Elwood Reservoir 2022 Fall Survey Summary

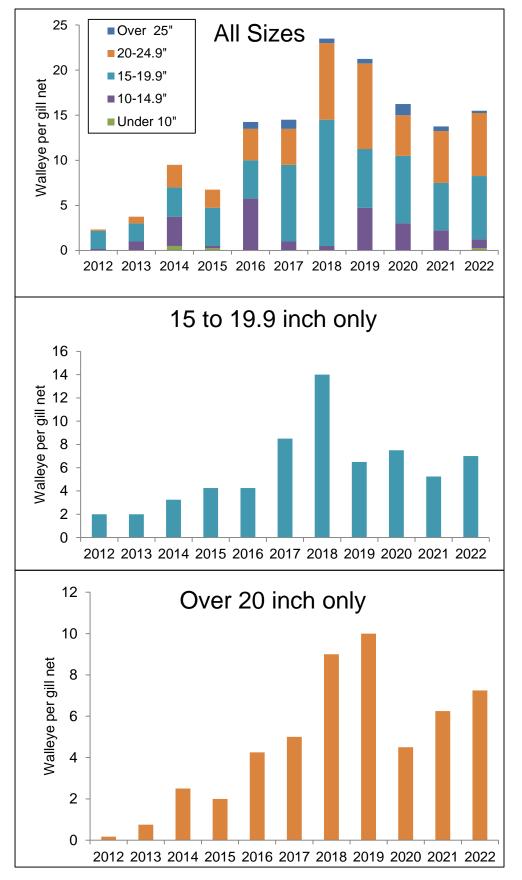


Jared Lorensen, Fisheries Biologist

Elwood Reservoir was constructed during the late 1970s and is utilized by Central Nebraska Irrigation & Public Power District (CNPPID) to store irrigation water and provide groundwater recharge. This reservoir is located approximately five miles south of Johnson Reservoir. The <u>public access</u> area is located along the east shoreline and provides a boat launching facility with lighting and a pit toilet. Coves are abundant but they are remote, steep and heavily vegetated making them accessible only by boat. Limited shoreline access for bank angling is available near the "bubble" and along the dam. Boating at Elwood Reservoir is limited to 5 mph/no wake.

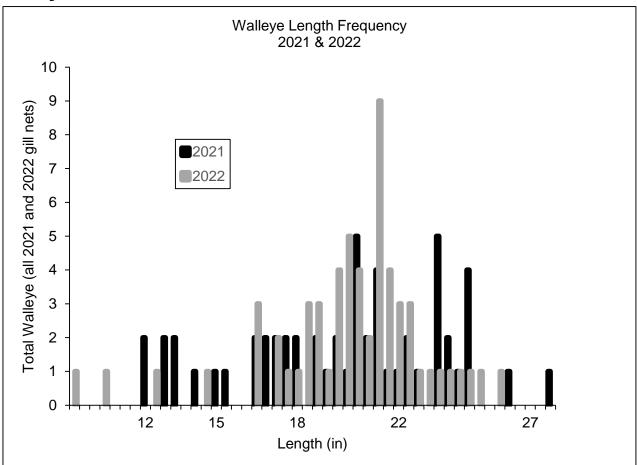


Walleye



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Walleye

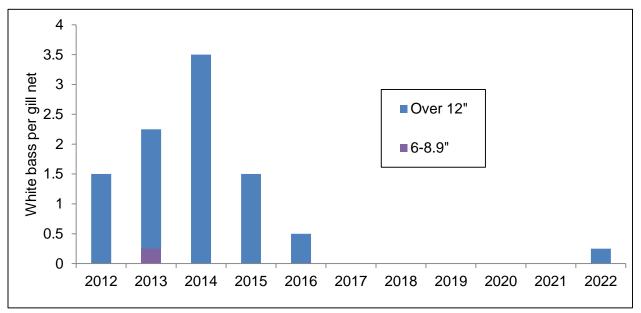


The 2022 survey revealed 15.5 walleye per gill net. This data is reflected in the first three walleye graphs. The sample included 2% under 10 inches, 6% in the 10 to 14.9 inch length group, 45% in the 15 to 19.9 inch length group, 45% in the 20 to 24.9 inch group and 2% over 25 inches. 2022's survey data indicates a slightly more numerous population but the quantity available past 22" may have decreased since 2021's survey. See the 4th graph.

On three different dates in 2022, walleye fingerlings were stocked. These walleye were not significantly present in the 2022 standard gill netting effort as they were likely too small. Evaluation efforts are being made to determine the most efficient size of walleye fingerling to stock. Requests for larger fingerlings will continue as current evaluations indicate their positive impacts to the walleye fishery. Check <u>NGPC's Fish Stocking</u> website for updates.

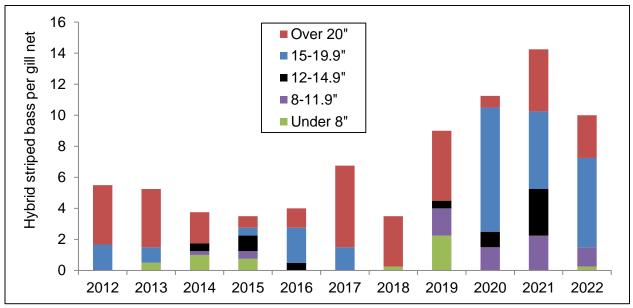
Elwood walleye regulations allow for the daily harvest of four walleye which may include one walleye from 15 to 18 inches and three larger than 18 inches OR four larger than 18 inches. Anglers are only allowed one walleye larger than 22 inches per day. For more information concerning regulations consult the <u>2023 Fishing</u> <u>Guide</u>.

White bass



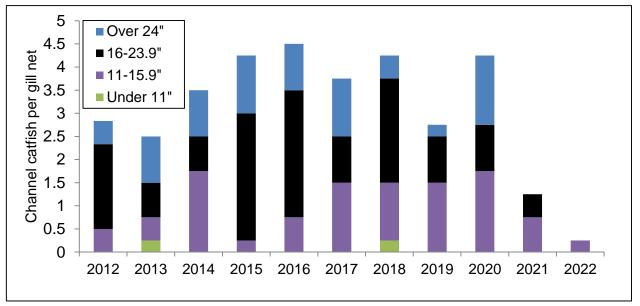
The 2022 survey collected one white bass. This specimen was 13.5" and three years old. There is a low abundance of white bass present in Elwood.

Hybrid striped bass (wiper)



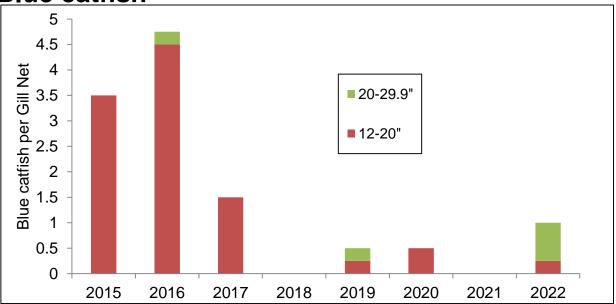
The 2022 data reveals an abundant hybrid striped bass population. Although the abundance of hybrid striped bass larger than 20" was lower, the average length of fish sampled during 2022 was 17.6 inches. The largest observed in 2022's catch was 26". Hybrid striped bass are annually stocked at Elwood to provide a low density trophy fish population. Elwood has a daily bag limit of 3 hybrid bass in combination with white bass; with only one fish longer than 16 inches. To investigate Elwood's harvest regulations visit the <u>2023 Fishing Guide</u>.

Channel catfish



Fewer channel catfish were caught again during 2022. Only one 12.5 inch channel catfish was sampled during the survey. Chances likely remain good to catch a nice sized channel catfish during 2023.

Blue catfish



Blue catfish were first introduced into Elwood in 2014. Additional stockings have occurred in 2017 and 2022. During the 2022 survey there were four blue catfish sampled, with the largest fish measuring 22 inches and weighing 3.4 pounds. Abundant alewife and gizzard shad populations provide ample prey and should allow blue catfish to grow to trophy sizes and provide for unique angling opportunities. The daily bag limit for blue catfish is one. Check the <u>2023 Fishing Guide</u> for details and the <u>NGPC Fish Identification Guide</u> for help differentiating between blue and channel 5 catfish.

Muskellunge

Although muskellunge aren't captured in Elwood's annual survey, they do provide a quality fishery. Muskellunge stockings are dependent on hatchery production that operates on a rotating schedule with northern pike and tiger muskellunge. In many cases, muskellunge must be hatched the year prior to stocking, kept at the hatchery site and fed minnows before stocking. They are approximately 12 inches when stocked. Elwood received a muskellunge stocking in 2022. These fish were observed during walleye stocking evaluations and appeared to be doing well. Another request for muskellunge stocking is in place for 2024.

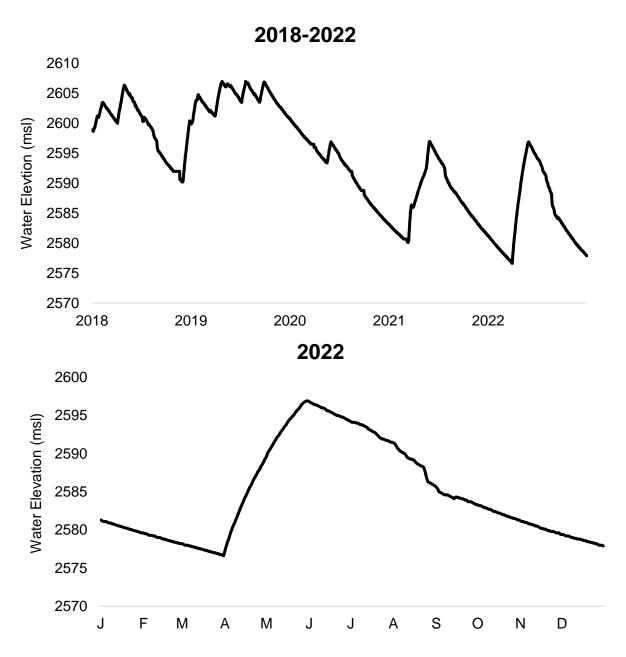


Stockings

Elwood Reservoir receives stockings from NGPC's Hatchery System every year. The species, rates and sizes of stocking vary annually. Below you will find Elwood's stocking history for the past ten years. Many factors can affect future stockings such as inclement weather, gear failure and changes in strategies. For this reason, 2023's request is tentative (*). For more stocking details access <u>NGPC's Fish Stocking Reports</u>.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*
Walleye	Х	Х	Х	Х	Х	Х	Х	Х	Χ	X
Hybrid striped bass	х	Х		Х	Х	Х	Х	Х	X	x
Channel catfish		Х		Х		Х			Х	
Muskellunge		Х		Х					Х	
Spotted bass	Χ	Х	Χ	Х						
Blue catfish	Χ			Χ					Χ	Χ
White bass						Χ				
Crappie (hybrid)							Χ			
Yellow perch							Х	Х		

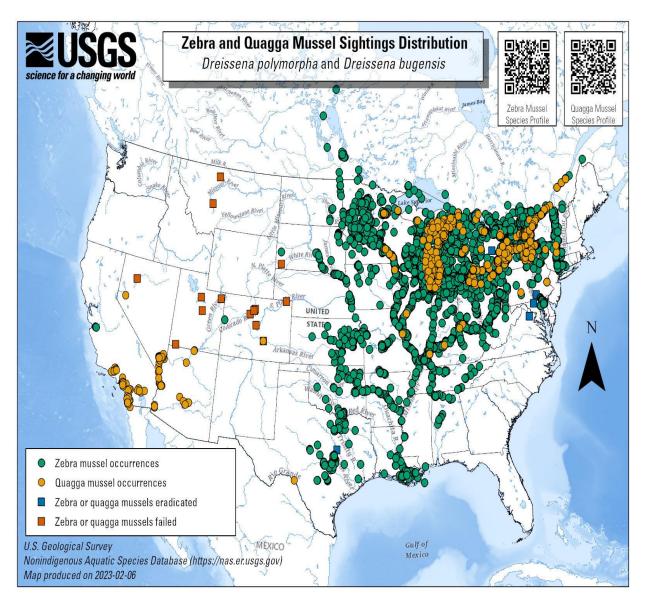
Water Levels



Elwood's <u>water level</u> changes frequently. As of February 10, 2023 this reservoir was at elevation 2576.2' inundating approximately 573 surface acres.

In the future, construction will take place at Elwood that may alter how water elevations are managed. Seepage issues will be addressed along with an inflow reconstruction project. During 2023, Elwood will be filled no higher than 2597' to allow the seepage concern to be addressed. Please follow <u>CNNPID's News</u> <u>Releases</u> for details.

Aquatic Invasive Species (AIS)



• <u>Zebra mussel</u> distribution is expanding, especially in Kansas and South Dakota. Currently the only waterbodies in Nebraska with confirmed zebra mussel infestations are the Missouri River, Lewis and Clark Lake, Lake Yankton and Offutt Base Lake.

• NGPC employs technicians to inspect watercraft for AIS with the goal of preventing infestations. In 2022, 6,627 watercraft were inspected statewide and more are planned in 2023.

• To report AIS utilize 402-471-7602 or ngpc.ais@nebraska.gov

If you have questions or concerns about Elwoood's fishery please contact Jared Lorensen, Biologist 308-535-8025, jared.lorensen@nebraska.gov Brad Eifert, District Mgr. 308-865-5331, brad.eifert@nebraska.gov