



Hammond River Angling Association Fall 2021 Newsletter NATURE CAMP

NATURE CAMP

Summer 2021

We had an amazing year this summer for Hammond River Nature Camp 2021!! We had 9 full weeks of camp, with well over 250 campers throughout the summer! Isabella has done an amazing job as our Camp Director! Thank you, Isabella!!!

This year marked the 20th Anniversary of the Nature Camp and we have been celebrating! Each child received a treat bag at the end of the week with some HRAA swag! Popcorn was served every week, as well as freezies and either a BBQ or pizza party on Fridays.

We had a great group of Counsellors this year!

- Ben Daigle - Lifeguard
 - Emma Steadman – Recreation Leader
 - Parker Morehouse – Counsellor
 - Ben Huisman – Recreation Program Leader
 - Patrick Herron – Ecological Technician
 - Jake Glaspy – Ecological Technician
 - Colin Downey - Lifeguard
 - Paige Wright – Recreation Program Leader
 - Lilla Christie – Counsellor
 - Robel Beserat – Counsellor
 - Rachel Hicks – Counsellor
 - Marissa Gootjes – Counsellor
- Thank you all for an amazing summer!





Hammond River Angling Association Fall 2021 Newsletter 2021 EVENTS

EVENTS

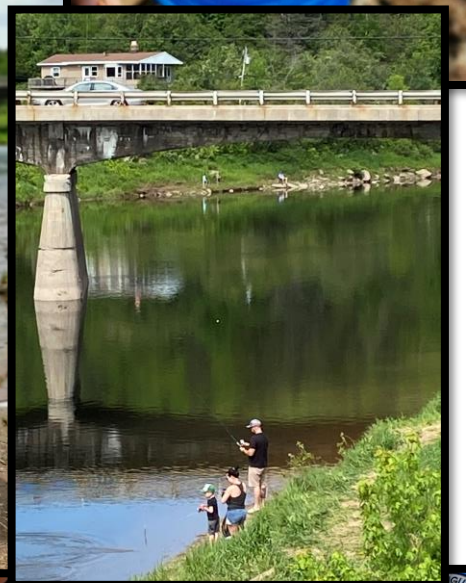
HRAA Family Fishing Derby (June 5th & 6th, 2021)

Hammond River Angling Association's Family Fishing Derby was a huge success!! We planned on having around 100 participants, and were blown away, having over 300 people register!

Each day from 11-12, we offered free pizza, chips and drinks to all registered participants! Thanks to Domino's Pizza for the support!

Every family who registered, had 1 ballot entered into a draw to win a 1-day fishing trip with Marlon Prince. Marlon offers bass, trout, muskie, pickerel, and pike trips! Thank you Marlon! To learn more about Marlon and his amazing trips, check out his website at <https://stjohnnysox.wixsite.com/guide>. The winner was Elizabeth Rideout!! Congrats Elizabeth and Family!

Thank you to Hammond River Holdings for sponsoring this event, to Rob Dekany from Maritime Worms for supplying the worms, East Coast Anglers for prizes and thank you to everyone who came out to fish! We had a blast and look forward to the 2nd Annual Family Fishing Derby next year!!





Hammond River Angling Association Fall 2021 Newsletter 2021 EVENTS/NEWS

EVENTS

Hook and Paddle (June 12th, 2021)

On June 12th the HRAA hosted the first stop of the Hook and Paddle multi-species paddling series. Thirty-four anglers gathered in front of the Conservation Centre for an 8 am start. For the next seven hours participants spread through the lower Hammond River hoping to catch and release as many different species as possible.

When the catches were tallied, Rene Pelletier came out on top with 6 species measuring a total of 83". Rene threw in some bonus points for good measure. Second place was taken by John Cail with 6 species measuring a total of 68.25" and Chris Bingham grabbed the bronze also with six species measuring 66.5".

This year's event had a Hollywood feel with a film crew from Red Lama Productions catching all the action for a web series that will be aired on Sportsmen Canada. Follow Hook and Paddle TV on Facebook for details. If you are interested in taking part in the Hook and Paddle series, check out their website at www.hookandpaddle.ca or search Hook and Paddle on Facebook.



NEWS

Donation in Memory of Mike Donovan

On October 12th, I was very privileged to attend a memorial presentation hosted by the Kennebecasis Branch (58) of the Royal Canadian Legion, where the "First Annual Mike Donovan Texas Holdem Tournament" presented a cheque to H.R.A.A., received by Rob Dekany, H.R.A.A. member, in memory of Mike Donovan. Mike was a long-time H.R.A.A. member, avid outdoorsman, fisherman, and exemplary conservationist. Rob, a close personal friend of Mike's, has also very benevolently offered to match this donation with one from his company, "Maritime Worm". Thank you all for these wonderful tributes to Mike, on behalf of all of us at H.R.A.A. Pictured are Brian Eisan, vice president, and Rob Dekany. – John Blenis





Hammond River Angling Association Fall 2021 Newsletter OPERATIONS/NEWS

NEWS

Congratulations

Staff member Josh Kelly successfully completed the Wetland Delineation Course, held earlier this year at The Maritime College of Forest Technology (MCFT)! Way to go Josh...so proud of you!!

Goodbye Abby!

All of us at the HRAA want to thank our Summer Student Eco Tech, Abby- your work over the past few months has been amazing! You are one of the most hardworking, talented, funny, and caring people to come through these doors. Your smile and laughter has made all of our days in the field so very enjoyable (and we crushed our projects this year because of you too!)

Abby just finished a Comparative Bottom Trawl Survey with DFO, before returning to her 3rd year at UNB to continue her work towards a degree in Marine Biology.

We hope to see you again next summer, Abby!!



OPERATIONS

Rentals

We are open for rentals at the Hammond River Conversation Center! We have a COVID Operational Plan in place and will be checking Vaccination Records at the door. Call Melissa at 645-1698 to book your rental today! Members receive 20% off all rentals!!

Office

The offices are currently closed to the public; however, an appointment can be made by calling or emailing!

You can reach us by phone at 832-1230 or by email at office@hrra.ca.

Maintenance

The Conservation Center has undergone some changes during the summer of 2021. We have redone the gazebo roof, thanks to Board Member Rick McKillop!! A fresh coat of paint was put on the building thanks to Bob Bardsley and Christina Crilley. The Center looks amazing!!

A new dock was installed out in front of the Center, with special Thanks to Gary Crossman and the Community Investment Fund! This has been great for Nature Camp as well as the community, who use it for kayaking, tubing, fishing and swimming.





Hammond River Angling Association Fall 2021 Newsletter 2021 PROJECTS

2021 PROJECTS

1. Cutting Hedge Technology: Using Shrubs to Sequester Carbon and Restore Palmer Brook

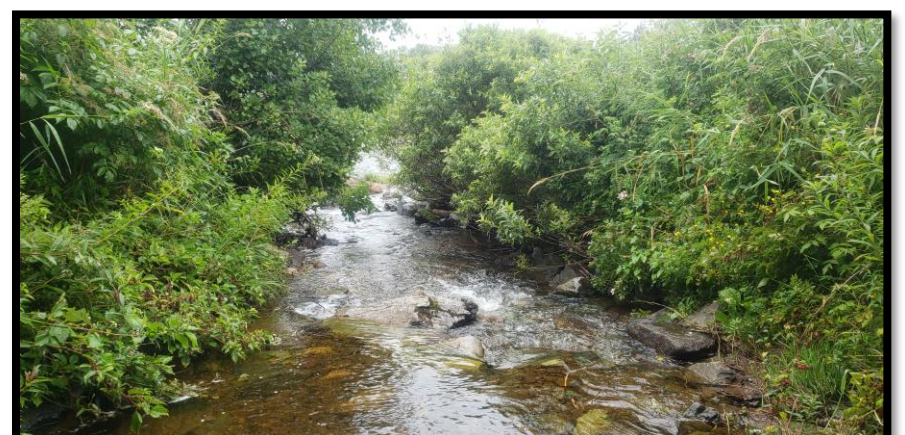
In June, we successfully planted a total of 1480 shrubs (15 different species) in the riparian zone along Palmer Brook. These shrubs will assist in erosion control and should withstand flooding and ice shears. So far, the shrubs are growing remarkably well! In addition, we recently completed 2 out of 4 rounds of core soil sampling. We take 8 samples at 3 locations in the Palmer Brook flood plain. The first location has only grass, the second location has immature willows, and the third location has mature shrubs and alders. These samples will allow us to examine how much carbon is being stored in the soil based on surrounding vegetation, with the hypothesis that areas with shrubs will sequester greater amounts of carbon. So far, our results have proved our hypothesis, which means the shrubs we have recently planted will eventually mature and assist in carbon capture, and our first 2 rounds of results show that the unploughed/unhayed HRAA field is sequestering approximately 12 tonnes of carbon per year! We have also given 3 demonstrations to Nature Camp kids on soil testing, microbes, and carbon footprint. We also hosted the funders of this project, the World Wildlife Fund- they joined us for soil sampling, and to see our restoration efforts. Our project was one of only 8 selected across Canada to examine soil carbon capture, and we are the ONLY group to extract core soil samples ourselves! We have also been experimenting with in-house soil bulk density tests.

2. Mini Bat Detector Boxes

In partnership with the Department of Natural Resources, our field staff installed 2 mini bat detector boxes within the watershed. These bat boxes collect ultrasonic frequencies to determine if bats (and what species of bats) may be in the area. The first box was placed in Upham, near Upham Mountain, which is home to Chantal's Cave (the 7th longest cave in the province). The second bat box was deployed near Theobald Lake, our Candidate Protected Natural Area.

3. Maintaining Water Quality Data While Adapting to Climate Change

We have been extremely busy this year with water quality samples! Each month, we are taking a grand total of 34 water quality samples as opposed to 12 water quality samples last year! Areas being sampled include confluence points of tributaries and the main stem of the Hammond River, as well as 6 locations in the Caledonia Highlands that are providing very cold-water to the Hammond River. On July 29th, we recorded the water temperature of the Jenny Lind Brook at 12.2°! On average, the 6 upper tributaries' water temperatures were 13.3 ° compared to 6 lower tributaries average temperature of 17.85°. Coming up, we will be measuring the width, velocity, turbidity, and sediment transport in each of the confluence points, and performing habitat assessments in the 6 upper tributaries.





Hammond River Angling Association Fall 2021 Newsletter 2021 PROJECTS

4. The Hammond River Lake Assessment 2021

We have performed all 10 lake assessments!! These assessments include land use surveys, invasive species documentation, macrophyte coverage, and fish community assessments. We created an online feedback survey for lake residents or users to fill out (if you haven't filled it out already, please visit our webpage and follow the link for the Lake Survey! This information will help guide our future conservation efforts). We partnered with ACAP Saint John and the Kennebecasis Watershed Restoration Committee for 2 field days, where we learned how to use fyke nets and beach seine nets. We also had the Atlantic Canada Conservation Data Center (AC CDC) perform a flora/fauna survey of Drummond's Lake, a potential calcareous hotspot for rare or endangered plants! We have also been extremely busy tracking cyanobacteria blooms that have occurred in Darlings Lake and the Kennebecasis River. We are working with ACAP Saint John and have deployed 2 SPATT Collectors (passive sampling devices for microcystins). In addition, we have collected 4 rounds of microcystin sampling from Darlings Lake, and it was determined to be a bloom that is producing harmful cyanotoxins in the first round of samples and came back negative for all subsequent samples. We have also produced an educational video on cyanobacteria, that we have posted on Facebook, You Tube and our website, which has had over 1k views so far! We also had a meeting with the Town of Hampton and a tour of their wastewater treatment facility, to determine if it is contributing to the nutrient spikes in the Lake- they shared their water quality data with us- they are not having exceedances, and they are well below capacity in the lagoons, and are probably not a triggering factor for the bloom in Darlings Lake. On a positive note- we have had huge engagement with the residents of Darlings Island and Nauwigewauk, many of whom have offered access to the lake, and many of whom have expressed interest in assisting with future HRAA projects.



5. Riverkeepers: Engaging Citizen Scientists of All Ages and Backgrounds

Using the Water Rangers Kits, we were able to provide educational lessons to 12 classes on the basics of water sampling. These kits have also been used regularly at Nature Camp. In addition, we hosted the Newcomers Society and Elizabeth Frye Society at the Conservation Center, where they also got to use these kits and learn the importance of water testing. We will also be lending some of these kits out into the community for additional citizen science testing! We have installed a rain gauge at the Conservation Center, and have distributed 2 additional rain gauges, with the remaining 6 to be given to local schools shortly, as part of the Collaborative Rain, Hail and Snow network.





Hammond River Angling Association Fall 2021 Newsletter 2021 PROJECTS

6. Monofilament Bins and Shoreline Clean Up

Our fishing line recycling bins have been an absolute smash hit! We have collected boxes full of used fishing line. The Kennebecasis Watershed Restoration Committee (KWRC) also reached out to us regarding these bins, so we constructed an additional 6 bins for them to place throughout their watershed! We recently did an interview for CTV News on the success of these recycling bins- this interview caught the attention of the Antigonish Rivers Association in Nova Scotia, who then began their own fishing line recycling bin program! This project also included clean-up efforts, including removing old tires from Brawley Brook, an old couch from the outflow of Drummond's Lake, and regular clean-up efforts around the main pools (Tabor Bridge, Silver Hill), and we are planning one last clean up event later in October.



7. Partnering with the Nature Conservancy of Canada

As a result of our engagement with the Nature Conservancy of Canada for access onto their property in Damascus to install the emerald ash borer trap, we are now working towards being the land stewards over this conservation area of approximately 100 hectares in size, bringing our potential total of conservation stewardship to almost 600 hectares within the watershed!

8. Emerald Ash Borer Traps

In partnership with the NB Invasive Species Council, our field staff recently installed 2 prism traps in the watershed. These sticky traps will attract and hold any emerald ash borers that may be in the surrounding area. One was located by the pond, to allow for educational discussions with the kids at Nature Camp. The other has been placed in Damascus, within the Nature Conservancy of Canada's Land Trust. We have since collected these traps and are happy to announce that we found no emerald ash borers.



9. Candidate Protected Natural Area: Theobald Lake, Jenny Lind Brook & Irish River

As part of the provincial Nature Legacy project, in which New Brunswick must set aside an additional 400,000 hectares of land for conservation purposes, our team submitted a proposal to create a Protected Natural Area that would encompass the wetland headwaters of the Jenny Lind Brook, Theobald Lake, and the Irish River. Our proposal was accepted, and we now have an official Candidate for conservation for 480 hectares! We will know this winter if our candidate becomes a fully fledged Protected Natural Area- public engagement was exceptional throughout the nomination timeframe, and we anticipate good things to come!



Hammond River Angling Association Fall 2021 Newsletter 2021 PROJECTS

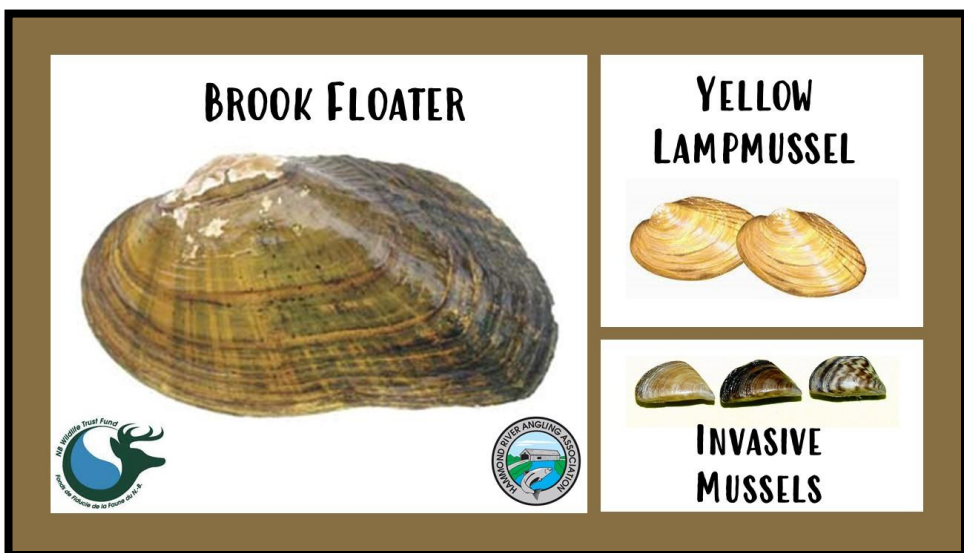
10. Upham Gypsum Monitoring

Monitoring is ongoing, as well as completing the habitat assessments and electrofishing of WC3 South, which was absolutely teeming with trout! The 2021 report will be complete in November on our monitoring efforts. We have also been approved for yearly monitoring of the project.



11. Mussel Survey

Preliminary visual surveys have been underway throughout the summer and into the fall, while the majority of this work will be completed in 2022. This project will update the 2018 mussel survey, completed by the HRAA.



12. Electrofishing & Redd Count

We have completed Electrofishing at all 15 index sites in the Hammond River and have confirmed juvenile salmon presence at 8 locations, with the highest densities being in Hanford Brook & Salt Springs Brook. We were also able to squeeze in one additional site, Twin Brook in Upham, near an exceptionally hung culvert, in hopes of finding juvenile salmon to strengthen our case to remediate the culvert: unfortunately, there was no salmon presence at the time, but lots of trout.

We are also working with the Wolastoq Genomics team again this year- last year, we collected 38 adipose fins for DNA testing, to determine if the salmon in the Hammond are OBoF, IBoF, wild, escapee, or hybrids. This year, we will be heading to the Kennebecasis River and Canaan River to assist in additional tissue samples, with a target of 30 at each site. The team has presented our work at the Tribal Lands Forum, and video content and social media engagement on this project should be released fairly soon to the public.

Later in October, we will begin to promote the upcoming redd count event- last year was a huge success, as we had many volunteers, and were able to find more than 40 redds throughout the month. Our plan for this year is to host a volunteer day once again, and then our field team will continue redd counting throughout the entirety of November. Josh has also been hard at work creating a new, and improved, data base for our electrofishing results. We are hoping to put together a database that will allow us to use the same format year after year.





Hammond River Angling Association Fall 2021 Newsletter 2021 PROJECTS

13. Culvert Fish Rescue

On Wednesday, September 22nd, 3 HRAA staff were onsite to assist with fish capture and relocation. A barrier net was installed approximately 4m in the unnamed outflow watercourse of the culvert to be replaced. The net was anchored in the watercourse using stakes and rocks, allowing water to flow freely, but impeding fish passage. The net was also flagged with 2 blue flags for ease of identification, and our contact information was also attached to the barrier net.

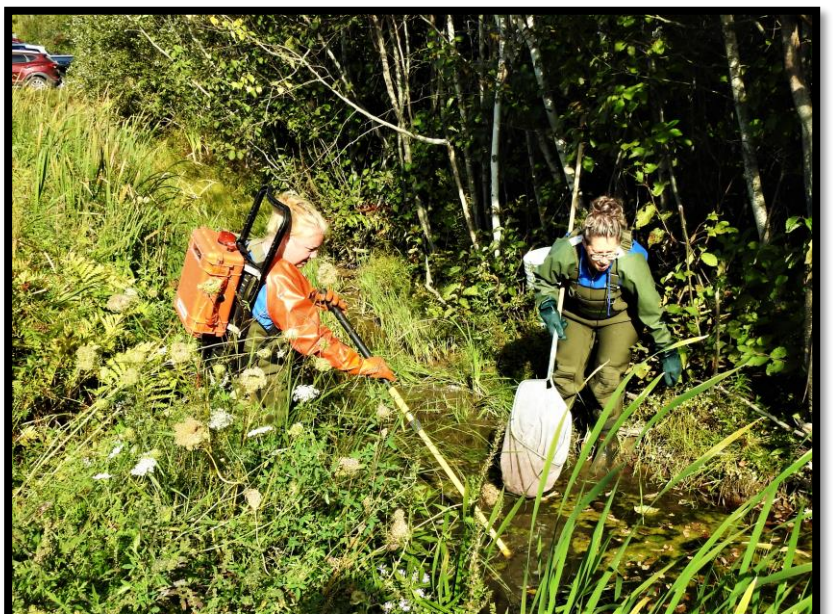
Staff followed the watercourse to determine its inflow source. The watercourse passes through the culvert to be replaced, then heads along a ditch approximately 17m in length, before entering a larger culvert system, below Reynold's Salvage Yard. It was determined that this is an elevated, sectional concrete pipe culvert, which does not allow fish passage under normal flow. This culvert is approximately 85m in length, and on the date of electrofishing, no water was present above the culvert.

Staff used a YSI multiparameter meter to determine water chemistry, to properly determine settings for the Halltech Electrofishing backpack. A sweep was performed above the culvert to be replaced, and along the ditch, before the watercourse entered into Reynold's Salvage Yard and fish passage is no longer possible. Staff then performed 3 sweeps in the outflow of the culvert, until no further fish were present.

Staff identified, counted, and subsequently relocated the fish well away from the proposed work zone. In total, HRAA staff documented 2 species of fish, with a total fish count of 47. All fish were successfully relocated, with zero fish mortalities occurring during the electrofishing or relocation.

Staff revisited the site periodically throughout the week to ensure that the barrier net was still viable. The culvert was then replaced by Sarcon Construction, with HRAA staff on hand to rescue the last of the fish.

All in all, it was a very successful partnership between HRAA and DTI!





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Maritime Worm



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