



NORTH SHORE Mi'kmaq Tribal Council

ANQOTUM RESOURCE MANAGEMENT

FALL BULLETIN 2024



PROMOTING LIFELONG LEARNING WORKSHOPS & SUMMER SCIENCE CAMPS

Our Promoting Lifelong Learning program is a way for us to engage children and youth in our communities. Classroom workshops, field trips, summer science camps, and take-home activity kits help us teach the next generation about culturally-specific species at risk such as plamu (salmon), mikijkj (wood turtle), komkutamu (sturgeon), and kataw (eel).

This summer, we distributed science kits at powwows, and in July we held a special summer science camp session at our Fisheries Resource Centre for the fami-



lies of NSMTC staff. More recently, we hosted science workshops for Grade 4 students from Elsipogtog, Na-toaganeg, and Metepenagiag where kids learned to use science lab equipment and handheld GPS devices to find our very own Geocache.

BROOK FLOATER GLOCHIDIA SAMPLING

Throughout the summer, our field team regularly visited the Priceville Foot Bridge to sample fish for brook floater glochidia. Glochidia refers to the larva of mollusks, which is parasitic and attaches itself to fish gills. For brook floater, a mollusk that is a known species at risk, this sampling can help us gain valuable data. By collecting fish and examining their gills, we can identify which species host brook floater glochidia and use this information to support our conservation efforts. We are completing DNA extraction and PCR amplification (a process that helps with DNA detection) in-house!



COLD WATER CLIMATE CHANGE RESILIENCY PROJECT

Cold water habitat is critical for Atlantic salmon and trout survival, especially with rising water temperatures. Without isolated pockets of cold water, these fish would be forced to remain exposed to warm water conditions that lead to physiological stress and potential mortality.

The NSMTC Anqotum Resource Management team, with support from the Canada Nature Fund for Aquatic Species at Risk, surveys key cold water sites and carries out work to enhance these sites. This year, we enhanced Dyer Brook, Sutter's Brook, and McLean



Brook by strategically placing rocks and boulders and deepening the brook inlets. We also visited our previously-enhanced pools to ensure they are still functioning. Through specialized thermal drone imaging and snorkel surveys, we can see if these cold water sites are working for the fish that need them.

MIRAMICHI RIVER REMEDIATION PROJECT ANNUAL MONITORING

In 2017, we completed reconstruction of the Oxbow – the north river bank of the Little Southwest Miramichi River adjacent to Metepenagiag Mi'kmaq Nation. The goal of this work was to reduce erosion coming from the area that was affecting critical habitat. Each September, we reassess the site to learn about how our work has benefited the area. Species we pay special attention to are trout, salmon, bank swallows, and wood turtles. The project monitoring continues to give us insight into river remediation and how it can benefit an ecosystem.

SMOLT TRANSPORT

This year, the North Shore Mi'kmaq Tribal Council came together with the University of New Brunswick, the Miramichi Salmon Association, and the Atlantic Salmon Federation to carry out a new research project on the Northwest Miramichi River. The study involved

collecting Atlantic salmon smolts via two rotary screw traps (smolt wheels) in Wayerton, and transporting those smolts beyond the tidal section of the Miramichi River, where striped bass predation is high. The goal of this project is to boost smolt survival, ultimately increasing the return of adult salmon to the Northwest Miramichi River. We will continue this valuable work next year.



Photo credit: Nelson Cloud

Pg. 1: Field Tech Taylor Colford monitoring river temperature (header); Summer Student Kayla Russel handing out science kits (top); Biologist Ethan Augustine teaching kids about fish anatomy. Pg. 2: GIS/Geomatic Specialist Vlad King Trajkovic and Field Techs Katie Patles and Taylor Colford conducting a kicknet survey as part of CABIN protocols (top); Field Tech Taylor Colford fishing smolt wheels with Miramichi Salmon Association staff.

