

On the lake and across the watershed A busy spring & summer for conservation and science

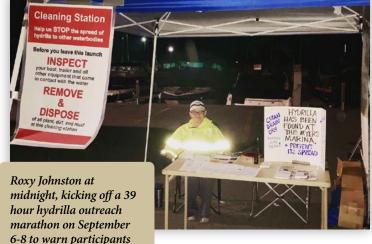
Hilary Lambert Steward/Executive Director, Cayuga Lake Watershed Network

In the past few years, our members and supporters have been trained and teamed up to carry out a lot of work to protect Cayuga Lake, and to gather scientific information that is being used to better understand some of the challenges our watershed is facing in this time of rapid change. Following is a summary—apologies if we left out your work or project—let us know for the next issue. We are fortunate to have community and university experts and specialists working alongside dedicated "regular folks." It's a beautiful combination for communication and understanding.

Embrace the Lake spring cleanups & trash-based art

show: Every spring we help community groups carry out lakeside, creek and ditch cleanups. Local community groups also organize their own. These spring cleaning events reduce roadside and waterway trash that accumulate over the winter and pollute our land and water. About eight Network-sponsored cleanups took place between March and mid-May, extending from the Aurora area on the east shore south through the Ithaca end and north to Covert on the west shore. The biggest event in 2019 was the town-wide cleanup in Caroline. Ithaca resident Paul Closs coordinates the south-end lake paddling community to carry out numerous, year-round cleanups. Paul worked with cartographer Michelle Henry to map the trash that he found floating in Cayuga Inlet over a several-month period. This was exhibited, along with a map of Caroline Byrne's trash excavations near WalMart, as part of a trash-based art show, "Strewn, Forgotten, Gathered, ReImagined," during June and July at Ithaca's CSMA (Community School of Music and Arts) gallery. The show will travel to an Elmira gallery.

CSLAP: The Citizens Statewide Lake Assessment Program (CSLAP) is a volunteer lake monitoring and



midnight, kicking off a 39 hour hydrilla outreach marathon on September 6-8 to warn participants in a fishing derby that hydrilla had been found at the nearby marina. Network members, staff and Watercraft Stewards from the Finger Lakes Institute worked together almost around the clock to get the "Clean, Drain, Dry" message out. At Myers Park public launch, Lansing.

education program managed by NYS Department of Environmental Conservation and New York State Federation of Lake Associations (NYSFOLA). There are five DECfunded sampling points along the length of Cayuga Lake. Every other week for 15 weeks, trained volunteer teams have been on the lake collecting water samples for lab analysis, recording information about weather conditions, water

temperature, water transparency, lake depth, and recreation quality of the lake and algal conditions based on the user's perception. That is a lot of work and time! More about CSLAP here: https://www.dec.ny.gov/chemical/81576.html.

Hydrilla Hunting: Network staff Jenn Tufano Grillo coordinates the installation and replenishment of about 65 hydrilla information boxes at launches and marinas and parks around the lake. The team of Network member volunteers—

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on Six Mile Creek.

watercraft-steward-program/.

aka Dave's Team, after team founder Dave Heck of Lansingincludes two staff from the Finger Lakes Institute, and we are grateful for their help. We send out an online newsletter update about hydrilla every few weeks from July to November. Hydrilla has been found at several new locations along the lake's east shore this spring and summer. A lakewide team of experts works together loosely to coordinate response, treatment options, public notification and discussion, and monitoring. We are hoping to formalize this over the winter months. If you want to obtain a free lake rake to do lakeshore monitoring this fall, or just want to know more about this highly problematic invasive aquatic plant, contact Jenn at programs@cayugalake. org and check the online resources at the Finger Lakes PRISM (Partnership for Regional Invasive Species Management) website http://fingerlakesinvasives.org/hydrilla/.

Macrophyte Survey Program, FL PRISM: Several Cayuga Lake volunteers are part of this regionwide data collection project, in which trained participants identify, survey and report on the presence or absence of high-priority aquatic invasive species. Participants receive plant identification training, survey kits, data protocol, resources, and one-on-one support. The survey (a rake toss) is conducted every other week for ten weeks between June and October. Coordinated by Patricia Wakefield-Brown, Finger Lakes Institute. More information: http:// fingerlakesinvasives.org/macrophyte-survey-program/.

Watercraft Stewards: Since 2012, the Watercraft Stewards Program has placed trained, paid college students in red

outfits at Cayuga Lake's major parks and launch sites during the summer months to carry out careful boat inspections for invasive species, to inform the boating public about "Clean, Drain and Dry" boating practices that prevent transport of invasives, and to collect recreational boating data (anonymously) for a better understanding of how aquatic invasive species (AIS) may be carried from one lake to another, or to different places on the same lake. When students go back to college, the program is maintained at some locations by parttime paid workers. The program is coordinated across the Finger Lakes by Sam Beckwith-Andersen at the Finger Lakes Institute and the Finger Lakes PRISM in Geneva, working with NYS DEC

and lake associations on several lakes, and is funded by a variety of sources. More information: http://fingerlakesinvasives.org/

Creek water quality monitoring: Over the past five years, Network staff developed and obtained startup funding for three water quality monitoring groups for creeks around Cayuga Lake, via volunteer training by the Community Science Institute. The Canoga Shoreliners sample creeks on the northwest shore; Yawger and Great Gully are tested several times a year by a newer group on the northeast shore; and the Milliken Creek group monitors along this Lansing creek downslope from the massive coal ash landfill next to the Cayuga Power Plant. Sampling results

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Annual Meeting & Picnic Report Cool & sunny, with good food & company

Hilary Lambert Steward/Executive Director, Cayuga Lake Watershed Network

Our 2019 Annual Meeting and Picnic was held on beautiful August 21 at Cass Park, near Cayuga Inlet in Ithaca. About 40 people attended, including Network members and supporters, Board members, family and friends. Thank you to Steve Smith of Ludlowville for his skills as grillmeister, and to everyone for sharing delicious side dishes and desserts.

ur guest speaker, Becky Sibner, is Land Protection Specialist with the Finger Lakes Land Trust (www.fllt.org). Becky provided a lively and information-packed update about the Finger Lakes Land Trust's effective work to protect land and water in the Finger Lakes region and Cayuga Lake watershed. Thank you Becky!

The annual election of new and retiring Board members was conducted by Board Chair Deb Grantham and Network staff Hilary Lambert and Jenn Tufano Grillo, completing the process begun via the earlier mailed balloting. Two new Board members were elected: Nancy Currier and Ed Currier, who have a cottage on the northwest shore just south of Seneca Falls. Welcome, Nancy and Ed! Returning members are Kate Graham (King Ferry) and Neil Schwartzbach (Ithaca). Our long-time Secretary and deeply effective helper Mike Duttweiler (Ithaca) has stepped down. Thank you Mike—and we are grateful you are staying on to help us with the website.

After the Annual Meeting, Deb Grantham convened a brief August Board Meeting to elect officers for 2019-20, as follows.

CLWN Executive Committee, 2019-20

Deborah Grantham (Ithaca), *Chair*David Wolfe (Lansing), *Vice President for Tompkins County*

Bill Ebert (Fayette), Vice President for Seneca County

Eric Devin (Aurora), Vice President for Cayuga County

John Abel (Ithaca), *Treasurer* Louise Mudrak (Ithaca), *Secretary*

Additional members, CLWN Board of Directors

Paul Closs (Ithaca)
Penney Mapes Cook (Aurora)
Ed Currier (Fayette)
Nancy Currier (Fayette)
Douglas Dixon (Ovid)
Kate Graham (King Ferry)
Patricia Haines-Gooding (Ithaca)

Mark Sarvary (Ithaca) Neil Schwartzbach (Ithaca)

CLWN staff

Hilary Lambert, Steward/Executive
Director
Jenn Tufano Grillo, Members,
Events & Programs →



are available at the CSI website, www.communityscience. org. This regular sampling around the northern half of the lake has revealed previously undocumented pollution issues from excess nutrients. These groups join the many others who have been monitoring creeks around the southern third of Cayuga Lake for as much as ten years, thanks to Steve Penningroth and the Community Science Institute. Funding comes from private foundations, county and municipal governments.

Harmful Algal Bloom monitoring and reporting: After a small beginning in 2017 when

Harmful Algal Blooms (HABs) first appeared

as widespread blooms on Cayuga Lake, the HABs Harriers monitoring and reporting program developed by the Community Science Institute's Claire Weston – now run by Nathaniel Launer—has grown to include 80 volunteers, weekly coverage of over 40% of the lake's shoreline, and a total of 60 blooms reported in 2019 as of early September. Bloom locations, lab test results and toxicity can be viewed online at the Harmful Algal Blooms monitoring link at www.communityscience.org. Thanks to close cooperation with the Network's HABs outreach program, the public knows to send a phone alert with photos,



artist-activist Caroline Byrne at the trash-based art show "Strewn, Forgotten, Gathered, ReImagined," in June at Ithaca's CSMA (Community School of Music and Arts) gallery. Local waterways trash was collected and mapped, and remade in artful ways, for this great show.

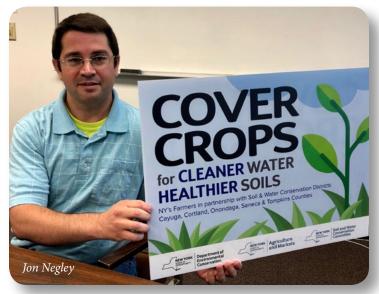
date, time and location of a possible bloom to habshotline@ gmail.com . Cornell University's Communications Program provided the Network with interns in 2018-9 to develop and boost our watershed-wide outreach program, which includes regularly-published online Cayuga Lake HABs Updates. More at our website www.cayugalake.org at the Algal Blooms tab.

Water chestnut survey and removal in the Ithaca

reservoir: The City of Ithaca obtains its drinking water from a reservoir on Six Mile Creek. Sharp eyes during a NYS DEC survey three years ago spotted the aggressive aquatic invasive water chestnut (Trapa natans—no relation to the edible water chestnut), floating in patches across the reservoir. Their distribution first mapped by Michelle Henry in 2017, the water chestnut plants are now pulled regularly by a team traversing the lake in small craft. Michelle reports a drop in plants during 2019, a good sign—if we keep after this pest. Michelle and Roxy Johnston (City of Ithaca Water Treatment Plant) suggest that the terrestrial (dry land) invasive Japanese knotweed is replacing the water chestnut as a major reservoir pest, rooting quickly and growing in shallow areas of the reservoir and on its banks.

A lot of people are working diligently to take care of our lake via regular activity and data collection. Want to get involved? Contact Hilary at steward@cayugalake.org. Want to donate to support our work? You can at our website, or send an inquiry to Jenn at programs@cayugalake.org. >

Cover crops = cleaner water, healthier soils



his is Jon Negley, District Manager of the Tompkins County Soil and Water Conservation District. Tompkins County anchors the steep slopes that drain to the southern third of Cayuga Lake via hundreds of permanent and seasonal small streams, and the big famous creeks and waterfalls including Fall Creek (Ithaca Falls), the spectacular Cascadilla Creek gorge through the Cornell campus into downtown Ithaca, Buttermilk Falls (Buttermilk Creek to Cayuga Inlet), Taughannock Falls, the falls at Ludlowville on Salmon Creek; and the Robert Treman State Park's Enfield Creek and gorge. And others!

Look for this sign "Cover crops for cleaner water, healthier soils" in fields that are being planted in cover crops to reduce runoff and erosion during the coming fall and winter months. This is a Best Management Practice (BMP) to lessen nutrient runoff that can cause Harmful Algal Blooms (HABs).

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It's the Law! Fertilize With Care!

Excerpt from the late summer 2019 "Gardens and Gutters," newsletter of the Central New York Stormwater Coalition.

The New York State Dishwasher Detergent and Nutrient Runoff Law restricts the use of phosphorus containing detergents and lawn fertilizers. While phosphorus is a nutrient that is essential for plant growth, in high levels it can degrade water quality. In many areas of NYS the soils naturally contain a sufficient amount of phosphorus to support the growth of turf grass without the need for additional fertilizer.

The law does not ban the use of phosphorus fertilizer, but for an established lawn it does require that a soil test be conducted to indicate that the soil is lacking in phosphorus. To ensure accurate test results, the NYS Department of Environmental Conservation recommends using a reliable laboratory over a home soil test kit.

If the soil is lacking phosphorus, an organic fertilizer can be applied. If the soil is not lacking, only fertilizer that contains 0.67% or less phosphorus, which the law defines as phosphorous-free, can be applied.

Phosphorus fertilizer can also be applied if you are establishing a new lawn with seed or sod. The law does not impact the use of agricultural fertilizer or fertilizer for gardens. Retailers are required to display phosphorus containing fertilizer separately from non-phosphorus fertilizers, and to post an educational sign where the phosphorus fertilizers are displayed.

Other things to keep in mind:

- Fertilizers containing phosphorus, nitrogen or potassium are prohibited between December 1st and April 1st.
- Phosphorus containing fertilizer may not be applied within 20 feet of any surface water unless there is a vegetative buffer of at least 10 feet.
- Fertilizer application on any impervious surface is prohibited; any fertilizer accidentally spilled or spread on an impervious surface must be picked up.

Organic versus synthetic fertilizer:

Organic fertilizers are derived from plant and animal nitrogen sources and always contain some phosphorus. In contrast, non-organic, or "synthetic" fertilizers can be manufactured without phosphorus.

The synthetic fertilizer industry now



produces phosphorus-free fertilizers. All organic products will naturally contain phosphorus, as it is found in all living creatures. This includes compost derived from the breakdown of leaves in our yards or at town compost facilities. Leaf compost typically has low amounts of

phosphorus in it and can be used to top dress established lawns.

By reducing phosphorus use in lawn fertilizer we can create a healthier aquatic environment for people, fish and wildlife.

Cover crops = cleaner water, healthier soils

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The two other main lakefront counties in our watershed are Cayuga and Seneca counties, which are also participating. Also taking part are Cortland County, which is partially in the Cayuga Lake watershed (notably Virgil Creek); and Onondaga County, home to the city of Syracuse and numerous large and small water bodies.

Thanks go to Jon Negley's team and other participating agencies including NYS Departments of Environmental Conservation, Agriculture and Markets, and the Soil and Water Conservation Committee.

It's the Law! Fertilize With Care!

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If you would like to subscribe to the Central NY Stormwater Coalition's newsletter, please send a request to mail@cnyrpdb. org.

- The Central NY Stormwater Coalition includes Cayuga County, and is online here: http://www.cnyrpdb.org/.
- Tompkins County's Stormwater Coalition: http:// tcstormwater.org/.
- For stormwater questions in Seneca County, contact the Seneca County Soil and Conservation District Office http://senecacountyswcd. org/.

Thanks to Michele Wunderlich (Cayuga County Planning, Auburn) and Kathy Bertuch (Central New York Regional Planning & Development Board, Syracuse) for sharing this information with us.

Introducing Tompkins County ScienceHub

Over the past year, the Network has benefited from working with the new Tompkins County ScienceHub, introduced here by the program's director, Norman Porticella. If the opportunity for local collaboration to build STEM (Science, Technology, Engineering and Math) capacity appeals to individuals, community and school groups, please respond to the survey link below.

Norman Porticella Director

Your actions are contributing to Community Science Literacy (CSL). At least we think they are. But nobody really knows what CSL is or how best to help it flourish. Addressing local problems typically involves bringing together a variety of human, material, and financial resources. Caring for a watershed, along with other initiatives like feeding the local population, educating it for today's jobs, and preparing it to help solve tomorrow's local problems often also require science-related resources. CSL acknowledges that solving problems that involve science requires more than teaching a group of individuals specific facts about the world. As with any community problem, it involves the capacity for that community to bring together a diverse set of resources.

Over the past two years, we've identified 130 STEM-engagement programs and organizations in Tompkins County and spoken to over 30 program administrators and educators representing a diverse group of local organizations across the county involved with STEM engagement. From these conversations



Tompkins County ScienceHub is a collaborative effort with Cornell Cooperative Extension of Tompkins County, to serve as a nexus for STEM-related resources & expertise across the county, leveraging existing structures and curating existing resources to support the development and assessment of Community STEM Capacity.

emerged an initial structure for Tompkins County ScienceHub with two primary goals: facilitate equitable, diverse, inclusive partnerships, and provide access to educational resources to enhance community literacy on STEM topics and engagement practices. In short, we aim to help educate and bring together people and critical resources to solve local STEM-related problems.

Of course, we're not proposing anything entirely new here. The Cayuga Lake Watershed Network and its partners are already doing an amazing job educating local residents and coordinating resources and activities across six counties on issues critical to the health of the local watershed. We'd like to learn as much as we can about communities like yours who've managed to persist despite numerous challenges. Help us better understand the strengths and needs of the watershed community to help shape ScienceHub as a resource for community engagement.

Please spend a few minutes completing a brief survey and we'll happily share the information back to you in the coming weeks.

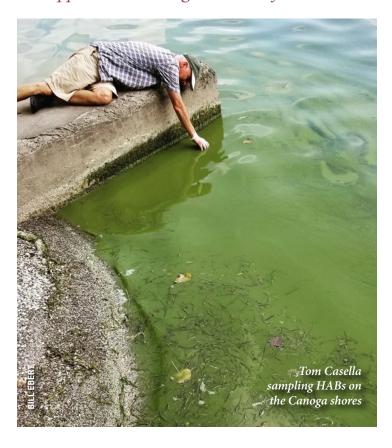


Survey Link: https://bit.ly/2kh8s2f Or use this QR Code to access the survey.

Email us at sciteam@tcscihub.org to share your thoughts on this organization or to learn more about it. *\mathcal{T}

2019 Annual Appeal Still Underway!

The response to this year's annual appeal campaign has been tremendous with the number of new donors higher than ever. We are still almost \$2000 short of our budgeted goal—can you help? The appeal runs through the end of October!



he Network's appeal theme this year is communication reaching you in many, different ways to keep Cayuga Lake's health forefront in your mind. This outreach takes substantial time and resources. How do we try to reach the

public? Many ways! We maintain our website, Facebook and Instagram pages, submit regular press releases to our media list (including outlets all around the lake), design and distribute Hydrilla Happenings and HABs Updates via our email list, attend meetings with municipal and non-profit partners all around the lake

Annual Appeal donations have huge impacts on the Network's successful efforts to protect Cayuga Lake.

to learn the latest on all lake-related topics, AND produce this valuable newsletter four times a year!

If you feel more connected to the Network this summer than in years past, please make a contribution toward these efforts by going to our website www.cayugalake.org and clicking on "Donate" or sending a check to us at CLWN, PO Box 348, Aurora, NY 13026.

With the support of our members and supporters, the Cayuga Lake Watershed Network is working to assure that Cayuga Lake remains a valuable and wonderful resource for you and for generations to come. **

Become a Member of the Cayuga Lake Watershed Network!

PLEASE JOIN CLWN, your lake's watershed protection organization. Your membership strengthens our ability to protect

	r lives. ENCOURAGE FRIEND join or renew. Mail completed form			
Name				
Address	City		State	Zip
Email		May we add you to our	r listserv?	O Yes O No
We have membership le	evels to suit everyone's needs. P	lease check one of the levels be	elow.	
O \$10 Student/Senior	○ \$35 Family	○ \$50 Business/Farm	O \$2	250 Lake Sponsor
O \$25 Individual	O \$50 Organization/Agency	O \$100 Headwaters Donor	O \$5	500 Watershed Benefactor
We are growing and expanding our effective programs. Would you like to make an extra donation to support this work? \$ Unrestricted – for general operations. \$ To support water quality tests on Canoga, Burroughs, Yawger and Milliken Creeks. \$ To expand our springtime Embrace the Lake creek, lakefront & ditches cleanups. TOTAL ENCLOSED: \$ Check # (payable to Cayuga Lake Watershed Network please)			ease)	Cayuga Color
Payment can also be made via Paypal/credit card at our website www.cayugalake.org Your Contributions to the Cayuga Lake Watershed Network are Tax Deductible.				○ I or ○ 2full-color CLWN logovindow stickies (4 x 6")

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

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Current Resident

Educate Advocate T Protect

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.

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Photographs by Hilary Lambert unless otherwise noted.

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







Upcoming Events

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

Embrace the Lake Cleanup & Fall Get Together, October 12 (weather date **November 9)—I-3 pm** at the roadside rest area on Route 89 in Covert, 4-5 miles north of Taughannock Falls State Park. The Network has adopted this rest area for regular cleanups. Come to help & stay for the donuts and cider. Consider a visit afterwards to one of the numerous nearby ciders and wineries!

Wizarding Weekend October 26-27,

downtown Ithaca. The Network will have an otherworldly presence at this magic-themed Hallowe'en event. Watch for our tent, Aqua Magicae, with the Golden Eggs. Bring kids and grandkids to cast spells protecting our lake and waters! Free, donations welcome. More information here: www. wizardingweekend.com and on Facebook at Ithaca's Wizarding Weekend.

Fall Community Conference, Saturday,

November 2 at the Ithaca United Unitarian Society, 9:30-1:00pm Relevant and informative topics related to the health and wellness of Cayuga Lake. Speakers TBA. Free for the public, with refreshments.

Hydrilla Public Information Reports & Volunteer thank-you event.

Watch for date & details at our website and on Facebook.

Giving Tuesday, Tuesday, December 3, **for 24 hours.** #GivingTuesday is a global day of giving fueled by the power of social media and collaboration. Celebrated on the Tuesday following Thanksgiving (in the U.S.) and the widely recognized shopping events Black Friday and Cyber Monday, GivingTuesday kicks off the charitable season, when many focus on their holiday and endof-year giving. One of the best ways to get involved is in your own community. Please consider making a year-end donation to the Cayuga Lake Watershed Network!

Winter Months Get-Togethers: managing our climate change

concerns. Anxiety and depression about climate change seems to worsen during the winter months when people feel isolated and shut in. Watch for gettogethers and activities in cooperation with several community partners. Contact Hilary at steward@ cayugalake.org to be added to a contacts list. "