Official Newsletter Spring 2015 Volume 1-15

CLA Mission

To protect the interest of the members of this Association in the real property owned by them; to endeavor to maintain the natural level in said lake; to protect against water pollution and unhealthy conditions; to secure adequate protection against fire, theft and pilfering, to secure improved roads leading to and around the lake; to protect and promote good fishing condition in said lake; and for such other purposes as shall be beneficial to the interests of said members and the community.

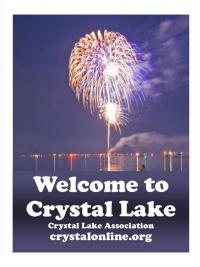
General Membership Meeting

10 a.m. on July 18th

At the Sailing Club

Briefings on CLA status and a special briefing on lake status and treatment for aquatic invasive plant species by Restorative Lake Sciences.

Mark your calendar and please plan to attend!



We Need Your Help To Keep Crystal Lake Crystal Clear.

Treatment for invasive weeds is required to keep Crystal beautiful. See article page 4.

Please contribute to the Water Quality Fund. Thank you.

Crystal Lake Association

Established June 5, 1932

www.crystalonline.org

Membership Drive - Now is the time to join the Crystal Lake Association

It's not often you can say you got a bargain in today's world but that is member of the CLA. Your \$35 annual dues contribute to preserving our beautiful lake, keeping activities * Provides signs and banners around on the lake safe, communicating with other CLA members, and staying informed on community activities throughout the year. We welcome all **friends** of Crystal Lake to become members of the CLA. whether resident or non-resident. If you enjoy the lake with your family, Sheriff's Marine division to patrol whether swimming at the beach, fishing or boating, please become a of programs and activities that are supported through membership fees and donations:

- * Water Quality Program- our most important work currently is to preserve and protect our lake from aquatic invasive species (AIS) which threaten our lake. Please see related articles in this newsletter to learn all the details. A major investment is needed by members and the community to curtail the spread of AIS.
- * Annual spring goose round-up to safely move the geese off the lake.
- * Newsletters, CLA website and Facebook page, annual General Membership Meeting, as well as the annual Cottage Directo-
- ry. These tools provide the means for lake users to stay up to date on all important information.

- * Provides the warming tent during the Crystal Winter Festival for the exactly the case when you become a brave Polar Dippers who raise money in support of our Crystal Township Fire Department.
 - the lake to promote Crystal Lake.
 - * Annual fireworks display on July 4 through fundraising and member contributions – a long standing tradition. What would the 4th of July celebration be without fireworks!.
- * Supports the Montcalm County Crystal Lake and maintain a safe lake for all. We also have been asked to member of the CLA! Below is a list help fund a replacement motor for the patrol boat.

If you are currently a member, please renew for 2015 and invite your friends and neighbors to join as well. While we have over 250 current members we can always use more! We also have separate funding opportunities to support the annual fireworks display and this year, to support the Water Quality Program. Our goal is to make the fireworks and the Water Quality Program self-supporting through donations. Your support is critical to preserving, protecting and enhancing Crystal Lake for years to come.

As always, membership placards and the cottage directory will be delivered to members over Memorial weekend. So, please submit your membership early and thank you for your continued support!

Nancy Ayres Membership Committee

Board of Directors 2015 - 2016

Board President:

Steve Meinhardt

steve@casair.net

Vice President:

Bonnie Kanitz

kanitzb@msn.com

Secretary/Treasurer Kim Siburt

kimsiburt@hotmail.com

Newsletter Editor:

Bill R. Hepburn

hepburnbs@casair.net

Directors:

Roxy Eaton

Joe Kopchick

Mike Manning

Nancy Ayers

Fred Engle

CLA Membership What you get:

- Fireworks
- Water Quality
- Sheriff's Patrol
- Goose Roundup
- Community Support
- Winterfest
- Township Report
- Lake Association Directory

Membership is easy – just go to our website and sign up, or mail in your application or call us and we will stop by and pick up your application.

Old Man Winter Freezes Out Crystal Winter Festival 2015

There was no hiding from Old Man Winter on Feb 14th. Subzero temps and high winds made for -25 degrees and white-out conditions! By noon, the horse drawn carriage rides and pony rides had folded and gone home. The winds were whipping through the tents and no one could get warm. Finally, the decision was made to cancel the polar dip due to safety concerns and go home! Thank you to Mike Manning, Bonnie Kanitz, Steve Meinhardt, Roxy Eaton, and Cindi & Phil Shaftner for braving the elements to get the warming tent set up, waiting around in freezing temps and then packing up equipment and hauling it all away.

All was for a good cause! In fact, \$2059.50 was still raised for the Fire Dept, with the Crystal Café Ladies pulling in \$1272 alone! P.S. I think most of the polar dippers were relieved it was canceled.





Township News

- Now that the lawsuit against the Township is over (during which the Township overturned the Anti-Funneling Ordinance), CLA requested the Township board reinstate a like ordinance to prevent funneling multiple non-riparian properties through one front riparian lot. There seems to be a disinterest by the township board to reinstate an anti-funneling ordinance, but they did agree to review the revised proposal the CLA had developed two years ago. This proposal is currently under review by the CLA and should be submitted to the Township Board for consideration by the end of May.
- Several drains have been consolidated within Crystal Township under the County Drain Commissioner.
- Three ordinances were modified to allow land parcel divisions. Parcels up for division will go before a board to be reviewed for approval/disapproval. Copies of these ordinances can obtained from the township office.
- Extra public safety patrols for this summer were discussed. The Township is looking at getting supplement patrols from either Carson City or Montcalm Sherriff's departments. No decision has been made at this time.

Goose Roundup June 2015

It has been a cold winter with reported ice thickness up to three feet. With the ice melting our favorite birds (Canadian Geese) are on their way back north so the paperwork has been started for this years goose roundup. I estimate the round up will be around the third week in June. This date is established by the Michigan DNR Wildlife Division. If you would like to help, give me a call in June (989) 560-4857. We will keep you posted as to the exact date. Last year we had great participation and we collected 67 geese to be transferred to a state reserve. Looking forward to your help. Fred Engle

Investment Now Will Impact Quality of Crystal Lake in Future Years

2014 saw the beginning of what has become the largest, most comprehensive and most expensive program the Crystal Lake Association has ever un-

dertaken. It began in June 2014, with the discovery that Crystal Lake, like many of the lakes in the state of Michigan, had been invaded by Starry Stonewort, Eurasian and Hybrid Milfoils (all invasive species). These potentially harmful aquatic plants were brought in by boats from other lakes and are not native to our lake. Upon learning about the situation, the CLA

Crystal Lake
Mercard County, M

Legend

Eurasian Watermilot -18.5 acres
P Starry Stonewort

NA3.2584

W84.9204

Starry

Coogle carth

Purple Loosestrife

NA3.2584

Arial photo showing areas of invasive weed growth

board took immediate action to identify and quantify the problem.

At the general membership meeting in July 2014, the membership unanimously approved a proposal to hire a specialist firm to develop a Five Year Lake Management Plan. Restorative Lake Sciences was hired to conduct the survey and develop a remediation plan. Under the direction of CLA vice president

Bonnie Kanitz, all contracts are in place and ahead of schedule.

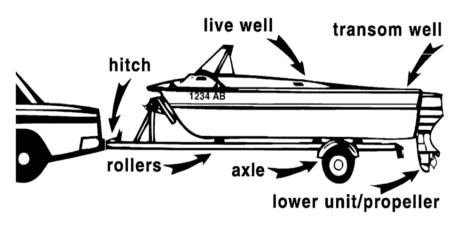
We now have in hand a comprehensive plan to begin a systematic treatment program. We will begin by treating the identified locations only. The application contractor and Restorative Lake Sciences will work together to ensure applications are correct for each specific type of invasive plant and location. Followup surveys will be conducted with results reported.

I commend VP Bonnie
Kanitz who has championed
this project from the start
and the CLA board for taking quick decisive action to
stay ahead of this before it
becomes an even more cost-

ly problem. To be able to fund our commitment for this project, we need your financial support by being a member and by donating directly to the water quality fund. The CLA needs to raise \$17,000 for treatment and consulting fees for 2015. Your generosity on contributing to the future quality of Crystal Lake is greatly appreciated.

Steven R. Meinhardt, CLA President

Simple Inspection Can Prevent Lake Contamination



Make sure your boat and trailer are clean and free of weeds and plants before you launch. You can make a difference.

Crystal Lake Action Plan for Aquatic Invasive Plant Species

By: Restorative Lake Sciences, Water Resources Director

In 2014, Restorative Lake Sciences (RLS) was retained by the Crystal Lake Association (CLA) to evaluate the current health of Crystal Lake and to determine the extent of the invasive aquatic plant communities within the lake as well as the native aquatic plant communities. Major findings of the study include the following:

- * Based on the current study, Crystal Lake contains sparse quantities (approximately 19 acres) of invasive aquatic vegetation such as the exotic submersed macrophyte Eurasian Watermilfoil (*Myriophyllum spicatum* L.), the submersed macro alga Starry Stonewort (*Nitellopsis obtusa*), and the emergent Purple Loosestrife (*Lythrum salicaria*). These invasives may displace favorable native biodiversity of aquatic vegetation and cause significant impairments in navigational and recreational activities if left untreated.
- * Management of the milfoil is recommended with granular Triclopyr herbicide and the management of Starry Stonewort and Purple Loosestrife is recommended with contact herbicides. The treatment of all of the milfoil with a dose of 150 lb/acre of Renovate OTF (granular triclopyr) will cost approximately \$8,415 (if no more is found in 2015 relative to 2014). In addition, the 1 acre of Starry Stonewort will require a \$500 treatment using Komeen copper crystals. RLS is hopeful that a powerful initial treatment will result in significantly less treatment needed in future years.
- * All of the products will be applied by Professional Lake and Land Management Corporation and will be overseen by RLS staff and guaranteed for performance and efficacy. Also, each product has been deemed safe when used according to the label by the US EPA and Department of Agriculture.
- * The state of Michigan Department of Environmental Quality (DEQ) will be issuing the herbicide treatment permit for Crystal Lake in 2015. RLS will also perform post-treatment inspections and surveys, and issue a final report to the CLA with future management recommendations.
- Crystal Lake contains 19 native aquatic plant species which represents a diverse aquatic ecosystem and thus management of milfoil and other invasive weed growth is critical. Additionally, the lake contains sparse quantities of native aquatic plants and thus management of natives is not recommended.
- The overall water quality of Crystal Lake was measured as very good with moderate nutrients such as phosphorus and nitrogen and moderate water clarity. The lake is considered mesotrophic and is phosphorus-limited. In mid-summer, the lake stratifies and loses adequate dissolved oxygen beyond a depth of 50 feet. The pH and alkalinity of the lake indicate that it is a slightly alkaline lake.
- Crystal Lake contains a healthy population of zooplankton and macroinvertebrates which serve
 as the base of the food chain. The fishery spawning habitat is favorable but more woody debris could be added to the lake. Aeration may be considered for the two deep basins to provide a healthier environment for the lake fishery.
- It is also recommended that the Crystal Lake community implement Best Management Practices (BMP's) to reduce the nutrient and sediment loads being transported into the lake from areas with high slope (> 6% slope) and in areas with mucky soils that are prone to ponding during heavy rainfall events.

Boater Safety News

How do I get my state boating license?

You may have heard that you need a Michigan Boat License to operate your boat, but what you really need is the Michigan Boating Safety Certificate. You can get a <u>Michigan Boating Safety Certificate</u> by taking the <u>Boat License Safety course</u> at boat-ed.com. Find out if you need the card.

Age Restrictions

Persons less than 12 years of age:

- •May operate a boat powered by a motor of no more than 6 horsepower (hp) legally without restrictions.
- •May operate a boat powered by a motor of more than 6 hp but no more than 35 hp legally **only if** they:
- •Have been issued a boating safety certificate and have it on board the boat and
- •Are directly supervised on board by a person at least 16 years of age.
- •May not operate a boat powered by a motor of more than 35 hp legally under any conditions.

Those born on or after July 1, 1996, may operate a boat legally only if they have been issued a boating safety certificate and have it on board the boat.

Those born before July 1, 1996, may operate a boat legally without restrictions.

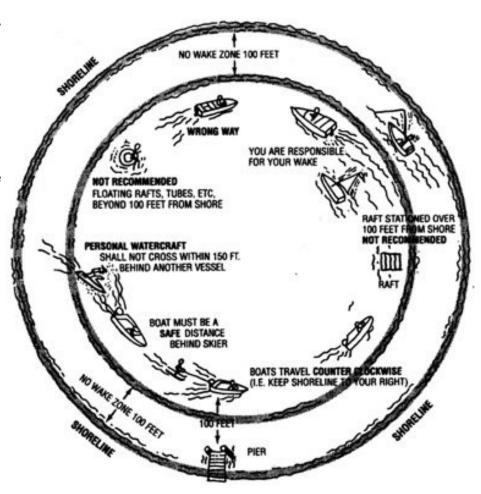
Personal Watercraft

Those **less than 14 years of age** may not legally operate a PWC.

Those **14 and 15 years of age** may operate a PWC legally only if they have obtained a boating safety certificate **and**

- •He or she is accompanied on board by his or her parent or legal guardian or by a person at least 21 years of age who has been designated by the parent or legal guardian **or**
- •He or she is operating or riding the PWC at a distance of not more than 100 feet from his or her parent or legal guardian or from a person at least 21 years of age who has been designated by the parent or legal guardian. Those at least 16 years of age and born after December 31,1978, may operate a PWC legally only if they have obtained a boating safety certificate.

Those born on or before December 31, 1978, may operate a PWC legally without restrictions.



CLA Memb	pership Application and Donation F	orm	
Name			
Mailing Address			
Mailing City, State & Zip			
Contact Phone	Email		
CHECK HERE IF YOU WOULD LIKE FUTURE CORRESPONDENCE VIA EMAIL			
GO PAPERLESS!	2015 ANNUAL DUES (\$35.00)	\$	
	FIREWORKS DONATION (2015 TARGET \$9,000)	\$	
	WATER QUALITY FUND (2015 TARGET \$17,000)	\$	
	LEGAL DEFENSE FUND	\$	
	TOTAL	\$	
	., CREDIT CARDS or ACH. Pay to: Crystal Lake ation (CLA) PO Box 307, Crystal MI 48818	• Association	
Renew online at: htt	p://www.crystalonline.org/renewon	line.htm	

Crystal Lake Association	
P.O. Box 307	
Crystal, MI 48818	