

"A Víew From Raquette Lake" By Gaíl Morehouse

"If we had no winter, the spring would not be so pleasant. If we did not sometimes taste of adversity, prosperity would not be so welcome". – Anne Bradstreet

"Can words describe the fragrance of the very breath of spring?" - Nelte Blancham

Last year was very hard on just about everybody. But, fortunately, the human spirit is so resilient. Most of us learned how to "zoom". We learned how to conduct conferences, birthday parties, and sadly, even funerals, virtually. This President's letter is actually sort of difficult for me to write because I'm feeling so cautiously, optimistically "normal". The Durant is planning to sail again. Most of the regular activities in the village are planning to resume, of course within CDC Covid guidelines. RLPF is planning to once again have our annual meeting in person!

This year, the Board of Directors has decided to try something different. We are going to change the date of our annual meeting away from the typical Durant Days weekend. Everyone is always so busy that weekend. The date and place will be sent in its own mailing, along with your proxy, but we are tentatively looking at July 17, 2021 as an option. And of course, there will be doughnuts.

Our Lake Management Plan continues to take shape. I mentioned in the last newsletter that our consulting firm Northeast Aquatic Research, (NEAR), had completed a very comprehensive survey of the lake. They documented 39 different aquatic plants species in the lake which indicates a very healthy ecosystem. They have since provided maps of each specie and documented their occurrences as rare, frequent, common and abundant. The accompanying report they provided is still in draft form, but I will try to give you a few highlights. They have recommended an Adaptive management style of plant management. In any natural resource management program, compromise is required. "Competing interests and differing economic opinions can obstruct plant management efforts." We are trying to define a baseline of where we are – scientifically. We are defining our goals and methods and hope to implement them soon. We will then track changes, interpret our success, learn and repeat.

Variable Leaf Milfoil, VLM, is tricky and we need to understand this invasive plant better. It grows in some habitats much more robustly than in others. Raquette Lake has several different Habitat areas, and so we need to break our studies into Habitat types. That is what NEAR has done, and they are making different recommendations based on those zones. As I mentioned, the report is still in draft form. The complete Management Plan will also be independently reviewed by another agency.

Our harvesting plan this year is to return to the village area up to Brown's Tract and repeat the harvesting that was done there about 4 years ago. Visually, we can see it coming back, and this is the area with the most boat traffic. We also hope to return to Otter Bay. VLM can only be eradicated successfully in certain areas. That requires harvesting the same areas every 3-4 years, and optimally both early in the season and a repeat late in the season. At our Board meeting at the end of May, we will be meeting with our harvesting team to determine the actual areas.

Our second public meeting about the Lake Management Plan will be held later this year. It will be the public's last opportunity for input into the plan. I hope to see many of our members there! The reality is, what is your goal for the lake? I think we all have similar goals; it's just usually a compromise on how to accomplish them.

On another note, RLPF is partnering with the Adirondack Watershed Institute to purchase and install a "Live Water Level and Temperature" sensor. Over time, having a record of this information added to the abundance of information we already have from our current water quality testing, will further help researchers understand trends that could affect water quality or the ecosystems in Raquette Lake.

I have been the president now for almost 2 years. I was the secretary before that for 4 years. I have learned so much. I think that RLPF has grown as an organization and will continue to learn and work to accomplish even more. I want to acknowledge our Board of Directors. Each of these individuals gives their time and different strengths into all the facets of what we do. It is a pleasure to work with them and I really look forward to seeing them all again soon. You will read later in this newsletter about Nancy Barnett and Wendy Barrett, I want to add my personal thanks for all they have done to help us. I personally want to acknowledge Ken Hawks. It is difficult to understand how much he has put into this organization. On several occasions, I have met people who have stated, "Raquette Lake is a better place because of all that he has done." I know how much time I put in; I can't imagine how much time he did.

Finally, to ALL of our donors; your generosity has given us opportunities I never thought we would have. Because of your gifts, we are able to look at larger, science based projects to help protect what we love most. I look forward to seeing all of you – in person!

"I'm still thanking all the stars, one by one" - Marissa Meyer

"Appreciation is a wonderful thing. It makes what is excellent in others belong to us as well."-Voltaire

A View From The Bottom" By Pat Deyle

Hope this finds you all safe and healthy, please get your shots so we can all be together once again this summer.

Several new boating laws have emerged we should all know about:

1. NY States Invasives Species Law Extended. Due to the disruption of the state Legislation Session due to the pandemic, legislative leaders extended a statewide aquatic invasive species law for one year. The law requires boaters to take reasonable precautions to remove any invasive plants or animals from their boats and trailers before entering a waterbody. Legislative leaders are committed to strengthen the law in the Adirondack Park.

2. Here are the state's rules regarding boating: On Jan. 1, 2020 Brianna's Law went into effect.

A. If you were born on or after Jan. 1, 1993, you will need the certificate by the first time you operate a vessel in 2020.
B. If you were born on or after Jan. 1, 1988, you will need the certificate before you operate a vessel in 2022.
C. If you were born on or after Jan. 1, 1983, you will need the certificate by the first time you operate a vessel in 2023.
D. All operators of motorized vessels regardless of age will need a boating safety certification by January 1, 2025.

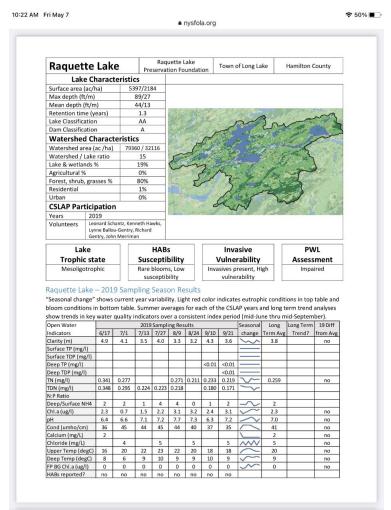
3. Under a new Federal Law effective April 1, 2021 any one operating a boat less than 26 feet in length are required to use their engine cut off switch (ECOS). This means wearing a lanyard- aka (ECOS) while at the wheel (Formerly referred to as a "kill switch"). The term engine cut off switch may be operated by physical lanyard or any of several electronic solutions.

Specifically Section 8316 of the National Defense Authorization Act of 2021 passed by Congress requires individuals operating recreational vessels less than 26 feet in length with a 3 HP or more to use ECOS links. However this law applies when the primary helm is not in a cabin and when the boat is operating on plane or above displacement speed. Situations in which an ECOS link would not be required include docking, launching and loading on a trailer, trolling and operating in NO Wake Zones.

Water Quality Testing on Raquette Lake By Dick Gentry

This year, for the third year, we will be sampling and testing our lake water as part of the NYSFOLA (New York State Federation of Lake Associations) CSLAP (Citizen Scientists Lake Assessment Program). We participate in this program along with about 200 other lakes in New York State. We will take samples once per month in June, July, August, and September. Deep and shallow water samples are taken from the deepest part of the lake in North Bay. They are processed and sent to a NYSDEC approved lab. In a previous newsletter I described all the processing and testing that is done to the samples. The test results for Raquette Lake and any other lake in the program can be found on the NYSFOLA website at: <a href="https://www.nysfola.org">www.nysfola.org</a>. click on the CSLAP tag and just enter in the lake name to bring up all the testing results.

Shown below is page one, of the nine-page report for 2019:



Treasure's Report By Bob Rosbourough

RAQUETTE LAKE PRESERVATION FOUNDATION, INC. TREASURER'S REPORT AS OF May 1, 2021		PREPARED BY:	R Rosborough
WORKING CAPITAL FUND BEGINNING BALANCE (AS OF 4/1/2021 INCOME: DUES INCOME: DONATIONS INCOME: DIVIDENDS	L) .	<b>\$82,226.88</b> \$820.01	
EXPENSES: ACH - Erie Insurance	\$180.00		
TOTAL EXPENSES TOTAL WORKING CAPITAL FUND	\$180.00	-\$180.00 <b>\$82,866.89</b>	
AIS FUND BEGINNING BALANCE (AS OF 4/1/2021) INCOME: DONATIONS INCOME: Raffle Ticket Sales EXPENSES:		\$11,034.46	
TOTAL EXPENSES TOTAL AIS FUND	\$0.00	\$0.00 <b>\$11,034.46</b>	
TOTAL CHECKING ACCT			\$93,901.35
<b>BUSINESS CERTIFICATE</b> BEGINNING BALANCE (AS OF 4/1/2021) INCOME: DIVIDENDS <b>TOTAL CERTIFICATE OF DEPOSIT</b>		\$3,757.53 \$0.32 \$3,757.85	\$3,757.85
TOTAL OF ALL FUNDS		-	\$97,659.20

E Colí Event on Golden Beach 2020 By Lenny Schantz

Last summer swimming at Golden Beach was temporarily prohibited because of elevated E. coli levels in the water. The ban on swimming only lasted a few days, but the event again raised the public's concern about Raquette Lake's water quality. The purpose of this article is to try and explain what happened last summer at Golden Beach.

## What is E.coli?

E. coli (*Escherichia coli*) is a bacteria that lives in the gut of healthy humans and animals. Most types of E. coli are harmless, but there are a few strains that can cause mild to severe illness. In water testing, the presence of E. coli is significant because it can indicate recent fecal contamination and the possibility that pathogens, like giardia or cryptosporidium, might also be present in the water.

## What is the E. coli guideline for bathing beaches?

The NYS Department of Health (DOH) set a limit of 235 E. coli colonies/100 ml in beach water. If exceeded, the operator of the beach facility – in our case the DEC - can prohibit swimming until results for two repeat samples show that E. coli levels have dropped below the 235 limit. Generally, water samples for E. coli are collected off-shore, in knee deep water and below the water's surface. At Golden Beach, one E. coli sample is collected every two weeks during the swim season.

### What were the E. coli levels for samples collected at Golden Beach?

The table below summarizes Golden Beach's E. coli test results.

Raquette Lake Golden Beach E. coli test results for period when swimming was prohibited in 2020						
Sample Date	E. coli mpn/100 ml					
7/14/20	7.4					
7/14/20 (duplicate sample)	8.6					
7/28/20	2419*					
7/30/20	28					
7/31/20	20					
7/31/20 (duplicate sample)	14.8**					
* Beach closed **Beach can reopen	<u>.</u>					

The table shows that the 7/28 test result was 10 times higher than the DOH limit, which probably explains the quick action DEC took to close the beach to swimming. According to the DEC, the 7/28 result was the highest E. coli result ever recorded for Golden Beach, and it was also the first time in DEC's memory that the beach was closed to swimming. E. coli levels are normally well below the DOH limit as the test results before and after the 7/28 sample indicate. Clearly the 7/28 result is an outlier.

#### What are some possible explanations for the high E. coli result?

A variety of mechanisms can produce elevated E. coli levels. For Raquette Lake, the likely sources are failed wastewater systems, severe runoff events, decaying organic matter, animal feces and resuspension of lake sediments. Each of these are discussed below.

I think it is safe to say that runoff did not cause the high test result. Based on meterological records for Saranac Lake, it's clear that the Adirondack region did not receive any significant rainfall in the weeks before 7/28. I'm also going to stick my neck out a bit and say that failed septic systems – either private or at Golden Beach – were also not directly responsible for the high test result because runoff was negligible and because baseline E. coli levels were low.

Back in my home town, there are several beaches that close every every swimming season because of decaying plant material. At one beach the plant is an algae (Cladophora), and at the other it is the invasive species Eurasian Milfoil. In both instances, the shorelines are littered with massive amounts of decaying plant material. The decaying plant material create a nutrient soup that when water temperatures are high E. coli levels are able to skyrocket. In Raquette Lake, I have never seen anything that remotely resembles the situation I just described.

DEC staff also suggested to me that maybe nesting water fowl – like canadian geesse – could have triggered the high result. This is possible, but so is a toddler in the water with a dirty diaper. Without the benefit of DNA testing to determine the origin of the E.coli, it is impossible to tell. In either case, their potential to impact on such a large volume of water is small.

Resuspension of shorline debris and bottom sediments is another possible cause for high E. coli levels. Meterological records for 7/26 to 7/29 do show winds 20 to 30 mph out of the WSW. Winds that strong and from that direction had to result in significant resuspension of bottom sediments along the shorelines at Golden Beach and the surrounding area. The additional particles in the water, coupled with warm water temperatures (air temperature in the eighties) just might have provided the perfect recipe for elevated E. coli levels. By the time a repeat sample was collected on 7/30, winds had dissipated, which would have allowed particles in the water to settle and E. coli levels to return to a more normal range. Of the previous scenarios discussed, this one makes the most sense to me.

Finally, last year the Raquette Lake rumor-mill claimed that the DEC / DOH found a dead deer in the water, which produced the high E. coli result. The DEC says that this rumor is not true.

#### What about the future?

At this point, it makes sense to wait and see what happens. However, if there is another high E. coli test result, then it would make sense for the DOH / DEC to expand testing to include locations adjacent to Golden Beach and, in particular, areas around South Inlet and the RT 28 shorline.

A special thank you to Jomo Miller at the DEC who patiently responded to my many emails. I truly appreciate DEC's effort to help educate the Raquette Lake community about important water quality issues.

# Pat Deyle Honored by NYSFOLA With 2021 Lake Steward Award By Ken Hawks

Our own Pat Deyle was the recipient of the 2021 NYSFOLA (New York State Federation of Lake Association) Lake Steward Award. This award is given to a NYSFOLA lake association member, nominated by their respective association, to an individuals who has gone "above and beyond the call of duty" in service to their organization.

Raquette Lake Preservation Foundation, Inc. takes great pleasure to nominate Patrick (Pat) Deyle for recognition as one of the 2021 Lake Steward Recipients. Below is Ken Hawks' Nomination Letter.

In 2004 our predecessor organization Raquette Lake Property Owners Association (RLPOA) recognized that Invasive Aquatic Species (AIS) could pose a threat to Raquette Lake. There was a great deal of concern expressed at our annual meeting. What was the threat, what should we and/or could we do about it, and how should we move forward? Our approach was to appoint an AIS committee to explore the area and report back with a plan. Pat Deyle volunteered to head up the committee. It was the right choice.

In 2005 Pat proposed we approach the problem from a prevention standpoint even though the Adirondack Park Invasive Plant Program (APIPP) staff noted that correction was more profitable at the time. The RLPOA agreed with Pat and we started to figure out how to accomplish that goal.

In 2006 Pat proposed a prevention program. Pat knew that first folks need to know that AIS was present in the Adirondacks and how to identify it so we could determine if we had any, and to inspect boats coming into Raquette Lake for AIS. Pat then arranged for the Department of Conservation (DEC), APIPP, and the Darin Water Institute (DWI) to conduct an aquatic plant identification training course for our potential shoreline surveyors and boat inspectors. Over 20 Raquette Lakers attended. That allowed us to conduct our first shoreline survey of a large portion of the lake. Pat also conducted a 4 hour survey of the lake with a senior staff member of APIPP. This survey determined that we did have an 'invasive' Variable Leaf Milfoil (VLM) in Raquette Lake. [Note that VLM was not at that time an 'official invasive'.] Pat contacted Dr. Bob Johnson at Cornell and he surveyed some of the lake, took pictures of the VLM in Marion River (it was the first time he had ever seen VLM in full bloom) and left with 2 large bags of VLM to study the DNA and environmental effects of the plant. Later in the year we started using volunteers to inspect boats coming into Raquette. It is interesting to note that The DEC Region 5 biologist said in August at a community forum, that Raquette Lake should have no fear of milfoil since Raquette was not conducive to it living there. His data was based on Eurasian Water Milfoil (EWM) and not VLM. Dr Johnson's research showed VLM has much more robust environmental parameters and is a threat!

In 2007 Pat applied for DEC permits to start matting. He tried various types of mats and we learned what worked and what didn't. Pat again arranged for and supported the DEC and the Adirondack Watershed Institute (AWI) in formal training of boat inspectors.

In 2008 Pat presented a 6 Phase program:

- o Launch Ramp monitoring Prevention
- Public Education (he designed a brochure to hand out) Prevention
- Training [plant ID and boat inspection] Prevention and Remediation
- Promoting Self Inspection to the organizations on the lake with inhouse launch ramps Prevention
- Applying for APA and DEC permits Remediation
- Shoreline surveying Remediation



Pat was instrumental in setting up our program with the Town of Long Lake to contract for a town summer hire to staff our town boat launch.

In 2009 the steward augmented by volunteers, inspected 1,769 watercraft; 20 shoreline surveys were sent to APIPP; and more mats were put out.

In 2010 Pat recommended we start buying commercial mats and went out for bids and the Board selected a supplier. One of our members lived nearby, and volunteered to save us delivery costs. A boat inspection course was held at Burke's Marina and 15 members became qualified as boat inspectors.

In 2011 APIPP approached Pat and asked if Raquette Lake would volunteer to be the test site for the Internet-Landing Inspection Devise Sensor System (I-LIDS) for the New York State. Pat briefed the board and a grant was awarded and the system installed.

In 2012 AWI assumed control of our Boat Launch Stewards (BLS) with Pat as the local coordinator. There were now 2 full time inspectors plus volunteers. 2,726 watercraft were inspected. 151 plants were documented and 100 were either invasive or nuisance plants.

In 2013 Pat coordinated another plant ID course with APIPP and DEC instructors. Pat was also one of the instructors. 30+ folks attended.

In 2014 Pat started applications with the Adirondack Park Agency (APA) and DEC. The APA wanted deeds from all adjacent land owners to the lake, and since the Constitutional amendment on Township 40 titles was in work, that killed that application. The APA later rescinded the requirement. We obtained an Adopt A Natural Resource permit from the DEC however.

In 2015 SUNY Cortland agree to provide scientific study on a continuing basis to Raquette Lake. VLM study was on their radar.

In 2016, Cornell reported to Pat that their DNA analysis showed that the VLM in Raquette Lake came from the Finger Lakes most likely via boats. Pat supervised the placement of 26 mats and the members agreed we needed to start hand harvesting. SUNY Cortland showed us their first results. The amount of VLM in Beaver Bay and Lake Eldon had not increased but the Bladder Wort had increased 4 to 5 times the amount previously recorded at their study sites.

In 2017 Hand Harvesting began at the village and has continued in other parts of the lake. The number of boats with VLM on them took a significant decline which continues.

In 2018 we applied for a DEC wash station at the intersection of Route 28 where the DEC had removed a Forest Ranger's house but the request was denied.

Pat Deyle continues to oversee the stewards, the placement of the mats and supervision of the Hand Harvesting teams. He has done an excellent job for over 16 years and deserves to be recognized by NYSFOLA!

The award was"presented" as part of the 2021 NYSFOLA Virtual Annual Conference on Friday April 30th at the NYSFOLA membership meeting.

Congratulations Pat, on a well earned honor in recognition for your great contribution to preserving our lake.

St. Williams on Long Point 2021 Concert Lineup By Lenny Schantz

For those music enthusiasts who enjoyed the Saint William's Church 2020 musical lineup by boat, 2021 should be even better! The concert locations are still being worked out, but they will include indoors at the church, boat audiences and at least one concert at the school. Wherever the concerts are held, your favorite pie ladies will pay you a visit!

The summer series begins July 15 featuring Bruce Matthews who will perform modern folk-rock music. Bruce is actually a Raquette Lake neighbor -- Bruce summers at the very north end in a boat-access only camp.

July 22 Patchouli and Terra Guitarra will surprise you with a unique fusion of nuevo flamenco guitar and folk vocals.

You will recognize the July 29 artists, The Jamcrackers. Locals Dan Berggren, Dan Duggan and Peggy Lynne perform Adirondack Folk music throughout Upstate New York.

The August 5 concert should be a blast! Bob's Brother's Band will have you up and dancing with classic Rock and Soul music. Lead vocalist Tim Hayes, an Avon, NY native has Raquette Lake ties. Tim is first cousin with Mary and Ed Campbell. Tim's father, Bob and their grandfather Basil B. Hayes along with NP's original Fran and Bob Campbell created quite a stir at North Point back in the day!

Betty and the Boomers will entertain you with their style of Folk music on August 12.

Raquette River local Bob Faulkner and friends known as Fifty Shades of Gray will bring you music from the 60's in the August 19 Season Finale!

These programs are made possible, in part with funds from the Decentralization Program, a regrant program of the New York State Council of the Arts with support of Governor Andrew Cuomo and the New York State Legislature and administered by the Adirondack Lakes Center for the Arts.

Community Pride Day By Lynne Ballou-Gentry

Community Pride Day was held this year on May 5 and community members were out cleaning up our highways and byways. We want to give a special shout out to those community members who are out there all year long picking up any litter that they notice. One of those people is Tom Beckingham. When you see Tom, give him a big thank you for all he does to keep Raquette Lake beautiful. I think his response would be to encourage each of us to lend a hand in keeping the litter off our roadways, and not just on Community Pride Day. Let's each do our part each and every day. Thanks everyone.

Close the Invasive Species Legal Loophole By Lenny Schantz

Currently, the New York State Aquatic Invasive Species Transport Law requires motorized boat operators to take "reasonable precautions" prior to launching their watercraft into public waters. But, this voluntary inspection model in the Park continues to see low compliance rates. Public uncertainty about the law has led to underutilized boat inspection and decontamination stations. This leaves Adirondack waters vulnerable to further invasive species spread. The current aquatic invasive species transport law will expire on June 1, 2021. We have an opportunity to strengthen the law by authorizing the Department of Environmental Conservation to conduct aquatic invasive species inspections, decontaminations (boat washing), and tagging (issuing a seal to indicate a boat is clean). Since 2015, 25 new invasive species infestations have been recorded in Adirondack waters, indicating that the Park's current, free, and expansive network of boat inspection and decontamination stations is being underutilized. While 17 states have boat inspection authority and 14 states have boat washing authority, New York State has neither.

Please strengthen the Aquatic Invasive Species Transport Law this year by authorizing the Department of Environmental Conservation to conduct aquatic invasive species inspections, decontaminations, and tagging. <u>https://www.adirondackcouncil.org/page/aquatic-invasives-action-alert-</u> <u>344.html?utm\_source=Almanack&utm\_medium=Email&utm\_campaign=AIS\_call\_to\_action&utm\_sourc</u> <u>e=Adirondack+Explorer&utm\_campaign=4f6e714d1b-</u> <u>RSS\_EMAIL\_CAMPAIGN&utm\_medium=email&utm\_term=0\_3a0c6b0008-4f6e714d1b-</u> <u>47393384&mc\_cid=4f6e714d1b&mc\_eid=a0f5096357</u> Are You A Historical Society? By Marion Goethals

As she says, President Gail Morehouse is determined to let the public know who we are and what we do: "We always sell any remaining raffle tickets at the Labor Day picnic in the village. One year, someone came up and asked, 'Are you a historical society?' That question proves that marketing/public relations matters so that people know who you are and what you do. The right piece is clear and understandable and draws you in. We protect, promote and try to preserve our beautiful lake for generations that will follow us. Once people understand that, and understand what a gem Raquette Lake is, they will help us." The beautiful RLPF website went live starting last year thanks to Gail and volunteer Nancy Barnett. "Nancy put in many hours using her expertise to develop a user friendly website, selecting attractive photographs, asking the Board of Directors the right questions, submitting drafts and making changes before it ever went live. She continues to be our "webmaster" and for that we are very grateful!"

This year Gail has teamed with Wendy Barrett to layout, design, and produce an up-to-date RLPF Brochure for distribution around the lake and beyond. Like many activities which help the lake, families pitch in; it is true for Gail, and for Nancy, and we applaud Wendy's husband Scott, and niece Abby Tompkins for their help with the brochure. Wendy said, "I was very honored to produce this brochure and help the foundation with its mission to preserve, protect, and promote Raquette Lake. I've been coming to the lake for at least 40 years, really enjoy spending time in the Adirondacks and nature in general, and have a strong interest in environmental preservation. I find natural and wilderness settings both physically and emotionally restorative—something a lot of people have discovered, especially during the pandemic. The brochure was an opportunity for me to use my background in writing and photography to support a place I deeply love and an organization whose work aligns with my wishes to preserve the natural surroundings and beauty of that setting. The brochure is a good communication tool for telling everyone who uses and enjoys the lake how to help keep it healthy for years to come, to let people know about the good work RLPF is doing, and to encourage them to support the foundation." RLPF sends a huge thank you to Wendy and family.

So, to answer the question, no we are not a historical society. We are, however, all about the nature of life at Raquette Lake.

## Adírondack Park Invasíve Plant Program (APIPP) Vídeo offeríngs By John Merríman

That's a mouthful to say! But APIPP has been busy this spring with video presentations on all sorts of invasive species projects. A particularly interesting one for us lake folks is "Prevent the Spread of Aquatic Invasive Species - Best Practices for Adirondack Anglers." You can watch this on YouTube, along with all the previous videos at: <u>https://adkinvasives.com/Resources/Resource-Library/Video-Recordings</u>. For upcoming presentations go to: <u>adkinvasives.com/Events</u>.

Here is the list of prior APIPP videos on YouTube:

2021

April 14th, 2021: Green Gardening - Design with Native Plants and Avoid Invasive Species (1hr 38 min) March 24th, 2021: Prevent the Spread of Aquatic Invasive Species - Best Practices for Adirondack Anglers (1 hr) March 3rd, 2021: PART 2: Take Action Against Hemlock Woolly Adelgid - Learn How to Hunt for HWA (1 hr 10 min)

February 25th: PART 1: Take Action Against Hemlock Woolly Adelgid – Impacts, ID, & Citizen Science (1 hr 35 min)

January 26th: Planning for Emerald Ash Borer - Best Practices for Managing Adirondack Ash Woodlands (1 hr 30 min)

2020

November 12th: Fall 2020 APIPP Partner Meeting (1 hr 28 min)

November 2nd: Invasive Animals of the Adirondacks for Middle Schoolers (22 min)

September 22nd: Prevent the Spread of Invasive Species - Best Practices for Sportsmen & Sportswomen (1 hr 30 min)

September 16th: Prevent the Spread of Invasive Species - Best Practices for Fall Hikers & Bikers (1 hr 30 min) August 25th: Emerging Species - Invasive Jumping Worms (1 hr 35 min)

August 5th: Managing Milfoil - Hand Harvesting using SCUBA, Biological Control, Chemical Application, and Permitting (1 hr 52 min)

July 30th: Know Your Knotweed - Identification, Impacts, and Management (1 hr 29 min)

July 23rd: Aquatic Invasive Species Identification and Volunteer Training (1 hr 54 min)

July 16th: Invasive Species Control for Adirondack Transportation Professionals (44 min)

July 1st: Exploring iMapInvasives - Protecting the Adirondacks through Citizen Science (1 hr 54 min)

June 10th: Aquatic Invasive Species Identification & Survey Training: Pt 1 Intro to APIPP & Invasive Species (21 min)

June 10th: Aquatic Invasive Species Identification & Survey Training: Pt 2 Plant ID with Larry Eichler from the Darrin Fresh Water Institute (36 min)

June 10th: Aquatic Invasive Species Identification & Survey Training Pt 3 Invasive Aquatic Animal ID (25 min) June 10th: Aquatic Invasive Species Identification & Survey Training Pt 4: iMapInvasives as Citizen Science (28 min)

June 9th: Terrestrial Species Identification and Survey Training (1 hr 30 min)

April 22nd: A Primer on Biological Controls to Manage Invasive Speices, Rob Williams of the SLELO PRISM (30 min)

April 22nd: APIPP's Aquatic and Terrestrial Program Findings for 2019 (34 min)April 3rd: Charlotte Malmborg of the NYS Hemlock Initiative and sponsored by APIPP and Adirondack Mountain Club (1 hr 14 min)

2020 Raquette Lake EggTake By Neil McCarthy , DEC Manager Chateaugay Fish Hatchery

The 2020 Lake Trout egg take started October 16<sup>th</sup> and was completed on October 18<sup>th</sup>. During the two day egg take a total of 500 Lake Trout were netted allowing hatchery staff to collect 80,000 eggs from 104 females (Tables1&2). A total of six trap nets were used during the egg take. Due to ideal water temperature of 52°F at the start, it was decided that all six nets would be set October 16<sup>th</sup> to maximize the catch of spawning Lake Trout. The nets were set at various locations (Figures 1&2, sites 2, 5, 9, 14, 15, 19) near North Point which have historically proven to be the most productive sites.

All Lake Trout caught, except those caught on the last day, were given a hole punch on their tail fin for population estimates and any fin clip already present was noted. The biological data, such as length, weight and markings of 200 Lake Trout were also recorded by fish culture staff for fisheries management data. The Lake Trout were sorted into separate tubs according to sex, selecting only females ready to produce eggs and all males for additional handling. All male lake trout are held to ensure that enough milt will be available to fertilize the eggs as some males we collect may not supply us with adequate milt. Once sorted, the eggs. The same number of males and females are stripped into the bowl, giving us a 1:1 ratio, which allows for greater fertilization success should any of the males prove to be infertile.

In 12 net nights (net nights is the sum of the total number of nets fished each night of the egg collection) a total of 500 Lake Trout were trapped, for an average of 41.7 fish caught per net night (Table 1); this year's catch per unit effort was over ten fish higher than the ten year average of 27.7 (Table 3) likely due to the ideal water temperature of 52 degrees Fahrenheit (Table 1). Staff collected 80,000 eggs (Table 3) which exceeded our target goal of 75,000. Eggs were taken from a total of 104 female Lake Trout, averaging 770 eggs each (Table 3). This was the lowest average eggs per ripe fish in the last ten years. Alternatively the egg quality and fertilization rates were the best they have been in ten years, yielding a fertilization rate of 86.1% (a total of 68,826 fertilized eggs Table 3), well above the ten year average of 77.1% (Table 3). We had 62,483 Lake Trout hatch and move from incubators to a tank at the hatchery; they will be released in spring of 2022.

According to data aquatic biologist from Raybrook sent us, the length of a stocked 6-year old lake trout which is used to evaluate growth, remained unchanged between 2019 and 2020 but still under the target at 17.4" (Figure 3&4). It was found that a greater percent of the 200 measured fish were unclipped in 2020; 48% unclipped up from 41% unclipped in 2019 (Figure 3). Hatchery staff found that 39% of the 500 lake trout handled this year were wild fish. The average length of a lake trout caught in the 2020 survey was 17.8" and 1.8 lbs.

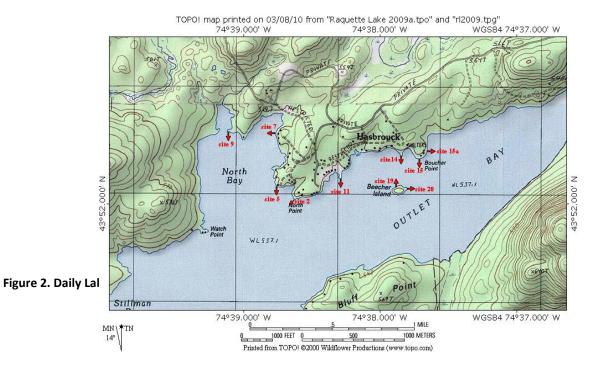
DATE	NETS FISHED	WATER TEMP	# LT	# LT ♂	# LT \$	# RIPE \$	# HARD Ç	# SPENT Ç	ơ∕♀ RATIO	# Wild LT	# Stocked LT	Stocked/ Wild Ratio
17-Oct-20	6	52	347	234	113	75	23	15	2.07	104	243	2.34
18-Oct-20	6	52	153	107	46	29	5	12	2.33	35	118	3.37
Results	12		500	341	159	104	28	27	2.14	139	361	2.60

Table 1: Summary of Daily Lake Trout Take, 2020

Table 2. Summary of daily lake trout catch per net site in Raquette Lake, 2020.

DATES FISHED		DAILY TOTAL					
	2	5	9	14	15	19	
17-Oct-20	25	86	35	33	87	81	347
18-Oct-20	17	41	24	15	12	44	153
NET NIGHTS	2	2	2	2	2	2	12
Fish Per Net Night	42	127	59	48	99	125	500

## Figure 1: Map showing locations of trap nets



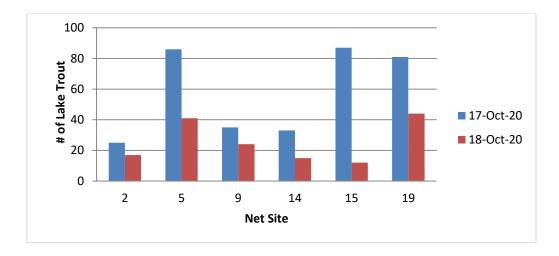


Figure 3: Average length of stocked 6 year old Lake Trout.

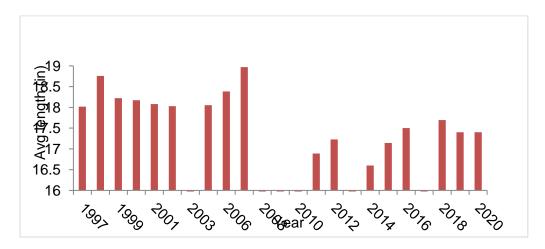
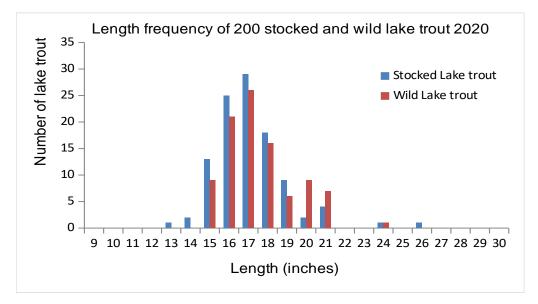


Figure 4: Histogram of stocked and wild for the 200 fish.



YEAR	DATE	TEM P (F)	# NET NIGHT	# Lake Trou t	CPUE 2	# ♂	# Q	# RIP E Q	RIPE Ç CPU E	EYE UP %	TOTAL EGGS TAKEN	AVG. EGGS / NET NIGH T	EGGS TAKE N PER RIPE Q	Total Cost	COST/ 1000 EGGS
2010								No Eg	g Take						
2011	10/12 -21	59	66	1833	27.8	119 1	64 2	177	2.68	60. 1	194,74 1	2,951	1,100	\$5,350.8 2	\$27.48
2012	10/16 -22	52	48	1330	27.7	932	39 8	190	3.96	81. 3	201,12 3	4,190	1,059	\$4,028.0 0	\$20.03
2013	10/16 -25	56	65	1653	25.4	946	70 5	175	2.69	73. 4	194,95 2	2,999	1,114	\$4,051.3 6	\$20.78
2014	10/15 -24	58	60	1061	17.7	766	28 6	104	1.73	85. 5	88,141	1,469	848	\$4,760.0 5	\$54.00
2015	10/14 -19	54	35	1572	44.9	951	62 1	200	5.71	78. 6	185,38 8	5,297	927	\$4,588.0 2	\$24.75
2016	10/12 -19	56	46	974	21.2	517	45 7	147	3.20	75. 8	175,04 5	3,805	1,191	\$4,710.3 9	\$26.91
2017	10/11 -20	61	49	884	18.0	456	42 8	133	2.71	68. 3	159,75 3	3,260	1,201	\$3,313.9 9	\$20.74
2018	10/13 -26	58	82	1340	16.3	673	66 7	88	1.07	84. 1	108,88 9	1,328	1237	\$5,077.9 6	\$46.63
2019	10/16 -20	54	30	1085	36.2	689	39 6	152	5.07	77. 6	153,86 2	5,129	1,012	\$4,457.2 9	\$28.97
2020	10/17 -18	52	12	500	41.7	341	15 9	104	8.67	86. 1	80,091	6,674	770	\$3,293.1 2	\$41.12
10 Year Avera ge		56	49	1223	27.7	746	47 6	147	3.75	77. 1	154,19 9	3,710	1,046	\$4,363.1 0	\$31.1 4

1) Net Nights is the sum of the total number of nets fished each night of the egg collection.

2) CPUE is the catch per unit effort or total # fish caught divided by net nights.



Welcome. The RLPF is happy to have had a number of new members join. By becoming a member you've helped us to ensure that we are able to do as much as possible to preserve and protect Raquette Lake. If you have any questions or would like to volunteer for any of our projects please email us.

Please consider making a gift of a membership to RLPF for friends and family who love Raquette Lake. The application is on our website: <u>www.rlpf.org</u>. If you are not yet a member we hope you will consider joining us by going to our website. Thank you.

As always we thank you for your support and your membership. We also want to deeply thank all those people who have so generously given donations to the RLPF. Your donations are put to use helping to keep our organization up and running and being involved in issues relating to protecting and preserving the Raquette Lake.

The purpose of the RLPF is to promote the cooperation and friendship among the inhabitants of the area and to unite its members in the material understanding of Raquette Lake, New York, so that the entire membership will go forward carrying out the preservation and conservation of Raquette Lake and its watershed through education, advocacy and broad based community involvement. *Please join us! Thank you!* 

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