

## President's Letter

by Pat Smith

Greetings,

While it is always sad to see the summer slip away, we are rewarded with Cossayuna's beautiful autumn foliage and crystal blue sky. We hope that everyone had a great summer season here at the lake.

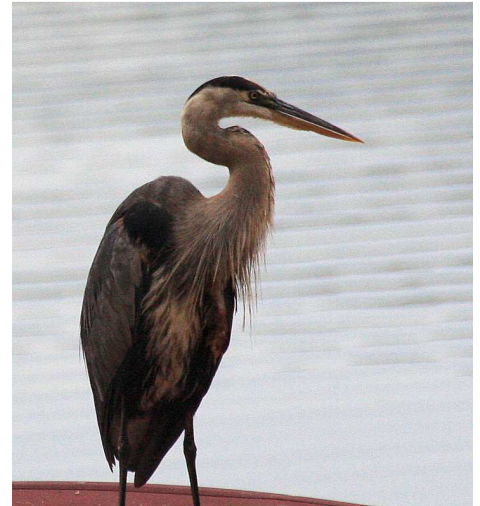
We would like to extend our thanks to the volunteers and participants in our committees and social events over the past season. On the Board of Directors, Richard Hutchinson stepped down as Treasurer after serving several years. We greatly appreciate the amount of time and work he dedicated to the CLIA. However, we are fortunate to welcome Rayna Henry as our new Treasurer who brings years of valuable business experience to the position.

Our commitment to enhancing our beautiful lake environment remains unwavering. We have now concluded a second season of our chemical treatment program. In coordination with the harvesting program, we have seen significant improvement in the management of the weeds that have affected the long history of Cossayuna. However, the job is never done. We reassess the situation each year and work diligently to make appropriate decisions that will take us to the next level. The Lake Management Task Force headed by Board member Lynn Wilbur continues its work and always welcomes the participation and ideas of new members from the community. We continue to collaborate with town, county, and state agencies to find new management solutions and additional sources of funding. Thanks to all who have supported and contributed to our programs.

As we look ahead to 2015, our first event is the Annual Ice Fishing Tournament scheduled for February 7<sup>th</sup>. We saw a dramatic increase in attendance at the tournament this past February and hope to see similar results. The Jerry Simon, Jr. Memorial Fishing Tournament will also return during the summer. Both events are both extremely enjoyable and support CLIA programs.

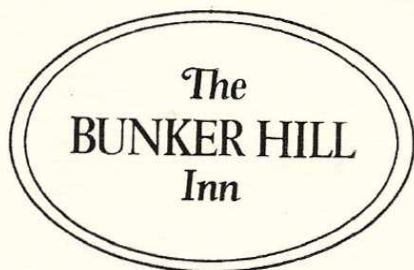
We hope that you will consider volunteering at one or more of our events this coming year. Our Friday Night Dinners will now become Saturday Night Dinners to make it more convenient for people to attend. In August, our successful Annual Clam Bake will return, music and all! The popular LaBoom and Open Mic Night are also on the summer calendar. Please check our website at [cossayunalake.com](http://cossayunalake.com) for exact dates and details. Also, any comments or questions can be directed to our email at [www.cossayuna\\_lake@yahoo.com](mailto:www.cossayuna_lake@yahoo.com)

Again, thank you for your support of our mission to improve the lake environment and to sponsor community events. We look forward to seeing you in 2015.



Laura Coldwell

518.854.9339



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## CSLAP Water Samplers

The Citizens Statewide Lake Assessment Program (CSLAP) is a volunteer lake monitoring and education program that is managed by the Department of Environmental Conservation (DEC) and New York State Federation of Lake Associations (NYSFOLA). Trained CSLAP volunteers collect lake data following approved methods. The data is added to the statewide lake database to help detect changes in water quality over time. The data also increases the total number of lakes that are sampled statewide and improves our understanding of the overall water quality of NYS lakes.

At this time we have two spots available for CSLAP water samplers. Bill Sowinski and Patricia McAuliff take water samples every 2-3 weeks from June to October and process them to send to the state labs. We need to have a total of four people trained for the testing. At present we only have the two. The training is a half-day at the NYSFOLA conference (a day trip to Cooperstown) usually in early May. You would not be required to do all the sampling sessions throughout the summer but may join Bill and Pat. It is time to send in our application for 2015. If you are interested in the water testing, please contact Pat Smith.

## Thank You to Our “Friends of Cossayuna Lake”

We have been the fortunate recipients of donations and volunteer time from people who regularly enjoy Cossayuna Lake, but are not property owners eligible for CLIA membership. Our deep appreciation goes out to: Wallace & Ted Paprocki, Rick & Betsy Preston, and Dr. Paul Nugent. Thank you so much for your support!



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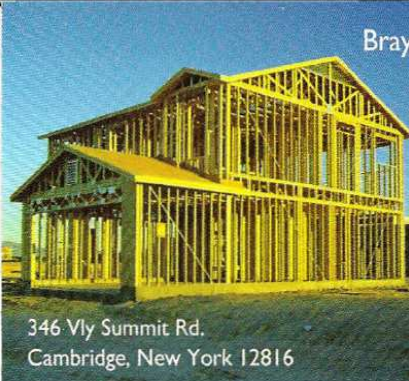
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# Cossayuna Lake

## 50 / 50 Raffle

by Nancy Hieber

It seems like a long ways away, but with the cold nights starting up people are already gearing up for the exciting 2015 CLIA Ice Fishing Tournament and 50/50 Raffle Fundraiser. Last year the 50/50 prize was over \$1200 dollars. This money goes towards the Cossayuna Lake projects that help our lake look so beautiful. We have decided to make it more fun by making these 50/50 Raffle tickets available now, while some of you are still here and enjoying the lake. Be a part of the exciting day even though you are not physically here by purchasing your tickets early. You can submit the form below to order your tickets now.

### CLIA 2015 ICE FISHING 50/50 TICKETS ORDER FORM

Drawing will be held at 3:35pm on Feb 7, 2015  
Tickets are available from now until 3:30pm on Feb 7, 2015

Contact Nancy Hieber 692-9206 or at [whiebersr@aol.com](mailto:whiebersr@aol.com) for 50/50 Ticket information  
Mail this form & check to CLIA - PO Box 81 - Cossayuna, NY, 12823 to order your tickets today

Name: \_\_\_\_\_

Address : \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

50/50 Tickets \$\_\_\_\_\_

**50/50 Tickets are 1 for \$5.00, 3 for \$10.00, 6 for \$15.00, 10 for \$20.00, 20 for \$40.00, 30 for \$50.00**

CLIA is a 501 (c) 3 nonprofit organization. Donations are tax deductible to the extent of the law.



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## Herbicide Program

by Lynn Wilbur

This year's treatment was very effective. It was very nice not to have the curly leaf pondweed in July and the milfoil was mostly nonexistent except for a few untreated shoreline sections and the south end. Harvesting of these beds was stopped so that no fragments could spread to other areas. The coontail came up thick in August, but the harvester did a great job of removing those massive floating beds. Coontail is a native weed. It provides a big burst of oxygen for our fish in August. We continue to work to make our herbicide treatment program and our harvesting program complement each other to best serve the health of the whole lake. The algae bloom was less this summer. We think that dropping the curly leaf pond weed when it was very small played a part in that, but weather can also have a major role in algae blooms.

On September 25<sup>th</sup>, an Aquatic Control technician came to do the end of the year assessment. Sheila Rappazzo went on the boat with him. The assessment was very thorough; they spent 3 hours going around the lake. The Aquatic Control Technician marked what kinds of weeds he was seeing and where they were on the lake treatment map. With the algae bloom (not as bad as last year, but still enough to interfere with visibility) it was sometimes difficult to see what was there, but he had a camera that he could submerge and he could tell what kind of weeds were there from that. There were a few scattered plants in some treated areas as well, but only a few for the most part. We did see milfoil growth in a number of areas that were not treated. Not only the South end, but in sections between treated sections, particularly in the northwest corner of the lake (which may be the source of the regrowth in those treated areas adjacent to it. Even in the South end where there were substantial untreated areas, you could see the difference, in how much milfoil depending on proximity to treated areas. The whole east shore was almost completely clear. Only a very few plants were observed in a couple of spots.

On Oct. 7<sup>th</sup>, Sheila and Jeff had a conference call with Aquatic Control's president, Marc Belluad. Marc presented three herbicide scenarios that could work. Marc is going to talk with DEC about these scenarios and then get back to us. There have been some changes at DEC so the need to be in sync with their interpretation of the regulations is important.

The Herbicide committee met to review the different options and discuss what we believe would be the best approach for Cossayuna Lake. The Herbicide Committee brought their recommendations to the Task Force Committee. The plan is going up for a Board of Director's vote soon. Full information of next year's treatment plan will be in the next newsletter.

## Harvesting Program

Another year of harvesting has come to a close. This year we have harvested 249 loads of weeds from the lake which is an increase of 48 loads from last year. With the chemical program being so effective along the shoreline we were able to concentrate our efforts on weed beds in open waters, thus the increase in more loads being harvested. The harvester was removed from the lake on Sept. 17th after completing four rounds of customer cuttings. Thank you for your continued support in keeping our lake looking beautiful. I wish you all a safe and healthy winter.

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# Cossayuna Lake Ice Fishing Tournament & 50/50 Raffle Fundraisers

## February 7th - Open to the public

### The 7th Annual CLIA Ice Fishing Tournament

Saturday, Feb 7th, 2015

Registration at Cossayuna Fire House: 5:30AM - 8:00AM

Measurements at Check-In Point: 7:00AM to 3:30PM.

**Strong Tournament Participation – Over 300 Participants Last Year**

**Pre-registration is \$10 per person until 7pm on Feb 6th**

**Day of Feb 7<sup>th</sup> registration fee is \$12 per person**

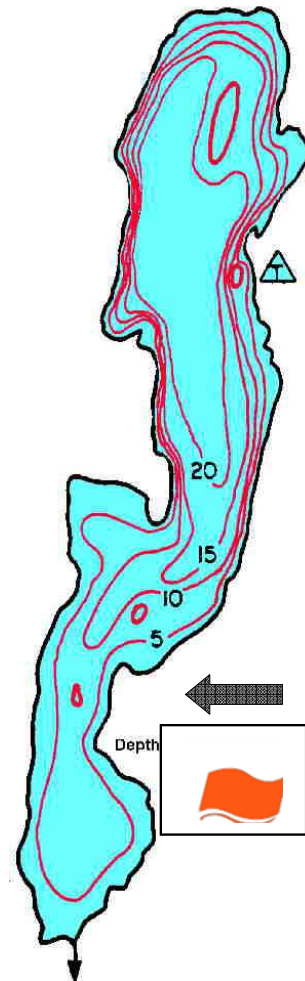
**90% Return of total entry fees as follows:**

**50% largest pike or tiger muskie** (2014 winner was 35<sup>1/4"</sup>)  
**25% largest perch** (2014 winner was 14")  
**25% largest crappie** (2014 winner was 15")

- All fish must be alive and ALL NYS DEC regulations apply
- All fish must be legal size to qualify for prizes
- Entry ticket must accompany all fish being measured
- Winners will be determined by length only
- Ties will be broken by time of entry to check-in station
- No entrants after 8:00AM : No fish will be measured after 3:30PM
- All fish will be measured on lake near Pratt's Point- Orange flag
- Check-in info/ location accessible on the lake at 195 East Lake Rd.
- Call Nancy with any questions (518) 692-9206

### 50 / 50 CLIA Raffle Ticket Drawing

- **Open to the public, you do not need to enter the fishing tournament**
- **Advance tickets available now by mailing in form below**
- Tickets available in person at Check-in point from 8:00AM – 3:30PM on Feb 7th
- **You do not need to be present to win**
- Drawing at 3:35 PM on Feb 7th
- Ticket prices: 1 for \$5, 3 for \$10, 6 for \$15, 10 for \$20, 20 for \$40, 30 for \$50.



-----Detach Here and Mail-in -----

### Submit Tournament Registration and/or Purchase 50/50 Tickets

- Call 692-9206 for Registration and/or 50/50 Ticket information
- Please mail registration and/or tickets by Jan 29 to: CLIA – PO BOX 81 – Cossayuna, NY, 12823  
[These fliers are also available on www.cossayunalake.com](http://www.cossayunalake.com)
- Register in person and pick up entry tickets 5:30AM – 8:00AM on Feb 7th. at Cossayuna Fire House on Corner of Bunker Hill Rd & East Lake Rd
- 50/50 Tickets will be available at registration location from 5:30 – 8:00AM then at Check-in Location from 8:00AM - 3:30PM.

Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Town of Residence \_\_\_\_\_

Email: \_\_\_\_\_

Registration \$ \_\_\_\_\_ 50/50 Tickets \$ \_\_\_\_\_ Donation to CLIA \$ \_\_\_\_\_

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**You can buy your bait at the Lakeside General Store (518) 531-4234**

## Cossayuna Lake

### Hydroraking

by Deb Hamilton

We are perusing Hydroraking options. For those people whose shoreline is shallow and full of muck, this option can be very effective for clearing out that muck. DEC is now enforcing the permitting of this lake management technique. If you are interested in having hydroraking done on your shoreline, please drop me an email with your name and approximate footage that you would like done. If we get enough people who are interested, we will work to make this option available.

lynnwilbur222@gmail.com

### Membership Report

by Nancy Hieber

We would like to thank all of this year's members for taking responsibility for our lake by joining the CLIA. We concluded the membership drive with 226 members this year. See the attached listing in this newsletter of those who joined this year. Just a reminder for when you move, or if you sell your property here. If you move, please send us an email to [whiebersr@aol.com](mailto:whiebersr@aol.com) or drop a postcard to CLIA, PO Box 81, Cossayuna, NY, 12823 with your old and new address so we can update our mailing list. It is important that we have your current and seasonal address so you don't miss newsletters or important Lake Management mailings. Please share our mailing address and email address with the new buyers if you sell your property so they can contact us to get on the mailing and email listings. The CLIA supports lake management efforts, organizes social events, and promotes a family friendly atmosphere for all of the lake residents and neighbors to enjoy. We hope that next year you will encourage your neighbors to participate by joining too. Your membership contribution and donations to the CLIA are tax deductible to the extent of the law.

*Timothy*  
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# Zebra Mussels

NYTimes.com

Robert H. Boyle

Feb. 24 2014

Since they arrived in the Great Lakes in the 1980s, two species of mussels the size of pistachios have spread to hundreds of lakes and rivers in 34 states and have done vast economic and ecological damage.

These silent invaders, the **quagga** and **zebra mussels**, have disrupted ecosystems by devouring phytoplankton, the foundation of the aquatic food web, and have clogged the water intakes and pipes of cities and towns, power plants, factories and even irrigated golf courses.

Now the mussels may have met their match: Daniel P. Molloy, an emeritus biologist at the New York State Museum in Albany and a self-described “Bronx boy who became fascinated by things living in water.”

Inspired by Rachel Carson’s “Silent Spring” in high school, Dr. Molloy, now 66, has long been a pioneer in the development of environmentally safe control agents to replace broad-spectrum chemical pesticides.

Leading a team at the museum’s Cambridge Field Research Laboratory in upstate New York, he discovered a bacterium, *Pseudomonas fluorescens* strain CL145A, that kills the mussels but appears to have little or no effect on other organisms.

As a result, New York State has awarded a license to Marrone Bio Innovations, a company in Davis, Calif., to develop a commercial formulation of the bacterium. The product, Zequanox, has been undergoing tests for several years, with promising results. (Dr. Molloy has no financial ties to the company.)

Zequanox killed more than 90 percent of the mussels in a test using tanks of water from Lake Carlos in Minnesota, said James A. Luoma, a research biologist with the United States Geological Survey in La Crosse, Wis. A control group of freshwater mussels, unionids from the Black River in Wisconsin, were unharmed.

In 2011, the federal Environmental Protection Agency reported that *P. fluorescens* CL145A presented “little risk to nontarget organisms.” The agency is now evaluating proposed open-water uses for Zequanox.

Natives of Eastern Europe in the genus *Dreissena*, zebra and quagga mussels began moving up the Volga River toward Western Europe 200 years ago. Highly prolific, they attach themselves to boats or any hard surface with their byssus, or beard. They can live out of water for two weeks, and their larvae, known as veligers, use currents to colonize new waters. As many as 700,000 mussels can pile up in a square yard.

Both species are thought to have arrived in North America in the ballast of trans-Atlantic cargo ships. By 1991 they appeared in the Hudson River, and within a year there were 500 billion between Troy and West Point, said David L. Strayer, an ecologist with the Cary Institute of Ecosystem Studies in Millbrook, N.Y.

The tiny mussels became a dominant species in the Hudson. Not even counting their shells, their total weight exceeded that of all the fish, plankton and bacteria combined, Dr. Strayer said, adding that they filtered “a volume of water equal to that of all the water in the estuary every one to four days.” There were no natural enemies to keep them in check.

None, that is, except scientists like Dr. Molloy. His fascination with water goes back to childhood summers on Lake Hopatcong, in New Jersey, where his father, an Irish-born lieutenant in the New York Fire Department, had built a cottage.

In 1956, when Dan was 8, his father and five other firefighters were killed when a wall collapsed in a storefront blaze — still the department’s worst disaster in the Bronx. Their children were given scholarships to Fordham University; the young Mr. Molloy got his bachelor’s and master’s degrees in biology at Fordham, and in 1972 entered the doctoral program at the State University College of Environmental Science and Forestry at Syracuse.

There he began working with State Museum scientists on one of their most vexing research challenges: finding an environmentally safe way to control a plague of black flies in the Adirondacks, where swarms and slashing bites were making life and tourism unbearable in the spring and early summer.

He began by converting a ramshackle fish hatchery in Cambridge, about 40 miles north of Albany, into what is now an internationally recognized field laboratory.

“I was in biocontrol doctoral research heaven,” he said, “getting \$25 a day to pursue the kind of problem I wanted to solve.”

Dr. Molloy concentrated on finding agents that could kill the black fly larvae in streams before the adults emerged. He had no luck with natural parasites, but then he heard that a bacterial subspecies called *Bacillus*

## Cossayuna Lake

thuringiensis israelensis, or Bti, discovered in a stagnant pond in the Negev desert in Israel, appeared to kill the larvae of black flies as well as those of mosquitoes.

Three years of intensive lab and field trials by Dr. Molloy, part of an international scientific effort, demonstrated Bti's effectiveness and environmental safety. It is now widely used in place of chemical pesticides throughout North America.

In 1990, when Dr. Molloy learned that invasive mussels had infested New York power plants, he began looking for a bacterium that could do to them what Bti did to black flies.

The odds were against him, he recalls. There were thousands of potential candidates, and a single species of bacterium can have multiple strains that produce widely different effects. Nor was there any guarantee that any of them could control mussels.

The project took Dr. Molloy and his team, in particular his colleague Denise A. Mayer, 20 years of work in New York and Europe. His lab received more than \$4 million in grants from the state, the National Science Foundation, the environmental program New York Sea Grant, electrical power utilities and other sources. (He was awarded \$8,626 for travel and research by the Hudson River Foundation for Science and Environmental Research in 1994, when this reporter was on its board.)

In 1995, after four years of testing more than 700 bacterial strains, excited staff members called Dr. Molloy into the lab. "Strain CL145A," a bacterium he had collected in river mud, was killing zebra mussels. It turned out to be a strain of *P. fluorescens*.

"A toxin in the strain's dead cells destroys the digestive system in a mussel," he explained later. "Dead cells are equally lethal as live cells, providing clear evidence that the mussels die from an intoxicating natural product, not from infection."

By contrast with caustic chemicals like chlorine, which cause the mussels to quickly shut their valves, the bacterium seems to travel normally through their inhalant siphons and into their digestive tracts. "Although ingestion of CL145A cells is clearly suicidal behavior for the mussels," Dr. Molloy said, "they appear to have no adverse reaction" when they first feed on the cells.

Compared with chemical agents, he continued, "the effectiveness and environmental safety of this bacterial strain have proved extraordinary."

Recently retired from the State Museum, Dr. Molloy is now a research biologist at the University at Albany, where he is assembling an international team of scientists to take on a new challenge: Haplosporidia, spore-forming parasites that have plagued bivalves worldwide.

There are more than 40 species, including the notorious *Haplosporidium nelsoni* MSX, which has devastated oyster populations in the Chesapeake Bay and along the Atlantic Coast. No one has been able to figure out how the spores spread infection from one host to another.

Dr. Molloy's team has discovered a freshwater version of the parasites, *H. raabei*, that infects zebra mussels, and will try to understand its life cycle

It is another daunting scientific challenge. But failure, Dr. Molloy said, "is not an option."

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