

The Lakesider.....Spring 2018

The Annual Newsletter of the Lake Mitchell Improvement Board.

**Lake Mitchell
Improvement Board**
4830 East M-55
Cadillac, MI 49601
info@lakemitchell.org

Mike Solomon
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Wexford County Drain
Commissioner

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City of Cadillac
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Cherry Grove Township
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Wexford County
Commission
Representative

Tom Jacobson
Treasurer
Representative At-Large
representing Lake
Mitchell

Lake Mitchell Association
Officers
President: Tom Jacobson
Vice President: Lois Poag

Lake Mitchell Improvement Board Meeting Dates for 2018:

- * Saturday, April 28, 2018 @ 12:00 AM Noon
- * Monday, June 25, 2018 @ 10:00 AM
- * Saturday, August 25, 2018 @ 10:00 AM
- * Monday, October 29, 2018 @ 10:00 AM

All meetings are held at the Cherry Grove township fire Hall on M-55. The public is invited to attend. Contact Lake Mitchell Improvement Board at lakemitchellboard@gmail.com.

Lake Mitchell Property Owners' Association Meeting:

- * Saturday, June 2 @ 10:00 AM
- Meeting is held at the Cherry Grove Township Fire Hall on M-55.

If you received this newsletter, please consider saving the board the \$2 it costs to print and mail this newsletter by reading it online at www.lakemitchell.org. (We would rather use our money to fight milfoil than print and mail newsletters). All the contents of the newsletter are available online plus photos, minutes of our meetings, and features about Lake Mitchell not found in our annual newsletter. Email us at lakemitchellboard@gmail.com and we will add your email to our list which has over 350 addresses. Benefits of being on the email list: notifications of lake treatments and reminders of upcoming meetings. If weather events such as floods, ice storms, or heavy snows occur, which could possibly damage property, emails may be sent. These are especially appreciated by Association members who are not lakeside residents. The email list will not be sold or offered to anyone and will only be used for Lake Mitchell Improvement Board and Association business.

Information ONLY on lakemitchell.org

- Photos of native and invasive vegetation
- Photos of Lake Mitchell activities and weather events in 2015-2018
- Years of archive photos (Your home might be a star.)
- Lake Mitchell Annual Progress Report (entire report)
- Lake Mitchell By-Laws
- Minutes of Improvement Board meetings
- Maps showing location of invasive vegetation

Website of the Lake Mitchell Improvement Board: www.lakemitchell.org
Scan this QR code with the QR Reader on your phone or tablet to get the Lake Mitchell mobile website: www.lakemitchell.org.



Summary of 2017 Lake Mitchell RLS Aquatic Vegetation Program

The 26 page report was prepared by Jennifer Jermalowicz-Jones CEO owner and water resources director of Restorative Lake Sciences and has been summarized by Dave Foley. The full report can be found on the website www.lakemitchell.org.

The overall condition of Lake Mitchell is ranked in the top 15% of developed lakes of similar size in the state of Michigan. In 2017, water quality was measured in spring and late summer. Lake Mitchell would be considered eutrophic meaning it has much soft bottom and abundant vegetation. Oligotrophic lakes have hard bottom, and little vegetation. Mesotrophic lakes fall between the two categories.

Water clarity

Protection of the 26 native species of vegetation is vital for the health of the lake fishery and these plants should not be managed unless they are a nuisance to the lakefront property owners creating navigational or recreational hazards (i.e. lily pads or nuisance pond weeds in the coves). Invasion species such as hybrid Eurasian Watermilfoil (EWM) are able to grow in moderate nutrient waters and thus are a challenge to the Lake Mitchell ecosystem. In 2017 approximately 78 acres of Eurasian water milfoil (EWM) was treated in the entire lake. This represents a decrease from the 105 acres that was found in 2016. Rigorous treatments in 2016 and the mild summer weather may have accounted for the reduction in acreage.

The water clarity in Lake Mitchell is improving and has been measured to be 9 feet. This is adequate to allow abundant growth of algae and aquatic plants. The improved clarity cannot be attributed to presence of zebra mussels since their population is not strong in Lake Mitchell due to low alkalinity. They are much more prevalent in Lake Cadillac.

Phosphorus

Measurements for phosphorus in Lake Mitchell showed a decrease. This may be due to the long dry spells where no runoff occurred. Hopefully it also comes from a reduction in fertilizers containing phosphorus being put on lawns. Phosphorus is the primary nutrient necessary for abundant algae growth and aquatic plant growth.

Alkalinity

Lakes with high alkalinity are able to tolerate larger acid inputs with less change in pH. The alkalinity of Lake Mitchell is quite low and indicative of a "soft water" aquatic ecosystem.

pH

Most Michigan lakes have pH values from 6.5 to 9.5. Acid lakes with greater than 7 pH are rare. Lake Mitchell had a higher pH at 8.8 to 9.0. This may be due to less tannins from inlets reaching the lake.

Chlorophyll and algal species

Chlorophyll-a is the measure of the amount of green plant pigment in the water, often in the form of planktonic algae. Mitchell has a low rating and a diverse crop of algae and plant life, an indicator of great water quality.

Toxic blue-green algae

When growing in high abundance, blue-green algae can result in a surface scum that produces a toxin that humans and animals should avoid contact with when swimming. Cause of this bloom may be nutrient enrichment, abundance of zebra mussels which filter out good algae and then expel blue-greens and possibly the enrichment of CO₂ since this phenomenon is occurring globally. The preferred treatment is not to apply copper based algaecides which may cause further blooms. RSL will focus on this problem this year.

Purple Loosestrife control

The Galerucella beetle is stocked each season around areas of Lake Mitchell infested with Purple Loosestrife. The goal has been to introduce enough beetles each season to create a sustainable population around the lake to naturally reduce the acreage of over management of the invasive Purple Loosestrife.

Management Recommendations for 2018

Detailed surveys done in late May or early June will pinpoint location of EWM and Curly Leaf Pondweed. Chemical treatments will follow and be overseen by RSL staff.

This year RLS is recommending that we treat offshore areas with Navigate (2,4-D), at 200 pounds per acre and small areas with 240 pounds per acre. Navigate is recommended for a change from Sculpin (2, 4-D) so that plant tolerance does not become established. Near shore areas will continue to be treated with Renovate OTF. Diquat and/or Clipper will be continued to be used in the cove areas for nuisance natives. The canal will be assessed for the need for a possible harvest and scheduled if necessary.

Water quality will continue to be monitored in lakes and tributaries.

2017 Calendar Year Financial Record

2017 Income	Jan.1-June 30	July 1-Dec. 31	Total
Interest	197.19	193.48	390.67
US Forest Service Grant			
Assessment Income	8927.00	82755.63	91,682.63
Selma Twp Grant			
Total	9124.19	82949.11	92,073.30

2017 Expenditures	
Roadside Weed Pickup	9,665.00
RLS Administration	16,000.00
Chemical Treatment	54,378.24
Purple Loosestrife Beetles	
Legal Fees	2,731.40
Insurance/Bond	702.00
Service (audit, inspection, permit fees)	1,382.00
Print (mailings, newsletter, website, supplies)	1,783.73
Total	86,642.37

Fund Balance Jan.1, 2017	401,112.85
2017 Revenue	92,073.30
Total	493,186.15
2017 Expenditures	86,642.37
Fund Balance Dec.31, 2017	406,543.78

2017 Lake Mitchell Treatment Map

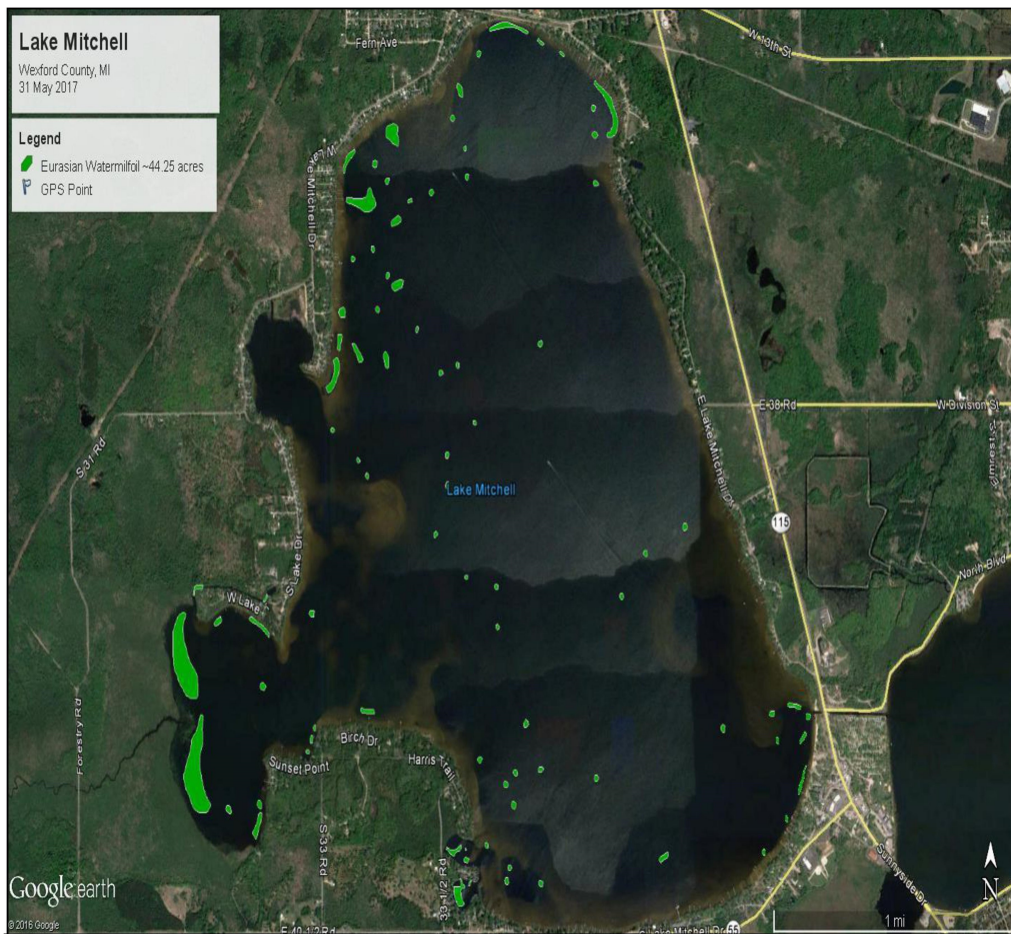
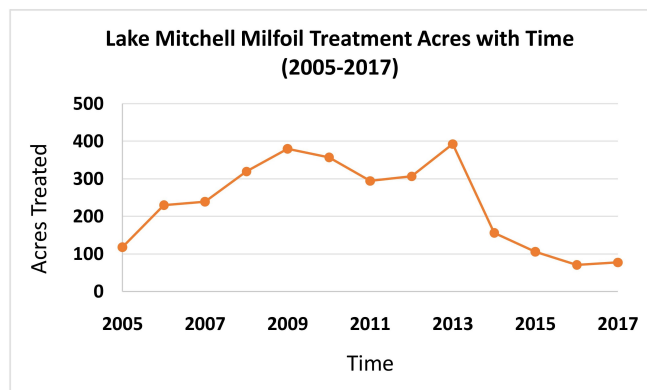


Figure 9. Distribution of EWM in Lake Mitchell (May 31, 2017). Note: Milfoil was mapped separately in the coves. A marked reduction in EWM in the main lake occurred relative to previous years due to intense treatment efforts and surveys.

Milfoil Control History Graph

Milfoil Control History in Lake Mitchell (2005-2017)

<u>Year</u>	<u>Treatment Acres</u>
2005	118
2006	230
2007	239
2008	320
2009	380
2010	357
2011	295
2012	307
2013	393
2014	156
2015	106
2016	71
2017	78



Looking back, 16 months on Lake Mitchell -- January 2017 – April 2018

2017

- January -February – Warmer than typical winter, very little snowfall in February
- February 24 – Ice storm causes 12 hr power outage for much of Lake Mitchell area.
- March 7-8 – High winds, gusts to 45 mph create some power outages.
- March 14 – Last measurable snowfall – ½ inch
- March 28 – Ice is off the lake
- April 2 – Frog chorus begins, peepers and wood frogs sing out
- May 19 – Coves are surveyed
- May 25 – Little Cove is treated
- May 30 - Main lake is surveyed
- May 31 – Pelican spends day on the lake
- June 8 – Main Lake, Franke Coves, Torenta Canal, and Big Cove treated
- September 21-26 - Heat records for six days. Highs 87 to 91. 24-27 degrees above normal
- October 9 - 19 – Fall colors peak
- October 22-25 – 6 inches of rain in 70 hours
- October 31 – First measurable snow – ½ inch
- December 5 -High winds – power outages
- December 18 – Lake Mitchell freezes
- December 25 to January 7 Daytime highs in teens. Lows below zero to single digits.

2018

- January 5 & 6 - Low temperatures of -23 and -28.
- February 18 - spring warmup – no snow and daytime highs not below freezing until March 6
- February 26 - Canada geese return, a sign of spring.
- March 26 – Ice goes off Lake Mitchell
- March 31 - April 6 - Three storms drop 10 inches of snow
- April 8 - Record low temperature - 3 degrees. Lake freezes for 24 hours.
- April 14 - April temperatures average 10-16 degrees below normal
- As newsletter goes to press (April 14) spring is still a no show.

Lake Mitchell Facts

- Lake surface area – 2580 acres
- Maximum depth – 25 feet
- Mean depth of lake – 8.7 feet
- Shoreline length – 11.4 miles
- Watershed – 58,256 acres
- Number of aquatic plant species in lake – 27
- Elevation of Lake Mitchell – 1289 feet
- Average water clarity – 7.5 feet
- Lake Mitchell is in the Muskegon River watershed.
- Typical total freezing of the lake – last week of November
- Typical ice out on the lake – second week of April

NOTICE 2018

PLM Lake and Land Management Corp
PO Box 424, Ewart, MI 49631
(800) 382-4434(o) (231) 372-5900(f)
www.plmcorp.net



IN 2018, SELECT AREAS OF MITCHELL LAKE WILL BE TREATED PERIODICALLY THROUGHOUT THE SUMMER BEGINNING IN APPROXIMATELY LATE MAY FOR THE CONTROL OF WEEDS AND/OR ALGAE. Below is a list of herbicides that may be applied to the lake and associated use restrictions. On day of treatment, signs will be posted along the shoreline within 100 feet of treatment areas that indicate what products were used and specific water use restrictions that apply:

Check all that apply	Chemical product/active ingredient	Chemical trade name	Do Not Use this water for swimming or bathing until	Do Not Use this water for ornamentals or turf irrigation until	Do Not Use this water for domestic purposes or agriculture irrigation until	Do Not Use this water for livestock watering or similar purposes until
X	Endothall	Aquathol K, Hydrothol 191	1 Day(s)	N/A	14 Day(s)	14 Day(s)
X	Flumioxazin	Clipper, Shooner	1 Day(s)	3 Day(s)	5 Day(s)	N/A
X	Imazapyr	Habitat	1 Day(s)	120 Day(s)	120 Day(s)	N/A
X	Chelated Copper Herbicide	Komeen Crystal, Nautique	1 Day(s)	N/A	N/A	N/A
X	2,4-D ester	Navigate 2,4-D	1 Day(s)	INDEF or until approved assay indicates a concentration of 100ppb or less for ornamentals; No restriction for established turf	INDEF or until approved assay indicates a concentration of 100ppb or less	INDEF or until approved assay indicates a concentration of 70ppb or less
X	Triclopyr liquid	Navitrol, Renovate 3	1 Day(s)	120 Day(s) or until approved assay indicates 1ppb or less; No restriction for established turf/grasses	120 Day(s) or until assay indicates 1ppb or less. N/A on domestic	See product label
X	Triclopyr granular	Navitrol DPF, Renovate OTF	1 Day(s)	Site-specific recommendation* No restriction for established turf/grasses	120 Day(s) or until assay indicates 1ppb or less. N/A on domestic	See product label
X	Triclopyr/2,4-D amine	Renovate Max G	1 Day(s)	Site-specific recommendation* No restriction for established turf/grasses	120 Day(s) or until assay indicates 1ppb or less triclopyr and 100 ppb or less 2,4-D. N/A on domestic	See product label
X	2,4-D amine	Sculpin G	1 Day(s)	Site-specific recommendation* No restriction for established turf/grasses	N/A on domestic; assay indicates levels under 100ppb at the water intake	See product label
X	Carfentrazone-Ethyl	Stingray	1 Day(s)	14 Day(s)	14 Day(s)	1 Day(s)
X	Diquat Dibromide	Tribune	1 Day(s)	3 Day(s)	5 Day(s)	1 Day(s)
X	PLM Blue, Cygnet Select: water dye (tracer), SeClear and SeClear G, Formula F-30, K-Tea: chelated copper, Cygnet Plus, PolyAn: Adjuvant,; M.D. pellets: gram negative, naturally occurring bacteria.				No Restrictions on swimming, bathing, irrigation, domestic purposes or livestock watering.	

For a complete listing of all product labels, please see our website.

N/A= Not Applicable INDEF= Indefinite

***Site-Specific recommendations to limit ornamental irrigation with Renovate & Sculpin granular treated water will typically last 2-14 days. Contact PLM for further information.**

The chemicals used for Aquatic Nuisance Control are registered by the U.S. Environmental Protection Agency and the Michigan Department of Agriculture. The potential for damage to fish and other non-target organisms is minimal provided that the product is used as directed on the product label and the permit. To minimize the possible effects on health and the environment, the treated water is restricted for the above purposes.

PLM Lake & Land Management Corp. Certified Applicators: Salvatore Adams, Jason Broekstra, Jaimee Conroy, Bill D'Amico, Jeff Fischer, BreAnne Grabill, Dustin Grabill, Steve Hanson, Kyle Heath, Jake Hunt, Nate Karsten, Justin Krueger, Shannon Leifker, Blake Mallory, Michael Pichla, James Scherer, Ben Schermerhorn, Casey Shoaff, Lucas Slagel, Jeff Tolan, Andy Tomaszewski, Dennis Vangessel,

LMIB to undertake watershed management plan

Summarized by Water Resources Director Jennifer Jermalowicz-Jones

Restorative Lake Sciences (RLS) will be presenting a proposed watershed evaluation and management plan to the Lake Mitchell Board at the April 28th Lake Board meeting. This study will assess where most of the nutrients are coming from and entering Lake Mitchell. A few key areas such as the Mitchell Creek, Brandy Creek, and Gytja Creek have already been identified but there are other areas around the lake and in the immediate watershed that may also contribute nutrients and soils to Lake Mitchell. The immediate watershed is the area around the lake that drains directly into the lake. Over time, these areas can significantly degrade water quality in the lake which is why it is important to identify them and recommend improvement strategies. The plan will be adaptive which means that as land use changes around the lake and in the immediate watershed, the plan can be revised to work continuously. RLS has certified professional watershed managers with specialized training to identify these areas and recommend Best Management Practices (BMP's). This is just one more way that the LMIB is helping to improve Lake Mitchell for current and future generations.

Some thoughts on improving our lakeshore community

By Dave Foley

On Lake Mitchell there are more than 500 lakeshore properties with another 200 land holdings that have deeded access to the water. Many of these property owners are on an email list that I use to send information regarding activities of the Lake Mitchell Improvement Board.

While the mission of the Improvement Board largely revolves around weed control, I receive emails at lakemitchellboard@gmail.com about other concerns of property owners. That's to be expected when you have so many folks living so close together. In some areas, lake lots are only 25 or 30 feet wide. On holiday weekends and during the summer when many property owners are hosting guests, the area can be as crowded as a city. So when we have 10 times the amount of people on the lake than normal, everyone should be aware that their excessive noise and actions leave an impact, and not always a good one.

This year I decided to highlight some of the issues that have been brought to my attention in the hopes that that may help alleviate some problems.

Fireworks all summer long

In 2011 Governor Snyder signed into law provisions that would liberalize the sale of fireworks in Michigan. On the 4th of July holiday weekend, the shoreline of Lake Mitchell lights up with spectacular light shows and the sound of fireworks. It's an amazing demonstration of firepower and most everyone seems to enjoy it. But judging from what I've heard, you can have too much of a good thing. It seems like that from then on you can count on at least one fireworks show every weekend night and occasionally a weekday display. Apparently this is a distressing time for family pets that may begin to howl or end up cowering under a bed. It can be frightening to war veterans as well. For anglers, if fireworks start going off on the end of the lake where you are fishing, you might as well go home. The concussion from the blasts ends your chance of making a good catch. Last summer when my two-year-old grandson was visiting, he awoke crying at ten o'clock when a neighbor decided to shoot off fireworks.

The Michigan fireworks law stipulates that you can fire your legally store-bought fireworks on the national holidays, the day before and the day after, between the hours of 8 A.M. and midnight.

From what I hear, many would be happier if this law was observed.

Lights that never dim

Looking to the east at night, the lights of Cadillac's "busy north end," as they like to call it, turn the horizon to a yellowish brown. But on a clear night the rest of the night sky is nearly black, a perfect setup for stargazers. Perfect that is, unless your neighbor has yard lights as big as street lamps. The glare from one of these will definitely impair your night viewing. I can understand concerns about safety and safeguarding your home from intruders. What might be a logical compromise for those wishing to illuminate their property would be installing lighting that is activated by motion. This would give the property owner light for moving about their yard and as well as detect anyone that approaches. When no one is about, it would be dark and the stars would be visible.

In recent years fewer fireflies have been seen. To mate, fireflies must find each other. It has been speculated that if an area is bathed in artificial light, fireflies cannot see the flickering light of other fireflies.

What to do with all the leaves and grass clippings

During the summer, trees offer shade on blistering hot days and a brilliant color show during autumn, but then the leaves fall, carpeting lawns. The logical place to dispose of the piles of leaves in your yard is to dump them in the nearest wooded area or the lake.

Please don't blow or rake them into the lake. A lake bottom full of decomposing leaves provides the soft matter needed for weeds to take root. The consensus is that we already have enough aquatic vegetation.

Most haul leaves back into the forest. If that is your choice, make sure that you check with the property owner before you leave your refuse. In the summer, when grass clippings are collected, be sure you have permission before depositing them on private land.

Dog doings

Forty years ago when I was running along Lake Mitchell roads, it wasn't unusual to be chased by dogs. I was bitten on two occasions. Now it is rare that I am challenged by a dog. Most dogs are either on a leash or respond to the commands of their masters. Where I am told there is a problem is dogs that defecate on lawns or driveways. I would hope that owners might pick up their dogs' doings when they fall on private property.

Unwanted tournament fishermen

Although it may be upsetting, bass tournament anglers can legally hover in their boats just off the end of your dock and boat casting baits under it. They are fishing there because during the summer, bass often lurk in shady places. If these fishermen step onto your dock or boat, that would be trespassing. The water, however, is open to all.

I have found tournament anglers to be polite and they willingly offer me an update on how the fishing is that day. I might add that tournament rules forbid the consuming of alcoholic drinks during the competition.

Working together on shared park land

Occasionally I will receive an email from a property owner living adjacent to a common area such as Hiawatha Court, Locust Lane, or Brandy Brook. Here, and in similar situations, the complaint is that some are abusing their privilege or not doing their share of the work. Usually it is expected that those living on property with a common area will help in the putting in and taking out of docks, clearing weeds from the beach as well as raking and mowing the lawn. Enforcing this is well beyond the scope of the Lake Mitchell Improvement Board. I do encourage residents of these shared properties to get together and work out arrangements so all will do their part.

I want to emphasize that with several hundred on our email list, the number of complaints are relatively few and solving these problems is not the responsibility of the Lake Mitchell Improvement Board. I am bringing this information forward hoping that these reminders will bring an awareness so that lake life will be even better.

What to expect from the Lake Mitchell Improvement Board

The assessment has been lowered

You might first become aware of the Lake Mitchell Improvement Board (LMIB) when you look at your tax bill and see that you have been assessed either \$50 for lakefront property, \$25 for deeded access, or \$100 for commercial property. This will appear on your summer tax bill. Those numbers indicate a reduction from last year's rate of \$125, \$63, and \$250. In 2013 the assessment was \$300, \$150, and \$600 and that year 420 acres of EWM were treated. Last year 78 acres of EWM were treated along with 22 ½ acres treated for nuisance vegetation in the coves and canal. The LMIB spent \$53,679 for chemical treatment which was significantly less than the \$180,000 that was needed for treatment in 2013. This amount of treatment could change each year given environmental and climate changes. Intense and regular lake surveys help to locate the invasives and nuisance weeds targeted for prompt treatments.

Less chemical needed in recent years, meant fewer funds were needed. The treasurer's report given at the LMIB's December meeting showed a balance on hand of \$406,820 as of November 11, 2017. It was at that time that the Board decided to reduce the assessment.

When the ice goes away the weeds come ashore

Typically the ice goes off the lake around the second week of April, but this may occur anytime from the first week of March to the end of April. This year lake Mitchell was ice free on March 27. Once the lake is open you can expect that following the first big windstorm of the spring large amounts of weeds will drift ashore. Over the winter much of the lake's vegetation dies and when the water gets agitated, these plants break off and float to the surface.

RLS goes to work

Restorative Lake Sciences LLC (RLS) was hired in 2011 by the Lake Mitchell Improvement Board to develop and oversee a program of aquatic vegetation control for Lake Mitchell. In 2017 Lake Cadillac hired RLS.

By mid-May weeds begins to grow once again. Soon after, RLS will begin to survey the lake. Moving slowly across the lake, the crew in the RLS boat establish more then 1500 GPS points. At each point weed samples are collected to determine what species of vegetation is present. Maps are created showing the specific location of EWM. These maps determine what areas of the lake receive treatment. Treatment of the main lake usually occurs about the second week of June. Because the shallow waters of the coves warm up more quickly, they receive the first treatment, usually occurring around the first week of June.

In the main lake, 2,4-D, brand names of *Navigate or Sculpin*, is used to kill milfoil. This is a systemic chemical meaning that the entire plant, roots and all, is killed. Because of the presence of shallow wells this chemical can be used no closer then 250 from the shore. To eliminate weeds closer to shore, Triclopyr, a systemic chemical with a brand name of *Renovate*, is applied. Triclopyr treated water has not been tested for residuals and sprinkling is at your own risk although I have never heard of a problem. New lawns or garden plants should not be watered until the water has been tested. Testing occurs within a week after the chemical application.

The coves and Torenta Canal, being shallow waters, grow thick vegetation. While some of it is EWM, much of the problem comes from nuisance weeds. The most effective treatment has been with the use of *Diquat* and *Clipper*. These are contact herbicides meaning that the visible plant is eliminated but the root structure remains in tact. As result the plants may return a few weeks after the initial treatment. If this happens, a second treatment may be needed in problem areas.

There is a 24 hour swimming ban on any waters treated. On the day of treatment yellow or green notices will be posted along the shoreline of areas scheduled for treatment. Those on the Lake Mitchell email list (lakemitchellboard@gmail.com) will be notified a couple days before treatments occur.

Most years the chemical treatment is done by Professional Lake Management, a company hired by the LMIB. On treatment days look for air boats spraying liquid chemical and white boats dropping pellets from fertilizer spreaders. Our RLS consultant, Jennifer Jermalowicz Jones and her staff, administer the aquatic vegetation program making decisions about which chemicals and the dosage to use. Before it is applied to the lake, chemicals are evaluated to make sure none will have a negative impact on the lake's ecology. The specifics and dosages of chemicals used appear in the complete end-of-year report that RLS submits to the Board. The report appears, in its entirety, on our website <http://www.lakemichell.org/www.lakemitchell.org> and a summary of it appears in the annual edition of the Lakesider.

Work done in the Torenta Canal

In the late 1960s a canal was dredged near Camp Torenta. Over the years the canal has gradually filled with decaying leaf and weed debris. While there are some weeds there, much of the canal is filled with a balled algae known as *Cladophora*. It reached the point where engines of watercraft trying to move through the canal became clogged. When chemical treatment failed, a harvester with small mesh was brought in 2016 to collect the *Cladophora*. While that initially proved effective, the *Cladophora* has accumulated again making it likely the harvester will need to return this year

Harvesting

Mechanical harvesters can be used to cut weeds. These were used for several years in the coves to remove nuisance vegetation. The problem was that the weeds quickly grew back. Treatment with chemicals has proved more effective. Harvesting remains an option for weed control and could be used again. Because EWM spreads by fragmentation, harvesters are never used where that plant is present.

Roadside pickup takes care of weeds

The Lake Mitchell Improvement Board will again provide roadside pickup of weeds. To accommodate off-season collection of weeds, four weeks have been added to the schedule.

Roadside pickup will begin one week earlier this year starting on May 15. That first week, the weed hauler will check around the entire lake one day and collect weeds. Starting on May 21 until September 7th, weeds will be collected following the schedule that has been used in past years:

- 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 during the week.

After September 13 and continuing through September 30, the weed hauler will collect weeds one day a week.

Aquatic weeds need to be removed from the lakeshore by the property owners and put on the edge of the road. Do not leave sticks, brush, yard waste or sand by the roadside. Only aquatic vegetation will be picked up.

Weed compost, black peat and mulch available

The weeds picked up along the shore of Lake Mitchell are deposited and spread out to dry at Ron Klimp's farm on the south side of Lake Mitchell. (7288 S. 33 ½ Mile Road). Contact Ron at 616-295-8686. You can pick up the weeds at no cost or for a small fee Ron will load them for you. The weeds that were once a nuisance in the lake can now be helping enrich your garden.

The black peat from the Franke Cove dredging project is also available. In addition Klimp has horse manure/saw dust compost.

Lake Mitchell Fishing Report

Fishermen, including myself, get into ruts. We tend to fish the same spots, use the same techniques, and tie on the same baits. That may fill your stringer with fish. Or it may not. I've learned that when the fishing gets tough, I talk with other fishermen. Locally I often end up checking out the seen with the folks selling bait on Shaffer's Bait and Pilgrim Village. This year's "Fishing Report" is based on stuff I learned from others and a good dose of fishing wisdom passed on to me by Steve Knaisel, the owner of Pilgrim Village.

Early Spring

Just after the ice goes out, the crappie head for the shallows in the back of the coves and the Causeway on Lake Cadillac. Swimming among the emerging weeds these black and gold panfish will hit small bait-like pinhead minnows, as well as maggots and waxworms impaled on teardrop hooks. Use light line and tiny bobbers. Some do well with miniature plastic grubs.

After the April 28 Pike and Walleye Opener

The gamefish are hungry. Narrow minnow *Rapala* type lures and spinnerbaits cast over and through emerging weeds will bring savage strikes from northerns. At dusk or on dark days, walleyes bite. During the first half of May, fans of live bait will do best with big shiners suspended under bobbers. Later in the month nightcrawlers and leeches may be the right choices for walleye.

The actual spawning of bluegills and sunfish may not begin until late in May, but nevertheless the fish are cruising the shallows. Using a small black spider garnished with a waxworm under a bobber can be effective. Bass fishermen find success casting fat crank baits with a bluegill pattern in areas where bass are bedding. Keep moving until you find a concentration of fish.

Early Summer: June to the 4th of July

The bigger hand-sized bluegills are late spawners and typically bed in deeper water. After spawning these fish head to 10-15 feet of water. Anglers find success fishing bait under bobbers in openings in the weeds.

Pike and walleye fisherman break out the weedless lures, typically spinner baits, and rip them through weeds. Not all weeds are equally productive so perseverance pays off for those who keep exploring.

Mid-Summer

The larger fish move deeper and relate to weed edges. With electronics anglers search for isolated weed beds in deeper water. Deep running crankbaits and weighted spinner baits are productive. Bass anglers use a variety of plastic grubs and worms.

On hot nights anglers cast *Jitterbugs* and buzzbaits listening for the sound of a big largemouth smacking their lure.

Fall

The first cold spell, occurring around Labor Day, seems to snap the fish out of their summer lethargy. Big fish become catchable again. It is feast or famine fishing. Some days the catching is good while on others you can't buy a bite. As the water gets colder, fish crankbaits and spinner baits more slowly. Look for green vegetation. Avoid weed beds of dying plants.

Walleyes begin to feed at night along drop-offs and near the canal. The blue and gold *Rapala Husky Jerk* is productive. Peak fishing may occur around Halloween or during deer season.

Ice fishing

First ice finds all fish ready to take on whatever food offerings are available. Crappie anglers search for schools of fish, which may be anywhere from hovering just below the ice surface to hugging the bottom. Minnows work well. Bluegill anglers favor tiny grubs on teardrops as they search among the weedbeds for eating size fish. Often gills school by size so if you catch little ones, assume the adults are elsewhere. Though great catches of jumbo perch are uncommon. Those fishing 10 to 15 feet with minnows or grubs occasionally are rewarded.

The tipup still seems to be the weapon of choice for pike and walleye. Keep moving until you find the fish. More 30-inch plus size northerns come through the ice than at any other time of the year. Those who would rather not depend on a pike's need to feed on hooked minnows, sit in shanties with spears poised. Spear anglers probably land the majority of big pike.

**Lake Mitchell Improvement Board
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