THE CULLEN CURRENTS

Summer, 2019

CLA Annual Meeting is August 10

The 37th Annual Meeting of the Cullen Lakes Association will be held **Saturday, August 10** at Lutheran Church of the Cross in Nisswa.

As usual, the meeting will begin at 9 a.m. for your convenience in attending and still having a full day for lake activities and recreation. Come early, anytime after 8:15, to get your name tag and annual meeting booklet, enjoy rolls and coffee, view the exhibits, and chat with Board members and your fellow Cullen Lakers.

This year's meeting will feature a presentation by John Maguire on the Maguire/Hirschey families' 100 years on the Cullen Lakes.

Following the presentation, there will be a CLA business meeting during which members will be asked to approve the 2020 budget and elect members of the Board of Directors. The annual meeting booklet will contain 2019 financial information and reports from the CLA committees for your information.

Your attendance and participation in the Annual Meeting are encouraged. No reservations are needed.

Lakes have plentiful aquatic plants

This year's spring and early summer weather conditions encouraged abundant growth of the lakes' native aquatic vegetation. Native pondweeds are especially plentiful, with their small seed heads often sticking up out of the water. While many people have assumed it is the invasive curly-leaf pondweed forming dense patches just under the water's surface, it is really native broad-leaf pondweeds such as clasping-leaf pondweed forming the near surface plant beds. Native vegetation will likely continue to increase as the lakes age and climate change continues.

News on controlling zebra mussels

After years of research scientists at the Minnesota Aquatic Invasive Species Research Center have sequenced the genome of the zebra mussel. This discovery may have major implications for controlling zebra mussel populations in the future.

Nick Phelps, director of the research center, told the Minneapolis Star Tribune recently that the discovery is a "first step" and though "we don't know yet quite where to attack . . . there's a whole spectrum of strategies that can be considered."

The genome map was pieced together from hundreds of millions of lines of genetic code. The map will allow researchers to pinpoint the exact genes that have allowed the mussel to thrive in Minnesota waters, North American lakes and distant foreign lands. The hope is that scientists will be able to exploit genetic weaknesses to collapse mussel populations, or at least slow or stop their spread. The genome sequence makes it possible to target a single species in a way that chemical pesticides and poisons might never accomplish, researchers say.

Zebra mussels traveled to the United States from the Caspian Sea in Eastern Europe in the ballast water of ocean freighters and first took hold in Lake Erie in 1988. They spread throughout the Midwest almost immediately. They were discovered in Lower Cullen Lake in 2016.

Spring treatment of curly-leaf pondweed was not as effective as hoped

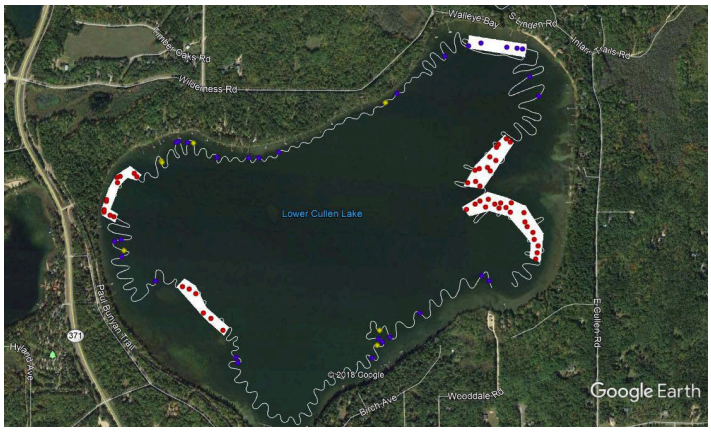
The curly-leaf pondweed (CLP) growth during both the spring of 2018 and 2019 was very slow in many area lakes and unfortunately that was the case in the Cullen Lakes. The DNR allows a very short spring treatment window (water temperature must be in the 50s) and there was very little treatable plant growth until after the treatment window closed. You may remember that the CLP in Middle Cullen was not yet far enough along for us to even treat it this year.

The ice went out on the Cullens April 21-23. Three and a half weeks later, when Clarke Aquatic Services conducted the CLP treatment, the water temperature was already 59. The native aquatic plants were abundant but the CLP wasn't yet. The CLP caught up, however, and it is the worst we have seen it in several years.

Members of the Invasive Species Committee plan to meet with DNR representatives later this summer to try to come up with a plan that will allow effective control of the curly-leaf pondweed in all three lakes. We don't want a repeat of this year.

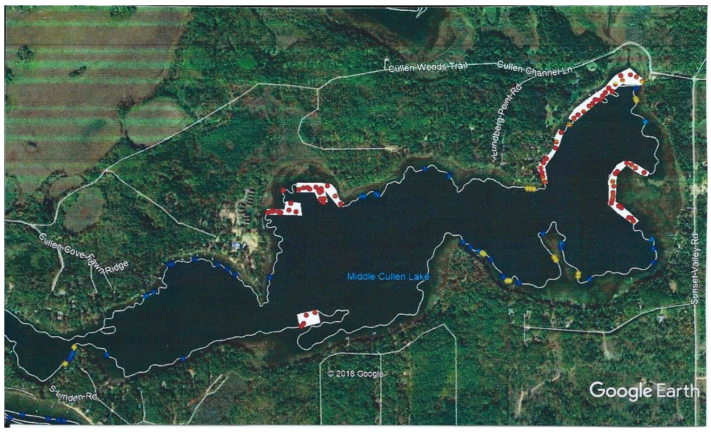
Meanwhile, the CLP should be dying back now and will not cause problems for recreational use of the lakes much longer. It will be depositing its turions (seeds) in the lake bed, though, readying for its next season of growth.

6/24 & 25 survey results with proposed 2020 treatment areas in white



Red-lined areas indicate 2019 treatment areas

Red dots indicate CLP found.
White areas are treatable polygons of CLP.



Membership update

CLA membership currently stands at 257. This includes 233 current property owners, 14 associate members (former owners or family members of current owners), and 10 complimentary memberships (new owners). There are 18 2018 members who have not yet renewed their membership. The number of Cullen Lakes property owners who are not CLA members is 29. Most of them have never been members of the lake association.

If your name is highlighted on this newsletter's mailing label or if you have been notified by email, you are one of the 18 2018 members who, as of July 20, had not yet sent in dues for 2019. This will be your last newsletter until your membership becomes current.

New housing development going in off Poplar Avenue in Nisswa

Many **C**ullen Lakers drive Poplar Avenue for one reason or another and may be wondering what is happening on the wooded parcel just east of the Paul Bunyan Trail.

A local man, the current owner of the Wolf Chase development east of Lower Cullen Lake, bought the almost 13 acre parcel and is planning a development that will include 28 family residential lots. The lots are currently for sale and buyers will be able to choose from a variety of house styles that will fit their lot's topography.

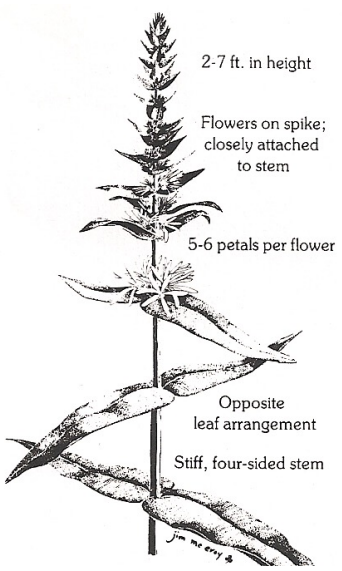
The development will be accessed by a private road. The lots will be on city sewer and there will be one well for every two houses. The development will have easy access to the Paul Bunyan Trail via a path in the middle of the parcel from the private road to the trail.

Currents on the Cullens

New owners
Jake & Becky Oberle, Lower Cullen (L113)
Russell Scanlan, Middle Cullen (M95)
Diane Anderson, Lower Cullen (L75)
Pete & Meg Miller, Lower Cullen (L118)

Deaths
Stan Ringold, Lower Cullen (L35)

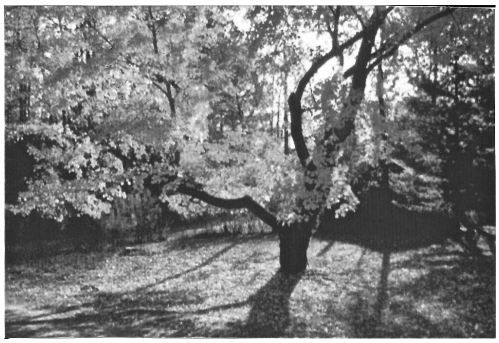
Is purple loosestrife growing on your shoreline?



By law, you must kill or remove any purple loosestrife (PL) on your property. If the PL is not too plentiful, the best method is to dig or pull it out by the roots. If the infestation is heavy, cut the blossoms off, being careful not to spread the seeds, and bag them up for disposal in the garbage. Then cut the plant off at ground level to inhibit future growth. You can also hand spray the plants with poison. Contact the DNR for more details on spraying and to apply for a permit to do so.

Cullen Lakes red maple tree almost sets a record

by Dan Long



Mike's Tree Company of Brainerd nominated a red maple tree growing on the Long property on Lower Cullen Lake. Thought to be one of the largest red maple trees in Minnesota, photographs and preliminary measurements were taken and sent to the DNR's Forestry Department.

Considered a candidate as a record size tree, the DNR came to the property and took official measurements--height, width, spread (canopy) and trunk circumference. Each category was given points. After tallying the points, the tree came in second, just a few points shy of a new record. The DNR indicated they would keep all information on file as some trees continue to grow while others may get severely damaged or destroyed.

It is nice to know our lakes area has the second largest red maple tree in Minnesota. Thanks to Shaun Malady of Mike's Tree Company for keeping a sharp eye out for special trees.

Fourth of July boat parades

The weather was a bit iffy at first, raining off and on in the late morning and early afternoon, depending on where you were on the lakes. However, the rain stopped in time to allow folks to decorate their boats and the parades took place as planned.

Middle Cullen had 29 watercraft in its parade, possibly a record number.

photo from Debi Oliverius

The parade on Lower Cullen consisted of 39 various types of watercraft, a few more than last year but short of its record 47.

photo from Ginger Sayer

photo from Ann Beaver

Bruce Galles reported there were 15 boats in the Upper Cullen boat parade this year. That may be a record!

Lower Cullen regatta postponed due to lack of wind

Although the light rain had ended by afternoon, the wind refused to cooperate. It remained steady at 3-4 miles per hour, not enough to propel a sailboat. There were three boats planning to race Saturday, July 20: the Brombach family's Flying J, Tom Beaver's Sunfish, and Dan Long's Laser. Instead, their crews enjoyed a delicious potluck supper at the Longs'.

Pictured below are the three boats' crews: high school juniors Edie, Maggie, and Grace and seniors by age Dan and Tom.

The regatta has been rescheduled for Saturday, August 10 at 3:00. Hopefully the winds of Lower Cullen will cooperate.

There's room for more sailors from any of the Cullen Lakes, so contact Dan Long if you're interested in participating: edaniellong@gmail.com.

What's new on the AIS front?

by C.B. Bylander

What's new in the Cullen Lakes area when it comes to aquatic invasive species (AIS)? The good news is "not much." Though zebra mussels, Eurasian watermilfoil and other unwanted species continue to spread throughout the state, little has changed in the Cullen Lakes area.

Eurasian watermilfoil was discovered recently in South Long Lake south of Brainerd. Similarly, new infestations of zebra mussels have been detected towards Park Rapids and Grand Rapids. However, no unwanted species have been discovered in the Cullen Lakes since zebra mussels were detected in Lower Cullen in 2016.

At the statewide level many interesting things are happening. For example, you may want to:

***Become an AIS detector.** If you or a family member want to become a certified AIS detector, well, go for it. An AIS detectors program has been developed by the Minnesota Aquatic Invasive Species Research Center (MAISRC) and University of Minnesota Extension. Participating in this program is a way to learn, contribute and help state AIS inspectors. Learn more by visiting **www.maisrc.umn.edu**.

***Participate in a Starry Trek.** You and others can be on the lookout for starry stonewort during a free statewide search. Starry stonewort is a grass-like algae that can form dense mats on the water's surface. Details at **www.starrytrek.org**. Crow Wing County will host a Starry Trek on August 17. The event is free but registration is required. Register on line at the above web site address.

***Learn about killing zebra mussels.** New research is underway to evaluate using copper to kill zebra mussels and identify the non-target impacts. The field work is largely on Lake Minnetonka. Learn more at **www.masisrc.umn.edu/copper-control**.

***Sign up for AIS updates.** You can receive the MAISRC e-newsletter at **www.umn.edu/aisnews**. It's chock full of good information.

***Get involved by attending the AIS Research and Management Showcase.** This will be held September 18 in St. Paul. Registration opens this month. Check the MAISRC website for details.

AIS inspections at Lower Cullen's public access

Because it is infested with zebra mussels, Lower Cullen Lake was allotted 300 hours of an AIS inspector's time at its public access. 104 of those hours had been used through July 12. This program uses AIS funds allotted to Crow Wing County by the State Legislature.

Midsummer loon reports

As of July 20.

Upper Cullen has two loon pairs still around; a third left for parts unknown. No loon babies this year, though.

The west bay of the Middle Cullen has one pair with two chicks. The center area of the lake has one pair but no chicks. The east end of the lake has 3-4 adult loons but no chicks.

Lower Cullen's east end pair of loons had two eggs, but only one hatched; the chick is doing well. The two west end loon couples did not successfully hatch any eggs.

Filamentous algae plagues Lower Cullen

Lower Cullen Lake suffered a nuisance presence in late June and early July of slimy, greenish floating mats of filamentous algae all around the lake. This algae is not harmful but it can make recreational use of the lake difficult in places, especially swimming areas. It begins its growth along the water's edge or bottom and rises to the surface as a bubble-filled mass when mature. It eventually breaks up and dissipates

.

Filamentous algae does provide cover for small animals such as aquatic insects and snails, which are valuable fish food, so it is not all bad.

Water quality data so far this season

by Ann Beaver

For those of you interested in water quality information, what follows shows the results of our first two months of checking water clarity (Secchi disk readings) and having water samples analyzed by A.W. Research Laboratories in Brainerd for chlorophyll *a* and total phosphorus. The measurement unit for Chl. *a* and TP is micrograms per liter (ug/L).

Upper Cullen	May	June	10 yr. avg.	Typical for ecosystem
Secchi (ft.)	8	14.5	10	8 to 15
Chl. a (ug/L)	15	4	6.5	max. of 14.5
TP (ug/L)	22	14	18.1	14 to 27

Middle Cullen	May	June	10 yr. avg.	Typical for ecosystem
Secchi (ft.)	9	13.5	9.8	8 to 15
Chl. a (ug/L)	11	6	7.1	max. of 14.5
TP (ug/L)	16	19	17.2	14 to 27

Lower Cullen	May	June	10 yr. avg.	Typical for ecosystem
Secchi (ft.)	11.5	15	12	8 to 15
Chl. a (ug/L)	5	4	5.2	max. of 14.5
TP (ug/L)	14	12	13.8	14 to 27

CULLEN LAKES ASSOCIATION
P.O. BOX 466
NISSWA, MN 56468

To protect, preserve, and enhance the three Cullen Lakes and their environs in order to ensure the continued vitality of the lakes, high quality fish and wildlife habitat, safe and healthful family living, and the survival of these natural gifts for future generations.

CLA BOARD 2018-2019

Beaver, Ann (Lower Cullen)
218-839-0593
beaver@uslink.net

Beilfuss, Paul (Lower Cullen)
218-963-6028
boomer284@charter.net

Boudrye, Charlie (Middle Cullen)
218-963-7494
eagleye@nisswa.net

Burrell, Jim (Lower Cullen)
218-568-5363
cullenlake@gmail.com

Bylander, C.B. (Upper Cullen)
218-828-4929
cb_bylander@hotmail.com

Hicks, Patty (Middle Cullen)
405-974-1656
pondering49@att.net

Hurley, Dan (Lower Cullen)
612-481-3766
lonegoose15@aol.com

Knutson, Joel (Middle Cullen)
218-963-0561
knutson.jc@gmail.com

Kostreba, Anne (Lower Cullen)
320-333-2426
jakostreba@gmail.com

Lindahl, Carol (Lower Cullen)
651-206-1330
lindahlcarol@hotmail.com

MacGibbon, John (Lower Cullen)
612-860-5864
jmacgibbon@mactek-inc.com

Oliverius, Debi (Middle Cullen)
952-261-7980
debioliverius@mac.com

Opsahl, Denny (Upper Cullen)
651-271-5522
djopsahl@gmail.com

Officers
President: Ann Beaver
Vice president: John MacGibbon
Secretary: Paul Beilfuss
Treasurer: Carol Lindahl

Newsletter editor: Ann Beaver

CLA web site:
www.cullenlakesassoc.org
Webmaster: Dan Meixner

CLA Facebook page:
www.facebook.com/cullenlakesassociation
Page manager: Alli Isaacson