

June 1, 2008

Dear Neighbors,

Welcome Lake Detroiters and friends of our lakes. Our annual meeting will be June 14 at 10 AM at the Holiday Inn in the Pelican Room. Coffee and Rolls will be served.

The Association is all of us around the lakes, and we would appreciate your input and your check for dues.

And, remember, we constantly looking for new members. Many associations have 90-95% representation from residents – Lake Detroiters has only 30%. Please encourage your neighbors to join.

Sincerely,

Dick Alsop President

**Lake Detroiters** 

**ANNUAL MEETING** 

Saturday, June 14

10AM(Coffee and Rolls provided)

**Holiday Inn (Pelican Room)** 

**Mission Statement:** The Lake Detroiters Association shall have as its overall purpose, the promotion, education, beautification and protection of the water quality of Big and Little Detroit Lakes, including waters running into and therefrom. This nonprofit association shall work to monitor and report water quality conditions, as well as participate as a member of the Becker County Coalition of Lake Associations. The Lake Detroits Association strongly supports the city and county enforcement of laws, ordinances and regulations.

# 2008-2009 Board of Directors

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# Join Lake Detroiters Today! Dues are \$25 per year! See enclosed envelope



# Noteworthy Websites:

- City of Detroit Lakes: www.ci.detroit-lakes.mn.us/
- Becker County www.co.becker.mn.us; for airphoto and tax parcel maps: http://gisserver.co.becker.mn.us
- Minnesota Department of Natural Resources: http://www.dnr.state.mn.us/index.html
- Pelican River Watershed District: www. Prwd.org

Make this site a "favorite" for info on...

Flowering Rush spraying schedule Ice damage info and permits Water quality data Road side pickup schedule Rain garden fact sheet Use the District's aerial map to zoom in on your neighborhood.

# Rice Lake Project Update:

As early as the 1970's the PRWD has been aware that elevated nutrient levels are being discharged from the ditched wetland located on the Pelican River about 2.5 miles north of Big Detroit. Nutrient problems are known to be associated with ditched wetlands in other parts of the state, having to do with complicated chemical interactions between the water, oxygen and sediments in the drained wetland areas, and the flushing effects promoted by the ditching.

For several years the PRWD has conducted studies of the area. Recently it was decided to proceed with some measures that will retard flows through the wetland system, and spread water more broadly into the adjacent wetlands. It is believed that this approach will significantly reduce downstream discharges of ortho-phosphorus, an important culprit in causing deteriorated water quality.

The project will entail construction of two low dams, intended to spread water more evenly throughout the Rice Lake wetland complex. The project will also involve the acquisition of flood easements from property owners in the Rice Lake area, the reconstruction of a road.

#### A Long, Hard Winter?

Many Lake Detroiters who stuck it out this year believe the winter of 07-08 to be especially severe and long, and there is some justification for that belief.

There were some extremely cold days and nights in January and February, but overall conditions were pretty similar to the long-term averages. March and April, 2008 were a couple of degrees colder than their averages. Snowfall was significantly higher than usual, largely on the strength of record-breaking April storms which accounted for half of the winter's snow total. Also, fifteen inches in early December, and the lack of a January thaw, kept pretty good snow cover throughout the winter months. But except for April, winter precipitation (moisture) was below average.

However, what really set the winter apart was its departure from trends over the last dozen years. We have grown accustomed to warmer winters, with fewer extremely cold conditions. Indeed this year we had more nights with temps below minus 30, and days below zero, than in any winter since 1996. Since then we have had eight years with no night-time lows below minus thirty, while this year we had 3. And this winter we had 15 days with day-time highs below zero, whereas the average of the last 12 years has been 5.

Finally, the spring thaw was a little later than usual. In most years spring runoff starts in March, and peaks by mid-April. In 2008, it began in mid-April and reached a peak in early May. And the thaw was more intense than in recent years, thanks to the 32 inches of April snowfall (comprised of 3.75 inches of water).

Dick Hecock 5/7/08

#### **Detroit Lakes Ice-Out, 2008**

As of May 1<sup>st</sup> the ice was substantially out of Big and Little Detroit Lake. Some wind-blown ice debris remained piled up along the South and West shores, but there was no solid ice left on the morning of May 2<sup>nd</sup>.

The last time there was a May ice-out was after the record-cold winter of 1996. The ice has left the lakes in May only three times in the last thirty years, and 14 in 116 years of record. The latest ice-out date was May 17, in 1950.

The average ice-out date is April 20. It is interesting that the duration of the 2007-2008 ice season is only slightly longer than average, because last year's freeze-up date (November 27) was a bit late.

Dick Hecock

#### A Very Clear Lake

Detroit Lakes has experienced unusually clear conditions this spring. A Big Detroit Secchi reading of 26 feet on June 1<sup>st</sup> is the highest recorded in 15 years of observations. Clarity readings in excess of 20 feet did occur in May of 1994, 2002 and 2003.

It seems likely that the relatively small spring runoff, coupled with unseasonably low water temperatures (which retard the growth of algae) are related to this year's unusually clear conditions.

# **Boating Checklist:**

# (check to make sure you are in compliance – DNR does!)

- Current license placed correctly on boat/pontoon
- Boat lights must be used between sunset and sunrise
- horns that work (boats over 16 feet)
- Throw cushion required in each boat
- Life jackets for each passenger in the boat (recent regulatory change allows use of inflatable life-jackets in some instances) life jackets must be "accessible" (not in bags or in storage lockers)
- Fire extinguisher required on boats longer than 16 feet
- Licensed boat trailer, with lights that work.

See the DNR Boating Rules for full details (they are on the DNR website).

Rules for Personal Watercraft are complicated, and very strictly enforced; owners and users should be very familiar with them.

Hint: pay special attention to the evening curfew.

# Dying Fish?

On again there have been some observations about dead fish; large numbers of panfish, and even some northern pike, have washed up along shorelines on Big and Little Detroit.

The Minnesota DNR says that the die-off is quite a normal phenomenon which occurs on many lakes. It seems that a bacteria, Chondrococcus columnaris, is widespread and persistent among fish populations in our area. A disease, called Columnaris, mostly affects fish in the spring, when water temperatures rise quickly and the fish are spawning. There is no practical cure for the disease.

While it may appear that huge numbers of fish have died, fish populations are usually not significantly depleted from Columnaris. Gamefish from a lake which has experienced die-offs may be eaten so long as they are normal in appearance and behavior, according to the DNR.

Dick Hecock

# Lake Friendly Highway Construction

For several seasons Lake Detroiters have been inconvenienced by the construction projects on Highway 10 and 59. We hope that the inconvenience is worth it. Aside from the improved traffic flow and safety, the changes are expected to be lake-friendly too.

Numerous measures have been incorporated into the highway designs that are specifically aimed at protecting the Lake Detroit and the streams which lead to it. As a result of the project much more of the City of Detroit Lakes stormwater runoff will be detained and treated prior to discharge to the Pelican River or other waterways leading to the lake. Similarly, there will be important stormwater detention/treatment devices next to the lake, on either end of the Highway 10 lake Overlook, adjacent to the Holiday Inn and the Lodge-on-the-Lake.

During construction considerable care was given to reduce erosion and contain sediment. Silt fences and floating debris curtains were employed.

The Pelican River Watershed District, together with Lake Detroiters, the City of Detroit Lakes, and other partners, have secured funding to do a major "restore-the-shore" project along the Highway 10 overlook. Non-native vegetation will be removed and replaced by native species, rip-rap will be inter-planted with shrubs and trees to improve aesthetics. Upon completion, the area will be the focus of a major education effort to acquaint local residents and passersby with the relevance of shoreline protection.

#### **Lake Detroit History Project**

As the Lake Detroiters Board of Directors planned the 2006 Directory, several indicated their interest in putting together a separate document that recounts the interesting history of the lakes, events, people, etc.

It was noted that other area lake associations, including Cormorant, Sallie, Melissa, and Cotton have undertaken such projects, and have been rewarded with an increased sense of community and interest in the lake.

Topics mentioned at that time included the ox cart route, French fur-trading, logging, ice-cutting, steamboating, The Sportsman's Club, the Spa, the Yakety-Yacht Club, Pokegama spring, as well as information about early lake residents.

One of the outcomes of the Directory project was that several Lake Detroiters identified themselves as interested in such a project. We think that there are other members who share this interest.

Accordingly the Board has decided to focus on local lake history. The project has not progressed as far or as far as the Board had hoped. We continue to look for help in the form of volunteers who are interested in contributing in various ways. We also are continuing to look for pictures and other information which would provide insights into our history.

#### **Detroit Lakes "Weed Harvest" Project**

Weeds have been perceived as a problem on Detroit Lakes for many decades and various forms of treatment have been tried. For many years aquatic plant removal on Big Detroit Lake was a part of the ice-harvest operations which ended in the late 1960's. In the early 1950's Lake Detroiters Association paid for mechanical harvesting of lake weeds. In the mid-1950's, the association began to use chemicals (sodium arsenite and copper sulfate) to control rooted plants and algae.

Between 1987 and 1989, PRWD contracted with lake shore owners on Deadshot Bay and Little Detroit for some mechanical harvesting operations, mainly aimed at Flowering Rush control. Following a petition by Detroit Lake residents in 1990 the Pelican River watershed District began mechanical harvesting and roadside pickup on Big and Little Detroit. The Project grew out of concerns about the rapid spread of Flowering Rush.

The Minnesota DNR is responsible for protecting aquatic plants in lakes; generally speaking it takes the view that aquatic plant populations are critical to the health of lake ecosystems. Over the years, the DNR has increased its scrutiny, and limitations placed upon harvesting activities by PRWD. Coincidentally it was determined that mechanical harvesting, the DNR recommended method of Flowering Rush control, is not effective (and may even contribute to its spread). Accordingly, starting in 2003 the District's use of mechanical harvesting equipment has been severely curtailed, but the DNR authorized the use of herbicides to control the exotic species, Flowering Rush

Beginning in 2002, the District began experimenting with various herbicides to control Flowering Rush. Based upon results in 2004, one herbicide, Habitat was selected for further testing in 2005, and for full-scale applications in 2006 and 2007. One of the important attributes of this particular chemical is that it does not affective native submerged plants. The District's expectation is for partial control in any given season, in large part because submerged (young) Flowering Rush plants also are unaffected by the herbicide treatment. Winds, waves, boating activities and other factors diminish the effectiveness of control too. Under the best of circumstances, several years of treatment will greatly reduce population of flowering rush, but total elimination is not anticipated, not least because it is often found mixed with desirable and protected species.

It is too early to know how successful 2007 chemical treatments have been. The results will be evaluated in late June and early July. In 2008, the District has contracted with Lake Restoration, Inc. to apply habitat to Flowering Rush plants on Detroit Lake, and will do so mainly in July and late August.

<u>Mechanical harvesting on Detroit</u>, will be allowed in spring and early summer to remove the exotic plant, Curley-Leafed pondweed, and perhaps later in the summer for very selected, DNR-approved areas of the lake. The District may seek specific permission for mechanical harvesting in a few other areas. Lakeshore residents will see less harvester activity on the lake.

Dick Hecock, June 2008

# Pelican River Watershed District 2007 Flowering Rush Herbicide Treatments

2007 treatments of flowering rush infestations took place in lakes Detroit, Melissa, Sallie and Deadshot Bay July 11–19. This year's treatment program followed what was generally regarded as a successful treatment program in 2006. In most cases the infested areas responded to treatment by shrinkage of the infestation or by reduced density of plants.

At seven test sites stems counts indicated reduction in plant densities by 50 percent or more. Pictorial comparisons, as in the case below, also support claims of 2006 success (See more examples on the District's web-site, <a href="www.prwd.org">www.prwd.org</a>).





Flowering Rush Infestations at J&K Marine

Note that it is not possible to completely eradicate Flowering Rush. The herbicide does not impact submerged plants, including young ones. Such plants can be expected to appear above the water surface in a subsequent year. Hence, it is anticipated that several years will be required to achieve a high degree of control.

After the 2006 treatment some areas did not appear to be helped. It is believed that these areas either inadvertently escaped treatment, or were disturbed shortly after treatment, possibly by boats or waves.

The 2007 treatment program occurred about two weeks earlier than in 2006; this year's earlier application was somewhat exaggerated from the plant's perspective because of the plant's somewhat delayed development in comparison to the previous year.

The 2006 and 2007 treatments were authorized by the DNR after three years of testing on several sites on Big and Little Detroit, Deadshot Bay (Curfman), Melissa and Sallie. In 2006 and 2007 the chemical herbicide imazapyr (which is made available under the trademark Habitat) was applied to all homogeneous stands of emergent flowering rush.

Treatment locations in 2007 were very similar to those in 2006 (See 2006 Executive Summary for map). Nearly all of the treated sites on Sallie and Melissa are very small, often only a few isolated spears, but including clumps up to four feet in diameter. On Big, Little Detroit and Curfman the treatment areas are quite a bit larger, ranging in size from 6-foot clumps, to more than an acre.

Treatments were carried out by Mr. Denton Offutt, a licensed herbicide applicator, from a specially adapted pontoon boat. The Habitat (*Imazapyr*) was mixed with a surfactant to promote adhesion of the herbicide to the plant material. A sprayer boom was used for larger treatment areas; a high pressure sprayer was used on smaller stands and those in shallow water.

Just under 33 gallons of Habitat concentrate were applied to about 87 acres on the five lake basins (74 acres on Big, Little Detroit, and Curfman). This year's total cost was \$58,000 down somewhat from last year because of carry-over stocks of chemical.

The success of this year's treatment program will be evaluated in June, 2008.

#### **Long-term Aquatic Plant Management Planning to Start in 2008**

In the face of changes in DNR policies governing aquatic plant management, as well as the problems associated with exotic species, the Managers of the Pelican River Watershed District have agreed to begin a two-year planning process that will develop harvesting plans for the chain of lakes which includes Curfman (Deadshot Bay), Big and Little Detroit, Pelican River, and Melissa, Sallie, Muskrat and Mill Lakes. The planning effort will begin with a \$40,000 mapping project which has been contracted with Lake Restoration, Inc. That company will produce maps of native species and exotics throughout the seven lakes and three stream segments. Upon conclusion of that data gathering effort, Lake shore residents and others will be involved in the establishment of management priorities and strategies that will guide the District over a multi-year period. These are likely to include programs to treat exotic species (including flowering rush and Curly-leafed pondweed) and mitigate nuisance native species which cause navigation or safety hazards (at the public swimming beach, for example).

Dick Hecock

### Problems with Roadside Lake Weed Pickup

The collection of raked up aquatics will continue as previous years, BUT there is still the continuing problem of residents placing the piles on the roadway or bike path causing unsightly traffic hazards for other roadway users. Be considerate of non-lake residents.

Create a pile on your very own property, not across the road on the Becker County right of way, accessible to a Bobcat, away from plantings and poles. The lawn will get damaged, so plan accordingly. Consider sharing a common area with a neighbor.

Please talk to your new neighbors. The Pelican River Watershed District only picks up washed up aquatics – 344 tons in the summer of 2006. Bullrush, Cattail, and Reeds are protected from removal. Garden wastes, branches, etc. are not picked up by the Watershed or by the City of DL. It is the responsibility of each homeowner to haul these items to the appropriate site north of DL:

 North of Detroit Lakes – drive one mile north on Hwy 59, watch for yard waste sign, turn West on Stoney Road.

Roadside pickup is available from June 1 through September 30, 2008

### Aquatic Plants, Native plants, Shoreline Plantings

We live on a natural body of water, complete with a life cycle of its own. Aquatic plants and algae growth follow a weather related relationship with the available nutrients. We can all learn so much through observing the natural growth patterns of the lakes plants and organisms.

The native plants provide food and shelter for numerous lake creatures, fish and birds. These plants protect the shoreline from erosion and stabilize the bottom sediments, as well as controlling the runoff from our lawns. The lake creates ice ridges to control this run in. Plantings in this lawn buffer zone will catch rain water, phosphorous and nitrogen.

The plentiful weed growth in our lake is a result of an excess of nutrients built up in the lake bottom. When the weather conditions are right, an algae bloom occurs. The native emergent plants: reeds, cattails and bulrush help utilize these nutrient. Detroit Lake has lost much of its native emergent vegetation, but several residents are adding DNR support replantings.

The Pelican River Watershed District Harvesting Project strives to keep Detroit Lake usable and "swimable" according to the plan put forth by a committee of lake shore residents:

- The exotic Curlyleaf Pondweed is harvested mid-May to June before it blows up on our beaches or wraps around the docks.
- The exotic Flowering Rush is sprayed when the plants are tall and vigorously growing.
- Harvesting of Flowering Rush is limited to special navigational considerations.
- Large mats of the native Northern Milfoil are hopefully picked up as they float on the water surface early July and August before blowing in.

To join the Harvesting committee call *Ginny Imholte 847-7236.* This committee considers the requests of numerous lakeshore owners, establishes yearly priorities considering a short ten week growing season, and budgets time and expenses.

#### Lake Detroiters Association Welcomes Fisherman and Recreational Boaters!

Be considerate and share the lake with recreational boaters <u>and</u> fisherman. *Make an effort to avoid fisherman or skiers that are already in the area of the lake you are on!* 

Note: From time to time water skiers and wake boarders have courses set up on the lake. It is legal for temporary buoys to be set up between sunrise and sunset without permits. Minnesota's DNR boating and safety guide points out (Page 49)

Temporary docks and buoys <u>are</u> allowed from sunrise to sunset.

#### **Mystery Snails**

(reported by Dick Hecock, 8/1/07)

There have been several recent reports of unusual numbers of large snails washing up on the shores of area lakes. Here are some recent samples:





(large squares are 1 inch)

Minnesota Department of Natural Resources (MNDNR) experts suggest that these are *not native* to Minnesota and belong to a specie known as the Chinese Mystery Snail (CMS), an exotic found in many Minnesota lakes. The CMS has previously been found in Lake Detroit, and has been identified in other area lakes.

The CMS shell is spiral shaped with an olive-brown coloration which varies from light to dark. The banding and colors on s of dead snails are more pronounced. The shell may reach two inches in length.

CMS normally live in deeper water (up to 15 feet), but tend to move to shallower areas in the spring to breed and to avoid low-oxygen situations in the summer (MNDNR). They live for several years (up to five) and shortly after reproducing for the last time in the spring, they die. Large die-offs also can occur in response to oxygen depletion associated with rapid warming of a lake. In any case, dead snails often are washed up on shorelines, sometimes in large numbers, as seems to be the local situation this year.

MNDNR reports that that CMS can form dense aggregations. They feed on dead plankton and algae; they do not eat plants. In sufficient numbers they may compete with other snails and other bottom feeders; the extent of their impacts on habitats and other species is not known.

The snails are a source of food in Asia, and it is believed that they initially entered North American waters in connection with attempts to grow them for food purposes. Some of the spread may be the result of their use in aquarium situations. In any case, CMS populations are prolific and now seem to be spread mainly by boats and bait water. Their occurrence among Minnesota lakes is spreading and populations are increasing (MNDNR).

So far attempts to control the non-native snails have been largely unsuccessful. MNDNR is investigating control options. While not ruled out, chemical control measures seem unlikely because of impacts on native species.

Wisconsin DNR reports that the mystery snails do not carry the swimmer's itch parasites.

The "mystery" in Chinese Mystery Snails (and other *mystery* snails) has to do with the habit of sudden hatches of fully-developed young snails "mysteriously" appearing. They also have a (somewhat) mysterious ability to achieve dormancy when removed from water.

Chinese Mystery Snail as depicted in the Wisconsin DNR Citizen Lake Monitoring Protocol Handbook.



