

The Lakesider.....Spring 2009

The Annual Newsletter of the Lake Mitchell Improvement Board.

Lake Mitchell Improvement Board

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Terry Meech

Secretary

Lake Mitchell Improvement Board tentative meeting dates for 2009:

- Monday, April 27 @ 3:00 PM
- Saturday, June 13 @ 10:00 AM
- Saturday, July 18 @ 10:00 AM
- Saturday, August 15 @ 10:00 AM
- Monday October 5 @ 3:00 PM

All meetings are held at the Cherry Grove Township Fire Hall on M-55.

Contact us at info@lakemitchell.org.

Lake Mitchell Property Owners' Association Annual Meeting

Saturday May 23 at 10 A.M.

Cherry Grove Fire Hall -- (Fire Hall) on M-55

Please put this on your calendar; the postcard notice about this meeting will not be sent to you this year.

If you received our annual *Lakesider Newsletter*, why not join our email list and save us the \$2 it costs to copy, print, and mail the newsletter. Last year that amounted to more than \$1000. We'd rather use that money to deal with milfoil. Email us at info@lakemitchell.org, and we will add your email to our list which has over 200 addresses.

Those on our email list will be notified when the newsletter is online which is about three weeks before it is mailed. Those with emails will also be alerted about harvesting, chemical treatment, and board meeting dates. In addition if important news occurs we will send emails. Last year we sent special emails concerning the flooding following the June 12-13 rains, the December heavy snows that stressed building roofs, and that mail was being stolen from mail boxes. The email list will not be sold or offered to anyone and will only be used for Lake Mitchell Improvement Board and Association business.

If you have a question or a concern for members of the Lake Mitchell Improvement Board, you may contact us at info@lakemitchell.org.

**Website of the Lake Mitchell Improvement Board:
www.lakemitchell.org**

Lake Mitchell Water Quality – 2008 Report

Lake Mitchell water quality has been investigated through the Wexford County Drain Commissioner from 2002 through 2008. A good baseline is being established to detect any problem areas, long term trends and a comparative data bank for future generations to look to.

Lake Mitchell Facts:

- Area: 2496 acres
- Watershed: 26097 acres
- Shoreline length: 54301 feet
- Maximum depth: 22 feet
- Mean depth: 8.5 feet
- Volume: 21321 acre feet or 928,742,760 cubic feet

Sampling:

Lake Mitchell is sampled twice a year at the 3 deepest holes. The spring sample is taken shortly after ice out when whitecaps first indicate that the lake is mixed from top to bottom and phosphorous from the sediments may be mixed into the water column. The summer sample is taken during August when the lake would be stratified if it occurs.

Parameters:

The parameters that are measured are: temperature, dissolved oxygen, chlorophyll A, transparency, total phosphorous, nitrate nitrogen, total alkalinity, pH and specific conductance.

Lake Water Quality Index:

The Lake Water Quality Index is a scale of from 1 to 100 that integrates the water quality parameters measured into a single index. The index rates lakes into categories similar to the way teachers grade students: 90-100=A; 80-90=B; 70-80=C; 60-70=D; and below 60=E. The graph of Lake Mitchell Lake Water Quality Indices shows little change over the 7 years that have been measured. The lowest measurement was 79 and the highest was 91. See graph. Overall, Lake Mitchell grades out as a "B". A much more detailed assessment of water quality on Lake Mitchell can be obtained from the Lake Mitchell web site or on a limited basis hard copies from the Wexford County Drain Commissioner (779-9115). This is summarized in a 26 page assessment that includes numerous graphs, charts and water quality interpretations.

Water Levels:

Here we go again or de.ja vu all over again!!! Unfortunately, lake levels are very high. The dam has been open since October but the precipitation has been out of the ordinary and the lake levels just peaked at 1290.14 feet which is slightly over spring levels. But lots can happen between now and spring melt. For those of you who are snowbirds, we have had record amounts of snowfall in December and two rain events that caused significant melting and ponding of water on the lake. Our long term mean precipitation for December is normally about 1.84 inches of water equivalent...December 2008 totaled 5.90 inches, which is likely a record. Our average annual precipitation is 30.81 inches and in 2008 we received 44.55 inches or about a 45% increase. Hopefully, we will have a slow and prolonged snowmelt so that we recharge the groundwater and not have flood levels on the lakes.

Just an update on the record rain fall in June 2008. The storm of June 13 dumped about 6 inches of rain in a 24 hour period with a total of 11.83 inches for the month. It comes as little surprise that we had record lake levels as a result and many of us sustained some to major damage. Lake Mitchell peaked on June 20th at about 1.50 feet above the spring levels. Comparing this to the FIRM Floodplain maps it appears to have been the 100-year or 1% occurrence storm. The rainfall for the month of June is approximately 38% of our long term mean precipitation. It resulted in the highest lake level on record.

Report prepared by Mike Solomon, Wexford County Drain Commissioner.

2008 Financial Report

2008 Income	Jan.1-June 30	July 1-Dec. 31	Total
Interest	687.98	426.83	1,114.81
2008 Collections from 2007	14,367.81		14,367.81
Summer Assessment		108,573.21	108,573.21
Total	15,055.79	109,000.04	124,055.83

2008 Expenditures	
Roadside Weed Pickup	8,500.00
Progressive Engineering Administration	13,000.00 (Inc. \$1,000 for Dec., 2007)
Chemical Treatment	107,773.20
Weed Harvesting	12,476.20
Bass Tournament Monitor and fish return	181.88
Insurance/Bond	696.00
Service (audit, assessment, permit fees)	3,100.50
Print (mailings, newsletter, website)	1,962.79
Assessment review	552.57
Total	148,242.57

Fund Balance Jan.1, 2008	93,366.49
2008 Revenue	124,055.83
Total	217,422.32
2008 Expenditures	148,242.57
Fund Balance Dec.31, 2008	69,179.75

The \$69,179.75 end-of-year balance will be used towards payment for chemical treatment, harvesting, and other expenses incurred from January 1st to July 1st, 2009.

In addition, approximately \$60,000 of assessment revenue is yet to be credited to the Lake Mitchell account for FY 2008 (July 1, 2008 through June 30, 2009), and this revenue will also be used in large part for January through June lake treatment expenses.

The 2009 summer assessment will generate revenue to address expenses after July 1st, 2009, and for the first 6 months of calendar year 2010.

Lake Mitchell Fishing Report – 2008

The abundant vegetation in Lake Mitchell provides ideal habitat for pike, bass, bluegills, crappie, and sunfish. The best fishing months are May and June. Some of the biggest pike for the year can be taken during the fall. The lakes froze on November 22nd and ice anglers appeared during the first week of December. Winter is an excellent time to fish Mitchell as the weeds gradually drop down so anglers can fish spots that are weed-choked during the open water months. Lake Mitchell may be one of the best lakes in the state for ice anglers to try for pike and crappie. Spearing season now has been expanded throughout the ice fishing year and lasts until pike season ends March 15.

Lakes Mitchell and Cadillac are favorite destinations for bass tournaments. Tournament anglers usually weigh-in (and release) full boat limits averaging two to three pounds per fish. Of the two lakes, the largemouth bass tend to prefer Mitchell while smallmouth are more likely to be taken in Cadillac. The east and south sides of Mitchell are considered good for small mouth. Tournament anglers prefer tubes, grubs, and plastic worms but also do well with crank baits and spinner baits.

Pike are plentiful and found in every part of the lake. A big minnow swimming under bobber or spinner bait fished in and along weed edges usually puts northern in the boat. Before the weeds get high, crank baits work well. In the winter pike are voracious feeders. Ice anglers fishing tipups, jigging spoons or jigging *Rapala* minnow-type lures don't usually go home empty handed.

Walleyes are starting to be caught again. Trophy fish in the seven to nine pound range were taken during the winter. Most of these big females were released so they could continue to spawn. Anglers, who persistently and patiently, troll live bait rigs, crank baits or wade out from shore to cast minnow lures in the fall occasionally land a walleye. Practicing catch-and-release with walleye helps our lakes rebuild that fishery. The crappie fishing has never been better. In the first weeks after ice out in April, the Lake Cadillac causeway and Mitchell's coves are magnets for crappie. Pinhead minnows under bobbers and tiny grubs are the favored baits. Unlike most fish which hang near the bottom, crappie suspend so adjusting bait depth can make a real difference in your catch. Though occasionally a good catch of perch is made, most of the fish are less than eight inches long. The bigger fish tend to school deeper after the spawning season in June. Anglers fishing bait under slip bobbers along weed edges in open spots in the vegetation catch hand-sized fish. Sunfish often run bigger than bluegills and Master Angler-sized ones are caught with surprising frequency.

Steve Knaisel at Pilgrim Village provides regular fishing reports for area lakes as well as Lake Mitchell and Lake Cadillac - info@pilgrimvillagefishing.com. Jim Anderson at Schafer's Bait on M-55 near M-115 by Cadillac West also is a good source of information.

Mitchell and Cadillac receive DNR Walleye planting: In 2007 planting of walleye was suspended due to the fatal fish disease Viral Hemorrhagic Septicemia or VHS. DNR Fisheries Biologist Mark Tonello, after ensuring that walleye fingerlings had tested negative for VHS was able to get permission for a planting in our lakes. This fall 81,000 walleyes, 3 ½ to 4 inches long, were planted. Mitchell received 53,000 while Cadillac received 28,000. An evening survey in the spring on a DNR shock boat provided proof that walleye stocked in 2005 had survived and were growing toward maturity.

Bass Tournament Release Program works 9 tournaments: Lake Mitchell Association members were concerned that while the vast majority of bass taken by tournament anglers were caught in Lake Mitchell, almost all the fish were released in Lake Cadillac after the weigh-ins. Last summer a volunteer group of Lake Mitchell Association members attended nine bass tournament weigh-ins in Lake Cadillac collected 268 bass and returned them to various points around Lake Mitchell. The Bass Tournament Release Program was formed in 2007 by the Lake Mitchell Action Committee, a sub-committee of the Lake Mitchell Improvement Board. Mark Pentecost, the owner of Cadillac Track and Trail, donated a pontoon boat, motor, and boat registration. Brent McCumber provided a livestock watering tank while Ron Moelker came up with a battery and a water pump. Craig Hewett offered docking at Four Winns Test Center. The bass release program will continue in 2009.

A Plan for Aquatic Vegetation Control in 2009

What is the problem? More than 70% of Lake Mitchell's 2580 acres supports aquatic vegetation. The problem is that Eurasian Watermilfoil (EWM), an invasive plant which first appeared in the late 1980s, now covers 300-500 acres. This plant chokes out native vegetation and when it grows near the water surface, impedes boat navigation. Adding to Lake Mitchell boater frustration in 2008 were the long brown strands of flat stem pondweed, a native plant, which lay across many surface acres of the lake. Although the spread of EWM is problematic in the main lake, heavy growth of EWM and native plants in the coves and selected shoreline areas greatly impedes off motorized boat traffic during the summer months.

How will the Lake Mitchell Improvement Board deal with the problem?

The Lake Mitchell Improvement Board will continue to deal with Eurasian Watermilfoil and nuisance weeds in 2009 by following the Board's stated objectives for aquatic weed control. In order of priority, these objectives are stated as follows: 1) Control Eurasian Watermilfoil in the main part of the lake, 2) Remove vegetation that hinders boaters' access to the lake, 3) Clear thick weeds away from ends of docks, 4) Provide roadside pick up for weeds.

To meet these objectives, Lakeshore Environmental Inc (LEI) has been hired as the Board's environmental consultant replacing Progressive Engineering. At the February 23rd Lake Mitchell Improvement Board meeting, Jennifer Jermalowicz-Jones, the consultant from Lakeshore Environmental Inc. who will be working with us on Lake Mitchell outlined the following program for aquatic plant management in 2009: 1) In May when the first immature Eurasian Watermilfoil can be detected, Lake Mitchell will be surveyed with plant samples being taken where they are found in a GPS survey of at least 800 points. (In past years, 350 grid points were used in the survey.) This more comprehensive survey will ensure that a greater percentage of the lake's milfoil will be detected. 2) Soon after the water reaches 55 degrees, (the minimum temperature for effective 2-4-D treatment) systemic aquatic herbicide will be applied. This likely will occur the second or third week of May. (In past years treatment was done the second week of June.) Early treatment kills plants before they have a chance to seed and the dying smaller plants create less decaying plant matter on the bottom of the lake. 3) On the day Aquatic Services Inc, (the applicator company hired this year replacing Professional Lake Management which has done the treatment in previous years) treats the lake, staff from Lakeshore Environmental Inc. will be on the treatment boats to supervise. The LEI staff will make sure that the areas treated correspond to the GPS surveyed grid points where EWM was found. The LEI staff will also ensure that boats are using GPS and depth finder equipment properly to insure accurate distribution of herbicide. The herbicide applied will be metered to make sure that the right dosage is applied. 4) It is estimated that we will harvest about 40 acres w/o Franke Cove and 43 acres if we include Franke Cove. Projecting the amount of EWM needing treatment is more difficult but it is likely we will locate 350-450 acres. This year contact herbicides (which only kill parts of the plant that comes in contact with herbicide) will not be used. Systemic herbicides will be used since they kill the entire plant including roots. The Board accepted Jennifer's recommendation that West Michigan Weed Removal be hired as our harvester this year, replacing Professional Lake Management which has provided this service in the past. The Board approved her recommendation. 5) Several weeks after the herbicide treatment, LEI will return to survey the lake and if healthy milfoil is found, then it will be marked for retreatment and soon receive a dose of herbicide. A final survey will be conducted in September to evaluate the effectiveness of the program.

The herbicides used for treatment will be the same as have been applied in previous years and include the following: 1. 2-4-D, which kills milfoil, is a systemic chemical which means that it kills the entire plant, roots and all. Because of the presence of shallow wells this herbicide must be used no closer than 250 feet from the shore. 2. Triclopyr, with a brand name of *Renovate*, is also a systemic chemical, and is used near shorelines. Lawns may be watered within 24 hours of application, but ornamental plants should not be hydrated until the water has been tested. All chemicals have a 24-hour restriction on swimming.

Weevils will be planted this year: Lakeshore Environmental plans to stock 10,000 weevils at a 50 acre site on Lake Mitchell early in the summer. Tentative plans will have weevils introduced near the mouth of Big Cove. A \$10,000 grant from the United States Forest Service will pay for much of the weevil planting.

How weevils control milfoil: Weevils feed exclusively on Eurasian Watermilfoil by consuming stem tissue and causing it to die and fall to the lake bottom. Although there have been some dramatic successes, introducing weevils does not guarantee that milfoil will be controlled. Areas where weevils are introduced cannot be chemically treated or harvested for several years until it can be determined if the trial was successful. Plantings of weevils can fail for several reasons. These insects must fly to shore where they burrow into brush or ground littered with leaves for the winter. Well kept lawns provide poor habitat for overwintering weevils. Panfish, especially bluegills, eat this insect's larva which can cause weevil plantings to be unsuccessful. Heavy boat traffic in a plant area can also be detrimental. If Lake Mitchell's weevil planting proves successful, the program will be expanded reducing the lake's reliance on chemicals for weed control.

Weed Harvesting to continue in 2009: West Michigan Weed Removal will conduct harvesting in coves and shoreline areas where vegetation is inhibiting boat traffic. In 2008 harvesting was delayed because the record rains that fell on June 12 and 13th raised water levels causing concerns about the effectiveness of harvesting during June. (Pictures of the aftermath of the June 12-13 rains are on our website.) This year the harvesters will begin cutting in late June in order to finish before the 4th of July holiday.

The Nature of Harvesting: Because milfoil spreads by fragmentation, aquatic herbicide treatment is the primary means of controlling that plant. Once the plant has been killed, then harvesters can collect the dead milfoil and other nuisance vegetation. Harvesting is used where native plants are so dense as to cause problems for boating. This means that a lane will be cut so people can get their boats from their docks to open water. Because harvesters are too big to maneuver between docks and need 18" to 2' of water to operate, not all weeds will be cut. In addition DEQ regulations forbid the cutting blades from digging into the bottom muck because according to the DEQ, would be dredging. The DEQ also stipulates that at least 20% to 40% of the littoral zone (meaning along the shore) be left vegetated to provide habitat for fish. Without harvesters to cut and remove plants, shallow areas would be rendered unusable for recreation. However harvesting does not eliminate weeds permanently. During peak growing season, mature plants may appear in harvested areas within a few weeks after a cutting.

Do harvested weeds float away to the shore around Lake Mitchell? As harvesters cut weeds they are fed onto a conveyer belt that carries them to a collection bin. When the bin's capacity is reached, the harvester returns to shore and off loads the weeds onto a dump truck which carries the weeds to an area farmer who uses them for mulch. Every effort is made to ensure that weeds cut by the harvester do not escape and float to other parts of the lake. Most floating vegetation has been cut by motor props, dropped by anglers, and is the result of the natural or chemically induced die-off of plants. Harvesting usually occurs during the last week of June. Property owners are encouraged to visit Big, Little, and the Franke Coves to observe the harvesting.

Integrated Lake Management: The Lake Mitchell Improvement Board will be following an integrated management program. To give you an understanding of what this means, the following information was provided by Lakeshore Environmental Inc: Integrated lake management involves the combined use of chemical, biological, mechanical, aeration, or other control methods for aquatic plant control or the combination of various methods for the management of nutrients, erosion, or other lake issues. Integrated lake management is becoming increasingly common since aquatic ecosystems are multi-dimensional and have different problems at various spatio-temporal scales in certain lake areas and thus may show variable responses to specific solutions. The recommended use of systemic chemical herbicides for the Eurasian water milfoil (*M. spicatum*) present within Lake Mitchell and the use of biological control (i.e. the weevils), along with mechanical harvesting of nuisance aquatic vegetation is indicative of an integrated management plan. Care must be taken to assure that the weevils are stocked during a period when chemical herbicide residues may not be detected in the water column and have been assimilated by treated *M. spicatum* plants.

What can we expect from our efforts to control the weed problem? Nothing can be done to return Lake Mitchell to what it was in the 1980s. The sewer system that was installed in the 1978 greatly reduced the leakage from septic systems into the lake which improved the water quality but also increased water clarity. The clearer water allowed light to penetrate farther into the lake stimulating plant growth in deeper water. In the late 1980s Eurasian Watermilfoil was introduced to Lake Mitchell. The clearer water and the appearance of EWM greatly increased plant growth.

Each year plants, whether killed through herbicide treatment or because of their natural seasonal die-off, fall to the lake bottom and decompose. This creates a fertile base which encourages an ever expanding area for plant growth. The Lake Mitchell Improvement Board working in concert, with Lakeshore Environmental, Aquatic Services, and West Michigan Weed Removal will administer a program of chemical treatment and harvesting to clear plants away from the water's surface so boaters and fishermen can utilize more of the lake. It is hoped that by detecting and treating more EWM in 2009, that there will be a significant reduction of this plant in future years.

The problem with native plants in the main lake: While invasive plants such as Eurasian water milfoil can be treated wherever they are found, according to regulations set forth by the Michigan Department of Environmental Quality, chemicals cannot be used to treat native plants that are more than 300 feet away from shore. In a situation such as 2008 when a bumper crop of flat stem pondweed covered parts of Lake Mitchell, herbicide treatment of that plant cannot be undertaken.

Fluridone (Sonar) – a solution to Mitchell's weed problem? Fluridone is an aquatic herbicide, known by the trade name *Sonar*, which was used in 2002 to treat Houghton Lake's Eurasian Watermilfoil problem. At that time 54%, more than 11,000 acres of Houghton Lake, was infested with EWM. The treatment virtually eliminated the plant although EWM has gradually returned and in 2008 covered about 1310 acres. Last fall the Lake Mitchell Improvement Board considered a fluridone treatment for this year. Representatives from SePro and Progressive Engineering conducted preliminary studies and felt Lake Mitchell was a candidate for this treatment. Officials from the DNR and MDEQ opposed the treatment pointing out that only 16% of the vegetation in the lake was milfoil. The Improvement Board voted to forego using a fluridone treatment at this time feeling that the program proposed by Lakeshore Environmental Inc involving more detailed surveys of the lake, and then coordinating a control plan using 2-4-D, trichlopyr, harvesting, and weevils might be best for Lake Mitchell.

Roadside Pickup

The Lake Mitchell Improvement Board will again provide roadside pickup of weeds. Weed hauling begins May 18 and continues through September 8. Aquatic weeds need to be removed from the lakeshore by the property owners and put on the edge of the road. Only aquatic vegetation will be picked up.

There is no hotline to call; the weed hauler will pick up weeds according to this schedule:

- **Monday** – From the canal north to the roller rink.
- **Tuesday** – From the roller rink along West Lake Mitchell Drive checking all lakefront roads ending with the Camp Torenta loop.
- **Wednesday** – From the canal south and west including all roads with lake front property to the end of Sunrise Point Road.
- **Thursday and Friday** – Days for collecting weeds not picked up earlier in the week.

If you would like to hire someone to collect and move your weeds from the lakeshore to the roadside, or do yard work, Joe Luis of Luis Maintenance is available. To contact Luis call 779-5895.

HB 4199 - \$500 fine for Launching Boat with Aquatic Plant attached

HB 4199 has been passed by the Michigan House of Representatives which makes it illegal to launch a boat into Michigan waters with an aquatic plant attached. A summary of the bill is as follows:

A person shall not place a boat, boating equipment, or boat trailer in Michigan waters with an aquatic plant attached. A law enforcement officer may order the owner or operator to remove aquatic plants from the boat, boat trailer, or equipment. The DNR shall prepare a notice that contains the summary of this law and make it available to owners of public boat access sites, who are required to post it and maintain it. A person who violates this law may be ordered to pay a civil fine of not more than \$500.

Shoreline Ecology

Create a shoreline greenbelt

A greenbelt is a band of natural vegetation growing along a lake shoreline. Greenbelts slow surface runoff before it enters the water, allowing sediments, excess nutrients, and other pollutants to settle out. Uncontrolled sedimentation will alter the habitat of crayfish, mayfly larvae, and fish as well as increase phosphorous loads in the lake. Leaving a strip of natural vegetation between your lawn and the water's edge is one of the best things you can do to maintain our lake's water quality.

Keep nutrients from entering the lake

1. In addition to creating a greenbelt, adopt a lawn fertilization program that uses no phosphorus and purchase products that slowly release nitrogen.
2. If fertilizer is needed, apply it when the grass is actively growing.
3. Perforate lawn and seed as well as mulch exposed soil to prevent erosion.
4. Do not feed ducks or geese.
5. Test soils (contact MSU extension) to establish a plan for fertilization.

The problem with seawalls

Standing on a seawall and watching the waves rebounding off, you note that the turbulence stirs up the water and bottom sediment. The US Fish and Wildlife Service notes that "Shallow waters provide nursery habitat for fry and young-of-the-year fish and habitat for a greater variety of animal fauna than for all other aquatic zones." In other words, the shallows of inland lakes are the most biologically productive areas. Seawalls, especially those with little or no rock riprap, create virtual "biological deserts." Natural materials are preferred where actively eroding shoreline justifies protective measures. Construction should follow the natural shoreline contours and minimize the use of steel, wood, or vinyl. Flat or corrugated material reflects almost all of a boat wake's wave energy back into open water accentuating erosion. If a straight-sided seawall is in place, it should be faced with riprap. Rock riprap is generally more effective at dispersing wave energy and costs substantially less than wood or steel seawall. If rock riprap is used as a seawall, it should be placed over a geo textile material to keep soil from flowing through the seawall.

***Phragmites* invade Lake Mitchell shorelines**

Phragmites, an invasive plant, also known as the common reed is being seen in the Lake Mitchell area. These plants often are found in gardens and yard vegetation. This wetland grass grows from six to fifteen feet tall. The plant grows in dense stands and crowds out other beneficial native wetland vegetation.

If allowed to spread into a wetland, *phragmites* can become the dominant plant and prove harmful to animals, birds, fish and amphibians that reside in these lowland areas. *Phragmites* grows along shorelines, roadside ditches, and other low wet areas. The plant spreads by fragmentation and its extensive root system makes it difficult to control. *Phragmites* has flat green leaves that alternate along the stem and a distinctive purple-brown seed head with plumes that appears in late July. *Phragmites* can be controlled using herbicide treatments followed cutting or mowing. There is currently no biological control of *phragmites*.

Purple Loosestrife threatens wetlands

Big Cove is ringed by thousands of purple loosestrife plants whose beautiful, but unwanted magenta flowers create a real threat to the health and survival of that wetland shoreline. Wetlands are the most biologically diverse productive component of our ecosystem. Numerous species of plants, birds, mammals, reptiles, insects, fish, and amphibians rely on healthy wetlands for their survival. However when purple loosestrife gets a foothold, the habitat where fish and wildlife feed, seek shelter, reproduce and raise young, quickly become choked under a sea of purple flowers.

Loosestrife plants are also found in other parts of the lake and occasionally in gardens. If you know of loosestrife plants, they should be destroyed. To remove plants, dig out the root system and then place the entire plant in a plastic bag so as to not spread the seeds which can be shaken off the flowers.

AQUATIC PESTICIDE TREATMENT NOTICE

This notice is to inform you that the Mitchell Lake Improvement Board has contracted with this company for aquatic management services. We are planning to treat the area waters with herbicides and/or algacides for the control of aquatic nuisance plants and/or algae.

Please be aware that only pesticides that have been approved by the Environmental Protection Agency, Michigan Department of Agriculture and the MDEQ (Michigan Department of Environmental Quality) are being used. These pesticides are being applied in dosages approved by the MDEQ and as applied are not harmful to fish, wildlife or pets. A permit from the MDEQ will have been secured prior to any pesticide applications.

Please watch the shoreline for the posting of YELLOW signs, which will indicate the day of treatment, exact pesticides used and the water use restrictions depending on the pesticides used. In the event of an additional pesticide application, a second sign will be posted outlining new water use restrictions.

Pesticides are applied as either liquid or granular formulations. Liquids are surface sprayed or sub-surface injected depending on treatment strategies and/or weather conditions. Granular formulations are applied with broadcast spreaders.

WATER USE RESTRICTIONS -- ♦ = Anticipated pesticide use for 2009.

♦ Copper Products	No swimming or bathing for 1 day.
Endothall	No swimming or bathing for 1 day. No household uses, irrigation, animal watering or similar uses for 14 days.
♦ 2, 4-D	No swimming or bathing for 1 day. No household uses, irrigation, animal watering or similar uses for an indefinite period.
Fluridone	No swimming or bathing for 1 day. Do not use this water for irrigating lawns, gardens, plants, row crops or tree crops for 30 days.
Dibromide	No swimming or bathing for 1 day. No household uses, irrigation animal watering or similar uses for 5 days. No turf grass watering for 3 days.
Glyphosate	No swimming or bathing for 1 day.
♦ Adjuvant	No restrictions.
♦ Triclopyr	No swimming or bathing for 1 day. No irrigation for 120 days.

Initial approximate treatment date will be late May to early June. If you have any questions regarding the pesticide treatment you can contact Aquatic Services, Inc at 810-636-3303 or the Mitchell Lake Improvement Boards contact person Jennifer Jermalowicz-Jones (Lakeshore Environmental) @ 231-845-0371.

LONG TERM WATER USE RESTRICTIONS

Renovate (triclopyr): Do not use treated water for irrigation for 120 days following application. As an alternative to waiting 120 days, treated water may be used for irrigation once the triclopyr level in the treatment area is determined to be non-detectable by laboratory analysis. Water samples will be taken approximately 3 weeks after treatment. Go to www.aquaticservicesinc.info LAKES page to find out when the water use restrictions have been lifted. There is no restriction on use of water from the treatment area to irrigate established grasses.

Navigate (2,4-D): Do not use water from treated areas for irrigating plants or mixing sprays for agricultural or ornamental plants, unless and approved assay indicates the 2,4-D concentration is 100 ppb (or less), or only growing crops and non-crops areas labeled for direct treatment with 2,4-D will be affected. Water samples will be taken approximately 3 weeks after treatment if the treatment area is within 250' from shore. Go to www.aquaticservicesinc.info LAKES page to find out when the water use restrictions have been lifted. There is no restriction on use of water from the treatment area to irrigate established grasses.

2, 4-D (offshore): Shoreline postings with 2, 4-D (offshore) means the treatment area is located more than 250' from shore. Follow the water use restrictions posted if you are irrigating within the 2, 4-D treatment area. Follow all other water use restriction times as they are posted.

POSTINGS

Notice of all pesticide applications shall be posted prior to each application. Notices shall be posted along the shoreline with 8 1/2 x 11 inch YELLOW posters. They shall indicate the day of treatment, permit number, contact information, exact pesticides used and the water use restrictions (swimming, irrigation and fishing) depending on the pesticides used. In the event of additional pesticide applications, additional notices shall be posted outlining new water use restrictions.

Some postings may be done in advance. How many days in advance will vary between lakes. There is an ADVANCED POSTING box on the poster that will be checked in the event of an advanced posting. If the box is not checked, the application will be made on the same day as the posting. Posters will be attached to trees, posts, decks, docks and other vertical objects along the immediate shoreline. However, riparian property owners who choose not to have the posters affixed to their personal property may have alternative postings. Within 30 feet of the immediate shoreline, you may supply your own bright YELLOW painted supporting device (stake) at least 30 inches tall and the posters will be stapled to that device. Go to www.aquaticservicesinc.info the SCHEDULES page to find out when the pesticide applications are to be made.

DNR considers change in pike regulations -- Comment period ends April 30, 2009

The DNR has examined the state of the pike fishery in Michigan and felt that changes may be needed in the fishing regulations. They are encouraging the public to look over the following options and make comment by April 30, 2009. Regulation Goal (msl means "minimum size limit"): 1) No msl, bag 5 Maximize sustainable harvest, 2) 24" msl, bag 2 Maintain current structure for fast growth populations, 3) Protected Slot 24-34, bag 2 fish immediately released between 24-34 inches, to improve population size structure, 4) 26 or 30" msl Reduced harvest.

These recommendations were based on a 32 page study put together by DNR personnel which examines the pike situation in Michigan and provides rationale for proposed changes. It can be found at www.michigan.gov/documents/dnr/PikePlan or put "Michigan DNR" into a search engine and then click on "fishing". I feel that certain ideas were not addressed by this study. While it may be true that pike populations where there are stunted fish or where ecological conditions have put the pike population at risk, may benefit from a change in regulations, Lakes Mitchell and Cadillac are not negatively affected by current pike regulations. Furthermore a change in regulations, specifically, ones in which the minimum size goes to 26 or 30 inches or a protected 24-34 inch slot, if created, would be detrimental to both the pike population and the angler's interest in fishing for pike. I have the following concerns: 1) Tipups account for the vast majority of pike taken by ice anglers. Larger fish typically swallow the minnow, so the treble hook becomes imbedded in the soft tissue of the throat. Removing the hook often kills the fish. Cutting the line is not usually an option since fishermen often use wire leaders. Protecting fish in the 24-34 inch range would create a high mortality for these larger fish. 2) Spear anglers finding that almost all their legal targets are less than 24 inches may not feel it is worth the effort to spear. Having just given them an extended season it would be unfortunate if interest in that sport waned. 3) Having been fishing pike since the 1950s, I know how little meat comes off a "hammer handle." Filets off fish smaller than 22 inches don't have much meat. 4) Fish over 34 inches, which would still be legal, are often released by anglers because: A) they aren't as tasty as smaller ones; and B) they appreciate that these trophy fish should be available for other anglers and reproduction. 5) With the annual sales of fishing licenses declining, every effort should be made to increase the number of anglers. Raising the line limit from two to three obviously was done to increase ice anglers' success. The new pike regulations will recruit no new anglers and may influence others to stop fishing. 6) With most catches consisting of two fish under 24 inches in length, the incentive to fish will likely diminish. In a time when it is increasingly difficult to recruit new young anglers, this is no time to make it harder to harvest a catch of decent-size pike. 7) Fewer fisherman means fewer dollars spent in the Cadillac area where angler dollars spent on pike fishing are an important part of our economy. I encourage you to voice your opinion to the DNR on this issue. -- Dave Foley

Michigan DNR personal watercraft regulations (2009)

Who may operate a personal watercraft:

- No under twelve years of age may operate a PWC.
- 12 and 13 year olds may operate a PWC only if they have obtained a boater's safety certificate prior to 1/1/1999 **or**
- Accompanied by a parent or guardian and both have a boater's safety certificate.
- PWC equipped with a lanyard-type ignition safety switch and the adult has the switch attached to them.
- The PWC is designed to carry two persons.
- 14 years and older must have a boater safety certificate unless they were born before 12/31/78. Those individuals need no certificate.

While most operate their Wave Runners responsibly, those who race close to shore, docks, and other boats frustrate and anger lake users.

PWC's must be operated at slow no-wake speeds under these conditions:

- Within 150 feet behind boats other the PWCs.
- In less than 2 feet of water.
- All watercraft must be operated at slow no-wake speed within 100 feet of docks or rafts, marked swimming areas, people in the water, moored or anchored vessels, and shorelines.

Michigan Law makes it illegal to run personal watercraft in the last hour before sunset or before 8 AM.

<i>2009 Personal Watercraft Boating Hours</i>			
<u>Date</u>	<u>Begin</u>	<u>End</u>	<u>Sunset</u>
May 1	8:00 A.M.	7:44 P.M.	8:44 P.M.
May 15	8:00 A.M.	8:00 P.M.	9:00 P.M.
June 1	8:00 A.M.	8:17 P.M.	9:17 P.M.
June 15	8:00 A.M.	8:26 P.M.	9:26 P.M.
July 1	8:00 A.M.	8:29 P.M.	9:29 P.M.
July 15	8:00 A.M.	8:23 P.M.	9:23 P.M.
Aug. 1	8:00 A.M.	8:07 P.M.	9:07 P.M.
Aug. 15	8:00 A.M.	7:47 P.M.	8:47 P.M.
Sept. 1	8:00 A.M.	7:19 P.M.	8:19 P.M.
Sept. 15	8:00 A.M.	6:53 P.M.	7:53 P.M.

To report unsafe or illegal PWC or boating activities call Wexford County Sheriff at 779-9211 or DNR at 1-800-292-7800. A complete listing of boating regulations is listed at www.boat-ed.com/mi/handbook as well as at the DNR and Sheriff offices.

What you can do to keep Invasive species out of Lake Mitchell

INSPECT your boat and your equipment and remove all weeds from your trailer propeller, anchor, and any other place found on your boat.

- 1) DRAIN all water from the boat motor, bilge, live well, and bait buckets on dry ground.
- 2) DISPOSE of leftover bait in a trash receptacle, not in the water.
- 3) RINSE your boat and all fishing equipment with hot tap water, OR thoroughly dry your boat outdoors for at least five days before traveling to a new lake or stream.
- 4) TEACH and help others to do the same.

Ten things you can do to protect Lake Mitchell?

1. Wash, drain, and clean your boat to keep invasive species out of the lake.
2. To guard against introducing VHS fish virus, only use minnows bought at authorized bait shops or ones caught in Lake Mitchell.
3. Check to make sure you aren't growing phragmites plants in your yard. This invasive plant will destroy our wetlands. (See phragmites in "Shoreline ecology and invasive plants.")
4. Use phosphorus-free fertilizers. (See "Shoreline ecology.")
5. Practice catch-and-release with walleyes to help rehabilitate that fishery. (See "Lake Mitchell 2008 Fishing Report")
6. Develop a greenbelt along your shoreline (See "Shoreline ecology.")
7. If a seawall is needed, consider using only rock or seawall with rock rip rap to minimize wave action erosion. (See "Shoreline ecology.")
8. Do not feed waterfowl to help prevent swimmer's itch. (See "Swimmer's itch" section on website.)
9. Remove purple loosestrife from your shoreline. (See "Shoreline ecology and invasive plants.")
10. Do not rake leaves or deposit lawn clippings into the lake.

Lake Mitchell Improvement Board
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