Medicine Creek 2017 Survey Summary – GAME PARKS – Caleb Huber, Fisheries Biologist

Fish populations are sampled each fall at Medicine Creek 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.

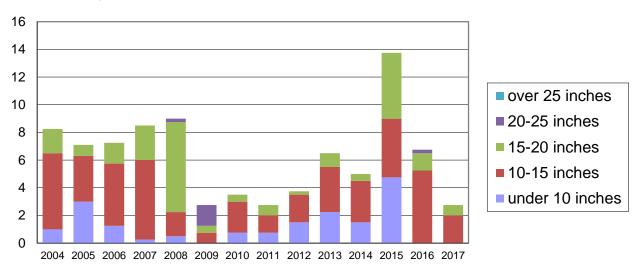
After a sharp rise in 2015 walleye numbers have fallen to 2 fish per net in 2017, in spite of annual fingerling stockings. It is possible that the decline in population is tied to harvest or water level fluctuations that are common with Southwest Nebraska irrigation reservoirs. Biologists have introduced saugeye to Medicine Creek based on success in the Southeast District and Kansas reservoirs. Saugeye are a hybrid between walleye and sauger that can, at times, perform extremely well in the right conditions. Saugeye tend to prefer dirty water with higher flow than walleye. Saugeye certainly sound like they belong in Medicine Creek. It can be difficult to differentiate between walleye and saugeye but its not a major concern to anglers as they are both regulated using the same length and bag limits.

Wipers were not stocked between 2008 and 2013 but have been stocked regularly since 2013. This stocking hiatus explains the low catch rates seen during those years. Catch rates did fall slightly in 2017, but the numbers are still good and the size structure is made up of larger fish that are a blast to catch. White bass catch rates have been stable but low hovering around the 5 fish per net mark. However in 2017 biologists saw a large jump to 12 fish per net. Anglers pursuing wipers and white bass should have good success during the 2018 season.

Medicine Creek is an excellent option for anglers seeking channel catfish. Biologists surveyed 12 channel catfish per net in 2017. The survey had multiple size classes ranging from 10-30 inches. Catfish anglers will find whatever they are looking for whether it is fish for the skillet or trophy fish to test their equipment. Anglers need to be aware that blue catfish are present in Medicine Creek and are more strictly regulated than channel catfish. Proper identification is a must if anglers are going to harvest catfish.

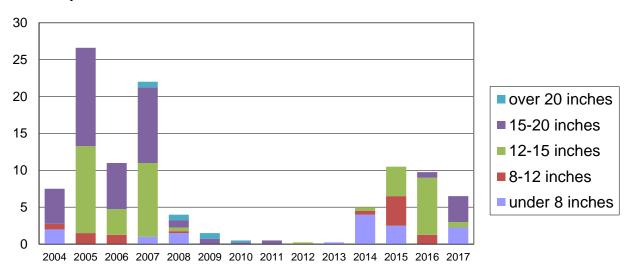
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2017 summary graphs of some local waterbodies for comparison.

Walleye Catch Per Unit Effort



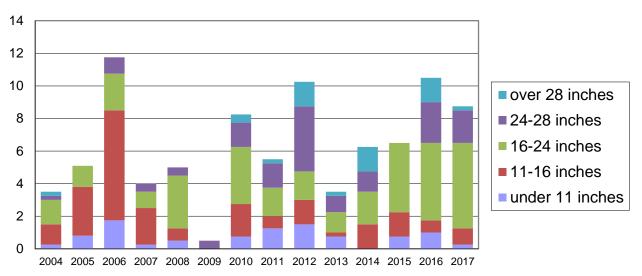
Walleye numbers spiked in 2015 but catch rates have dropped in 2016 and 2017. Biologists surveyed 3 fish per net in 2017. The walleye size structure consists mostly of sublegal fish with few fish over 15 inches. The lack of juvenile fish in the last two surveys is cause for concern. Walleye fingerlings are stocked annually to supplement the low rate of natural recruitment.

Wiper Catch Per Unit Effort



Biologists sampled 6 wipers per net in 2017. The wiper size structure is increasing each year and in 2017 approximately half of the fish sampled were in the 15-20 inch group. Wiper are managed as a trophy fish and anglers are encouraged to practice catch and release so that fish are able to reach trophy status. Wiper are stocked regularly at Medicine Creek and are currently requested for 2018

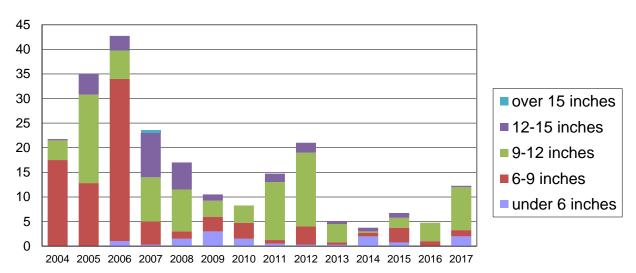
Channel Catfish Catch Per Unit Effort



Biologist surveyed 9 channel catfish per net in 2017. Channel catfish reproduce naturally in Medicine Creek and thus are not stocked. There were good numbers of 16-24 inch fish in the surveys which are what most anglers prefer for table fare. Medicine Creek is a great destination for anglers seeking catfish both for the freezer and the chance to catch a trophy.

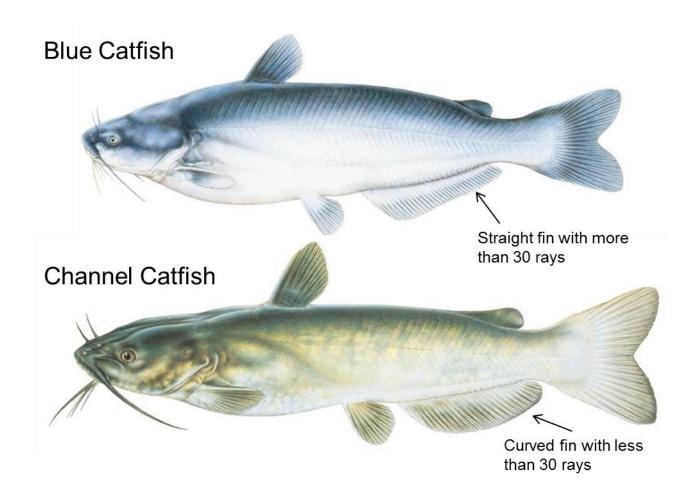
Note: Blue catfish have been introduced to Medicine Creek and are managed under different regulations that channel catfish. Take caution to properly identify your catch.

White Bass Catch Per Unit Effort



White bass population numbers increased from 5 fish per net in 2016 to 12 fish per net in 2017. Size structure remained fairly consistent with strong numbers of 9-12 inch fish. It is encouraging to see a group of juvenile fish coming up to provide larger fish that anglers tend to prefer. White bass are prone to boom and bust cycles and are notoriously difficult to sample due to their schooling behavior. Angling should be fair in 2018 but most fish will be on the smaller side.

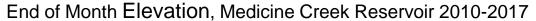
Blue Catfish were introduced into Medicine Creek Reservoir in 2015 and have been stocked annually since the introduction. Biologists surveyed 3 blue cats per net in 2017. Blue cats were introduced based on success at Swanson reservoir and a strong existing catfish fishery at Medicine Creek. The goal of this introduction is to increase the trophy fishing opportunities in the Southwest District and provide unique opportunities for anglers where possible. Blue catfish are known to grow in excess of 80lbs and are a very popular species for some catfish anglers. It is important to point out that there is a **1(one) fish daily bag limit** for blue catfish statewide. Anglers need to take care to identify their catch before harvesting any catfish species at Medicine Creek. The most foolproof method to distinguish between the species is to look at the anal fin. Blue catfish have a straight anal fin with more than 30 rays while channel catfish have a curved anal fin with fewer than 30 rays. There are other cosmetic differences such as body shape, color, and spots but those differences can be misleading depending on the environment and individual fish.

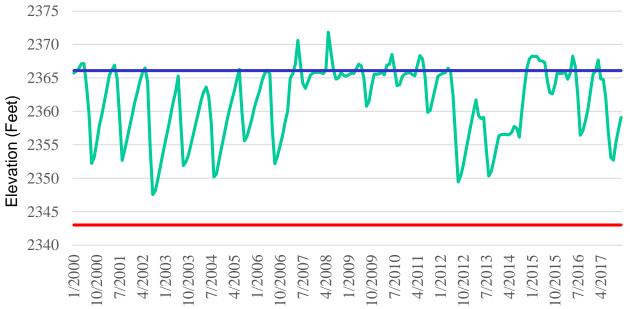


Medicine Creek Fish Stocking Summary

Year	Walleye	Wiper	Yellow Perch	Saugeye	Blue Catfish
2017	92,622 (1.25")	9,336 (1.5")	59,939 (1.5")	129,980 (1.25")	3,500 (13")
2016	144,840 (1.5")				5075 (5")
2015	138,000 (1.5")	13,875 (1.4")			8,850 (9.9")
2014	75250 (1.3")	10300 (1.3")			
2013	139,434 (1.25")	19,265 (1.2")			

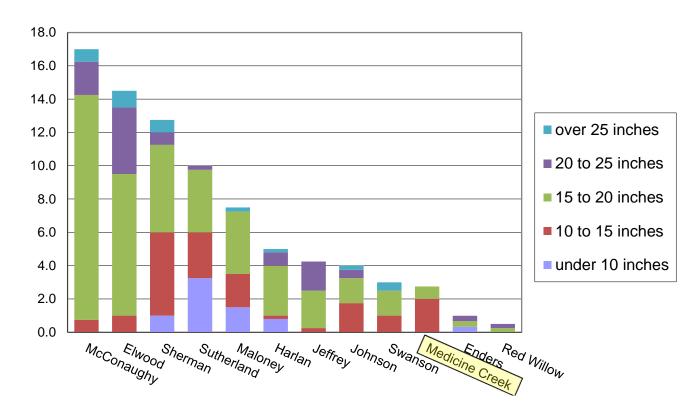
Above is a table of fish stockings for the last 5 years at Medicine Creek Reservoir. The species stocked, number stocked, and fish size are presented in the table. Multiple species are stocked annually and a comprehensive database of fish stockings can be found at the Nebraska Game and Parks website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



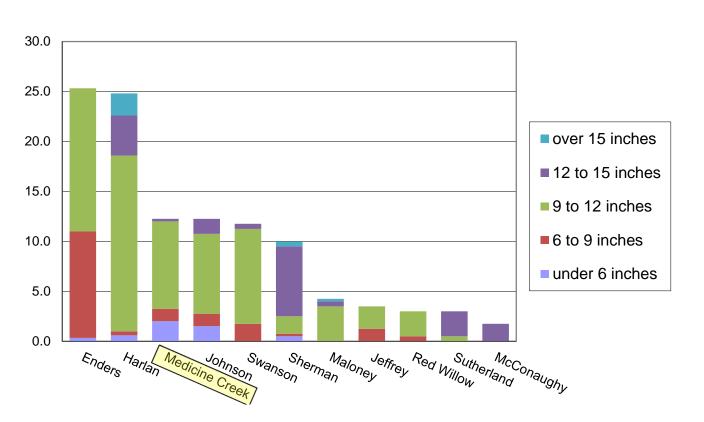


Medicine Creek is the only Southwest reservoir that irrigates annually but also refills annually due to higher inflows and the NCORPE stream augmentation flow. The graph above is a representation of monthly mean elevations. The dark blue line indicates the top of the conservation pool, the green line indicates the end of month elevation, and the red line indicates the top of the inactive pool. For current lake elevations visit this webpage: Current Elevation

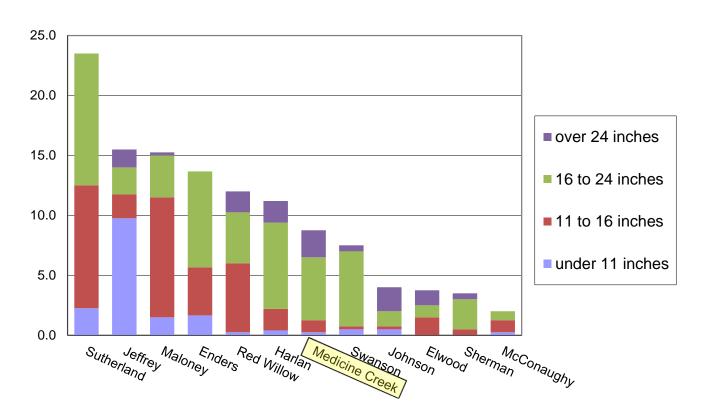
Southwest District Walleye 2017



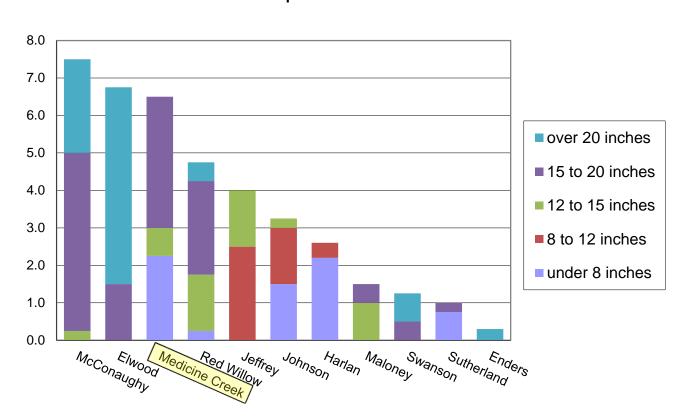
Southwest District White Bass 2017



Southwest District Channel Catfish 2017



Southwest District Wiper 2017





STOP AQUATIC HITCHHIKERS!

Prevent the transport of nuisance species. Clean <u>all</u> recreational equipment.

www.ProtectYourWaters.net

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. 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 for a boat or trailer to arrive or leave a launch area with any aquatic vegetation from 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