



CANDLEWOOD LAKE AUTHORITY

P.O. BOX 37 • SHERMAN, CONNECTICUT 06784-0037 • (860) 354-6928 • FAX (860) 350-5611

Minutes of Regular Meeting July 11, 2018

Attending:

P. Schaer	Sherman
D. Cushnie	Sherman
J. Hodge	New Fairfield
J. Main	New Fairfield
B. Licht	New Fairfield
J. Wodarski	New Milford
D. Rosemark	Danbury
W. Lohan	Brookfield

Absent:

E. Siergiej	Danbury
G. Linkletter	Sherman
C. Robinson	Danbury
J. Murphy	Brookfield
B. Brown	Brookfield
M. Toussaint	New Milford
S. Kluge	New Milford

F. Frattini, CLA Administrative Coordinator
M. Howarth, CLA Executive Director
CLA Marine Patrol –Chief D. Vane (left 8:00PM)

Recorder: F. Frattini

Guests: Seven members of the public.

Prior to the meeting Jenna d’Arcy and Catherine Brockner from New Fairfield High School presented on the work they did for the CLA for their Senior SEE project. They showed their poster initiative and signage for the purpose of awareness and education to prevent invasive species. They also helped re-launch the CLA Zebra Mussel Monitoring Station Program for 2018, deploying zebra mussel hotels at various sites around the lake. They added that they enjoyed working with the CLA and that they learned a lot about what the CLA does and how important it is to the Lake. Mrs. Schaer thanked them and it was a real pleasure having them intern at the -CLA. Mr. Howarth presented them each with a Candlewood Lake Towel and wished them well in college where they both are planning to study Environmental Engineering. They left the meeting.

Chairman, Phyllis Schaer, called the regular meeting of the Candlewood Lake Authority to order at 7:43 P.M. at Brookfield Town Hall Brookfield, CT. She welcomed the guests.

CLAMP Report: Chief Doug Vane reported that all is going well, the equipment is working fine and the officers are patrolling the lake.

Pubic Comment: Mrs. Schaer asked if anyone wished to speak.

Don Lowe, First Selectman of Sherman addressed the delegates about the number of complaints he has received from his constituents about noise (loud music) on the lake. Joe Wodarski, Co-Chair of Public Safety advised that the Lake Patrol can only enforce Boating Law but that they are willing to transport the Resident Trooper if needed. Discussion followed about "Noise Ordinance" in the Lake Towns, the noise statute in the boating law pertains to engine noise, courteous boating, what can and cannot be done, noting it has been an ongoing concern of the delegates, Towns and residents. The idea to amend the noise statute to include other noise than just engines may be brought up to the local legislators. Mark Howarth noted that the Public Awareness Committee has been taking about a campaign on boating courtesy and this could be included.

Peder Scott, Engineer & Architecture LLC, spoke to the delegates about the application to install two swim areas at the property located at 45 Wanzer Hill Road, Sherman. The new owner of the property has grandchildren that are there most weekends and would like the swim area for them. There are two areas proposed, one which is less than 5' deep and the other which contains a swim float in deeper water. The Public Safety Committee has reviewed this original application and Joe Wodarski advised Mr. Scott that after inspecting the area they saw that it was not in a boat channel with heavy boat traffic but rather a secluded area with little boat traffic and voted that the application would not be approved. They saw no reason for one swim area let alone two. There is no precedent for swim areas for children and grandchildren. Mr. Scott advised that DEEP had given their approval but DEEP will not sign off without Lake Authority approval. Mr. Scott added that they have a lot with almost two thousand feet of frontage and they will stipulate that they won't add any other water frontage items if the swim areas are permitted - he noted that you could make it that only residential frontage of more than one thousand feet could have a swim area so it would not be a precedent. He added that he had paperwork from Mike Payton of DEEP who said they just needed CLA sign off; Mrs. Schaer asked that he forward that paperwork to the office. Mr. Scott thanked the delegates for their time.

Secretary's Report: In the absence of Jerry Murphy, Secretary, Mrs. Frattini noted there was a *correction to the minutes of the June 13, 2018 meeting on Page 4 in the Budget line Transfer of \$828.27 was to Line #161 HR Expense it should be Line #151. Dan Rosemark made a motion to accept the minutes of the May 9, 2018 meeting as amended, seconded by bill Lohan, motion was voted with all in favor and John Hodge abstained. Motion carried and minutes have been accepted as amended.*

Chairman's Report: Chairman Phyllis Schaer reported that the Interns were fun to work with and further their knowledge this spring at the CLA.

She reported that July 15 to 21 is Lake Awareness Week and on July 19th she will be taking a group out on the lake. She would like to take the Town CEO's out as well and will try to arrange a convenient date.

She is still looking for a location for the decontamination station.

Mrs. Schaer advised that the bench for former delegate Harold Mayer has been installed with a plaque at Lynn Demming Town Park in New Milford. Possibly the dedication could be in September in conjunction with the Clean Up.

Vice-Chairman's Report: Vice Chairman, Mark Toussaint was absent – no report.

Treasurer's Report: Treasurer Bill Lohan noted that year-to-date income is 99.9% of budget. This does not include the sale of the donated boat, which will be in the new fiscal year. Expenses year to date are Administration is at 69%, Equipment/Facilities 96%, Public Safety 98%, Public Awareness 74% and Watershed Management 96% making the total year to date

expenditures 81% of the total. He expects about the year will end with a surplus around one hundred thousand dollars. Mr. Lohan reported that there were budget transfers totaling \$13,706.22 – *A breakdown list of these transfers is attached to these minutes. Bill Lohan moved to approve these transfers, seconded by John Hodge and voted with all in favor. Motion carried and transfers approved.*

Mr. Lohan reported that he would like to transfer forty thousand (\$40,000.00) dollars from the Executive Director Wage line to the Capital Project Fund. Discussion began, Mrs. Schaer made a motion to add this to the agenda, motion seconded by Bill Licht and discussion continued, the second was withdrawn and it was decided that this item would be on the August agenda.

Mr. Lohan reported that at the Executive Committee meeting the money that had been appropriated for legal fees was discussed and asking the auditor if it should be returned – it was noted to leave as is, it will show up in the audit.

Mr. Lohan advised that the 2018/2019 Budget per town would be the requested \$79,900.00 based on the Towns that approved the full budget request (Danbury, New Fairfield and Brookfield). This is a \$2,100.00 increase over 2017/2018 at 1.6%.

The Audit will begin at the end of the month.

Executive Director's Report: Mark Howarth advised his report is attached to these minutes and then noted the highlights.

The Boat Sale should be final early next week.

New Fairfield Seniors have begun collecting samples for bacteria testing. WESCON has begun Blue Green Algae testing and results are being posted on CLA social media

He has met with the CEO's of Brookfield, New Fairfield and Sherman and looking forward to meeting with the last two.

Congratulations to the Lake Patrol for another safe fireworks night.

Inflatable PFD's have been purchased for the staff and will be kept at Sherman Base.

He has been speaking to DEEP about the mobile billboards, where will they go, etc. more planning, development and continued conversation.

Village Fair Days just 16 days away – July 27 and 28 need volunteers for Saturday.

Still working to develop a partnership with the UCONN Master Gardeners Program.

Public Safety Committee: Joe Wodarski noted that he has set a meeting with the New Milford CEO for Mr. Howarth. He reported that the committee had approved two applications for buoys which did not have permits on file: Speed in Brookfield's Arrowhead (Kellogg Street)/ Hickory Hills Cove and Navigation in Sherman/Allen's Cove. They have been submitted to DEEP for approval.

Equipment/Facilities Committee: Committee Chairman Doug Cushnie reported that everything is now up and running and in good shape. He is working on the Capital Asset List with the Operations Manager, as it is needed for the auditor. He advised that Echo Bay has donated the new Bimini Top for McKee I.

Public Awareness Committee: In the absence of the Committee Chairman, Mr. Howarth reported that the committee has been discussing using video to get the courtesy in boating message out there with a joint Public Safety/Public Awareness effort. Bill Licht suggested "Good behavior vs. Bad behavior" "Don't be that guy" type of message. The challenge is - how will it reach the people?

Village Fair Days Booth will be a history of the lake for its 90th Birthday.

Lakes Awareness Week: we need another pontoon boat and captain to bring CEO's out, delegates are invited.

Watershed Management Committee: With Committee Chairman, Mark Toussaint absent – Mrs. Schaer reported that review of the SMP including discussion and draft changes, conferring with FirstLight Power on areas of concern for both the CLA and FLPR. A sub-Committee of Watershed is being formed to review the SMP – Phyllis Schaer, Mark Toussaint, Dan Rosemark, John Hodge and Jeff Main volunteered to be on the SMP Review Sub-Committee. This will be a way to work with FirstLight for the betterment of the Lake.

Old/New Business

Phyllis Schaer moved to go into Executive Session for the purpose of discussing the person to hire for the position of Director of Ecology and Environmental Education, seconded by Bill Lohan, motion voted with all in favor. All guests left the room and recorder turned off.

Those in the Executive Session at 9:05 PM were delegates and members of the HR Committee as follows: Joe Wodarski, Doug Cushnie, Bill Lohan, Bill Licht, John Hodge, Dan Rosemark, Jeff Main, Phyllis Schaer, Mark Howarth and Frances Frattini.

At 9:42 PM John Hodge made a motion to come out of Executive Session, seconded by Jeff Main, voted all in favor. Guests were invited back, recorder turned back on and meeting continued with John Hodge making a motion to offer candidate "B" the position of Director of Ecology and Environmental Education as discussed in Executive Session. Seconded by Jeff Main and voted with all in favor. A phone call and letter with the offer will be sent to the candidate.

Bill Licht moved to adjourn the meeting, seconded by John Hodge, meeting adjourned at 9:45 P.M.

Respectfully submitted,

Jerry Murphy, Secretary
Frances Frattini, Administrative Coordinator
r/b/mh

These minutes are not considered official until they have been approved at the next regularly scheduled meeting of the Candlewood Lake Authority.

CLA Budget - Funds Transfer

Date: June 30. 2018

\$ Amount	Transfer From	Account Name	\$ Amount	Account Name	Transfer To			
1,380.60	#112	Admin Fringe	1,380.60	Admin Wage	#110			
234.66	#114	Telephone	234.66	Office Supplies	#115			
318.31	#121	Expenses	318.31	Computer HW/SW	#123			
77.85	#102	ED/Fringe	77.85	HR Expenses	#151			
232.63	#226	Work Boats	232.63	SB- Repairs/Maint	#221			
1,215.89	#300B	LP Wage/Admin	1,215.89	LP/Wage off lake	#300A			
602.07	#300B	LP Wage/Admin	602.07	LP/Wage	#300			
363.01	#313	Insurance	363.01	Boat Maint/Reimb	#311			
3.89	#300B	LP Wage/Admin	3.89	Training	#314	1,024.00	#513	BG Algae
500.00	#313	Insurance	902.26	Maint/Miscl	#318	600.00	#514	Travel
402.26	#300B	LP Wage/Admin				1,659.00	#515	Equip/Sup Satelite
72.57	#412	Ed Bulletins	72.57	Subscription services	#414	107.00	#516	Imaging SL/Clean
16.54	#415	Events & Displays	16.54	Merchandise	#416	1,072.94	#521	Up Engineer/
7,449.94	Various		7,449.94	Lake & Stream Monitoring	#511	600.00	#532	Consul
740.00	#500	WM/ Wages	740.00	E-Coli Bacteria Testing	#512	1,187.00	#541	GIS/IT
96.00	#521	Shoreline Clean up	96.00	Professional Develop	#531	1,200.00	#551	Grass Carp
						7,449.94		
13,706.22	TOTAL		13,706.22		TOTAL			

40,000.00 #100 ED Wage 40,000.00 Captial Fund



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July 11, 2018
Executive Director
Mark Howarth

Monthly Report:

- **Vegetative Buffer Report:** After last month's board meeting, we submitted the voted upon buffer report comments to FirstLight, along with the vote for the modified language for the Encapsulated Dock Foam requirement.
- **Boat Sale Status Update:** We are waiting for payment to complete the final sale on the CLA's donated boat.
- **Patrol Laptop:** We have purchased a basic laptop to allow the Patrol to complete their required Daily Activity Reports in Excel from the Sherman Base, which Fran can then grab from the laptop. This should aid Fran in the processing of those reports.
- **NF Senior Center Bacteria Monitoring:** The New Fairfield Senior Center Environmental Corps has begun their weekly E. Coli bacteria sampling at 18 sites around the lake. The samples are then brought by the seniors to Hydro Technologies in New Milford for analysis. This program is run in addition to the testing done by the municipal Health Departments.
- **Weekly BGA Testing:** Dr. Edwin Wong's lab at Western Connecticut State University began the weekly sampling and testing for blue-green algae at the municipal beaches, as well as Squantz Pond State Park, at the end of June. This year the samples are being taken on Wednesday and test results are reported each Friday. We have begun posting the results on Friday on our social media platforms, in addition to our website.

An additional program run by WCSU spearheaded by AER Limnology will take place on the lake this summer. A former CLA New Fairfield SEE Program intern, Josh Sproule, will be working with Dr. Edwin Wong to test areas, outside of the normal town park weekly test sites, where blue-green algae blooms are being reported by the public. For this study the public is being asked to email Josh Sproule at sproule003@connect.wcsu.edu. Information in the email should include the name and phone number of the person reporting the bloom, an address, location along the shoreline or GPS coordinates where the bloom can be found, and permission to access private property to sample, should it be required. If a picture of the bloom is available, that should be attached to the email as well.

- New Hire: CLA Staff and HR Committee members have completed the final round of interviews for the Director of Ecology and Environmental Education position. We will be looking to make a recommendation to the CLA Board for a hire.
- Meetings with CEOs: As discussed at the last meeting I was looking to meet with each of the Chief Elected Officials of the Towns. To date, I have had the pleasure of meeting with three of our area Chief Elected Officials, joined by the delegates of those towns. We discussed a variety of topics, including what the CLA is doing as well as any questions or concerns they have for us.
- Fireworks: The fireworks were held on June 30th, without any major incidents. Many thanks to the CLA Marine Patrol and CT DEEP EnCon Police and the CLA Public Safety Committee for a job well done, once again.
- PFDs: The CLA has purchased five inflatable work PDF's for the staff and delegates to be used when out working on the lake.
- Mobile Billboards: We had some initial conversations with CT DEEP regarding the possibility of us using the mobile billboards at the ramps. We will be working to get specifics to them (location, usage plans, etc.) to see how we might fully deploy this educational tool around the lake.
- VFD: Village Fair Days will be on July 27 and 28. We are working on getting our merchandise designed and in and we will be working on finishing the educational booth preparation for the event.
- Interns: Our two interns from the New Fairfield SEE Program have completed their time with the CLA. They worked hard to get our zebra mussel monitoring program up and running again including distributing zebra mussel "hotels" to sites around the lake, in addition to spending time learning about the different things we get involved with here at the CLA and spend a lot of time learning about invasive species.
- Site Plan Review: The CLA has been asked by Danbury EIC to do a site review for a property on the lake. We are working to complete that for the designer so that they may go before EIC.
- Grass Carp Tracking: Dr. Theodora Pinou has started tracking the sterile grass carp on the lake this summer again, and has been joined by delegate Doug Cushnie who volunteered his time to aid in this research project. She will be looking to add more tracking days as the summer goes on and will need volunteer boat captains to help out. Any who are interested in being a volunteer boat captain of this should contact the CLA.
- UConn Master Gardeners: We have had some initial conversations with the UConn Master Gardeners program about hopefully working on a program here for Candlewood Lake. Discussions to continue.
- Monthly WQ Observations: We are getting regular monthly water quality observations from AER. We are looking to use what we get from them to create a public information resource. Below is the June report.

MEMO

Date: June 28, 2018

To: Phyllis Schaer, Mark Toussaint, and Mark Howarth, CLA

From: Aquatic Ecosystem Research - 1204 Main St. #161; Branford, CT 06405

Re: Water Quality Observations for June 7, 2018

Dear Candlewood Lake Authority,

The second site visit, data collection, and sampling of Candlewood Lake and Squantz Pond occurred on June 7th and 11th, respectively.

Surface water temperatures at Candlewood Lake warmed from 15 to 17°C (59 to 64°F) on May 15th to 20 to 21°C (68 to 70°F) observed on June 7th. Temperatures at the bottom of three Candlewood Lake sites (DB, NF, and SH) increased from between 8 and 9°C (46 to 48°F) on May to 9 to 11°C (48 to 51°F) in early June. At the deeper NM site, bottom temperature was 5.8°C (44°F) during the June sampling event; only 0.2°C warmer than the 5.6°C (42°F) measured in May.

Temperature and density differences between strata of the water column suggest that stratification had occurred with the greatest difference (thermocline) between 5 and 6 meters at DB, NF and SH. In May, signs that stratification was developing were observed at the same depths. Relative thermal resistance to mixing (RTRM) values in May for the three sites ranged between 21 to 43 standard units; in June the RTRM values ranged from a low of 68 standard units at the SH site to a high of 143 at the NF site. At the NM site, an RTRM of 80 was measured between 6 and 7 meters. June Squantz Pond profile data was similar to that from DB, NF, and SH with the exception of surface waters being approximately 2°C warmer.

Oxygen concentrations were high in all surface waters, ranging between 9 and 11mg/L; low concentrations below the thermocline indicated that oxygen concentrations were not being replenished at a rate exceeding aerobic consumption. Oxygen concentrations at the bottom of all four sites ranged between 2 and 3mg/L at Candlewood Lake; the concentration was 4.2mg/L at the bottom of Squantz Pond.

Table 1. Selected nutrient data, data from biological productivity analyses, and pH from samples collected at Candlewood Lake and Squantz Pond in May and June of 2018. m = meters; Bot. = Bottom; Chl-a = chlorophyll-a; µg/L = microgram per liter; SU = standard pH unit.

May	DB		NF		NM		SH		SQ	
	1 m	Bot.	1 m	Bot.	1 m	Bot.	1 m	Bot.	1m	Bot.
Secchi (m)	2.46		2.58		2.23		2.63		2.34	
Chl-a (µg/L)	7.2		5.0		13.6		7.3		6.0	
TP (µg/L)	15	11	6	12	38	4	6	11	9	8
TN (µg/L)	480	580	440	550	740	610	380	460	380	490
pH (SU)	8.5	7.5	8.7	7.4	8.7	7.6	8.6	7.4	8.6	7.5

June	DB		NF		NM		SH		SQ	
	1 m	Bot.	1 m	Bot.	1 m	Bot.	1 m	Bot.	1m	Bot.
Secchi (m)	2.64		2.46		2.84		2.73		2.76	
Chl-a (µg/L)	7.1		6.5		3.5		4.6		NA	
TP (µg/L)	14	2	12	3	19	2	7	5	NA	NA
TN (µg/L)	1340	1450	950	1200	1160	1400	540	1100	NA	NA
pH (SU)	8.5	7.1	8.4	7.1	8.5	7.3	8.3	7.1	NA	NA

Secchi transparencies and chlorophyll-*a* concentrations in June were similar to those measured in May with the exception of the NM site where increases of 0.5m of transparency and a decrease of 10µg/L of chlorophyll-*a* occurred between the two sampling events (Table 1). Surface water (1m depth) and bottom water total phosphorus levels were consistent with those generally observed in May and June with the exception of the NM site where surface concentrations in May 2018 were notably higher compared to previous years.

This may potentially explain the higher chlorophyll-*a* level and lower Secchi transparency observed at the NM site at that time.

Total nitrogen levels encountered in June 2018 were notably higher than those measured in May 2018. Interestingly, the highest total nitrogen concentrations in surface waters during 2017 were encountered in samples collected during June with 920 and 970µg/L at the Danbury and Sherman sites, respectively. Concentrations at the bottom of the water column in June 2018 were also elevated compared to those observed in May 2018 and June 2017 when concentrations ranged between 310 and 780µg/L in the latter. Reasons for the differences are unclear at this point and future nitrogen levels will be closely monitored.

It is also worth noting that clarity improved as June 2018 progressed based on anecdotal assessments of clarity and actual Secchi transparency measurements. Measurements of 3.15, 3.05, 3.00, and 3.18 meters were recorded by AER or CLA Delegates between June 24th and 27th.

Not all phytoplankton enumerations have been completed at this time. Those that are complete were collected on May 15th and revealed a community comprised largely of species from the golden algae (or Chrysophyceae), followed in importance by species from the diatoms (or Bacillariophyceae) and also the blue-green algae (cyanobacteria) groups. The only genus of cyanobacteria that was encountered was *Aphanizomenon spp.* Microscopic examinations of plankton net tows collected in June (on June 7th and on June 27th) revealed a very diverse community. Bloom-forming cyanobacteria species, including *Dolichospermum spp.* and *Woronichinia spp.*, were observed but not dominant.

Lastly, samples were collected in front of the aqueduct boat barrier on Candlewood Lake on June 7th and June 27th to conduct zebra mussel veliger analyses. Analysis of samples collected on June 7th were completed without detection of zebra mussel veligers. Those samples did contain ostracods, the organism that can lead to a false positive result; those organisms are pictured below (Fig. 1) along with zebra mussel veligers collected from Lake Lillinonah in 2015.

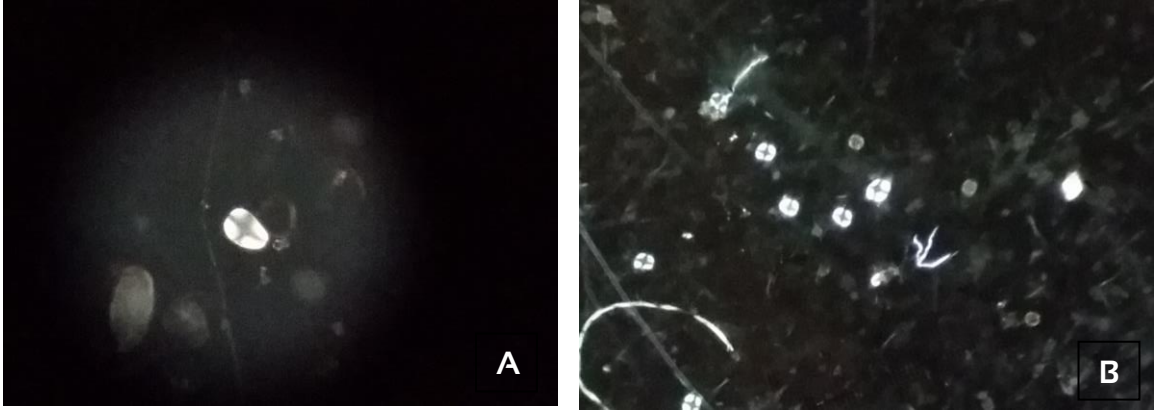


Figure 1. Photograph of A) an ostracod collected from Candlewood Lake on June 7, 2018, and B) zebra mussel veligers collected from Lake Lillinonah in 2015. Note the similar black Maltese crosses but also the differences in shape and size.