

# Crystal Lake Association

Since 1932, working for the preservation and improvement of Crystal Lake and its watershed for future generations.

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## State of Michigan Boating Law Changes for 2001

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**MICHIGAN 2001 BOATING LAW  
CHANGES**

**WHO CAN OPERATE A BOAT:**

**Those less than 12 years of age;**

- May legally operate a boat powered by a motor of no more than 6 horsepower (HP) without restrictions.
- May legally operate a boat powered by a motor of more than 6 HP but no more than 35 HP only if they are directly supervised by a person at least 16 years of age
  - May not legally operate a boat powered by a motor of more than 35 HP under any conditions

**Those 12 to 15 years of age;**

- May legally operate a boat powered by a motor of no more than 6 horsepower (HP) without restrictions.
- May legally operate a boat powered by a motor of more than 6 HP only if they:

1. Have passed a boating safety course approved by the DNR and have onboard their boating safety certificate **or**.....

2. Are accompanied onboard by a person

at least 16 years of age

**Those less than 16 years of age.**

- May operate any boat on the waters of Michigan.

**NOTE: See Who may operate a Personal Water Craft (PWC) below:**

**WHO CAN OPERATE A PWC:**

**Those less than 12 years of age;**

No one under the age of 12 can legally operate a PWC.

**Those 12 to 13 years of age;**

▪ A person who is 12 or more and less than 14 years of age may operate a PWC **only if:**

- He or She obtained a boating safety certificate prior to January 1, 1999, **or**...
- **All** of the following conditions are satisfied:

- The person is accompanied solely by his or her parent or legal guardian.
- Both the person and the parent or legal guardian have obtained a boating safety certificate.
- The PWC is equipped with a lanyard-type ignition safety switch attached to his or her person, clothing or PFD.
- The PWC is designed to carry at least two persons.

**Those 14 years of age or older:**

- A person born after December 31, 1978, may operate a PWC only if he or she has obtained a boating safety certificate.

° Those born December 31, 1978 or earlier may operate a PWC without restrictions.

## **UNLAWFUL AND DANGEROUS OPERATION OF A BOAT OR PWC**

### **MI Law designates these dangerous operating practices as illegal:**

Reckless operation of a boat or PWC or reckless manipulation of water skis, surfboard or similar device is defined as that which disregards the safety or rights of others or endangers the person or property of others. Some examples are:

- Weaving your boat or PWC through congested waterway traffic or swerving at the last possible moment in order to avoid a collision.
- Jumping the wake of another boat unnecessarily close to the other boat or when visibility around the other boat is restricted.
- Loading the boat or PWC beyond the recommended capacity shown on the plate installed by the manufacturer,
- Chasing, harassing or disturbing wildlife with your boat or PWC
- Causing damage from the wake of you boat

**FAILURE TO REGULATE SPEED** is defined as operating a boat or PWC at speeds that may cause danger to the life or property of any person or speeds that will not permit you to bring your boat or PWC to a safe stop. It is illegal to:

- Operate a boat or PWC in excess of 55 mph except if at least one mile offshore of the Great Lakes or Lake St. Clair.
- Operate a boat or PWC at a greater than idle speed if any person is in the bow of a boat without proper seating.
- Operate a boat or PWC faster than reasonable or prudent under the conditions. (Weather, boat traffic, etc.)

**IMPROPER DISTANCE** is operating at a greater than idle speed (except in channels which are not posted) and such that the boat or PWC or persons being towed are within 100 feet of:

- A shoreline (if operating in water less than 3 feet deep)
- Any moored or anchored boat
- Rinse any other areas that get wet, such as water collected in trailer frames, safety light compartments, boat's decking and lower portion of motor cooling systems.

- A dock or raft
- Any marked swimming area or person(s) in the water

**In addition, if operating at a greater than idle speed, PWC must:**

- Stay at least 200 feet from the Great Lakes' shoreline
  - Not cross within 150 feet behind another boat other than another PWC
- IMPROPER DIRECTION** is defined as the failure to operate in a counter-clock wise direction except in areas marked by well defined channels or rivers.

**BOATING IN RESTRICTED AREAS** is defined as operating within restricted area clearly marked by buoys, beacons, diver-down flags, etc.

**RIDING THE BOW** is illegal if the boat is not equipped with bow seating and the boat is operating at greater than idle speed. Persons are also not allowed to ride on the Gunwale. While underway, persons on a boat or PWC cannot sit, stand or walk on any portion of a boat not designated for that purpose.

**GUNWALE:** The upper edge of boats side (generally pronounced gunnel)

**IDLE SPEED:** The slowest speed at which it is still possible to maintain steering and does not create a wake.

Source: Boat Michigan Sponsored by the DNR & MI Sheriffs' Assoc.

**REMEMBER..... REMEMBER THAT AS AN OWNER OF A PWC, YOU ARE ALSO LIABLE IF YOU ALLOW OTHERS TO OPERATE YOUR BOAT OR PWC IN VIOLATION OF THE LAW.**

Entire Copies of Boat Michigan may be obtain at your local DNR Office or County Sheriffs' Offices'

## **ZEBRA MUSSELS**

As reported in our last Association news letter we do indeed have a population of Zebra Mussels inhabiting our lake. The clam like creatures were transported to our waters from Europe, and then transported to the Great Lakes by a transatlantic freighter dumping its ballast water in the Great Lakes in the 1980's.

(Water warmer than 110° F will kill veligers and 140° F will kill adults. If hot water is not available it is still important to rinse your boat and equipment, Do not use

Zebra's tenaciously cling to hard surfaces and even though they are small by nature (½ to 2 inches when fully grown), they are not remotely a desired species in our waters.

A fully mature mussel may produce up to one million eggs per season. The egg release starts when the water temperature warms to about 54° F and continues until the water cools below 54° F. There season peaks during July and August. Eggs are fertilized outside the body and quickly develop into free-swimming larvae called veligers. If veligers don't settle within 3-4 weeks they die. Only 1-3% survive. Those that attach them-selves to a hard surface transform into the typical double shelled mussel shape and are considered juveniles. They become sexual adults usually within 1 year and grow rapidly, 1 inch the first year and a ½ inch the 2<sup>nd</sup> year. Their estimated life span is 3 years in Lake Erie. Juveniles are the most sensitive in the zebra mussels life cycle. Colonies grow rapidly wherever oxygen and particulate food is available and water currents are not too swift. The potential impact of zebra mussels threaten undue destruction to traditional rock or gravel fish spawning beds through colonization. They may greatly reduce plankton on which young juvenile fish and forage fish normally feed on. They accumulate in the water intakes of both inboard and outboard motors and cause damage to those engines. They are transported to inland lakes by boats that have had contact with Zebra Mussel in inhabited waters. Steps that can be taken to prevent transporting Zebra Mussels to other waters and streams are as follows;

- Remove any visible vegetation from items that were in the water, including boat, propeller, trailer and all equipment ( Zebra Mussels also attach themselves to aquatic vegetation.)
- Flush the engine cooling system, live wells and bilge with hot water. If hot water is not available use tap water.

salt or chlorine water mixtures as both mixtures are very toxic to other organisms and may also damage boat equipment. (Therefore, neither is recommended now

for use outdoors.)

- Always air dry boat and other equipment before using in uninfested waters. If boat and equipment are completely dry for two days (after you have rinsed as above,) it may be safe to use in uninfested waters.
- Examine boat exterior for mussels if it is docked in infested waters; if mussels are found or exterior is heavily fouled by algae, either clean fouled surfaces or leave boat out of the water for at least FIVE days before entering uninfested waters.
- If your gear feels gritty, then young microscopic mussels may be attached. Any mussels scrapped off should be bagged and discarded in the trash.
- **Do not reuse bait** if exposed to infested waters.

*Source: Great Lakes Sea Grant and Department of Environmental Quality*

## EURASIAN WATER MILFOIL

Nuisance colonies of Eurasian milfoil developed in North America in the late 1940's and were found in at Put-in Bay in western Lake Erie in 1960's. Within 10 years they have become a hindrance to recreational activities on many Southern Michigan lakes. Eurasian Milfoil continued to spread northward and in the 1990's and has moved across the Straits of Mackinac into the upper Peninsula. In many lakes, Eurasian Milfoil forms thick tangled mat of vegetation. Much of this mat is near or at the water surface and forms a canopy of foliage. (A.T.T. Labs located Eurasian Milfoil near the Public Boat launch site at Crystal lake.) In waters having an abundant growth of Eurasian Milfoil, moving over or through the canopy mat is difficult — swimming, boating and fishing can be seriously hindered. Under the canopy, conditions deteriorate, because of the reduced water circulation, decreased light and increased deterioration of native plants. Eurasian Milfoil is a perennial plant that reproduces seeds or plant fragments. It begins to grow in the spring when temperatures of the water is still cold (55-60 ° F) This gives it an advantage over native plants. It can

We discussed catch and release programs and Mike said he participates if, the fish caught are out of season or if they are too large or too small, to meet his selective choosing.

grow 1 to 3 inches a day, the fragmented stems easily spreads to other parts of the lake. Fragmented stems may be transported by boat and trailer, as well as water fowl, who may also play a role in moving the plant. Studies have taken place using a freshwater weevil (*Euhrychiopsis lecontei*) in possible control of Eurasian Milfoil. Currently Eurasian Milfoil is mainly controlled through chemical treatments and also by harvesting. Chemical treatments are estimated to run between \$200.00 - \$300.00 per acre of water treated. Combinations of harvesting and chemicals can run considerably more. The following steps should be considered in the development of a control program for Eurasian Milfoil;

- Be certain you have positive identification of Eurasian Milfoil.
- Early identification of Eurasian Milfoil infestations may allow the plants to be carefully hand harvested and removed from the lake (*which is what is going to be done at Crystal Lake*).
- Early identification allows tools to be applied to a small area. This minimizes cost and impact on other plants and the environment.
- Continual monitoring and maintenance is required to keep this nuisance plant at it's lowest possible level.
- Avoid using control tools such as harvesting tools which causes it to spread.
- Use selective control tools appropriate for the conditions.
- Use of selective herbicides in the spring of the year designated for Eurasian Milfoil and that will not damage the desirable native plants. All herbicide applications require a permit from the MI Department of Environmental Quality (DEQ).
- Winter draw down of lake levels is beneficial in killing or at least reducing Eurasian Milfoil populations. Eurasian Milfoil stems exposed to freezing and drying are damaged or killed. Whereas, some native plants actually benefit from a draw down. A permit from the DEQ is needed to draw down a lake. *Crystal Lake is lowered 8" during the winter.*

Since Mike fishes an extraordinary amount of time, I asked him about the fish he was catching in the lake currently. "Mike, are you seeing any signs of Zebra Mussels in the fish stomachs?"

## Source: MSU Extension Service and MI Riparian FISHING ON CRYSTAL LAKE MEET MIKE BENNET

Article By: c. a. tomlin

Mike and I sat in my kitchen drinking coffee and talked about fishing on CRYSTAL LAKE. I was interested to know that Mike moved to the lake to live in 1962. Mike and his mother Joanne reside in the home of Joanne's mother and Mike's Grandmother. Mrs. Crawford, now 100 years old and residing in the Masonic Home in Alma, was a well known thespian and school teacher. His family has maintained the family home for 80 years. Those of you whom have lived in the area for many years, may remember the plays performed up in the Crystal Park, at the old Silvers Home.

Given a family history of living on the lake, Mike has had a few years of fishing Crystal Lake to get to know the lake and all of the good fishing locations. Mike says he started fishing in earnest at the age of 10.

Mike fishes on the average of 40 to 50 hours each week, he says, "a few less hours in the dead of winter."

Mike enjoys the relaxed time spent out on the lake and delights in listening to the distinctive call of the Loons, that visit the lake in the early Spring and Fall. He says he learned how to fish and relax with the best fishermen he ever knew, those being, Merl Bloss, Willard White and Lloyd Whitney.

We talked of the infinite quantity of minnows this season along the shore line, and noted that last year there were far less. Mike thinks that is perhaps relative to the ecological cycle changes that occur within nature.

Mike of course, wouldn't tell me where his favorite or most bountiful fishing locations were, or where he relaxes while fishing for Walleye, Perch and Blue Gills. But he did say, fishing had been "awfully good" from his dock this spring, where he has caught a "Bigger than ever Blue Gill".

As I had recently read of fishermen up North who had commented, that the stomachs of fish caught were packed full of zebra mussels. Mike responded that he had not noticed any thing of that nature

with the fish he has caught on Crystal. He did however say, that fish hooks caught on weeds and then brought up to the surface, contained large amounts of attached Zebra Mussels.

The subject of DNR fish planting came up and we discussed the planting of Tiger Muskie in the lake. Mike stated that he had caught a small Tiger Muskie last winter while ice fishing. He explained that they are small enough yet to not be aggressive to the other pan fish, but the day would come, when they would eat their fair share of smaller fish in the lake, not unlike the Walleye and Pike. I asked him what he would like to see planted in the lake and he said High Breed Blue Gills, Speckled Bass and Perch. Mike also commented that 5 or so years ago, one could catch a meal of Croupe in the channel. He said you never hear of anyone catching Croupe anymore. So I guess, that should be added to his wish list for future fish planting.

During the time we were chatting the weather changed from sunny to dark and cloudy, the winds picked up and I thought, I wonder what is the best weather, in Mikes opinion, for catching fish. Indeed, he had an answer; "In the fall just before dark, winter, is early morning, late afternoon, and early evening. During and after a light rain is *great* for catching Walleye and Blue Gills while in season Mike adds."

We discussed the weed beds located throughout the lake, and Mike said he notices no change other than 10 or 15 years ago they poked their heads out of the water, but he feels that the boat traffic on the lake is keeping them down lower. However, he notes that the populations of zebra mussels seen on the beds are voluminous, but the mussels remain at approximately ¼ to ½ an inch in size.

Mike say's that he is catching less large Blue Gills, but there are still a lot of fish out there for those of you want that big catch. The fish are just smaller than he used to catch.

We discussed the advent of the policing of Crystal Lake by the Montcalm County Sheriff's Department, and he was much in favor of police monitoring the activities on the water. He commented that he wished that there were speed boat restrictions allowing fishermen a time period to fish without the annoyance of

speed boats and PWC out on the lake on weekends. He cited a time of perhaps up until 9:00 a.m. which would allow them time to fish without the distraction of boats running over and through their lines.

I guess that probably is a realistic request of all sincere fishermen, especially those that only have the weekend to fish. Not being a fishing person, I've never before given it a thought.

So all of you guys and gals, grab your license, rods, reels and what ever and go. Go out on that CRYSTAL CLEAR, BEAUTIFUL lake and catch, catch, catch.

I am hoping that you fishing enthusiast understand what I'm trying to tell you. I don't fish or know much of anything about fishing! But the time spent drinking coffee and listening to Mike, truly let me know that, **THERE ARE FISH** in that **LAKE** just waiting to be caught. The realization is that this man not only lives to fish, but fishes to live.

## **FISH CRYSTAL LAKE.**

### **CRYSTAL LAKE SEDIMENT RESEARCH**

Article By: Tom Crites

Due to the outcry of the citizens of MI concerning the health of our lakes, rivers, streams and other surface waters, our state adopted legislation to fund and research the health and trends of our sur-face waters. Around \$100,000 each year funds Michigan Surface Water Sediment Trend Project. This is a collaboration between MI Dept. of Environmental Quality (DEQ) and Michigan State Univ. (M.S.U.). The Team, a DEQ biologist and M.S.U. Geological Sciences, used the United States Environmental Protection Agency's research vessel, R/V "Mudpuppy" and it's crew to gather samples of sediment from Crystal Lake on Wed.8-23-00.

Their objective is to understand trends of toxic chemical accumulations in its environment to access the current state and potential future problems of Michigan's surface water quality. Crystal lake is very fortunate to be part of this project. Being only the seventh lake to be studied. We happened to be selected because we are centrally located in the state, have a good DNR access site and a

lake that has depth. Shallow lakes are not suitable for study, as the wave action continuously disrupts sedimentation on the bottom. Therefore the researchers are unable to accurately read the necessary data collected from the bottom. The samples taken were obtained from one of the larger basins in the lake at a depth of 55 feet. Researchers are studying historic as well as "Natural" chemical concentrations, and accumulations. Along with the relationship of chemical accumulation trends to human activities and natural processes as well as types of influences on our environment. Upon completion of this round of data gathering, components will be broken down to even less than parts per billion. The DEQ biologist said, "Crystal Lake is a good lake and we have definitely slowed the aging process by having the sewer system."

*Results to be published when final report is received.*