This last summer we enjoyed the fruits of our efforts from our 2016 treatment for hybridized Eurasian WaterMilfoil (EWM). More of the details of this treatment are elsewhere in this newsletter. But, as all of you who have been on the lake know, there is virtually no EWM present. Therefore, we did not have a need to do even small spot treatments in 2017.

The success of this treatment is attributable to our close working relationship with the MNDNR, CCWD, the cities of Andover and Coon Rapids, and Anoka County Park and Rec Dept. Special thanks go to Keegan Lund and his associate, Kylie Cattoor, of the DNR, as well as the collaborative efforts of Freshwater Scientific Services, and PLM Lake and Land Management. They were instrumental in the permitting and determination of treatment process.

That treatment was very expensive, but we were so fortunate to receive a MNDNR AIS grant as well as two Anoka County AIS grants. Couple those with the continuing support of Andover and Coon Rapids, and CLAA was well able to handle its share.

Part of that 2016 treatment plan entailed working to promote native plant growth within the lake. To that end we worked with CCWD, MNDNR, and Freshwater Scientific in transplanting other native plants to Crooked Lake this summer. Please see related article.

Our survey reports indicated a resurgence of another AIS plant – Curlyleaf Pondweed. We did do a small treatment in the north bay in May, knowing this plant is best treated in early spring. It will be a focus of ours in Spring 2018.

Thank you to all for your continued support of CLAA. We are a 501(c)3 tax exempt non-profit corporation. So, all of your dues and donations are tax deductible. Please consider us in your philanthropy. We have a never ending battle to try to manage and contain invasive species in our lake.

Hope to see you at our Winter General Meeting on Thursday, February 15, 2018, 6:30 pm at Crooked Lake Elementary School.

We apologize for selling out of our fabulous CLAA T-shirts at the summer picnic! We have since re-stocked. 

If you would like to purchase a T-shirt, please contact Dan at 763-807-5848.

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Hybridized EWM 2016 Treatment Results

The details of this 2016 treatment plan were presented at last year's Winter General Meeting, but to briefly restate:

This was an 'experimental' treatment using granular Fluridone in a low dose concentration, maintained all summer long by an initial application, followed by two successive 'bump' applications, approximately 5-6 weeks apart. The treated areas were 10 locations totaling approximately 25 acres. With a granular product and wind and wave action, the effect of the spot/location treatment was that of a 'whole lake' treatment!!

Preliminary assessments by the DNR, Freshwater (surveyor), and PLM (applicator) in the Fall of 2016 indicated a very successful outcome. However, all advised that the final results would not be known until 2017.

On June 23, 2017, James Johnson (Freshwater) said in an email: “I completed the EWM survey last week and found NO Eurasian Watermilfoil! Keegan (DNR) said that he had found one plant earlier this year, so I plan to get the GPS location for that point from Keegan and then collect more rake samples...Needless to say, the EWM map in your 2017 delineation report will be very boring, but the findings are very exciting.”

In a subsequent July 26, 2017, email James reported: “For the EWM delineation maps, I added the locations where the DNR found an EWM fragment and where we found EWM during the native transplantings. These locations only had solitary plants – pretty amazing results considering the lake was full of EWM last year!”

And in James' formal EWM report: “...Other than these two locations, we observed no additional EWM plants in Crooked Lake. These results are remarkable and strongly suggests that the experimental granular sonar (Fluridone) treatment conducted in 2016 effectively controlled EWM lake-wide.”

And, as all of you know, the lake was a pleasure to be on this year! Looking forward, our hope is that we can keep the EWM in check with small spot treatments. We will never be rid of it – just hoping to control it below nuisance levels.

2017 Native Transplanting Project

One of the requirements of our 2016 EWM treatment plan was to promote the re-establishment and propagation of more native plant species to Crooked Lake. This was attempted by transplanting native plants not currently growing in Crooked Lake from another lake not infested with any invasive plant species. Typically, a lake like ours would have about 20 different species of native plants. Crooked Lake only has 12 in 2017 (up from 10 a couple years ago).

Our donor lake was Lake Norris in Anoka County. Five plant species were harvested from Norris via snorkeling and transplanted into Crooked Lake on June 29, 2017. The transplanting technique was to secure them to holes in burlap mats which were then sunk and weighted down and surrounded by wire mesh fencing. Six sites around the lake hosted these transplantings – Thank you to volunteer hosts! (And, a special thank you to the MNDNR, CCWD, and Crooked Lake volunteers, as well as James Johnson!)

The aim is for these plants to propagate and establish themselves such that they out-compete EWM in our lake. They are beneficial plants that will not be a nuisance like EWM. Preliminary results from September indicate that survival rates were high (>70%) for 3 of the 5 new species.
The water quality of Crooked Lake has been monitored since the 1980s and has been continually improving. According to the Metropolitan Council’s Lake Grading System, Crooked Lake ranks well above average when compared to other metro lakes. This year, Crooked Lake earned a "B+" on the A-F scale.

Lake grades are based on average summertime measurements of phosphorus, chlorophyll-a, and Secchi depth. These parameters provide information on the amount of nutrients, abundance of algae, and water clarity, respectively. It is important to note that although lake grades give a general picture of the health of a lake, there are many other important factors to consider such as aquatic plant and fish communities!

Water clarity in Crooked Lake has improved substantially over the past 40 years. The average clarity has increased from 4 ft (1975 to 1990) to roughly 8 ft. The CCWD will continue to monitor the water quality of Crooked Lake on a rotating schedule, 2 out of every 3 years.

The clarity of Crooked Lake from 1975 through 2017. The blue circles indicate the average clarity from May-Sept and vertical lines represent the minimum and maximum range of observations each year.

The CCWD and cities of Andover and Coon Rapids work together to improve the stormwater system that drains to Crooked Lake. Still, we need your help. Keep the runoff from your property as clean as possible!

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**CLAA SEeks Company Dollars**

Crooked Lake Area Association (CLAA) is a non-profit organization. Perhaps your company has a gift program. Please consider applying to company sponsors for CLAA. Thank you.
Zebra Mussel Monitoring
By Justine Dauphinais, Coon Creek Watershed District (CCWD)

Invasive zebra mussels are rapidly spreading throughout MN, largely due to people moving contaminated boats, docks, & lifts. Roughly 150 have been infested statewide, including lakes in 6 of the 7 counties that border Anoka County.

In April of 2017, CCWD and Anoka County Parks launched a county-wide zebra mussel monitoring program. The goal of this program is to detect any new infestations as early as possible to increase the feasibility of control. To date, no zebra mussels have been found in any Anoka County lake. Thank you to all of the volunteer spotters including 9 Crooked Lake residents!

Please check your equipment for zebra mussels when you remove it at the end of the season and report any suspicious findings!

Contact Justine Dauphinais, CCWD Water Quality Coordinator, for more information: JDauphinais@cooncreekwd.org; 763-755-0975
Recognizing Cheryl Seeman

The Anoka Conservation District (ACD) would like to recognize Cheryl Seeman’s conservation efforts. ACD has nominated Cheryl Seeman for the Minnesota’s Community Conservationist Award which is sponsored by the Minnesota Pollution Control Agency and Minnesota Association of Soil and Water Conservation Districts. We at ACD are grateful for her passion for clean water and pollinator habitat and her conservation work with the Anoka County Master Gardener Program, Andover Pollinator Project working group, Springbrook Nature Center’s Environmental Fun Fair and many other projects that benefit pollinators and clean water. The ACD Supervisors will present Cheryl with a Community Conservationist Award in the near future.

Summer Meeting and Picnic 2017

About 10 boats participated mostly decorated in traditional 4th of July. Many lakeshore homeowners watched from their swimming pools, lawns and docks.

2017 boat parade winner was Dave & Lisa Beckermann’s family with the Ice Cream wagon!
Welcome and Introductions:

Program
- Meet and greet and Open Mic
- Brief treatment history – and current info on Andover and Coon Rapids help
- Historical Water Quality, AIS treatment efforts, native plants - (J. Dauphinais) CCWD
- Survey Reports, 2016 treatment, transplanting, prospective 2018 treatment

Business meeting:
New business / Old business / Elections

Watercraft Inspection
By Jessica Abarca, Aquatic Invasive Species Coordinator

Anoka County Parks had watercraft inspectors again in 2017. The 4 inspectors who worked at Crooked Lake Boat Launch worked 729 hours while educating boaters about the risks of aquatic invasive species (AIS) and conducting 1,515 boat inspections. It is great seeing a big decrease in violation rates over the years, and hopefully, they will continue to fall. It is looking very good for the future with attitudes about AIS changing, and more people checking their boats to stop the spread.

Anoka County is considering continuing the watercraft inspection program next year in 2018. Make sure to stop by and introduce yourself when you see them at the boat launch.

<table>
<thead>
<tr>
<th>Year</th>
<th>Inspections</th>
<th>Hours</th>
<th>Boat Plug Violation Rates</th>
<th>Plant Violation Rates</th>
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<tbody>
<tr>
<td>2015</td>
<td>533</td>
<td>288</td>
<td>11.6%</td>
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<tr>
<td>2016</td>
<td>956</td>
<td>519</td>
<td>7.2%</td>
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<td>1,515</td>
<td>729</td>
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Winter General Meeting

Date: Thursday, February 15, 2018
Time: 7:00-8:30 pm
Social starts at 6:30 pm
Crooked Lake Elementary School Cafeteria

Welcome and Introductions:

Program
- Meet and greet and Open Mic
- Brief treatment history – and current info on Andover and Coon Rapids help
- Historical Water Quality, AIS treatment efforts, native plants - (J. Dauphinais) CCWD
- Survey Reports, 2016 treatment, transplanting, prospective 2018 treatment

Business meeting:
New business / Old business / Elections

KORU fitness
On the corner of St. Francis and Bunker Lake Blvd.
14007 St. Francis Blvd.
Ramsey, MN 55303
info@korufitnessmn.com | (763) 432-6501

Nice difference

Christian Brothers Automotive
6441-140th Court NW, Ramsey, MN 55303
phone 763-323-8717 • fax 763-323-8704
tassociates.com

TJ Associates
Advanced Graphic Solutions
6441-140th Court NW, Ramsey, MN 55303
phone 763-323-8717 • fax 763-323-8704
tjassociates.com
Crooked Lake Park Renovation  By Joel Friday, Coon Rapids Watchdog

Starting spring 2018, Crooked Lake Park will be renovated. The plan is to have many of the current amenities remain in similar positions, like the playground, tennis courts, pavilions and fishing pier. Parking is planned to be consolidated to one lot in the NE corner of the park. There will be 2 shelters that will hold 6 picnic tables each, which accommodates more groups rather than one massive group. Both will have power and a grill. The park will also feature restroom facilities. Scheduled completion will be fall 2018 with some areas needing a little longer for grass to establish properly.

The Beach area will get a modest update with a new fishing pier and plantings to assist with infiltration into the lake from the park. There is no intention to open and supervise the beach and it will remain a swim at own risk amenity.

The Park is in final design and will go to Council for review before bidding the project this winter.

Crooked Lake Park will be under construction for most of 2018 with a final product to provide updated layout, amenities, and trail circulation. It will remain the premier gathering location on the lake and the best sunsets in the area.

See page 203 of http://agendaquick.coonrapidsmn.gov/docs/2017/CCReg/20170620_902/AGENDApacket__06-20-17_1325_901.pdf
Hope to see you at the Winter General Meeting at Crooked Lake Elementary School — Feb. 15, 7:00 pm, Social 6:30 pm

The mission of the Crooked Lake Area Association is to act as an advocate of the lake and to establish and promote a strong sense of community among the residents on and around Crooked Lake.

**From the Treasurer’s Desk**  *by Paul Martin, Treasurer*

The membership suggested donation amount to the lake association is $35 per year. You can donate anytime from January 1 — December 31st. We are a 501(c)3 corporation which means that all money donated by you is tax deductible. If you have not sent in your donation for this year (since January 1, 2017), now is a great time to do so!

If you are not sure if you have made a donation for 2017, send me an email paulmartin@comcast.net, or call 651-755-4656 and I will look it up.

**Volunteer Appreciation Night Out**

If you volunteered in 2017 to help out for an Event you will be receiving an invite soon for our Night out at the Pizza Ranch in Andover, on December 3rd, at 4:00 PM.

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**List of Officers and Phone Numbers:**

- **President & Vice President**
  - Gary Nereson: 763-422-0682 (President)
  - 612-961-0358 (Cell)
  - Angel Prom: 763-244-0378 (Vice-President)

- **Treasurer**
  - Paul Martin: 763-427-5305

- **Quadrant Leaders — NE & SW**
  - Patti Friday: 763-355-2953 (Quadrant Leader – SW)
  - Amy Mulvihill: 651-238-5359 (Quadrant Leader – NE)

- **Quadrant Leaders — SE & NW**
  - Jerry Piche: 612-719-1199 (Quadrant Leader – SE)
  - Duane Ullrich: 763-229-3344 (Quadrant Leader – NW)

- **Andover City Council Watchdog**
  - Dan Anderson: 763-807-5848

- **Andover Watchdog**
  - Julie Jared: 763-229-7848

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**2018 MEMBERSHIP APPLICATION FORM**

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Please include your
- Lake Owner Annual donation of $35.00 or
- Lake Watershed Annual Membership donation of $20.00

Make check payable to: **CLAA**
Send to: **Paul Martin**
926 129th Ave NW
Coon Rapids, MN 55448