

# September 2020

#### Owasco Lake Watershed Inspection and Protection Division Casowasco By Kaitlyn Shanahan and Andrew "Drew" Snell

The Owasco Lake watershed is a 208 square mile area that is home to a variety of families, farms, businesses, and unique establishments. Our watershed community continues to progress in recognition of the importance of protecting the water resources of Owasco Lake through collective, conscientious efforts. Protecting our water resources and critical drinking water sources requires constant observation, recognition, and special care for our individual corners of the watershed. The activities we conduct on land within our watershed will ultimately impact neighbors and resources downstream. One of the unique, established landmarks that has adopted this philosophy, and has demonstrated a proactive approach towards water quality protection, is Casowasco Camp and Retreat, nestled in the western shore of Owasco Lake.

The original property surrounding Casowasco was purchased in 1946 from a family with the last name Case. The property was purchased at a significantly reduced price by The United Methodist Church to be converted into a summer camp and year-round retreat. The Case family offered this sale with two conditions; that "the land be used in ministering to youth and children", and that the Case name be carried with the property. Hence the name "Casowasco". The initial sale included 73 acres, eventually expanding to 273 acres, descending from the Highland camp on the west side of Route 38, through a deep, scenic ravine, to nearly a mile of shaded Owasco Lake shoreline. The camp's amenities include interpretive hiking trails, cabins, yurts, ropes courses, a beach, a soccer field, an archery range, a lakeside chapel, and two houses which have remained on site since the Case family resided in them.

The Casowasco staff recognize the inherent spiritual connection visitors have with the camp's scenic, natural surroundings. Preservation of the property and its natural features continues to be at the forefront of Casowasco. The camp's property is typical of many lake side properties with a backdrop of steep slopes and deep ravines, which can result in constant threats to infrastructure, water quality, and the aquatic community. As such, opportunities to implement resilient practices, retention structures, and stream protections exist throughout the property. A stroll from the upland portion of the property down to Owasco Lake surely illustrates the practices incorporated.

Of the water management structures constructed at Casowasco, perhaps the most visible to passersby is the small reservoir located at the camp's main entrance, adjacent to route 38. The pond, currently empty, was initially constructed by the Case family to function as a control structure to supply water for hydroelectric power generation at their residence on the lake. Through the years, as the need for the on-site hydroelectric diminished, the pond has performed as an effective sediment retention basin, capturing tons of sediment, preventing nutrients and soil from entering the lake. Recently, a mechanical issue with the dam gate drained the pond, revealing the effects of its sediment retention capabilities (photo 1). Interim camp director, Anne Horton quickly recognized the exposed material was neither stable material, nor aesthetically pleasing. She decided to add stability and color to the exposed soil by simply broadcast seeding the area with native wildflowers. This small, but important act, will prevent the retained sediment from sliding to the lake until final decisions on maintenance and repair of the structure are agreed on.



Sediment Retention Basin - Before

Continuing down the steep gradient of the access road, at times overlooking the ravine, it is apparent that camp staff has worked hard to invest in the protection of their most important infrastructure components by incorporating dozens of stone velocity controls, or "check dams," along the steep access road ditches. These structures will protect against damages and costly road failures that result from erosion. The check dams will slow water velocities, filter nutrients, and retain sediments on the land.



Sediment Retention Basin - After Seeding

Nearing the lake, noticeable efforts are evident for streambank stabilization on the lower portions of Casowasco's main stream which were likely subject to years of destructive flows chiseling away the bank. Hundreds of feet of heavy rock armor have been installed to stabilize the streambanks and protect the lake, nearby vegetation and property.

Within yards upstream of the shores of Owasco Lake, a culvert was replaced a few years ago to provide safe emergency vehicle access to a camp building. During the planning of the culvert replacement, camp staff recognized the opportunity to add to the project and eliminate an aquatic passage barrier to allow fish access beyond the culvert.

Anne Horton recounted many visitors over the years who have found a deep spiritual connection to the lake and the beauty of its surroundings. She stated that it truly is "a place to appreciate God's creations, which are amazing." This resounding sentiment is a big part of why the caretakers of Casowasco have continuously emphasized protection for future generations. For more information about Camp Casowasco visit their website at https://casowasco.org/.

# Cayuga County Health Department Septic System Replacement Program By Eileen O'Connor, P.E.

Did you know that you can get funding assistance to replace your old septic system? Without appearing to function improperly, many older septic systems may be releasing phosphorus to the lake via movement through the soil. If you have a septic system located on property fronting Cayuga, Owasco, or Skaneateles Lake, there is funding available to assist you in making a tangible commitment to the water quality of the lake you love. This funding will provide up to \$10,000, or 50% of the total cost, to install a new septic system. If you are interested in the program, please contact the Cayuga County Health Department at <u>cchealth@cayugacounty.us</u> or 315-253-1405.



# Invasive Species Working Group Asian Clam Survey By Michele Wunderlich

Members of the Cayuga County Invasive Species Working Group conducted a socially distanced Asian clam survey on July 30th. Drew Snell, Ed Wagner, Kaitlyn Shanahan and Michele Wunderlich surveyed Owasco Lake in the Emerson Park area for the Asian clam. The clams seemed to be more abundant this year than in the last few years and there seemed to be more large clams. Stay tuned for a presentation this winter. Special thanks go out to Owasco Marine for providing us the boat for the morning.





Samples of collected Asian clams

Drew Snell and Kaitlyn Shanahan collecting Asian clams



Ed Wagner collecting Asian clams

## 82 and counting... Cayuga County's Household Hazardous Waste Program, 1996 to 2020 By Bruce R. Natale, P.E.

This is the 25th year of Cayuga County's Household Hazardous Waste (HHW) program and our 83rd event will be on October 17, 2020.

Over these past 25 years, Cayuga County has held 82 collection events to make the homes, farms and schools in Cayuga County safer. Our main goal is to remove chemicals for safe disposal, which if not properly handled could threaten human health and the environment. We've removed over 87,000 tires, which would otherwise be mosquito breeding habitat and a fire hazard, and, we recycled over 1100 pounds of lead wheel weights from those tires. We've recycled over 1,000,000 pounds of electronic equipment, safely removing lead, cadmium, mercury and other toxins from homes in the County.

#### History of Cayuga County's Hazardous Waste Events

During the years we were trying to build support to hold our first HHW event, Cayuga County staff found 100% grant funding to hold a similar event, an agricultural chemical collection event known as a Clean Sweep. So, the County's first hazardous waste event was not the 1997 HHW day, but our 1996 Clean Sweep event. After successfully implementing Clean Sweep 1996, the County Legislature authorized the local contribution to hold our first HHW event the following year.

Since 1997, the County Legislature has authorized the County's Solid Waste Management Program Office to regularly apply for 50% New York State Assistance to conduct these programs. In all, Cayuga

County has received over \$316,000 in New York State grant funds to conduct its household hazardous waste collections and generally has matched the State dollars one for one. The County has also received assistance from federal sources, the City of Auburn, NUCOR Steel and local foundations to make these collection programs available to the public.



## October 17th: Household Hazardous Waste Event

This is our big chemical collection for all Auburn and Cayuga County residents. Get your leftover pool chemicals, garden and lawn poisons, paint thinners and your old gas/oil mixes out of your house and garage before winter. We also collect hazardous non-alkaline batteries, old propane tanks and fluorescent bulbs. You must pre-register at <a href="https://reg.cce.cornell.edu/HHW2020\_205">https://reg.cce.cornell.edu/HHW2020\_205</a> for this event. To be SAFE, we need to space out the traffic and have a smooth flow in and out of the event. By having appointments we can handle over 300 cars in 3 hours. That's nearly 2 cars unloaded every minute! That is why you need an appointment and that is why you need to try your best to arrive on time. For more information, please visit our website at <a href="https://www.cayugacounty.us/705/Disposal-of-Household-Hazardous-Waste">https://www.cayugacounty.us/705/Disposal-of-Household-Hazardous-Waste</a>.

So if you've been home social distancing and cleaning out the house and garage, do the right thing and bring your chemicals to us 10/17... It won't be Halloween yet, but we will all be wearing masks!



Household Hazardous Waste Collection Event

Skaneateles Lake Association Robert G. Werner, Ph.D. March 6, 1936 - September 13, 2020



Bob Werner (right) with son Kurt Werner (left)

It is with deep sadness and a profound sense of loss that the Board of Directors of the Skaneateles Lake Association shares with our members and the Skaneateles Lake Community the passing of our esteemed Board Member, Robert G. Werner, Ph.D.

In 1971, Dr. Werner joined the Skaneateles Lake Pure Water Association, which had been founded in 1969. The goal of the organization was to protect and preserve Skaneateles Lake and the watershed. In 1992 the Tri-County Skaneateles Lake Association was formed to continue the work of the Skaneateles Lake Pure Water Association. Bob served on the board of that organization beginning in 1994 and remained on the board of its successor organization, the Skaneateles Lake Association, Inc. As our Lake Ecologist, Bob was always ready and prepared to explain what was happening on the lake and to the lake water. Bob spent most of his professional career as professor of limnology (study of lake ecology) at the SUNY College of Environmental Science & Forestry. He was one of the most popular and respected professors and still remains an inspiration for his students. He had an ability to translate complex scientific data into language that we all could understand. Bob brought true scientific thought process to the Skaneateles Lake Association.

His knowledge, voice and patience guided the entire SLA board not only in decision making, it served as the perfect example of just how you worked to enable the community members and government agencies to see the truth of science. Dr. Neil Murphy, another of our SLA Board Members, gave Bob the title of "Dean of Skaneateles Lake" which is so apt for Bob was not just a man of his own action, but he empowered all of us who worked with him.



Bob Werner (left) with SLA Board Member and Lake Ecology Team Chair Bill Dean sampling first Harmful Algal Bloom of 2019 while out surveying for Eurasian Watermilfoil

With technical expertise, Bob continued to conduct the annual survey of the lake for milfoil growth using his own pontoon boat until the Fall of 2019. It was that survey each year that guided the efforts for milfoil control the following summer. This past summer when Bob realized that he would not be able to continue to get out on his boat to do the work that the annual survey required, he did what a good teacher does, he passed along the skill and knowledge so that others could continue the effort.

In order to be able to continue all that Bob did surveying the lake, responding to community member concerns about lake conditions and assisting with the many research efforts related to Harmful Algal Blooms, the Board of Directors of the Skaneateles Lake Association has undertaken a complete refurbishing of a pontoon boat with all the necessary equipment for the survey and research efforts. Additionally, the boat will be set up to be used as a floating classroom for education programs about the lake, its water, its condition and its protection for children and adults in the watershed community. We know that Bob would be pleased to know that all of this will be happening.

Most appropriately, this boat will be named the Robert G Werner Research & Education Boat. A number of community members have already contributed to this boat to help provide the funds needed.

If you would like to honor Bob with a donation you can mail a check to the Skaneateles Lake Association, P. O. Box 862, Skaneateles, NY 13152 and note "research boat" on the memo line. You can also donate online at <u>http://www.SkaneatelesLake.org</u> under the "Membership/Support" tab /make an in memory/honor gift.

Bob will be missed, but his spirit and love for the lake lives on through you and many of us working together to protect the beautiful gem we call Skaneateles Lake.

Bob's obituary can be found by clicking <u>HERE</u>.



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