

Glenwood Area Fisheries Newsletter

Minnesota Department
of Natural Resources

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Factors affecting our stocked walleye fisheries— what might the future hold?

The coexistence of walleyes with other species such as largemouth bass, small-mouth bass and northern pike in the same waterbody has been a popular topic around the scientific tables of fisheries management. At the center of the discussion is what factors play significant roles in the establishment and/or sustainability of walleye fisheries. Researchers for example have documented the expansion of largemouth bass to lakes where walleyes were once the main predators. There is evidence of other changes— changes in habitat, predation and competition. Fish managers are looking at how to best adapt to these changes. Does one play a larger role than another? Is it a combination of many factors?



DNR Fisheries has assembled a team of biologists to look at this issue— the Largemouth Bass Working Group (LBWG). Much of what the group focuses on will be important to lakes in the Alexandria-Glenwood Area. That's because the majority of our lakes are bass-panfish lakes where habitat is characterized by warm to cool water and an abundance of aquatic vegetation— ideal for bass, sunfish and northern pike. It's these types of lakes that are coming under closer scrutiny in terms of their ability to sustain walleye fisheries.

Wisconsin has been grappling with this question as they have watched walleye populations decline in some of their small, lakes while largemouth bass numbers are steadily rising. Biologists have suggested some potential reasons for this occurrence:

- Largemouth bass prefer warmer water than walleyes. Minnesota and Wisconsin have gotten warmer and growing seasons have gotten longer over the past 50 years. Could this be favoring largemouth bass at walleyes' expense?
- Tougher environmental regulations have brought better pollution control resulting in improved water quality and clarity in many lakes. Largemouth bass prefer clear, vegetated shallow-water habitat for feeding and spawning. Walleyes on the other hand are light-sensitive and prefer rocky, wind-swept shoal areas. Perhaps the overall amount of walleye habitat is being reduced.

- Catch and release of largemouth bass is much more common than it used to be, popularized by bass fishing clubs and tournament anglers. Catch and release is not nearly as popular for walleyes which are readily kept and eaten by most anglers.

Wisconsin is not Minnesota however and while there are similarities, our lakes are generally larger with many more containing better established populations of walleyes than our neighbors to the east. There's no getting around the fact however that like Wisconsin, we have an ongoing stocking program that attempts to create walleye fisheries in small to medium sized lakes best suited for northern pike, bass and panfish.

As the climate continues to warm and watersheds continue to see increased residential development, it's critical that we recognize the importance of our cool-water, natural walleye fisheries— those lakes that produce millions of walleyes all on their own. It's here where greater protection might be required. In lakes that rely on stocking, managers and researchers will work together to develop stocking strategies that will adapt to these changing conditions.

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Glenwood State Fish Hatchery receives major renovation

Construction crews finished renovations to the Glenwood walleye hatchery in April 2011. Improvements include:

- Three stainless steel egg batteries with connected fry tanks
- Large capacity water heaters with insulated lines
- Energy-saving recirculation pumps
- Isolation room with state-of-the-art UV filter to guard against viral and pathogen introductions
- New lighting fixtures, valves and water pipes

Maximum egg capacity has been increased from 700 quarts to 1060 quarts. With new tanks and batteries, the hatchery is now capable of isolating three different strains of walleye eggs. Stainless steel material all but eliminates costly maintenance issues.

Energy efficiency was a priority since costs to heat a tremendous amount of water can get expensive. In order to mimic mother nature, water must be warmed gradually for proper egg incubation. As heated water flows through the system, pumps will re-circulate the water back through saving money on heating costs.

Anyone interested in touring hatchery operations during the upcoming spring season is encouraged to call the Glenwood Office to arrange a visit.



February's Ice Fishing Challenge on Lake Agnes leaves questions, but no smoking gun

The idea was a good one. Move the Ice Fishing Challenge to a lake closer to town where folks could move to and from local merchants a bit easier. The Lake Agnes fishery was in good shape—a 2007 netting assessment found good numbers of northern pike averaging 4 pounds each, a steady increase in bluegill abundance, and plenty of largemouth bass and yellow perch.

What contestants caught however will go down in history. Not one fish. There were rumors that more than one angler either had a fish on temporarily or threw a small one back, but in the end, it was a brutally slow day and frankly, sort of embarrassing.

Skip forward to March 20 when a call from a concerned citizen alerted DNR staff to dead fish at the outlet of Lake Henry. A closer inspection revealed dead fish at other locations, including the inlet to Lake Agnes. It appeared that a significant number of fish were dead and more would likely be found once the ice was gone. Questions were being asked about whether the fire at SunOpta could have been linked to the dead fish—the contest was held about 2 weeks after the fire. Following the contest results, DNR Fisheries checked the lake for dissolved oxygen thinking



maybe the lake had winterkilled. Negative. The lake is over 30 feet deep and had plenty of oxygen. Could the ash and other materials from fire-fighting efforts somehow have been washed down the ditch along the bike trail and made its way into Lake Agnes? Residual material was carefully collected for testing in case it was found that it had. In mid-April, a bioassay was completed using this sample to see if it was toxic to fish. The results were

negative. It appeared that whatever washed away from the Sun-Opta plant during the fire either didn't reach the lake or if it did, probably wasn't the cause for the poor contest results.

Now jump forward again to mid-May. The lakes were ice-free, and electrofishing was completed in both lakes to assess the presence of live fish. Very few fish were found, in either lake. A few walleyes and yellow perch were captured in Lake Henry, carp and yellow perch in Agnes. No other fish. It was very unusual not to see a variety of sunfish and other small, near-shore species. A more complete netting assessment in June will hopefully clear up unanswered questions. Regardless, the 2011 Ice Fishing Challenge gets chalked up as a mystery. With prize money carrying forward to next year's contest however, it's sure to be an exciting event. Let's just hope the fish cooperate.

The 2011 lake survey season—lakes on the list

Each year, the Glenwood Area Office conducts 12-18 lake surveys and population assessments on Area lakes. These surveys provide important information which we use to plan management activities. Data are collected using gillnets, trapnets seines and electrofishing equipment. The information is compiled and written into the form of a report during the winter months, with a completed version available to the public by summer of the following year. Fisheries surveys essentially fall into one of three categories: Full surveys (FS) include an evaluation of the fishery as well as vegetation, water chemistry, bottom substrates and shore and watershed features. Lake population assessments (PA) are the most common and evaluate the relative abundance and size structure of the fish community. Index of Biotic Integrity (IBI) surveys are conducted to evaluate the quality or health of the lake and its habitat. Most Area lakes are on a 3-5 year rotation schedule. Survey dates, net site locations and electrofishing stations are all standardized so that comparisons from year to year can be made. Following is a list of field work proposed for 2011:

Agnes	.....PA, IBI
Andrew	.....PA
Barrett	.....PA, IBI
Carlos**
Gilchrist	.....PA, IBI
Hattie	.....FS, IBI
Henry	.....PA, IBI
Ida	.....PA
Linka	.....FS, IBI
Long (Stevens Co.)	.....PA, IBI
Louise	.....PA
Miltona	.....PA
Moon	.....FS, IBI
Page	.....FS, IBI
Pomme de Terre	.....PA
Scandinavian	.....PA, IBI

** Lake Carlos is part of a statewide annual study.

Area fishing tournaments scheduled for 2011

Each year, the DNR issues permits for about 450-600 fishing tournaments throughout the state. Because tournaments have the potential to disrupt recreational activity on public waters, limitations as to the size and frequency of tournaments is closely followed. Many fishing tournaments don't even need a permit however, as long as they meet any one of the following criteria:

- There are 25 boats or less (replaces threshold based on number of participants) or 150 participants or less for ice fishing contests, entry fee is \$25 or less, total prize value is \$25,000 or less, and the contest is not limited to trout;
- The contest is not limited to specifically named waters, and the contest is not limited to trout;
- All the participants are 18 or younger;
- The contest is limited to rough fish; OR,
- The total prize value is \$500 or less

For more details, visit the DNR's website at : <http://www.dnr.state.mn.us/fishing/tournaments/index.html>

For the Alexandria-Glenwood Management Area, the following tournaments have been approved for this coming summer:

Lake	Species*	Date
Alexandria Chain	Black bass	June 11
Ida	Black bass	June 18
Osakis	Walleye	June 18-19
Minnewaska	Black bass	June 19
Ida	Black bass	July 10
Minnewaska	Black bass	August 6

* Black bass includes largemouth bass and smallmouth bass



“Hey Mister, you fellas are welcome to fish here, we’re just about done.”

Minnesota is home to other sunfishes besides bluegill and pumpkinseed

When people talk about sunfish in Minnesota, they're usually referring to bluegills or pumpkinseeds, right? It may come as a surprise to some people that Minnesota is home to 11 different species of fish that belong to the sunfish or *centrarchidae* family. We're all familiar with bluegill, pumpkinseed, black crappie, white crappie, rockbass, largemouth bass and smallmouth bass, but have you ever heard of an orangespotted sunfish or a warmouth? How about a longear sunfish or green sunfish? These are small sunfish that are not commonly caught by anglers, but nonetheless add interesting diversity to our fish communities and a good bit of tropical-like color!

Orangespotted sunfish

This little sunfish reaches a maximum length of only about 4 inches. They're quite tolerant of poor water quality and are able to withstand high turbidity conditions with very low dissolved oxygen. More common in lakes and ponds confined to the southern regions of Minnesota, they can occasionally be found around the Glenwood-Alexandria Area, especially in Charlotte Lake and Long Lake near Cyrus. Orangespotted sunfish aren't much value to anglers as a food fish but will take bait if they're big enough. They are hardy and make a great addition to any child's aquarium as long as they have live food such as insect larvae to eat.



Orangespotted sunfish (*Lepomis humilis*)

Warmouth

The warmouth is another small, uncommon sunfish that is occasionally found in southern Minnesota lakes and reservoirs, especially in the southeast near Winona and the backwaters of the Mississippi River. The name 'warmouth' probably comes from the aggressive behavior this species exhibits toward its mate or any other fish that gets in its way during the spawning season. Research



Warmouth (*Lepomis gulosus*)

studies have documented that the male warmouth will charge, nip and may even kill a female that is unwilling to spawn with him. Like the orangespotted sunfish, warmouth can tolerate poor water quality and seem likely to expand their range north if watershed degradations occur and water quality declines.

Longear sunfish

The longear sunfish is mainly a southern dweller, especially common in the streams of Ohio. There are two subspecies of this fish—the central longear and the northern longear sunfish. Minnesota is home to the northern longear sunfish and can be found as far north as



Northern longear sunfish (*Lepomis megalotis*)

Crow Wing County. The fish can be identified by the ear flap—distinctly angled upward at about 45° with a single red spot within the white margin. Similar to orangespotted sunfish, longears are hardy, but timid and make good aquarium specimens.

Green sunfish

Most common of the four, green sunfish can be found in hundreds of lakes all over Minnesota. One of the more notable characteristics of the green sunfish is its tendency to hybridize with bluegill and pumpkinseed sunfish which are usually much more common when the three species are occur together in the same



Green sunfish (*Lepomis cyanellus*)



Bluegill-green sunfish hybrid

lake. Bluegill-green hybrids are very common and are aggressive fighters when caught. Both the pure green sunfish and the bluegill-green hybrid sunfish can grow large, the hybrids up to 9 inches with record fish approaching 2 pounds.

Frequently asked questions regarding proposed hunting and fishing license fee increases for 2011

Q: Why does the DNR need to increase the cost of fishing and hunting licenses?

A: Because like everything else, the costs to make sure fish and wildlife populations remain healthy is more expensive than it used to be. Minnesotans have come to expect quality hunting and fishing opportunities and so just as the price of milk and bread or a tank of gas has gone up, so too does the business of maintaining fish and wildlife resources.

Q: What about that .375 percent sales tax increase we all voted on— The Legacy Amendment. What happened to that money?

A: The Legislature specifically stated that Legacy dollars could NOT be spent on things like fish and game enforcement, stock trucks, boats, motors, nets and other infrastructure and equipment supplies. Rather, Legacy money goes to things like habitat improvement, impaired waters and State Parks and Trails.

Q: What will the fee increase accomplish?

A: It will provide the foundation for maintaining great hunting and fishing for the next 10 years. Under current conditions, the Game and Fish Fund is projected to “go negative” by 2014.

Q: How does the cost of Minnesota’s hunting and fishing licenses compare to other states?

A: We rank 37th in the nation for fishing licenses and are well below the national median. Ironically, Minnesota has about 90,000 miles of shoreline— more than Florida, California and Hawaii combined. We also have more recreational boat ownership per capita than any other State in the Country. Minnesota is home to some of the best walleye and trophy muskellunge water in the United States.

Q: When would a fee increase occur?

A: Unknown at this time. The state Legislature has to decide. It could be as early as 2012 or it may not happen at all.

Lakeshore residents are reminded of DNR aquatic plant management permit requirements

As the summer season nears, lakeshore residents are reminded of aquatic plant management permit requirements.

A property owner can *mechanically* remove up to 2500 square feet of submerged aquatic vegetation without obtaining a permit. The 2500 square foot area must not exceed 50 feet along shore or ½ the property frontage, whichever is less. The area must be mechanically maintained (ie., hand pulling, cutting, raking), must remain in the same location from year-to-year, and must only involve *submerged* vegetation (that which grows below the water’s surface).

In addition, a property owner can *mechanically* remove up to a 15 foot wide channel to open water through floating-leaf vegetation without a permit. The channel must be mechanically maintained,

must remain in the same location from year-to-year, and must only involve floating-leaf (ie., waterlilies) vegetation.

Lakeshore property owners are reminded that a permit is required for most other aquatic plant removal activities. Activities that require a permit

include operation and installation of an automated aquatic plant control device (ie., weedrollers and beachgroomers), use of pesticides/herbicides in Minnesota public waters, or the removal or alteration of *emergent* vegetation (vegetation in which the foliage extends above the water’s surface, ie., cattails, bulrush, wild rice). DNR aquatic plant management permits will be issued, with proper justification, to provide reasonable use and access for property owners within the confines of the rule.

Property owners with questions regarding aquatic plant management or who wish to obtain a permit application should call Leslie George, Aquatic Plant Management Specialist, at the Glenwood DNR Fisheries Office via telephone at 320-634-4573 or email at: leslie.george@state.mn.us.



Employee Spotlight— Bill Wiste



Many DNR employees come from rural backgrounds where hunting and fishing as a child triggered early interest in pursuing a career in fish and wildlife management. Glenwood Area fisheries technician Bill Wiste is proof that there are guys from the Twin Cities that can share the same passion for the outdoors as their rural counterparts. Growing up in south Minneapolis, Bill discovered the excitement of fishing with a buddy on Lake Nokomis in the heart of Minneapolis. “At that time, most guys were still using old-style braided nylon line, and heavy fiberglass rods,” explains Wiste. “My neighbor-buddy was a good fisherman, and introduced me to ultra-light tackle— a new idea in the fishing world back in those days”. Fishing trips occasionally included a drive to the Annan-

dale area with a 14-foot boat, 10-horse outboard and a green box— the depth finder that paved the way for fish electronics. “We really thought we were big shots, says Wiste. We caught fish though, and that’s when I knew I wanted to take fishing further and actually pursue it as a profession.”

Bill attended the University of Minnesota in 1967 and graduated in 1971 with a bachelor’s degree in fisheries management. After graduating, he enlisted in the Navy Reserves until 1976. During that time, he landed his first job as a fisheries research assistant at the Glenwood Office. “I’d say 1975 was a special year for me. I got my foot in the door with the DNR and have been here ever since.” In 1980, Bill was promoted to a fulltime fisheries technician, a position he holds to this day.

Over the years, Bill has just about seen it all. “I can’t even begin to count the number of good days I’ve had working on the lakes and ponds in this area.” Some of the bad ones though are tough for Bill to forget, like the 1984 survey of Cottonwood Lake in Grant County. “I had a college intern to work with that

summer and he was a bit green when it came to picking gillnets.” That wasn’t the only thing that was green. Cottonwood stunk like a cow yard that year— the result of a terrible bluegreen algae bloom and subsequent die-off. “I think we picked over 2000 yellow perch out of two gillnets that day. When we reached the trapnets at 4 in the afternoon, they were so full of dead, rotted fish that the hoops were floating at the surface. I remember it was a cloudy day— when all that algae died, it must’ve sucked the oxygen right out of the lake. What a nightmare it was.”

For the past 10 years or so, Wiste has modified his field duties to include more time as an inspector for the Aquatic Plant Management (APM) Program. Thousands of applications to remove aquatic plants come in every year. DNR Fisheries is responsible for making sure permit requests aren’t frivolous and/or damaging to fish habitat. Sometimes the decision to grant a permit can’t be made unless the site is inspected first-hand. Wiste often chuckles when asked about the APM work he’s found in the twilight of his career— “I’ll take these job duties over picking smelly gillnets any day.”

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