Johnson Reservoir 2014 Fall Survey Summary



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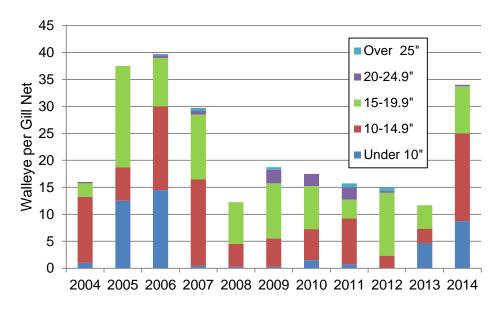
Johnson Reservoir is a major reservoir on Central Nebraska Public Power & Irrigation District's (CNPPID) Supply Canal System downstream of Plum Creek Reservoir. Notice its fluvial behavior at CNPPID's Reservoir/River Data page. CNPPID manages Johnson Reservoir for hydroelectric power generation and irrigation purposes. There are unique fishing opportunities as a result of this functionality. Notice these aspects on NGPC's Lake Map.

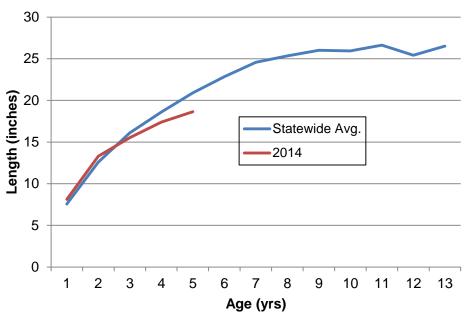


Every fall the fishery of Johnson Reservoir is surveyed using at least two sampling methods. For more information on survey techniques access MEBRASKAland's Fishery Survey Article.

The following text and graphs are the result of the 2014 gill net, modified fyke net and electrofishing surveys at Johnson 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

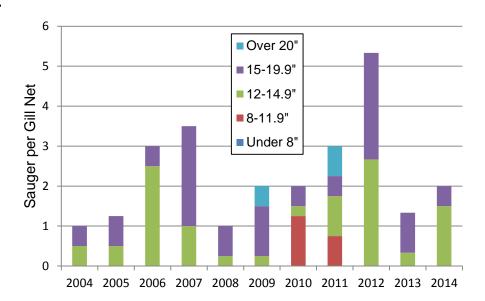




Walleye abundance rebounded in the 2014 survey data with 34 sampled per net. Average length of those sampled was approximately 13". The 2013 and 2014 year classes recruited well contributing to the abundance of small walleye in the population (blue and red segments). The largest sampled was 20". Walleye reach 15" in length after approximately three years of growth in Johnson Reservoir.

The walleye regulation at Johnson (in conjunction with sauger) includes a daily bag limit that may include four walleye greater than 15" with only one over 22".

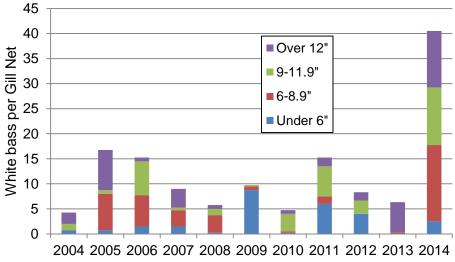
Sauger



Average length of sauger sampled during 2014 was 14.3". Sauger in Johnson are reaching 15" after approximately three years of age. They are not stocked in Johnson, but are stocked annually upstream in Midway, Gallagher and Plum Creek reservoirs when possible. Fingerling and fry stockings in these upstream reservoirs are scheduled in 2015.

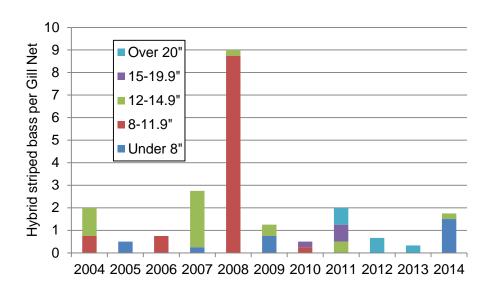
The sauger regulation at Johnson (in conjunction with walleye) includes a daily bag limit that may include four sauger/walleye greater than 15" with only one over 22". Access MSPC's
Fish Identification guide for help identifying these similar species.

White bass



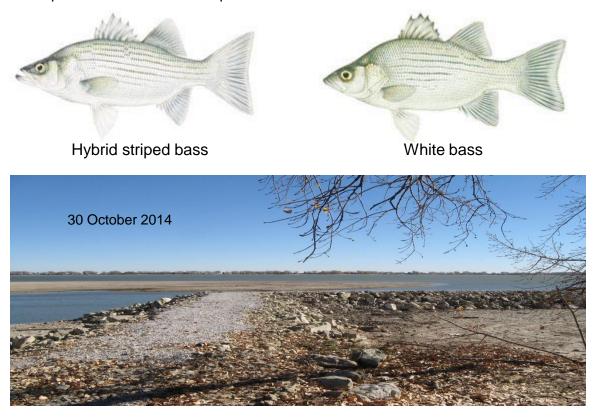
White bass reproduction and recruitment is sporadic. Fortunately, the 2014 survey indicates that white bass reproduction and recruitment of the 2012 and 2013 year classes was strong. The average length captured was 10" and the longest was just short of 15". The white bass regulation at Johnson (in conjunction with hybrid striped bass) includes a daily bag limit of 15 with no more than one greater than 16".

Hybrid Striped Bass

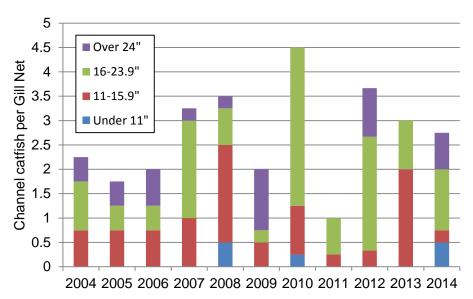


The hybrid striped bass population remains at a low level. Overall, only seven were sampled in 2014 and 86% of these were less than 8" and representatives of the 2014 stocking. The hybrid striped bass population is managed to provide trophy fish (greater than 20").

The hybrid striped bass regulations at Johnson (in conjunction with white bass) includes a daily bag limit of 15 with no more than one greater than 16". Access <u>NGPC's Fish Identification</u> tool for hybrid striped bass identification help.



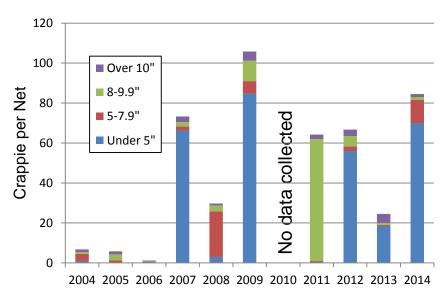
Channel Catfish



Abundance of channel catfish is fairly consistent in Johnson (note vertical axis). In 2014, abundance sampled was down a little from previous years but the size composition appears to be more favorable along with some recently recruited smaller fish.

The daily bag limit for channel catfish has been increased to 10 at Johnson– Check the 2015 Fishing Guide for details.

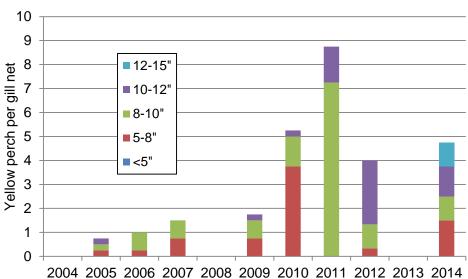
Crappie



The 2014 survey data was comprised primarily of small (<5") crappie but four length classes were present. This may indicate that the population of larger crappie is being underestimated. If history repeats itself, this large abundance of small crappie will recruit to larger sizes providing good crappie angling. Black crappie represented 62% of the sample with white crappie making up the rest. In 2010, low water level prevented crappie data from being collected.

The crappie regulation at Johnson includes a daily bag limit of 15 (in conjunction with all panfish) with no length limit.

Yellow perch

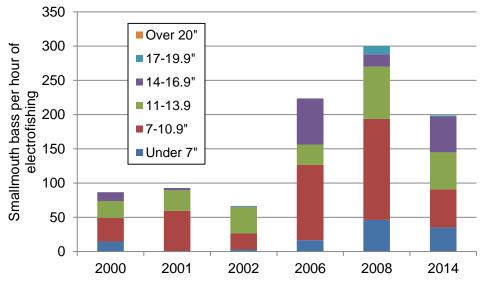


The 2014 survey indicated a growing yellow perch population. Although the overall abundance was low, the 2014 data is the first to indicate perch longer than 12". Stockings of yellow perch began in 2007 and a resurgence has been observed.

The yellow perch regulation at Johnson includes a daily bag limit of 15 (in conjunction with all panfish) with no length limit.

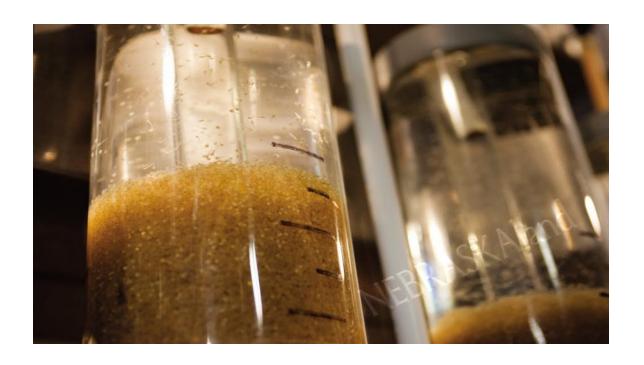
Smallmouth

bass



Survey data isn't collected annually for smallmouth bass at Johnson (notice horizontal axis) but they aren't a species to overlook. Five length groups were represented in the 2014 survey with the largest specimens at 18". Average length of those sampled was 11".

The smallmouth bass harvest regulation at Johnson includes a 15" minimum length limit and a five fish daily bag with only one bass 21" or longer allowed in conjunction with largemouth and spotted bass.



Johnson Reservoir receives stockings from NGPC's Hatchery System every year. Many factors are at play when stocking selections are made. Below you will find Johnson's stocking history for the past eleven years. For more stocking details access NGPC's Fish Stocking Reports.

<u>Year</u>	<u>Walleye</u>	Hybrid Striped Bass	Yellow Perch	Channel catfish
2004	145,125-1.4"	14,000-1"		
2005		14,000-1"		
2006	140,000-1.25"	28,000-1.25"		
2007	140,000-1.25"	40,475-1.75"	65,973-4"	
2008	100,000-1.1-1.25"	43,780-1.25"		
2009	219,525-1.4"	14,763-2"	66,610-3"	
2010	219,000-1.5"			
2011	219,473-1.25"		66,674-3"	6,070-7"
2012	219,375-1.3-1.4:"			37,470-5"
2013	239,082-1.2"	10,963-1.2"	60,048-3"	
2014	168,295-1.5"	21,890-1.3"		

Angler Access Project

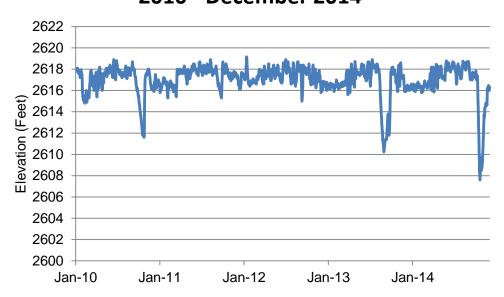
In 2009, the Nebraska Unicameral passed legislation that expanded the Aquatic Habitat Rehabilitation Program so that 30% of the funds would be dedicated to improving angler access at public waters not necessarily involved in aquatic habitat rehabilitation. Projects have been evaluated within each NGPC District with the primary purpose of improving access for bank anglers.

The inlet of Johnson Reservoir is a popular area for bank fisherman but unstable rip rap and steep inclines made fishing difficult. During 2014 water levels were dropped and construction took place to improve access at this site. This activity included reconstruction of fishing piers, placement of water level pavement, addition of rock shoal habitat and reconstruction of the ramp breakwater (pictured below and on page 4). These efforts will provide level and undeterred access for bank anglers along with differentiating water flow patterns that will attract sport fish.

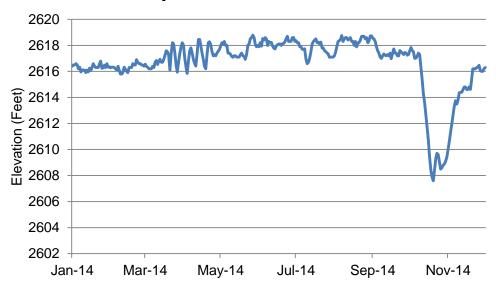




Johnson Water Elevation 2010 - December 2014



Johnson Water Elevation January 2014 - December 2014



Johnson Lake's water level changes frequently. Follow water level fluctuations at <u>CNPPID's Reservoir Data</u> page.



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

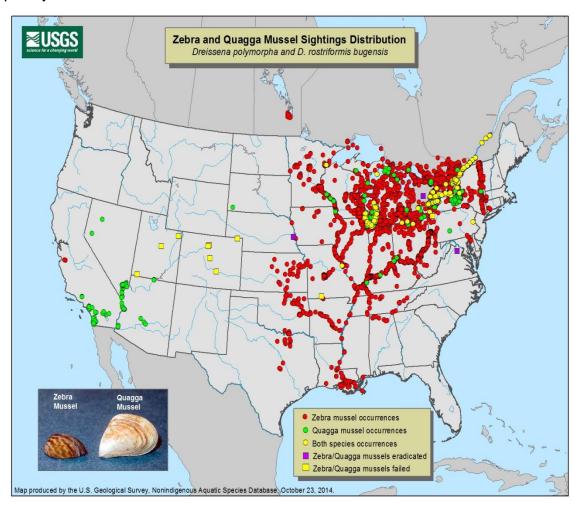
All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

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



New in 2015 - In addition to and to clarify the above regulation concerning Aquatic Hitchhikers - it is unlawful to arrive at or leave any waterbody in Nebraska with water other than from a domestic source (such as a water supply system, well, or bottled), except for fire-fighting purposes. This applies especially to boats, their compartments, equipment or containers that may hold water **but also** applies to bank anglers if using water holding devices to transport harvested fish.

Distribution of zebra and quagga mussels is getting nearer to SW Nebraska. The most recent finding in Nebraska was at Louis and Clark Reservoir during the fall of 2014. <u>USGS's Zebra and Quagga Mussel Sightings Distribution Map</u> is updated frequently.



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

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