



President's Message:

I'm happy to say that I feel relatively confident in our many measures to prevent milfoil and other invasive aquatic plants from getting a foothold in Keoka. Kudos to those on the frontlines of this battle, especially LEA, Arne Klepinger and the Plant Patrollers, Tom Stockwell, Peter Morse, and many others. In August, we conducted a detailed lake inspection, with LEA divers, and found no Invasives.

We have an emerging concern, however, and that is the algae known as Gloeo. This is discussed at length in the body of the newsletter and has been highlighted in Colin Holme's column in a recent *Mutiny Brook Times*. While this season's high reading may be a fluke, I know that I saw lots of green stuff in the lake this summer, so although it might have been a fluke, I don't doubt the data. So, please, read the included article for details.

And here's something that each of you can do! You can help to starve the Gloeo of its essential nutrients (phosphorus-laden storm runoff): **Self-inspect your property!** Any evidence of direct runoff into the lake should be addressed. Evidence of runoff can be elusive, so please examine your land carefully. We can help, if you'd like help. Even if you have won the coveted LakeSmart award, it is still important to do an annual runoff review of your property.

To close, these are exciting times. We have a growing education initiative, ongoing milfoil work, and the regular behind-the-scenes 'blocking and tackling' that makes our lake such a great place. We are truly a community and we are proud of it. Please take time to get out and meet your neighbors, and while you are at it, encourage them to become members of KLA.

Thanks again for your support,

Charlie Tarbell

KLA has been BUSY!

The summer of 2014 has been a busy one for KLA. The board met Memorial Day weekend to plan some important events for KLA and for Keoka Lake. Unveiled at that meeting were the new KLA float key chains that are attached to a laminated card that highlights the steps in inspecting a boat for possible invasives. (See more under KLA Merchandise and Membership.)

New this year, KLA and Keoka Beach Campground co-hosted the first annual *Friends of Keoka Community (FOKC)* event on Sunday, July 6th at Keoka Beach Campground. Under Ginger Eaton's capable guidance, the event was open to anyone in the area around Keoka and was designed to educate people about the health of Keoka Lake and what KLA is doing to keep Keoka Lake clean and safe. KLA

board members had a number of displays highlighting the nesting loons and loon safety, the 'status' of the lake, KLA membership, Invasive Plant Patrol efforts, KLA merchandise and Keoka Lake: Who are your Neighbors? (that included Andy Tabor's large map of the lake with lakefront properties mapped and labeled). In addition, KLA president, Charlie Tarbell, used Peter Morse's fishing boat to talk about boat inspections and boat safety. Attendees were encouraged to inspect the boat and to find the invasives lurking in various places in and on the boat. The highlight of the day was two LEA presentations on the Sebago Lake Watershed and how what happens around Keoka (or any other lake in the watershed) ultimately 'muddies' the waters of Sebago (the source of water for the city of Portland). Young and 'older' from the

community and from Keoka Beach campground participated in the interactive watershed demonstration and the Invasives game that showed clearly why being vigilant in inspecting watercraft entering and leaving Keoka is so critical to the long-term health of the lake. KLA thanks Keoka Beach Campground for hosting the event and looks forward to the Second Annual FOKC Event next summer.

How healthy IS Keoka?

Keoka Lake is listed as a lake of **Moderate/High** concern. Phosphorus and chlorophyll concentrations in the surface waters are moderate, however, consistently low dissolved oxygen values in the deeper waters continue to be a problem. In late summer, it is common for the bottom half of the lake to have little or no oxygen which is not good for the fish population. During this same time period, elevated phosphorus concentrations are also observed in the deeper waters. These conditions indicate that a process called phosphorus recycling may be occurring. Phosphorus recycling is very detrimental to water quality because it allows nutrients that are usually trapped in the sediment to be re-released into the water column. It is because of these low oxygen conditions and periodically elevated phosphorus levels in the bottom waters that puts Keoka Lake in the **Moderate/High** degree of concern category.

The 2014 water-testing results show both clarity and phosphorus were **Better** than usual. However, phosphorus levels below the thermocline were elevated as in previous years. Chlorophyll levels were slightly **Worse** than the long-term average. The extent of dissolved oxygen depletion was similar to previous years. Weather is a big factor in these results (2014 was dry but not as hot as 2013), so the results vary accordingly.

Gloeo who?

Gloeotrichia echinulata (or Gloeo for short) is a species of blue-green algae that grows primarily on the bottom sediments of lakes. It uses the phosphorus on the bottom of the

lake to grow and then floats into the water column, where it can re-release the phosphorus, leading to worse algal blooms and leading to phosphorus recycling. Gloeo produces toxins that can be harmful to humans and pets. It is here! Algae blooms have been seen on a number of Maine lakes. Of the 15 lakes that LEA sampled in 2013, six contained elevated levels of Gloeo and are of highest concern, including Keoka (6 gloeo per liter). The other five lakes of highest concern are: Moose Pond (16/ltr), McWain Pond (9/ltr), Long Lake (7/ltr), Crystal Lake (2.5/ltr) and Peabody Pond (1.5/ltr). The sampling results for 2014 are not compiled but as of mid-September, Colin Holme, Assistant Director-LEA, indicates overall populations of Gloeo have been much higher than last year. A late season sample taken from Keoka had over 72 colonies per liter, indicating the urgency to better understand this algae and how to control it. Such high levels can cause skin rashes during peak periods. Stay tuned for more information!

LEA testing

The Lakes Environmental Association (LEA) is the workhorse for all things environmental concerning the watersheds and lakes in the region. During the summer of 2013, LEA installed temperature testing sensors near the east shore of Keoka to study near-shore water temperature patterns and to get solid baseline data for future study of climate change. This summer, LEA installed a series of these sensors along the west shore of Keoka. In part because of the expense of a string of these sensors and because of the chance that they could be damaged accidentally, they were marked with a formal regulatory-style buoy so that the string of sensors could be easily seen by all who use the lake. Did you see the white buoy in front of Kokosing this summer and wonder what it marked? Now you know!

LakeSmart

Due to a number of scheduling problems, there were no LakeSmart inspections conducted on Keoka during the summer of

2014. However, 2015 will begin a new push to work toward getting all lakefront properties inspected. Given the impact of phosphorus on the vitality of Gloeo in the lake, it becomes more important to identify those properties where mitigation can reduce the amount of phosphorus run-off into Keoka. If you have not had your property inspected and would like to sign up for a 2015 inspection, please contact Charlie Tarbell to be placed on the list. If your property has been inspected and you have neighbors who have not yet had an inspection, please encourage them to get on the inspection list. There is NO downside to an inspection. It provides information about how “LakeSmart” a property is and if there might be anything that could be done to reduce negative impact on Keoka Lake.

Plant Patrol

In 2014, Arne Klepinger divided Keoka Lake into 15 segments for ease in monitoring plant presence and changes in plant life in Keoka. The map is available on the website. A huge shout-out to the following Keoka Lake Volunteer Plant Patrollers: Nan Brett, Arthur Jacobson, Arne Klepinger, John & Marian Moore, Richard Orr, Don Rung, Tom Schaeffer, Alan & Kathy Sousa, Tom Stockwell, Al Struck, Andy Tabor and John & Dodi Wait!!! Several of them have taken on two segments so that the entire lake is inspected three or four times a summer. Arne is looking for more volunteers to help ease the ‘burden’ of combining a pleasant paddle on the lake with watchful eyes for changes in plant life, new species and/or areas of concern. Knowledge is power and by frequent inspections, any change in existing plant life or the presence of something new can be noted, monitored and mitigated as necessary. If you’re looking for a way to ‘help keep Keoka clean and safe’, this is an easy way to volunteer. Training is provided!

CBI

Did we mention that LEA is the workhorse for area lakes? Once again, the LEA staff has supported Keoka’s Courtesy Boat

Inspection (CBI) program in 2014 by providing payroll services, program support and, new this year, by doing the scheduling of the individual CBI inspectors. For the summer of 2014, the inspectors worked a total of 336 hours, conducted 194 inspections and caught 14 plants – all on outgoing boats. None of the plants found were invasives! In addition to conducting the boat inspections, the CBIs try to engage the boat owners in the inspection, educating them about the importance of inspecting their own boats every time they prepare to launch or pull out. The laws in Maine prohibit the transportation of Invasives and the fines are steep. All watercraft – boats, jet skis, canoes, kayaks, paddleboards, inflatables – should be inspected for the possible plant fragment that tries to hitch a ride, caught by the tiniest of rough surface or sharp edge.

Did you know?

There is a \$500 fine if a boat is caught without a current year’s inspection ON the boat???

2nd Annual Bud Lazott Memorial Regatta

August usually means good sailing on Keoka, but not August 2nd this year! Despite an absolute lack of wind until 5 minutes before the start of the race at 2 pm, 11 veteran sailors in two classes of boats braved the fickle (and fading?) winds to run the course. Winner of the Lazer Class was “Captain” Jess McGreehan; runner up was Christian Struck. In the Open Class, the winner was Fred Heuttig and the runner up was Larry Griffin. Photos of the event will be posted to the website.

Volunteering

For over 43 years, KLA has been doing what it does with a committed group of volunteers. Volunteers serve on the Board of Trustees of KLA; they serve as plant inspectors that check a section of the lake on a regular basis to assess unusual flora or fauna activity; they monitor water quality; they maintain and set up/store the loon nest; they assist with merchandising and

spreading the KLA word at Community Breakfasts, the 4th of July parade & the Fall Foliage Race; they serve as volunteer Courtesy Boat Inspectors and they serve as liaisons to the Town of Waterford, LEA and other state organizations through direct contact or through service as a committee or board member. KLA would not be what it is without those who volunteer. Would you like to join us?

KLA's Board of Trustees is interested in talking to anyone interested in lending a hand. Volunteering for KLA is a great way to get to know others who treasure Keoka Lake and, as more people volunteer, the work is shared and everyone gets to spend more time enjoying all Keoka and the area has to offer. Lend a hand! Check one of the boxes on the Fall Dues Form and you will be contacted! Our thanks to all who volunteer now and welcome to those who wish to join us!

Kayak Raffle

The winner of the 2014 Kayak Raffle is: KLA member, Betsy Whitfield who has a place on Keoka's Stone's Cove.

Social Media:

Do you 'tweet' (no, it's not just for the birds)? How about Instagram? (it's not anything close to a 21st century version of the dot/dash telegram) Vine? (nope, not a trailing weed that you can't remove from the shoreline because it's protected) YouTube? (no, that's not a personal inner tube pulled behind a boat). How about 'google'? (did you know it's now a legitimate word in Webster's dictionary!) Do you have a Facebook page? (now, that's something most folks have heard of!)

The world of social media is changing before our eyes but rest assured, Keoka Lake is taking it slowly. Yes, KLA has a website (<http://www.keokalake.org>) and KLA has a Facebook page. If you have a Facebook page too, you can 'Like' us on Facebook and any updates and/or posts to the KLA page will show up on your Timeline – It's as easy as that. Coming soon (we hope), we can alert you to updates on our

website by posting a notice on our Facebook page. So for those long winters not spent on the waters or shores of Keoka Lake, you can be 'in the know'!

Gift Memberships

Many of the 'camps' that border Keoka Lake are multi-generational camps with long histories on the lake. Childhood friendships are renewed at Keoka when those who spent their summers in the '60's, '70's and '80's return to Keoka with their families to share those same experiences. Family reunions are what it's all about!

But the work of KLA is supported largely through dues payments. Please consider encouraging your children and grandchildren to take a direct interest in the lake by becoming independent members of KLA. To jumpstart the transition from one generation to another, consider giving a KLA GIFT MEMBERSHIP to children, grandchildren and/or nieces/nephews. On the enclosed Dues Notice, just fill out the form for your gift recipient, check the "Gift Membership" box and give us **your** name & address. KLA will do the rest and send you a **GIFT MEMBERSHIP CERTIFICATE** that you can gift-wrap and/or deliver as you wish. Passing the torch to the next generation ensures the continued enjoyment of the lake by all. A KLA Gift Membership is a gift that keeps on giving (and doesn't need batteries, doesn't take up space, doesn't need a charger and doesn't collect dust!). KLA Gift Memberships make great stocking stuffers or Hannukah gifts!

KLA Merchandise:

In 2014, KLA continued to present articles for sale at the Wilkins House Community Breakfasts as well as at the Fourth of July Parade and the Fall Foliage Weekend. Our organization regularly nets upwards of \$500 from these sales opportunities and we thank each of you who support KLA in this way.

New this year, the neon orange KLA floating key chains are now available for sale for \$5 each. Attached to the keychain is a laminated card for easy reference as you do

an inspection of your boat before you launch and after you pull out of any water body. For each membership to KLA, one of these floating keychains is yours! If you have yet to receive yours, please see Joanne Eaton at the KLA merchandise table during the 2015 season! If you would like to have keychains for stocking stuffers for the holidays, please contact Joanne.

Memorials

KLA lost a long-standing board member early in 2014. Our sympathies go out to the family of Steve Wilcox, former treasurer of the KLA Board of Trustees. Our thanks to Steve's family who included KLA in their list for memorial contributions and to those who contributed to KLA in his memory. Memorial donations can be earmarked for specific programs or for general activities that support the mission of KLA.

Fall Dues Notice:

The final page of this newsletter is the Fall Dues Notice. Our thanks to those listed who

have paid their 2014 dues by Nov. 11th. If you have not paid your 2014 dues, please note that you can pay both the 2014 and the 2015 dues with this notice (and save yourself a stamp!). Remember, each membership is eligible for one KLA floating keychain!

Please consider a gift in excess of \$25 either as an unrestricted donation or directed to the Milfoil Reserve or Educational Initiative. KLA is a volunteer organization that relies on donations to continue its mission to maintain the health and safety of Keoka Lake, especially in the face of the threat of invasives, both flora and fauna, and naturally occurring and man-made environmental threats. KLA is also committed to protecting the waters of Keoka Lake for future generations by educating its membership about environmental threats, environmentally conscious and proactive best practices and safe boating practices to protect those who enjoy its waters.

*We wish each of you a Happy Holiday season
and a very Happy New Year!*

KLA BOARD OF TRUSTEES

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<http://www.keokalake.org>