

Swanson Reservoir

2017 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 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. Environmental factors can play a strong role in catch data. Due to this variability biologists look at trends over time when making management decisions.

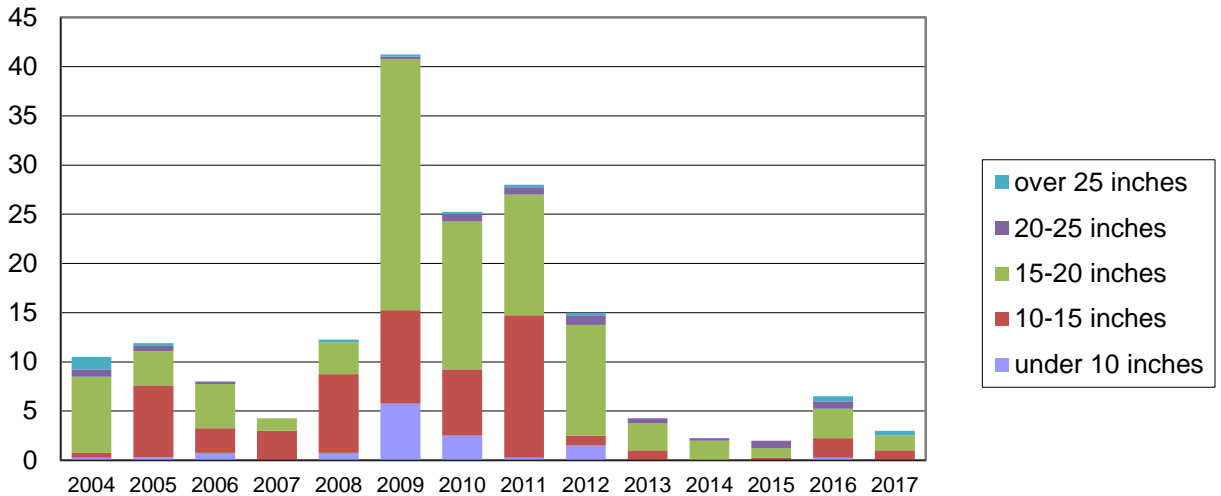
Biologists sampled 3 walleye per net in 2017. Walleye numbers have been low at Swanson for several years in spite of active stocking of fry and fingerlings. In an attempt to increase walleye numbers and provide an improved fishery, 14,000 advanced walleye have been requested for 2018. Advanced walleye are approximately 8 inches long when stocked and are much more expensive than fingerlings so production numbers are limited. Currently, the plan is to commit to this strategy for 3-5 years and monitor accordingly to determine success or failure of advanced walleye stocking. Staff are hopeful that the larger fish will have increased survivability and recruit readily to the population.

Biologists are also adding fry stocking to the wiper management activities at Swanson based on success at Harlan County Reservoir. Beginning in 2018, personnel will incorporate fry into the stocking plan by stocking fry and fingerling on alternating years. Wiper are managed as a trophy species focused more on size structure than catch rate. White bass numbers have fallen from the 2016 survey likely due to increased harvest of fish in the 12-15 in size class. There are good numbers of smaller fish so white bass populations should improve with time as they grow and move into the larger size classes.

Channel catfish numbers are holding stable at Swanson Reservoir and provide great angling opportunities for those seeking catfish. We see both good numbers and size structure that would accommodate anglers seeking harvest or trophy fisherman. In addition, Swanson has a developing blue catfish population. Blue catfish were introduced in 2008 and although numbers have remained modest, personnel sampled a fish that weighed 12 pounds in 2017. It is exciting to see some larger fish that might eventually reach trophy status.

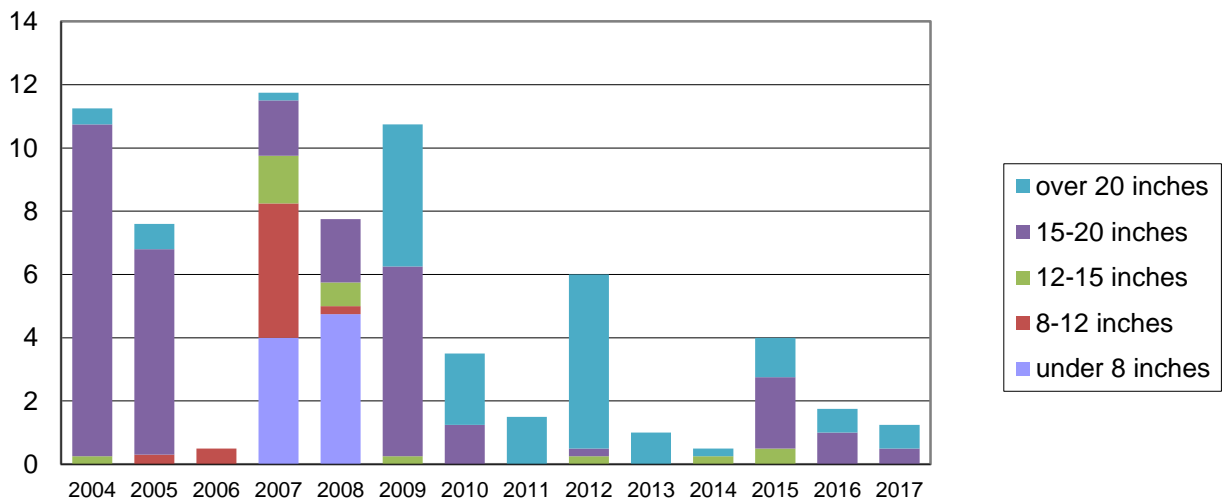
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2017 summary graphs of some local waterbodies for comparison.

Walleye Catch Per Unit Effort



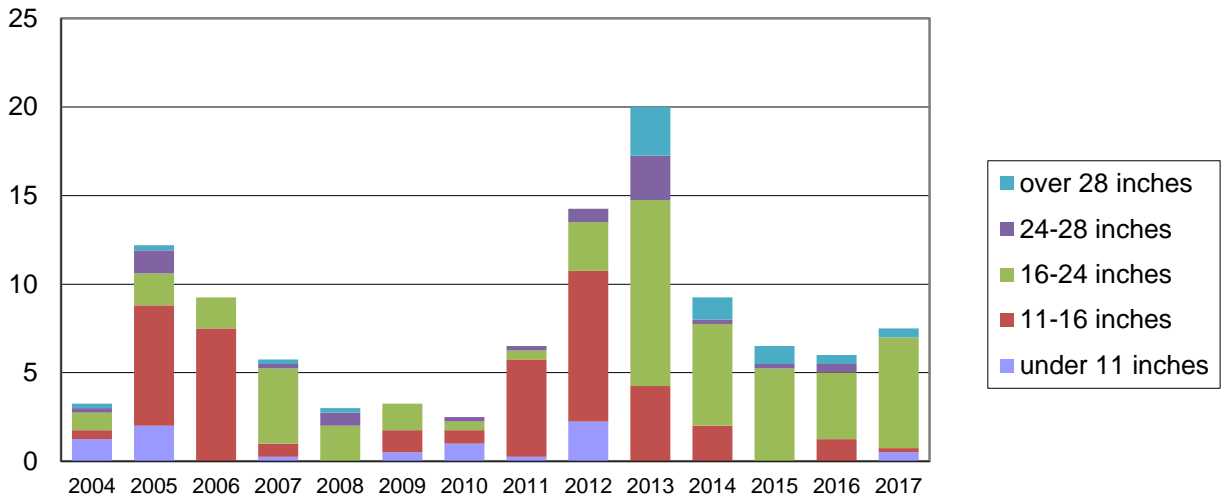
Biologists sampled 3 walleye per net in 2017. Populations have been low but stable since 2013. There was a large spike in walleye catch from 2009 through 2012 but those increased numbers were not sustainable. A significant increase in lake elevation and flooded habitat in 2007 produced a new lake effect which was responsible for the spike in walleye production. Based on historic data it is realistic to expect numbers to hover between 5-10 fish per net. Staff will be stocking advanced walleye fingerlings in 2018 to try and increase population numbers.

Wiper Catch Per Unit Effort



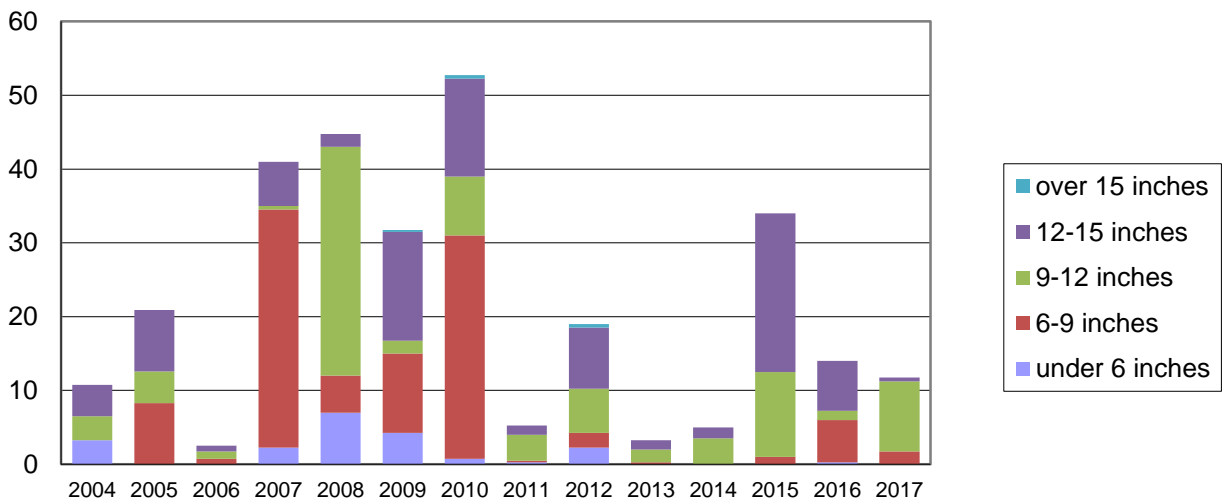
Wiper numbers have been variable at Swanson due to an inconsistent stocking availability and requests. Biologists surveyed 1 fish per net in 2017. Wiper are managed as a trophy fish. Currently wiper are requested on a three year rotation. Wiper fry are requested for 2018.

Channel Catfish Catch Per Unit Effort



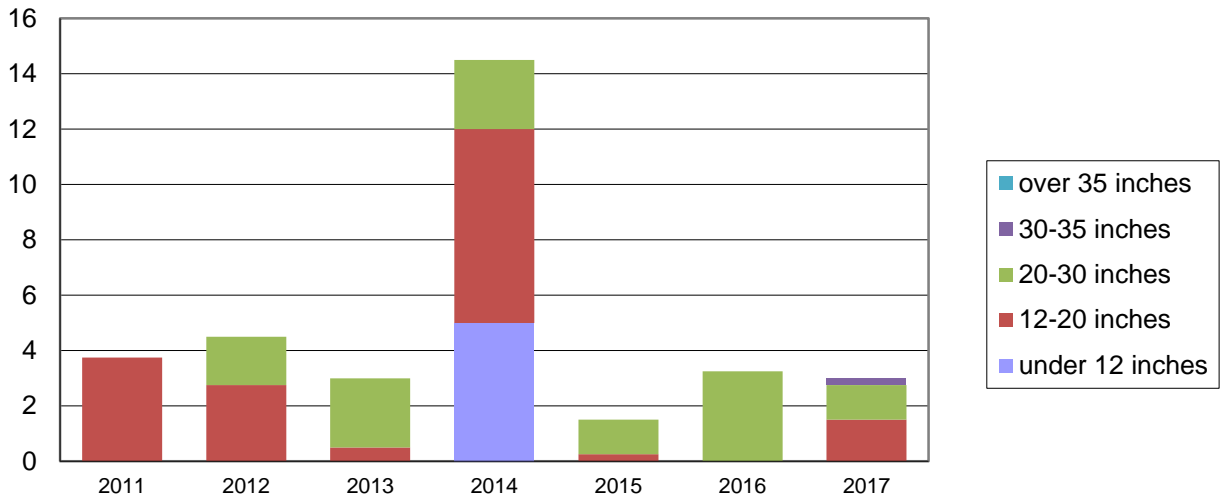
Biologists sampled 7 channel catfish per net in 2017. Swanson is a great destination for catfish anglers and produces good numbers and sizes of fish. The 2017 surveys consisted primarily of fish in the 16-24 inch size class with a handful of trophy fish greater than 28 inches. Catfish are stocked regularly at Swanson to supplement the low natural reproduction and were stocked in 2017.

White Bass Catch Per Unit Effort



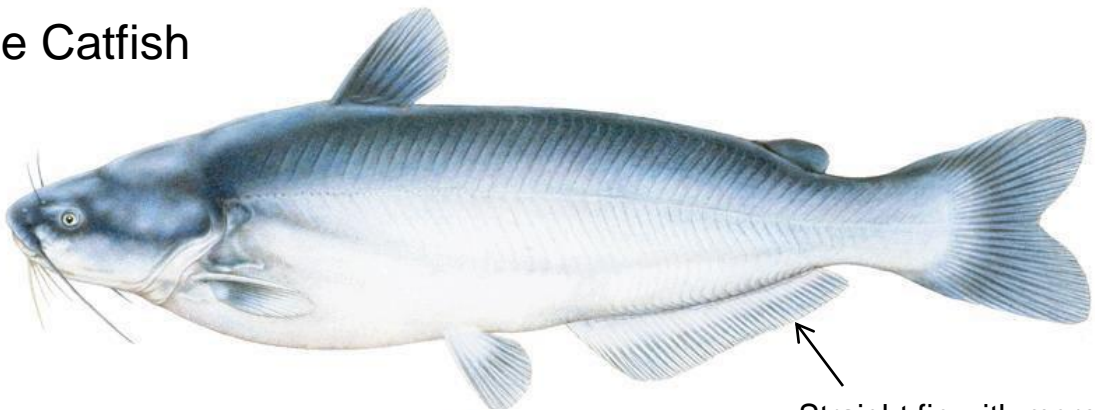
Biologists sampled 12 white bass per net in 2017. White bass numbers peaked sharply in 2015 but have decreased in the subsequent years. The biggest losses have been in the larger fish in the 12-15 inch size group. There are still good numbers of smaller fish that are progressing through the system and will grow to fill the 12-15 inch group preferred by anglers. White bass fishing should be fair in 2018 for smaller fish.

Blue Catfish Catch Per Unit Effort



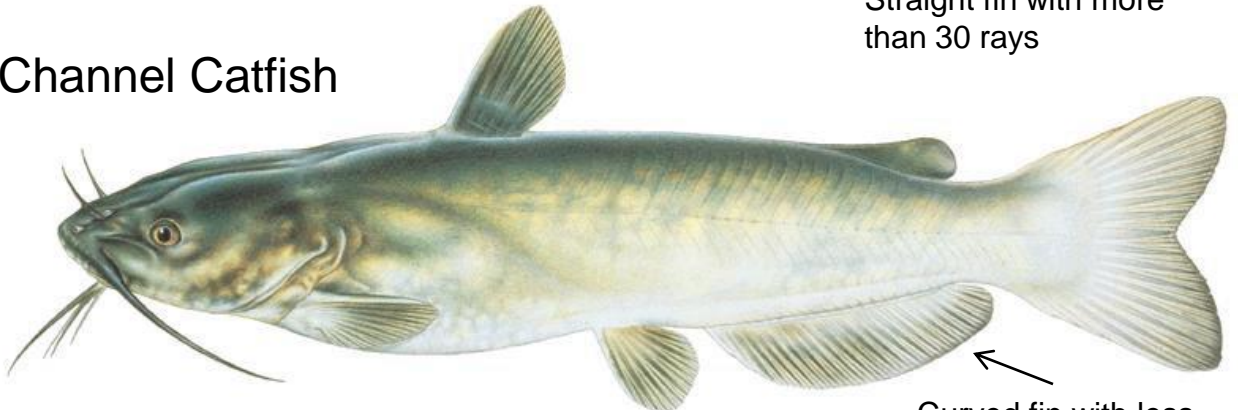
Blue catfish were introduced to Swanson in 2008, in an effort to provide a unique trophy fishing opportunity for catfish anglers in Southwest Nebraska. Blue cats are stocked regularly and seem to be growing at a good rate. Biologists sampled 3 fish per net again in 2017 including one individual that was 12 pounds. It is important that anglers take care to positively identify catfish that are harvested because blue catfish are managed under different regulations. 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



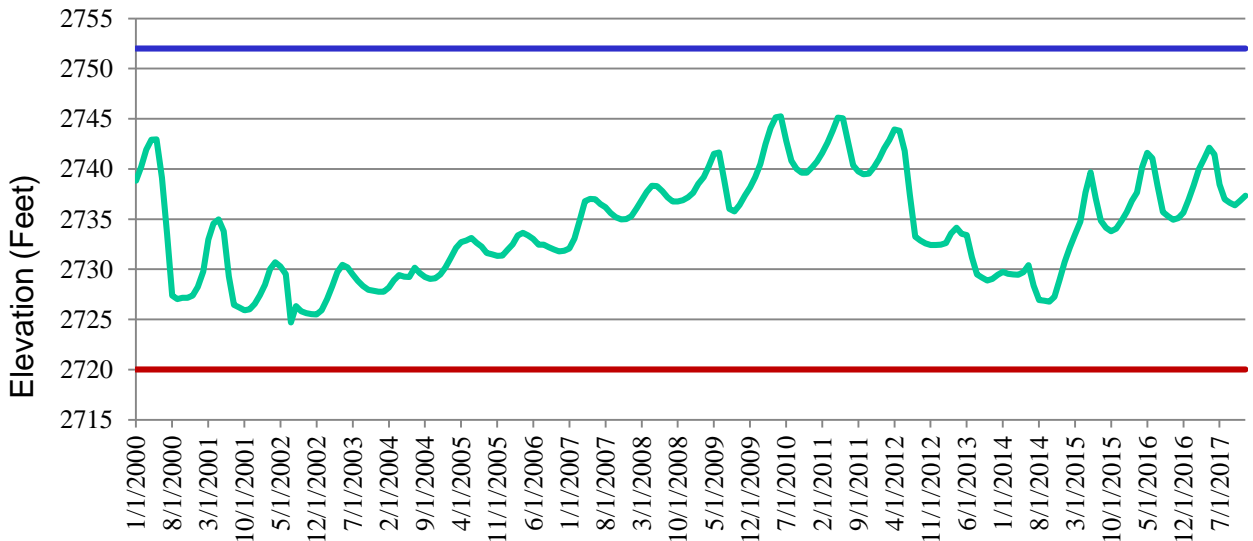
Curved fin with less than 30 rays

Swanson Reservoir Fish Stocking Summary

Year	Walleye	Wiper	Channel Catfish	Blue Catfish	Yellow Perch
2017	323,476 (1.5")	16,135 (1.5")	16,176 (5")	4,450 (13")	187,789 (1.5")
2016	3,547,800 (fry)			4,900 (7.5")	
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")

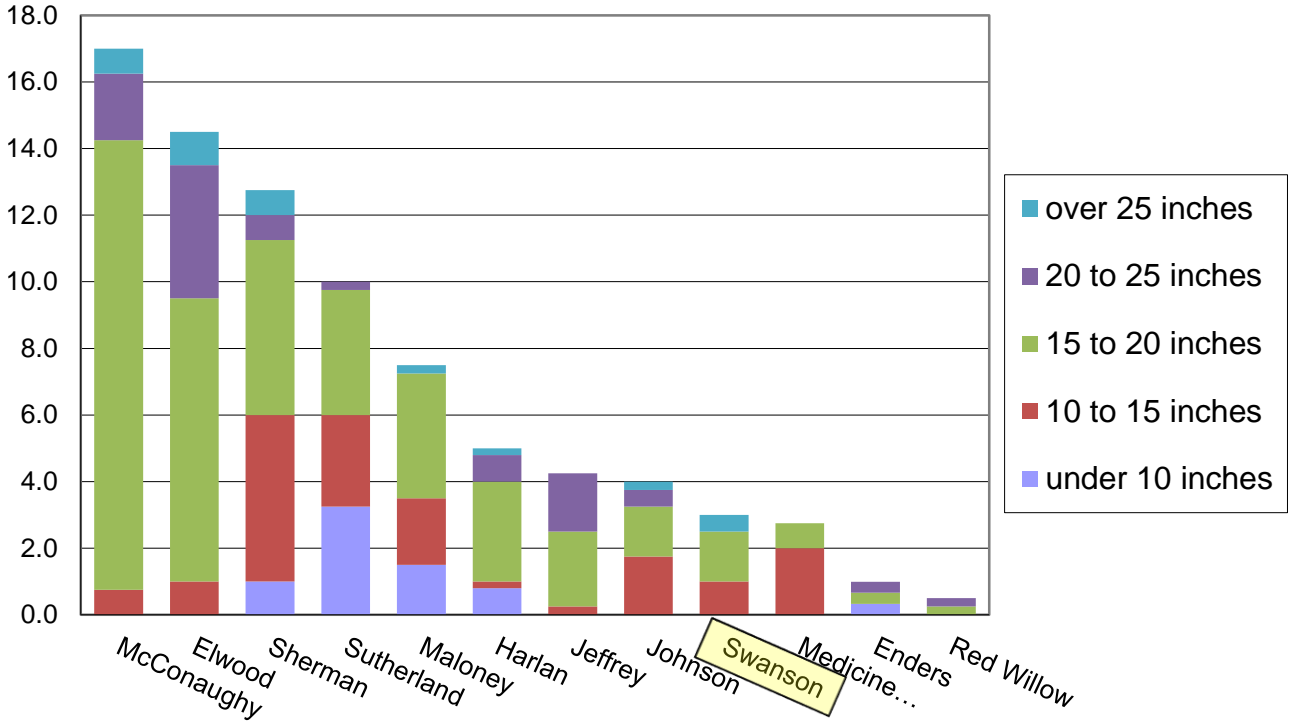
Above is a table of fish stockings for the last 5 years at Swanson Reservoir. The species stocked, number stocked, and fish size are presented in the table. Multiple species are stocked annually at Swanson and a comprehensive database of fish stockings can be found at the Nebraska Game and Parks website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

End of Month Elevation, Swanson Reservoir 2010-2017

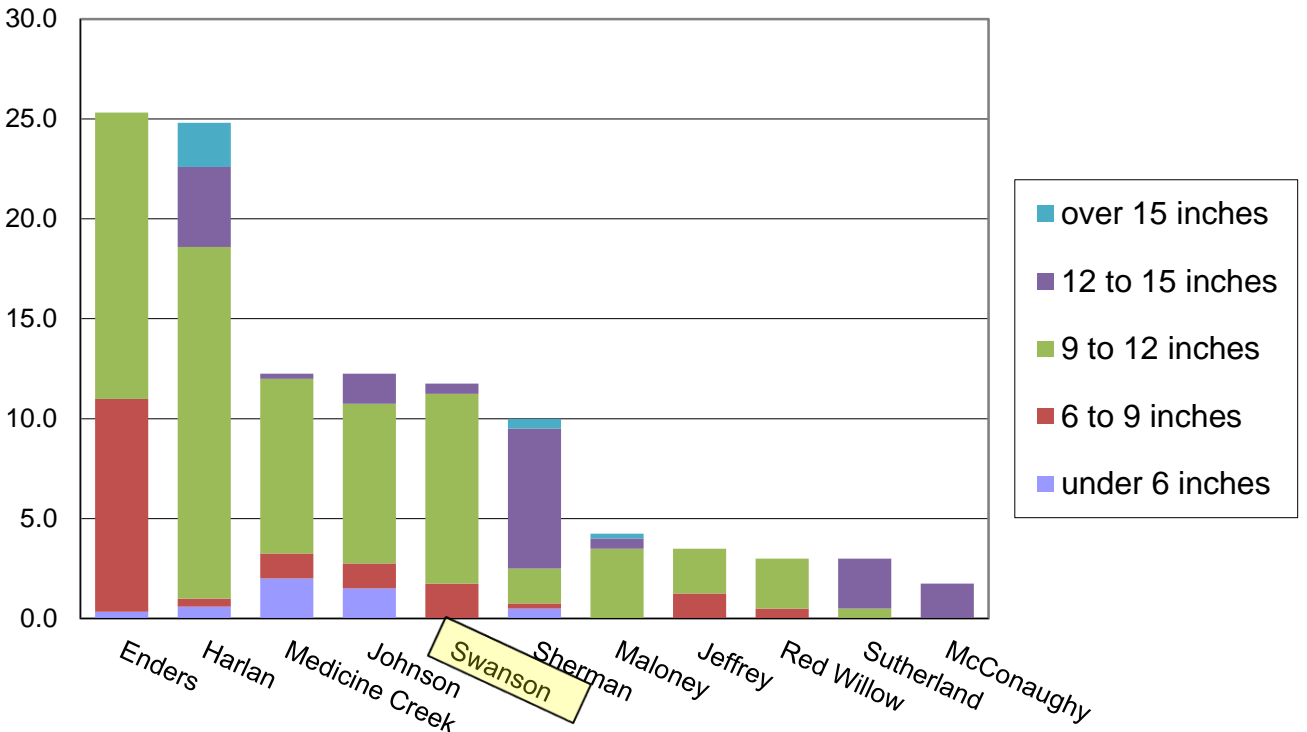


Water elevation is a constant management concern at Swanson Reservoir. The dark blue line indicates the top of the active conservation elevation, the green line indicates the end of month reservoir elevation, and the red line indicates the top of the inactive pool. More detailed information and current reservoir elevation data can be obtained by following this link: [Current Elevation](#)

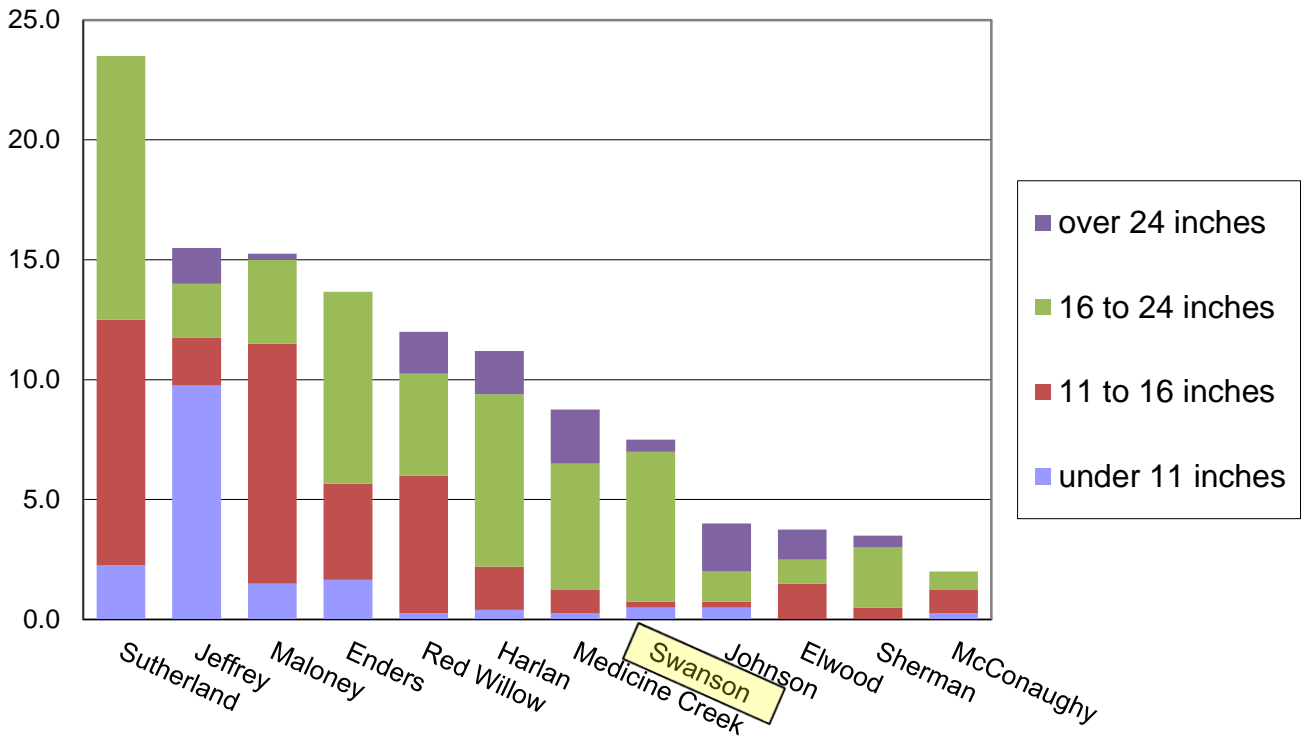
Southwest District Walleye 2017



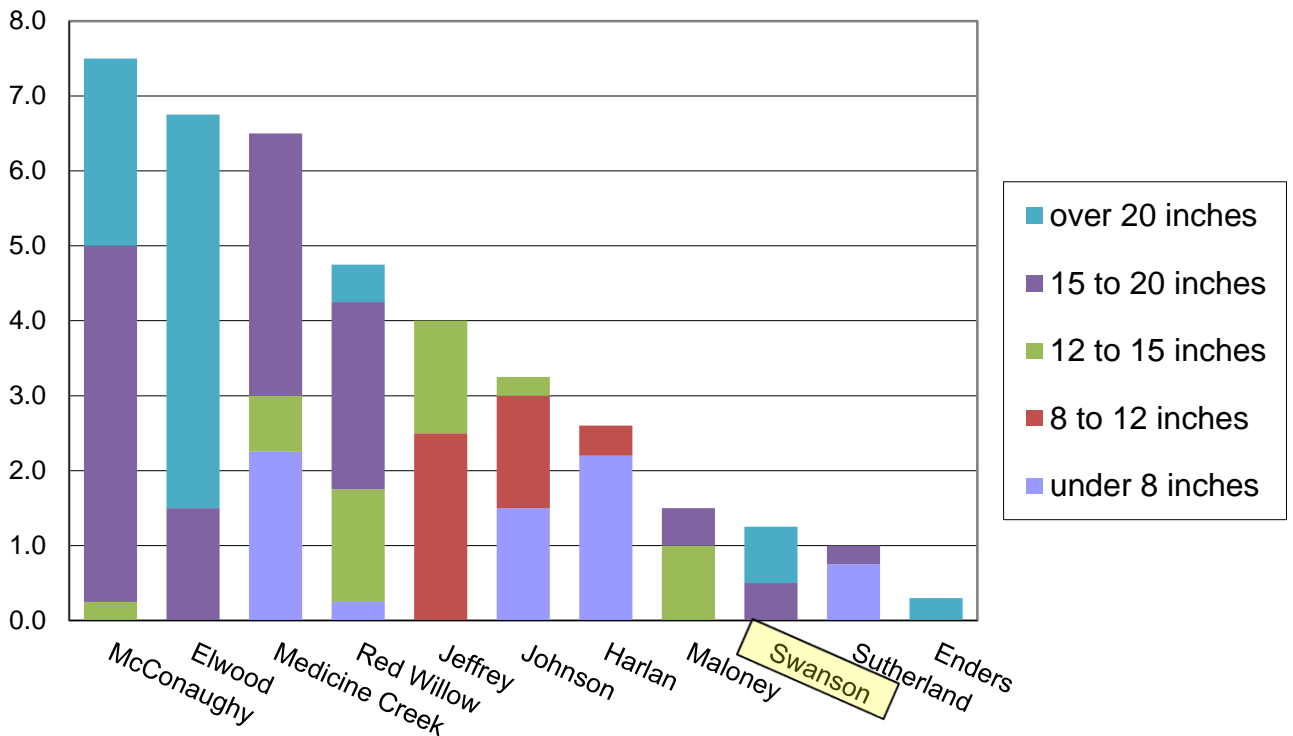
Southwest District White Bass 2017



Southwest District Channel Catfish 2017



Southwest District Wiper 2017





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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. Anglers and boaters should be on the look out for personnel performing boat inspections and decontaminations statewide. 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.

Preventative Steps and Regulations

- It is unlawful for a boat to arrive at or leave any body of water in Nebraska with water other than from a domestic source except for fire-fighting purposes. Drain water before leaving an area
- It is unlawful from a boat or trailer to arrive or leave a launch area with any aquatic vegetation for that waterbody still attached. Boat blinds cannot use plants listed as invasive species or noxious weeds
- Wash mud off waders. Felt-sole waders are not allowed

Nonresident Aquatic Invasive Species Stamp

Motorized watercraft registered outside Nebraska are required to purchase and display the Aquatic Invasive Species Stamp before launching from any Nebraska boat ramp. Stamps must be affixed on the starboard side toward the rear of the boat above the waterline. The fee for each stamp is \$15 dollars and includes the \$2 issuing fee. Stamps can be purchased online or at Nebraska Game and Parks Commission Offices.



Left: Zebra Mussel
Right: Quagga Mussel