

# Johnson Reservoir 2020 Fall Survey Summary



Jared Lorensen, Fisheries Biologist

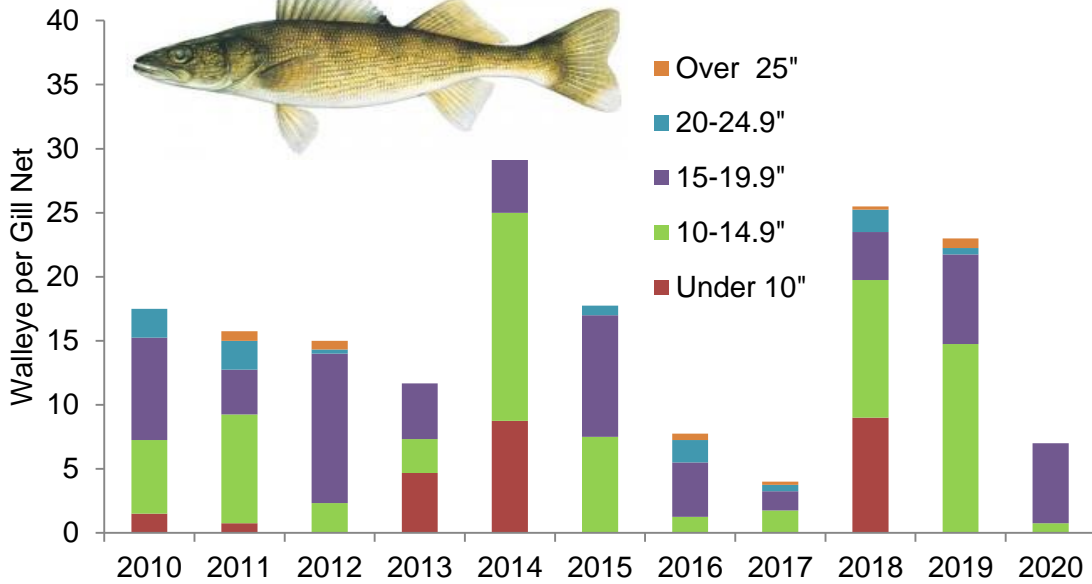
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Johnson Reservoir is a major reservoir on Central Nebraska Public Power & Irrigation District's (CNPPID) Supply Canal System downstream of the Canyon Reservoirs. Notice its fluvial behavior at [CNPPID's Reservoir/River Data](#) page. CNPPID manages Johnson Reservoir for hydroelectric power generation and irrigation purposes. There are unique fishing opportunities as a result of this functionality. Notice these characteristics utilizing [NGPC's Lake Map Page](#). 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. For more explanation of what constitutes a fisheries survey read the [Survey Says](#) article.

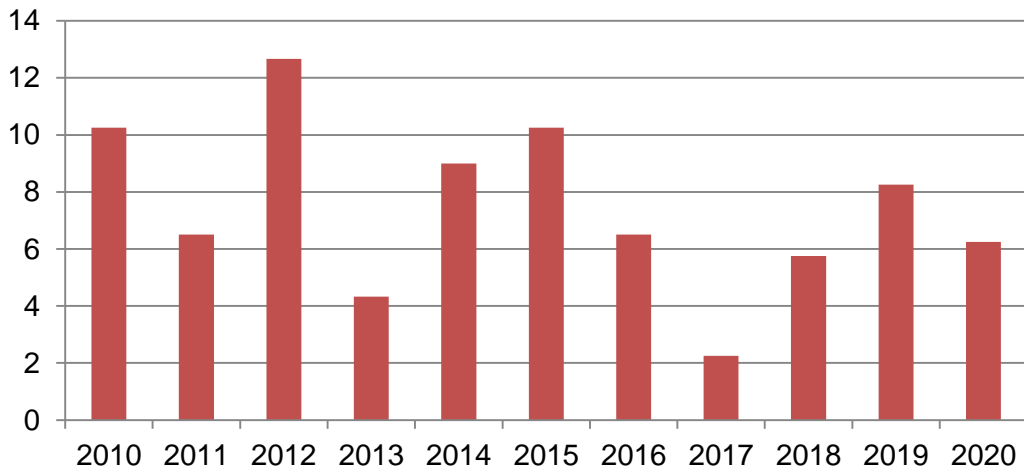


Every fall the fishery of Johnson Reservoir is surveyed with standard sampling methods. The following text and graphs are the result of the 2020 gill net survey. Graphs represent the number of each species captured per gill net by length group. For comparative purposes it shows results from previous years.

# Walleye

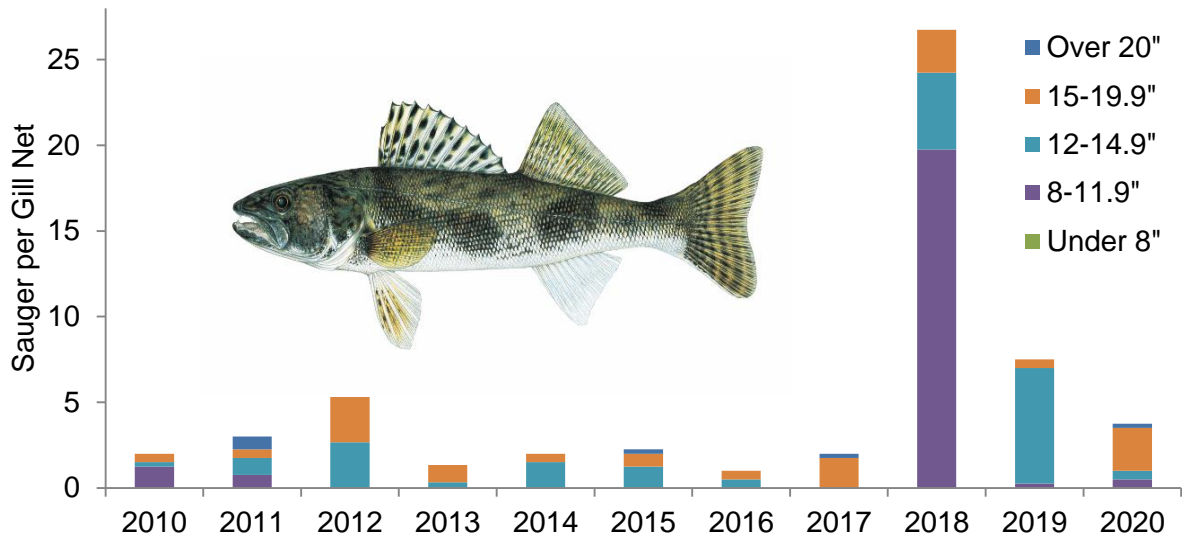


## >15"



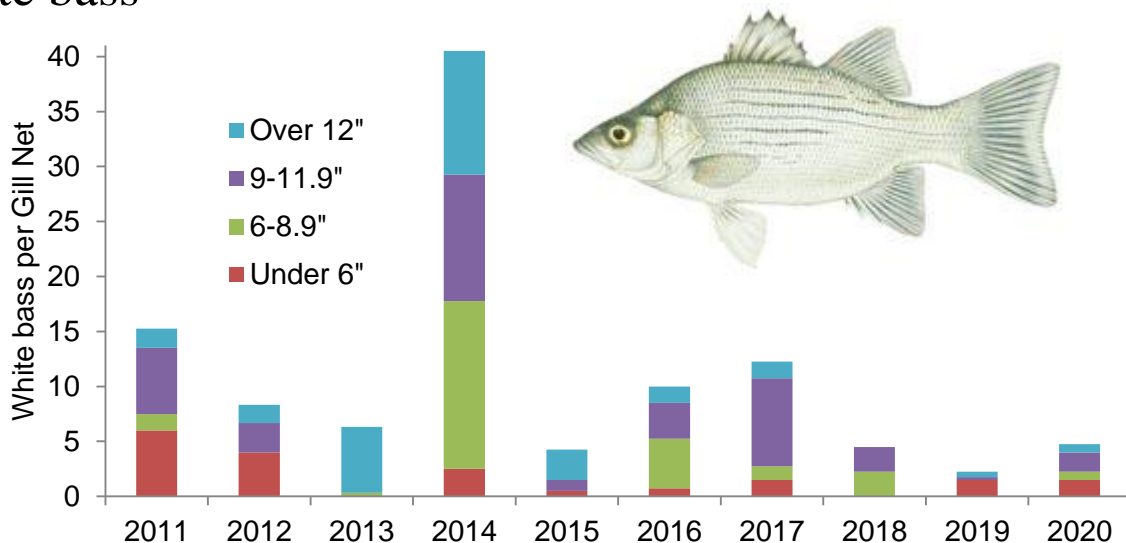
The 2020 survey was low with 7 walleye sampled per gill net. Of these, 11% were 10-14.9" and 89% were 15-19.9". The overall average length was 16.2". Walleye reach 15" in length after approximately two and a half years of growth in Johnson Reservoir. Although low in abundance, 2020's survey indicates good recruitment of the 2018 year class into the next larger length group.

# Sauger



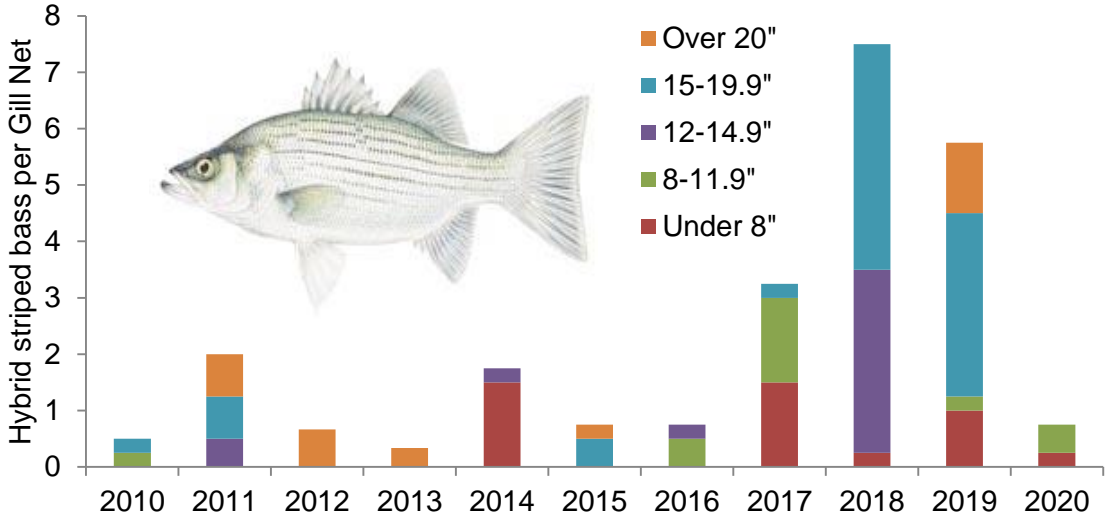
The 2020 sauger survey agrees with a declining trend but this observed abundance is still favorable as prior to 2018 this catch (3.25) would've been above average. Although 2020's catch was much smaller than 2018's, average length of these fish was approximately 5" longer. Average length was 15.3". Current data suggests that sauger in Johnson have the potential to reach 15" after approximately two and a half years of age. This species is not stocked in Johnson, but are stocked annually upstream. Sauger appear quite similar to walleye and harvest is regulated in conjunction for these two species. Access [NGPC's Fish Identification Tool](#) and the [2021 Fishing Guide](#) for details.

# White bass



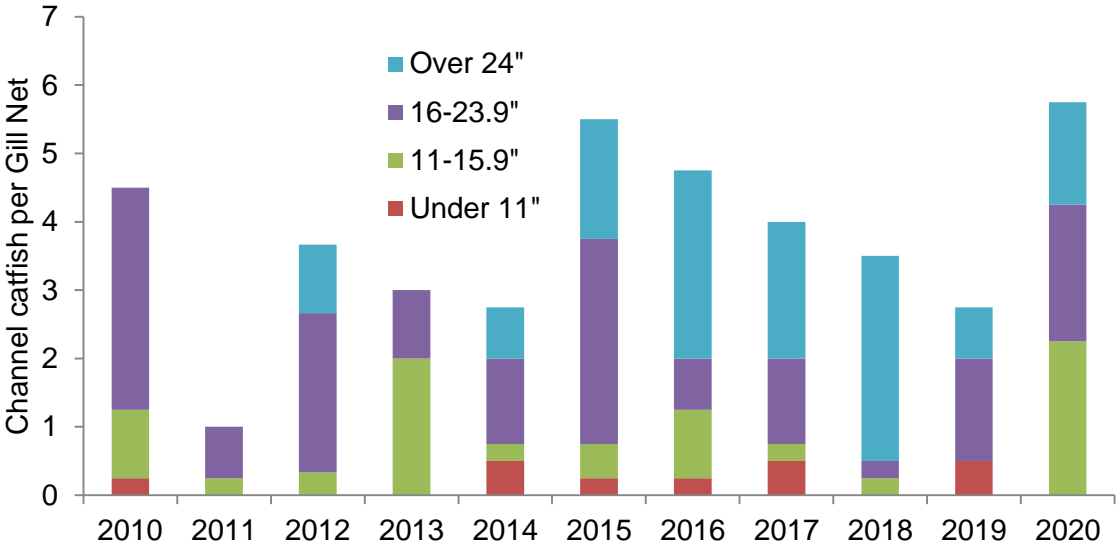
White bass reproduction and recruitment is sporadic and due to their schooling behavior, are difficult to survey. The 2020 survey revealed double the quantity of white bass per gill net than 2019's. These consisted of all four length groups, which may indicate a bright future for white bass angling.

# Hybrid Striped Bass



The 2020 hybrid striped bass survey data indicates a much reduced population. Only 0.75 per gill net were observed. These fish averaged 9" in length. Access [NGPC's Fish Identification tool](#) for hybrid striped bass and white bass differentiation and the [2021 Fishing Guide](#) as only one white bass or wiper over 16" is allowed in daily creels.

# Channel catfish



A declining trend was reversed with 2020's data due to an abundance of 11-15.9" fish. During 2020's survey, 5.75 were observed and the largest channel catfish sampled was 34.3". This is the most channel catfish in a survey on recent record from Johnson.

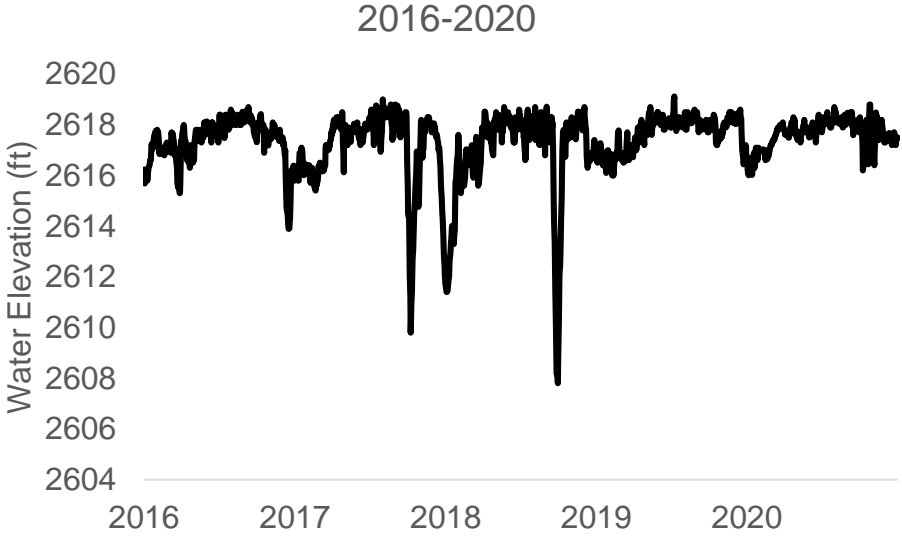
# Stockings



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>	<u>Hybrid Striped Bass</u>	<u>Yellow Perch</u>	<u>Channel catfish</u>
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"		
2015	219,317-1.5"	10,945-1.3"	85,078-2.6-2.8"	
2016	218,872-1.5"			
2017	219,143-2"		73,489-3"	
2018	218,820-1.5"			
2019	237,497-1.75"		85,528-2.75"	
2020	218,888 – 1.25"	11,000-1.25"		

# Water Elevation



Johnson Lake's water level plays a vital role in the fishery. Follow water level fluctuations at [CNPPID's Reservoir Data](#) page.

If you have questions or concerns about Johnson's fishery please contact Jared Lorensen, Biologist 308-535-8025, [jared.lorensen@nebraska.gov](mailto:jared.lorensen@nebraska.gov)

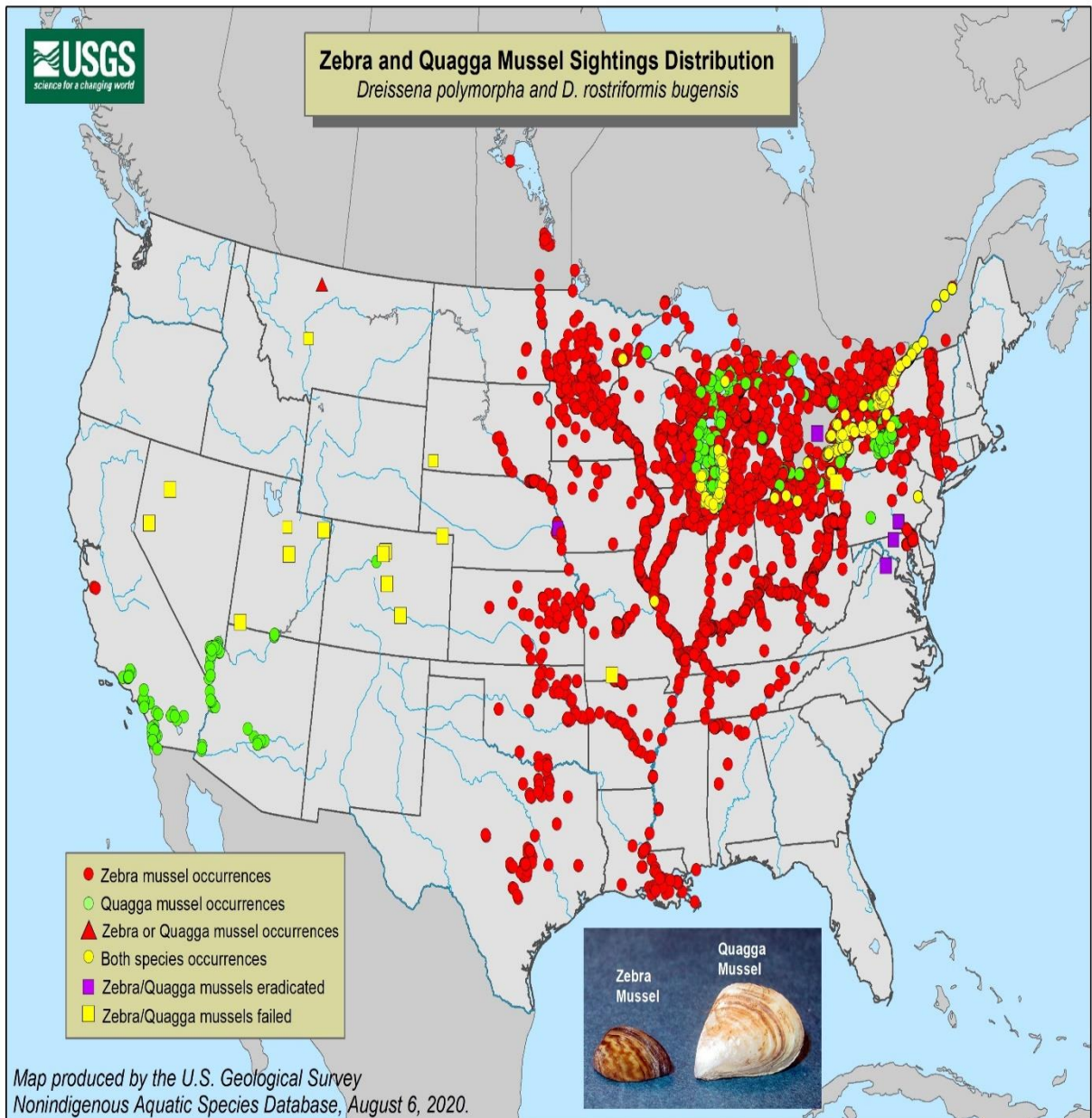
OR

Brad Newcomb, District Mgr. 308-865-5330, [brad.newcomb@nebraska.gov](mailto:brad.newcomb@nebraska.gov)

# Aquatic Invasive Species (AIS)

Distribution of zebra and quagga mussels is growing. The most recent finding in Nebraska was Glen Cunningham Lake in Omaha during 2018. The below map portrays the spread of these invasive mussels. Access [U.S. Geological Society's Site](#) for more information.

In 2016, Nebraska boaters became required to possess a [Aquatic Invasive Species \(AIS\) Stamp](#). Residents acquire the stamp when registering their watercraft. Nonresidents have to purchase a physical sticker that must be displayed on their watercraft.



# Aquatic Invasive Species (AIS)

**Silver carp** have found their way into every tributary of the Missouri River in Nebraska, including the Platte, Elkhorn, Loup and Nemaha rivers. Obstacles to their continued spread are vital as these species cause substantial damage. These obstacles include physical structures and angler awareness. Silver carp have invaded the Platte to Lexington, NE as the below known distribution map indicates.





## Aquatic Invasive Species (AIS)



**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!**

