



2009 Lake Sharpe Fishery Projections

Each year, biologists working on Lake Sharpe collect information on fish populations from many fisheries surveys conducted throughout the year. They also collect information on angler use and harvest of those populations through creel surveys.

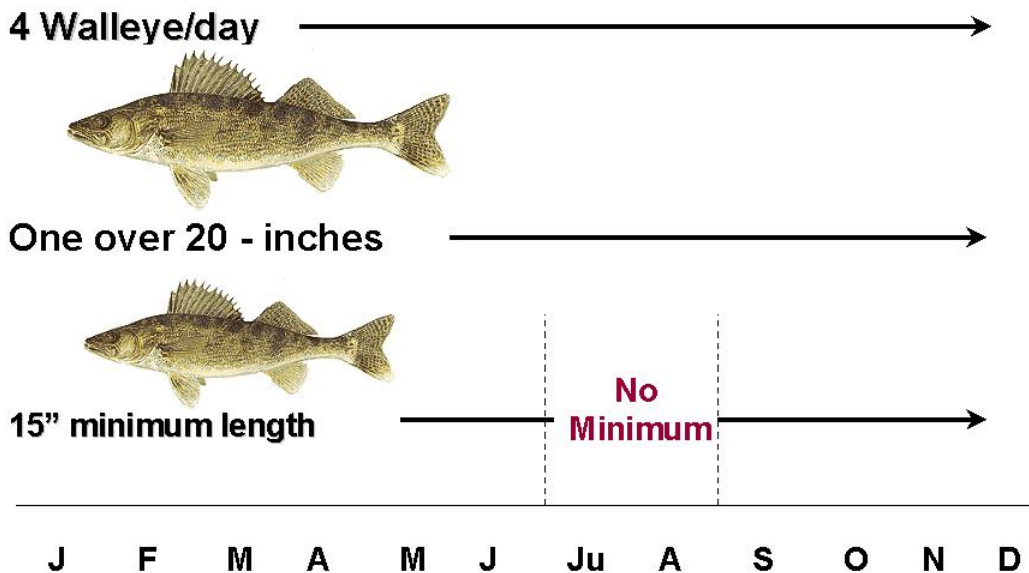
By looking at trends in fish populations and angler use and harvest, predictions can be made about fishing on Lake Sharpe for 2009.

Walleye

Regulations for Lake Sharpe Walleye

Walleye limits for Lake Sharpe are the same as the South Dakota statewide standards of 4 fish daily and 8 in possession. The daily limit may include only one walleye 20 inches or longer, year-round, and a 15-inch minimum length limit is in effect during all months except July and August.

Walleye Regulations for Lake Sharpe

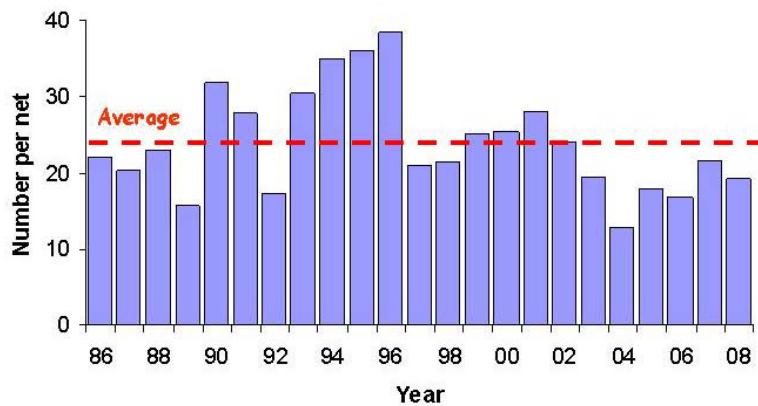


Walleye Fishing Trends for 2009

Fishing activity peaks at different times in different areas on Lake Sharpe. Fishing usually is best in the spring in the upper region, near Pierre, and then progresses downstream to the lower third of the lake. Walleye fishing in the Pierre area is usually best in the spring and fall. In June, fishing improves in the lower third of the reservoir and remains good throughout the summer.

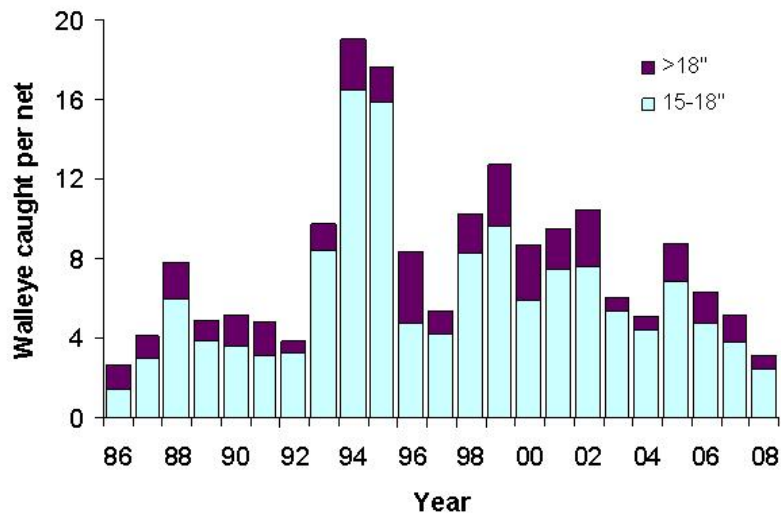
A walleye population, as with any fish population, has many ups and downs due to many factors, such as weather and water conditions, food resources, and angler harvest. In 2008, the walleye abundance index was 19 fish per net, which is slightly lower than the average, but has increased since 2004. The increase in abundance was largely due to high production of young walleye during 2005-2008.

Lake Sharpe walleye population with its ups and downs during the past years.



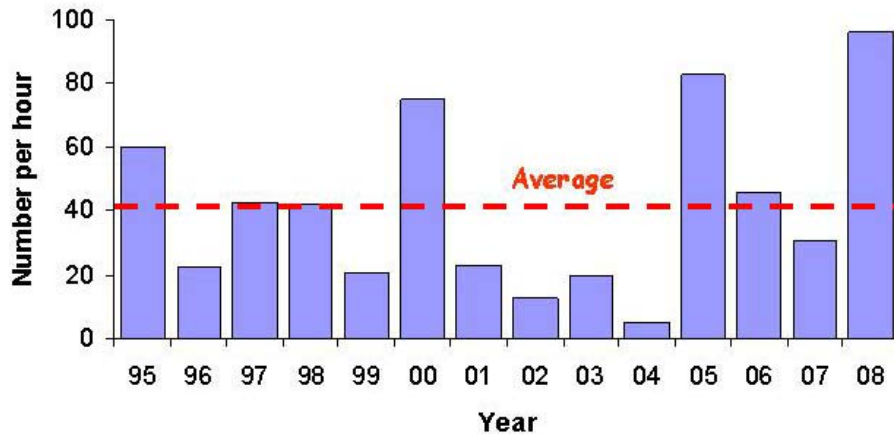
The abundance of harvestable size fish (over 15 inches) was lower in 2008 than in the past, due to many factors including past angler harvest and lower production of young walleye from 2001 to 2004. Of the 19 walleye caught per net in 2008, on average, only 3 walleye per net exceeded 15 inches.

Harvestable size (> 15 inches) walleye numbers in Lake Sharpe were low in 2008.



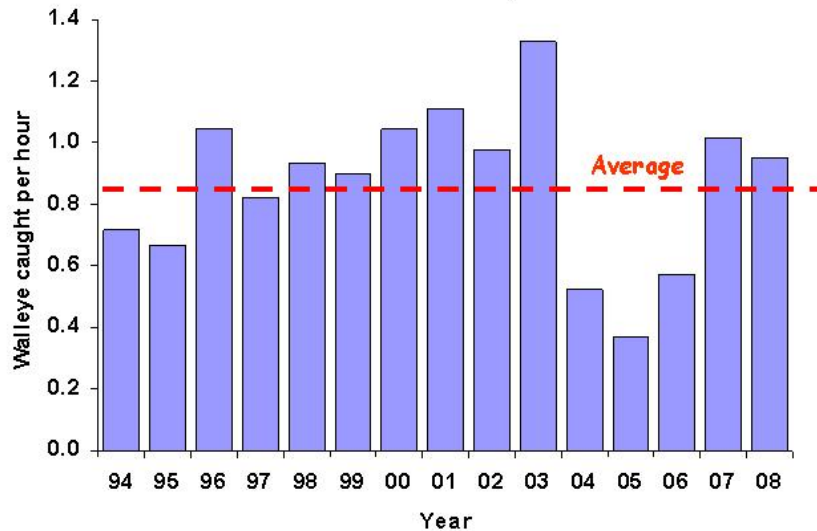
However, the future is bright for Lake Sharpe. During the years of 2005 through 2008, Lake Sharpe experienced average or above average production of young walleye. These fish began to reach harvestable size (> 15 inches) in 2008. Small walleyes will make up a large portion of the catch in 2009.

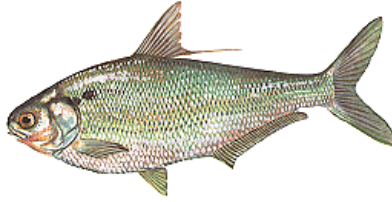
Walleye production has been good the past 4 years on Lake Sharpe.



How easy fish are to catch is influenced by many factors including the number of adult walleye in the population, ages of fish (younger fish bite better), and how abundant food is. If the fish have a limited supply of food, catch rates generally increase. In 2009, catch of walleye should be good with the walleyes produced during the 2005-2008 period making a large portion of the catch by anglers.

Number of walleyes caught per hour increased in 2007 and 2008 due to a population increase of small walleyes.





Gizzard Shad: Lake Sharpe's Primary Forage

In Lake Sharpe, gizzard shad are the primary forage species. The majority of young gizzard shad die each winter due to cold water temperatures and a few adults survive each winter. In the spring, these adults spawn and produce thousands of young that feed Lake Sharpe fish for the rest of the year. If spawning conditions are not ideal for gizzard shad, there will be less food for walleye and other predator species. When conditions are right, adult gizzard shad will produce a high number of young, providing ample food for all predatory fish in Lake Sharpe.

In Lake Sharpe, fishing patterns develop due to the reliance of walleyes and other fish on young gizzard shad as food. In the spring, when gizzard shad numbers are low, walleye are easier to catch. In the summer, as the gizzard shad become large enough for walleye to eat, walleye are harder to catch because they have full stomachs. In the fall, walleye become more susceptible to anglers as they migrate upstream and concentrate in the upper end of Lake Sharpe. Also, as the water cools in the fall, walleye become more active and easier to catch.

How old is the walleye I just caught?

Walleyes in different lakes grow at different rates. A lot of factors affect how fast a walleye grows, including water temperature, amount of food and time of food availability, and spawning stress. Just like humans, some fish eat more and may grow faster than others. In Lakes Oahe and Sharpe, biologists have aged walleye as old as 16 years of age. In most cases, fish continue to grow longer and larger as they age. The chart below describes the growth of walleye in Lake Sharpe. A lot of years are invested in growing walleyes large enough for anglers to keep. Generally speaking, it takes four years to raise a walleye to harvestable length (>15 inches) in Lake Sharpe and nine or 10 years to grow a 20 inch walleye.

An Age Estimate for Walleye in Lake Sharpe according to the length of walleye.

Length of walleye (inches)	Age (years)
6	0
10	1
12	2
14	3
15	4
16	5
17	6
18	7
19	8
19.5	9

Age is approximate. Length is in August.

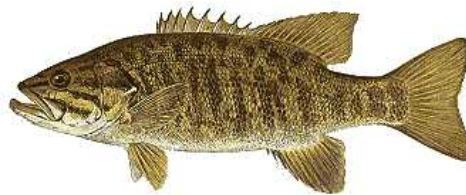
Why not stock Lake Sharpe with walleye?

Factors such as cool or unstable weather, water management of the Missouri River system, and drought affect how successful the spawning season and natural production of walleyes are each year.

Lakes Francis Case and Sharpe have traditionally had consistent production of young walleyes. Lake Sharpe has never been stocked with walleyes and Lake Francis Case was only stocked with walleyes in 2002 because water management by the Corps of Engineers resulted in a decrease in water levels during the spawning season.

In many lakes with a history of good natural walleye production, stocked fish usually survive well in years when natural production of young walleyes is also good. When natural production is poor, stocking often has poor results. The only time this would not be the case is if some environmental factor negatively affected the walleye spawning season, like a decrease in water level. Current management plans are to only stock Lakes Sharpe or Francis Case if water management during the walleye spawning season would negatively impact the potential for a good year of natural production.

When walleyes are at a low abundance, the stage is set for a good year of natural production, as shown by high walleye production in 2005. The major factors affecting successful spawning seasons in the future will be weather and the possible continuation of the drought in the Missouri River basin.



Smallmouth Bass

Smallmouth bass are found throughout Lake Sharpe, but the best fishing is in the lower half of the reservoir. Smallmouth bass are the second most common species caught by anglers in Lake Sharpe. Shore fishing opportunities are best in May and June. The release of all smallmouth bass over 18 inches is encouraged to help increase the number of trophy bass in Lake Sharpe.

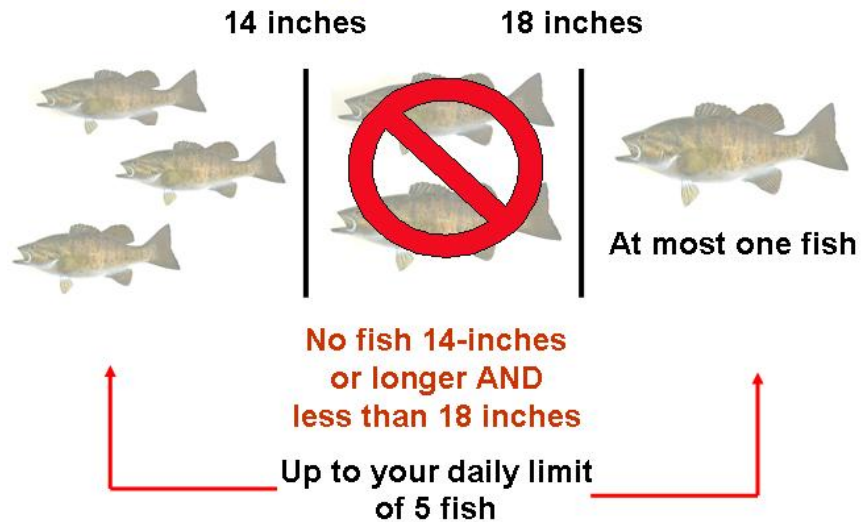
Smallmouth bass spawn in May to early June in Lake Sharpe. The male builds a nest in the shallows and attracts a female to his nest. The male will guard the nest and newly hatched fry for some time after hatching. After spawning, smallmouth bass will disperse from the shallows and cruise the "flats" for food during the summer, feeding to regain strength spent spawning. Walleye anglers often fishing the "flats" during June and July commonly catch smallmouth bass.

The smallmouth bass population is in the process of maturing into an excellent and important fishery in South Dakota. Lake Sharpe is beginning to attract anglers from across the Midwest who enjoy fishing for this great sport fish.

Regulations for Lake Sharpe Smallmouth Bass

Only smallmouth bass less than 14 inches or 18 inches and longer may be taken, and of those 18 inches or greater, only one may be kept daily. Thus, all smallmouth bass must be released that are between 14 and 18 inches. The daily limit is five smallmouth bass, and the possession limit is 10.

Lake Sharpe Smallmouth Bass Regulations



Rainbow Trout

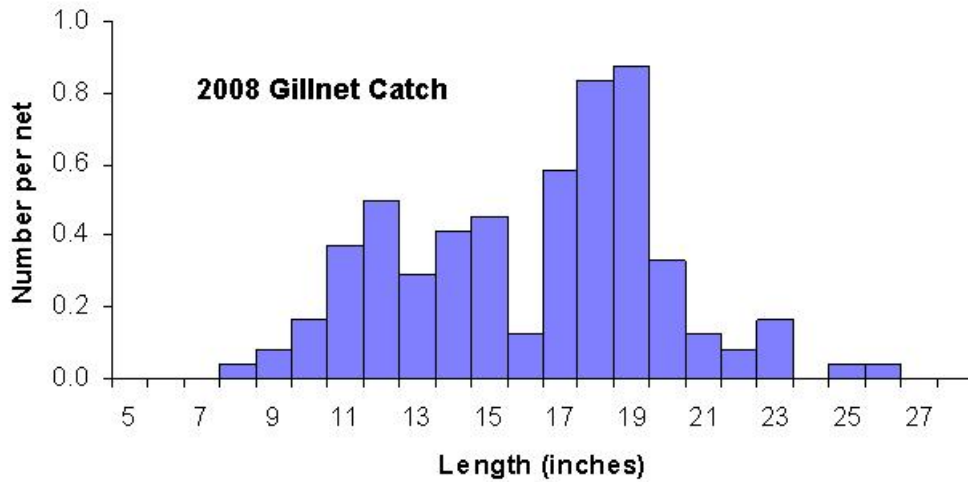
The tailrace area below Oahe Dam is well known for trophy trout fishing. Fishermen commonly catch large rainbow trout in the marina next to the tailrace during the winter and spring and in the tailrace throughout the year. In April, catchable rainbow trout (9-11 inches long) are stocked in the marina. This provides an excellent angling opportunity for kids and adults. A stocking of rainbow trout will also be made in April near the LaFramboise Causeway fishing piers in Pierre to provide an easily accessible place for people fish for rainbow trout. Catchable rainbow trout that survive their first spring in Lake Sharpe can grow to a large size in the Oahe Dam tailrace, adding to the number of large rainbow trout available to anglers.



Channel Catfish

Channel catfish are found throughout Lake Sharpe and are abundant but overlooked by most anglers. Lake Sharpe channel catfish average 15 inches in length. Shore fishing with live, cut, or stink bait is especially effective and can be extremely fast during the summer months. Channel catfish are very long lived in the cooler waters of Lake Sharpe. Larger channel catfish in Lake Sharpe may be up to 25 years of age. Many areas throughout Lake Sharpe are good channel catfish fishing locations including the Oahe Tailrace, Farm Island's Hipple Lake, and Fort George.

Catfish of all sizes are found throughout Lake Sharpe





White Bass

The white bass population is down considerably from previous years in Lake Sharpe. White bass suffered a die off in 2005 from columnaris bacteria. This bacteria is found in most fishes, but only harms fish that have been stressed, especially schooling fish. The white bass population is very capable of rebounding from this die off, but it'll take a few years before anglers see the numbers and sizes of white bass caught in the past.

To fish for white bass look for them in May and June, especially in the upper third of the reservoir. Fish the windblown shorelines. White bass are excellent to eat if served fresh with the red meat trimmed from the fillets.

Key Issues for 2009 for Lake Sharpe

- Catch of small walleye will be very common in 2009 due to 4 previous years of good production of walleye. These small walleye are the future walleye fishery for Lake Sharpe.
- Natural production of walleye for 4 years (2001-2004) was below average and has limited the number of fish above the 15-inch minimum length limit the past few years.
- Smallmouth bass fishery will provide an excellent fishery for the future.
- White bass population is rebuilding due to a widespread die off in 2005.
- Boating access is not an issue on Lake Sharpe in most areas of the reservoir.

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