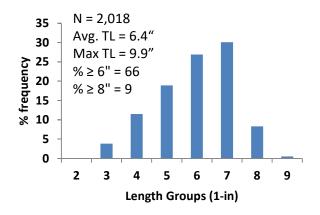
Clearwater Lake

Sunfish numbers in Clearwater Lake are average; however, the size structure is above average for the area. Historical summer trap net surveys rarely sample sunfish over 8 inches and do not appear to represent the true size structure of the sunfish population. Recent studies found that targeted sampling around spawning time appears to give a better representation of the size structure of the sunfish population. In 2022, a spring targeted survey sampled 2,018 sunfish ranging in length from 3.1 – 9.9 inches with an average length of 6.4 inches. Sixty-six percent of the sunfish sampled were longer than 6 inches and 9% were longer than 8 inches. Growth is average taking about 4 years to reach 6 inches and 6 years to reach 8 inches. Previous success on other lakes with a reduced bag leads us to believe that by reducing the bag limit to 10 will help protect and possibly improve the existing size structure.



Length distribution of sunfish from Clearwater Lake collected spring 2022.

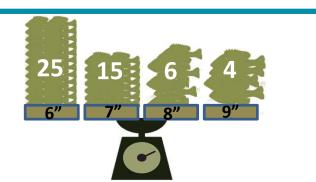
Why release big fish?

Common sense has told us that when sunfish overpopulate the best strategy is to harvest more - to **thin the herd**. However, science has shown thinning the herd is ineffective and actually contributes to the problem. It all has to do with biology. Big male sunfish dictate the size of the rest of the sunfish population.

Big males get the best spawning locations, attract more females, and are better at protecting the nest and eggs. The mere presence of big male sunfish forces other male sunfish to make the choice to also grow big. Without big male sunfish little male sunfish can focus energy on reproductive growth instead of body growth.

Simply put: if sunfish don't have to grow big, they won't. When small fish are able to spawn it means more fish are able to spawn. More fish spawning means more small fish. Harvest does not suppress numbers; it only suppresses size.

Releasing big fish limits reproduction which limits the number of small fish.



The number of sunfish needed to make 1lb of fillets. Would you rather clean 15 fish or only 6? By keeping fewer large fish - you'll still get plenty to eat and help ensure big fish for the future.

Quality sunfish Initiative

sunfish Angling and Management on Sauk Rapids Area Lakes



Sauk Rapids Area Fisheries Office 1035 South Benton Drive Sauk Rapids MN 56379

(320) 223-7867 saukrapids.fisheries@state.mn.us



What is the QSI?

The QSI, or Quality sunfish Initiative is a statewide effort by Fisheries Managers to increase the size of sunfish.

The QSI is:

- A proposal to increase the number of lakes managed for quality sunfish size.
- Angler driven!
- A response to angler dissatisfaction with sunfish size statewide.
- Aimed at increasing average sunfish size NOT creating trophy fisheries.
- Backed by science. Experimental regulations have proven succesful on lakes in MN and WI.
- Special Regulations aimed at specific lakes NOT a statewide regulation.

Why the QSI?

Anglers are generally dissatisfied with sunfish size statewide. However, recent surveys show anglers do not support reduced limits as a statewide regulation.

The QSI will:

- Increase the number of lakes with special sunfish regulations.
- Protect or improve sunfish populations on select lakes using reduced harvest.
- Improve angler understanding of sunfish biology and mangement through outreach and education.
- Provide managers with insights into what determines success or failure of reduced bag limits for sunfish.

How will the QSI work?

Area managers will select lakes they believe deserve special attention to either protect or reestablish quality sunfish populations.

The QSI will use:

- 5 fish bag limits on lakes where managers hope to re-establish quality sized sunfish. This is the "fixer" regulation.
- 10 fish bag limits on lakes where managers want to protect quality sized sunfish. This is the "maintainer" regulation.
- An education and outreach program featuring anglers, resort owners, fishing guides and "celebrities", and DNR staff designed to inform anglers about sunfish management and biology.



Will the QSI work?

We certainly believe it will or we would not be proposing it. Not all regulations will work on all lakes, but the QSI is backed by success stories in both MN and WI.

Reduced bag limits have:

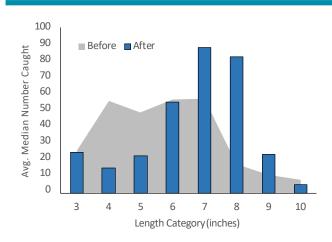
- Maintained or improved sunfish size on 7 of 9 lakes reviewed in MN with a 10 fish limit.
- Maintained or improved sunfish size on 10 of 11 lakes reviewed in MN with a 5 fish limit.
- Increased the average length of sunfish nearly 3/4" in lakes where length increased.
- Been popular with anglers and other stakeholders. No 5 or 10 sunfish limits have been removed after review.

What does the QSI mean for me?

sunfish populations are good to great on many Sauk Rapids area lakes and most lakes in the area will continue to operate under the current statewide regulations.

Some lakes in the area do have populations of sunfish with declining or poor size. We believe these lakes can be "fixed" with 5 fish regulation. Some area lakes have excellent sunfish size but have low numbers of sunfish and face very heavy pressure from anglers. We believe these lakes can be protected by either the 5 or 10 fish regulation.

We are proposing six new lakes in 2023 (Clearwater Chain (5 lakes) and Maple Lake which will join 13 other lakes that were enacted in the first phase of the QSI.



Above: Graph showing the number of sunfish at a specific size before (gray shading) and 10 years after (blue bars) a 5 fish limit was put in place at a northen MN Lake. Notice the increase in 7-, 8-, and 9-inch fish and decrease in 3, 4, and 5 inch fish. Regulations may work faster on central and southern MN lakes where sunfish growth is faster.