Medicine Creek

2019 Survey Summary - GAME

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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.

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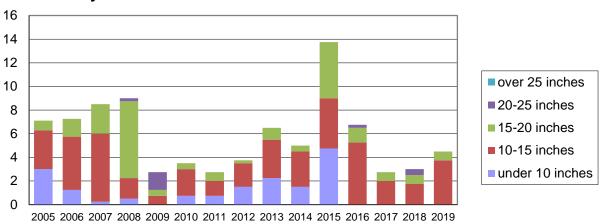
Walleye catch rates increased for the second year in a row in 2019 with biologists sampling just over 4 per net. Sampled size structure consisted mostly of sublegal fish. It is unclear why larger fish were not observed in nets in 2019. However, with higher water levels there is potential for a good growth year in 2020, providing anglers with ample opportunity to catch keeper walleye at Medicine Creek. In an effort to maximize opportunity, saugeye were stocked in Medicine Creek beginning in 2017 to take advantage of excellent available habitat. Those stocking efforts are starting to yield positive results and should continue to improve in coming years. In 2019, biologists sampled 2.5 saugeye per net. It can be difficult to differentiate between walleye and saugeye but its not a major concern to anglers as they are regulated using the same length and bag limits. To assist biologists in identification of stocked fish, walleye and saugeye will be stocked on alternating years. In 2019, Medicine Creek received both a requested and surplus stocking of saugeye resulting in 252,380 fingerlings being stocked. There are 138,000 walleye fingerlings requested for spring 2020.

Wipers continue to be a part of our management plan at Medicine Creek in 2019. They 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. After stable catch numbers from 2015 to 2018, a decline was observed in 2019. However, wiper catch has a tendency to be variable and lower rates are not a concern at this time. White bass catch rates have been variable the last couple years at Medicine Creek. In 2018, a strong year class was observed but numbers declined in 2019 to a number closer to the average catch in Medicine Creek, 5 fish per net. Anglers at Medicine Creek could struggle to find wipers and white bass in Medicine Creek in 2020.

Medicine Creek continues to produce quality channel catfish for anglers. Biologists sampled almost 9 fish per net in 2019. 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. Blue catfish were sampled at a rate of 7 per net in 2019 and will continue to grow and provide opportunities for anglers.

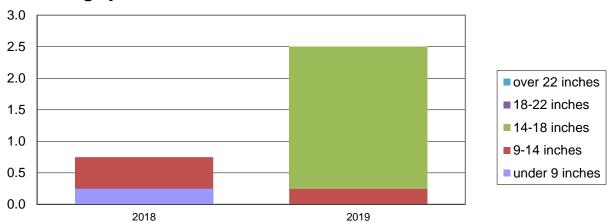
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

Walleye Catch Per Unit Effort



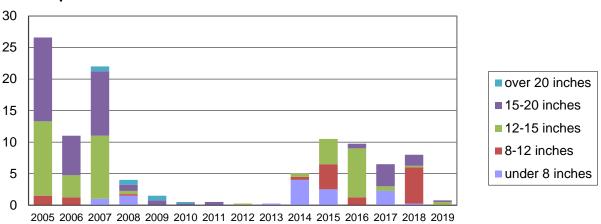
Walleye numbers continued to rebound in 2019 after the decline observed in 2017. Biologists surveyed 4.5 walleye per net in 2019. Size structure will provide anglers opportunities to harvest legal fish in 2020. Walleye will now be stocked on alternating years opposite of saugeye and 2019 was the first year of no walleye stockings in Medicine Creek. There are 138,000 walleye fingerlings requested for spring 2020.

Saugeye Catch Per Unit Effort



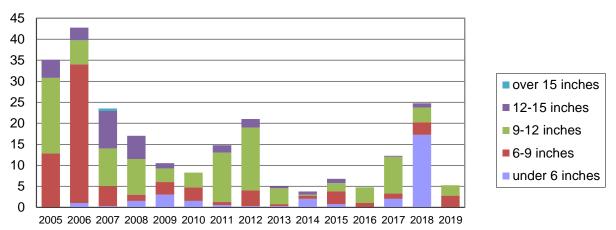
In an effort to take advantage of what should be suitable habitat, saugeye were stocked in Medicine Creek in 2017. In 2019, biologists sampled 2.5 saugeye per net. A large portion of sampled fish came from the original 2017 stocking and are already pushing 15 inches. Saugeye are managed the same as walleye so no concerns with identification should come up from anglers. Current management plans will consist of alternating year stockings between saugeye and walleye. Medicine Creek received a requested and surplus stocking in 2019. In total 252,380 saugeye fingerlings were stocked in 2019. Saugeye will be stocked again in 2021.

Wiper Catch Per Unit Effort



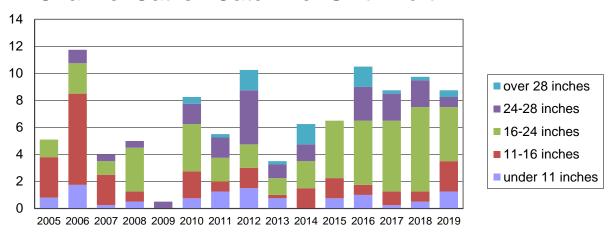
Wiper catch rates were down throughout the southwest reservoirs in 2019. Medicine Creek was no exception with biologists sampling just under 1 wiper per net. At this time, there is not much concern with lower catch rates but populations will continue to be monitored in 2020 and stocking rates will be adjusted if deemed necessary. There are 9,250 wiper fingerlings requested for spring 2020.

White Bass Catch Per Unit Effort



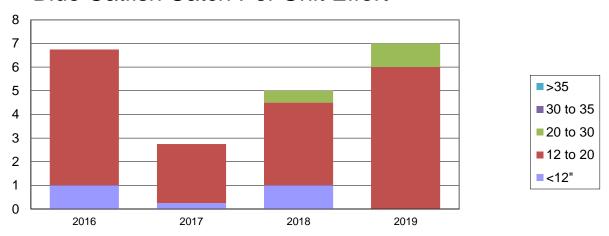
White bass numbers dropped to 5 fish per net in 2019. This was a major shift from the nearly 25 per net caught in 2018. No juvenile fish were sampled in 2019, highlighting the highly variable nature of white bass natural recruitment. White bass are prone to boom and bust cycles and are notoriously difficult to sample due to their schooling behavior. Size structure consisted of a few individuals pushing 12 inches in 2019. The outlook for 2020 should be positive as these fish continue to grow and water levels remain consistent.

Channel Catfish Catch Per Unit Effort



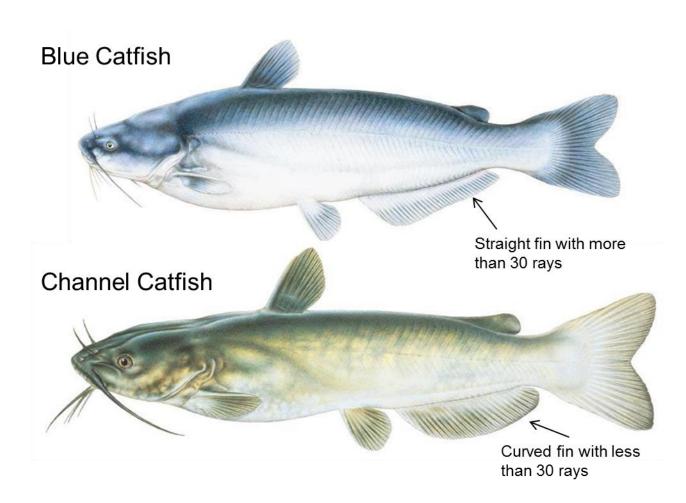
Biologists surveyed over 8 channel catfish per net in 2019. Channel catfish continue to maintain their population in Medicine Creek naturally. Size structure will provide anglers the opportunity to catch large trophy fish as well as smaller fish for the frying pan. Any angler looking to harvest catfish at Medicine Creek needs to be aware that blue catfish are managed differently than channel catfish and need to be identified properly.

Blue Catfish Catch Per Unit Effort



Blue Catfish were introduced into Medicine Creek Reservoir in 2015 and have been stocked regularly since the introduction. Biologists surveyed 7 blue catfish per net in 2019. Some of those fish are already pushing 25 inches. Blue catfish 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. There are 5,550 advanced blue catfish requested for fall 2020. Any angler looking to harvest catfish at Medicine Creek needs to be aware that blue catfish are managed differently than channel catfish and need to be identified properly.

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.

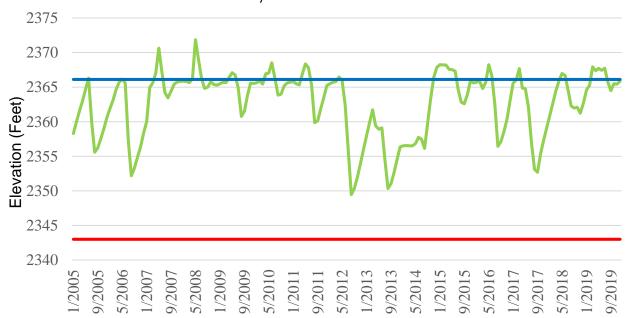


Medicine Creek Fish Stocking Summary

Year	Walleye	Wiper	Yellow Perch	Saugeye	Blue Catfish
2019		9,658 (1")		252,380 (1.25")	
2018	93,210 (1.25")	9,296 (1.25")			2,711 (12")
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")				5,075 (5")
2015	138,000 (1.5")	13,875 (1.4")			8,850 (9.9")

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

End of Month Elevation, Medicine Creek Reservoir 2005-2019



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: <u>Current Elevation</u>



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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. 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