

Elwood Reservoir

2013 Fall Survey Summary



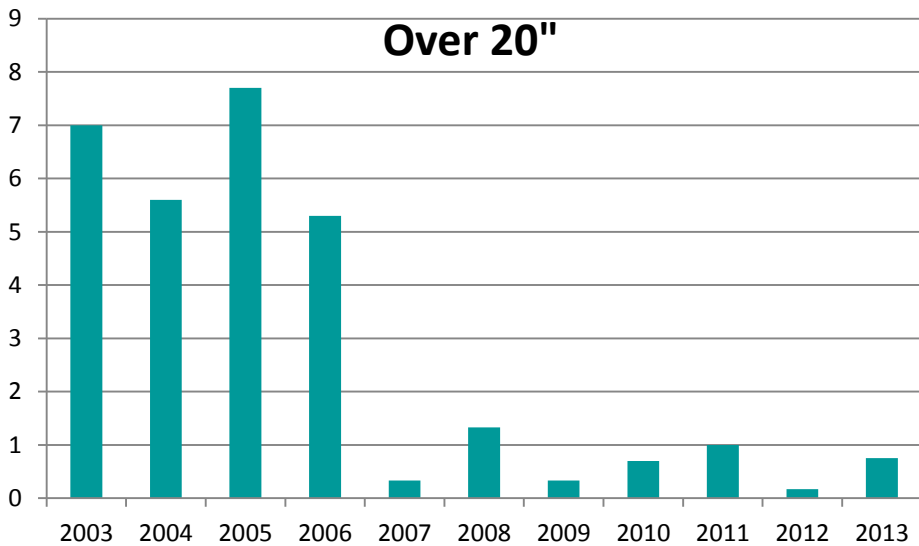
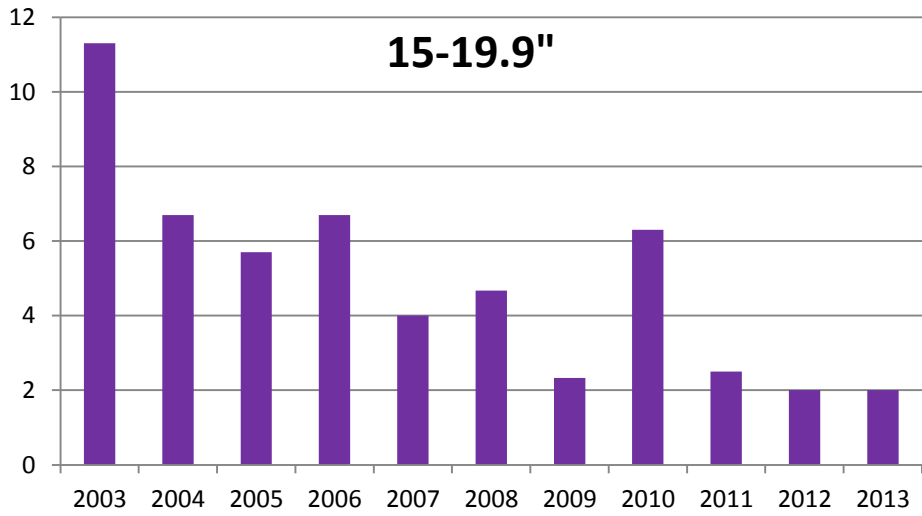
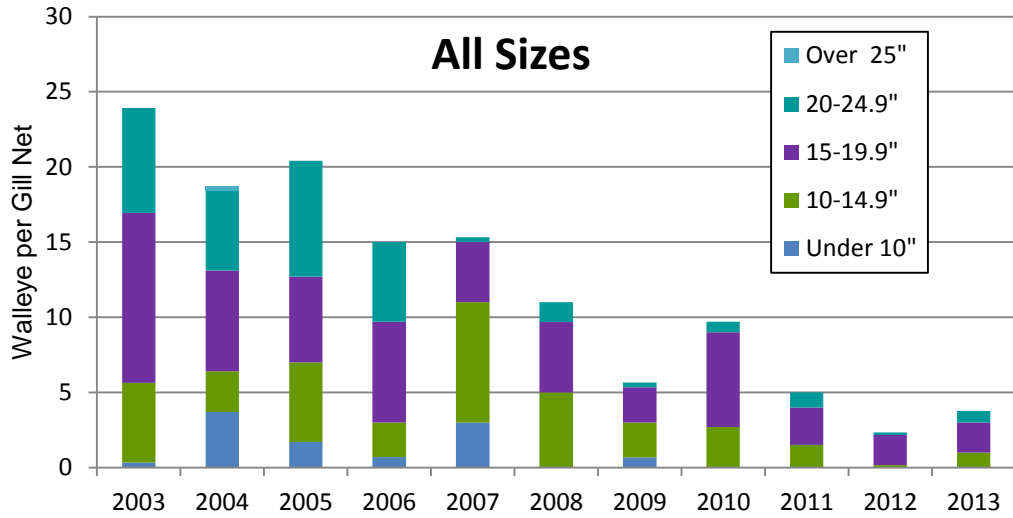
Jared Lorensen, Fisheries Biologist

Elwood Reservoir is utilized by Central Nebraska Irrigation & Public Power District (CNPPID) for regulation of irrigation water. After several years of low water conditions, Elwood has filled to conservation pool during each spring since 2010. This occurrence floods approximately 500-600 acres of shoreline but this is not expected to occur during 2014. Approximately 10 feet of water elevation was gained from the South Platte River Flood during Fall 2013.



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. These nets are made of clear monofilament mesh strung between a weighted line and a floating line. Gill nets create an invisible wall in the water column that fish cannot sense so they are entangled by their gills as they attempt to move through this mesh. 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 4 walleye were sampled per gill net in 2013. Walleye fingerlings (1.3") were stocked at an approximate rate of 116 per surface acre for a total of 155,110 in 2013. These fingerlings were marked and biologists are currently in the process of determining their survival compared to 1,460,300 walleye fry that were also stocked during 2013. The mark these walleye received is not discernable to the angler. Otolith bones must be removed and analyzed with specialized equipment to detect this marking. Similar walleye stockings and a similar marking experiment are planned for 2014. In addition to walleye, 600 adult gizzard shad were stocked into Elwood to supplement the existing prey. These additional stockings of walleye fry and gizzard shad are aimed to help understand current recruitment factors and improve the current walleye population.

Another part of the walleye recovery effort includes a **new harvest regulation** that took effect **January 1st 2013**. This new regulation replaces the protected slot limit (18-24") that was in effect from 2003 through 2012 and is exactly the same as the regulation for walleye at Merritt, Calamus and Harlan reservoirs. 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 2013-14 Fishing Guide at <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf>.



The other rule change that affects Elwood anglers is the statewide striped, hybrid & white bass one-over length daily bag limit regulation. As of January 1, 2013 only one striped, hybrid or white bass may be kept over 16 inches. This regulation change was made to decrease harvest of hybrid striped bass greater than 16 inches.

ATTENTION ANGLERS

Special Regulations for Elwood Reservoir



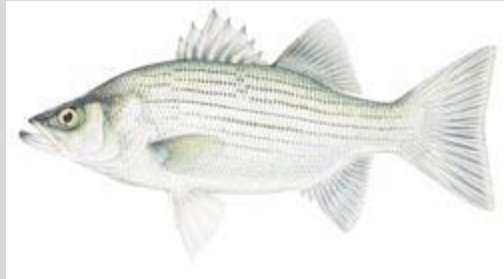
Walleye

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

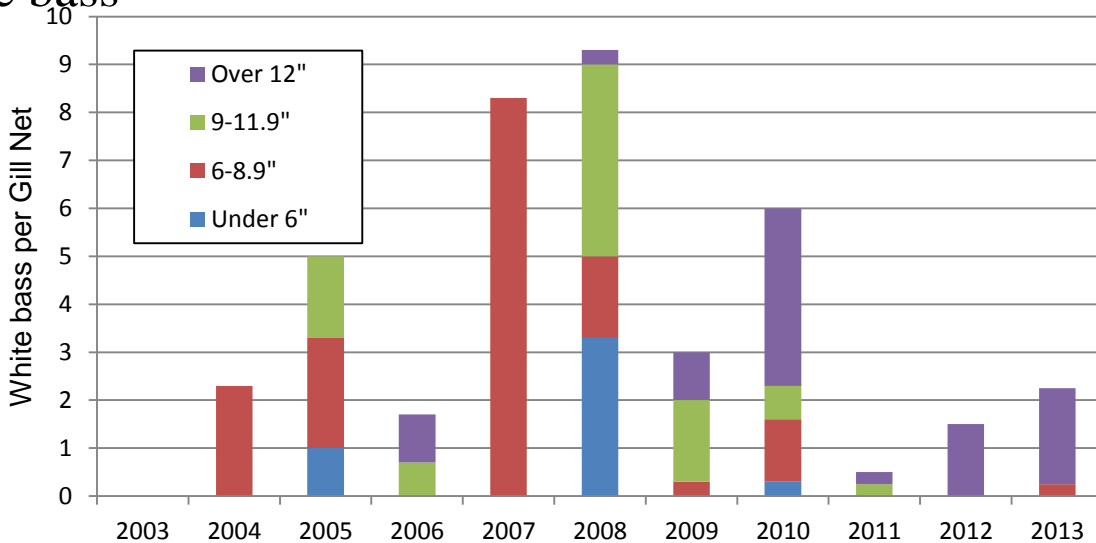


White bass / Wipers

Daily bag limit of three (3) fish (combined)

No more than one fish over 16 inches in daily bag

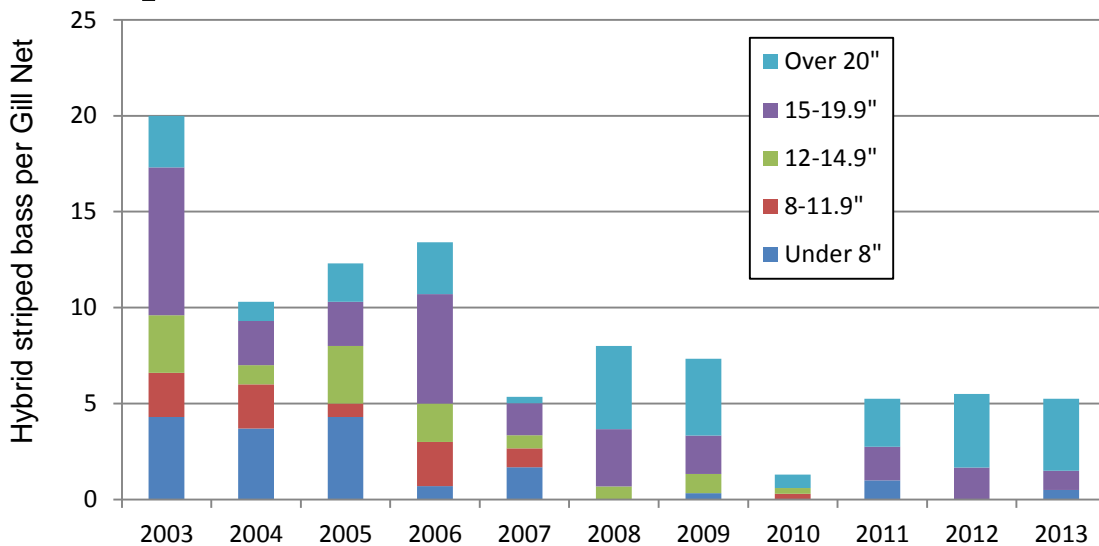
White bass



There has been a resurgence of white bass since 2003 but recent survey data does not show it. White bass survey data is inconsistent from year to year due to their schooling behavior. White bass (12"+) will be available for anglers in 2014.

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

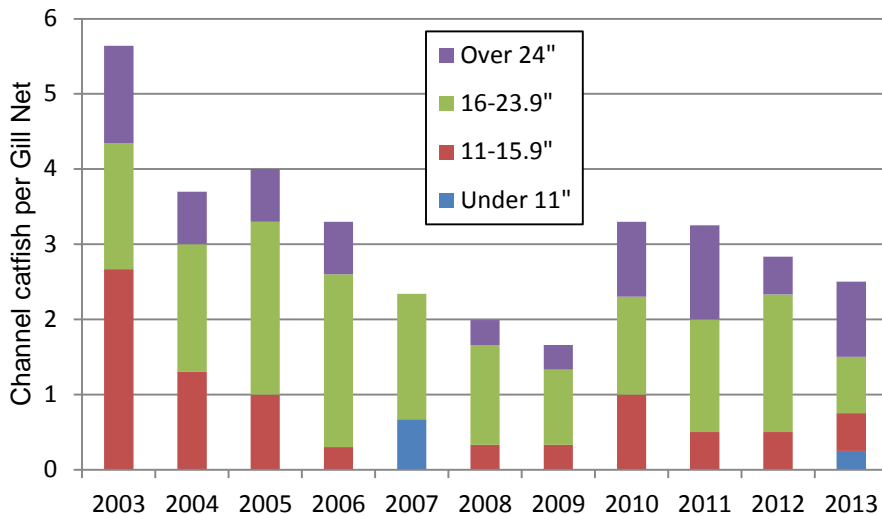
Hybrid striped bass



The 2013 survey data may indicate a holding pattern with approximately five hybrids captured per gill net with a mean length of 20.5" during 2013. These fish represented three length groups and eight age groups ranging from age 0-8. Continuation of improved water levels will contribute to an improved fishery. Although this population has declined since the early 2000s, it will provide a good fishery in 2014. Hybrid striped bass stocking occurred during 2013 and a similar stocking is planned for 2014.

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



Channel catfish survey data was similar to that observed in 2012. The current population appears to be the strongest observed since 2006. Improved water levels and supplemental stockings in 2007, 2009 and 2013 are likely contributing to this observation. Average length of channel catfish sampled in 2013 was 20" with the largest being 30". Chances remain very good to catch a trophy sized channel catfish.

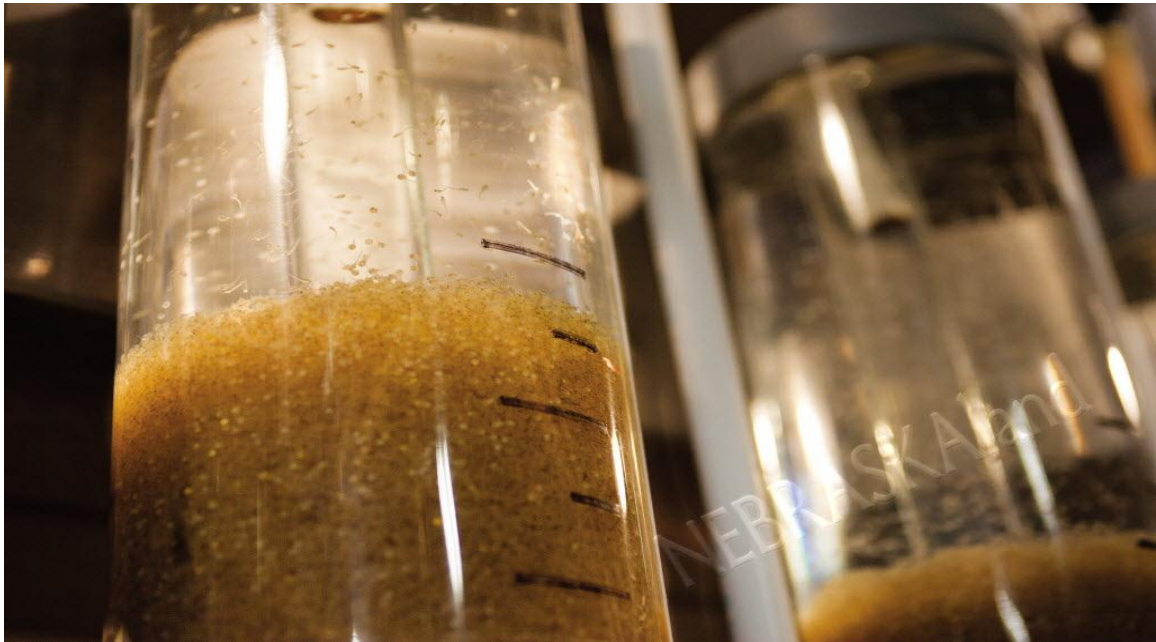
The channel catfish regulation at Elwood includes a daily bag limit of five.

Stockings

Muskellunge offer another species for anglers to pursue and large muskies have been caught at Elwood. During 2013, 450 – 13" muskellunge were stocked. Assuming water operation remains normal, future management will involve maintenance stockings every other year. Muskellunge are regulated with a statewide 40" minimum length limit and daily bag limit of one.

To take advantage of Elwood's unique habitat, 3,600 spotted bass were stocked during 2013. A stocking request of 11,500 spotted bass is in place for 2014. An initial stocking of blue catfish is also requested to occur during 2014.



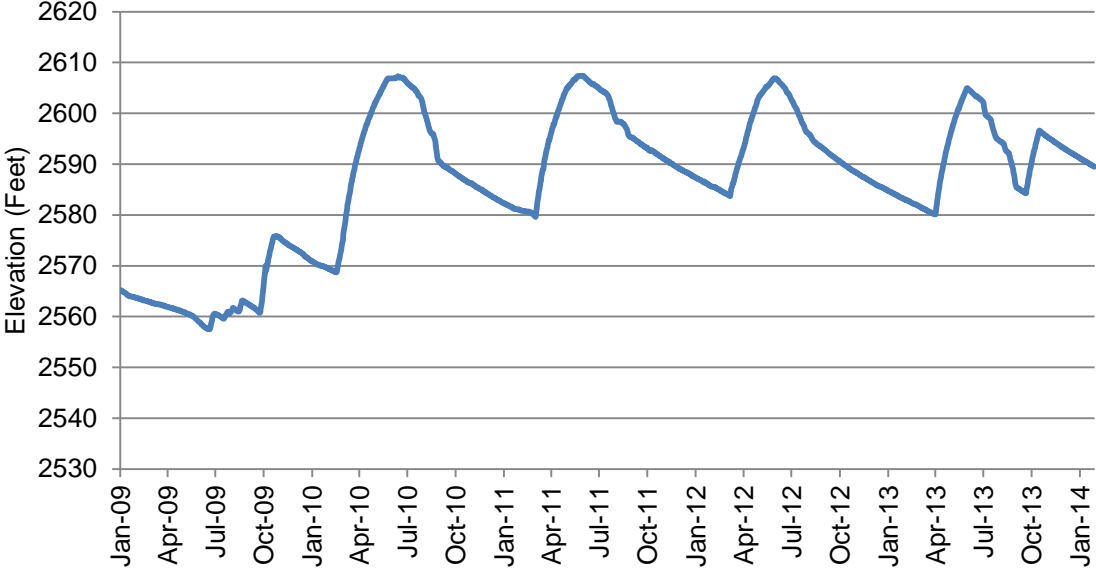


Elwood Reservoir receives stockings from NGPC's Hatchery System every year. Many factors are at play when stocking selections are made. Below you will find Elwood's stocking history for the past eleven years. For more stocking details access <http://outdoornebraska.ne.gov/fishing/guides/fishguide/FGstocking.asp>.

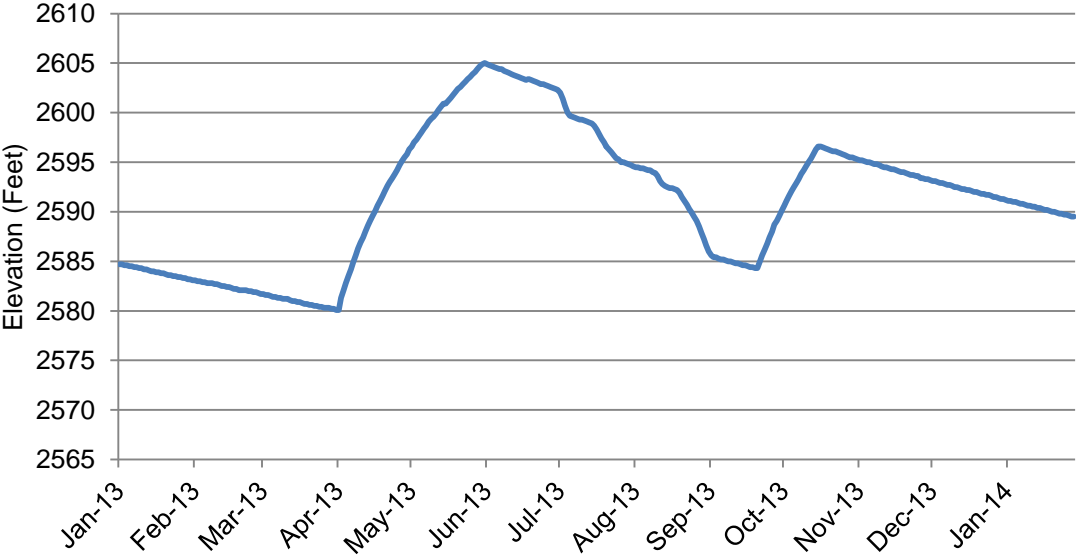
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Walleye	X	X	X	X	X	X	X	X	X	X	X
Hybrid striped bass	X	X	X	X	X	X	X	X	X		X
Channel catfish	X				X		X				X
Muskellunge		X							X		X
Alewife					X						
Gizzard shad					X						X
Yellow perch							X	X			
Black crappie								X			
Bluegill									X		
Largemouth bass									X		
Rock bass										X	
Spotted bass										X	X

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 Level 2009 - January 2014



Elwood Water Level January 2013 - Jan 2014



Elwood's water level changes frequently. Follow water level fluctuations at http://www.cnppid.com/Elevation_Flows2.htm.



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!**

Zebra and Quagga Mussels

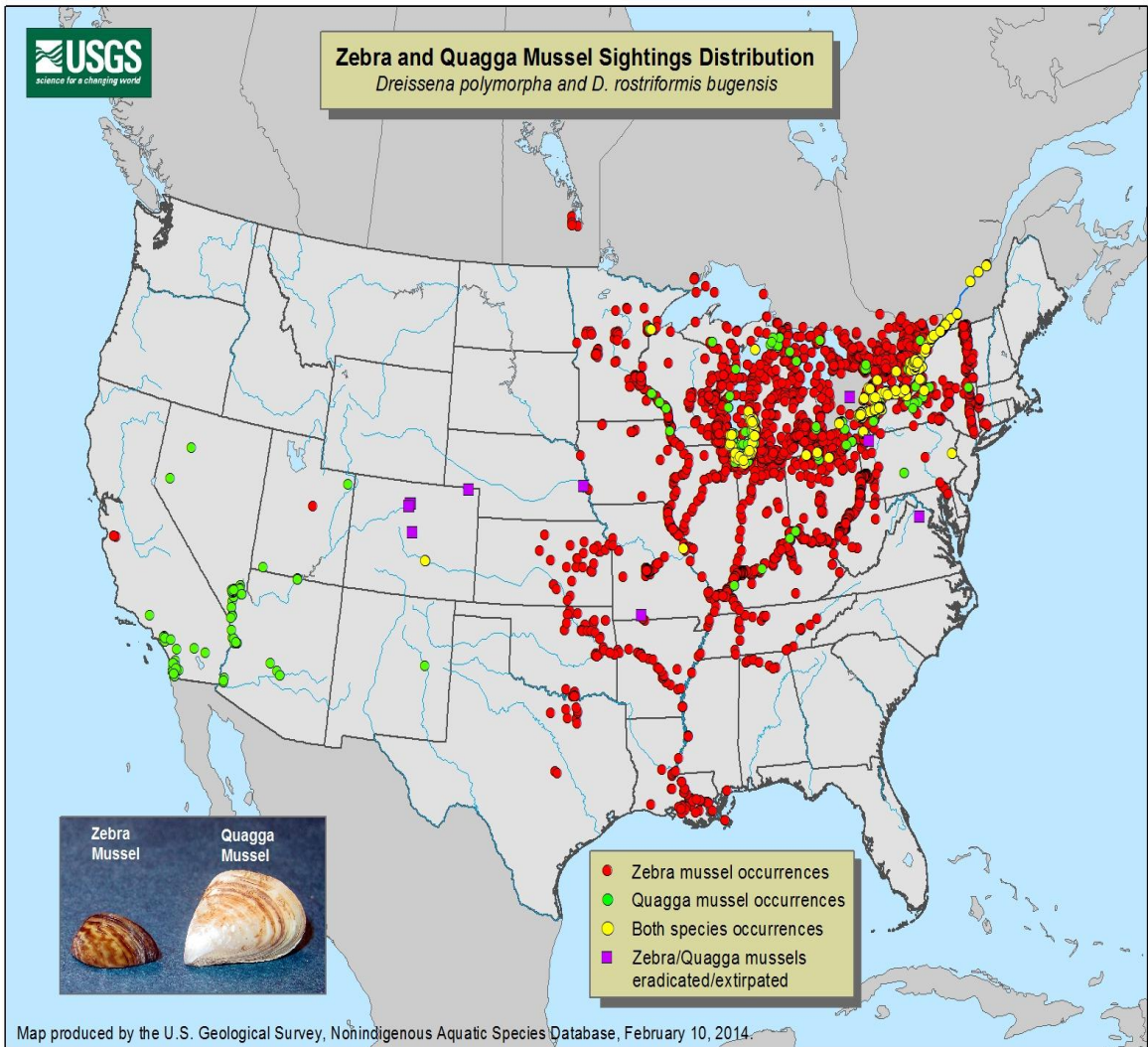
Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes and continue to **Clean, Drain and Dry** their equipment and boats prior to launching at a new waterbody. Zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in neighboring states. Monitoring was completed at several Nebraska reservoirs during 2011, 2012 and 2013 including Elwood. No evidence of zebra or quagga mussels was found. For more information concerning invasive species or to report a finding of invasive mussels access <http://neinvasives.com/report-a-sighting/>.

Anglers and boaters using Nebraska waters this season need to be aware of **new regulations** dealing with aquatic invasive species. Signs similar to that on the previous page are posted at Elwood's boat ramp. Starting January 1, 2013 the following regulations went into effect to help prevent the spread of unwanted species.

- Any watercraft that has been on a Nebraska waterbody must drain the lake water from their compartments, equipment or containers before leaving the launch area. It is illegal to dump baitfish into a Nebraska waterbody.
- Livewells need to be drained prior to leaving a launch area: plan ahead and bring a cooler for harvested fish.
- All aquatic vegetation from that waterbody attached to the watercraft and/or trailer must be removed before leaving the launch area.



Distribution of zebra and quagga mussels is getting closer and closer to SW Nebraska. The most recent finding was at Lake Waconda near Glen Elder, Kansas during the summer of 2013. This map is updated often and can be accessed at http://nas.er.usgs.gov/taxgroup/mollusks/zebramussel/maps/current_zm_quag_map.jpg.



If you have questions about Elwood's fishery please contact

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OR

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