

Minutes of the Lake Colby Association 8/13/21

We are thankful that we were able to meet in person at the Keet Shore house. We felt comfortable being in the open air of the screened in porch and some of us wore masks. Meeting began at 3:03, for our 24th year of the LCA. Minutes from 2020 were sent through a link provided by Lee. Input for changes and corrections were sought. Motion made to accept the minutes by Debbie Neill, seconded by Lee Keet. Minutes approved.

Attending:

Ann Greene, Board Member

Rod Greene

Lee Keet, Board Member, Treasurer

Glenn Keet

Max Keet

Nancy Keet, President

Dan Kelting, Executive Director, PSC ADK Watershed Institute Aaron Kramer, Interim CEO Adirondack Health

Melinda Little, Village Trustee

Ashley Milne, Harrietstown Council Board Member

Chris Neill

Debbie Neill, Secretary

Tracey Schrader, Harrietstown Council Board Member

Mike Setteducati

Laura Sigman

Rich Shapiro, Village Trustee

Via Phone Call:

Mark Epstein, Little Colby Pond

Jim Moore, Board Member, Little Colby Pond

Huda Scheidelman

Nancy thanked everyone for attending the meeting and was glad to see everyone doing well. Lee started by discussing the collected monies for eurasian water milfoil harvesting, which is in the bank account. State has frozen all payments. No grant money received, there is \$24,000 due us from DEC. No answer - hopefully state will pay that eventually. For our \$100,000 project state was going to put in \$50,000. Our dues collected were around \$3,500.

Lee thanked the town for being a supportive partner and explained to Ashley their role.

There was no EWM harvested this year.

Elections:

Our board for the Lake Colby Foundation, a 501c3, and our officers of the Lake Colby Association, a 501c4. It is necessary to have elections. The foundation allows us to accept tax deductible donations from contributors.

Board Election:

We have a position to be filled to replace Sylvia Getman; congratulations on her retirement and we thank her for her amazing work at ADK Health. Returning board members are Ann Greene, Lee Keet and Jim Moore; we thank them for their continued dedication to our association.

A motion was made to elect a new board member, Aaron Kramer kindly volunteered and the vote was unanimous to accept.

Officer Election:

Nancy Keet is kindly willing to continue as our President. The treasurer position needed to be filled since Lee Keet has stepped down from that position. We thank Lee for his incredible grant writing and dedication these many years to ensuring our finances. Huda Scheidelman kindly volunteered to become secretary. That created a good shift in positions for myself, Debbie Neill, to fill the treasurer position. Glenn made a motion to elect the president, secretary and treasurer which was seconded by Ann. Vote unanimously passed.

Finances:

Lee reviewed the finances. (See attached)

We are very thankful for the Harrietstown matching grant monies.

Road Escrow: Every 5-7 years we find the need to grade the road. The road could use some grading this year. Lee will contact Trudeau Sand & Gravel to schedule the work and will let us all know of the timing. All the culverts seem to be in good shape.

Water Quality:

Lee introduced Dan. We are very thankful to have Dan helping us for 19 years now, as he has been very instrumental in determining what we need to do for our lake. Lake Colby is a very productive lake, nutrient rich and fragments can easily take root. Constant battle to stay even. \$20,000 per year for our little group is hard. Dan has some new potential solutions for our lake.

Dan began by explaining the boat steward program which everyone is excited about across our Adirondack Lakes and how it has been an immense help in monitoring lake usage. As far as Eurasian Water Milfoil, there were no teams in Lake Colby harvesting EWM - no one to hire. This might have been a "Happy Accident" since he felt there was not a large expansion of EWM growth, upon a visual survey of the lake. Recap from last summer of 2019 - diver hand harvesting which was intensive work.

Measured 370 bags w/800 hours of work, fast growth in July, larger plants. Lots of sun and warmth recipe for rapid growth of plants. Started in North Bay and moved to West bay. He would predict that 2020 would have been a lot like 2019 - hand harvesting would have been hard to do this year.

Dan participated in a panel, where he learned that the town of Minerva received a permit to use ProcellaCOR EC. This is an aquatic herbicide that is quick to react and quick to decompose. Dan continued with an explanation of how ProcellaCOR EC was used to treat Minerva Lake, at the cost of \$14,000. Dan was very impressed with the results: initially 41 acres were surveyed which had been full of EWM for a couple of years. When it was resurveyed, there was no EWM! Lee Walrath was the DEC agent on the scene at Minerva Lake and helped with the application. At this point we need to talk with Lee W., Dan is in the process of working with him.

"Happy Accident?" - if indeedthis is a continuing narrative as LC spent many dollars and still continues to have a problem. Dan approached the park agency and they were receptive to try a more cost effective technique. Dan thinks this is something that is worth discussing and seeing what the needs are from the agency. DEC will want to monitor what the effects are on native plants, fish, etc. Dan highly recommends that we consider talking with the park agency about this product and talking with Minerva Lake. We should consider the use of this herbicide in North Bay, West Bay and the Trestle - hospital area is under very good control with hand harvesting.

Lee asked what Renovate targets specifically, as it is similar to ProcellaCOR EC. Renovate did cause some curling of Hill's pondweed, which is considered an endangered species, but it did ok, even without a curtain. Question was asked if Minerva Lake is used as a water source for residents - it is not. Dan stated that folks drawing water from the lake should wait a week

before using water from the lake after treatment. Rod asked who manufactures ProcellaCOR EC and Renovate - SePOR manufactures both of these products. The question was then asked what happens to all the dead plants: most likely the die off of plants will have a short term effect, the lake will flush them out and oxygen will be replaced. This product is used more in the southern lakes, not so much up here.

Ann & Rod Greene pull water for use in shower, toilets, sinks, etc. Ann would rather not rush into this use. Folks had a lot of questions and concerns. A lot to consider certainly including Camp Colby, village beach and swimmers. We would contract with a herbicide applicator - herbicide would be on the western side. It breaks down quickly so would not effect Lower Saranac Lake. Question was asked about using it on Little Colby Lake - would a curtain need to be put up and would that be a problem with blocking the outlet? Dan thought that "a spot treatment" might work there.

Dan explained that Loon Lake used 15,000 lbs? of Renovate to control 15 acres. There was much less use of ProcellaCOR EC on Minerva Lake for control. Dan thought that using ProcellaCOR EC would be more cost effective. Tracey asked about the effects on our nesting Loons on Little Colby Lake. Dan stated that the Table Toxicity showed there is no issue to water fowl. Hopefully not to fish as well. Dan thought he could start the application process to see how the DEC reacts to a possible proposal which could very well take three years.

Lee K. will research this product more. Discussion and decisions will continue as to the use of this herbicide. For 2022, we will have to make a decision as to what we should do - possibly a matting strategy since there will be a definite regrowth.

Water Quality: Adirondack Lake Assessment Program/ALAP for 17 years! Dan stated that we have done good work! Lake Colby is quite stable - persistent water quality issue is salt. LC has the second highest concentration in Adk's and has been fairly stable over last 10 years. Butternut Pond has a higher concentration. We still have the salt shed flushing into Colby Brook, but the salinity coming from the brook is decreasing, and more is from the highway. Tracey was on Lake Clear Zoom meeting and they might be trying another alternative on the roads along the lake. If successful, they will consider using the new product for the stretch by hospital. DOT has been contacted for the past 20 years with concerns for the trees, salting, and lower the speed limit. Town and LCA paid for rather inadequate speed sign by the road which is unsafe. There is no help from Watertown DOT. Paul Maroun, on the Franklin County Board, seemed to have a little success. They have alternative techniques w/Mag Chloride solution that would be more effective in lower temps.

Dan continued: The problem with increased salt is increasing Calcium concentration. The calcium concentration is high enough to support Zebra Mussel habitat; ongoing salinization would allow zebra mussel to grow. Also, high salinization prevents turnover of the lake. LC used to turn over much more frequently. LC has a lot of wind energy which is a little bit of help.

Last thing to share: a lake steward from Lake Flower came to Lake Colby's boating access site. Dan had a break down of boats in LC water. 21 came from different Waterhouse's. 11 of those are know to have invasive aquatic species- Saranac chain, Floodwood, Fish Creek including curly leaf. Lake Champlain has zebra mussels therefore there is the possibility of ZM in LC, which we sure hope never occurs. Most of the non-motorized boats were used in local waters. One boat came from Long Pond which has a lot of ZM. One piece of good news: all the boats that were inspected were clean which is really great. Boat owners were using good stewardship by self cleaning and checking boats, before going into the lake. Our use is mostly local but some of the boats coming from some distance, were exposed to ZM, and water fleas. This is very important data to have especially since it reinforces the need to be vigilant on

reducing salt application, in order to reduce amount of calcium in water. We appreciate our amazing Lake & Boat Stewards. Thanks much to Dan for his continued support of our Colby lakes!

Lake Water Level:

Lee talked about the significant increase in the height of the water. No sign of beavers as stated by the trappers, although they have been spotted swimming. We appreciate the commitment of the County to come out quickly to clean out the grate. Right now it's a foot higher than normal. Higher water will continue to damage shoreline and docks along the lake. We would like to get the lake down before winter. Thankfully, the County has been very responsive and will continue to clean out the grate.

Animal sightings:

Debbie reported sightings of one pair of mating loons that hatched two chicks, of which only one survived and decided to finally fly off the lake the day before ice in! It is heart wrenching to watch the eagles trying to catch the loon chicks. Also: muskrat, beaver, turtles, fish, mink, chipmunks, squirrels, mice, blue herons, kingfishers, amazing variety of song birds, 2 Eagles, 1 deceased eaglet, (fell out of the nest) and deer.

Nancy thanked everyone for their continued concern for Lake Colby and Lee thanked everyone for their dues and contributions. Lee made a motion to adjourn the meeting and Debbie seconded at 5:04.

Respectfully submitted, Debbie Neill, Secretary

Some Additional Notes:

*We greatly appreciate Mark Epstein's perceptive and persistent sighting of one of our LC Loons in trouble. He observed something red close to the loon's mouth and contacted our amazing Loon Conservation Center/Nina Schoch who got into action for the rescue on the evening of 9/17/21. Mark kayaked from Little Colby Pond and herded it toward the Neill dock where it was netted. A group of us went into action to remove fishing line wrapped around its neck and tongue, with a lure on the tongue and a hook in its neck. This bird was a juvenile that had already been tagged earlier in the year. It was heartening to watch Nina massage the top of the head, such soft feathers, as it relaxed and almost fell asleep. It was given fluids and antibiotics and released successfully. Such an amazing and special rescue; what an honor to be a part of. I observed this loon almost daily as it healed and was able to dive, finally fish, and leave the lake successfully!

*Also, here is a synopsis of Mark and Lauren Epstein's follow up email to all our Lake Colby members dated 10/01/21. They expressed that they feel there has not been much change in the growth of EWM in Lake Colby and Little Colby Pond in the past 6 years that they have lived here. Mark felt that Dan Kelting also stated that there was not a big expansion of EWM when there was no hand harvesting. ProcellaCOR EC does not have a long history of use for us to significantly realize its full impact. Mark and Lauren feel that we need to wait and see if the EWM reaches a state of equilibrium that is acceptable. If not, aggressive herbicide action might be taken into consideration at that point. They advocate the need to continue in a more conservative approach.

*Ann and Rod Greene, replied on 10/02/21, that they also do not support any chemical use in Lake Colby as well. They strongly urge a more conservative approach to the EWM problem. Their property does not receive town water nor does it have a well, they draw water from the lake as their water source and they are not alone in this. Ann feels that we are not in a crisis and does not want to use Lake Colby as a testing ground for this chemical.



Water Quality Report

- 19 years of monitoring through the Adirondack Lake Assessment Program (ALAP)
- Three Aquatic Stressors: Eutrophication, Acidification, Salinization
- Water quality has been stable, no trends
- **Eutrophication (Productivity)**
 - Trophic indicators (transparency, total P, & Chlorophyll-a) are relatively stable
 - Transparency is greater than 75% of lakes in ALAP (64 lakes in 2021)
 - Trophic indicators suggest a low productivity lake (oligotrophic)
 - Less than 1/3 of the lakes in ALAP are low productivity lakes
- **Acidification**
 - Lake is alkaline and is relatively stable over time
 - pH is greater than 84% of lakes in ALAP (ninth highest pH)
- **Salinization**
 - Lake has high salt concentration (sodium & chloride) from road salting in watershed
 - Highest of all lakes in ALAP
 - Relatively stable over the last 10 years
 - Water has a highly corrosive character
 - Lake has calcium concentrations in the range to support Zebra mussels
 - Only Augur Lake (14.9 mg/L) had a higher calcium concentration

Water Quality Indicator	6/20/2021	7/24/2021	8/21/2021	Average	Trend
Transparency (m)	5.6	4.2	4.0	4.6	No Trend
Total Phosphorus (µg/L)	10.8	8.3	4.7	7.9	No Trend
Chlorophyll-a (µg/L)	2.1	0.9	2.4	1.8	No Trend
Laboratory pH	7.8	8.0	7.8	7.9	No Trend
Sp. Conductance (µS/cm)	273	277	277	276	No Trend
Color (Pt-Co)	21.4	15.0	11.8	16.1	No Trend
Alkalinity (mg/L)	32.1	34.8	34.4	33.8	No Trend
Chloride (mg/L)	58.1	68.3	58.4	61.6	No Trend
Calcium (mg/L)	14.1	14.6	14.9	14.5	No Trend
Sodium (mg/L)	30.0	31.6	31.3	30.9	No Trend

AWI Steward at Lake Colby DEC Launch – Activity Summary

216 boats launched, 5/29 to 8/9 (4 days per week – bridging weekends)

52 motorized
44 not in water or were only in Lake Colby in the last two weeks
8 from 8 different waterbodies
All known to harbor at least one invasive species (7 local lakes and 1 from Hudson River)
7 boaters had taken spread prevention measures
0 boats had organisms found
164 non-motorized
110 not in water or were only in Lake Colby in the last two weeks
54 from 34 different waterbodies
12 from AIS infested waters (CLP, EWM, VLM, ZM)
(mainly local waters, but also Long Pond)
45 boaters had taken spread prevention measures
0 boats had organisms found

Water Quality

- 18 years of monitoring through the Adirondack Lake Assessment Program (ALAP)
- Three Aquatic Stressors: Eutrophication, Acidification, Salinization
- Lake has been fairly stable, no trends

- **Eutrophication (Productivity)**
 - Trophic indicators (transparency, total P, & Chlorophyll-a) are relatively stable
 - Transparency is greater than 70% of lakes in ALAP (68 lakes in 2020)
 - Trophic indicators suggest a low productivity lake (oligotrophic)
 - Less than 1/3 of the lakes in ALAP are low productivity lakes
- **Acidification**
 - Lake pH is alkaline and is relatively stable over time
 - pH is greater than 90% of lakes in ALAP (fifth highest pH)
- **Salinization**
 - Lake has high salt concentration (sodium & chloride) from road salting in watershed
 - Highest of all lakes in ALAP
 - Relatively stable over the last 10 years
 - Lake has calcium concentrations in the range to support Zebra mussels
 - Only Augur Lake (15.4 mg/L) had a higher calcium concentration

Water Quality Indicator	6/28/2020	7/26/2020	8/24/2020	Average	Trend
Transparency (m)	5.6	6.2	5.6	5.8	No Trend
Total Phosphorus (µg/L)	7.3	8.4	8.2	7.9	No Trend
Chlorophyll-a (µg/L)	2.0	1.8	2.0	1.9	No Trend
Laboratory pH	8.4	8.0	8.1	8.1	No Trend
Sp. Conductance (µS/cm)	267.0	270.0	269.0	268.7	No Trend
Color (Pt-Co)	18.2	11.8	15.0	15.0	No Trend
Alkalinity (mg/L)			33.8	33.8	No Trend
Chloride (mg/L)			74.7	74.7	No Trend
Calcium (mg/L)			12.9	12.9	Not Analyzed
Sodium (mg/L)			29.6	29.6	No Trend

Results & Analysis

Macrophyte Abundance

A total of 138 sites were surveyed on July 27, 2021 (Appendix B), where 25 aquatic macrophytes (including filamentous algae) were identified during the survey (Table 1). Raw data and distribution maps can be found in Appendices A and B, respectively.

Aquatic Macrophyte	Total		Trace		Sparse		Medium		Dense	
	Sites	%	Sites	%	Sites	%	Sites	%	Sites	%
Total Sites	138									
Percent Cover SAV	113	82%	24	21%	36	32%	24	21%	31	27%
Percent Cover FLT	40	29%	36	90%	4	10%	0	0%	0	0%
Eurasian Watermilfoil	86	62%	45	52%	26	30%	12	14%	3	3%
Common Waterweed	76	55%	40	53%	34	45%	2	3%	0	0%
Water Stargrass	72	52%	27	38%	37	51%	8	11%	0	0%
Tape-grass	69	50%	30	43%	32	46%	7	10%	0	0%
Clasping-Leaf Pondweed	51	37%	36	71%	13	25%	2	4%	0	0%
White-stemmed Pondweed	42	30%	13	31%	15	36%	13	31%	1	2%
Slender Naiad	37	27%	23	62%	14	38%	0	0%	0	0%
Water Marigold	36	26%	29	81%	7	19%	0	0%	0	0%
White Waterlily	33	24%	23	70%	9	27%	1	3%	0	0%
Thin-leaf Pondweed	29	21%	18	62%	8	28%	3	10%	0	0%
Southern Naiad	29	21%	9	31%	16	55%	1	3%	3	10%
Macro-algae	28	20%	12	43%	12	43%	4	14%	0	0%
Spiral-seed Pondweed	27	20%	16	59%	11	41%	0	0%	0	0%
Robbin's Pondweed	26	19%	15	58%	10	38%	1	4%	0	0%
Variable-leaf Pondweed	23	17%	8	35%	10	43%	5	22%	0	0%
Watershield	22	16%	13	59%	8	36%	1	5%	0	0%
Pickerelweed	11	8%	9	82%	1	9%	1	9%	0	0%
Big-leaf Pondweed	10	7%	6	60%	3	30%	1	10%	0	0%
Leafy Pondweed	8	6%	7	88%	1	13%	0	0%	0	0%
Yellow Waterlily	8	6%	8	100%	0	0%	0	0%	0	0%
Spikerush	8	6%	3	38%	5	63%	0	0%	0	0%
Burreed	3	2%	0	0%	2	67%	1	33%	0	0%
Common Bladderwort	2	1%	2	100%	0	0%	0	0%	0	0%
Water Lobelia	1	1%	1	100%	0	0%	0	0%	0	0%
Arrowhead	1	1%	1	100%	0	0%	0	0%	0	0%

Red indicates an invasive species

