

## **2021 Field Program Summary**

**Smolt Estimate:** It has been an exceptionally early spring here in the Miramichi and we have already started preparing for our annual smolt estimates. In an effort to improve accuracy, this year the MSA will be placing two smolt wheels on the Northwest Miramichi River. The cables needed to secure the smolt wheels are currently in place and the smolt wheels are being assembled. We will start the smolt wheels this week in conjunction with the North Shore Micmac District Council (NSMDC), who will provide a student to help with the estimates.

**Smolt Tracking:** Once again, the MSA has partnered with the Atlantic Salmon Federation (ASF) for our annual smolt tracking project. Later this month the MSA and the ASF will begin tagging smolts on the Southwest Miramichi River using Vemco acoustic transmitters. By tracking the movement of smolt out of the river, estuary, and into the Gulf of Saint Lawrence the survival percentage of smolts exiting the river can be determined, and any areas of high mortality potentially located. ASF will be placing transmitters in smolts from the Northwest Miramichi and also from the main Southwest Miramichi at Rocky Brook.

**Smolt Collection:** The MSA is planning for a long-term fry stocking research program to both bolster the salmon population and investigate the best method to stock fry. Stay tuned as we progress with this research!

**Electrofishing:** The MSA conducts an electro-fishing program each year to assess the distribution of juvenile Atlantic salmon in the headwater areas of the Miramichi River watershed. Our 2021 Juvenile Atlantic Salmon Assessment on the Miramichi River will continue as usual with funding received from the New Brunswick Wildlife Trust Fund. This program will be taking place during the latter part of the summer.

**Cold Water Pool Restoration:** This year, the North Shore Micmac District Council (NSMDC), in conjunction with the MSA and other partners, will be conducting two Miramichi river cold-water pool restoration projects. The areas that are scheduled for restoration are Grey Rapid's Brook and Morrissey Brook. Our MSA team is also planning to follow up on past cold water pool

restoration sites by performing snorkeling surveys, recording cold water temperature data, and assessing sites for possible clearing of debris obstructing water flow.

**Broodstock Collection:** Broodstock, or adult spawning salmon, are collected from the river by the MSA and its members for spawning at the Miramichi Salmon Conservation Centre. The eggs are incubated at the MSCC over-winter, and released back to the rivers in June as first feeding fry, strategically placed where juvenile densities are low. Salmon broodstock collection is planned to resume this coming fall on the Southwest Miramichi River.

**Beaver Dams Management:** Our beaver dam management program is a go this year as we have already received our permits. We plan to have potential sites assessed early and ready for the project to start in the fall, as the MSA did not perform beaver dam management last year due to Covid and a delay in issuing permits.