

# Medicine Creek

## 2013 Survey Summary

Caleb Huber, Fisheries Biologist



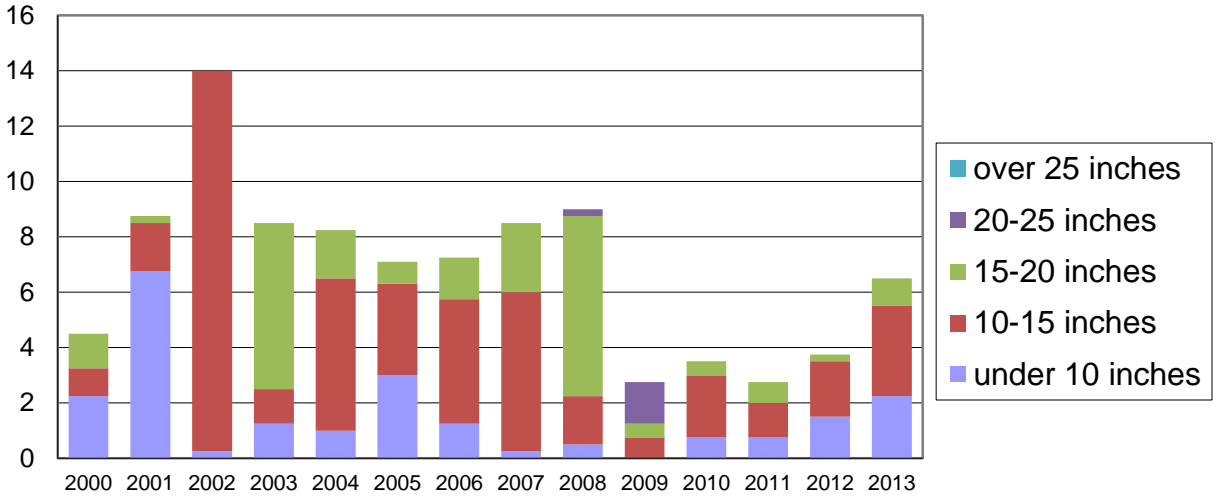
Fish populations are sampled each fall at Medicine Creek Reservoir using gill nets, a method commonly used to sample fish found in open water, such as walleye, white bass, channel catfish and hybrid striped bass. Gill nets are set on approximately the same dates and locations each year to reduce variability.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

Walleye numbers took a sharp decline in 2009 due to a lack of recruitment. This lack of recruitment may have been due to a change in stocking strategy, using walleye fry rather than walleye fingerling. Walleye fry have been very successful at other Southwest Reservoirs but never performed very well at Medicine Creek which could be due to turbidity, increased flow, or high shad abundance compared to other reservoirs. In any case, biologists returned to fingerling stockings in 2010 and things seem to be improving. There has not been a strong increase in numbers, but catch rates are the highest they have been since 2009 even though the reservoir was dropped to a record low in 2012 due to extreme drought conditions. There are also a few small walleye showing up in annual surveys which indicate that they are recruiting to the population. Catch rates for walleye continued to improve in 2013. Biologist sampled approximately 6 walleye per net in 2013, which is a strong improvement when compared to the previous year's catch rates.

Channel catfish are a popular sport fish for anglers at Medicine Creek Reservoir. The survey data was down in 2013 but still on par with the historical average for fall surveys. It is important to point out that Medicine Creek always produces several large catfish each year. In 2013 approximately one third of the fish surveyed were over 24 inches in length. In addition to catfish, white bass are also a "go to" species for local anglers. White bass numbers declined sharply in 2013. Biologist surveyed 20 fish per net in 2012 but that number dropped to 5 fish per net in 2013. White bass tend to have cyclical populations but if necessary fish stocking will be requested in the future to maintain a population of white bass. In addition to white bass, Nebraska Game and Parks personnel stocked wipers in 2013 and requested fish in 2014 to reestablish the wiper fishery in Medicine Creek.

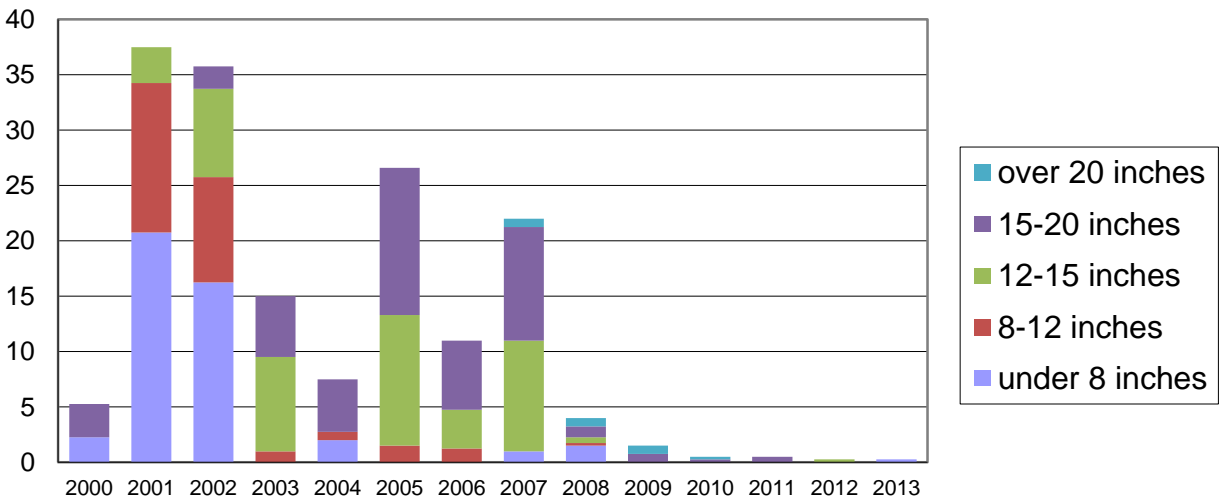
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are 2013 summary graphs of some local waterbodies for comparison.

## Walleye Catch Per Unit Effort



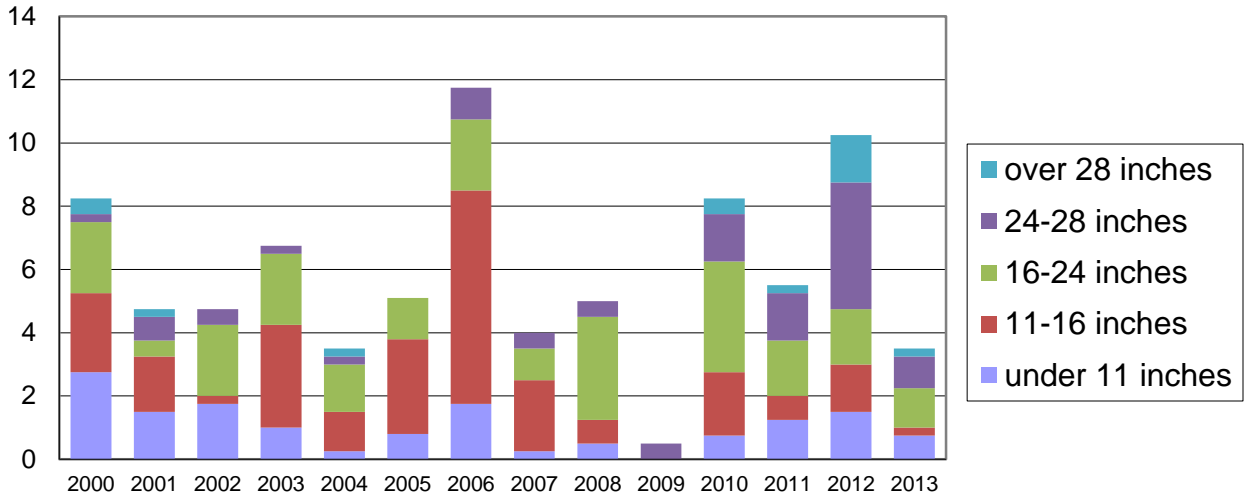
Walleye number appeared to drop markedly in 2009 but have been recovering in recent years. Biologists sampled 6 fish per net in 2013 which is nearing the historical average. Most of the fish sampled were less than 15 inches in length in the fall but some of these fish should be available for harvest during the 2014 season.

## Wiper Catch Per Unit Effort



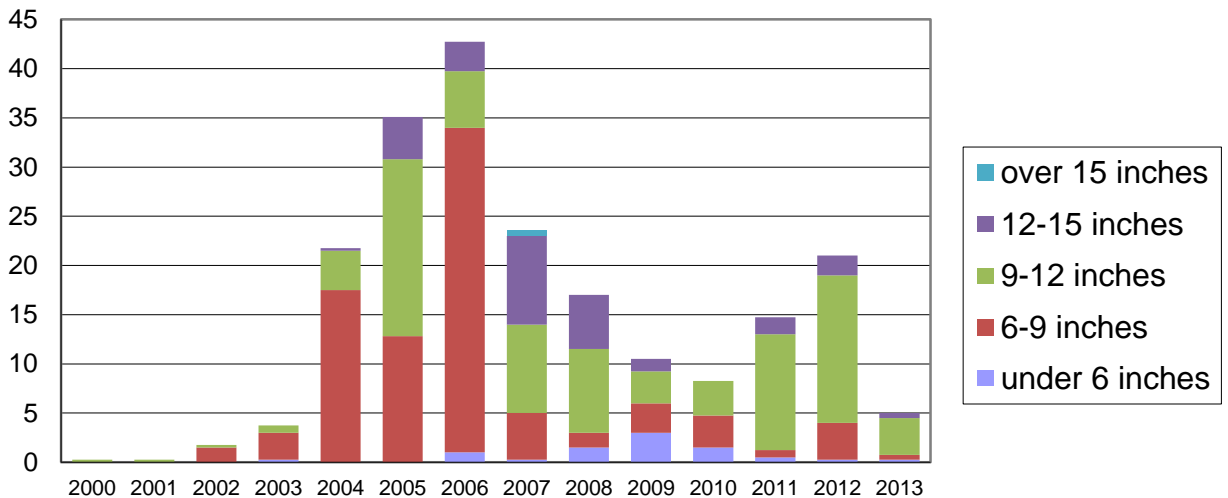
Wiper numbers are down again at Medicine Creek with approximately 1 fish per net. Wiper stockings were suspended in the past but were reintroduced in 2013 in an effort to reduce the number of gizzard shad. 19,000 wipers were stocked in 2013 and another 10,000 are requested for 2014. Wipers will be requested annually to reestablish the fishery.

## Channel Catfish Catch Per Unit Effort



Channel Catfish numbers are pretty consistent at Medicine Creek with the exception of the 2009 sample year. During 2013, biologists caught about 4 fish per net which is just under the average catch rate at Medicine Creek. There was a good representation of larger fish with approximately 1/3 of the fish handled greater than 24 inches in length. Channel catfish are not stocked at Medicine Creek because natural recruitment is adequate to maintain a fishery.

## White Bass Catch Per Unit Effort



White bass numbers have been steadily increasing since 2010 but fell off sharply in 2013. Biologists surveyed 5 fish per net in 2013. White bass numbers can be cyclical but it may be necessary to request white bass stockings if numbers do not improve in the coming years.

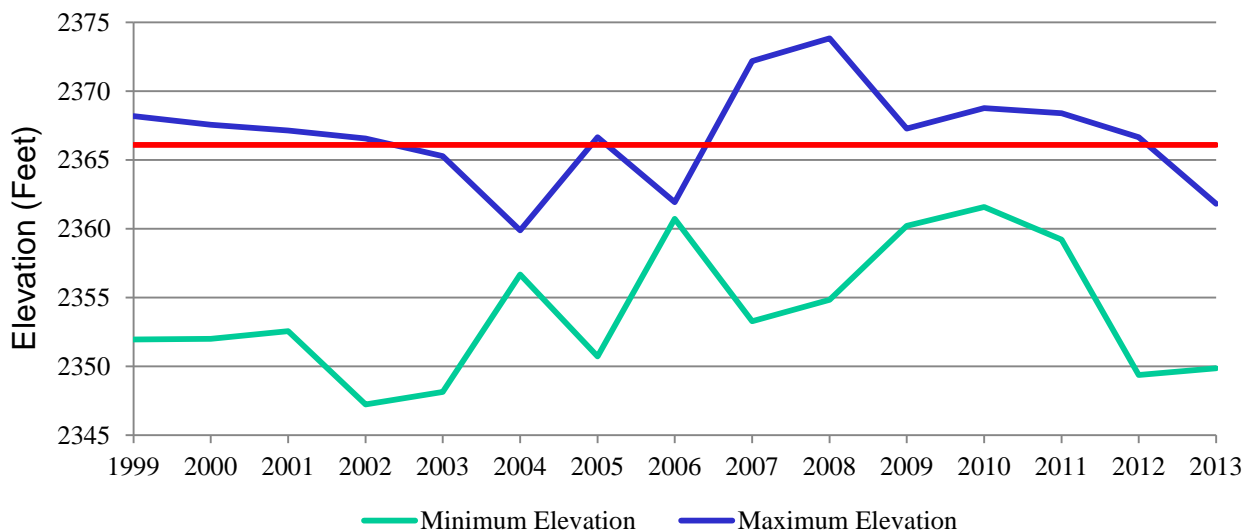
# Medicine Creek Fish Stocking Summary

| Year | Walleye            | Wiper            | White Bass     | White Crappie   | Yellow Perch   |
|------|--------------------|------------------|----------------|-----------------|----------------|
| 2013 | 139,434<br>(1.25") | 19,265<br>(1.2") |                |                 |                |
| 2012 | 131,081<br>(1.2")  |                  |                |                 |                |
| 2011 | 93,556<br>(1.25")  |                  | 10,230<br>(2") | 9985<br>(5.5")  |                |
| 2010 | 1,911,500<br>(fry) |                  |                | 9963<br>(3.25") |                |
| 2009 | 2,723,400<br>(fry) |                  |                |                 | 53,306<br>(1") |

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](#)

## Average Annual Elevation, Medicine Creek Reservoir 1999-2013



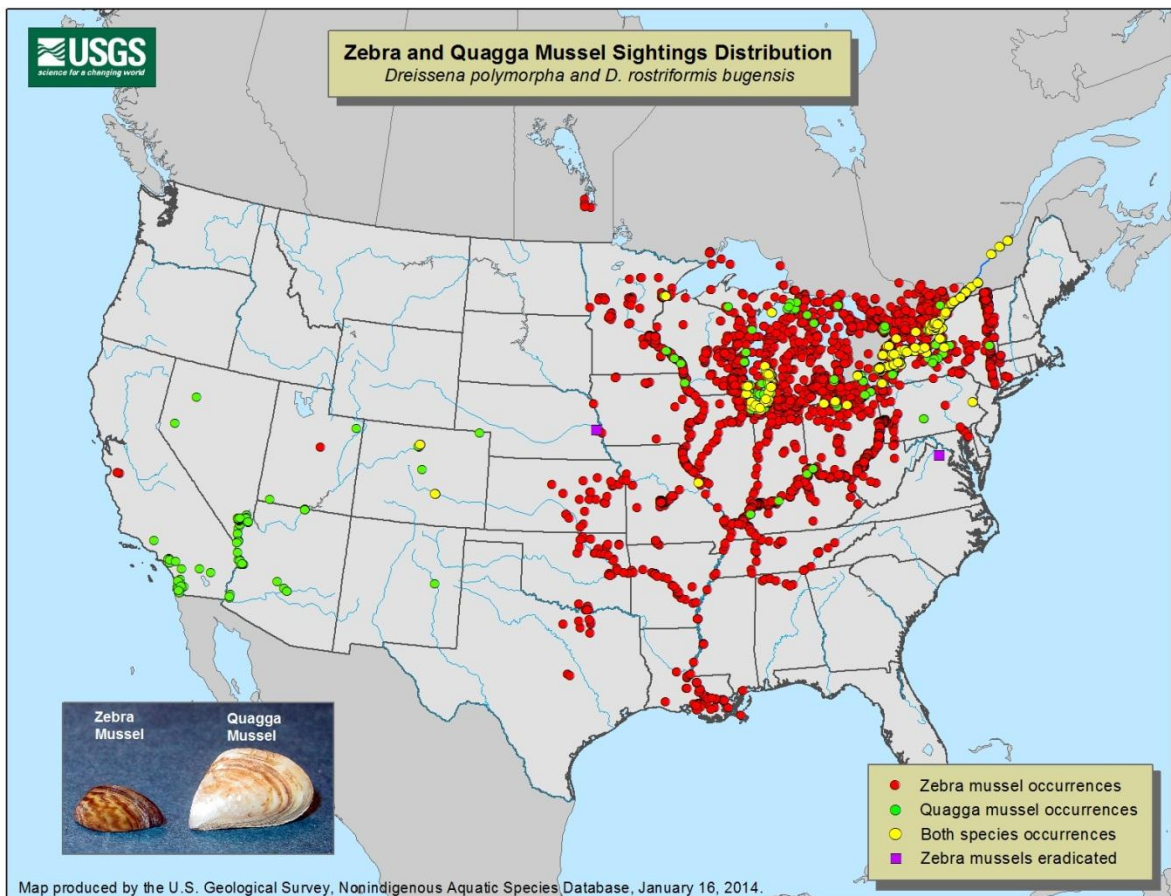
Medicine Creek is the only Southwest reservoir that irrigates annually but also refills due to higher inflows. Medicine Creek normally fills each year and the shape of the data above represent the minimum and maximum annual elevation. The static red line represents the top of the conservation elevation or full pool elevation. Current elevation data can be found by following the link: [Current Elevation](#)



# STOP AQUATIC HITCHHIKERS!™

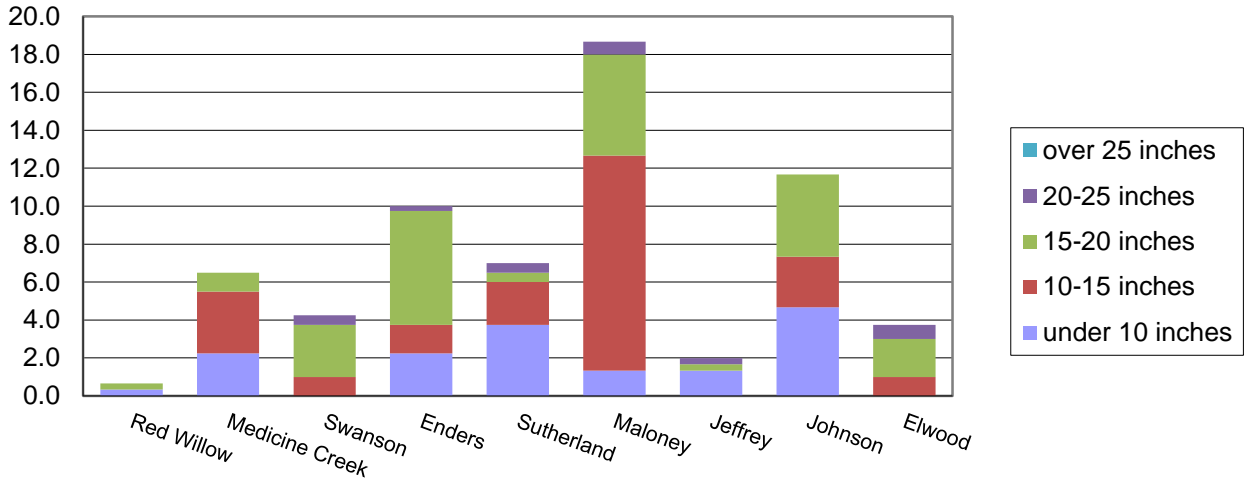
Prevent the transport of nuisance species.  
Clean all recreational equipment.

[www.ProtectYourWaters.net](http://www.ProtectYourWaters.net)

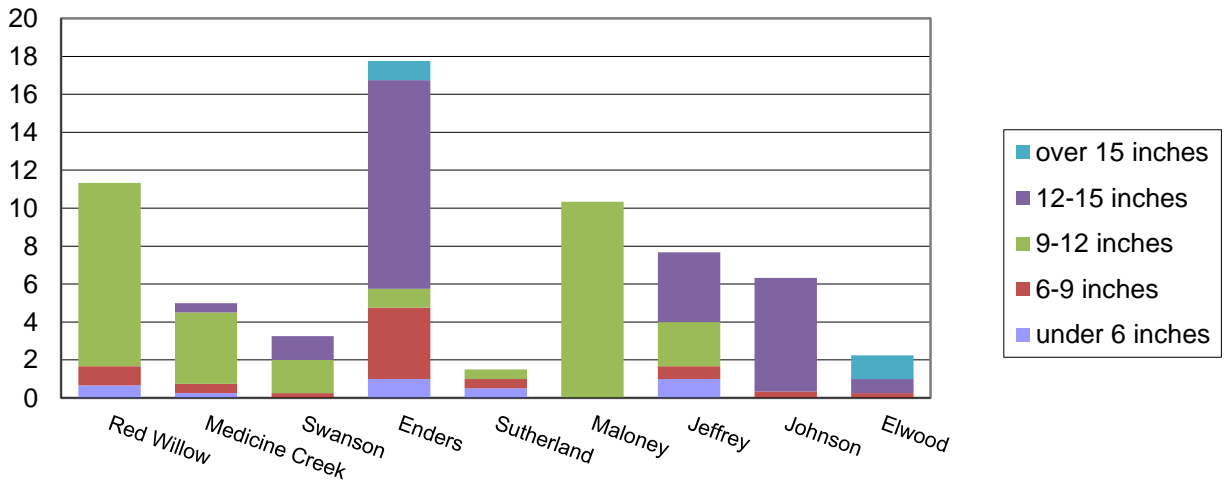


Aquatic invasive species (AIS) are getting closer to Nebraska waters all the time and have the potential for strong negative impacts on the State's aquatic resources. The spread of AIS can be prevented using the Clean, Drain, and Dry technique. Before leaving any water body make sure to drain or dump 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

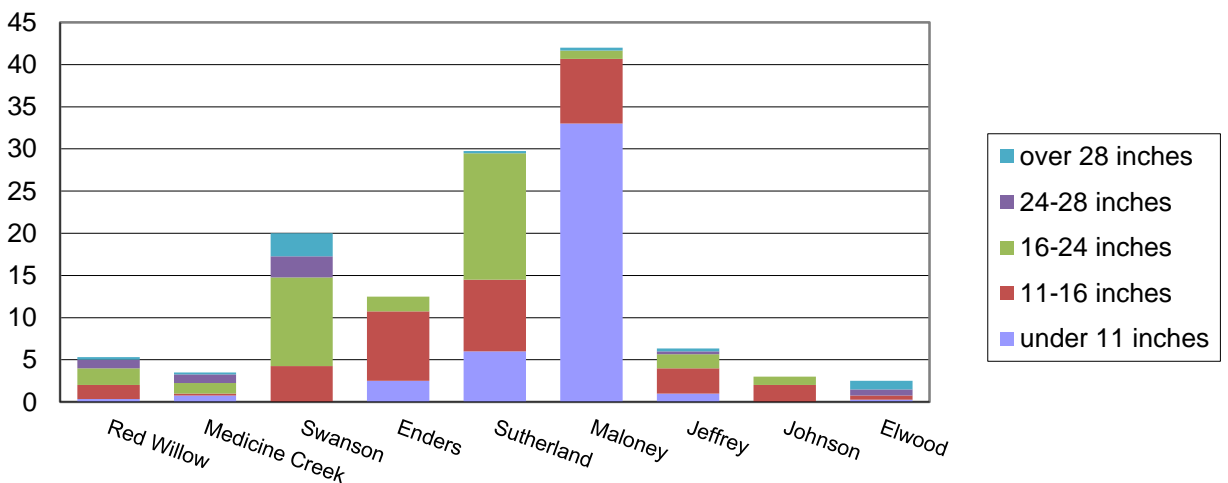
## 2013 Southwest District Walleye Catch



## 2013 Southwest District White Bass Catch



## 2013 Southwest District Channel Catfish Catch



# 2013 Southwest District Wiper Catch

