Elwood Reservoir 2014 Fall Survey Summary



Jared Lorensen, Fisheries Biologist

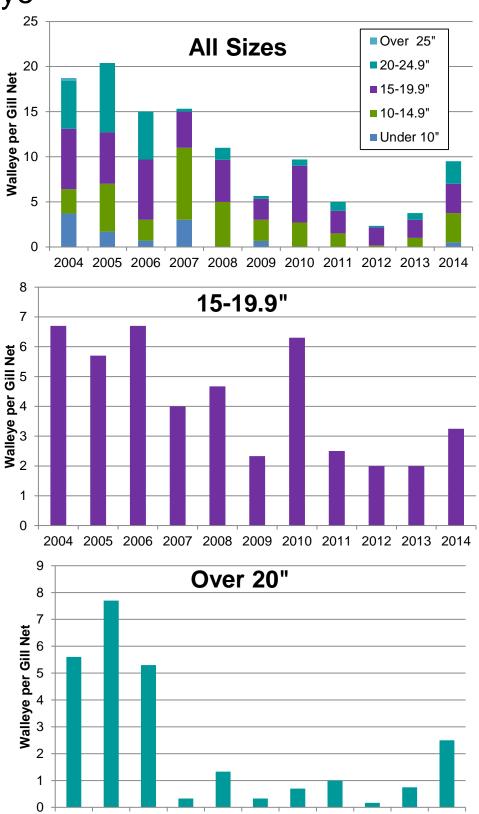
Elwood Reservoir was constructed during the late 1970s and is utilized by Central Nebraska Irrigation & Public Power District (CNPPID) for regulation of irrigation water. This reservoir is located approximately five miles south of Johnson Reservoir. A public access Wildlife Management Area (WMA) is located along the east shoreline and provides amenities including 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 7, 2015 this reservoir was at elevation 2594.1' inundating approximately 883 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



2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

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 but the 2014 survey data indicates a slight improvement. Approximately nine walleye were sampled per gill net in 2014. The observed increase was strongly influenced by the 10-14.9" length group. These fish originate from the 2013 year class and have recruited well into the adult population.

During 2014 walleye fingerlings and fry were stocked. The fry were chemically marked. This mark isn't outwardly noticeable as it only leaves a mark on bone discernable by using specialized lighting and microscopy. Young-of-year walleye were collected during the fall of 2014 and are currently being analyzed for presence of marks.

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 2015 Fishing Guide.



ATTENTION ANGLERS

Special Regulations for Elwood Reservoir

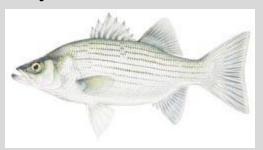


Walleye

Daily bag limit of four (4) walleye may include:

One walleye from 15 through 18 inches Three OR four walleye over 18 inches No more than one walleye over 22 inches

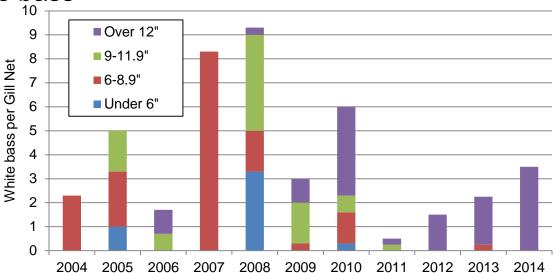




White bass / Wipers

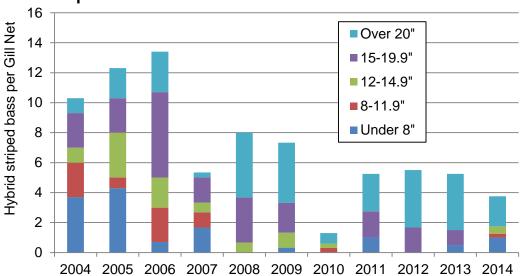
Daily bag limit of three (3) fish (combined) No more than one fish over 16 inches in daily bag

White bass



There has been a resurgence of white bass since 2003. The 2014 survey collected 12"+ white bass only. Reproduction and recruitment can be inconsistent especially in waters with alewife. Hopefully a strong year class will recruit into the population soon. White bass survey data also is inconsistent from year to year due to their schooling behavior. The white bass regulation at Elwood includes a daily bag limit of three (in conjunction with hybrid striped bass) with only one greater than 16".

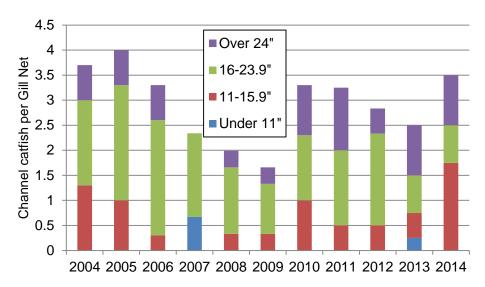
Hybrid striped bass



Although the 2014 survey data indicates a slightly declined hybrid striped bass population it also indicates presence of small fish. The 2013 and 2014 stocking seem to be recruiting well. A mean length of 16.5" and a maximum length of 25" was observed in the 2014 data. These fish represented seven ages ranging from age 0-8. Although this population has declined since the early 2000s, it will provide a good fishery in 2015.

The hybrid striped bass regulation at Elwood includes a daily bag limit of 3 (in conjunction with white bass) of 15 with only one greater than 16".

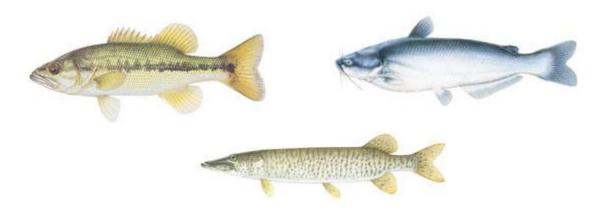
Channel catfish

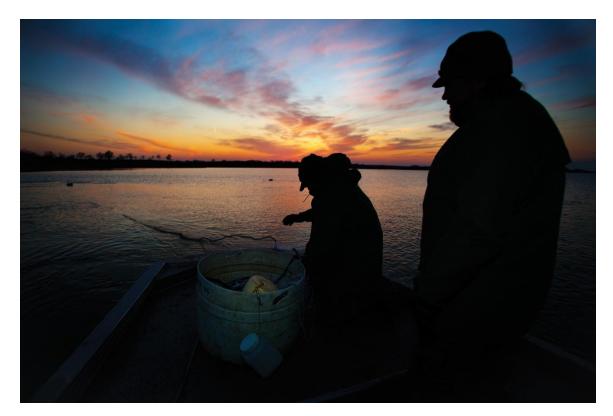


An increased channel catfish population was observed in the 2014 survey. Small fish contributed primarily to this increase and are recruits from the 2013 stocking. Average length of channel catfish sampled in 2014 was 19" with the largest being 30". Chances remain very good to catch a trophy sized channel catfish.

Elwood is **NOT** included in the newly increased channel catfish bag limit found at nearby reservoirs. The daily bag limit of channel catfish at Elwood remains at five (5). Check the 2015 Fishing Guide for details and the NGPC Fish Identification Guide

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. The abundant alewife and gizzard shad population should support these catfish and they should provide another unique angling opportunity in the future. The daily bag limit for blue catfish is one (1). Check the 2015 Fishing Guide for details and the NGPC Fish Identification Guide for help differentiating between blue and channel catfish.

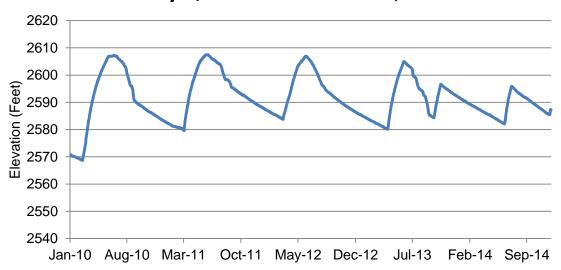




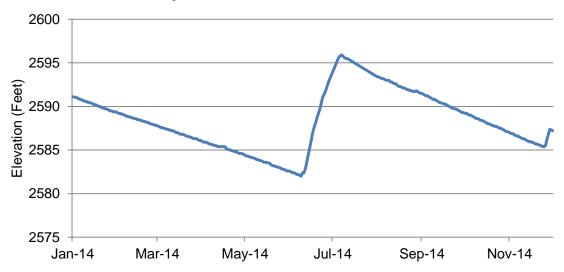
Elwood Reservoir receives stockings from NGPC's Hatchery System every year. Many factors are at play when stocking selections are made. Below you will find Elwood's stocking history for the past eleven years. For more stocking details access NGPC's Fish Stocking Reports.

-	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Walleye	Х	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х
Hybrid striped bass	Х	Х	X	X	X	X	X	X		X	X
Channel catfish				Х		Х				Х	
Muskellunge	Х							Х		Х	
Alewife				Х							
Gizzard shad				Х						Х	
Yellow perch						Х	Х				
Black crappie							Х				
Bluegill								Х			
Largemouth bass								Х			
Rock bass									Х		
Spotted bass									Х	Х	Х
Blue catfish											×7_

Elwood Water Elevation January 1, 2010 - December 1, 2014



Elwood Water Elevation January 1, 2014 - December 1, 2014



Elwood's water level changes frequently. Follow water level fluctuations at CNPPID's Reservoir/River Data 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

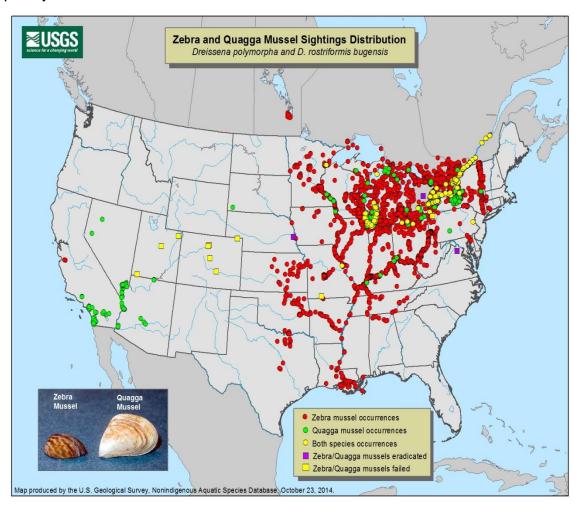
All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

Protect Your Waters—Remember to <u>CLEAN</u>, <u>DRAIN</u>, and <u>DRY!</u>



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 Elwood's fishery please contact

Jared Lorensen, Biologist 308-535-8025

jared.lorensen@nebraska.gov

Brad Newcomb, District Mgr. 308-865-5330

brad.newcomb@nebraska.gov