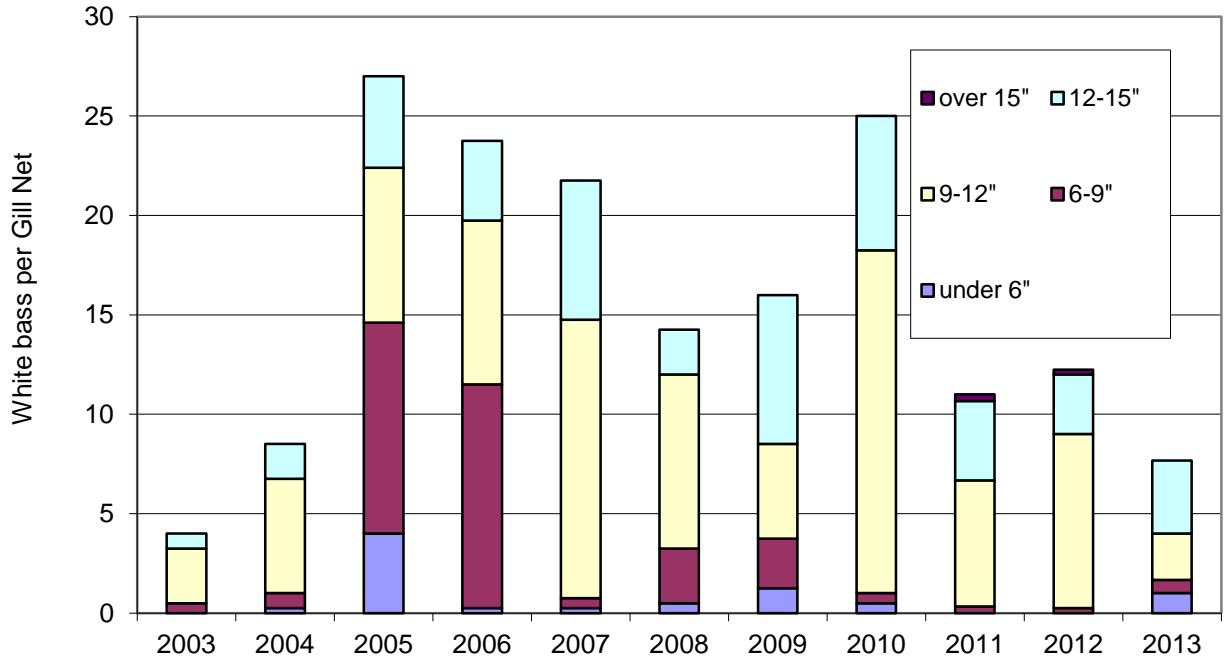


Hybrid striped bass



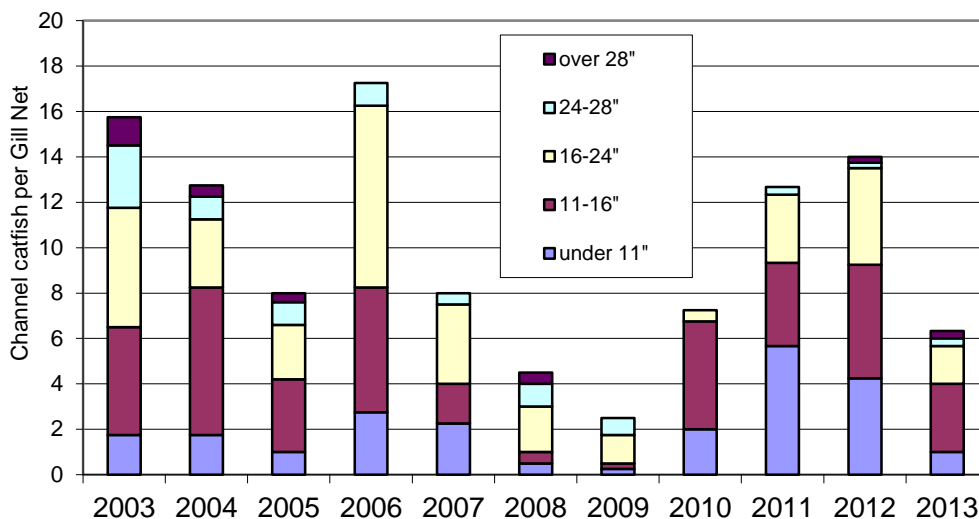
Hybrid striped bass catch rates had been consistent from 2007 through 2009 but have declined recently with zero sampled during 2013. Jeffrey's hybrid striped bass fishery is managed to provide a low density population of large (>20") individuals. During 2013, 7,718 fingerlings were stocked and a similar stocking is requested for 2014.

White bass



The overall downward trend in gill net catch rate observed since 2006 continued with the 2013 data. Approximately 8 white bass were sampled per gill net with an average length of 10.7". White bass are not stocked into Jeffrey as they naturally exist in the reservoir.

Channel catfish



In 2013 channel catfish were not as abundant in the sample. Approximately 6 channel catfish were sampled per gill net with 37% over 16". Catfish anglers should still have success catching channel catfish in 2014.

Notes

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 1st) to prevent damage from ice and placed back in the water during early spring. This WMA is undergoing a transition of maintenance tenants. The date of this final transition is currently unknown.

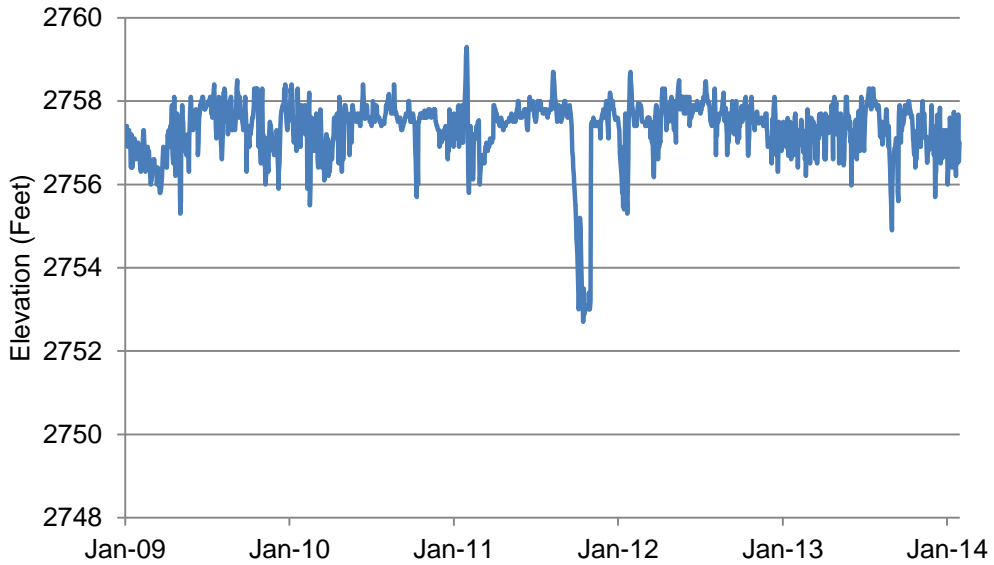
A change has been made concerning the statewide striped, hybrid & white bass one-over length daily bag limit regulation. As of January 1, 2013 only one may be kept over 16 inches. This regulation change was made to decrease harvest of hybrid striped bass greater than 16 inches. Access the 2013-2014 fishing 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.



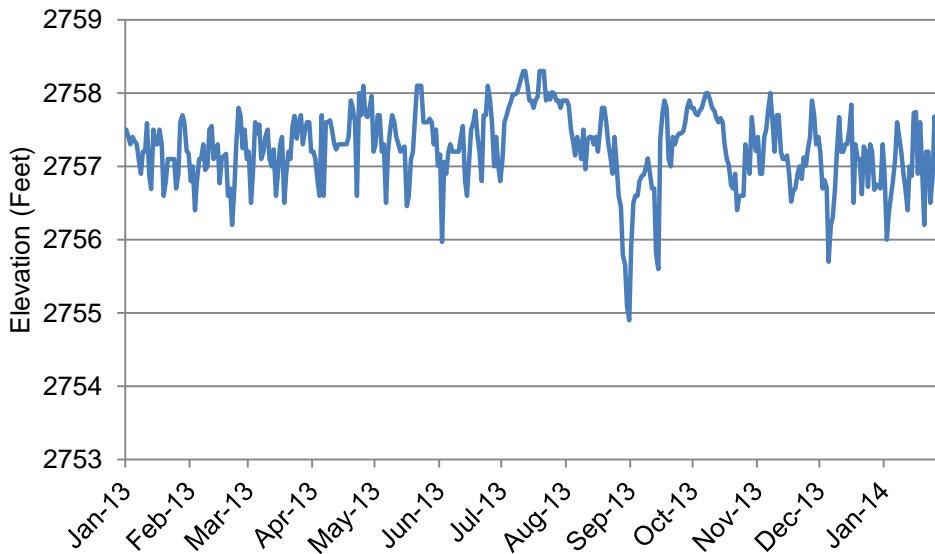
Jeffrey receives stockings from NGPC's Hatchery System nearly every year. Many factors are at play when stocking selections are made. Below you will find Jeffrey's stocking history for the past eleven years excluding some adults stocked during 2009. For more stocking details at Jeffrey and other public waterbodies access <http://outdoornebraska.ne.gov/fishing/guides/fishguide/FGstocking.asp>.

<u>Stocking Year</u>	<u>Walleye</u>	<u>Hybrid Striped Bass (Wiper)</u>	<u>White crappie</u>	<u>White bass</u>	<u>Sauger</u>
2003					
2004	25,000-1.25"	7,500-1.5"		84,850-1"	
2005		8,000-1.25"			
2006	25,132-1"	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" 1,080,770-0.1"
2010			9,009-1.5"		
2011					38,688-2"
2012					
2013	38,540-1.25"	7,718-1.2"			52,385-1.25"

Jeffrey Water Level 2009 - January 2014



Jeffrey Water Level January 2013 - January 2014



Jeffrey's water level fluctuates often. Check water fluctuations at http://www.cnppid.com/Elevation_Flows2.htm.



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!**

Zebra and Quagga Mussels

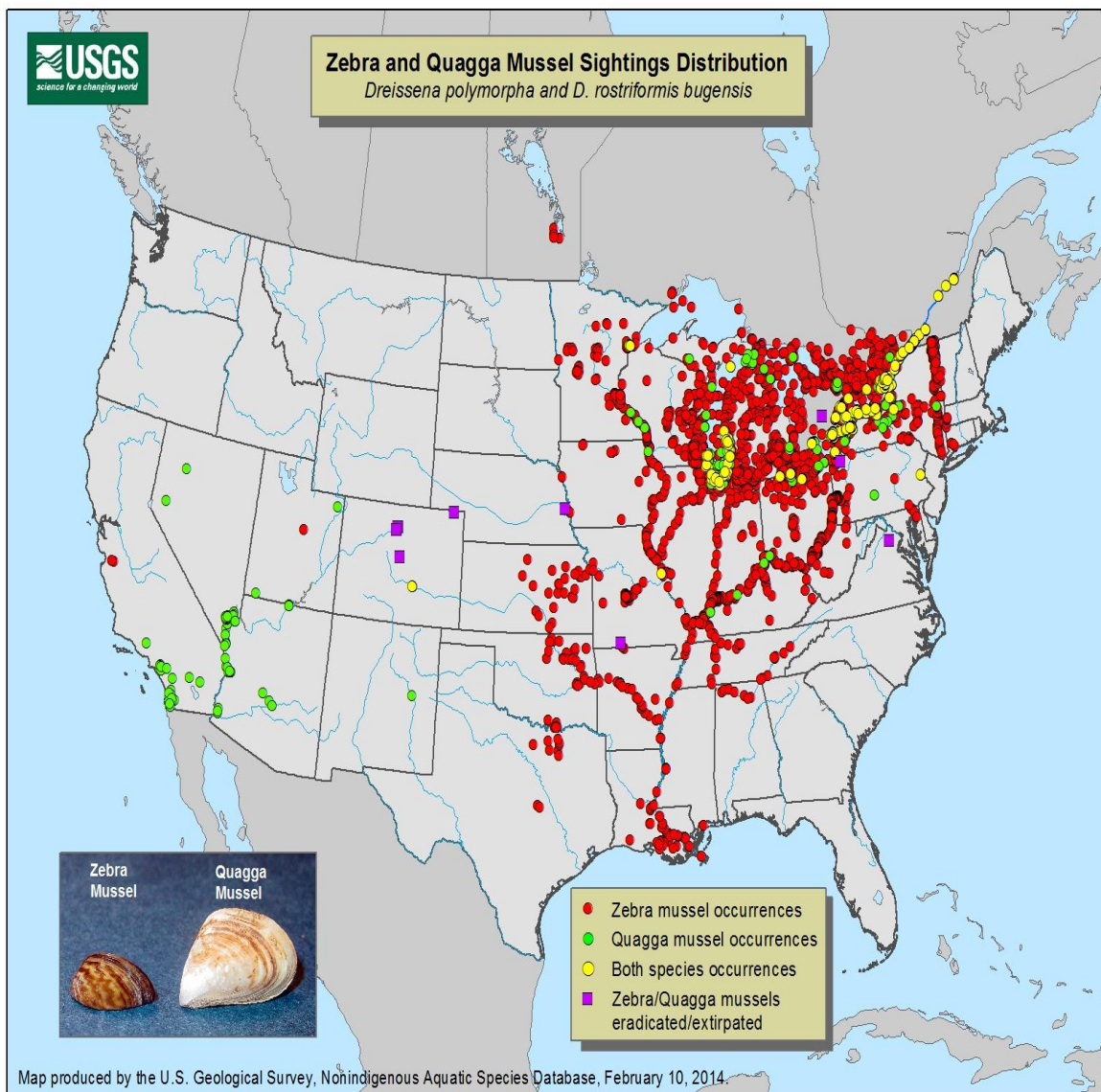
Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes and continue to **Clean, Drain and Dry** their equipment and boats prior to launching at a new waterbody. While no mussels have been identified at any of the I-80 Lakes, zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in neighboring states. Monitoring was completed at several Nebraska reservoirs 2011, 2012 and 2013. No evidence of zebra or quagga mussels was found. For more information concerning invasive species or to report a finding of invasive mussels access <http://neinvasives.com/report-a-sighting/>.

Anglers and boaters using Nebraska waters this season need to be aware of **new regulations** dealing with aquatic invasive species. Signs similar to that on the previous page are posted at Jeffrey's public boat ramp. 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.



Distribution of zebra and quagga mussels is getting closer and closer to SW Nebraska. The most recent finding was at Lake Waconda near Glen Elder Kansas during the summer of 2013. This map is updated often and can be accessed at http://nas.er.usgs.gov/taxgroup/mollusks/zebramussel/maps/current_zm_quag_map.jpg.



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

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