

***In this fourth issue of Living Rivers, we report on stewardship activities for rivers and Atlantic salmon in Newfoundland and Labrador from June through October 2020. Three months into the COVID-19 pandemic, the summer field work began with extreme caution and uncertainty. Facilities were closed and volunteer events cancelled. Gradually, under the guidance of medical officers and with adherence to directives under a provincially phased approach, residents focused on enjoying nature in their home province. Rivers became a refuge of peace and tranquility in a troubled world.***

*We at Intervale put our trust in science and in the good nature of people everywhere to care for one another while working to protect our rivers. We hope you enjoy this issue!*



Marcus Flynn, age 12, practiced fly casting at the workshop in Point Amour, Labrador. He can tie a salmon fly and loves learning about fish.

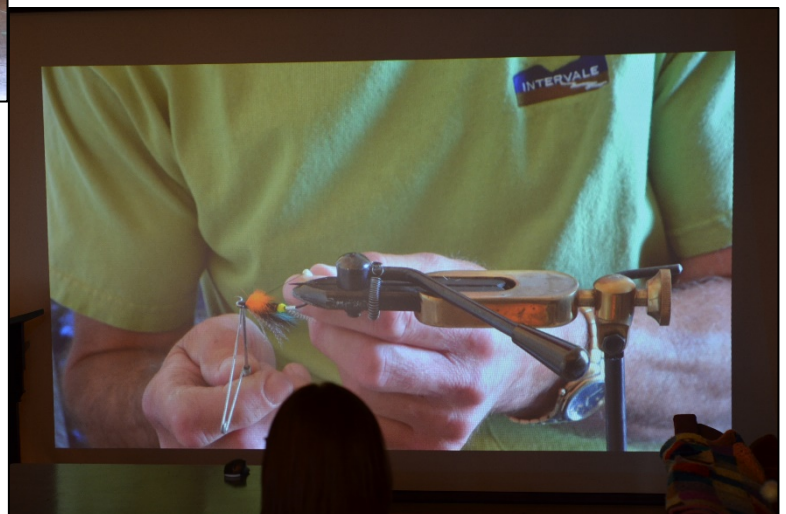
## Restrictions Cast New Light on Workshops

Organizers of the fly-tying workshops for youth came up with a method for maintaining social distancing while continuing the popular workshops that have attracted followers and introduced newcomers to the sport of fly-fishing. Under normal conditions, participants would gather closely while the instructor demonstrated the intricacies involved in creating a beautiful, functional salmon fly from a variety of natural and man-made products. Students would repeat the steps on their own, using a vice and a collection of materials.



Krista Grant gave a presentation on river ecology at workshops in Roddickton, Englee, and Point Amour, Labrador. A graduate of McGill University, she served as an intern with Quebec-Labrador Foundation (QLF), a partner in Living Rivers.

To enable workshop participants to physically distance themselves from the instructor while observing the procedure close-up, Intervale used a video camera to project an image of the instructor and his work onto a large screen at the front of a room. The instructor spoke to students while seated at the back of the room, explaining the procedure step-by-step.



To accommodate social distancing, live recording of the instruction was projected onto a large screen at the front of the room.



This year's instructor was Clarence Goodyear of Roddickton. Clarence is a former school Principal and for 17 years has been guiding anglers from Tuckamore Lodge in Main Brook. In honour of the individual who taught for the past several years, Goodyear began his lesson with a tribute to Hans van Klinken, noted Dutch fly fisherman and creator of a fly called the "Klinkhammer."

Feedback from students indicated that, although they missed not being able to create their own fly, they could observe the process better than if they had crowded around the instructor. For their enjoyment, Goodyear presented each student with a fly to take home and use next time they went fly-fishing.



Eric Bennett of Intervale gave a workshop for youth at the Flat Bay First Nation, where he is a member. He described threats to Atlantic salmon and what people can do to help.

As a further bonus, the workshop included a session on fly casting. Students were required to wear vinyl gloves as, one-by-one, they took a turn with the fly rod. They had a great time

learning from a master and practicing their cast in front of their peers.

Intervale and its partners successfully completed three fly-tying and casting workshops at the following locations: Flat Bay First Nation Band office (Bay St. George), Roddickton community hall (Town of Roddickton-Bide Arm), and Point Amour Lighthouse Provincial Historic Site (Labrador Straits). We thank the partners for hosting the workshops and the generous assistance from Quebec-Labrador Foundation.



Clarence Goodyear gave instruction in fly-tying and casting to youth in Flat Bay, Roddickton-Bide Arm, and Point Amour, Labrador. For 17 years he has served as a guide for Tuckamore Lodge.



Yashveen Gunput, age 11, from L'Anse au Loup, Labrador, loves the workshops that have been offered at Point Amour each year.

## Main Brook Celebrates Salmon History

A new interpretive panel in the Town of Main Brook describes the importance of the Salmon River to the local economy, promotes best practices for angling, and encourages people to get involved. When logging operations by Bowater ceased in the 1960s, residents organized extensive clean-up of remaining structures and pulpwood that were degrading fish habitat. Since then, people from the region as well as many non-residents have been enjoying the river for its abundance of wild Atlantic salmon.

 The panel features a large title "Salmon River of Main Brook" at the top. Below the title is a paragraph of text about the river's history and its importance to the local economy. The panel is decorated with several photographs of people fishing, a fish, and a person cleaning up. At the bottom, there is a section titled "What you can do:" with a list of guidelines for anglers and visitors.
 

**Salmon River of Main Brook**

The Salmon River of Main Brook is known for its abundance of wild Atlantic salmon and easy access to many people. The salmon are often seen and heard jumping out of the water's surface from their resting places along the river banks and into the water. Most return to sea in the fall. Both large salmon (400-500g) and smaller salmon, known as parr, are in the river beginning in June and early July. During this journey, salmon will adapt to vastly different environmental conditions of ocean and freshwater habitats.

The closest community of Main Brook is proud of its river. Commercial salmon fishing in Main Brook was the area's first industry, followed by logging operations by Bowater from about 1945 to 1962. The company, which employed many residents, conducted log skidding down to a facility on the shores of Main Brook, where they were shipped to a paper mill in Corner Brook and to overseas markets. Other log skidding roads and operations, including organized extensive clean-up of the river and watershed in the 1980s, resulted in streams such as the Tuckamore Lodge brook, which features salmon fishing and fall fishing, and the Bowater brook. The subject employs many local men and women, who share their knowledge of the river with anglers from the province and beyond the border.

**When extracting a stream, follow best practices:** Remove as much as you can. Keep the log below the water's surface. Avoid trampling the banks and the fish habitat. Write the fish records.

**At the end of the stream, please do not:** Remove litter and non-biodegradable materials. Avoid using pesticides and herbicides. Avoid using motor vehicles. Avoid using heavy machinery.

**What you can do:**

- Leave no waste. Pack it out.
- Remove litter and non-biodegradable materials.
- Follow angler guidelines.
- Minimize stress and harm to fish.
- Prevent erosion and siltation.
- Protect buffer zones.
- Report poaching. Call 877-528-0999.



## Clean-ups Make a Difference

River and shoreline clean-ups across the province continued this summer, fueled by a desire to clear waste from new sites and to maintain the standard that was put into place following last year's clean-ups. A major first clean-up was performed at the estuary of Southwest River, which drains into Bay St. George.

Intervale's Eric Bennett had no problem rounding up over 20 cabin dwellers to get to work on a Saturday morning in late September. Within a few hours they had picked up 2,570 pounds of discarded waste, consisting of household items such as mattresses, plus fishing-related gear and bait box liners that had washed ashore. Eric and Liam Walters, also from Intervale,



Eric Bennett and Liam Walters (pictured) of Intervale hauled the waste to the Bay St. George Waste Disposal Site landfill using a U-Haul and trailer.

rented a U-Haul truck and trailer to haul the waste to the landfill site in St. George's.

Within minutes a Facebook posting from community elder Hayward Young of Stephenville Crossing congratulated all participants and encouraged the adoption of stewardship practices going forward.

Back in August on the Northern Peninsula, a team from Quebec-Labrador Foundation (QLF) checked several popular salmon fishing areas that had been cleared of trash in 2019, making sure that they remained free of litter in 2020.

The areas were along Beaver Brook, the Salmon

River of Main Brook, and the St. Genevieve River. Team members were pleasantly surprised by a marked decrease in the amount of litter. Intervale recognizes the dedication by several local groups to ensure the health of these rivers. They include White Bay Central Development Association, St.

Barbe Development Association, Tuckamore Lodge, St. Genevieve Inn, and individuals such as Brendan Fitzpatrick and others. Keep it up, everyone!



Jackie Bauman, Krista Grant, and Alexa Schubak from QLF were three of the people who helped keep First Sou'west in Main Brook clear of litter. They formed a bubble as part of their work experience for QLF.



In late September, 22 cabin dwellers from the Southwest River area in Bay St. George performed a clean-up that removed >1 ton of household and fishery-related waste from the estuary shores of this important salmon river.

## Help Stop Poaching

Recently there have been photos posted on Facebook and stories in the media providing evidence that poaching of salmon in rivers of Newfoundland still occurs. Moreover, a culture of tolerance persists in many areas of the Province. As reported in the previous issue of Living Rivers, citizen action does make a difference. If you see something, call DFO (1-877-820-0999) or the provincial fisheries office (1-800-222-TIPS). Refuse to purchase illegally caught salmon. Teach youth. Get involved in a stewardship group.



Photo Credit: Department of Fisheries, Forestry and Agriculture



## Assessing Culverts and Bridges for Aquatic Connectivity

Several nonprofit organizations are working with Fisheries and Oceans Canada (DFO) to assess barriers to fish passage on the Island of Newfoundland, as reported in *Living Rivers*, Vol.3, No. 1, June 2020. DFO is seeking to create a complete database of barriers to fish passage as well as information about available fish habitat that could be gained following future mitigation measures. Work in 2019 focused on identifying and taking measurements from culverts on watercourses that support Atlantic salmon, trout, and possibly other species such as Arctic char and American eel. The objective in 2020 broadened to encompass both culverts and bridges.

DFO biologist Lica Christensen with the Fish and Fish Habitat Protection Program issued each team with the necessary equipment, a territory map, and a list of culverts and bridges from which to draw the sample. Team members underwent an all-day training session arranged by DFO to test the equipment and practice survey techniques. Work commenced in



**Overfalls Brook Bridge, where the brook enters the Grand Codroy River in southwestern Newfoundland.**



**Liam Walters was part of the team assessing culverts in the Codroy Valley and surrounding area in southwestern Newfoundland.**

September and is expected to be completed by mid-November.

Teams spent long days driving highways and forest resource roads to the culverts and bridges on their target list. Culverts and bridges associated with streams that support fish passage received the bulk of their attention. For culverts, field crews took measurements such as size, shape, and condition of the culvert; inlet and outlet

water depth and elevation; and outflow drop and outflow pool depth. Bridges were much simpler, as field crews were required to collect data on length and width as well as the photos and coordinates required of every site.

The project has proven interesting to team members, who are gaining an appreciation for the condition of a large number of culverts and bridges that are scattered throughout the province. For Lica Christensen, it has been an opportunity for DFO to learn from people with local knowledge of their streams and the potential available fish habitat that could be gained in the future.



**Jake Sinnicks using the self-leveling laser kit to measure inlet elevation at culverts on the Northern Peninsula.**



## Anglers, Walkers Praise River Stewardship

Visitors to two rivers on the Great Northern Peninsula left comments of praise and encouragement in guest books placed in the decorated trailhead boxes that were installed at Beaver Brook and the St. Genevieve River. As reported in the June 2020 issue of Living Rivers, Intervale invited youth artists Chloe Foley and Lily Cunning to paint the boxes with images inspired by the rivers. No sooner had the boxes been painted and installed at the trailheads but anglers and walkers began to leave enthusiastic comments describing their enjoyment of the river, appreciation for the clean appearance of the trail, and praise for stewardship of the river habitat. Such acclaim exceeded the



Trailhead box at Beaver Brook that was painted by youth artist Chloe Foley of Roddickton.

expectation of project organizers at Intervale, who have prepared a third box for installation on a river in southwestern Newfoundland.

Here are examples of comments from visitors (names omitted) to Beaver Brook, which is home to the underground salmon pool:

*July 15. ...Great improvement in the trail this year compared to last year. Good job everyone.*

*July 15. ...Salmon river is full. Must be hundreds of them. Beautiful trail, walk place, river. Good work to those who keep it looking so well.*

*July 27.....Beautiful spot. Respect it and please keep it clean.*

*July 30. I always love walking here! So many salmon today, which was awesome! Great job maintaining the trails.*

Comments were equally positive about the St. Genevieve River, as in these examples:

*July 7. This is an awesome river! Good work, Lily, to remind us all that it's worth keeping it clean.*

*July 8. Beautiful river and worth the effort to keep clean.*

*July 8. Wicked river! Let's keep it clean.*

*July 15. Great day on the river fishing!*



Isabella Nolan (14) of Stephenville Crossing was selected as youth artist for a trailhead box on one of the salmon rivers in southwestern Newfoundland. A student at Bay View Academy in St. George's, Isabella has an active interest in salmon conservation and attended the fly-tying workshop held in Flat Bay in July.

## Placemat Available

Copies of a new informational placemat on rivers are available to local restaurants, communities, and stewardship groups. The design is the 20th in a series of placemats on terrestrial and aquatic species and habitats in Newfoundland and Labrador. Placemats are free of charge, but some shipping costs may apply. To learn more, contact [info@intervale.ca](mailto:info@intervale.ca)



## Snorkel Survey of Little Barachois Brook

*We thank Rex Porter for providing the information contained in this account and for leading the snorkel surveys and population assessments for these rivers.*

Snorkel surveys were conducted on Robinsons River and Middle Barachois Brook in 2018 and 2019, and on Little Barachois Brook in 2019 and 2020. The numbers of Atlantic salmon counted in these surveys were used to determine if the number of spawners met the conservation requirements for these rivers, i.e. the status of the stocks. These snorkel surveys are part of a larger three-year project being conducted by the Bay St.

George Area Development Association (BSGASDA) to evaluate the effectiveness of a Fisheries and Oceans Canada (DFO) Atlantic salmon management plan introduced in 2004 for Bay St. George rivers. Core funding for the project was provided by the Atlantic Salmon Conservation Foundation.

Results of the surveys in 2018 and 2019 were presented in stock assessment reports to DFO by retired DFO biologist Rex Porter. Restrictions under the COVID-19 pandemic meant that surveys in 2020 could not be repeated on the Robinsons and Middle Barachois rivers; however, surveys could be conducted on Little Barachois Brook because logistical arrangements allowed for social distancing. A report on the 2018-2019 assessments and on results of the 2020 snorkel survey was provided to BSGASDA.

According to the report, the 2018-2019 assessments indicated that the salmon stock in Middle Barachois Brook was at 39% (2018) and 55% (2019) of its conservation requirements. The salmon stock in Robinsons River was at 70% (2018) and 71% (2019) of its conservation requirements. Information on the surveys for Middle Barachois and Robinsons rivers appears in Living Rivers, Vol. 3, No. 1, June 2020.

In 2019 and 2020, snorkel surveys were conducted on a 9 km section of the Little Barachois Brook downstream from the counting fence that was installed during both years. The survey was deemed essential because some salmon likely remain and spawn below the counting fence. Porter considers the downstream section of river



**A team of snorkelers counted salmon in Little Barachois Brook in August 2020. Each snorkeler carried a 3 m rope, which was tethered to enable snorkelers to span the width of the pool.**

suitable for using snorkel survey techniques because of the absence of ponds and tributaries, timing of salmon entering the river, and low water levels that allow snorkelers to see the bottom.

The 2019 snorkel survey of Little Barachois Brook resulted in 144 salmon. This count was added to the number of salmon counted at the counting fence including adjustments for salmon that passed through the fence subsequent to the snorkel survey, and an estimate of the number of salmon not counted due to high water levels June 23-25. The estimated total number of salmon spawners was 624.

The 2020 survey was conducted on August 11. Ten snorkelers and four assistants formed two teams, one following the other by 30 minutes so that data collected could be compared, producing more accurate results.

The snorkelers counted 76 Atlantic salmon, which was less than the 144 counted the previous year. Of these, 19 (25%) were identified as large salmon ( $\geq 63$  cm) and 57 (76%) as small salmon ( $< 63$  cm). They observed salmon in five pools. One important pool contained 59 salmon, representing 78% of the total. The percentage of large salmon observed in 2020 (25%) was also lower than the percentage observed in 2019 (40%).

The number of salmon counted by the snorkel team will be combined with the number of salmon counted through the counting fence to provide an estimate of the total number of salmon spawners in Little Barachois Brook.



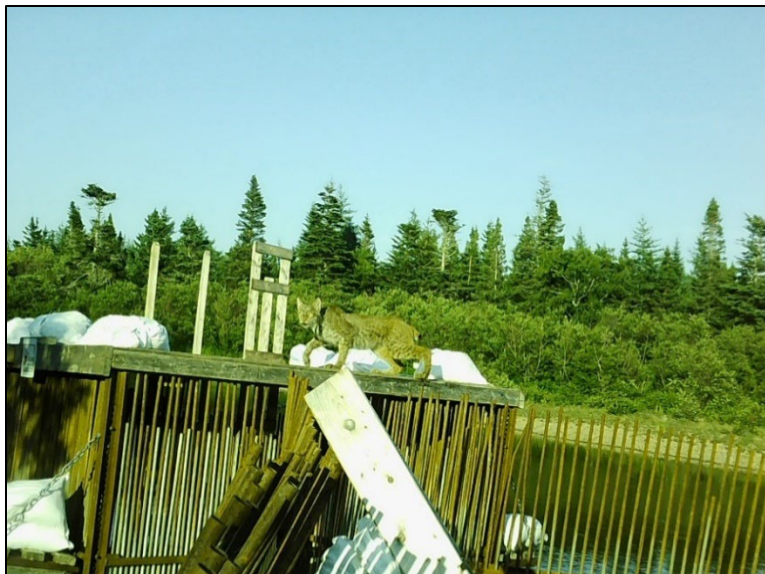
Liz Belanzaran of the Stewardship Association of Municipalities (SAM) joined Intervale and QLF on a clean-up of the area known as The Forks, part of the Salmon River watershed in Main Brook. We appreciate the effort by SAM to work with municipalities throughout the province on ways to protect important wetlands and riparian habitats.



## Productive Season for Salmon Conservation: Bay St. George Area

*We thank Suzanne Shears, BSGSADA, for contributing this report.*

For the third year in a row, the Bay St. George South Area Development Association (BSGSADA) continued its habitat assessment and restoration work in rivers and tributaries of Bay St. George. The focus during the 2020 season was the Highlands and Fischells rivers and their tributaries. The task engaged the BSGSADA Habitat team and a Green Team from the Conservation Corps of Newfoundland and Labrador in collecting data and removing obstructions such as woody debris that can potentially block salmon passage. In total, the teams surveyed 82 kilometers!



A lynx visited the counting fence on Little Barachois Brook in 2020. The image was captured by a trail camera on August 8 at 7:10 p.m. Photo courtesy BSGSADA.

Unusually low water levels and higher than normal water temperatures experienced this season brought an even greater sense of importance to their work. By removing several obstructions, clearing passages at culverts and bridges, maintaining pools, and protecting eroding riverbanks, the people at BSGSADA are maintaining habitat connectivity for migrating adult salmon and thereby helping to restore salmon populations in rivers of Bay St. George.

Meanwhile, for the second year in a row, the BSGSADA maintained a salmon counting fence on Little Barachois Brook, near St. Georges. This picturesque salmon river is adjacent to two protected areas: a nature reserve

maintained by Nature Conservancy of Canada and Barachois Pond Provincial Park.

The counting fence was installed on June 22 approximately 9 kilometers upstream from the estuary. Results from the 2020 season were encouraging: on August 30, the count reached 788 salmon, which was much more than the 474 that were counted in 2019.

The BSGSADA is extremely grateful for project funding from the Atlantic Salmon Conservation Foundation as well as support from Fisheries and Oceans Canada, WWF-Canada, Intervale, the Conservation Corps of Newfoundland and Labrador, Nature Conservancy of Canada, and many other supporters. Special thanks to the field staff who worked long hours installing and monitoring the fence.

The workshop, *Parker's Brook: Then and Now*, took place October 27, 2020. It examined the health of Parker's Brook, also known as Western Brook, which flows into Pistolet Bay on the Northern Peninsula. To access the presentation recordings, please contact Chelsea Boaler at [cboaler@wwfcanada.org](mailto:cboaler@wwfcanada.org).



Summer 2020 was a good season for residents of NL and the Atlantic bubble to enjoy the rivers and ponds near home. A gentleman from St. Anthony enjoyed fishing at First Sou'west, which flows into the Salmon River in Main Brook on the Northern Peninsula.

Editor: Kathleen Blanchard. Photo credits: Pages 1, 2, 5, and 8 by Kathleen Blanchard; Page 3 top and left by Eric Bennett, right by Kathleen Blanchard, bottom by Department of Fisheries, Forestry and Agriculture; Page 4 top and middle by Eric Bennett, bottom by Clarence Goodyear; Page 6 by Clarence Goodyear; Page 7 top by Kathleen Blanchard, bottom courtesy BSGSADA.

**Living Rivers is a multi-year, collaborative project for the conservation of rivers and Atlantic salmon populations in Newfoundland and Labrador. The work engages volunteers and many partnering organizations, businesses, and departments. Intervale is grateful to these and other groups, which provide financial and in-kind support.**



This project was undertaken with the financial support of:  
Ce projet a été réalisé avec l'appui financier de :



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada

**We gratefully acknowledge support from Fisheries and Oceans Canada for projects described in this newsletter.**

*Intervale is a nonprofit organization, incorporated in Newfoundland and Labrador, with a mission to conserve biodiversity, interpret heritage, and promote the integrity of rural livelihoods.*

**For more information about Intervale, please contact [info@intervale.ca](mailto:info@intervale.ca) or visit [www.intervale.ca](http://www.intervale.ca).**

**Intervale Associates Inc.**

P.O. Box 172

Doyles, NL A0N1J0 Canada

Tel: 709-686-5927

