

The Lakesider.....Spring 2008

The Annual Newsletter of the Lake Mitchell Improvement Board.

Lake Mitchell Improvement Board

4830 East M-55
Cadillac, MI 49601
info@lakemitchell.org

Lois Poag
President
Representative At-Large representing
Lake Mitchell Association

James Dean
Vice-President
City of Cadillac Representative

Ray Mayer
Treasurer
Cherry Grove Township Representative

Dave Foley
Secretary/Newsletter editor
Selma Township Representative

Mike Solomon
Wexford County Drain Commissioner

Larry Copley
Wexford County Commission
Representative

Lake Mitchell Association Officers

Bill Noonan
President

JoAnn Engels
Vice-President

Marty Chapo
Treasurer

Terry Meech
Secretary

Lake Mitchell Improvement Board tentative meeting dates for 2008:

- Monday, May 5 @ 5:30 PM
- Saturday, June 14 @ 10:00 AM
- Saturday, July 12 @ 10:00 AM
- Saturday, August 16 @ 10 AM
- Monday October 6 @ 5:30 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 24 at 10 A.M. Cherry Grove Municipal Building - (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 160 addresses.

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 alert you to harvesting, chemical treatment, and board meeting dates. In addition if important news occurs we will send emails. Last year we sent special emails noting location of rock hazards that appeared during last summer's low water and also 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.

Stolen Mail – In recent months several Lake Mitchell residents have reported mail being stolen from their mailboxes; some of it was found scattered along the road shoulder. The thefts seem to be occurring during the night time hours. Residents are encouraged to not leave mail in boxes overnight.

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

Lake Mitchell's water level – up and down in 2007

Lake levels in 2007 seemed to be all over the board. After a very wet October 2006 when we received over 6 inches of rain we were not able to get the lake level down to an acceptable level going into the New Year. March and April were wetter than normal but by keeping the dam wide open I was able to manage the water levels at an acceptable level throughout the spring. Probably a little higher than some would like, but lower than others want. I closed the dam in mid June and have not reopened it since as lake levels have continued to drop. The drought that we had during the summer took there toll on the lakes also and we now have some of the lowest levels on record. I have been on the lake for over 20 years and not seen it this low. Others, with longer histories talk of times when it was much lower during the summer and they actually had to move their boats and hoists out to the drop off to be able to launch them. The lake level is down almost 12 inches from spring high levels that we often have in April and May. Before the lakes froze in early December, you could see a sand bar in the entrance to the canal that nearly blocked the whole entrance.

What can we expect in 2008? The only thing I know is that it is pretty unpredictable. It is solely dependent upon winter snow pack, spring rains and runoff conditions. If we get adequate precipitation from now through April the lakes will rebound nicely...if we don't we may be in for very low levels for this summer's boating season. Snow pack is a key and right now (early January) we do not have much. It takes about 10 inches of snow to equal an inch of water...so a lot of snow is necessary to account for our water deficit right now. I will keep the dam closed until the water levels have significantly rebounded, but open them in the spring if needed to release any flood flows.

Lake Mitchell Water Quality

I have completed the sixth year of water quality testing on Lake Mitchell since I have been Drain Commissioner. This is starting to give us a good indication of our existing water quality. Water quality can be quite variable, so a series of data can be much more valuable. Our transparency data varies from 5 to 9 feet over the 6 year period with 6 to 8 foot readings in 2007. Our trend line is fairly stable with a slight trend to reduced clarity. Our phosphorus values also increased some in 2007 as they did in 2006. They average right around 20 micrograms/liter...with 10 considered to be low and 50 to be high. Our lake water quality composite has seemed to stay fairly level around the high 80s which is in the "B" range if we were grading like in high school. I will once again be doing this analysis in 2008 and hopefully we will see some improvements.

E. coli Testing

The Drain Commissioner has also done beach monitoring for E. coli at the Lake Mitchell State Park since 2004. In 2007 the sampling period began on June 12 and continued through September 4. Fourteen samples were collected in 3 different locations at this beach. All of the samples were within State standards for swimming sites.

If you have any questions concerning this information or other concerns, please call me at 779-9115. Mike Solomon, Wexford County Drain Commissioner

2007 Financial Record

Income	Jan.1-June 30	July 1-Dec. 31	Total
Interest (includes 70.89 in June)	303.60	591.08	894.68
Winter Assessment	62,575.00		62,575.00
Summer Assessment		169,928.07	169,928.07
Total	62,878.60	170,519.15	233,397.75

Expenditures	Jan.1-June 30	July 1-Dec.31	Total
Professional Lake Management (PLM)	5,562.50	44,485.10	50,047.60
PLM deferred		84,526.00	84,526.00
Service (Insurance)		735.00	735.00
Office supplies		207.00	207.00
Print (mailings, newsletter, website)	2,001.34	145.33	2,146.67
Transfer (loan)	3,000		3,000.00
Total	10,830.84	129,891.43	140,722.27

Itemized Expenditure	
Roadside Pickup	8,250.00
Progressive Engineering Administration	12,000.00
Chemical Treatment	105,924.00
Harvesting	7,024.60
Other	1,005.00
Lake Inspection	370.00
Service (insurance)	735.00
Office (supplies)	267.00
Print (mailings, newsletter, website)	2,146.67
Transfer loan	3,000.00
Total	140,722.27

Fund Balance Jan.1, 2007	891.01
Net gain	92,675.48
Fund Balance Dec.31, 2007	93,366.49

Included in the income total is \$2700 which is annually paid by Selma and Cherry Grove Townships to be used toward control of Eurasian milfoil.

Income for 2007 included both winter and summer collections. In the future the winter collection will be eliminated. If a surplus is accumulated due to reduced expenditures or large collections, assessments may be lowered. Annual income is expected to be about \$170,000.

The \$84,256 referred to as "PLM deferred" is stated in this way because that was work done before June 30 and bills could not be paid until the summer collection was made.

The \$93,366.49 end-of-year balance will be needed to pay off the chemical treatment and harvesting work that will be done before June 30. After that the 2008 summer collection will be used to pay for the rest of the 2008 expenses and leave a similar balance to start 2009.

Lake Mitchell Fishing Report – 2007

Lake Mitchell continues to have a reputation as one of the best lakes in the region for producing pike, crappie, and largemouth bass. In addition Lake Mitchell also has the dubious distinction of being just about the best place to catch trophy-sized dogfish in the state.

In the winter, tip-ups and jigging spoons or Rapala type minnows are favored by pike anglers. Once the season resumes in late April, pike are taken with minnows under bobbers, spinner baits, and assorted crank baits fished in and around weed beds. As with all species, the catching is easiest in spring and early summer, but pike are available all season long if you are persistent.

Lakes Mitchell and Cadillac's reputation as a productive bass fishery draws tournaments from all over the Midwest. These anglers routinely catch fish in the three and four pound range with the occasional five-pounder mixed in. Typically bass from Lake Mitchell make up about 70% of the tournament's catch, but the majority of small mouth bass come from Lake Cadillac.

The walleye stocking that was done in 2005 and 2006 is starting to show results as undersized fish are once again being caught. Skilled anglers still take fish in the 22 to 27 inch range. Night crawler harnesses trolled during the day and crank baits cast at night have been the best options for walleye. Though still a far cry from the good old days, there is cautious optimism that a good walleye fishery will someday be available in our lakes.

Crappie are king among panfish, as thousands of these thin-lipped fish are pulled through the ice in winter and taken by open water fishermen. Minnows and small jigs are the most productive baits. Crappie suspend and may be caught anywhere between the surface and lake bottom. Because these fish travel and feed in schools, anglers should keep moving until they find fish.

Although bluegills are numerous, and eating-sized fish aren't hard to catch, the big ones are elusive and not as common as they were a few years ago. If you catch one that is nine or ten inches long, it is likely to be a sunfish.

The perch population, which was decimated by a virus a few years ago, still has not rebounded. A good catch of perch is the exception rather than the rule.

Steve Knaisel provides regular fishing reports on what's happening on area lakes as well as Lake Mitchell and Lake Cadillac. Check his site for current information - pilgrimvillagefishing.com.

Bass tournament fish release program to continue -- Last year the Lake Mitchell Action Committee instituted a program to redistribute bass caught during tournaments to the north, west, and south sides of Lake Mitchell. Concerns had been raised by lakeshore residents that the tournaments practice of releasing their catch at public docks on Lake Cadillac was reducing bass populations in Lake Mitchell. Research done by LMAC members found that in studies done on tagged bass throughout the United States yielded data indicating that most bass would remain within a mile of where they were released for at least several months. Some of the major bass tournaments in southern states routinely take tournament caught bass and redistribute them throughout the waters that had been fished.

During the 2007 fishing season, about a dozen tournaments were staged on our lakes. Most of these tournaments were contacted and asked to return 50% of their catch to one of five release points located along the south, west, and north side of Lake Mitchell. Members of the LMAC met with tournament anglers at the weigh-ins and helped insure that the release took place.

Improvements for 2008 bass release program -- Whereas last year, the committee was relying on the tournament anglers to use their own boats to carry the fish back into Lake Mitchell, this year Mark Pentecost owner of Track and Trail Marine will supply a pontoon boat and motor that will be equipped with a tank and aerator so LMAC committee members can handle the release of the bass. With about a dozen tournaments to cover, the LMAC is looking for volunteers who will help release bass after tournament weigh-ins. It is hoped that the committee can be expanded to about a dozen members so each member might only have to help with one or two tournaments; to collect and release fish involves about two hours on a weekend afternoon. If you would like to help or learn more about the Lake Mitchell release program, contact Dave Foley at info@lakemitchell.org.

Note: Due to space limitations, the angler creel survey taken in 2006 and 2007 could not be included in the newsletter. This information is on our website.

Milfoil decreases in 2007; Board makes plan for 2008

What was done in 2007: Grid survey completed and will be improved in 2008

To better locate Eurasian milfoil beds in Lake Mitchell, an 11-hour survey of the lake was conducted on June 5th, during which time a lake grid of 267 points was checked for milfoil. A rake head attached to a rope was tossed in likely milfoil areas in an effort to find evidence of the weed. No milfoil was found at depths greater than twelve feet. At this time of year most plants are small and not-visible at depths greater than five feet so dragging a rake across the bottom is the only method of detecting deep water plants. Initially 239 acres of milfoil was found and subsequent surveys revealed more milfoil. By season's end 305 acres was treated with 2-4-D. Areas where the plants resisted the first treatment were dosed again with 2-4-D at no charge.

The result was that there was less milfoil visible during the summer, but the lake board is still concerned about the amount of milfoil that could be seen in mid-summer. Visible milfoil beds were marked by GPS readings in the late summer and fall and will be treated in 2008. In addition the grid points will be recalibrated putting them closer together which will allow a more comprehensive examination during the early summer boat survey.

Lake Cadillac has been treating Eurasian milfoil since 2006. To learn more about their program check out their website. <http://web1.msue.msu.edu/wexford/LC/index.html>

Harvesting addresses areas of choking vegetation

Thirty-one acres, predominantly in the Franke and Little Cove area, were harvested in late June. Weed cutting is done where weeds grow so thick that normal boating is impaired as vegetation fouls propellers and is sucked into engine uptakes. The harvester blades are prohibited by law from digging into the bottom because that would legally be considered dredging. The harvesters cut rather than uproot weeds. Typically within a month to six weeks after a cutting has been made, the weeds grow back. It appears, in some cases, that they grow back thicker than the original crop. For this reason harvesting is only used in areas primarily near docks where boating has been made difficult because of the presence of vegetation.

Objectives for Weed Control in Lake Mitchell

The Lake Mitchell Improvement Board will continue to deal with Eurasian milfoil and nuisance weeds in 2008 by following the Board's stated objectives for aquatic weed control. In order of priority these objectives are stated as follows: 1) Control Eurasian milfoil 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 the Board held a public hearing on January 13th 2007 for the purpose of raising the property owners' assessments and getting feedback from members of the Lake Mitchell Association.

Timeline for Weed Control in 2008

Early June – comprehensive survey of lake conducted at 267 GPS grid points to locate Eurasian milfoil and determine harvesting needs. Mid-June - 2-4-D applied in all areas that are more than 250 feet from shore. (2-4-D cannot be used within 250 feet of any shallow wells.) Milfoil and nuisance plants near the shore, will treated with Renovate and Reward chemicals. For more information see "Chemical Treatment and Harvesting Procedures." Late June - In addition to chemically treating thick vegetation in coves, harvesting will be done in late June to remove the vegetation near docks and to provide navigation paths so boats can enter and exit the coves. As the harvesters cut the weeds, they will collect them so the weeds do not pile up and clog these waters. For more information see "Chemical Treatment and Harvesting Procedures." July – Surveys done to determine effectiveness of chemical treatment and harvesting and where deficiencies are noted, corrections are made.

Roadside Pickup

The Lake Mitchell Improvement Board will again provide roadside pickup of weeds. Weed hauling begins May 19 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; the weed hauler will collect aquatic vegetation according to the following schedule:

- **Monday** – From the canal north to the roller rink.
- **Tuesday** – From the Roller rink along West Lake Mitchell Drive checking all lakefront roads and courts ending with the Camp Torenta loop.
- **Wednesday** – From the 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.

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. Call 779-5895.

Boating Hazards

When the dry summer weather dropped Lake Mitchell's water level more than a foot, boats began to hit rocks and ground out in shallows. Should the waters stay low, these are some places to avoid or exercise care when boating:

- 1) When entering Lake Mitchell from the canal always proceed in a southwesterly direction. Due west and north of the canal is a large shallow area, containing several large rocks. This shallow area extends into the lake for more than a half-mile.
- 2) Obviously the presence of reeds may indicate shallow water. Exercise caution when traveling through reeds.
- 3) The reeds located in mid-lake actually grow in shallower water than those located near the west shore. The large reed patch located about a half-mile off shore on the west side of the lake has a long shallow sand bar extending south from this reed bed.
- 4) The Franke Coves are shallow and difficult to enter with a motor boat. The reed bed located in front of these coves is often too shallow to accommodate motor boats.
- 5) Virtually all points of land have shallow sand bars extending from them into to the lake. Use caution when rounding or crossing these areas.
- 6) If water is high enough to enter Wheeler Creek in Big Cove, watch for submerged logs and muck bars in the creek. The creek will become narrow as you proceed. It may be difficult to turn around.

This list should not be considered complete. There are likely dangerous boating situations that are not listed here.

Lake Mitchell end of canal dredged

Low water levels in Lake Mitchell and Cadillac last summer created difficulties for boaters trying to navigate the canal. Some reported having to raise motors as they entered the canal from the Lake Mitchell side. Lake Mitchell Improvement Board members brought this concern to the attention of Larry Solce, chief ranger at Mitchell State Park, who contacted the DNR.

During the first week of March, the Lake Mitchell end of the canal was dredged so that boat traffic should be able to enter the canal more easily this season.

Lake Mitchell Chemical Treatment and Harvesting Procedures

Each year Professional Lake Management, following the guidelines stipulated on a permit issued by the Department Of Environmental Quality, chemically treats parts of Lake Mitchell based on recommendations resulting from boat surveys conducted on Lake Mitchell by Progressive Engineering AE limnologists. Members of the Lake Mitchell Improvement Board, and occasionally, Lake Mitchell property owners, accompany Progressive Engineering staff on these boat surveys.

The boat surveys occur in early June and the chemical treatment follows about ten days later. Follow-up surveys and treatment may occur in July. The following three products are used for chemical treatment on Lake Mitchell:

1. 2-4-D, which kills milfoil, is a systemic chemical meaning that it kills the entire plant, roots and all. Because of the presence of shallow wells this chemical must be used no closer than 250 feet from the shore.
2. Trichlopyr, with a brand name of Renovate, is also a systemic chemical, and is used near shorelines. While it may be used within 24 hours to water established lawns, it shouldn't be used on plants until the treated area has been tested.
3. Reward is another chemical that does not have a well setback restriction, but it is a contact herbicide, rather than a systemic one. This means it kills only the portion of the plant that it comes in contact with. It is commonly used near shorelines.

All chemicals have a 24-hour restriction on swimming.

Harvesting in shallow waters

Because milfoil spreads by fragmentation, chemical treatment is the primary means of controlling that plant. Once the plant has been killed by chemicals, then harvesters can be used on 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 as that, 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 the weeds for mulch. Every effort is made to insure 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.

A native plant, naiad, grows in the deeper waters of the main lake. Its presence, as floating mats of weeds on top of the water, prompted the establishment of the Lake Mitchell Improvement Board in 1989. It is an annual plant, which dies and breaks off in late summer and floats to shore.

Camp Torenta looking for canoes

Camp Torenta, which is jointly operated by the YMCA and the Cadillac Schools, operates day and weekly camp sessions for youth during the summer. Increasing interest in its canoeing program has created a demand for canoes. If you have a canoe to sell or donate that is in good condition, contact the YMCA at 231-775-3369.

Weeder's Digest offers relief from invasive aquatic weeds

This website, www.weedersdigest.com, offers several pages of information about products such as weed rakes, underwater weed cutters, and devices for removing muck and algae. In addition it presents ideas for lakeshore property owners on the best ecological practices. To contact them directly go to Info@WeedersDigest.com or call 763-551-1441.

Barley straw? A solution for Lake Mitchell

Ponds and lagoons in waste water treatment plants often use barley straw to reduce the amount of suspended solids in their ponds. Although the process is not fully understood, it occurs as the barley decomposes and releases chemicals. This process does not remove pond scum, sludge mats, or duckweed. To use barley, approximately 300 hundred pounds of barley per acre, are tied into sausage booms which then are floated in the effected water. The barely must be replaced every six to eight weeks. Mackinaw City is using barley in its waste water ponds. The algae and weed problems found in Lake Mitchell's coves would not likely be solved by the use of barley straw.

Phragmites invade Lake Mitchell shorelines

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

Lake Mitchell is bear country

The "Bear Crossing" signs that are seen along M-115 and M-55 near our lake were put up last summer as a result of bear/car collisions which resulted in eleven bears being killed in this area in the last five years. This is the first area in the state to have "Bear Crossing" signs because of a collaboration between the MDNR & MDOT for the safety of motorists as well as the bears. The nutrient rich wetland complexes that include the Mitchell swamp & the watersheds that connect Lks. Mitchell & Cadillac is excellent bear habitat. The abundance of skunk cabbage that appears early in spring provides necessary feed for bears coming out of hibernation. This core bear reproduction area, provides home territories for sow bears to rear their young, & target areas for male bears during breeding season. This critical habitat which sits next to the urban area of Cadillac & our congested lakeshore properties, makes for many bear/human encounters. Especially, when 2 major highways intersect with busy Bear travel corridors!

Will tribal treaty affect Lake Mitchell fishing?

On September 26th the DNR, the United States and five Michigan Indian tribes signed an agreement on tribal inland hunting, fishing, and gathering rights covering the 1836 treaty area of Michigan. This agreement with Indian tribes could affect fishing in Lake Mitchell as Indians now have the right to harvest 855 walleyes from Lake Mitchell and 392 from Lake Cadillac each year. The fish must be used for subsistence only and cannot be sold. If Indians plan to spear walleye or fish out of season they must notify the DNR. Tribal fishing laws allow Indians to use four lines in open water and seven during the ice season. In addition they may use trap nets (no gill nets) and spears. They are limited to ten fish per person per day. According to the treaty, non-walleye species may also be taken by Indians with nets. Bag limits for these species are also greater than those allowed anglers who obey Michigan's fishing laws. This treaty covers the inland lakes in the northwest part of the state. The likelihood of Indians exercising their fishing rights in Lakes Mitchell or Cadillac is not known. More information on the terms of the treaty can be found at www.michigan.gov/dnr under "Proposed 2007 Decree."

Township resolutions oppose use of phosphorus fertilizers

Last year, Selma and Cherry Grove Township Boards passed a Township Resolution opposing the use of fertilizers containing phosphorus within 500 feet of Lake Mitchell. The resolution provides an exemption from the phosphorus-free provision if soil samples taken to the Michigan Extension Office on Lake Street, show a phosphorus deficiency or during the first season that a new lawn is established. Soil studies show that virtually all hard ground area around our lake has a natural abundance of phosphorus.

Michigan's Ottawa County has passed an ordinance banning the sale and use of phosphorus fertilizers. Allegan County is voting on a similar ordinance in the near future. Other Michigan communities have also adopted ordinances restricting use of phosphorus.

Phosphorus-free fertilizers are available at the following locations: The 13th Street Market and Helsel Bruce Tree Farm Nursery (779-1414) located on the corner of 13th Street and M-115 has phosphorus-free fertilizer available. Grahek's Greenery (775-9362) on 515 East 13th Street also has a four-step fertilizer program that are all phosphate-free. Home Depot – On west side of 131 near Boon Road. McBain Co-Op – 101 N. Pine Street in McBain.

Lake Weeds Love Phosphorus

Phosphorus, a key ingredient in lawn fertilizers, stimulates the growth of aquatic weeds and algae. As it turns sandbars into weed beds, covers gravel beds with slime and waving mosses, as well as clouds clear water with an over abundance of microscopic plant life. More plant life produces more dead plant material and the accelerated decay of plant matter robs the water of oxygen supply. Meanwhile the phosphorus accumulates in the decayed material and continues to stimulate growth. One pound of phosphorus could result in over 500 pounds of wet algae.

Keep your lawn green and our lake clean

On fertilizer packages there are three numbers, the middle number indicates phosphorus content. The numbers 30-0-4 on a package of fertilizer shows there is no phosphorus. When contracting lawn care services such as Trugreen or Chemlawn, insist that they use phosphorus-free products. Encourage your neighbors not to use phosphorus fertilizers as well.

Test your soil before fertilizing. If you must use a fertilizer, use a non-phosphorus fertilizer and a slow-release nitrogen source. The slow-release nitrogen will allow less of an impact on the lake since only two applications, spring and fall are required.

Problems with Canada geese fouling your lawn?

Every year lakeshore property owners have trouble with flocks of Canada geese coming ashore to defecate on their lawns. If this is a persistent problem these geese can be relocated. The City of Cadillac has done this in recent years. An officer of the Lake Mitchell Association needs to procure and fill out an application from the Wildlife Division of the DNR if there is a consensus of lakeshore owners who agree to remove the geese. The application must be received by June 1, after which a permit may be issued by the DNR for goose removal. After receiving a permit the Lake Assoc. conducts the goose roundup with DNR assistance. The DNR will provide the trap & crates for transporting the birds. The Lake Mitchell Association provides 2 or 3 boats and people to handle the geese with DNR training and a truck &/or trailer & driver to haul the birds to the release site. For the project to go forward, those property owners in the area where the geese are concentrated must approve the relocation of geese and will be expected to provide the vehicles and needed manpower. The Goose roundup will occur during the last two weeks of June when the geese are molting and are unable to fly. If you would like to initiate a removal of geese, contact info@lakemitchell.com.

Aquatic Invasive Species Threaten Michigan Lakes

Eurasian milfoil appeared in Lake Mitchell in the mid-1980s. The original plant was probably just 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 costing property owners hundreds of thousands of dollars.

Ocean traffic passing through the St. Lawrence Seaway has introduced dozens of other invasive species into Great Lakes waters.

- Fish such as gobies and ruffes threaten walleye and perch populations in the Great Lakes.
- Bloody red shrimp, the spiny water flea, the fishhook water flea, and quagga mussels compete with native organisms diminishing food sources for native fish populations.
- VHS a fish-killing virus made its first appearance in an inland lake in Budd Lake near Harrison.
- Zebra mussels cover rocks making barefoot walking unpleasant as well clogging intake pipes and covering dock supports.
- Curly leaf pondweed, a fast growing invasive plant, can be just as problematic as Eurasian milfoil.
- Hydrilla, a plant capable of completely choking a lake, was found in an Indiana lake and \$2 million dollars was spent to control hydrilla in that one lake. If hydrilla comes to Michigan it could overwhelm lakes here as it has done in other states after only a few growing seasons.

The Michigan Se Grant website www.miseagrant.umich.edu offers a vast amount of information about aquatic invasive species in Michigan as well as other the latest on other ecological issues pertinent to our state.

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.

DRAIN all water from the boat motor, bilge, live well, and bait buckets on dry ground.

DISPOSE of leftover bait in a trash receptacle, not in the water.

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.

TEACH and help others to do the same.

VHS threat curtails walleye planting and effects bait sales

VHS is a deadly virus that has killed large numbers of fish in Lake St. Clair, Lake Erie and Lake Ontario. In April 2007 it made its first appearance in an inland lake, killing bluegills, crappie, and muskellunge in Clare County's Budd Lake. To protect the state hatchery system from the deadly virus the DNR has taken a one-year moratorium on planting walleye, northern pike, and muskellunge. The planting of walleye in Lakes Mitchell and Cadillac scheduled for 2007 was cancelled.

Suspecting that the VHS virus entered Budd Lake through infected live bait, which may have introduced by fishermen on that lake, the DNR has put some restrictions on the sale and transportation of live bait. Anglers buying live bait are given a receipt saying that the bait is VHS-free. Purchasers of bait must carry that receipt with them. This is to discourage the transporting of bait from one lake to another. In other words minnows caught in Lake Mitchell must be used in that lake (or Lake Cadillac) and not transported for use in another body of water. Be sure and only use live bait that you were given a receipt by the bait dealer. Do not catch and bring in live bait from other waters.

Operate Personal Watercraft Responsibly

Michigan DNR personal watercraft regulations

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.

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

2008 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 at www.boat-ed.com/mi/handbook as well as at the DNR and Sheriff offices.

Notice of Chemical Treatment

Dear Customer,

We will be treating Mitchell Lake in 2008 for nuisance aquatic vegetation beginning in late May or early June and periodically throughout the summer. At the time of the treatment(s), signs will be posted along the shoreline that state what specific products were used and what water use restrictions apply. THE X INDICATES WHAT PRODUCTS AND RESTRICTIONS MAY APPLY TO YOUR WATERBODY

X PRODUCT/ACTIVE INGREDIENT RESTRICTION

X Navigate, Aquakleen/ 2,4-D 24 -hour restriction on swimming Irrigation of lawns, grasses, and turf – no restriction. Irrigation of crop, non-crop, & ornamentals – indefinite unless assay indicates 100 ppb or less. Potable water – indefinite unless assay indicates less than 70 ppb.

X Renovate 3/ OTF Trichlopyr 24 -hour restriction on swimming Irrigation of established lawns & grasses – no restriction. Irrigation of ornamentals, crops, and non-crops – 120 days or until assay indicates a non-detectable level.

X Reward/ Diquat dibromide 24 -hour restriction on swimming, 1 -day animal consumption of treated water, 3 -day restriction of domestic water use and irrigation of turf & ornamentals, 5 -day restriction on crop irrigation.

X Shade/ water dye – tracer

Cygnat Plus/ D,1-limonene & alcohol ethoxylated fatty alcohol

PolyAn/ anionic poly acrylamide polymer - No restrictions

*Certified Applicators: Jason Broekstra, Audrey Buist, Lynn Benedict, Jaimee Conroy, Bre Grabill, Dusty Grabill, Steve Hanson, Jake Hunt, Nathan Karsten, Pat McLamara, Stephanie Mervau, Casey Mickelson, Lucas Slagel, Jeff Tolan, Andy Tomaszewski, Jacob Ware.

Lake Mitchell Improvement Board
203 Peninsula Drive
Cadillac, MI 49601