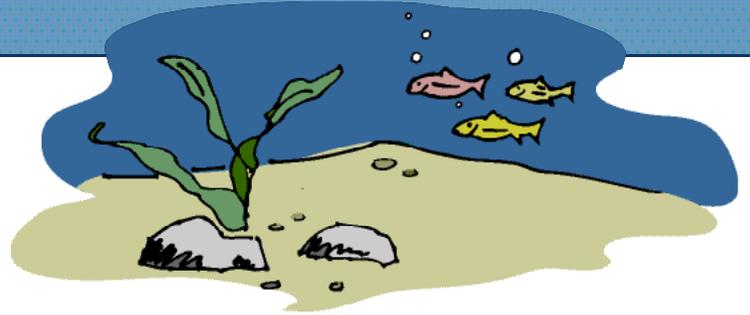


MANAGING FISH IN LAKES

Short answers to frequently asked questions
about managing fish in lakes



Why is the fishing so poor on my lake? Why are the fish smaller than I remember?
Why am I catching so many bullheads (or other rough fish)?
How can we control the increase of "less popular" fish in our lakes?
I am concerned about fish populations decreasing due to spearing, fishing contests,
and/or over-harvesting on my lake. What can be done?
How do I find out what fish have been stocked in my lake?
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Why is the fishing so poor on my lake? Why are the fish smaller than I remember?

In many cases the numbers of fish are still good, it's just that more anglers are sharing them. In other cases, we find that a particular lake supports numerous forage fish, making game fish less inclined to take your bait. Annual or short-term variations in fishing success are normal, so it's difficult to say why the fishing has gotten worse unless we know more about your lake.

There are some general trends that can cause decreases in fish populations, including increases in the number of anglers, the technology used by anglers, and water pollution from sediment and nutrients. The loss of aquatic vegetation, introduction of exotic plants and animals, increased shoreline development, and cumulative land use impacts to water quality in the watershed all play a role in decreasing the ability of lakes to maintain the quality fisheries that we have enjoyed in the past.

Why am I catching so many bullheads (or other rough fish)?

Although "rough fish" is a well known term, it is probably more appropriate to refer to them as "less popular" fish, because all fish have some ecological, food, or angler value. Bullheads, carp, and other "less popular" fish are very adaptable and can thrive when water quality declines. Turbidity from erosion and run-off can decrease the amount of light that reaches the bottom of lakes and

reduce the number of rooted aquatic plants. Run-off also typically carries nutrients, causing algae blooms that further reduce light penetration. Sedimentation can reduce available spawning and rearing sites for game fish. While the number of "less popular" fish species occurring in our prairie lakes is naturally higher than in the deeper, less productive lakes of the forested regions, human activities in the forested regions of Minnesota have often tipped the scale to favor nongame fish.

How can we control the increase of "less popular" fish in our lakes?

Decreases in water quality and the loss of habitat and spawning sites for game species are often the primary mechanisms that create opportunities for "less popular" fish species. The best way to avoid this is to protect habitat where game fish spawn and rear their young. Restoring natural habitat to shorelines is a great way for individuals to do their part. Promoting good stewardship practices in the entire watershed is absolutely essential to maintaining or improving water quality in our lakes and streams.

I am concerned about fish populations decreasing due to spearing, fishing contests, and/or over-harvesting on my lake. What can be done?

Part of fisheries management is to work closely with local units of government, lake associations, sporting groups, and concerned citizens to formulate lake management plans. Fisheries managers

periodically review current and historical information, inventory fish stocks and consider changing lake conditions before recommending changes to the plan. The Minnesota Department of Natural Resources (MDNR) sets regulations that address the pressures facing Minnesota fish stocks. Sparring, fishing contests, and harvest limits are set based on scientific research and citizen input. If you have questions about your individual lake management plan, contact your local MDNR Area Fisheries office to obtain a copy or discuss the plan with the area fisheries manager.

How do I find out what fish have been stocked in my lake?

There are two ways to obtain this information. If you have Internet access, contact the MDNR website at <http://www.dnr.state.mn.us>. At the left-hand side of the homepage you will find a Lake Finder button. Enter the name of your lake to access survey information or click on the interactive map. If you don't have Internet access, call your MDNR Area Fisheries office or the MDNR information center in St Paul (888-MINN-DNR) to request a copy of your lake survey. Also, the MDNR building at the Minnesota State Fair has a lake data booth where you can get information about your lake.

What is the best fish habitat for game species?

Although habitat needs for each species are different, there are some generalizations that can be made. Good water quality, available spawning sites, and aquatic vegetation are all important in the life cycle of Minnesota's game fish. Adequate zones of vegetation are important for spawning sites, cover and protection for young fish, and production of aquatic insects and forage fish that are necessary for game species to be successful. Large woody debris like fallen trees provide shade, cover, and food for many species. This shaded zone also offers refuge of cooler water during the summer. It is important

to remember that lakes in different ecoregions of Minnesota offer different potential for certain game fish species.

How do I find out if my lake has been surveyed for fish?

The Lake Data Survey available from the MDNR website and Area Fisheries offices will give you information on the last survey conducted on your lake. Most lakes in Minnesota are surveyed every 10th year. However, Minnesota's more popular lakes and lakes that are undergoing intensive management through stocking or special regulations are surveyed more frequently.

Who can I call if I have questions or a problem related to fish management?

Check your local telephone listing, the "Who to Contact" section of the Minnesota Shoreland Management Resource Guide Web site, www.shorelandmanagement.org, or the Web sites listed below for: Minnesota Department of Natural Resources (MDNR)

- www.dnr.state.mn.us

Minnesota Sea Grant Aquaculture and Fisheries

- www.seagrant.umn.edu/aqua

Your local MDNR Area Fisheries office

What are some additional resources related to fish management?

LakeSmarts: The First Lake Maintenance Handbook. 1983. S.

McComas. Terrene Institute, Washington D.C.

The Waters Edge. 1998. Minnesota Department of Natural Resources

Managing Minnesota's Fish. Minnesota Department of Natural Resources