

4-H2O Youth Education Programming Description: Summer 2021

The Amazing Cyanobacteria of Cayuga Lake

Saturday, June 12, 1:00 – 2:00 pm

Salt Point Natural Area, Lansing

Thursday, July 8, 6:00 – 8:00 (presentation at 7 pm)

Taughannock Falls State Park, North Point

Saturday, Sept 4, 1:00 – 3:00 (presentation at 2 pm)

Stewart Park, near floating dock

Reservations are highly recommended, but not required.

Microscopic organisms called cyanobacteria have been causing harmful algal blooms (HABs) and swimming beach closures in Cayuga Lake over the past few years. Though they may get a bad reputation for this, cyanobacteria have been around much longer than the lake itself and are one of the oldest life forms on Earth. In recent years they have been baffling lifeguards and scientists alike as we all try to figure out why, where and when they will appear next. Stop by Salt Point (6/12), Taughannock Falls (7/8) or Stewart Park (9/4) this summer to learn more about these fascinating life forms and how to recognize them so that you can keep yourselves and your pets safe. The Community Science Institute (CSI) will have a field lab set up where you can help us collect and look at live lake plankton samples. We'll explore a wide range of plankton found in Cayuga Lake and learn what cyanobacteria look like both from the lake shore and through a microscope. At each of these locations we will provide kid-friendly presentations (see schedule for specific timing) and drop-in activities for you to learn about the fascinating ecology of cyanobacteria and their role in Cayuga's diverse aquatic community. We'll also provide information about our ongoing Cayuga Lake HABs Monitoring Program and how you can get involved!

COVID-19 Safety Precautions: Face masks are required. Participants will be asked to maintain social distancing to the extent possible during the workshop and activities.

Biomonitoring Fun!

Thursday, July 22, 6:00 – 7:30 pm

Upper Buttermilk Falls State Park

Thursday, Aug 12, 6:00 – 7:30

Upper Robert H. Treman State Park

Saturday, Sept 25, 1:00 – 2:30

Lower Buttermilk Falls State Park

Reservations are required at least two days in advance. Directions and more information will be provided when you sign up.

Who lives under the rocks in streams and what can these organisms tell us about water quality? Join the Community Science Institute (CSI) for an evening or afternoon at one of our scenic local State Parks as we explore the aquatic life that can be found in the creek and collect a sample of organisms that will be used to evaluate water quality and ecosystem health. This event is meant for the whole family and is interactive. Participants will help us wade through the creek to find organisms under rocks for everyone to look at under magnification. Learn to identify what you find and what these organisms indicate about how healthy a stream is. Those who are interested in following the scientific protocols for collecting an official sample (that will be

analyzed and the results of which will be included in CSI's long-term datasets of water quality) can help collect the sample and complete a physical survey of the stream. Bring a picnic dinner or lunch along, if you'd like!

COVID-19 Safety Precautions: Face masks are required. All participants will be asked to social distance to the extent possible during the event. Shared microscopes and sampling equipment will be routinely disinfected. If you are interested in joining us, you will need to reserve a spot for each family member in advance.

Water Quality Cruises on Cayuga Lake

Sunday, July 11, 9:00 am – 12:00 pm

Sunday, Aug 22, 9:00 am – 12:00 pm

Saturday, Sept 12, 1:00 – 4:00 pm

Reservations are required at least three days in advance and space is limited. Directions and more information will be provided when you sign up.

Sail Ho! Join the Community Science Institute on an exploration of Cayuga Lake aboard the Floating Classroom. For the 16th year running, CSI's 4-H2O Program will be partnering with Discover Cayuga Lake's Floating Classroom to collect and analyze water samples from Cayuga Lake. Participants will learn how to collect water samples using a Van Dorn sampler and will analyze them while aboard the Floating Classroom's boat, the MV Teal. Data collected by participants will be included in CSI's online water quality database, helping to better our collective understanding of the health of Cayuga Lake!

This is a great opportunity for all ages to participate in local water quality science! Space is limited to 40 participants, so sign up while there is still time!

COVID-19 Safety Precautions: We are limiting the number of participants in this program to 40. At this capacity, social distancing can and will be followed on the boat. Face masks are required. All surfaces will be routinely disinfected. If you are interested in participating, you will need to reserve a spot for each family member in advance. To learn more about the precautions being taken to ensure everyone who participates in the cruise remains safe and healthy, please visit Discover Cayuga Lake's covid-19 guidelines found on their website at www.discovercayugalake.org