

THE CULLEN CURRENTS



Winter, 2016

Important Notice to All Cullen Lakes Property Owners

Areas of the aquatic invasive species curly-leaf pondweed (CLP) in all three Cullen Lakes will be treated with the DNR approved herbicide Aquathol K this spring. This will be the eighth consecutive year of such treatment.

If you do NOT want this treatment to take place within 150 feet lakeward of your shoreline, YOU MUST NOTIFY the Cullen Lakes Association in writing via email (beaver@uslink.net) or U.S. mail (P.O. Box 466, Nisswa, MN 56468) no later than April 1, 2016.

Note to CLA Members

For those of you who receive the newsletter via U.S. mail, included in this issue should be your 2016 update of the map/guide of the Cullen Lakes. Those of you who receive the newsletter electronically will receive the map/guide in a separate mailing.

Cullen Lakes property owners who do not belong to the lake association do not receive the map/guide.

If you find errors in the map/guide, please notify Ann Beaver. With the increasing number of lake properties in joint ownership, please also inform her of your preference as to how the property is listed in the map/guide.

Also, if you received a print copy of this newsletter but you are willing to receive it electronically, please send your name and email address to the newsletter editor requesting electronic delivery.

Curly-Leaf Pondweed Management Donations Update

by Jack McNamara, CLA Board Member

A big "Thank You!" to all the Cullen Lakes property owners for a very successful start to our annual curly-leaf pondweed (CLP) donations campaign. In the 2016 membership mailing, you received my request for funding support to enable continuation of our CLP control treatment program. I am happy to inform you that we have received a very positive response.

Here are some of the statistics so far:

- * 98 property owners - number that made a CLP donation as of 12/31/15
- * 123 property owners - number that made a CLP donation as of 01/20/16
- * 59 property owners - number that contributed the \$175 suggested in the mailing
- * 27 property owners - number that contributed more than the \$175 suggested
- * \$5 - \$500 - range of contributions
- * \$19,382 - total contributions as of 01/20/16

We're on sound footing going into the 2016 CLP treatment season, but our existing CLP reserves will only last another year or so and grant money from the DNR for treatment of CLP has been drastically reduced. However, with your generous support we are already over half way to raising enough to pay for one year's future treatment of the entire acreage allowed us by the DNR. It is very comforting to know that so many of you are as concerned about our lake quality as the CLA Board of Directors.

Thanks again for your on-going support. I will keep you posted on our progress.

Editor's note: All donations thus far have come from CLA members. It would be heartening to see non CLA members contributing to this cause, too. We all benefit from CLP control.

CLA Treasurer's 2015 Year End Report

by Charlie Boudrye

Cullen Lakes Water Quality Report

by Ann Beaver, Water Quality Committee chair

As of December 31, 2015 we had the following balances in our accounts.

Cash and Bank Accounts

Operating Checking Account	\$ 4,391.32
Project Savings Account	\$20,645.85
Operating Savings Account	<u>\$ 2,457.11</u>
Sub Total	\$27,494.28

Certificates of Deposit

CD - 403520 (1/26/14)	\$15,000.00
CLP - 403787 (4/23/14)	<u>\$60,000.00</u>
Sub Total	\$75,000.00

Total \$102,494.28

The total amount is a decrease of \$1,369.04 from last year due to higher costs for CLP treatment.

In the near future our projects will be focused on CLP and other invasive species control. The income accounts display the money received for CLP control, DNR grants, and revenue from sale of merchandise, member dues and other donations.

The pro-forma revenues and expenses are summarized below. Total income was less than expenses. The difference was covered by converting some CDs to cash.

Income

CLP Donations	\$22,953
DNR Grant	\$ 9,100
Support Donations	\$ 2,643
Merchandise Sales	\$ 373
Member Dues	\$ 9,194
CD Interest	\$ 13
Interest Income	<u>\$ 3</u>
Total Income	\$44,279

Expenses

Organization Memberships	\$ 100
Soteroplos Scholarship	\$ 250
Annual Meeting	\$ 337
Water Quality Committee	\$ 630
Merchandise Costs	\$ 224
Education Committee	\$ 2,189
Invasive Species Control	
Services — Clarke Aquatic	\$40,166
Membership Committee	\$ 432
Miscellaneous	\$ 488
Directors & Officers Insurance	<u>\$ 950</u>
Total Expenses	\$45,766

Deficit **-\$1,487**

I am required by our Lake Management Plan to report the past year's water quality to you each winter and I'm always looking for a new angle to use in my report, as the results of the lake water testing vary little from year to year. We can be thankful for that, but it makes writing an interesting, informative report difficult unless you're into water chemistry.

So briefly, here is the water quality summary: All three lakes remain in what is called the **mesotrophic** range, which is normal for this ecoregion. This is largely due to the high level of development on the lakes' shorelines in this part of the state. The mesotrophic range means nutrient levels are high enough to cause temporary algae and aquatic plant problems during the warm weather season, but the lakes are still basically healthy ecosystems.

The three parameters we use to determine water quality — Secchi disk readings for water clarity, total phosphorus, and chlorophyll *a* — vary throughout the year and from year to year. This year, for my report to the CLA Board of Directors in October, I calculated the 10 year monthly average and range (May through September, 2005-2014) of each parameter and then compared the 2015 monthly results to those historic averages and ranges. The results showed that the 2015 results fell within the 10 year range of averages in all but a few cases. Out of 15 chlorophyll *a* results in 2015 two were worse than the historic range (one in Lower Cullen and one in Upper Cullen). Out of 15 total phosphorus results in 2015, two were better than the historic range (both in Middle Cullen). And out of 15 Secchi disk readings in 2015, two were better than the historic range (both in Upper Cullen).

There are no discernible trends in all this data other than the lakes are holding their own, with slight monthly variations through the years. **Let's do whatever we can on our shorelines to ensure this continues.**

Currents On the Cullens

New owners

David & Kimberly Ellingson, Lower Cullen (L11)
Andrew & Erin Hunter, Middle Cullen (M125)
Jeffrey Lazar, Middle Cullen (M9)
Mark & Amy Morrow, Middle Cullen (M86)

Deaths

Jerry Johnson, Lower Cullen (L110)

CLA Membership

by Charlie Boudrye, Membership Committee chair

We closed the year 2015 with 255 members. Of these, 13 were complimentary members (new lake property owners), 17 were associate members (former property owners, family members of property owners, or owners of property in the Cullen Lakes watershed) and 225 were Cullen Lakes property owners. There are 52 lake property owners who do not belong to the lake association.

Membership letters were mailed in late November/early December. If you haven't already done so, please take the time now to write your check, make any corrections needed to your personal data on the membership form, and mail them to CLA, PO Box 466, Nisswa, MN 56468.

If you have misplaced the form you received, you may use the form at the bottom of this page.



SWCD Annual Tree and Plant Sale

The Crow Wing County Soil and Water Conservation District (SWCD) is selling low cost Minnesota grown native tree seedling, flowers, grasses, seed mixes, and also tree cages. Orders will be accepted through the end of February. Visit the SWCD web site —www.crowwingswcd.org — to view the selection available this year and ordering details. Tree and plant pick up will be May 5-7 at the Northland Arboretum in Brainerd.

SWCD is hosting an open house Friday, February 5 from 9 a.m. to 3 p.m. in the downstairs meeting room of the Land Services Building in Brainerd. Play plant “stump the chump” with local experts and master gardeners, get help and money for your spring projects (grants may be available), and enjoy free coffee, treats, and door prizes.

Name(s) _____

Mailing address _____

Phone _____ Email _____

Please check one:

Current owner/co-owner of a Cullen Lakes shoreland property
co-owner's name: _____

Family member of a current Cullen Lakes shoreland property owner
Owner's name: _____

Previous owner of a Cullen Lakes shoreline property

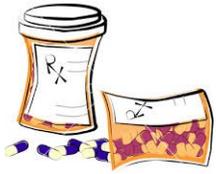
Owner of real property within the Cullen Lakes watershed

2016 Dues \$ 25

Curly-Leaf Pondweed
treatment donation \$ _____

Program Support donation . . . \$ _____

Total enclosed \$ _____



New “Bring it to the Box” Medication Disposal Site in Pequot Lakes Brings Area Total to Five

Help protect area surface and ground water from contamination by pharmaceuticals. It’s easy to do!

There now are five free medication disposal sites available in Crow Wing County. Crow Wing County is serious about preventing the abuse or misuse of old or unneeded medications. To ensure that these medications can be disposed of in a healthy and environmentally safe manner, free disposal sites have been offered since 2012. The disposal boxes at each site accept unneeded over-the-counter, prescription, and narcotic medications from community members.

Disposal sites are located at:

Nisswa City Hall

5442 City Hall St.
Nisswa, MN 56468

Hours: Monday-Friday, 8:30am-4:30 pm

Contact: Chief Craig Taylor
218-963-444

Pequot Lakes City Hall

4638 County Road 11
Pequot Lakes, MN 56472

Hours: Monday-Friday, 8am- 4pm

Contact: Police Chief Eric Klang
218-568-8111

City of Breezy Point Police Department

8361 County Road 11
Breezy Point, MN 56472

Hours: Monday-Friday, 8am-3:30pm

Contact: Chief Kevin Merschman
218-562-4488

Crow Wing County Sheriff’s Office

304 Laurel Street
Brainerd, MN 56401

Hours: Monday-Friday, 8am-5pm

Contact: Lieutenant Joseph Meyer
218-825-3417

City of Crosby Police Department

22nd St. SW
Crosby, MN 56441

Hours: Monday-Friday, 9am-5pm

Contact: Chief Kim Coughlin
218-546-5137

Highway 371 from Nisswa to Jenkins: 2016-2017 Construction

The final contract to build the new segment of Hwy. 371 between Nisswa and Jenkins has been awarded and the final design and construction can begin on the nine-mile, four-lane expansion of Hwy. 371 between Nisswa and Jenkins. Design and field work began with soil boring and testing in December.

The first major construction activity will begin in January when crews clear trees for the new roadway. All lanes of the new segment of Hwy. 371 are scheduled to open in fall 2017.

The project will:

- Expand Hwy. 371 to four lanes between Nisswa and Jenkins.
- Create a new Pequot Lakes Gateway that provides safe and easy access to the city with a new interchange at County Road 11, and road connections into Pequot Lakes at County Road 168/107 and County Road 112.
- Install a new box culvert bridge spanning Cullen Brook.
- Realign and improve access to the Paul Bunyan Trail.
- Keep Hwy. 371 open to two lanes of traffic throughout construction.
- Make improvements to the local road systems in Pequot Lakes and Jenkins.

For more information, visit mndot.gov/d3/hwy371/.

Paul Bunyan State Trail to Remain Open During Highway 371 Realignment

The Paul Bunyan Trail between Nisswa and Jenkins will remain open during the Hwy. 371 realignment project, but trail users should be cautious near construction activity and check trail conditions before traveling.

Construction Crews will begin removing brush and trees at the end of January. Work near the trail is expected to last through the fall of 2016. No closures of the trail are expected this winter, but snowmobile trail users could encounter crews working near the trail and are asked to watch for activity and proceed cautiously.

To allow for highway realignment, a new section of the trail will be constructed this summer and will become a permanent reroute. The trail alignment will be changed with minimal disruption to users.

Visit www.mndnr.gov/state_trails/paul_bunyan/index.html for construction updates and trail conditions.

from the
DNR Question of the Week



Q: Not every bird species migrates from Minnesota to warmer climates down south before winter sets in - some stay behind. Is there anything that can be done to help these brave birds survive winter?

A: An easy plan for winter bird feeding is to provide three main choices of food – large seeds, small seeds, and suet. Black-oil sunflower seeds and cardinal mixes have the greatest appeal to the broadest variety of winter birds and contain a high-energy content.

Water is a critical ingredient of a winter-feeding program. There are excellent birdbaths with heating elements and thermostats available from bird feeding supply stores. The heated water is primarily for drinking. Don't worry about birds freezing if they bathe on a cold winter day because native song birds seem smart enough not to bathe when the wind chill is 40 below.

- Carrol Henderson, DNR nongame wildlife program supervisor

Q: Do I still need an open burning permit for my brush pile even though it is winter?

A: The snow and cold of a Minnesota winter generally make this time of the year a better and safer time to burn brush piles. When there is less than three inches of snow cover, open burning permits are required by law. In communities that regulate open burning, permits are generally required year-round regardless of the weather conditions.

Property owners should contact local DNR Forestry offices to ask about the need for a permit before burning any brush pile. For more information about burning permits, go to www.mndnr.gov/forestry/fire/questions.html.

- Steve Simmer, DNR fire administrative supervisor

Q: Why does the fur coat of a deer change colors depending on the time of year – a reddish color in the spring and brown in the fall?



A: The deer's coat is designed to provide both a means for thermoregulation and camouflage. Summer coats appear reddish and are thin, allowing deer to better cope with heat stress.

In the fall, deer begin a process of molting, which is triggered by hormonal changes that reflect the changing seasons. The reddish summer coat turns into a faded gray or brown color as the new winter coat begins to grow. The new coat is comprised of two layers. The outer guard hairs are hollow, stiff and grow about 2 inches longer than the undercoat. The inner layer is soft and dense which insulates deer from the cold weather and snow. Coat color, regardless of the season, tends to be darker in forested areas and lighter in agricultural areas where deer are exposed to more direct sunlight.

- Michelle Carstensen, wildlife health program supervisor

When and How Do Lakes Freeze Over?
by Moriya Rufer, RMB Environmental Laboratories

As you all know, water freezes at 32 degrees Fahrenheit. That doesn't mean, however, when the air temp reaches 32 the lakes freeze. Water is a great insulator and good at holding heat, which is why the lake temperature doesn't fluctuate much day to day like the air does. Therefore, below freezing temperatures are needed for a week or more to form ice on a large lake.

Water is a unique substance in that the solid form (ice) is lighter than the liquid form (water). For most substances, the solid form is heavier. Our lives would be much different if ice sank instead of floated. If ice sank, lakes would freeze from the bottom up and the fish and other aquatic creatures wouldn't survive the winter!

Since water is good at holding heat, the more water there is, the more heat it will hold. This is why large deep lakes take longer to freeze and melt than small shallow lakes.

Water freezes from the perimeter of the lake to the center. It happens this way because the water is shallower at the lake's edge so it cools off faster. Water is most dense at 39 degrees Fahrenheit, so when it gets colder than that, the cold, lighter water floats on top of the lake. This top layer of water interfaces with the cold air, which cools the top of the lake even further until it freezes. Windy days cool the lake surface off faster because the cold air moving over the water cools the lake faster.

Since ice-in does not occur in one day like ice-out usually does, it is hard to keep accurate records. The ice can form around the edge of the lake, and then a warm sunny day can come along and melt it again. There are historical records for many lakes in Minnesota held by local agencies. Its also a fun thing to keep track of yourself.

Editor's note: This year ice-in for Upper Cullen was December 19, for Middle Cullen it was December 20, and Lower Cullen held off until December 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 2015-2016

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