

The Lakesider.....Spring 2006

The annual newsletter of the Lake Mitchell Improvement Board.

Lake Mitchell Improvement Board

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

The **Lake Mitchell Improvement Board** is composed of six appointed members who oversee the distribution of the annual budget which comes from assessments paid by those owning lakefront or lake access property. Improvement Meetings are open to the public. Tentative meeting dates for 2006 include:

- Monday, May 8 5:30 PM
- Saturday, June 10 10:00 AM
- Saturday, July 8 10:00 AM
- Monday, August 14 5:30 PM
- Monday September 25 5:30 PM

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

All who own property on or adjacent to Lake Mitchell are members of the **Lake Mitchell Association** and are invited to attend the annual meeting and discuss concerns about Lake Mitchell. **This year's meeting is on Saturday May 27 at 10 A.M. at the Cherry Grove Township Fire Hall on M-55.**

Read about Lake Mitchell news and Improvement Board work on our website **www.lakemitchell.org**. Check out the website to find the following information: The 2006 newsletter, highlights from the 2005 edition, archived minutes of Improvement Board meetings. listing of spraying and weed harvesting dates, and *30 Years on Lake Mitchell – A look back.*

It costs \$2 each to copy, print, and mail the newsletter. Last year that amounted to more than \$1400. You can save the Board that expense by reading ***The Lakesider*** online so we don't have to mail you a hard copy.

By sending us an email at **info@lakemitchell.org**, we will add your email to our list (Last year 60 Association members added their names to the list).

Those on our email list will be notified when the newsletter is online, which is about three weeks before it is mailed. In addition we will alert you to harvesting, chemical treatment, and board meeting dates. 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**.

STEWARDS OF YOUR MONEY

As stewards of your money, we would like to explain why the board does not think that assessments are excessive in relation to what we spend maintaining the lake quality. This newsletter has explained the steps we go through to keep up that quality. For the second year in a row, our expenses were more than our income, resulting in an even lower ending cash balance. We welcome your input on how to reduce expenses and yet maintain lake quality.

Assessments

The assessment process is a legal process that requires certain public notices and public meetings. We went through that process in 2004. The formula for annual assessments is:

| | | | |
|------------------------|-------|--|------|
| Residential waterfront | \$100 | Residential deeded or dedicated access | \$25 |
| Commercial waterfront | \$200 | Commercial deeded or dedicated access | \$50 |

In 2005 that brought in \$61,575. At first glance that seems like a lot of money, but when trying to serve all aspects of lake quality the expenses add up.

Expenses

| | | | |
|-------------------------|----------|-------------------------------|-----------------|
| Chemical Treatment | \$34,220 | Newsletter & Web Site | 2,600 |
| Weed Harvesting | 16,370 | Insurance | 730 |
| Progressive Engineering | 7,000 | Audit | 450 |
| Shoreline Clean-up | 9,700 | Computer Services for Billing | 100 |
| Water Testing | 550 | Training | 50 |
| | | TOTAL EXPENSES | \$71,770 |

2005 SUMMARY:

| | |
|--------------------------------|-----------------|
| Beginning Cash Balance: | \$20,700 |
| Plus Assessments | 61,575 |
| Plus Bank Interest | 450 |
| Less Expenses | - 71,770 |
| Ending Cash Balance | \$10,955 |

We spent \$1,700 less than we spent last year because in 2004 we went through the legal steps required for the assessment renewal.

However this year's ending cash balance went down almost \$10,000.

Last year our ending cash balance went down \$15,000.

Our board sees this as an indicator that expenses will need to be closely analyzed and we welcome your input.

The Fishing Report -- 2006

Pike, Bass, Crappie abundant, while Perch and Walleye remain elusive

Limit catches of pike, crappie, and largemouth bass were not uncommon this year. Ice anglers occasionally landed a few pike that were 30+ inches while good-sized crappie were jigged up by fishermen on the ice at dusk. Spring-time crappie anglers also did well. The first month after the Memorial Day Weekend opener produced many bass, although Saturdays and Sundays found local anglers often competing for fish with 60-100 bass tournament boats on the lakes. While large mouth bass are found all over Mitchell, the smallies favor the east side of Mitchell and all of Lake Cadillac.

Jumbo bluegills were not common, although most fishermen could catch tons of bite-sized gills; however, it is not unusual to land master-angler length sunfish. Perch, although more available than other years, still remain small. Occasionally a lucky or skilled angler found bigger ones. Although a few experts regularly take walleyes, most who fish for them have little success. The ones that are caught, though, are usually at least twenty inches long.

More walleye to be planted next two years.

The November survey of Lake Cadillac and Mitchell found no walleye from the plant in Cadillac while only a few were taken in Mitchell. As a result, this spring a million-and-a-half quarter inch fry will be put in our lake while Cadillac will receive a million. The following year, 100,000 inch- and-a-half fingerlings will be planted in Mitchell and a smaller number in Cadillac.

A recent study conducted by the Wisconsin DNR and the University of Wisconsin may help explain why walleye populations have plummeted in our area. The study, *Interactions between Walleyes and Four Fish Species with Implications for Walleye Stocking*, found that bass, not pike, are the primary consumers of young walleye. With bass numbers high in the lakes in recent years, young walleye may be losing out to the abundance of largemouth and smallmouth bass.

Changes in bass season coming this year.

Starting this spring, the catch-and-release bass season will begin on the same date, the last Saturday in April, as the pike and walleye openers. However, bass may not be kept until the Saturday of Memorial Day Weekend. It is important that anglers, especially when fish are in bedding areas, return the fish immediately to water. Studies show that if bass are kept for more than a couple minutes, they may abandon the nest and the likelihood that predator panfish may eat the eggs becomes great.

What about the red sores found on pike?

You may have caught pike with reddish sores on their fins or sides. These sores are a contact-transmitted virus spread from fish to fish during spawning. This disease is found on pike throughout the United States and Canada. The disease is not known to be infectious to other animals or man; however infected fish should not be eaten. Legal size fish should be kept and disposed of, to keep the disease from spreading.

Fish with yellow grub and black spot.

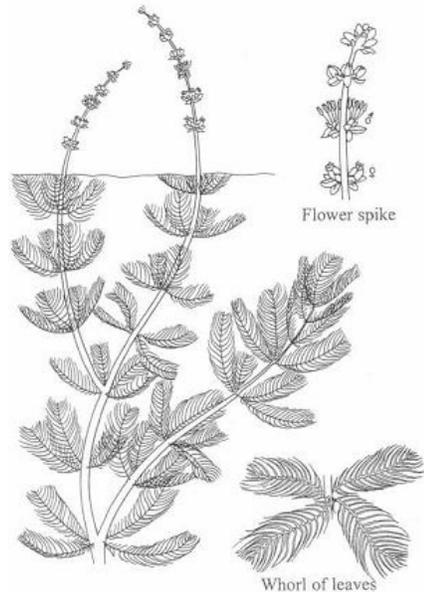
Yellow grubs and black spots are found in fish in many area lakes, including Mitchell and Cadillac. Black spot looks like grains of pepper on the skin or fins. Yellow grub appears as a white or yellow worm, about one inch long in the flesh and does not have any external signs. These parasites are larval stages that infest birds, but spend their life cycle in snails and fish. The bird host for the black spot is the kingfisher while the Great blue heron is the bird host for the yellow grub. The parasites do not impact growth and longevity; however young fish may experience mortalities. The parasites are killed by proper cooking and the flavor of the fish is not impacted. Neither of the parasites is capable of infesting humans. The incidence of these parasites is increasing and this can be attributed to the greater numbers of kingfishers and Great blue herons in our area. The presence of both of the birds is sign of a healthy environment.

What your Improvement Board is doing about aquatic plant control?

Based on input from lake residents, the Improvement Board spends the vast majority of the roughly \$60,000 collected from assessments on aquatic plant control.

To accomplish this, Progressive Engineering has been hired to advise the Improvement Board on the most effective and safest means of dealing with Lake Mitchell's weed problem. This is accomplished in the following ways:

- Lake Board members conduct lake surveys with Progressive Engineering limnologists (professionals in the study of aquatic plants) to determine the location of nuisance weeds. *Last year property owners from Little Cove and Franke Cove joined us on the survey to give us input on the situation in their coves. If you would like to join us for the boat survey please let us know.* Surveys are made before and after Lake Mitchell has been harvested and chemically treated.
- Control of Eurasian milfoil with herbicides is the Board's first priority. The primary chemical treatment occurs about the beginning of the second week of June. Typically 50-60 acres are treated.
- The weed harvesters usually cut vegetation in the last week of June. Most years about 40-50 acres are harvested. When weed growth is heavy, a second round of chemical treatment follows in mid-July with a second harvest occurring in early August.
- When harvesting, weeds that impede navigation are first priority. That's why much of the harvesting is done near docks and in boat passages. To prevent the appearance of mats of weeds on the surface, the large beds of Eurasian milfoil growing in mid-lake are treated. Weeds are a part of the natural ecology of a lake so while the Board works to control plant growth, it does not try to eliminate all weeds from any part of the lake.
- Last year in late August, Progressive Engineering conducted a lake-wide transect survey, the first time this has ever been done, and found 118 acres of milfoil



On our website the section *Chemical Treatment and Harvesting to Control Aquatic Plants* offers a more complete explanation of weed control in Lake Mitchell.

What's happening on Lake Cadillac?

Last summer mats of Eurasian milfoil appeared on the surface of Lake Cadillac. Progressive Engineering was hired to assess the situation and reported that over 250 acres of this invasive plant was growing in the lake. The Lake Cadillac Association was formed and it was determined that an integrated approach, using chemicals and weevils would be used. The annual proposed program cost is approximately \$100,000. The cost will be spread among the city of Cadillac, single family units, multiple family units, and commercial properties.

Milfoil problems on Lake Missaukee, too

Lake Missaukee has assessed property owners \$162 for 2005 and \$140 for 2006 & 2007 and spent approximately \$35,000 to treat 130 acres of Eurasian milfoil.

What you can do to help Lake Mitchell

1. Use phosphorus-free lawn fertilizer

Phosphorus, which helps grow green luscious lawns, promotes weed-growth in lakes. Just leaving the last few yards of lawn near the lakeshore phosphorus-free isn't enough. Studies show that phosphorus reaches lake waters from all parts of a lakeshore lot. Fertilizers have three-number labels; the middle number indicates phosphorus content. The numbers 30-0-4 on a package of fertilizer indicates there is no phosphorus. **Without doubt, phosphorus in lawn fertilizer is a major contributor to Lake Mitchell's weed problem.**

Hesel's Nursery, 13th Street Market and Cafe located at the corner of 13th Street and M-115 has phosphorus-free fertilizer.

50 pound bag of 25-0-15 costs \$14.89

50 pound bag of 27-0-8 costs 16.89

More detailed information about lawn care the establishment of a greenbelt is found on our website, www.lakemitchell.org.

2. To help prevent swimmer's itch, do not feed the ducks.

The parasite that causes swimmer's itch uses ducks and snails as hosts before infesting humans. Children often are most affected because their skin may be more sensitive, and they spend time playing in shallow water where the swimmer's itch parasites are more concentrated.

Infected swimmers may notice red spots within a half-hour of leaving the water. These spots may enlarge for the next 24-30 hours and may itch for a week. Toweling off may help. Others find protection by applying baby oil before swimming or taking a shower after leaving the water.

By not feeding ducks, not only will you help prevent the spread of swimmer's itch but, if fed, ducks (and geese) will congregate in that area leaving copious amount of duck poop on lawns and docks.

More information about swimmer's itch is found on our website.

3. Create a greenbelt

Rather than maintain a lawn to the water's edge, consider allowing natural vegetation to grow in the last three to six feet leading to the lake.

This will slow runoff before it enters the water, allowing sediments, excess nutrients, and other pollutants to settle out. Uncontrolled runoff will alter the habitat of crayfish, mayfly larvae, and fish as well as increase phosphorus loads into 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.

4. Clean your boat before launching in Lakes Mitchell.

It is quite likely that Eurasian milfoil first rode into Lake Mitchell on a boat. It probably was nothing more than a fragment wound in a propeller or twisted onto the frame of a boat trailer. But once in the lake, in a matter of years, it had created thousands of plants.

Although no zebra mussels have been found in our lake, we need to be vigilant in our inspection of boats entering the lake to keep those tiny snails out. The Michigan Sea Grant College program offers the following suggestions for protecting our lake:

- 1) **INSPECT** your boat and your equipment and remove all weeds from your trailer propeller, anchor, and any other place found on your boat.
- 2) **DRAIN** all water from the boat motor, bilge, live well, and bait buckets on dry ground.
- 3) **DISPOSE** of leftover bait in a trash receptacle, not in the water.
- 4) **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.
- 5) **TEACH** and help others to do the same.

Operate Personal Watercraft Responsibly

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 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.

Fisherman become especially irate when Jet Skis and Wave Runners operate their watercraft in the evening. **Michigan Law makes it illegal to run personal watercraft in the last hour before sunset or before 8 AM.**

| 2006 Personal Watercraft Boating Hours | | | |
|---|--------------|------------|---------------|
| <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 on our website and at the DNR and Sheriff offices.

Shoreline Cleanup

The Lake Improvement Board is offering a new system of shoreline pick up this year. We hope it proves to be a more efficient way to deal with aquatic vegetation.

Weed hauling begins May 22 and continues through September 8. Aquatic weeds need to be removed from the lakeshore by the property owner and put on the edge of the road. Only aquatic vegetation will be picked up. There is no hotline to call this year; the weed hauler will collect aquatic vegetation according to the following schedule: **Monday** - Section 1# - Canal north to the roller rink. **Tuesday** – Section 2# - Roller rink along West Lake Mitchell Drive checking all lakefront roads and courts ending with the Camp Torenta loop. **Wednesday** – Section 3# - Canal south and west including all roads with lake front property to end of Sunrise Point Road. **Thursday** and **Friday** - Days for collecting weeds not picked earlier in the week.

Drain Commissioner's Update
By Michael J. Solomon, Drain Commissioner
Lake Mitchell Water Quality
Don't Drink It, But It's Not Bad

Congratulations, we now have four years of water quality data on Lake Mitchell. The first three years were funded by Wexford County and last year the Lake Mitchell Improvement Board stepped forward. The objective of this sampling is to develop a baseline of high quality data for a data base from which to compare future changes. The Drain Commissioner has been working with Water Quality Investigators from Dexter, Michigan, to collect, analyze and present the water quality data. I would like to share some of this information with you.

The Water Quality Study

During certain periods of the year, Michigan lakes have poorer water quality than the remainder of the year. The water quality sampling in this study is designed to look at two of those poor water quality periods, one in early spring when phosphorus which may be released from the bottom sediments is distributed throughout the water column by spring mixing, and a second in late summer when the water is warmest, and the lake is stratified (if it stratifies). During most of the remainder of the year, the water quality is better. Thus, if the lake gets high marks for water quality during early spring and late summer, it probably has pretty good water quality all year long.

Water quality is sampled at three locations representing the three deepest points in the lake. Spring samples are collected at the surface since the lake is thoroughly mixed at this time. During summer when the lake is stratified, surface water quality is sampled for laboratory analysis and top to bottom temperatures and dissolved oxygen profile data is collected. The water is analyzed for temperatures, dissolved oxygen, chlorophyll a, total phosphorus, nitrate nitrogen, total alkalinity, pH, and specific conductance. Additionally, Dave Foley has been collecting water transparency measurements with a Secchi disk 10-12 times throughout the spring and summer. A water quality index is then calculated integrating all the measured parameters into one volume.

The index ranges from 1 to 100, with 100 indicating excellent lake water quality. The index rated lakes about the same way teachers rate students: 90-100=A, 80-90=B, 70-80=C, 60-70=D, and below 60=E.

The highest index for a Michigan lake studied by the author was Long Lake in Grand Traverse County at 100 in the spring of 1994. The lowest was 16 in an Ottawa County lake. The second highest rating was for Lake Meauwataka in Wexford County!

Water Quality Parameters

Overall, the water quality of Lake Mitchell has remained remarkably stable and is generally slightly better than Lake Cadillac. The water quality indices have ranged from 84 to 89 and not varied greatly from spring to fall.

We all know that our water quality is important to the property values and uses of Lake Mitchell. As property owners we need to continue to use management practices that protect our water quality. Support your Lake Improvement Board and look to this newsletters, our web site and the "Your Lake and You" that was provided to each of you for Management strategies that protect our water quality. In future issues I will provide more information on individual water quality parameters.

I would like to compile a history of the Lake Mitchell area including photos, stories, and other data on the settling and development along the shoreline. If you wish to contribute or can help find sources of information, please email info@lakemitchell.com. Here's a chance to share information about what was happening here forty, fifty, sixty, or hundred years ago. For Historical Facts About Lake Mitchell, visit our website.

Quick Facts about Lake Mitchell & Lake Cadillac

- Size of lakes: Lake Mitchell - 2,496 acres ; Lake Cadillac - 1,150 acres
- Maximum depth: Lake Mitchell - 22 feet; Lake Cadillac - 30 feet
- Lake Mitchell mean depth – 8.5 feet
- Lake Mitchell flushing rate 1.06 years -complete exchange of water.
- Water clarity: Lake Mitchell – 5-8 feet
- 10.4 miles to circle Lake Mitchell on a bike or in a car
- 7.1 miles to circle Lake Cadillac on bike (7.2 in car)
- Acres of milfoil identified in 2005: Lake Mitchell -118 acres; Lake Cadillac -200+ acres
- Length of canal: .3 mile
- Average date lakes freeze 1974-2005 – last week of November.
- Average date lakes become ice free 1974-2005 – second week of April
- The lakes at 1289 feet above sea level are among the highest in the Lower Peninsula.
- Lake Mitchell is in the Muskegon River watershed. Years ago Pete Smith paddled from Lake Mitchell down the Clam River, into the Muskegon River and on to Lake Michigan

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