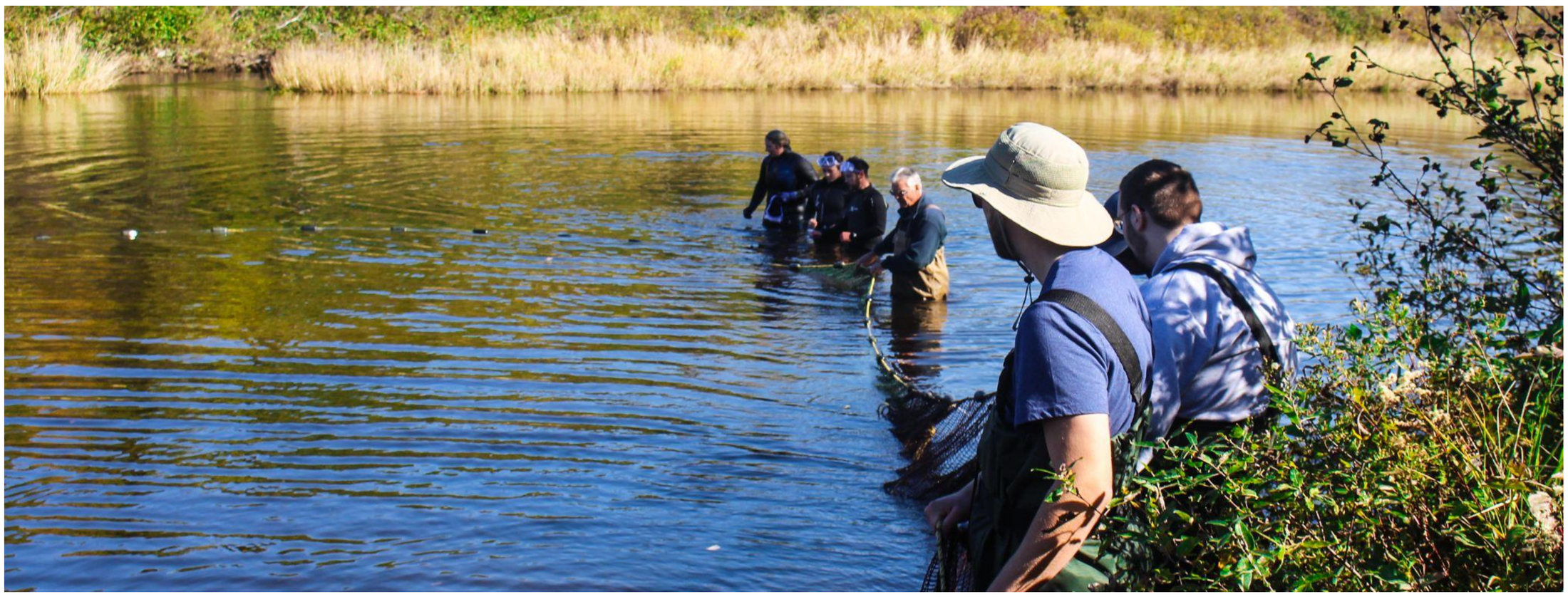
The Miramichi Salmon Association

The South Esk hatchery has been stocking salmon since 1873. In the 1990s, The Miramichi Watershed Management Committee took over, and the hatchery became the Miramichi Salmon Conservation Centre (MSCC). Stocking continues to occur annually through the MSA, who use the MSCC facility as their homebase.



In the late 1800s, the hatchery would stock approximately 1 million fry annually. To increase the number of fry stocked, commencing in the 1900s, broodstock were purchased from commercial trap nets to spawn. Transportation of the fry included using horses, boats, buggies, and trains to stock at multiple sites along the Miramichi River.

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2024 Brian D. Moore Legacy Fund Project completed by Ally Taylor

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Traditional stocked salmon fry are born from two adult salmon that have spent their entire lives in the river. MSA staff collect the adults as broodstock to spawn and release in the fall. The fertilized eggs are incubated at the MSCC throughout the winter, until they hatch in the spring. They are then stocked into their natal rivers as first-feeding fry.

Fry are transported on the back of trucks in water tanks with oxygen. Prior to transportation, batch weight estimates are taken to eliminate over-saturation of the areas stocked. With the decline of salmon stocks, a new perspective on fry stocking has developed taking the forefront over traditional stocking.

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Smolt-to-Adult Supplementation (SAS) was proposed as a stocking strategy in 2020 as part of an experiment. Its purpose was to see if wild and SAS fry would have similar survival rates. The Dungarvon River project involves smolt collection from 2020-2024, then in 2025 onward, taking fin clips from the smolts leaving the Dungarvon River and mature adults returning to the Dungarvon Barrier, to identify whether their parents were wild or SAS salmon

Smolt collection occurs during our Smolt Estimate program. Collecting the salmon as smolts allows them to retain ‘wild’ tendencies from their juvenile years. After growing to maturity at the MSCC, the females’ eggs are stripped and fertilized, and the eggs are incubated and tended to until the hatched fry are ready to be released the following spring.

Smolt-to-Adult Supplementation programs are used in areas that are considered high-risk for loss of genetic diversity within salmon stocks because of the rapid decrease of populations.

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