#### DEPARTMENT OF NATURAL RESOURCES

# **Ortonville Area Fisheries Newsletter, March 2025**

The lake sturgeon restoration project is well on its way in Big Stone Lake. Approximately four thousand seven-inch lake sturgeon were stocked annually from 2014-2024 (except 2020) totaling about 44,500 fish to date. These fish came from eggs taken by the Wisconsin Department of Natural Resources which are then hatched by the United States Fish and Wildlife Service at the Genoa National Fish Hatchery, also in Wisconsin. The partnership efforts by staff at these agencies have been the reason lake sturgeon once again thrive in Big Stone Lake. The goal of stocking is to establish a self-sustaining, naturally reproducing population of lake sturgeon in the lake and its connected waters.

The lake sturgeon have a small tag inserted into them at the hatchery. The tags have numbers identifying the stocking year. We occasionally receive lake sturgeon that have died from various causes. These fish are examined for sex and maturity, and the tags are extracted and read under a microscope. We were able to age five lake sturgeon this winter using this method. The oldest was nine years old and 52 inches long! We also know from these tags that lake sturgeon can reach 17 inches after two summers of growth. Lake sturgeon in Big Stone Lake have grown relatively fast when compared to other

# Lake Sturgeon Update By: BJ Bauer

populations in the state.



e lake sturgeon be<br/>It's possible for<br/>o be sexuallyLake sturgeon are mobile fish and<br/>they have been found upstream in the<br/>Little Minnesota River near BrownsI females by age<br/>veral years there<br/>some spawners in<br/>vever, it's probably<br/>be older before<br/>ecent spawning<br/>ail River. GivenLake sturgeon are mobile fish and<br/>they have been found upstream in the<br/>Little Minnesota River near Browns<br/>Valley, upstream in the Whetstone<br/>River in Milbank, downstream in the<br/>connected waters of the Minnesota<br/>river and even more than 60 river miles<br/>upstream in the Pomme de Terre River<br/>near Morris.ail River. Given<br/>tion, we don'tSouth Dakota State University.

South Dakota State University, South Dakota Game, Fish and Parks and the MN DNR will partner on a study that will look at age, growth, maturity and movement of lake sturgeon in Big Stone Lake and the connected waterways. This project will encompass three years and will provide valuable insight for sustainably managing lake sturgeon.

The season for lake sturgeon on South Dakota/Minnesota border waters is closed from April 15 to June 15. Catch-and-release fishing is permitted for the remainder of the year. No harvest of lake sturgeon is allowed on the MN/SD border waters.

How soon can the lake sturgeon be expected to spawn? It's possible for male lake sturgeon to be sexually mature by age 8 and females by age 14, so in the next several years there could potentially be some spawners in the population. However, it's probably more likely they will be older before maturing based on recent spawning events in the Ottertail River. Given this is a new population, we don't know for sure and are learning as we go!





# Gas Bubble "Disease" in Fish By: Chris Domeier

Gas bubble disease isn't a "typical" disease in the sense that it's contagious or caused by an infection. It's actually a physical reaction in fish when too much gas enters their bodies and gas bubbles form in their tissues and under their skin. This can occur when the water becomes supersaturated with dissolved oxygen, which then comes out of solution in the fish and forms bubbles. Eventually, this can kill fish due hemorrhaging and organ failure.

Lakes can become supersaturated with oxygen when they have clear ice, very little snow cover, a lot of algae, and there is ample sunshine. The most important factor is the ice cover. Clear ice will create a green-house effect in the water below which causes algae and plants to produce a lot of oxygen. The ice forms a "cap" on the lake and prevents the oxygen from leaving. This is easy to see when you drill a hole in the ice as bubbles will start coming out.

During "typical" Minnesota winters oxygen levels are usually less than 10

parts per million (ppm) in a lake. During mild winters with clear ice, lakes frequently have oxygen levels over 20 ppm. This is very high considering saturation is around 13 ppm. This winter we recorded the highest level we've ever seen of 41 ppm on Lac qui Parle Lake. That is extremely high!

The highest oxygen levels are usually near the surface just under the 50 years that I am aware of. So the ice where more of the "microscopic" algae can be found. This is because they produce oxygen as they photosynthesize. It's common during mild winters to see oxygen levels greater than 15 ppm just below the ice and lower levels (5-15 ppm) near the bottom. This is good since most fish will be near the bottom and therefore are less likely to be subjected to those higher levels.

Sometimes the higher oxygen levels are near the bottom of the lake because filamentous algae and rooted We'd also appreciate feedback from plants are growing there. This is not ideal and is more likely to cause gas bubble disease since that's where the

fish prefer to be. This scenario happened late last winter on Traverse Lake and it caused a partial fish die-off in a portion of the lake. Air bubbles were readily apparent under the skin of fish collected during ice-out, as can be seen in the attached photograph.

We have not observed any other fish die-offs from gas bubble disease in the Ortonville area during the past Traverse kill was a pretty isolated incident. However, with the high oxygen levels we've been seeing this winter the potential does exist. Oxygen levels will likely increase as more and stronger sunlight is occurring every day.

We don't know for sure at what level gas bubble disease starts to occur, but we think it's around 25 ppm or higher. We'll be monitoring lakes where levels are a concern to determine if any fish die-offs occur. anglers. Please let us know if



you see fish that are swimming erratically or having trouble

maintaining balance, which are symptoms of gas bubble disease. We ortonville.fisheries@state.mn.us.

can be reached at 320-839-2656 or

# 2024 Walleye Harvest By: Kyle Anderson

Ortonville Area DNR Fisheries harvested 15,249 pounds of walleyes from local rearing ponds in 2024 (Table 1). Walleyes fell into three categories. Fingerlings which are one summer old and 4-9 inches long, yearlings which are two summers old and 9-14 inches, and adults which are three or more summers old and 14-30 inches.

The statewide harvest by all DNR Fisheries offices combined was 76,000 pounds of walleyes. So, Ortonville accounted for 20% of the statewide DNR



harvest of walleyes! The fish harvested in our area were stocked throughout the state, including 3,103 pounds that were stocked locally.

Many of the walleyes were stocked locally into Kids Fishing Ponds, including Clinton, Sylvan, Appleton Park

and Marietta ponds. Several small lakes were also stocked including Botkers, John, Porter and Long Tom. These basins are stocked annually, often with catchable sized fish, and are promoted as put-andtake fisheries.

Perch Lake, south of Canby, was stocked with mixed aged walleyes. Many of those walleyes were marked by clipping a fin. This will help us determine the contribution these fish make to the walleye population during future surveys.

The Ortonville Area also transferred 12,146 pounds of walleyes to 12 other DNR Fisheries Areas throughout the state to help meet their stocking needs. Because fry stocking has generally worked well in Ortonville Area lakes, most fingerlings raised in the area ponds are transferred to other Areas.

Three genetic strains of walleyes are grown in Ortonville Area ponds. Mississippi Strain primarily from Pine River near Brainerd, Red River primarily from Lake Sallie near Detroit Lakes and Walker Lake near Fergus Falls, and Spicer Strain primarily from Koronis Lake near Paynesville. Some Areas need specific strains based on genetic integrity requirements and walleyes are stocked accordingly.

Ortonville Area 2024 Walleye Harvest				
	Pounds	Number	Pounds	Number
	of Walleye	of Walleye	of Walleye	of Walleye
	Stocked Locally	Stocked Locally	Transferred	Transferred
Fingerlings	250	1992	7884	54513
Yearlings	2300	11260	4262	30799
Adults	553	678	0	0
Totals	3103	13930	12146	85312

# 2025 Fisheries Surveys By: BJ Bauer

The Ortonville Area Fisheries staff oversee fisheries and habitat management in Traverse, Big Stone, western Lac qui Parle, western Swift, western Yellow Medicine and northern Lincoln counties.

Popular Lakes include Artichoke, Big Stone, Hendricks, Lac qui Parle and Traverse. The Minnesota River and many smaller lakes and rivers provide numerous additional angling opportunities. Due to the shallow, productive nature of these water bodies, fish grow fast, and quality populations of yellow perch, walleyes, crappies, freshwater drum and white bass are common.

Fisheries staff routinely evaluate fish populations in lakes and streams using gill nets, trap nets, seines and electrofishing. These data are used to make management decisions. The data are also available to anglers in reports which are useful for deciding where to fish. The data presented here are from the most recent surveys conducted.



### Walleye

Most lakes are regularly stocked with walleyes, however good natural reproduction does occur in several lakes and rivers. walleyes are most abundant in Traverse, Hendricks, Steep Bank and the Oliver Lakes. Big Stone, Hendricks, Artichoke and Lac qui Parle also have decent populations. Although "eater-sized" walleyes (13-18 inches) are most common, plenty of larger walleyes are also present. Walleye fishing can also be good in the Minnesota and Pomme de Terre rivers especially during spring and fall.

# **Yellow Perch**

Yellow perch fishing is very popular and there are numerous options in the area. Big Stone is a perennial favorite with high numbers of perch, many from 8-10 inches. Hendricks and Traverse Lakes are also worth giving a try. Yellow perch grow fast in these lakes and reach 10 inches after 3-4 summers.

#### Crappies

Several lakes in the area can provide decent crappie fishing. Lac qui Parle Lake has provided a quality crappie population for many years. When the bite is on, good catches of 10-13-inch crappies are common. Crappie numbers have been increasing in Big Stone and Traverse Lakes, and angling for them can be good, especially in the spring.

### Bluegills

Only a few lakes in the area provide decent bluegill fishing. Improved water clarity has led to increased vegetation in Big Stone and Traverse Lakes. This has created better bluegill habitat. During the past several years bluegill fishing has been very good on Big Stone. Traverse can also provide good fishing at times. Anglers have a chance to catch a trophy in both lakes. West Oliver and Del Clark both have decent numbers of bluegill, but they tend to be smaller in size.

### Largemouth and Smallmouth Bass

Largemouth and smallmouth bass numbers have increased substantially in the area during recent years. Big Stone is becoming known for its quality largemouth bass fishing. Increased vegetation has led to better survival and recruitment of bass. Growth is fast and many bass over five pounds are caught. Smallmouth bass are present in Traverse and Oliver Lakes. Traverse has a substantial amount of rocky habitat and Oliver has abundant flooded timber, cover types that commonly hold bass.

# **Northern Pike**

Numbers of northern pike have been increasing in area lakes. Del Clark, Traverse, Lac qui Parle and Perch Lakes provide the best opportunities for catching pike. Most of these lakes have decent numbers, with some fish over 30 inches. Big Stone has lower pike numbers, but anglers have reported catching pike over 40 inches.

# **Catfish and Bullhead**

The Minnesota River, Lac qui Parle and Traverse Lakes have high numbers of channel catfish. Catfish grow fast and fish over 30 inches are present. Big Stone and Lac qui Parle Lakes have decent numbers of large bullheads. Black, yellow, and brown bullheads are all present in the area.

# **Freshwater Drum and White Bass**

Many area lakes and rivers provide good fishing for freshwater drum and white bass. Freshwater drum are commonly known as "sheepshead". Drum can be caught in Lac qui Parle and Big Stone Lakes, whereas the best bets for white bass are Traverse, Big Stone and Hendricks Lakes. Both species can be caught from the Minnesota River as well. These species are good to eat, and they continue to become more popular with anglers. Their flavor can be improved by bleeding them prior to cleaning (cut through their gills when on a stringer or in the live-well), by keeping the slime off of the meat during filleting and by trimming away the reddish "mud-line" flesh from outer edge of the fillets. Excellent recipes for preparing drum can be located on the internet by searching "drum recipes".

### Lake Sturgeon

Lake sturgeon were historically present in Big Stone Lake but had disappeared by around 1950 likely due to winterkill, summerkill and barriers to spawning migration. Lake sturgeon were reintroduced in 2014 and 4,000 fingerlings have been stocked annually since then. The stockings have been successful, and sturgeon are frequently caught by anglers, and in DNR sampling. The oldest fish are already measuring over 50 inches. Lake sturgeon will continue to be stocked until a self-sustaining population has been reestablished.

# **Other Lakes**

Artichoke, Long and East Toqua lakes experienced severe winterkill during 2022-2023. These lakes have been restocked and should provide good fishing soon, if not already.

This article includes data from surveys of the more popular lakes in the area. Please contact the area office with questions about any other lakes of interest. The larger lakes in the Ortonville management area are surveyed annually, while smaller lakes are surveyed every third year or more. More detailed survey reports are available upon request or can be found on the Minnesota DNR Lakefinder website on the internet.











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https://www.dnr.state.mn.us/areas/fisheries/ortonville/index.html