Lewis and Clark Lake 2015 Fishing Forecast

Annual fisheries surveys are conducted on Lewis and Clark Lake to monitor fish population trends. Electrofishing, gill netting, and seining are used to collect information that helps biologists monitor trends in fish populations. Angler surveys are conducted during some years to gather information on angler use and harvest. These long-term trends in fish population status and angler use are used by biologists to make management decisions and determine regulations.

Key Issues in 2015 for Lewis and Clark Lake

Regulation changes for 2015

- The channel catfish daily and possession limits have been changed to 10 and 20, respectively for the SD/NE border waters. The flathead catfish daily and possession limits remain at 5 and 10.
- In March 2015, the Game, Fish, and Parks Commission finalized a set of rules in attempt to reduce the risk of spreading aquatic invasive species (AIS) such as zebra mussels, Asian carp, and Eurasian water milfoil. These rules will not be in effect until 20 days after filing with the Secretary of State's office. We anticipate that these rules will be in effect on or around May 11, 2015.
    - Boaters and anglers will be required to remove all vegetation and aquatic invasive species from all boats and boat trailers. In addition, it will be required that all drain plugs and related devices be opened or removed from boats when in transport. An exception would be granted to allow livewells to hold water while being transported from a boat ramp to an immediately adjacent fish cleaning station.
    - Anglers will not be allowed to transport fish or aquatic bait in water obtained from a lake, river or stream except when they are traveling from a lake, river or stream to an immediately adjacent fish cleaning station. Anglers will be allowed to transport fish and aquatic bait using domestic water resources or on ice.
    - For more information go to http://gfp.sd.gov/wildlife/nuisance/aquatic/default.aspx

Aquatic Invasive Species (AIS)

- A single zebra mussel was found attached to a boat dock at Midway boat ramp November, 2014.
- Lewis and Clark Lake is home to many AIS including curlyleaf pondweed, Eurasian water-millfoil, purple loosestrife, Asian clams, and zebra mussels.
- Silver, bighead, and grass carp are found in the river directly below Gavins Point Dam and pose a threat to nearby lakes including Lewis and Clark.
- Anglers need to be careful not to spread AIS to or from Lewis and Clark Lake

Fish

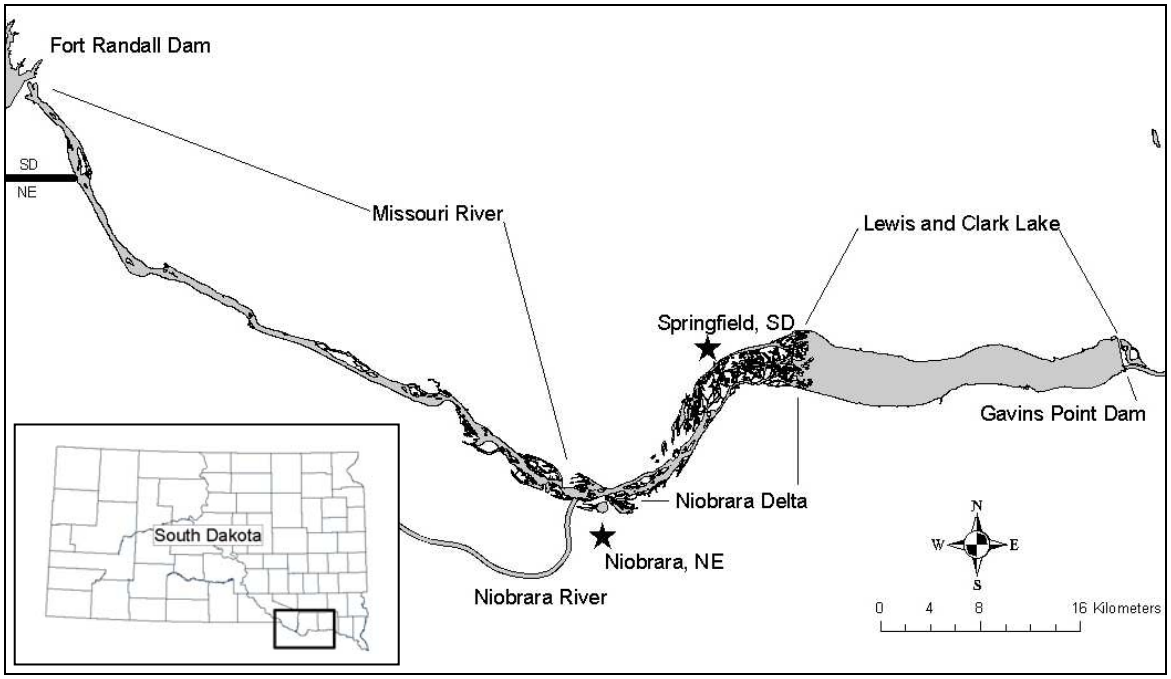
- Walleye recruitment has been low from 2009 through 2012; however, the 2012 year class will average 15-16 inches in 2015 and will provide anglers opportunity to harvest fish
- Walleye production was moderate in 2013 and this year class should reach 15 inches by the end of 2016.
- 2014 channel catfish abundance was near average in Lewis and Clark Lake and should provide good angling opportunities for many years.
- Angling success is often affected by prey fish abundance. During years with good numbers of gizzard shad throughout the summer/fall seasons, angling success can decline due to the amount of food present.

Habitat

- High flows from the 2011 flood altered habitat throughout the reservoir, especially in the river reaches and the upstream areas of the reservoir. Large amounts of sediment were moved around within the reservoir and deposited in new areas. Anglers are cautioned that there are sandbars and other obstructions where there was deep water before and deeper areas in places that were relatively shallow prior to the flood.

- Sedimentation plays a major role in habitat alteration in Lewis and Clark Lake. Large amounts of sediment are deposited by the Niobrara River which contributes to the growing delta near Springfield, SD. As the physical characteristics of Lewis and Clark Lake change, anglers will need to adjust their fishing strategies.

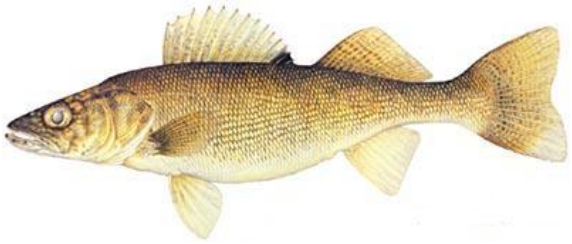
Lewis and Clark Lake



Additional information can be obtained by contacting:

Missouri River Fisheries
1550 East King Avenue
Chamberlain, SD 57325
(605) 734-4548
www.sdgfp.info

<u>Lewis and Clark Lake Walleye, Sauger, and Hybrids</u>



Did you know that the spawning seasons of walleye and sauger naturally overlap and they sometimes spawn together, forming hybrids known as saugeye. Saugeye can also spawn with one another, or with pure walleye or sauger. Of all four Missouri River reservoirs in South Dakota, Lewis and Clark Lake has the highest percentage of walleye/sauger hybrids. This means many of the fish caught by anglers in Lewis and Clark Lake that look like pure walleye or sauger could be hybrids.

Lewis and Clark Lake Walleye/Sauger/Hybrid Regulations (For more information on Missouri River Regulations, see 2015 Fishing Handbook, pages 16-18)

These regulations apply to waters of the Missouri River from Gavins Point Dam upstream to Fort Randall Dam.

- *4 fish daily/8 possession*: Walleye/Sauger/Hybrid (in any combination)
- *Minimum length 15 inches year-round* *
- *High-grading or culling of walleye/sauger/saugeye is prohibited.*

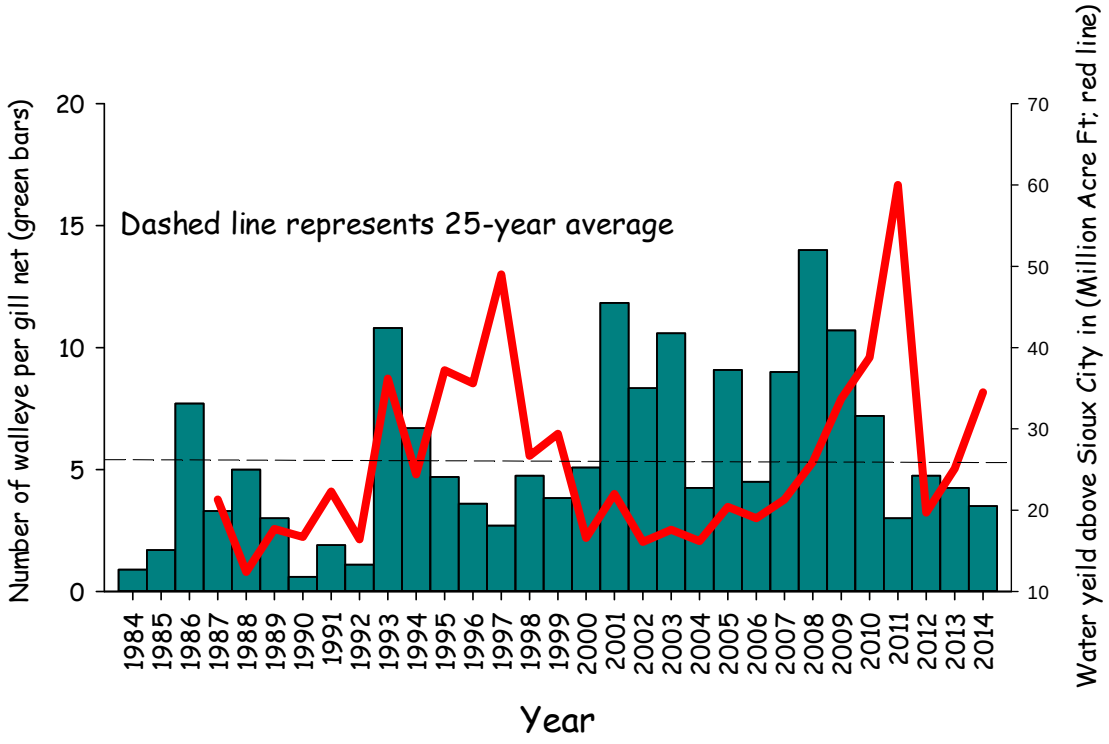
*There is NO minimum length restriction in July and August and only 1 fish in the daily limit may be 20” or longer year-round **from the South Dakota/Nebraska border upstream to Fort Randall Dam**

Walleye

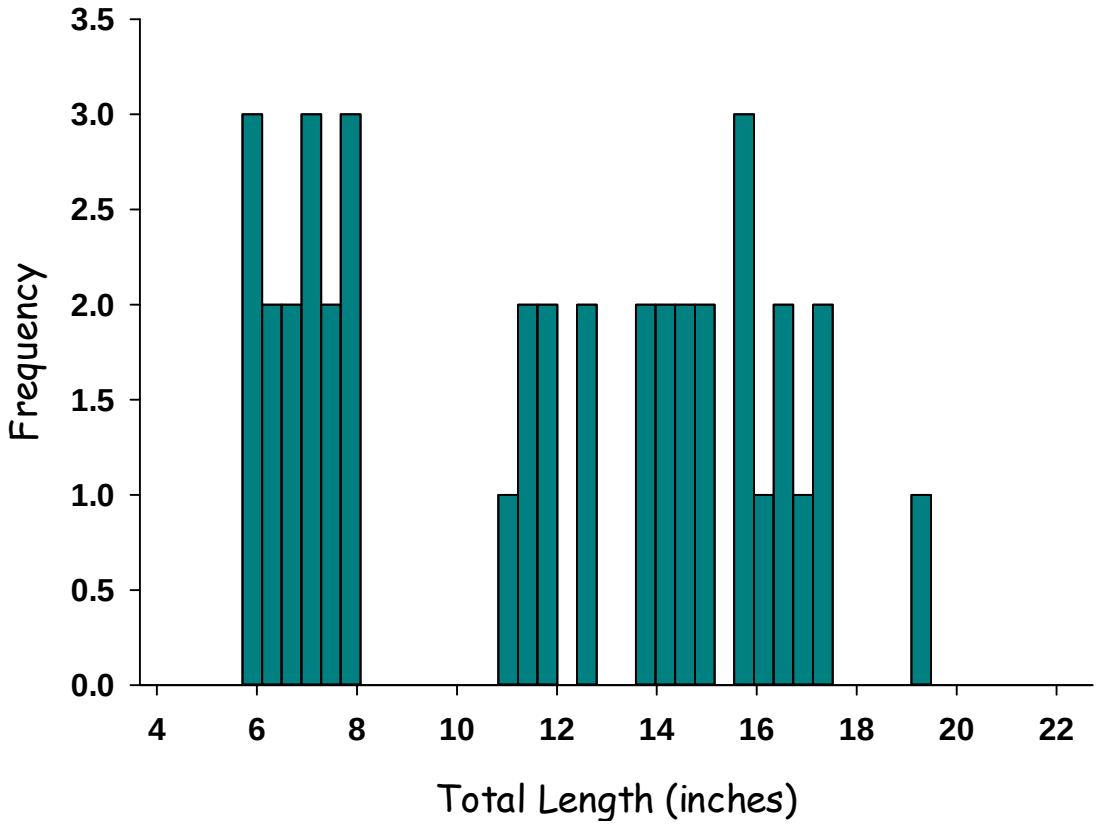
Walleye abundance is monitored through an annual September population survey. The average number of walleye per gill net is compared with the data from previous years to detect changes in abundance. Since the highest recorded walleye abundance in 2008, there has been a decreasing trend through 2014. This is mostly due to low walleye recruitment during 2009-

2013. Sampling for age-0 walleye (the 2014 year-class) was conducted using gill nets and nighttime electrofishing. Results indicated moderate production in 2014; however most of those fish will not grow to harvestable size until 2017. The majority of the harvestable population currently is from the 2012 year classes with a few fish from the 2009 and older year classes. The 2012 fish will provide much of the angling opportunity in the summer of 2015, these fish should average around 15 inches.

Walleye Relative Abundance 1984 – 2014

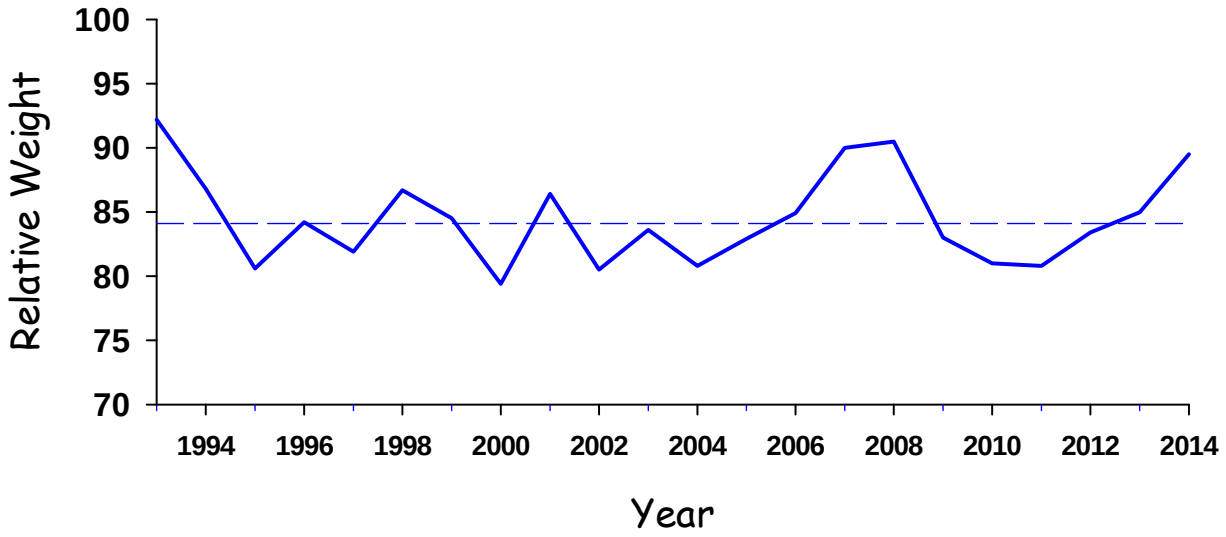


2014 Length Frequency



Relative weight is an index used to describe fish condition. High values indicate that the fish are plump and healthy, while low numbers can indicate an imbalance between walleye and its prey. Walleye relative weight values in Missouri River reservoirs are generally between 80 and 90 and only approach 100 when prey species are overly abundant. Walleye relative weights observed in 2014 were above the long term average for Lewis and Clark Lake indicating adequate prey resources were available in 2014. Relative weights in 2015 will be dependent on prey abundance that year.

Walleye condition was above the long term average in 2014



Points to Ponder

Anglers will likely see reduced catch rates of legal sized walleye and sauger in 2015. This is due to lower recruitment in 2009-2013. However, a low-moderate year class was produced in 2012, which will provide opportunity to harvest some walleye between 15 and 16 inches. For catch rates to increase to levels seen in 2008, moderate to strong reproduction needs to occur in upcoming years.

Lewis and Clark Lake walleye tend to have stronger year classes produced during drought years. If water yield through the reservoirs is lower than average in 2015, the chances of another moderate to strong year class increases.

<u>Lewis and Clark Lake Catfish</u>

Lewis and Clark Lake Channel and Flathead Catfish Regulations (For more information on Missouri River Regulations, see the 2015 Fishing Handbook, pages 16 - 18)

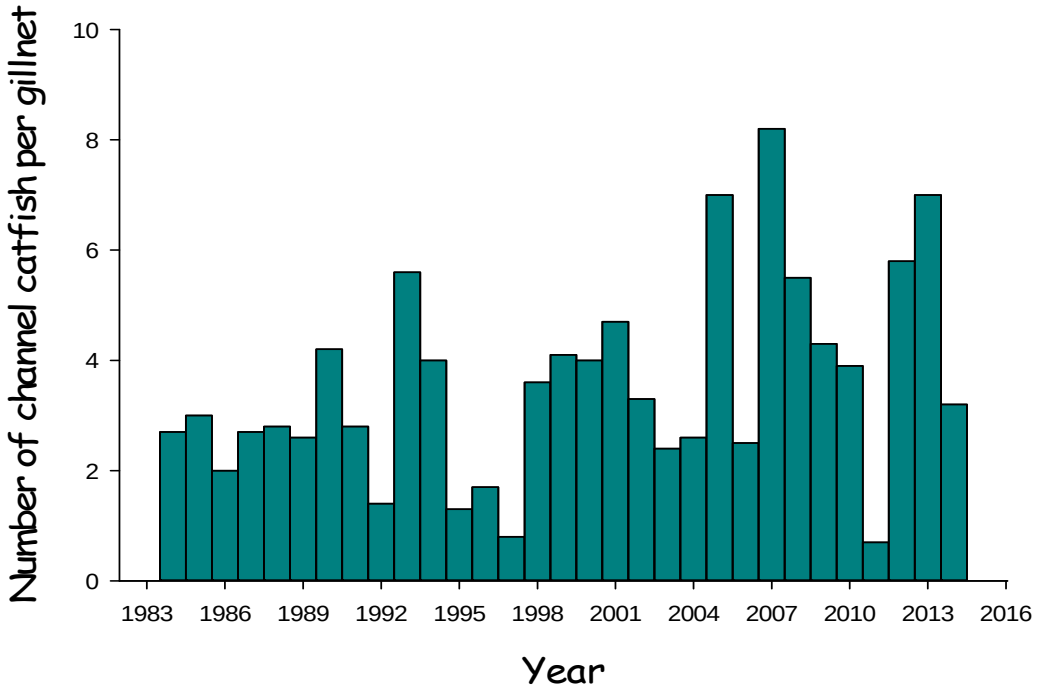
These regulations apply to waters of the Missouri River from Gavins Point Dam upstream to the South Dakota/Nebraska border where the river becomes entirely in SD.*

- *10 fish daily/ 20 possession- channel catfish*
- *5 fish daily/ 10 possession- flathead catfish*

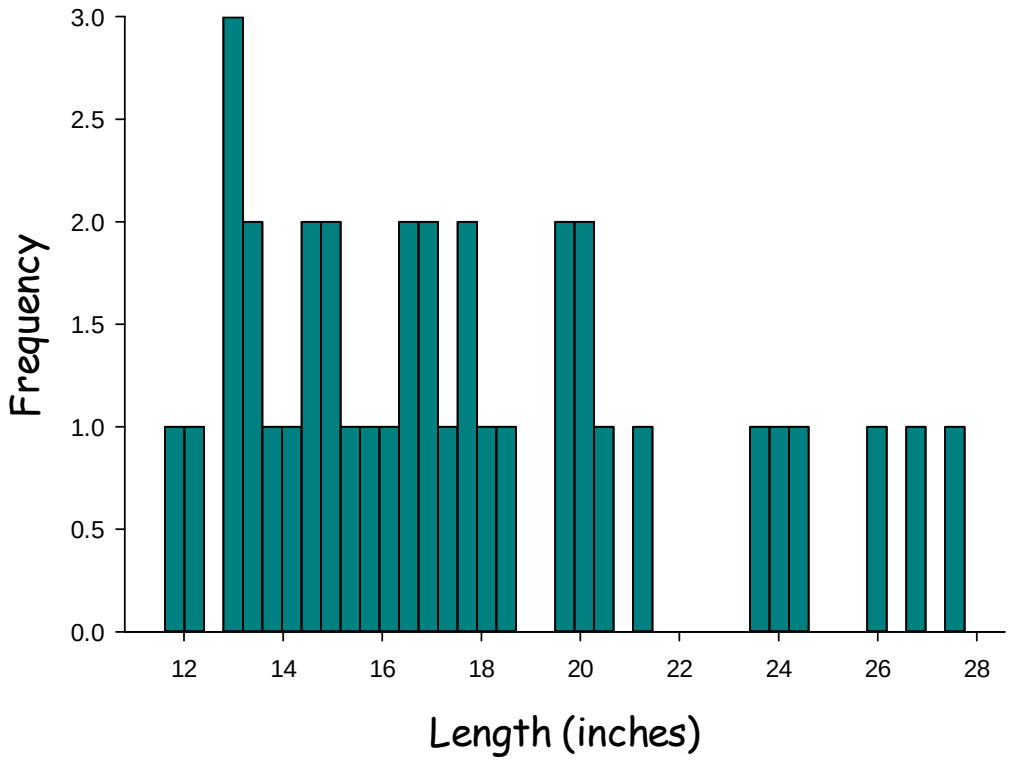
**No daily or possession limit from the SD/Nebraska border <u>upstream</u> to Fort Randall Dam.*

Channel catfish may be the best kept secret of the Missouri River reservoirs! Lewis and Clark Lake is no exception with excellent numbers and sizes present. In 2014, channel catfish abundance was near the long term average. Mean length was nearly 18 inches and fish as big as 27 inches were sampled. In 2010,there was a strong year class produced which will likely result in increased catch rates of channel catfish in upcoming years.

2014 Channel Catfish abundance is near long term average.



Channel Catfish Length Frequency 2014



Flathead catfish are present in Lewis and Clark Lake and can provide angling opportunities for those willing to search for them. Surveys from recent years have produced flatheads over 25 pounds!

Lewis and Clark Lake Largemouth and Smallmouth Bass

Lewis and Clark Lake Largemouth and Smallmouth Bass Regulations
(For more information on Missouri River Regulations, see 2015 Fishing Handbook, pages 16-18)

These regulations apply to waters of the Missouri River from Gavins Point Dam upstream to Fort Randall Dam.

- *Smallmouth/Largemouth Bass (in any combination)-5 fish daily/10 Possession*
- *There are no minimum length restrictions for this portion of the river*

Largemouth bass are annually sampled by electrofishing backwater areas in the Niobrara Delta. In 2014 the number of largemouth per hour of electrofishing was above average. The 2011 flood severely altered the backwater habitats within the delta which resulted in altered largemouth bass distribution within the delta. Traditionally, the best largemouth bass angling on Lewis and Clark Lake has been found in backwater areas of the Niobrara Delta containing aquatic vegetation.

Smallmouth bass are abundant throughout the reservoir from Gavins Point Dam to the Fort Randall Dam tailwater. Most of the population is young and tends to be on the small side; however, some smallmouth bass near 18 inches are sampled each year.