

Swanson Reservoir

NEBRASKA

2015 Survey Summary – GAME



PARKS –

Caleb Huber, Fisheries Biologist

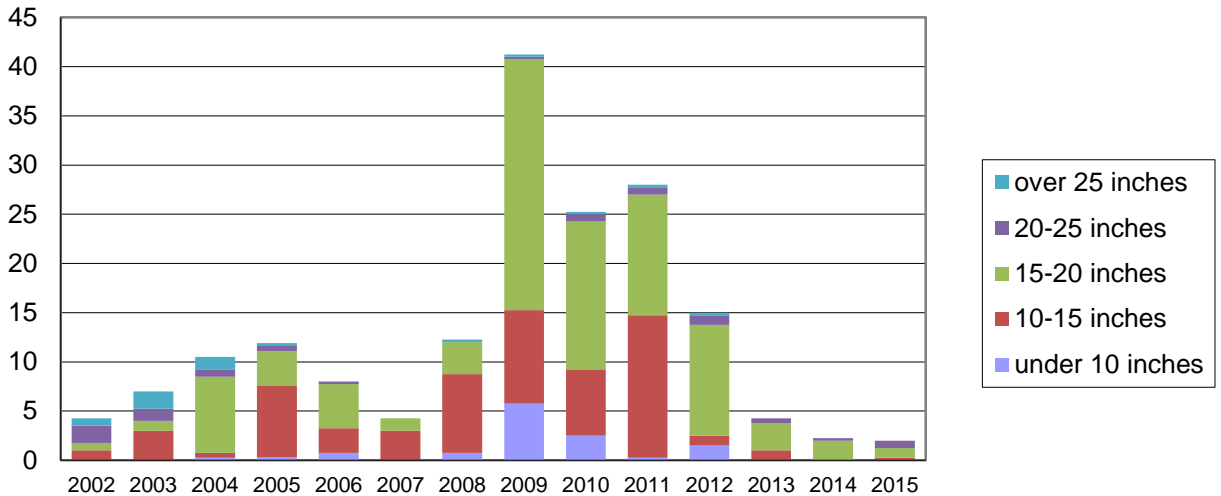
Fish populations are sampled each fall at Swanson Reservoir using gill nets, a method commonly used to sample fish found in open water, such as walleye, white bass, channel catfish and hybrid striped bass. Gill nets are set on approximately the same dates and locations each year to reduce variability. 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 management decisions.

Walleye numbers peaked sharply in 2009 due to newly flooded vegetation that was inundated in 2007. Populations remained strong for several years but have declined with the water levels and are down again in 2015. Biologist surveyed 2 walleye per net in 2015. In an attempt to rebuild walleye populations despite lower lake elevations, personnel will be stocking fry and fingerling on an alternating year basis to determine which option best suits the available habitat. Walleye fingerlings were stocked in 2015 and currently there are 2.9 million walleye fry requested for the spring of 2016. In contrast, wiper numbers have increased at Swanson. Biologists sampled 4 wiper per net in 2015. There were a few trophy fish in excess of 20 inches but most of the fish surveyed were from a stocking in 2013 and were smaller individuals. If those fish are allowed to mature they should reach trophy status in 2-3 more years. Wipers are also requested for 2016 and will be stocked as needed to maintain a modest population. White bass numbers were also much improved in 2015. Personnel sampled 34 white bass per net in 2015. Most of the fish sampled were adult fish that were underrepresented in previous surveys. There were good numbers of 12-15 inch fish that are just right for anglers looking to harvest white bass. Despite the low walleye numbers there should be good angling opportunities for wiper and white bass in 2016

Swanson Reservoir is also a favorite of local catfish anglers. Swanson supports both a large population of channel catfish and a smaller number of blue catfish. It is important to point out that these species are managed very differently. Channel catfish are managed more liberally with daily bag limit is 5 fish and a 10 fish possession limit. Blue catfish are managed as a trophy fish with a reduced bag limit of 1 fish daily bag and 2 fish in possession. If the blue catfish are ever going to reach their true trophy potential it is imperative that anglers allow them to mature for several years by practicing catch and release. Growth rates are good on the blue catfish and some of the oldest fish which were stocked in 2008 are nearing 30 inches long. Identification should not be based on spots or coloration but rather on the shape of the anal fin. Channel catfish have a rounded anal fin and blue catfish have a straight anal fin. This is illustrated in the latter pages of this survey summary.

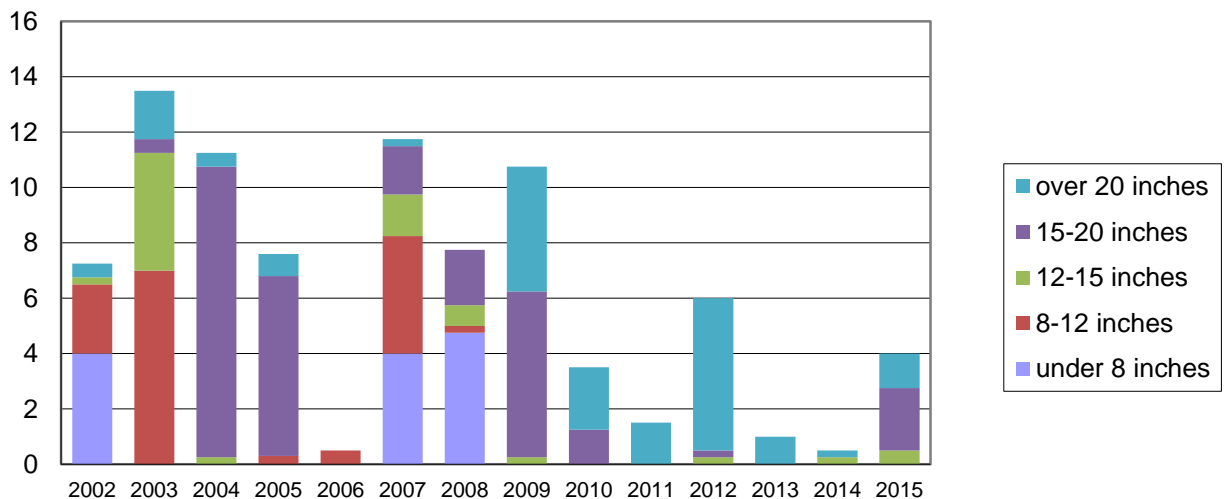
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2015 summary graphs of some local waterbodies for comparison.

Walleye Catch Per Unit Effort



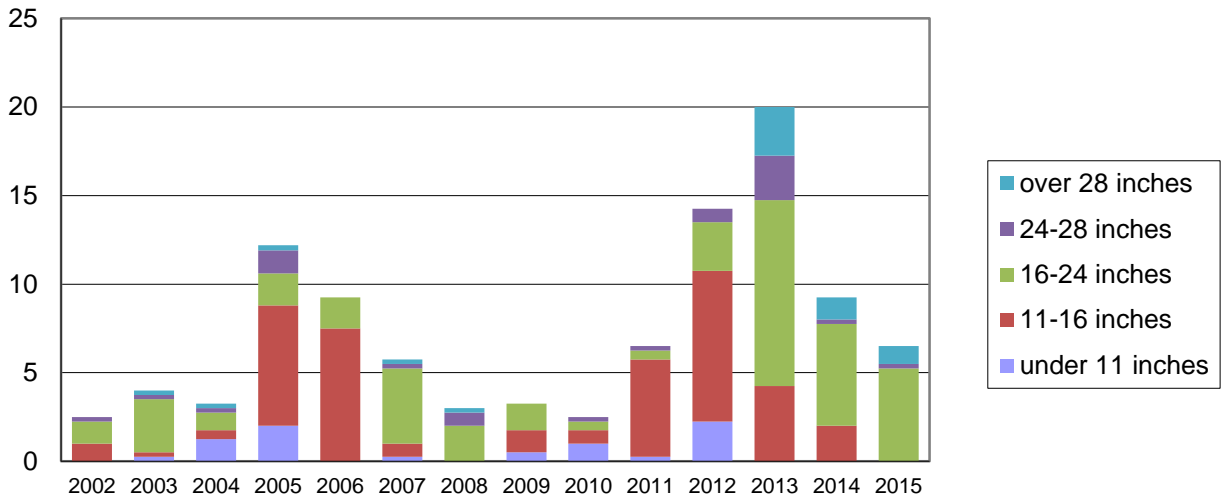
Walleye numbers were down again in 2015. Biologists sampled 2 fish per net in 2015. Walleye numbers peaked in 2009 and have been steadily falling ever since. The decline is due primarily to decreased recruitment and loss of nursery habitat, although increased angling pressure has also been a factor. In an attempt rebuild the walleye fishery, personnel began a stocking strategy that alternates between fry and fingerling stockings. Fingerling walleye were stocked in 2015 and 2.9 million fry are requested for 2016.

Wiper Catch Per Unit Effort



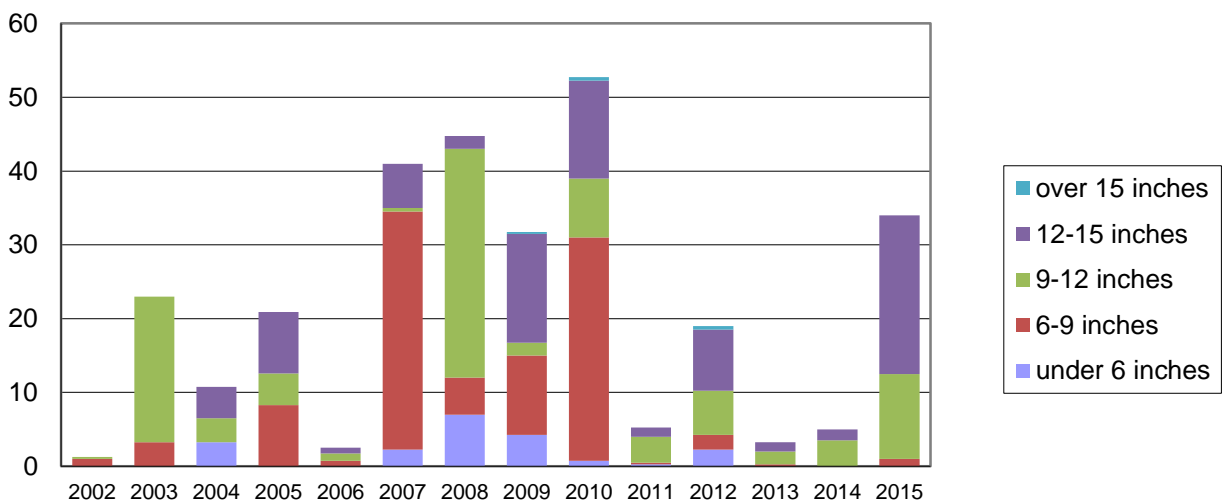
Wiper numbers have been variable at Swanson for several years due to changes in stocking plans. Biologists sampled 4 wipers per net in 2015 which is a substantial increase compared to recent catch rates. Wipers were stocked in 2013 and appear to be growing quickly and made up the bulk of the 2015 survey. Fish stocked in 2013 have already reached the 15 inch range during the fall of 2015. Wipers are requested again in 2016. Catch rates should improve with additional stockings but wipers will continue to be managed as a low density trophy fish in the future.

Channel Catfish Catch Per Unit Effort



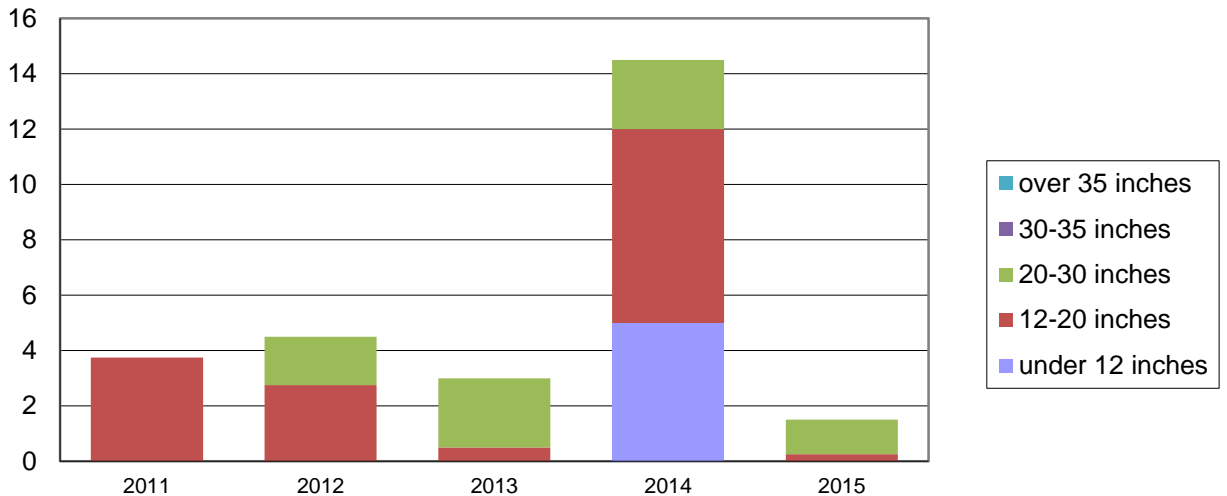
Channel catfish are a popular sport fish during the summer months at Swanson Reservoir. Biologists sampled 6 fish per net in 2015 including some trophy fish in excess of 28 inches total length. There are also strong numbers of 16-24 inch catfish in Swanson which are a great option for anglers interested in harvesting fish. Channel catfish are stocked regularly at Swanson to supplement poor natural reproduction and are requested for 2016. It is important for catfish anglers to remember that blue catfish are also present in Swanson but are not managed under the same regulations. The daily bag limit for channel catfish is 5 fish per day. Conversely, the daily bag limit for blue catfish is only 1 fish per day.

White Bass Catch Per Unit Effort



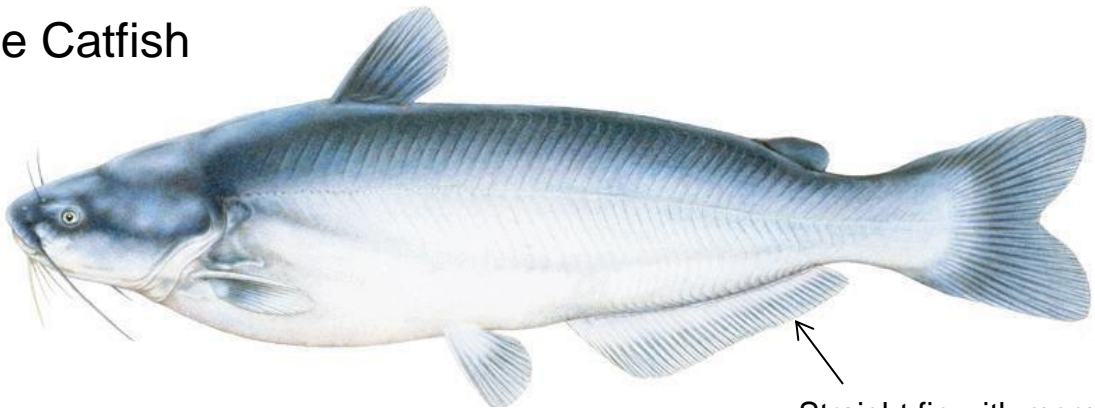
Biologists sampled 34 white bass per net in 2015. White bass numbers have been variable in the last few years but there was a strong increase in survey numbers in 2015. It is not uncommon to see boom and bust cycles in white bass numbers but most of the fish sampled in 2015 were adult white bass that have been underrepresented in previous surveys. There are also a few smaller fish which indicate that there may be more year classes in the system. White bass anglers should have very good success in 2016.

Blue Catfish Catch Per Unit Effort



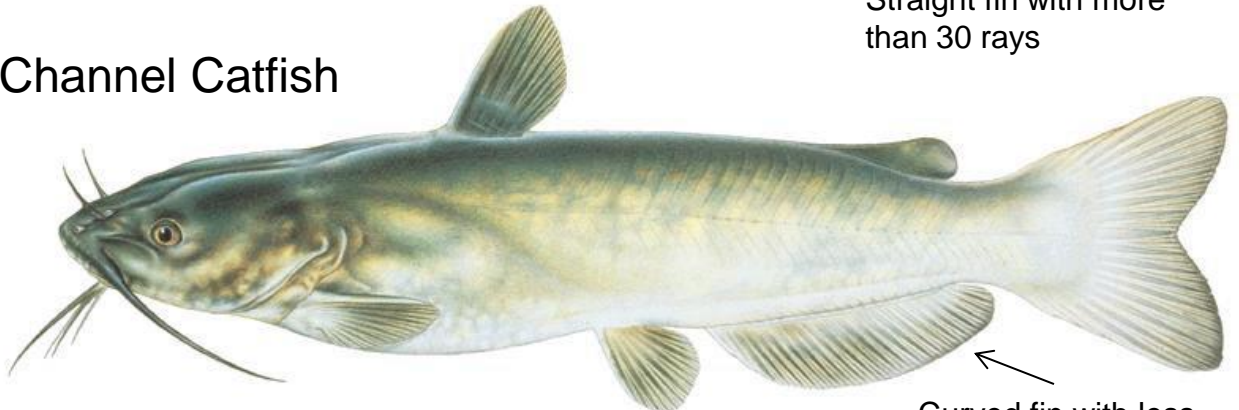
Blue Catfish were introduced to Swanson in 2008, in an effort to provide a unique trophy fishing opportunity for catfish anglers in the future. Blue cats are stocked regularly and seem to be growing faster than expected. There was one blue cat that has already reached 28 inches in length in the 2015 survey. Biologists sampled fewer than 2 fish per net in 2015 which is a sharp decline from the 2014 data. It is possible that anglers are mistakenly harvesting them as channel catfish. It is important to note that the bag limit for blue cats is **1 fish per day and 2 fish in possession**. Due to natural variation in color, catfish species are more easily identified based on the anal fin rather than coloration.

Blue Catfish



Straight fin with more than 30 rays

Channel Catfish



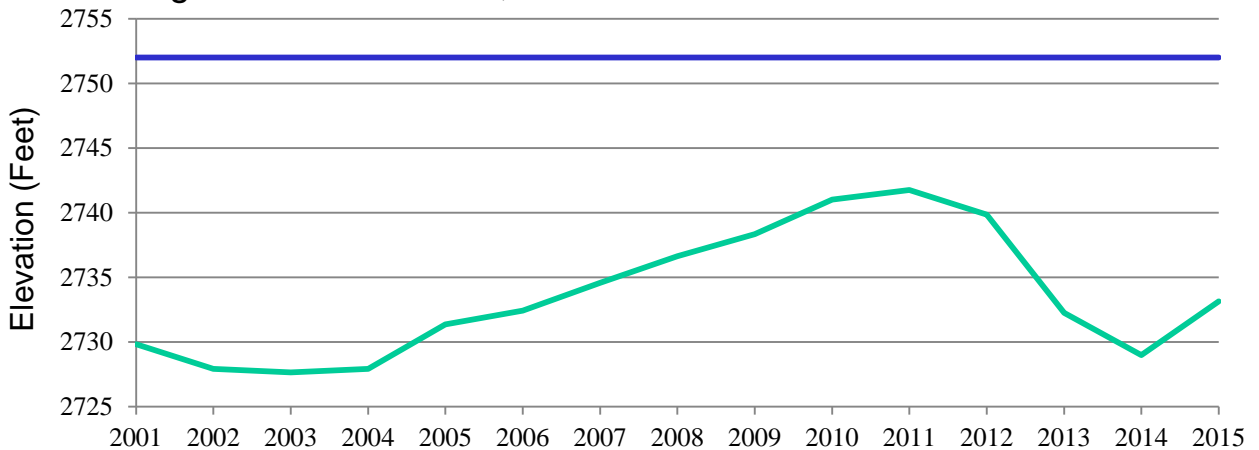
Curved fin with less than 30 rays

Swanson Reservoir Fish Stocking Summary

Year	Walleye	Wiper	Channel Catfish	Blue Catfish	Yellow Perch
2015	106,925 (1.5")		12,537 (5")	3,019 (10")	
2014	4,863,000 (fry)			4,158 (12.5")	81,195 (.5-1")
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)			9,985 (5.5")	12,420 (2.5")

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 link below. [Stocking Database](#)

Average Annual Elevation, Swanson Reservoir 2001-2014



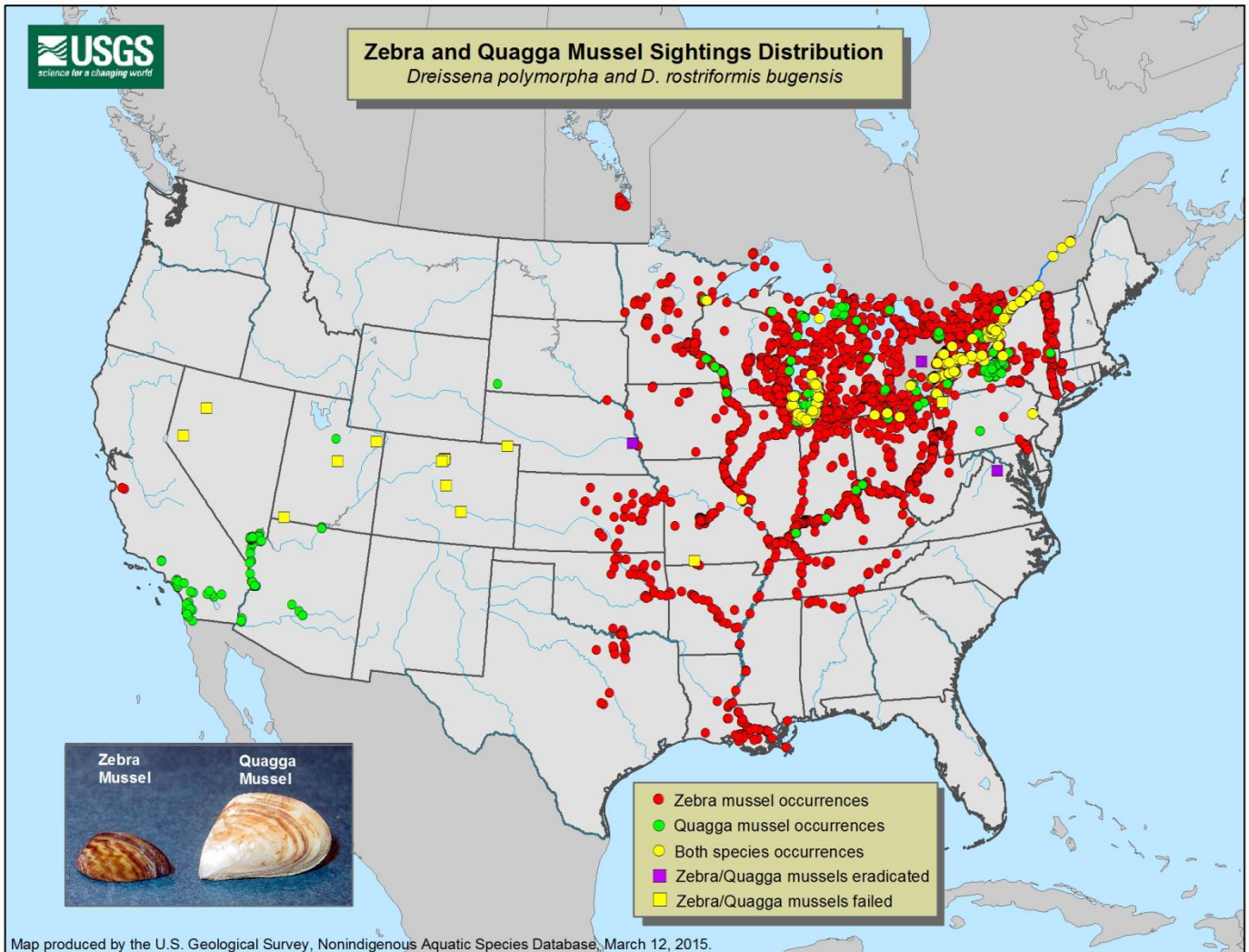
Water levels at Swanson recovered nicely beginning in 2009 but appear to be on the way back down. The dark blue line indicates the top of the active conservation elevation and the green line indicates the mean reservoir elevation. More detailed information and current reservoir elevation data can be obtained by following this link: [Current Elevation](#)



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Aquatic invasive species (AIS) have reached Nebraska. Zebra mussels are currently established in Lewis and Clark Reservoir, Offut AFB pond, and the Missouri River. Beginning in 2016 anglers and boaters should be on the look out for personnel performing boat inspections and decontaminations statewide. 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.

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.



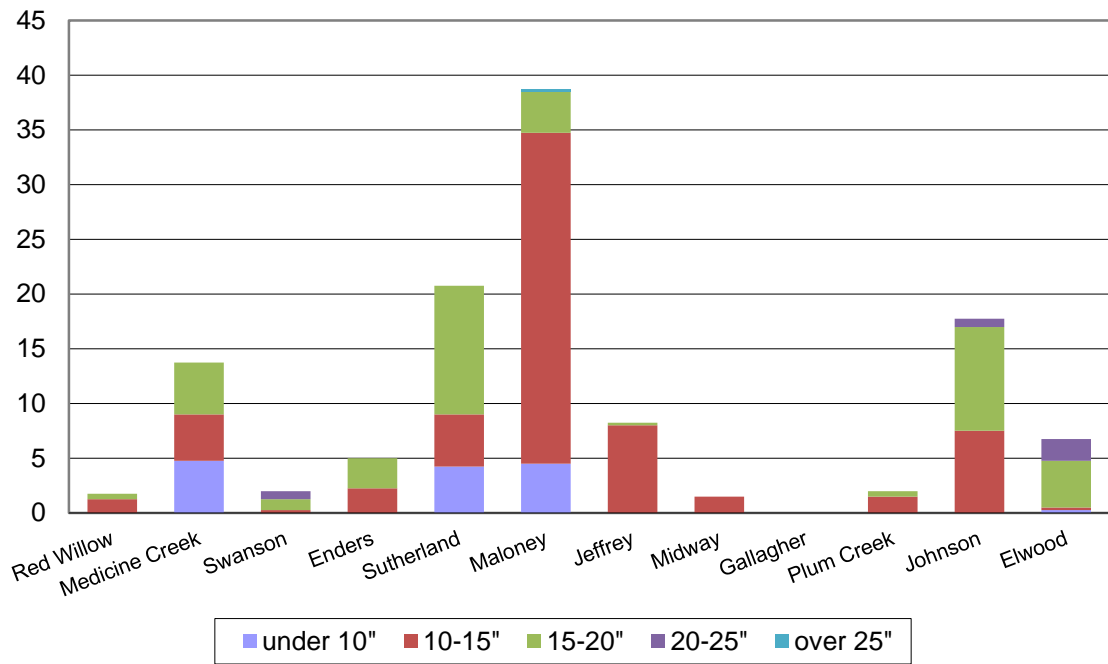
- Boat inspections for AIS prior to launch in Nebraska are NOT mandatory at this time.
- Personal watercraft registered outside of Nebraska must have this stamp.
- Non-motorized craft registered in any state are exempt from the stamp.
- Stamps are not required for boats registered in Nebraska. A \$5 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.

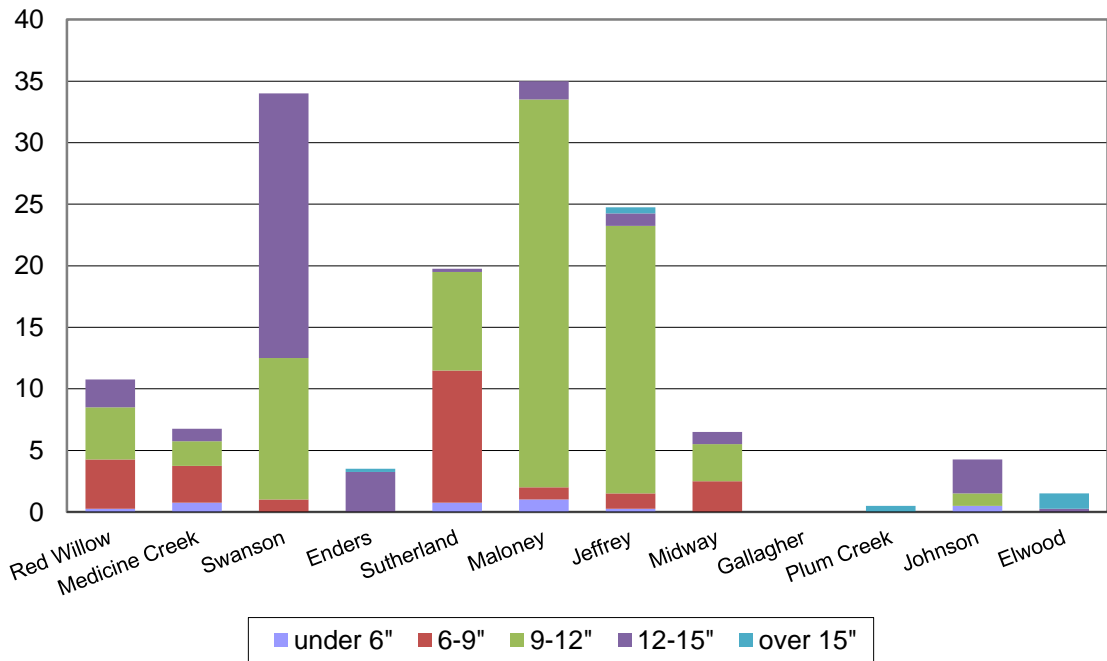
Learn more about invasive species at neinvasives.com.



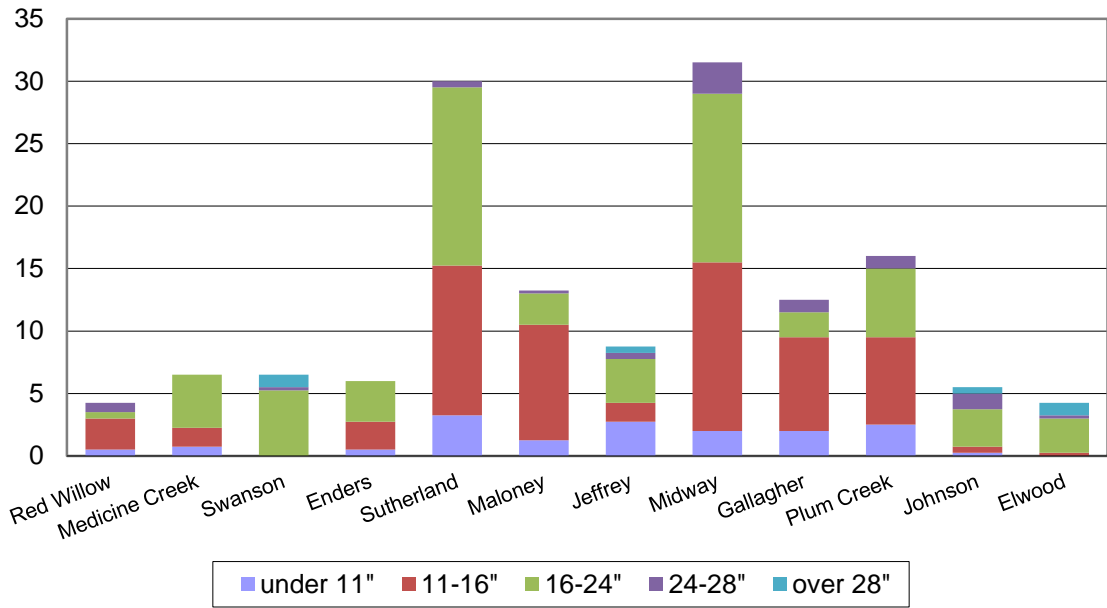
2015 Southwest District Walleye Catch



2015 Southwest District White Bass Catch



2015 Southwest District Channel Catfish Catch



2015 Southwest District Wiper Catch

