Elwood Reservoir 2015 Fall Survey Summary



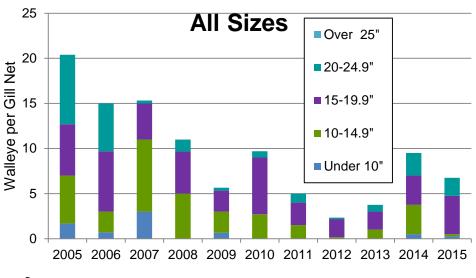
Jared Lorensen, Fisheries Biologist

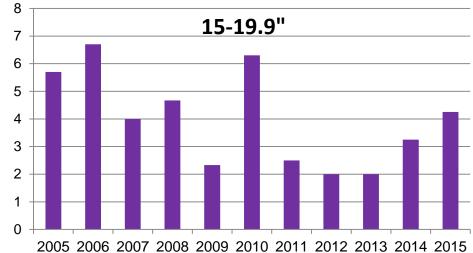
Elwood Reservoir was constructed during the late 1970s and is utilized by Central Nebraska Irrigation & Public Power District (CNPPID) for regulation of irrigation water. This reservoir is located approximately five miles south of Johnson Reservoir. A public access Wildlife Management Area (WMA) is located along the east shoreline and provides a concrete boat ramp, dock, nighttime lighting, parking and an outhouse. Most of the abundant coves and fingers of this reservoir are remote, steep and heavily vegetated making them accessible only by boat. The boating regulation allows internal combustion engines but limits speed to 5 mph and/or non wake producing speeds. As of January 25, 2016 this reservoir was at elevation 2601.8' inundating approximately 1,039 surface acres.

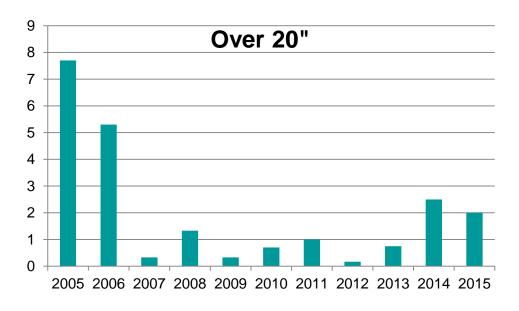


The fishery of Elwood Reservoir is sampled every fall using experimental gill nets, a method commonly used to sample species found primarily in open water. Data collected from these surveys allow biologists to evaluate the population density, size structure, and growth rates for several species. This 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.

Walleye







The walleye population declined during the low water years preceding 2010 due to poor habitat availability, reduced prey populations and angling mortality. Since the return of better habitat, survey data has not indicated the desired walleye population response. Approximately 7 walleye were sampled per gill net in 2015. This sample was predominately comprised by the 15-19.9" length group and the most abundant year class was two year old fish originating from 2013.

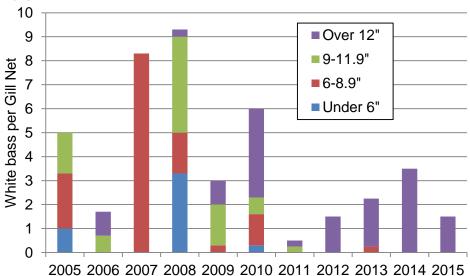
During 2015 walleye fingerlings and fry were stocked. Both were chemically marked. This mark isn't outwardly noticeable as it only leaves a mark on bone discernable only using specialized lighting and microscopy. Unfortunately, abundance of young-of-year walleye was too low to collect a representative sample for testing.

Different walleye stocking strategies are being discussed. The 2016 stocking may be different from years past. Check <u>NGPC's Fish Stocking</u> website for updates.

A daily bag limit of four walleye may include one walleye from 15 to 18", and three or four longer than 18" and only one 22" or longer in the daily bag. The primary objective is to protect walleye through age three, thereby increasing abundance of larger fish. This regulation will be evaluated and future regulation changes will be dependent on the response of the walleye population to this regulation along with water levels. For more information concerning regulations consult the 2016 Fishing Guide.

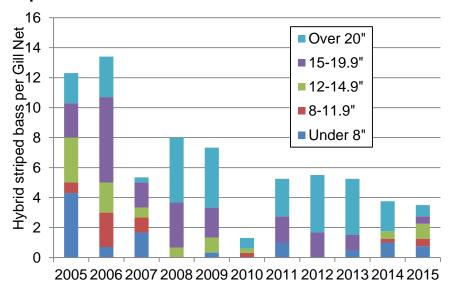


White bass



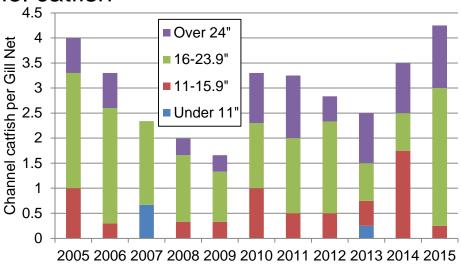
There has been a resurgence of white bass since 2003 when zero were captured but the 2015 survey collected 12"+ white bass only. The maximum length observed was 15.6". These white bass were comprised of age four and five year old fish. White bass reproduction and recruitment can be inconsistent. White bass survey data also is inconsistent from year to year due to their schooling behavior. To investigate Elwood's harvest regulations visit the 2016 Fishing Guide.

Hybrid striped bass



Although the 2015 survey data indicates a slightly declined hybrid striped bass population it also indicates presence of small fish. This indicates that recent stockings are recruiting. A mean length of 14" and a maximum length of 23" was observed in the 2015 data. These fish represented five length groups and five age groups ranging from age 0-5. Although this population has declined since the early 2000s, it will provide a good fishery in 2016.

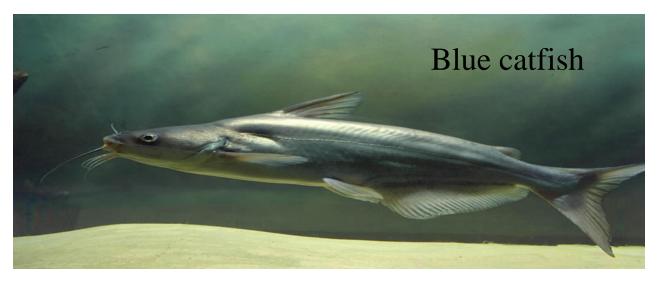
Channel catfish

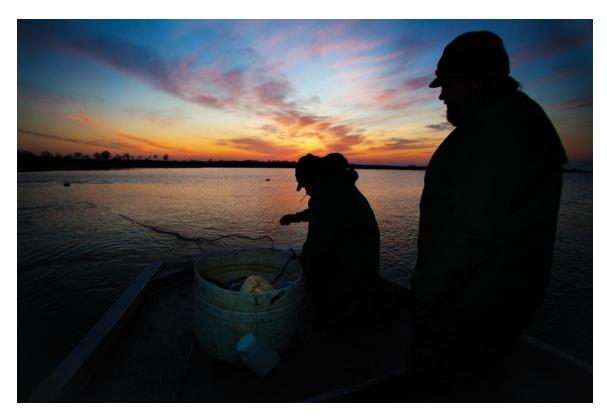


An increased channel catfish population was observed in the 2015 survey due to observed abundance of 16-23.9" fish. Average length of channel catfish sampled in 2014 was 15" with the largest being 30". Chances remain very good to catch a trophy sized channel catfish.

Other

Other species of interest to anglers are also available at Elwood including muskellunge. Stockings of muskellunge have resumed since favorable water levels returned and large specimens have been caught by anglers. Spotted bass are a unique species to Nebraska. They have been stocked in Elwood as their life history characteristics are met well by the habitat available. Blue catfish were first introduced into Elwood during 2014 and 13-16" blue catfish were observed in abundance during the 2015 survey. The abundant alewife and gizzard shad population should support these catfish and they should provide another unique angling opportunity. The daily bag limit for blue catfish is one (1). Check the 2016 Fishing Guide for details and the NGPC Fish Identification Guide for help differentiating between blue and channel catfish.



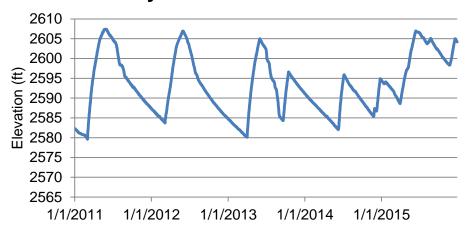


Elwood Reservoir receives stockings from NGPC's Hatchery System every year. Many factors are at play when stocking selections are made. Below you will find Elwood's stocking history for the past eleven years. For more stocking details access NGPC's Fish Stocking Reports.

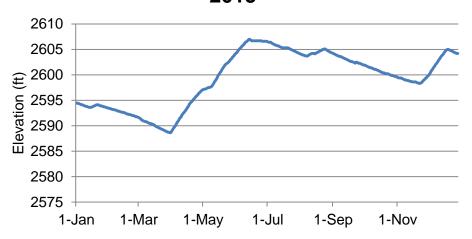
_	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Walleye	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X
Hybrid striped												
bass	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ
Channel												
catfish				Χ		Χ				Χ		Χ
Muskellunge	Χ							Χ		Χ		X
Alewife				Χ								
Gizzard shad				Χ						Χ		
Yellow perch						Χ	Χ					
Black crappie							Χ					
Bluegill								Χ				
Largemouth												
bass								Χ				
Rock bass									Χ			
Spotted bass									Χ	Χ	Χ	Χ
Blue catfish											Χ	

For additional information about the fishery of Elwood Reservoir please contact Brad Newcomb, District Mgr. 308-865-5310, brad.newcomb@nebraska.gov Jared Lorensen, Biologist 308-535-8025, jared.lorensen@nebraska.gov

Elwood Water Elevation January 2011 - December 2015

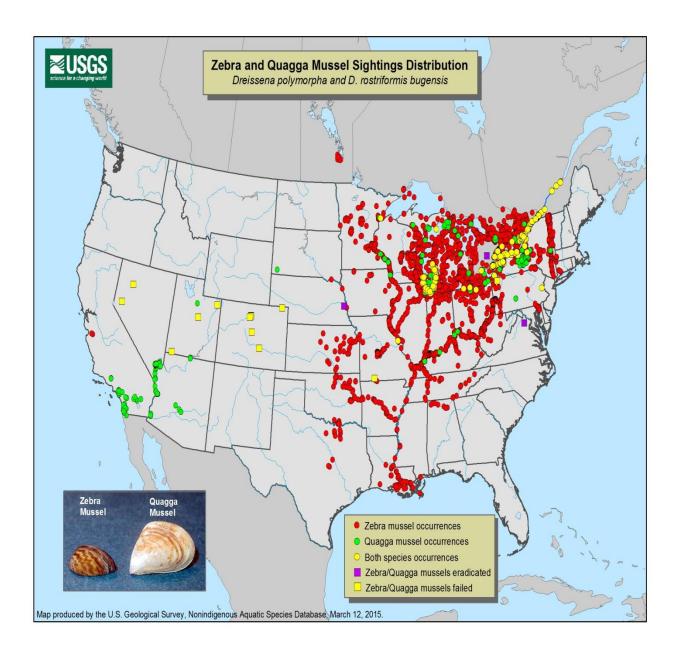


Elwood Water Elevation 2015



Elwood's water level changes frequently. Follow water level fluctuations at CNPPID's site.

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 <u>map</u> 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.





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!

