Swanson Reservoir
2013 Survey Summary

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Fish populations are sampled each fall at Swanson Reservoir using gill nets, a method commonly used to sample fish found in open water, such as walleye, white bass, channel catfish and hybrid striped bass. Gill nets are set on approximately the same dates and locations each year to reduce variability. However, environmental factors can play a strong role in catch rate and composition data. Due to this variability biologists look at trends over time when making most management decisions rather than kneejerk decisions based on one data point.

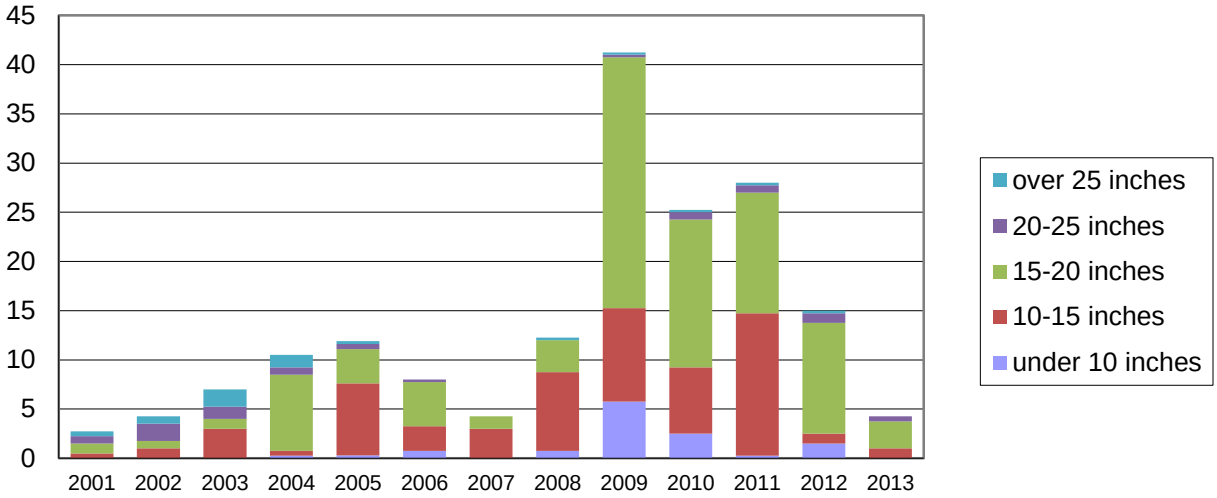
Beginning in 2009 the walleye population at Swanson improved substantially compared to historic data. This improvement was due to an increase in water levels and the resulting flooded vegetation which boosted the productivity, recruitment, and the availability of habitat in the system. This is also commonly called a “new lake effect”. Due to drought conditions beginning in 2012, the elevation has dropped and most flooded timber mentioned previously, is high and dry. This drop in elevation along with increased fishing pressure means a decrease in walleye numbers which was indicated during the 2013 fall surveys. Survey numbers have been declining but dipped below 5 fish per net in 2013 which matches up well with other data collected during lower elevations such as 2001, 2002, and 2007. Based on historic data the walleye population will stabilize somewhere around 5-10 fish per net until water levels increase again.

White bass populations also responded favorably to the increased water level, boasting a strong increase beginning in 2007. Survey data has been somewhat variable, bouncing from 5 fish per net in 2011 to 19 fish per net in 2012 and back down to 4 fish per net in 2013. Even though the survey data is variable the size structure does seem to be pretty stable with good number of fish in the 12-15 inch class. In addition to white bass, wipers were stocked in 2013 and will be stock at moderate levels into the future to maintain a limited population. Most of the fish sampled were large adults greater than nine inches in length.

Biologists surveyed 20 channel catfish per net in 2013. The survey data at Swanson indicates a strong population of catfish and outstanding size structure. Biologist even sampled several fish greater than 28 inches long. In addition to channel catfish, blue catfish have been introduced to Swanson Reservoir and have reached the 20 inch mark in most cases. Bear in mind, that the daily bag limit for blue catfish is 1 fish per day rather than the five fish daily bag that is allowed on channel catfish. Blue cats are different from channel catfish in several ways. Blue catfish have a pronounced hump on their backs and a straight anal fin and lack spots. Channel catfish have a rounded anal fin and may or may not have spots, and lack a pronounced hump.

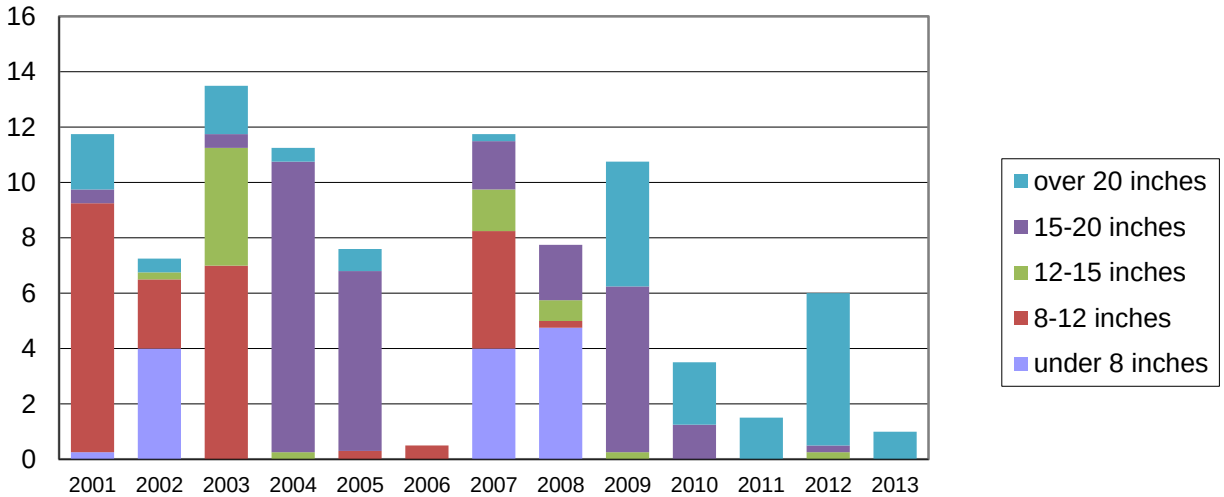
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2013 summary graphs of some local waterbodies for comparison.

Walleye Catch Per Unit Effort



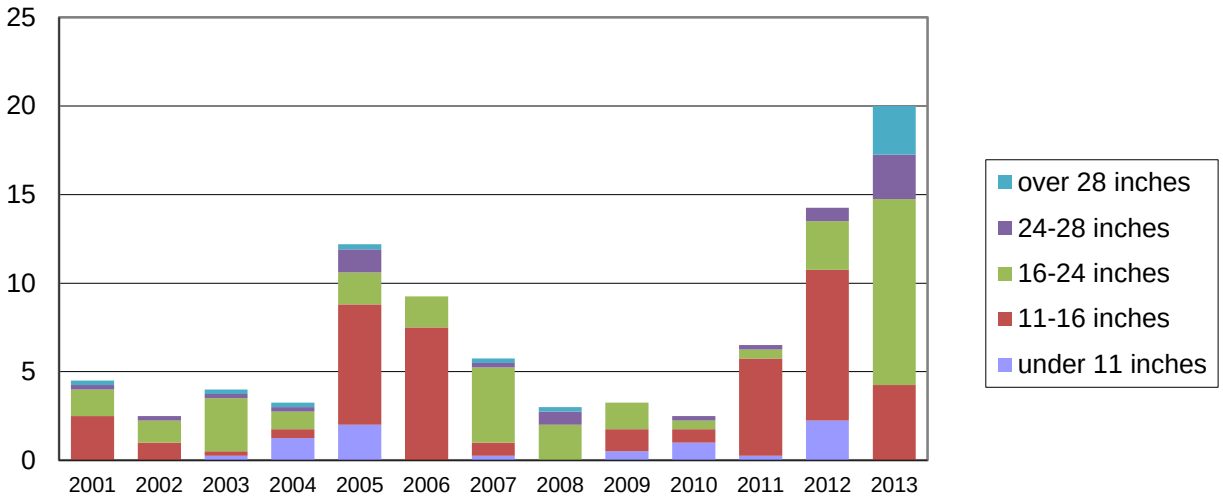
Walleye numbers have been very good at Swanson for the past few years. This increase is due to increased water levels and a change in stocking strategy. However, survey results from 2013 indicate a fairly sharp decline in 2013 to just less that 5 fish per net. This decline can be explained by an increase in angling pressure since 2009 and reservoir drawdowns due to the current drought conditions. Angler success will probably be down in 2014 and could remain that way until water levels recover.

Wiper Catch Per Unit Effort



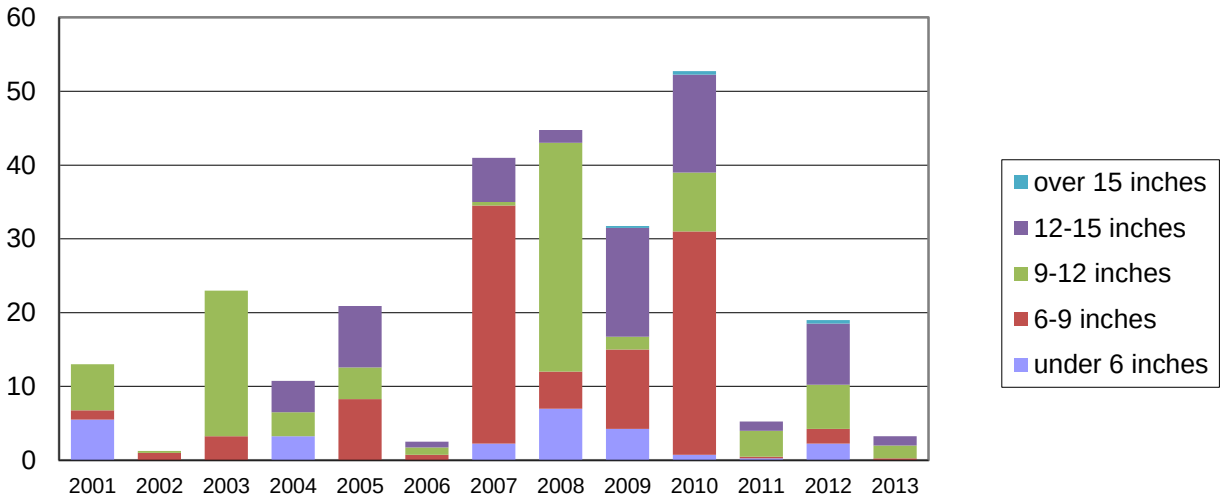
Wiper numbers have been variable at Swanson for several years. Wiper stockings have been reduced at Swanson due to increased walleye and white bass catches and minimal angler effort as indicated by creel data. Wipers were stocked in 2013 and will be stocked every 3-5 years into the future to provided opportunity for those seeking wipers. Catch rates were low in 2013 at only 1 fish per net. Catch rates should improve but wipers will be managed as a low density trophy fish.

Channel Catfish Catch Per Unit Effort



Catfish numbers have been increasing at Swanson due to an aggressive stocking policy. Biologists sampled 20 catfish per net in 2013. Its also important to point out that the majority of fish sampled were large fish. Biologists even sampled a few fish greater than 28 inches. Blue catfish are also being stocked in order to create a unique fishery for catfish anglers.

White Bass Catch Per Unit Effort

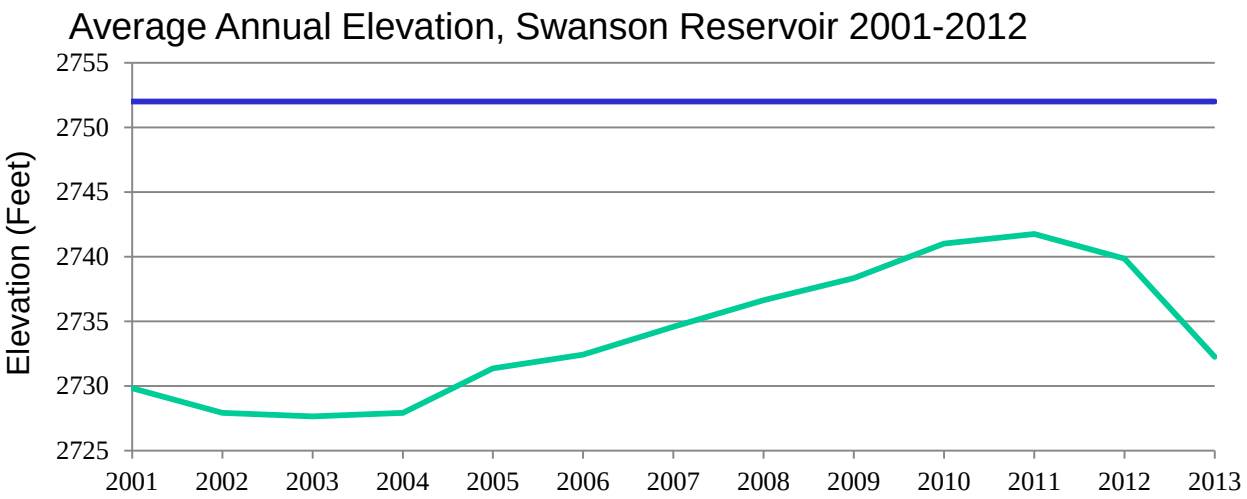


Biologists sampled 3 white bass per net in 2013. White bass numbers have been variable in the last few years but have been down when compared to survey results from 2007-2010 but are comparable to historic catch data at Swanson Reservoir. Staff will continue to monitor white bass numbers at Swanson and will change management as necessary to maintain a white bass fishery for anglers.

Swanson Reservoir Fish Stocking Summary

Year	Walleye	Wiper	Channel Catfish	Blue Catfish	Yellow Perch
2013	2,800,000 (fry)	13,513 (1.2”)			13,441 (2.25”)
2012	7,570,000 (fry)		20,175 (10.5 “)		
2011	3,470,000 (fry)			9985 (5.5”)	12,420 (2.5”)
2010	6,300,000 (fry)		15,756 (10”)		
2009	2,600,000 (fry)			16,452 (10”)	35,000 (1”)

Above is a table of fish stockings for the last 5 years at Swanson Reservoir. The species stocked, number stocked, and fish size are presented in the table. Multiple species are stocked annually at Swanson and a comprehensive database of fish stockings can be found at the Nebraska Game and Parks website or by following the ling below. Stocking Database



Water levels at Swanson recovered nicely beginning in 2009 but appear to be on the way back down. The elevation in December 2013 was 2729 feet and it appears that the reservoir will remain at these lower elevations at least until we cycle out of this drought pattern. The dark blue line indicates the top of the active conservation elevation and the green line indicates the mean reservoir elevation. More detailed information can be obtained from: Current Elevation

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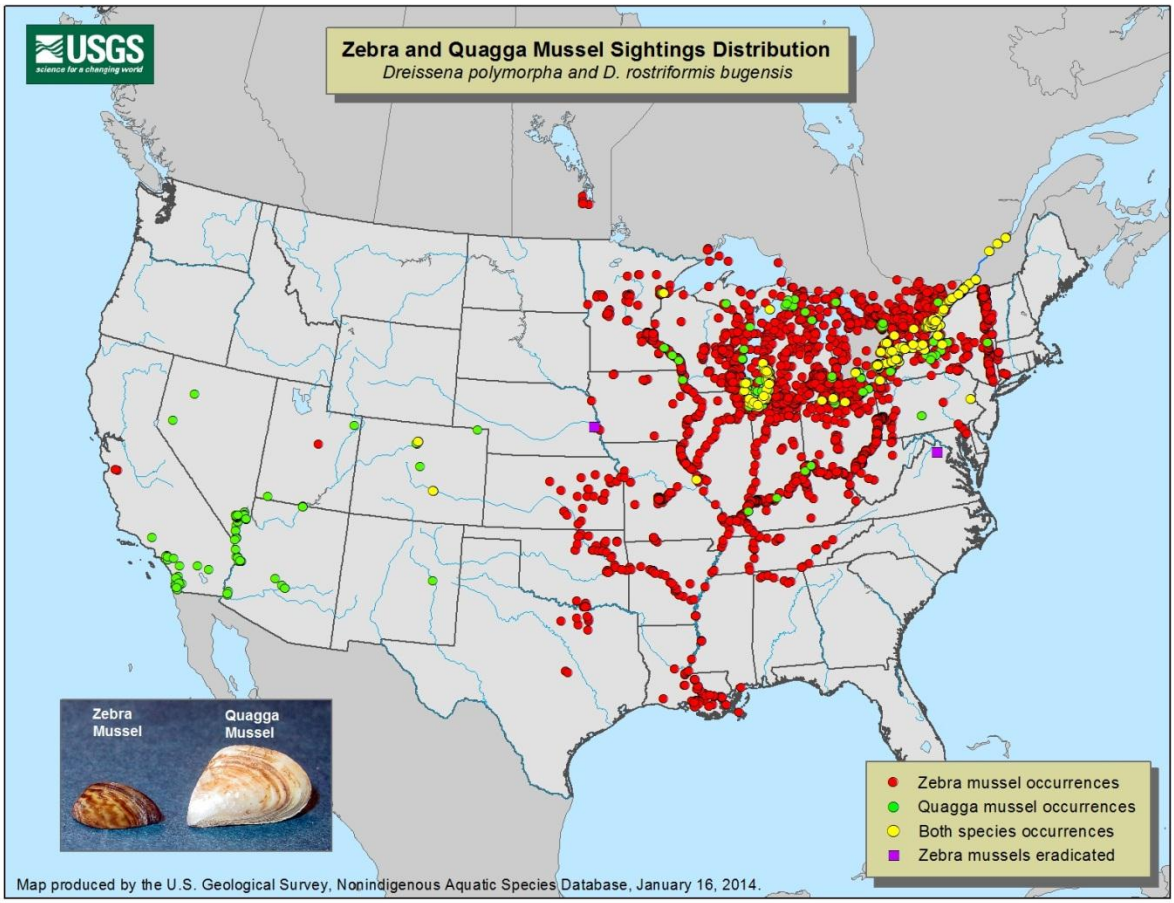
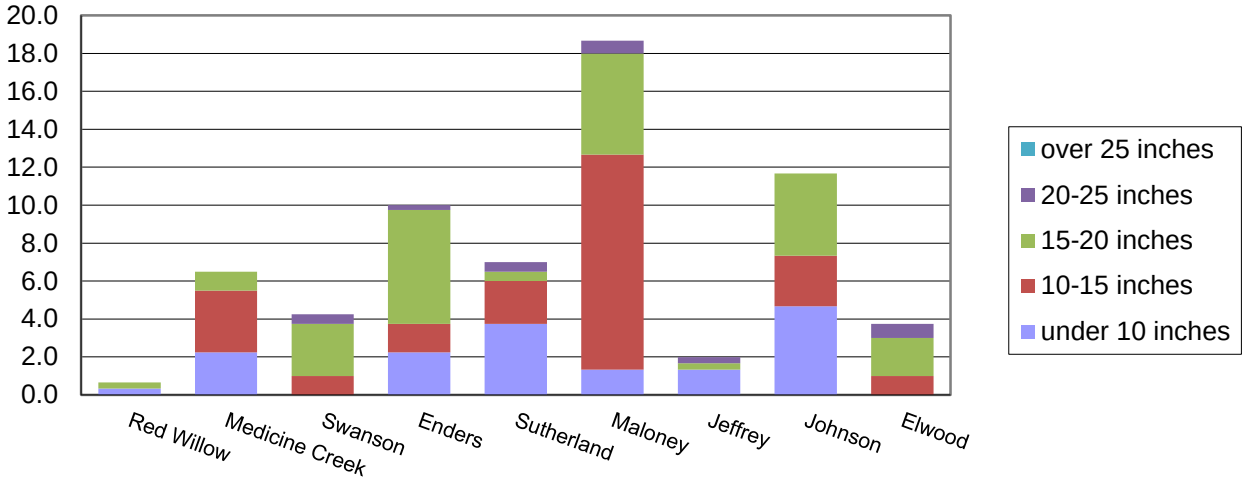
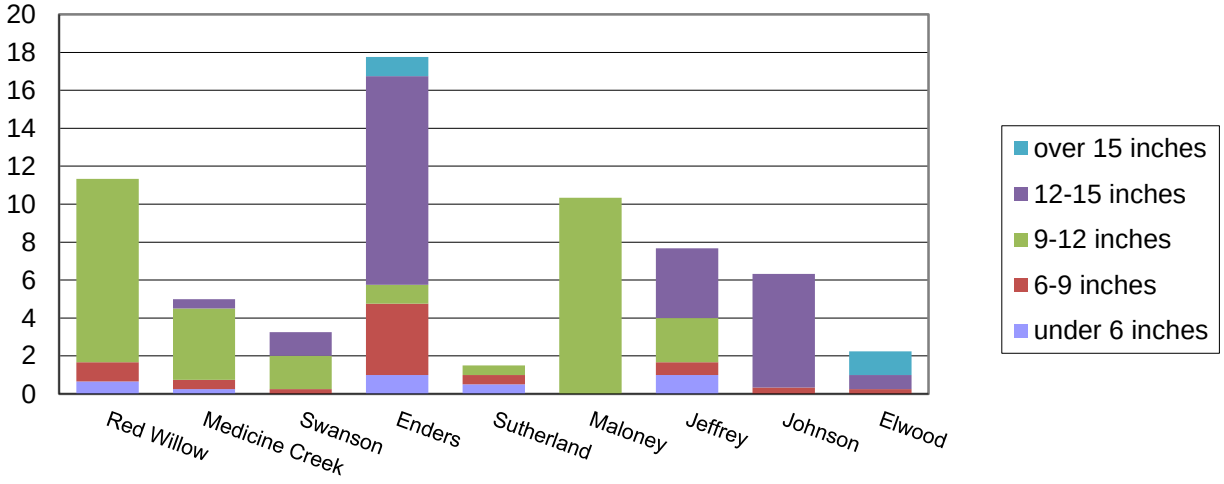


Aquatic invasive species (AIS) are getting closer to Nebraska waters all the time and have the potential for strong negative impacts on the State's aquatic resources. The spread of AIS can be prevented using the Clean, Drain, and Dry technique. Before leaving any water body make sure to drain or dump any standing water and remove debris that might be attached to the boat or trailer. If possible allow the watercraft to completely dry before launching at another area. Follow the link: Nebraska Invasives Species Program or call 402-472-3133 to report any possible AIS sightings or for more information about AIS in Nebraska

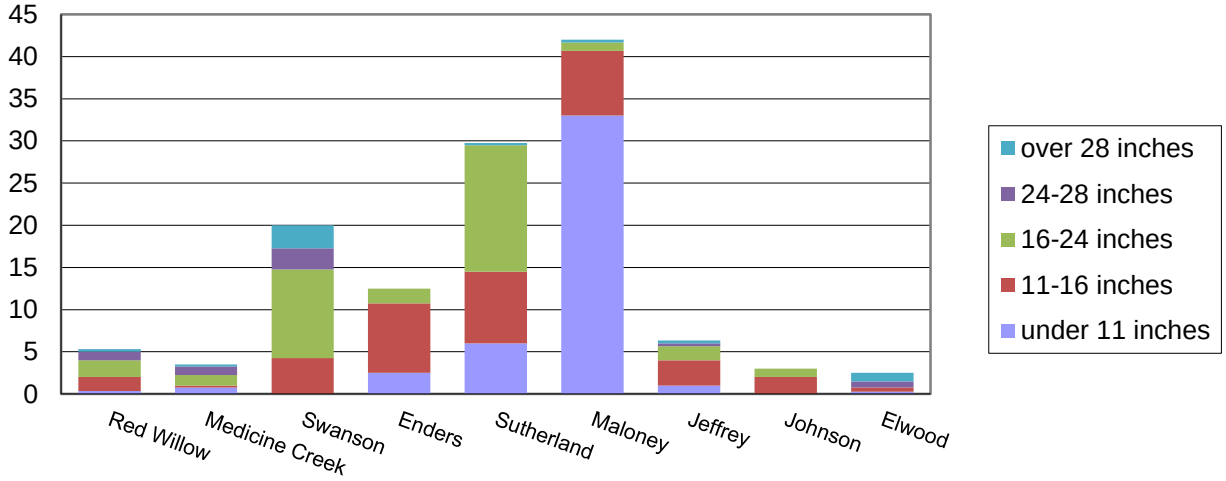
2013 Southwest District Walleye Catch



2013 Southwest District White Bass Catch



2013 Southwest District Channel Catfish Catch



2013 Southwest District Wiper Catch