

Network News

It takes a Network to protect a watershed.



Summertime 2020

Hilary Lambert CLWN Steward

Many people have been noting that nature's annual seasonal rounds have continued, regardless of our human problems. As our human cacophony has died down, some have wondered if nature is emerging, edging outward. Here's my recent experience: When I went outside to walk my dog at 5:30 a.m., a deer was sleeping in the front yard on the recently-mown grass, halfway between my bedroom window and Hanshaw Road. She woke up, stared at us, and ambled slowly across the empty road to the fields.

There's a redwing blackbird just down the road who daily divebombs me, my dog, and the neighbors, I suppose for getting too close to the family nest. It is probable that a bobcat visited the backyard in April (falling off a white pine branch with a yowl), terrifying my cats. The mallard ducks situated at the

next door pond wandered freely and talkatively around my yard, unafraid of my household. I have heard of many other such close encounters, since shortly after the pandemic began and people-pressure retreated.

Is it us, or is it them? In any case, we should treasure our deeper immersion in

the out-of-doors during these interesting, tragic, and strange times.

Many people have gone to the lake to paddle, walk, and swim, are hiking along creeks and to waterfalls for solace and release. Families and friends sheltered at lakeside cottages outside the usual summer season, to be together and avoid pandemic dangers.

We do not yet know what changes the summer and fall of 2020 will bring for society, our country, and for us personally, but we do know that the changing seasons are beautiful and that our lake, lands and waters are loved and valued. And that Black Lives Matter.

Watershed-protective work continues this summer

Most of the Network's annual water-protective activities are continuing during 2020, some of them adjusted to keep participants safe during the COVID-19 pandemic. We were unable to host our usual spring community conference at Cayuga Lake's north end; but we are supporting numerous research and volunteer monitoring efforts around the lake. There are many things we can do to protect water quality and enjoy the outdoors, while staying safe.

continued on page 7



Bill Ebert and Tom Casella conducting CSLAP water quality testing on Cayuga Lake, June 2020.

A Multi-Decade Perspective on Fall Creek

Niamh O' Leary *Professor of Environmental Science, Wells College*

In the early 1970's Dave Bouldin (pictured with Roxy Johnston) and several colleagues undertook an intensive study of water quality in Fall Creek. Thousands of water samples were collected and analyzed for various constituents. At that time there was growing awareness of the adverse impact of phosphorus runoff as a driver of algal growth in lakes, but comparatively little was known about when and how phosphorus left watersheds and entered lake systems. The research determined that phosphorus levels in Fall Creek varied with the seasons, and that most of the phosphorus leaving the Fall Creek watershed was transported during high flow snowmelt and rainfall events. These findings have been fundamental to the design of effective water sampling protocols ever since. Working with colleagues too numerous to mention, Dave's early work on Fall Creek also included an ahead of its time effort to calculate a phosphorus budget for the watershed, and to determine which of several types of phosphorus contributed most to algal growth in Cayuga Lake. Later research using more sophisticated tools and approaches largely confirmed many of the findings from the early 1970s.

Over the years and decades since the 1970s, Dave returned to Fall Creek periodically to collect and analyze many more water samples. Thus a long-term data set was born that constitutes an irreplaceable legacy of decades of work. Long-term data sets of high quality and consistency are rare, but they are very valuable



Roxy Johnston, City of Ithaca; and Dave Bouldin, emeritus professor, Cornell University.

because they give us the opportunity to determine if watersheds are, or are not, changing over time. In a recent publication, the Fall Creek data set was used to determine if there was any significant change in soluble reactive phosphorus (SRP, an important type of phosphorus in water bodies) in Fall Creek between the 1970s and the first decade of the 2000s. There has been tremendous change in our region since the 1970s—land use has changed, as has population, climate, and more. Remarkably, no significant difference in the amount of SRP flowing down Fall Creek was evident when these two time periods were compared.

This is telling us that this aspect of the Fall Creek watershed appears to be quite stable and resilient in the face of change. You can read the full publication, which also includes a comparison of Fall Creek with other tributaries in the watershed in collaboration with the Community Science Institute, at <https://www.mdpi.com/2073-4441/11/10/2075>.

Generations of colleagues have contributed to and used the Fall Creek data set. The work continues today with more research and studies underway. Dave continues to collaborate actively with a variety of researchers and stakeholders in the Cayuga watershed and beyond. To learn more about the Fall Creek work of Dave and his many collaborators, and to access data, go to ecommons.cornell.edu, choose to “browse by author” and enter “Bouldin” as the search term. 🐾

Our 2020 HABs Communications Intern

The Harmful Algal Blooms monitoring season kicked off around Cayuga Lake this year on June 29. Beginning that week, the 90-something HABs Harriers began regular monitoring of about 60% of the Cayuga Lake shoreline for Harmful Algal Blooms. This will continue until October. Thank you, volunteers!

The Community Science Institute HABs Lab team, led by Nathaniel Launer, carries out lab analysis of suspected HABs samples brought in by the Harriers or a member of the public. You can view their Cayuga Lake Cyanobacteria (HABs) Reporting Map at www.communityscience.org > Cayuga Lake HABs Reporting Page.

The Network shares CSI reports, HABs research and concerns with the public via weekly e-newsletter, HABs Updates. These are sent out widely and will be posted to our HABs website tab. We are fortunate this year to have Sofia Walzer as our HABs Communications Intern. Contact her at habsintern2020@gmail.com to be added to the e-mail list. She has provided us with some information about her. Welcome, Sofia!

HELLO! My name is Sofia Walzer, and I'm the HABs Communications Intern this summer for the Cayuga Lake Watershed Network. I'm

a rising junior at Cornell University majoring in Biology and Society with minors in Climate Change and Marine Biology. I became interested in studying marine biology through my passion for scuba diving. Beyond my studies, I enjoy exploring the outdoors, skiing, painting, and traveling. Based in Long Island, New York, I've lived abroad in London, Paris, and Hong Kong, and grew up in a Mexican-American household; I hope to continue to build a diverse worldview. I look forward to learning more about a nearby ecosystem and working with a team that is dedicated to environmental activism! In these socially-distanced times, I'm optimistic that we can still create a sense of community. 🐾



It takes a Network to protect a watershed!

Our HABs efforts are in full swing in 2020!

July 2020

Dear Friends,

Many of us have felt helpless in the face of the COVID-19 pandemic. We can make a positive difference by supporting causes dear to our hearts. Lake, creek, and watershed health are essential to local lives and communities, as we work together to build a better social and environmental future.

Please give to our 2020 annual appeal. The money raised will be used to keep you and the public informed about Harmful Algal Blooms, and about other threats to human and ecosystem health across the watershed.

We are concerned about the continued weakening of federal Clean Water Act protections for the USA's waterways. More than ever, local vigilance and action are essential, so that Cayuga Lake and its creeks remain clean and healthy. With the support of you, our members and supporters, the CLWN can stay focused on the central goal of protecting our watershed for generations yet to come.



HABs sampling
on Cayuga
Lake 2018

This summer we pledge to:

- Keep you updated about Harmful Algal Blooms.
- Share steps needed to end Harmful Algal Blooms.
- Provide volunteer opportunities to protect our lake and creeks.
- Inform and take action about other water pollution problems.
- Inform 19 area municipalities about hydrilla & other invasives.
- Encourage residents to adopt Lake Friendly Living practices.

THANK YOU...

hope to hear from you soon. Have a healthy, positive, water-loving season.

Hilary Lambert, Steward/Executive Director;
steward@cayugalake.org

Jennifer Tufano Grillo, Program Associate;
programs@cayugalake.org

Please donate or join by mailing your check to Cayuga Lake Watershed Network, P.O. Box 348, Aurora, NY 13026 or with PayPal by visiting www.cayugalake.org.

Cayuga Lake 2020 Hydrilla Update

Hilary Lambert CLWN Steward

*Thanks to vigilant monitoring and quick treatment response, hydrilla (*Hydrilla verticillata*) was absent from Cayuga Inlet and Fall Creek at Cayuga Lake's south end from 2015-2018.*



However, in fall 2019, hydrilla patches were mapped in Cayuga Inlet and at the southwestern corner of the lake. The several-year-old patches offshore of Stewart Park and around the Merrill Sailing Center on the southeast shoreline were treated in 2019, and are being monitored.

A few miles north in Lansing, a major infestation of the Finger Lakes Marina was treated during 2019, and is being carefully monitored for followup treatment. Further north, monitoring and treatment continue for the dredged and treated area at Don's Marina in King Ferry, and along the shoreline in the Village of Aurora and at Payne's Creek. (See the Cayuga Lake map of hydrilla infestation sites, fall 2019.)

Teamwork for control & eradication

A lakewide team on Cayuga Lake is emerging to coordinate the monitoring and treatment of the invasive aquatic plant hydrilla for the summer of 2020. This Hydrilla Task Force coordinating group includes the Tompkins County Soil and Water Conservation District Office in Ithaca; the Finger Lakes Institute and PRISM (Partnership for Regional Species Management), Geneva; the Department of Planning, Cayuga County; the U.S. Army Corps of Engineers Office, Buffalo; and Racine-Johnson Aquatic Ecologists, Ithaca. Other central participants are the Departments of Health in Tompkins and Cayuga counties; and the Bolton Point Water Treatment Plant, Lansing. Several affected municipalities and Wells College in Aurora are also participating.

Locally, public outreach is provided by the staff of the Cayuga Lake Watershed Network, with support from Tompkins County Cornell Cooperative Extension, and DiscoverCayugaLake. The Finger Lakes PRISM provides information, research, and expertise. Information is being shared with the 19 lakeshore municipalities around the lake,

because hydrilla is not just a south end/Ithaca problem any longer.

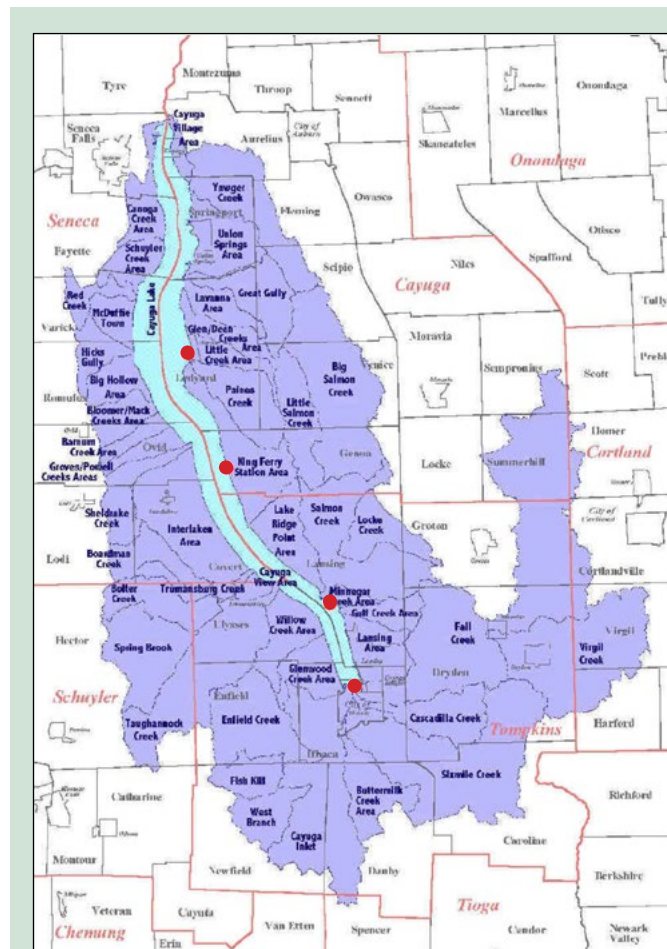
In 2020, hydrilla is being found many miles north of where it was discovered (by a talented intern on the Floating Classroom!) in 2011, flourishing in the waters around the Ithaca Farmers Market and Johnson Boatyard docks. Although we will never know exactly where or how, the hydrilla was most likely carried to this popular boating area on a boat or trailer that had picked it up in an infested waterbody further south or east. Early treatment options along Cayuga Inlet in 2011-12 included suction- and hand-harvesting by divers, but the fragments were difficult to contain. Special benthic mats can be used on small areas. Since 2012, chemical treatments and meticulous monitoring were

found to be most effective in controlling—and for a few years, eradicating—hydrilla from the lake's south end.

While some argue that we need to learn to accept and live with hydrilla, it is an aggressive invasive, can grow a foot a day, and fills water bodies up to 30 feet deep. California and other states spend tens of millions of dollars each year to keep it at bay so that it does not clog fishing, boating and swimming areas. Florida was not able to get ahead of—or flatten, as we say nowadays—the invasion curve, and spends many millions of dollars annually to mow lanes for boats, and to chemically treat large areas. But the hydrilla always grows back quickly, and its thick green mats fill Florida lakes.

We don't want that to happen in Cayuga Lake. Imagine if the shallow south and north ends, and much of the lakeshore, was clogged with hydrilla. We would be well on the way to that situation by now, if the original 2011 Task Force had not acted quickly and effectively, and maintained an active program in all the years since.

Water users are paying attention and protecting our lake from hydrilla's spread
To date, ours is the only Finger Lake infested. This suggests that



CAYUGA LAKE HYDRILLA TASK FORCE. BASE MAP OF THE CAYUGA LAKE WATERSHED IS FROM THE INTERMUNICIPAL ORGANIZATION, CAYUGA LAKE WATERSHED.

Hydrilla infestations, Cayuga Lake 2011-2019

- City & Town of Ithaca (2011 – 2019):
South end of the lake, Fall Creek and Cayuga Inlet,
Southeast shore and Merrill Sailing Center Marina.
- Town of Lansing (2019): Finger Lakes Marina
- Town of Genoa (2018): Don's Marina
- Town of Ledyard (2017): Wells College dock & Aurora waterfront.

messages to clean boats, such as “Clean, Drain, Dry” and “Stop Aquatic Hitchhikers!” publicized widely by the Finger Lakes PRISM and others, are working. People are checking boats and trailers for hydrilla fragments when they leave Cayuga Lake and head for other lakes. Also, people are reading and acting on the hydrilla information sheets that Dave’s Team sets out at 70 sites around the lake each year. Additionally, the boating and fishing public are making use of Watercraft Steward free boat-checking services at numerous launches.

We hope to see an integrated, lakewide communications and response system for hydrilla put in place over the next few years, especially if better funding can be developed to establish a lakewide management/control/eradication program.

Watercraft Stewards program continues lakewide for 2020

The Finger Lakes Institute is continuing the Finger Lakes boat stewards program for 2020, with COVID-19 pandemic protections in place for the safety of both stewards and the public. Watch for the red-clad Stewards, with (unmanned) information tables, at these Cayuga Lake sites: Treman State Marine Park (with boatwashing station), Cayuga Lake State Park, Long Point State Park, Dean’s Cove NYS Launch, and NEW—Mud Lock at the lake’s north end.

Participation by boaters is fully voluntary and protected by COVID-19 pandemic practices. For more information about this program, contact Sam Beck-Andersen beck-andersen@hws.edu and view <http://fingerlakesinvasives.org/watercraft-steward-program/>.

Citizen science volunteers sought to help monitor & report

Since hydrilla was first detected in Cayuga inlet in 2011, a loosely coordinated group of volunteers has provided time and effort to get information to the public about hydrilla, and to help monitor the lake’s shallow water and shoreline for its spread. This work continues in 2020, with appropriate COVID-19 safety measures in mind. New volunteers are sought!

- **Dave’s Team:** Hydrilla information boxes will be re-installed at 70 sites (launches, marinas, docks) around the lake during June-July. These need to be checked and refilled.
- **Lake Rakers:** Join paddlers and lakeshore lovers to check the shoreline and shallow water for hydrilla in July-November. Lake rakes free, in return for commitment.
- **Hydrilla Hunts:** Watch for these calls to action in October.
- **Receive the Hydrilla Hunter Happenings e-newsletter.**
- **Help and support your shoreline municipality to watch for hydrilla.**
- **Contact** programs@cayugalake.org & steward@cayugalake.org

Learn more about hydrilla

- Tompkins County Cornell Cooperative Extension <http://www.stophydrilla.org>
- Finger Lakes PRISM (Partnership for Regional Invasive Species Management) <http://fingerlakesinvasives.org/hydrilla/>
- Cayuga Lake Watershed Network <https://www.cayugalake.org/volunteer/become-a-hydrilla-hunter/> ➤

Does your lake have Starry Stonewort?

Starry Stonewort (Nitellopsis obtusa, SSW) is an invasive aquatic macroalgae from Eurasia that closely resembles a vascular plant. It invades lakes, ponds, and slow-moving water bodies. The first occurrence of SSW was documented in the late 1970’s in the St. Lawrence River. Ballast water from ships is the prime suspect for the entry and spread throughout the Great Lakes basin.

Left unchecked SSW will cause harm to natural environmental systems, fish habitat and inhibit use of waterways, which can potentially result in economic impacts.

With funding from the US Environmental Protection Agency Great Lakes Restoration Initiative, The Starry Stonewort Collaborative for the Great Lakes basin enhances the capacity of experts, resource managers and local stakeholders to address starry stonewort infestations in the general focus areas of Outreach, Ecology, and Control.

A key component of the Collaborative is the engagement of citizen scientists to complete simple surveys for SSW. The Finger Lakes Institute and FL-PRISM provide training, identification materials, and basic field kits. These surveys provide important information that support early detection efforts and a better understanding of its growth and spread.

The Collaborative website (www.starrystonewort.org) has information about how to get involved, a growing library of information and research about SSW, and a forum to ask questions and discuss what others are learning.

Go to the website or contact David Carr at 315-781-4398 for more information and help us fight this invader! ➤

PHOTO COURTESY TIP OF THE MITT WATERSHED COUNCIL [HTTPS://WWW.WATERSHEDCOUNCIL.ORG/STARRY-STONEWORT.HTML](https://www.watershedcouncil.org/starry-stonewort.html)



Starry Stonewort

Paddle4Change Trash2Art

Paul Closs *Board member & Paddling Community Liaison*

Very excited to announce this Summer Project. It's an idea from the paddling folks in Ithaca, New York who usually put on the Cayuga Lake Cup every year. It's a summer-long project to preserve, respect, and appreciate the environment through paddling, trash clean-up, and art.

For more information and photos, go to the Glorious Trashbirds page on Facebook.

Here's how it works:

1. Beginning May 31 and ending August 15, when the Cayuga Lake Cup is scheduled:
 - i. Paddle as you usually would, but
 - ii. When you see trash or garbage—cuz you know it's there—collect it and take it back with you. Recycle or dispose of it properly, or better yet:
 - iii. Turn it into art!

NEXT!

1. Share photos of everything you create USING THE HASHTAGS: #Paddle4Change and #Trash2Art on Facebook and/or Instagram and also TAG The Cayuga Lake Cup. These will be judged by the public through the number of likes they receive!
2. For the serious folks we will have a panel to judge art as well as a physical exhibit in the Central New York region in the fall!

When the challenge ends, “winners” and “awards” in different categories will be announced. But really, we all win by taking part: Individually, we get to paddle, we help preserve/reclaim the environment, we turn trash into art, but collectively, we're also doing it together as a community.

Now this was mainly created for paddlers, but we want to include EVERYONE. So for those of you who don't paddle, substitute paddling for any outdoor, physical activity: Biking, walking, jogging, skating, scooting etc.

For those of you not into creating art, just post some pics of what you collect. There may be awards for things like, largest trash piece found, craziest thing found, etc. Just make sure to include the hashtags and tag Cayuga Lake Cup.

Get out there, do your thing, grab some litter, make some art! Let's see what you've got! 🐦



The Network's New Spring and Summer Lakewear!

The Network has new hats and shirts available for purchase!

All proceeds benefit the Network, and a portion of our earnings will be used to purchase future gear. Hats and shirts feature “AIS” (Aquatic Invasive Species), and logos from CLWN and our partners at the Finger Lakes Institute and Finger Lakes PRISM (Partnership for Regional Invasive Species Management) in Geneva.

We encourage anyone working with, volunteering to protect, or simply enjoying our lake and creeks, to purchase and proudly wear these items. They also make great gifts!

Hat or Shirt: \$25/each
Two of any combination
(two hats, or two shirts, or hat/shirt): \$40 total

Shirts are unisex, sized from adult Small to XXL.

Caps are adjustable, for adult head sizes. There's one color selection for caps and

shirts—blue shirts, and cream caps with matching blue piping.

How to order

Please contact Jenn Tufano Grillo at programs@cayugalake.org to place an order.

- Provide your name, mailing address, and number of items to be ordered, including shirt sizes.
- To calculate shipping costs, please provide your mailing address, so that we can calculate cost of shipping to your location, based on the number of items you order. We'll add that to the cost of the items, and provide you with a total amount for payment.
- Payments can be made via our website or by sending in a check—please arrange with Jenn.
- Items will be shipped upon cleared payment. 🐦

They also
make great
gifts!

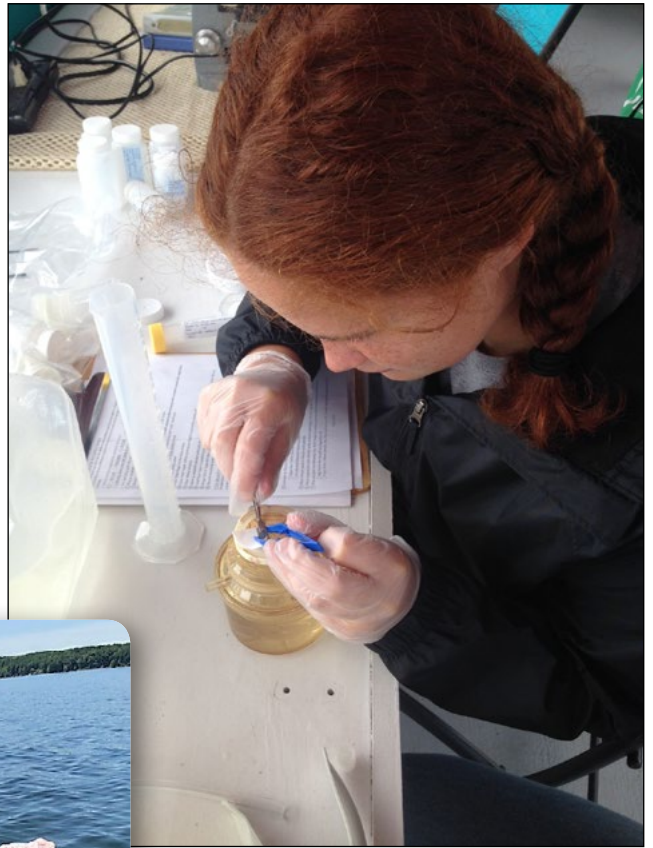


Stormwater Sampling: The results of this new project may someday point the way for reduction of runoff that contributes to Harmful Algal Blooms (HABs). Bill Ebert, chair of our Water Quality Committee, reports that the Stormwater Sampling team has done one round of base flow sampling at the mouths of eight creeks around the lake. These are, in Seneca County (west shore): Sheldrake Creek, Johnsons Creek, Burroughs Creek, Williamson Creek, Canoga Creek, Canoga Creek (North); and in Cayuga County (east shore) Yawger Creek (North), Yawger Creek (South), and Great Gully. Trained early this spring by staff from Upstate Freshwater Institute, the samplers are ready to collect water quality samples during big rain events, which often wash larger quantities of excess nutrients (phosphorus, nitrogen) down creeks and into the lake. This special focus project builds on years of data collected under the guidance of Ithaca's Community Science Institute. Learn more about this project at our website at Resources>Water Quality Committee.

CSLAP: The Citizens Statewide Lake Assessment Program (CSLAP) is a volunteer lake monitoring and education program that is managed by the NYS Department of Environmental Conservation and the NYS Federation of Lake Associations. CSLAP was established in 1985 to, among other goals, begin collecting water quality data about New York State lakes, using trained volunteers. Coverage of Cayuga Lake by this program has varied over the years, but from 2017-2019 DEC paid for water quality sampling at five points down the length of the lake. The Network took over payment of lab fees for three of these sites for 2020, so that regular data collection could continue. We'll share results of this long-term look at the state of Cayuga Lake in an article later this year.

Out on the lake this summer, if you see a motor boat bobbing while two people take water samples, they may be our CSLAP volunteers in action. They are James and John Murphy (sampling at a site in the shallow north end), Bill Ebert and Tom Casella (sampling mid-lake near Burroughs Creek), Doug and Linda Dixon (sampling near Long

FIVE TEAMS are doing water quality sampling on Cayuga Lake this summer for DEC's CSLAP program. Shown here are Frannie Lux of the DiscoverCayuga team, Linda Dixon (with Doug), and Sarah and Pete Gould with trusty assistant Luna. The fourth team, Bill and Tom Casella, are the masked men on the front page. The fifth team, Jim and John Murphy, are not pictured.



Point State Park), Sarah and Peter Gould (sampling mid-lake near Taughannock Creek), and Bill Foster, Shellie Blackler, Marina Howarth and others on the DiscoverCayugaLake crew (sampling mid-lake near the south end). See accompanying photos. This project takes a lot of time and commitment. You can learn more about CSLAP at DEC's page: <https://www.dec.ny.gov/chemical/81576.html>.

Look for other Network-sponsored and supported volunteer-led projects in this issue of *Network News*. There's plenty to do, so please—go outdoors! 🐾



The mission...

The Cayuga Lake Watershed Network identifies key threats to Cayuga Lake and its watershed, and it advocates for solutions that support a healthy environment and vibrant, sustainable communities.



PO Box 348
Aurora, NY 13026

NON-PROFIT
U.S. POSTAGE
PAID
TRUMANSBURG, NY
PERMIT NO. 1

Cayuga Lake Watershed Network
170 Main St., PO Box 348
Aurora, NY 13026
www.cayugalake.org
Office: 607-319-0475

OFFICE HOURS:
By appointment.
Please contact
steward@cayugalake.org
to arrange.

STAFF:
Hilary Lambert, Steward
steward@cayugalake.org
Jennifer Tufano Grillo, Staff
programs@cayugalake.org

2020 Summer Interns
Sofia Walzer, Abbey Yatsko

Newsletter Advisory Committee:
Niamh O'Leary
Nancy Currier
Ed Currier

Photographs by Hilary Lambert
unless otherwise noted.

The Cayuga Lake Watershed Network thanks Leigh Dezelan of Dezelan Design and Pioneer Printing of Lodi for newsletter production excellence.



- Educate
- Advocate
- Protect

Current Resident

Upcoming Events

Check our website www.cayugalake.org & Facebook page for the latest!

The CLWN has our own YouTube channel! If you use YouTube, just search for Cayuga Lake Watershed Network and enjoy a brief welcome video by Network staff. We intend to populate this video resource with conference presentations, how-to videos on everything from building a lake rake to identifying invasive aquatic plants, informational presentations by our partner organizations, and more! If you have been curious about a topic and think an informational video could help inform you and others, please send us your ideas. You can subscribe to our channel to receive updates as new videos are added. Happy viewing!

We usually hold a mid-August picnic and Annual Meeting at one of our many beautiful lakeside locations. This year, however, the **meeting and Board elections** are probably going to be managed online and via mail. Watch our listserv, Facebook and Instagram pages for updates.

If anyone would like to get together for a socially-distanced picnic in August, contact Hilary at steward@cayugalake.org and let's see what we can figure out. It is very important to go outdoors!

There are opportunities in this issue for volunteer activities that protect Cayuga Lake and watershed. Look for hydrilla hunting and lake raking (page 5), and consider doing a creek or lakefront cleanup of trash, as part of the Paddle4Change Trash2Art project (page 6). We can provide gloves, and can loan trash-grabbers. Do NOT pick up or dispose of trash without COVID-19 protections. Disinfect and wash up after trash collecting! Contact Jenn at programs@cayugalake.org

Join the Lake Friendly Living program—check out our webpage—sign the pledge! Go to www.cayugalake.org > Get Involved > Lake Friendly Living!

It's not just for lakeshore residents. Anyone can take part. ➤