

Clearwater Lake Conservancy Annual Meeting

June 15, 2021

Agenda



- Welcome
- Clearwater Camp Update
- Budget Review
- Lake Management Initiatives
 - 2020 Review
 - Milfoil treatment recap: Amy Kay, Clarke Aquatic Services
 - Reports – milfoil, rusty crayfish, fishery, loons
 - 2021 Plan
- Social Activities
- Lake Area News
- Sharing Other Lake Activities
 - Questions - Communication
- Adjourn

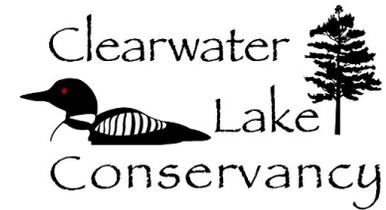
Board Members - Volunteer



- Gary Perkins, Co-Chair
- Paul Bergren, Co-Chair
- Barb Schmitz, Treasurer and Secretary
- Lance Baumann
- Ron Green, Lake Management Committee
- Katie Johnson
- Charles Lick, Lake Management Committee Chair
- Kathy Peterson

Accepting new members!
Please reach out to any of us; we'd love to have you help

Additional Volunteers



- Loon Nesting – Jeff Zernov and family
- Rock Pile Buoys – Francisco Gonzales and Mike Dufour
- Secchi disk readings – Julie Guth, XXX???
- Creek and culvert clearing – Mike and Maggie Lick, XXX???
- Other activities I'm missing?

T-H-A-N-K Y-O-U !!!

Clearwater Forest Update



- Lance Baumann
- Doug Snaza
- Jon Kirschhoffer

- Capital Campaign and Video

Treasurer's Report

as of May 25, 2021



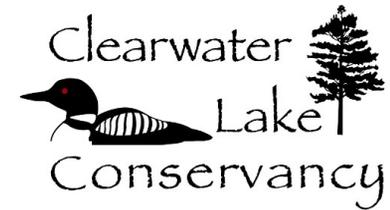
	CLEARWATER LAKE CONSERVANCY, INC.	TREASURER'S REPORT 5/22/21
Beginning Balance	Deposits	Expenses
\$44,306.02	\$12,289.18 (Homeowners Donations) \$ 3,000.00 (Crow Wing County Grant) \$ 3,000.00 (State of MN Grant) \$.20 (Interest)	\$25.00 (DQ Gift Card for Boat Parade) \$78.00 (MN Attorney General – Name Change, Annual Filing Fee) \$85.31 (Crayfish Traps) \$1,350.00 (Freshwater Scientific Services – EWM Survey) \$350.00 (Freshwater Scientific Services – Board report) \$36,142.99 (Clarke Aquatic Services – EWM Treatment) \$90.00 (Website Domain Registry Two Year Renewal) \$1,036.80 (Beaver Control) \$80.49 (Zoom Account)
Total	\$18,289.38	\$39,238.59
Ending Balance		
\$23,356.81		
<i>Reference 2020</i>	<i>\$18,150.00 (H/O Donations=\$14,150.00; Grant=\$4,000.00)</i>	<i>\$27,682.32</i>
<i>Reference 2019</i>	<i>\$17,630.00 (H/O Donations=\$15,630.00; Grant=\$2,000.00)</i>	<i>\$6,443.80</i>
<i>Reference 2018</i>	<i>\$19,150.00 (H/O Donations=\$19,150.00; Grant=\$5,000.00)</i>	<i>\$22,148.46</i>

Annual Association Dues: \$50

Recommended environmental contribution: \$350

Send check or now use Paypal – add our account name?

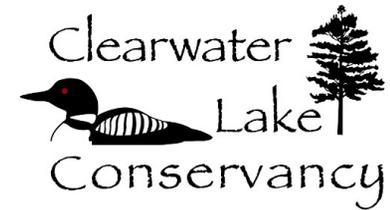
Lake Management Plan



On-Going Goals

1. Protect and improve fish and wildlife habitat
2. Minimize impact of aquatic invasive species (AIS) – coexist until eradicate
3. Protect and preserve native aquatic vegetation
4. Ensure lake water quality is adequate for recreation, fishing, and wildlife

2020 Lake Initiatives Review



- Key Lake Concerns
 - Invasives: milfoil and rusty crayfish
 - Loss of native vegetation/plants – what is causing? milfoil chemical 2-4-D? Crayfish? Natural causes? Other?
 - Reduction of fish populations
- Consulted with James Johnson of Freshwater Scientific Services, LLC and Amy Kay of Clarke Aquatics
- Met with Dr. Gretchen Hanson and James Larkin from U of M

Lake Health Calendar



Action Item	Purpose	Frequency	Timing	Owner	Cost
Nokasippi River Headwaters Management	Keep outbound water flowing by monitoring and removing any impediments (boggs, beaver dams and trapping)	Monthly	April - Oct	Lake volunteer	\$500
Loon Nesting	Provide safe habitat for loons	Annual	April - June	Lake volunteer	\$0
Secchi depth readings	Record water clarity / depth	Annual	July	Lake volunteer	\$0
Water Quality	3rd party lab testing; chemical composition and temperature readings; assess issues; trend analysis	5 years, 2011, 2016, 2021		RMB Labs, Brainerd	\$500
Fisheries Catch Summary	Trend analysis	2019		DNR	\$0
Aquatic Vegetation	Aquatic plant mapping	10 years; 1995, 2015		DNR	\$0
	Identify aquatic plants, % frequency and distribution throughout lake. Establish baseline	2018, 2021	Aug/Sept	RMB Labs, Brainerd	\$2,500
Invasives/Milfoil Survey	Identify extend of invasive vegetation	Annual until extinsion	July	Freshwater Scintic	\$1,450
Invasive Vegetation Treatment	Treat invasive vegetation	Annual or selective (when needed)	Sept/Oct		\$20-40k based on treatment area
Shore Survey	Lakeshore habitat identifying sensitive lakeshore and shoreland	2011, 2015		DNR	\$0
	Shoreline erosion; lake nutrient levels; septic leakage	2009, 5 years?	Winter	TBD	TBD

Lake Water Levels



- High due to beaver dams
- Relocated beavers
- Removed debris

Thank you
Mike and
Maggie Lick!

Rusty Crayfish



Problem:

When Rusty Crayfish reach high densities, their voracious foraging drastically reduces aquatic plant populations. The loss of plant cover leads to declines in aquatic invertebrates and panfish. Seemed less of an issue last year vs previous.

What We Can Do:

- **Trapping:** Kathy Peterson has extra traps
- **Predator Species:** Pursued slot limits and/or catch-and-release with the DNR – not successful
- **MAISRC MN Aquatic Invasive Species Research Center:** Accepting proposals for research projects. Dr. Hansen and Jake Walsh from DNR agreed to assist with drafting proposal. Dr Hansen on sabbatical spring 2022 so will be revisiting.

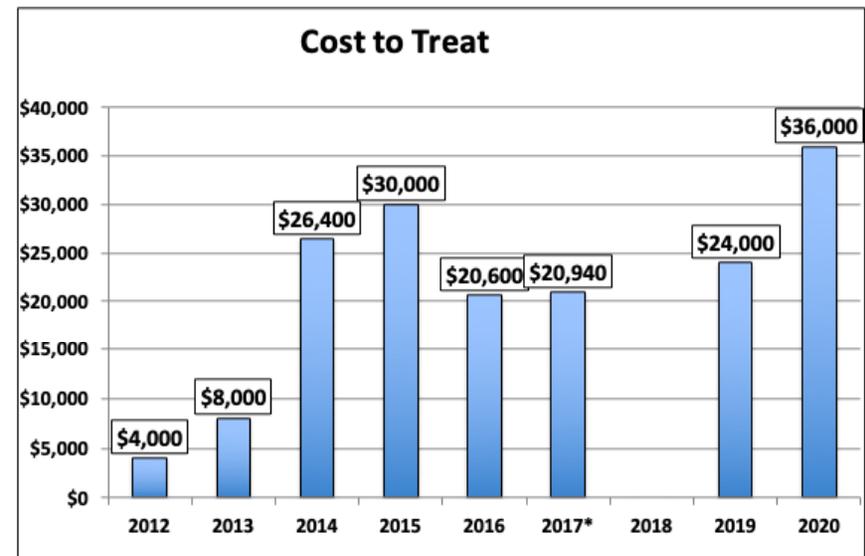
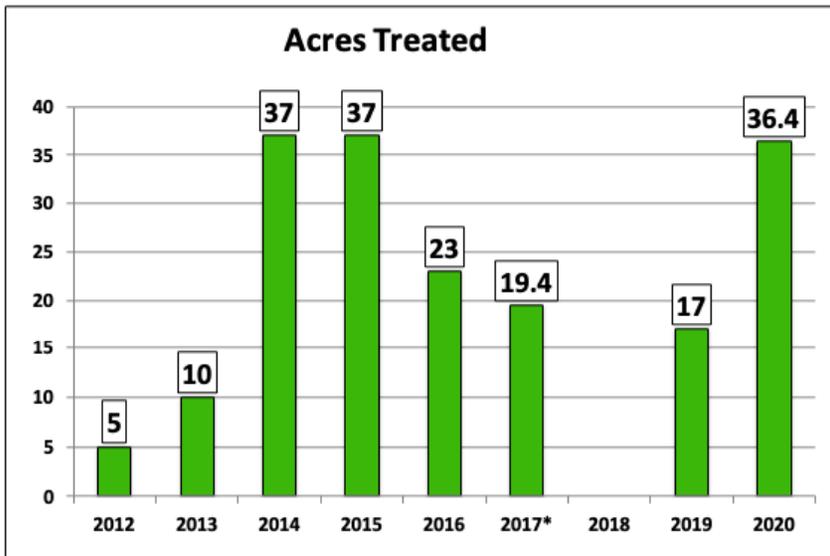
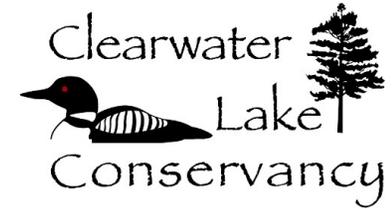
Milfoil Treatment



Placeholder

Amy - Clarke Aquatics slides

Milfoil Historical Recap



2020 Recap

Treated: 36.4 acres

Cost: \$36,000

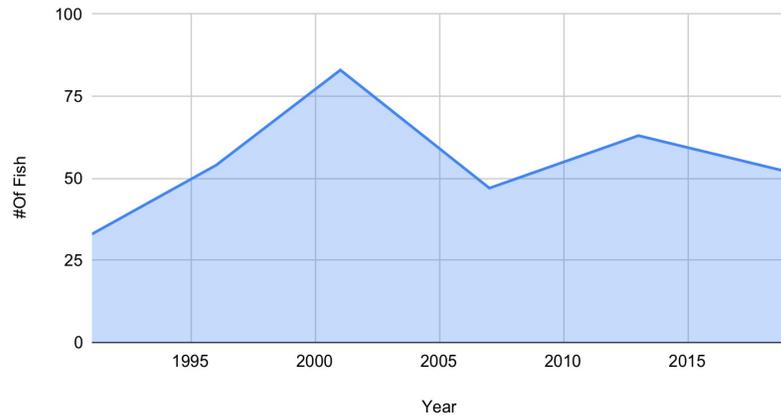
Grants: \$6,000

- Crow Wing County - \$3000
- MN DNR - \$3,000

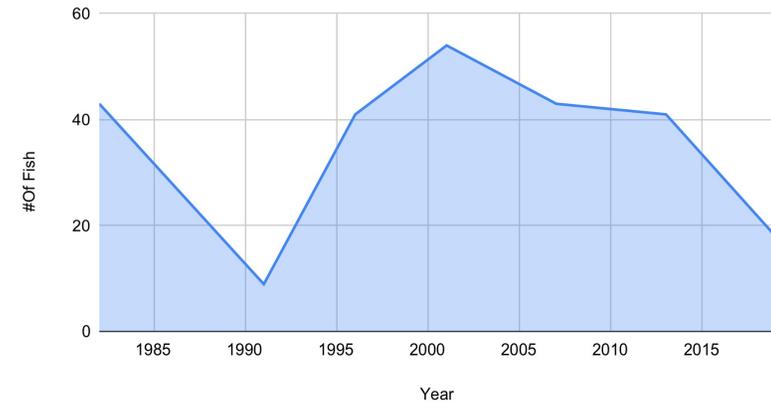
Fishery Reports



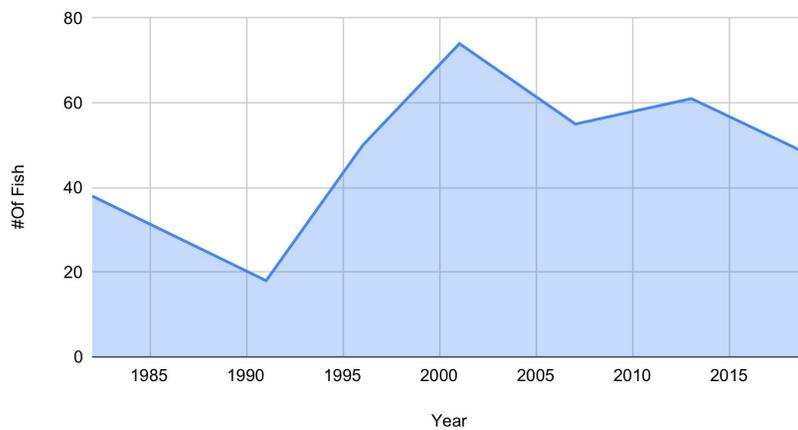
Walleyes



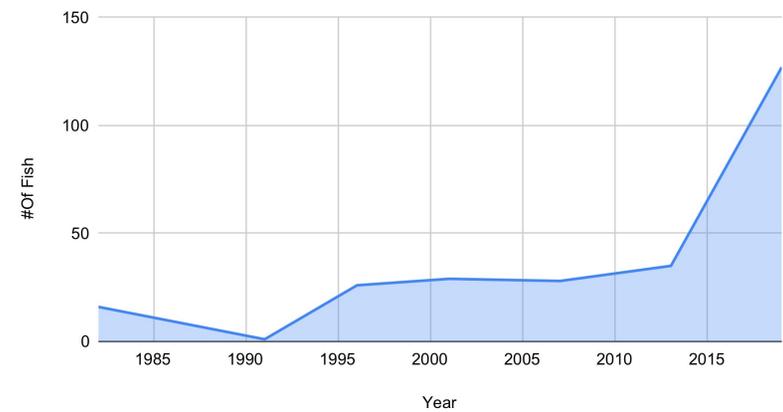
Large Mouth Bass



Northerns



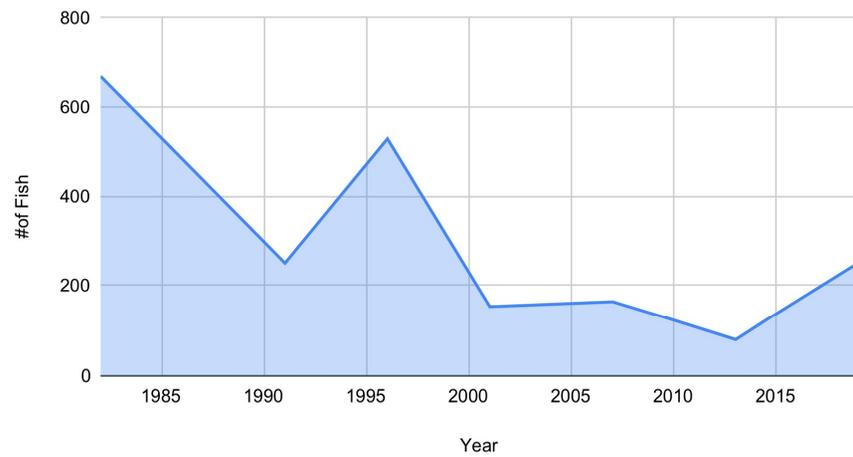
Small Mouth Bass



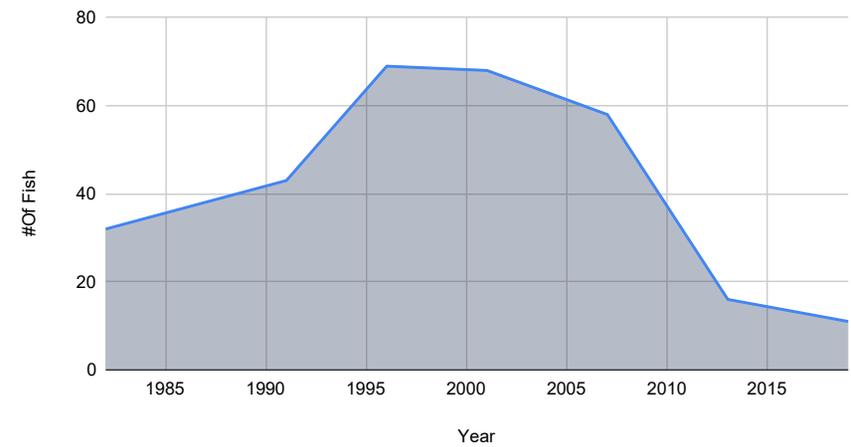
Fishery Reports



Sunfish



Crappies



Loon Report

June 2 update:

- 9 nests occupied
- 11 chicks hatched
- 8 were swimming



Area Lake News



Comments shared with Rick Swanson, lake homeowner and new County Watercraft Inspector:

- Bay Lake: zebra mussels much worse this year
- Crooked Lake: milfoil issues - using divers to manually pull and chemicals for treatment
- S. Long Lake: now has zebra mussels
- Lake Hubert: has zebra mussels; one of about 10 lakes that have reduced the limit on crappies and sunfish by half and all bass over 12" are catch-and-release
- Clearwater: seeing a lot of lake hoppers - especially bass boats who found Mille Lacs too rough recently. Lot of 20' boats struggling with the landing.

Area Lake News



Crow Wing County, Land Services Department

Encouraging lakes to have positive impact on the watershed areas they belong to. Lots of resources and lots of success stories – www.crowing.us

Two examples:

Serpent (2019 Lakeland PBS story):

<https://lptv.org/serpent-lake-has-its-clearest-water-since-1991/>

Lake Ada

<https://www.crowing.us/DocumentCenter/View/18051/Ada-Lake-Plan?bidId=>

Lake Social Activities



Annual Boat Parade

Sunday, July 4

1:00 meet at Loon Point



Lake Community Garage Sale?

Two suggestions:

- A coordinated date for interested lake residents to have a garage sale at their residence with Clearwater Lake Conservancy providing advertising and signage. You would keep all proceeds.

OR

- A group event where people can donate garage sale items, with lake resident volunteers setting up and manning the sale at one site. All proceeds allocated to a pre-determined cause like a donation to Clearwater Forest Camp or milfoil treatment.

Contact kathy@robertpeterson.org or leave message in Zoom chat right now.

If there is enough interest, we will work out the details for a sale this fall or next spring. Expressing interest does NOT commit you to participating in the sale.

Key Priority Actions for 2021



- Water quality survey
- Aquatic vegetation survey
- Milfoil survey - assess impact / effectiveness of new test chemical on milfoil
- Revisit discussions with DNR on fish limits / catch and release to help control rusty population, maintain/increase aquatic vegetation, and maintain/improve lake water quality.

Next Steps for All of Us



- Review section on What You Can Do to Help Protect and Preserve Clearwater Lake – good practical guidance



Property Owners – What You Can Do to Help Protect and Preserve Clearwater Lake

- Take active role in trapping rusty crawfish.
- Plant native grasses, wildflowers, shrubs and trees along shorelines and slopes. These provide good habitat for fish and wildlife but also act as a buffer that soaks up runoff carrying harmful nutrients into the lake from grass clippings, driveways and other organic matter.
- Install rain gardens, rain barrels, berms, or natural depressions.
- Don't burn brush or leaves on a slope where ashes can wash into the lake.
- Remove ash from any firepits and dispose of properly so none of it can wash into the lake after a rain storm.
- Regularly aerate your lawn to reduce soil compaction and improve water infiltration.
- Use non-phosphorous containing fertilizers and dishmachine detergents.
- Check your water softener to make sure system is not leaking.
- Maintain septic system and look for leaking system once every other year. If you are installing new or upgrading construction, consider installing holding tanks, composting toilets, gray water systems. Don't use a garbage disposal – could plug drainfields.
- Wash only full loads of dishes or clothes; use water-saving showers and toilets.
- Test your water. MN Dept of Health recommends annual testing for coliform bacteria, nitrates testing every other year, arsenic and lead testing at least once, and manganese testing before a baby drinks the water. As a private well owner, you are responsible for regularly testing your well water. Minnesota Department of Health (MDH) recommends:

Protect your health!
Test your well water for:



- Coliform Bacteria (Every year)
- Nitrate (Every other year)
- Arsenic (At least once)
- Lead (At least once)
- Manganese (Before a baby drinks the water)

Testing is even more important if young children drink the water.

<https://www.health.state.mn.us/communities/environment/water/wells/waterquality/tips.htm>

Purchase kits locally (A.W. Research Laboratories near the Brainerd airport has these for sale).

Conclusion



- Volunteer to be on the Board and / or a committee
- Questions collected during Conference Call
- Adjourn