ST. MARY'S RIVER NEWS



Derek Whiteway and Deirdre Green land this 38" kelt during the St. Mary's River tagging program. See story P. 5

Aerial liming targets spawning zone

By Sandy MacDonald, SMRA

Barren Brook may be one of the most promising spawning grounds for Atlantic salmon in the Southern Uplands region of Nova Scotia. The meandering channel, inundated by wetlands and sedge meadows on the West Branch of St. Mary's River, has the potential to be one of the most productive salmon streams in the entire Southern Uplands. But Barren Brook needs a little help first. Luckily, the St. Mary's River Association has stepped up to lend a hand.

Continued on Page 9

St. Mary's River Association • Annual Newsletter - Spring 2021

Highlights In This Issue

- President's Message
- Partner Reports
- Guest Contributors

And more!

Board of Directors

The St. Mary's River Association is a charitable, non-profit organization providing leadership and engaging partners to enhance, protect and promote the St. Mary's River as a healthy ecosystem for Atlantic salmon and other native animals and plant species as well as a rich community resource.

Our vision:

"Health for the river, the Atlantic salmon and our community."

SMRA News is a publication of the St. Mary's River Association as a service to our members.

The opinions expressed are those of the authors and do not necessarily reflect the policy of the St. Mary's River Association, the editor or the publisher. Memberships, suggestions and comments are welcome.

Address all correspondence to: St. Mary's River Association PO Box 179 Sherbrooke, NS BoJ 3C0 or by e-mail to stmarysriver@ns.sympatico.ca Registered Charity # 89145 0975 RR0001

Publisher, Editor, Layout and Design: Newsletter Committee Printer: Bounty Print

2020 - 2021

Scott Beaver

Kenny Silver

Mary Gallant

Scott Beaver

Gwen Boutilier

President: Vice-President: Secretary: Treasurer: Past President:

Directors: Alan MacDonald **John Silver** Winston Sawlor Tim Sawlor **Ralph Jack George Sutherland Rennie Beaver Donnelly Archibald** Milton Gallant Deirdre Green **Derek Whiteway** Mark Dort Sandy MacDonald Sam Pascoe **Robert Robichaud**

Honorary Directors: Hardy Eshbaugh David Sobey Allan MacDonald Donald Barnes

Gilbert van Ryckevorsel

NOTICE TO MEMBERS ANNUAL GENERAL MEETING

The Annual General Meeting of the St. Mary's River Association has been postponed for the time being. Memberships are available online at our website or in person at the Interpretive Centre for those wishing to join or renew their membership.

Busy year ahead for river work

By Scott Beaver, SMRA President The St. Mary's River Association has many projects on the books for 2021. Of course, we will continue our efforts to stop the massive Cochrane Hill Gold mine project from entering our watershed. This project is unacceptable to our organization and the recovery efforts of Atlantic salmon.

Aside from the NOPE campaign, 2021 is shaping up to be very busy for our organization.

This is the final year of our threeyear project funded by the Federal Coastal Restoration Fund. Last year we completed more habitat restoration work with a grand total, since 2014, of 600,000 square metres. We have also limed 200 acres by helicopter using approximately 850 tonnes of lime. This summer we will continue working on habitat restoration and will also start restoration planning and in-stream work for the first time on the East Branch and Main Branch of the river. You can read more on our habitat work further along in the newsletter.

We are also included in Nova Scotia Salmon Association's 3.8million-dollar project funded by the Canadian Nature Fund. St. Mary's River is one of eight priority rivers involved in this Aquatic Species at Risk project which includes Atlantic salmon, American eel and the Brook Floater in our watershed. These funds are expected to take our river habitat restoration efforts into 2023.



Here is a quick summary of a few more projects. We are currently researching a more accurate way to count Atlantic salmon within the river and will spend the time needed getting this right. Our volunteer team is working on a three-year revamp of our interpretive centre with new displays broadening our Heritage footprint as well as highlighting threats to our river valley.

We are spearheading our own testing of the mud flats near the mouth of the river where a company wants to farm clams. With little or no consultation by the company on the project, we have concerns and will not wait.

We will be starting a wood turtle monitoring program in partnership with Nova Scotia Nature Trust, while we continue to lobby for more protected ecologically-significant properties along the SMR valley.

This year the province announced we will work with Inland Fisheries on measures to educate folks on the dangers posed to the St.

Mary's watershed by invasive species, including fresh water bass and chain pickerel.

We will work with Canoe and Kayak Nova Scotia on growing the recreational paddling footprint within our valley as well. Last summer, through the CLARI fund, we hired a summer student to start the process of attaining Heritage River Status. That process is currently moving slowly, but you can be sure that SMRA and partners will continue to work towards this goal. Although largely symbolic, it is certainly a national title of prestige the St. Mary's River well deserves.

As you can see, our volunteer organization has our work cut out for us. But I am confident in the team we have put together to meet the challenges of the day. We are continuously looking for new members and I would ask that you renew your membership and promote the good things we are doing here on the river. Hopefully our numbers will increase. The support is much needed, as a larger membership helps us accomplish our goals.

Thank you all and here's to a safe, healthy and productive 2021.

Bringing back our sea trout

by Ralph Jack and Milton Gallant

4

St. Mary's River Association, in partnership with the Fraser Mill's Hatchery in St. Andrews, NS, is in its 4th year of stocking the river with native sea trout. During the fall of the four years we were able to fish, a group of anglers caught approximately 25 male sea trout for the hatchery breeding program. The trout are transported to the hatchery in St. Andrews where the milt is used to fertilize the eggs of female trout from the Middle Musquodoboit River. The eggs are set in trays and monitored all winter. Each spring in April, we deposit approximately 20,000 to 25,000 fry (between an inch and an inch and a quarter long) to selected cool water and shaded brooks of the St. Mary's River where the fry can develop and thrive.

The goals of the St. Mary's stocking programs are to increase the sea trout population, increase angling opportunities, and stock the river with a genetically large trout. Thanks to all involved.



Ralph Jack and Milton Gallant are both directors of the St. Mary's River Association

Gunning partners with SMRA for river song, video

Dave Gunning is never shy to put his voice where his heart is. award-winning The Nova Scotia singer-songwriter wrote and recorded his original song, For All The Gold, in support of conservation efforts to protect the St. Mary's River. A proposed open pit gold mine at Cochrane Hill near the river threatens the pristine ecology of Nova Scotia's longest river.

"This has been an easy issue for me to become interested in," says Gunning, who co-wrote the song with Jamie Robinson for the St. Mary's River Association.

"I have so much respect for the work they're doing. We were up against similar issues in Pictou County with the pulp mill effluent."

The four-minute video opens with a sweeping overhead drone shot of kayakers pushing off the shore to paddle down the St. Mary's River in early autumn. The gorgeous video is intercut with old black and white photos of earlier mining exploits along the river, as well as contemporary footage of endangered native Wood Turtles and spawning Atlantic Salmon.

As Gunning sings in his new song: "Five years' worth of pay cheques never cover up the cost of forever gone." The video and audio version for "For All The Gold" can be viewed on the SMRA website and other social media.



Dave Gunning

Kelt tagging exceeds expectations

By Deirdre Green, SMRA



Gwen Boutilier, Deirdre Green and Sadie Beaver on the river.

The spring of 2021 is off to a productive and exciting start for the St. Mary's River Association. In April, our team partnered with DFO to conduct a kelt tagging project. Despite high-water conditions and brisk temperatures, small groups of hardworking volunteers eagerly ventured out, day after day, to angle for science.

Paired up in teams of two, we captured kelt and safely transported them in well-aerated tanks to the main holding tanks located at Gwen Boutilier and Ralph Jack's property. DFO then surgically implanted tags, monitored the fish and released them back into the river.

The project was a tremendous success with a total of 46 Atlantic salmon efficiently captured within the St. Mary's River. Twenty-three kelt were transported to the Coldbrook hatchery for a stocking program, 15 were implanted with acoustic transmitters and 8 implanted with satellite (PSAT) tags.

Tom Cheney, Communications Manager with ASF and videographer Tim Myers, were onsite to document our progress for upcoming ASF presentations and an Atlantic Salmon Journal story that highlights the value of angler stewardship.

"I was really impressed with how smooth the operation went," says Cheney. "The volunteers from the St. Mary's River Association are so dedicated to helping protect this resource. They're incredibly careful in the handling of and transport of these kelts."

"Everyone involved with the project was overwhelmed by the sheer number of salmon in the river, and their impeccable health. These fish are reconditioning beautifully after their winter in the river. It's a sign of a healthy ecosystem."

As a newer member of the river association, it is thrilling to share in this work. Not only to have the privilege of observing the quantity and condition of our salmon firsthand, but to volunteer alongside so many passionate and knowledgeable individuals.

These men and women have devoted their entire lives to protecting this river and the wild fish within. And now our precious St. Mary's Atlantic salmon will play a part in helping scientists better understand the threats facing the salmon population at sea.



Scott Beaver, Ralph Jack, Derek Whiteway and Milton Gallant.

د Close encounters of the salmon kind

by Mark Dort, SMRA

Can you have a fishing story without a fishing rod? Sure, you can ... On a warm day in early October 2020 we arrived at Silvers bridge with three children in tow. Our goal for the day was to hike along several beautiful Eastern Shore rivers. Forty-five minutes earlier, before embarking on our journey, the children and I started talking about the area we were about to visit.

I was rather excited to chat about fishing and how these rivers are home to Brook trout and Atlantic salmon. The conversation in my driveway determined that the two inquisitive little boys had never seen an Atlantic salmon before. As one boy commented "I caught a big trout before". I knew right then what I had to do. My daughter Denver was fortunate to see several Atlantic salmon over the years, so she automatically assumed the role of tour guide.

The summer and early fall had provided drought – like conditions. Although many tropical storms had been forecasted, they mainly evaded our shorelines. As a result, we received sporadic rain events that brought minimal rises of water levels. This meant migratory fish would be late entering the river and when a bump of water did arrive, they would be aggressively moving upriver to spawn. Considering Silvers Pool is one of the deeper pools on the St. Mary's River I figured we may have a chance to spot Atlantic salmon holding before moving upstream.

As we parked our vehicles alongside the guard rail, I began explaining why the river split in two directions and where it may be possible to spot an Atlantic salmon. We walked over the bridge still covered in shadows as the morning sun was rising. The air was refreshing but warm. We got the kids in position to look over the bridge. We first started on the Glenelg Lake side.

The water was dark and somewhat tea-stained with a reddish hue. The coloration was from a small bump in water levels from overnight rain, and leaves had started to filter the river bottom. As the shadows of the trees covered the main holding area, we were unsuccessful in our attempt to spot a salmon. We then moved to the lower side of the bridge looking down towards the historic landmark, Silver's camp.



Three keen salmon spotters waiting for showtime on the river.

We tried our best looking over the iron bridge but to no avail. The water was just too dark to spot any fish holding. Standing on the bridge with our friends and family was worth the pit stop. I took pictures of the area like I did hundreds of times before. This area never gets old.

Then all of a sudden, we heard a splash! Everyone's eyes were scanning the river to find the source of the noise! I recall looking upstream on the West branch and could see water moving like a mini submarine lay beneath! I knew we were in for a treat.

It began! Salmon after salmon put on an aerial show. I will never forget how excited those children were when they saw these silver bullets leaping two to three feet out of the water. It was a calm morning with not a breath of wind. Every time a salmon smashed the surface it sent ripples up and down the pool. The children were screaming with excitement. They wanted to be closer to the action!

As a group we crawled over the guard rail and walked behind the Silver's camp. The views from this property are second to none! The high elevation of the deck covering one of the most famous salmon pools in Nova Scotia is something you don't easily forget.

We stood on the deck of the camp and watched a significant school of salmon move from lower West Branch into Silver's jagged rocks and back again. This routine went on for some time.

Children are the future river stewards

Continued from Page 6

The children wanted to go even closer.

We made our way down to the river's edge and positioned ourselves within what seemed liked an arms-reach of the salmon. The salmon could be seen pushing water as a group and frequently broke the glass-like surface with their dorsal fins. The children observed salmon in the 12-14 lb range as the fish prepared to move upriver to complete their spawning life cycle.

Our trip to the river brought about many questions from these inquisitive children. "Can we fish for them? Why are those trees so big? Are you sure we can't fish for them? Why are the salmon jumping?" The inventory of questions continued. I tried to answer the questions to the best of my ability and promised these children a fishing trip in the future.

These children reminded and reinforced why we work so hard restoring the river, fighting for wild Atlantic Salmon and protecting an ecologically unique area of old growth forests, wild native



Glassy morning water at historic Silver's Pool.

species such as Atlantic Salmon, Brook trout, Lamprey eels and Brook floater. I was fortunate to grow up in the surrounding area and got to experience the mighty St. Mary's since the early '90s. My hope is someday my children and their friends can have this same experience. I encourage everyone to share similar moments with our younger generation as they are the future river stewards of the St. Mary's river.

Exciting upgrades coming to Interpretive Centre

Canada Day will have a special significance this year for the St. Mary's River Association. On July 1, we will be marking the 20th anniversary of the opening of our Interpretive Centre.

We would like to invite you to visit our Interpretive Centre this summer at 8404 Highway 7, just outside of Sherbrooke.

Over the past year, we have undertaken some upgrades to the interior of the museum and to our displays. The visitor-friendly displays examine the geology of the watershed, the history of the river, the evolution of local angling, threatened species, and much more.

Work on this initiative is ongoing but if you haven't been into the museum for a while, you will see changes.



Although our ability to offer programs this year is impacted by the pandemic, we do hope to participate in St. Mary's River Days hosted by Sherbrooke Village on August 21st. The museum will be open to the public seven days a week, and will be operating under the Public Health guidelines.

⁸ SMRA Member of the Year: Sam Pascoe



The St. Mary's River Association is proud to announce Sam Pascoe is the 2020 Member of the Year.

Sam is originally from England and has been living in Port Bickerton, NS for the past three years. He is a Marine Biologist with a keen interest in natural history of all types. Having previously worked on Atlantic salmon conservation in the UK, the SMRA seemed like a perfect fit to share experiences with the members, and to learn more about the wildlife of Nova Scotia.

Sam's first paid job was working as a salmon fisherman on the River Exe in England, where everything was done by hand, using row boats, seine nets and arm power! That job ignited Sam's passion for the 'King of fish'.

Sam and his wife are continuing their life adventure and will be leaving the St. Mary's area this summer to take up a new position with Nuxalk First Nation in Bella Coola, BC.

Congratulations Sam!

ASF advocating for more protected habitat

By Kris Hunter, ASF

Greetings from the Atlantic Salmon Federation (ASF). As I watch the snow fall outside my window and reflect on the past year, I realize just how much has happened since I last provided an update. Covid-19, of course, leaps to the forefront.

So, before anything else I wish to pass along my wishes that you all can stay safe and relatively sane as we push through what is hopefully the last phases of this pandemic.

I also wish to pass along my condolences to those of you that have suffered and lost during these difficult times. COVID-19 has presented many challenges to us all both personally and professionally.



Kris Hunter

Important fundraisers, the lifeblood of non-profit organizations, have been curtailed or cancelled. Projects have had to be reworked, new safety protocols figured out, in person meetings have had to be moved to conference calls or online, to say nothing of the immense personal toll that self isolation, job losses, and the threat of illness and loss has taken on us all. Despite these challenges there has also been a lot of success and triumph.

All told, the salmon season was pretty good this year and I know that SMRA and others were able to overcome several obstacles and accomplish a lot on behalf of salmon. ASF was no different. ASF's research and management teams, headquartered in NB, dealt with fundraising challenges, travel restrictions and all sorts of COVID-19 related logistical constraints but were still able to achieve most of our 2020 objectives.

Continued on Page 12

Liming mitigates acid in Barren Brook

By Sandy MacDonald, SMRA

Continued from page 1

Beginning in 2019 the SMRA, with funding from the Coastal Restoration Fund, a program administered by the Department of Fisheries and Oceans Canada, began the search for the most suitable tributary to complete an acid rain mitigation project. Building on the success of the NS Salmon Association's pilot project in Sheet Harbour, SMRA decided it was time to implement similar measures on the West Branch of the St. Mary's River.

So for nine days last November, Barren Brook was ground zero for an ambitious habitat restoration project aimed at mitigating the disastrous effects of high acid levels in the West Branch of the river and establishing a spawning and juvenile salmon refuge. A small blue and grey helicopter, on loan from the Department of Natural Resources, buzzed all day between the quiet pool and a cache of powdery white limestone, trucked every morning from the Moser Limestone pit in Upper Musquodoboit.

While the chopper hovered overhead, dangling an aluminum bucket on a cable, a front-end loader shovelled in 2000 pounds of the agricultural lime. With the bucket full, the helicopter swung off toward the brook and released its dusty payload. Over the nine days and almost a thousand flights, 850 tonnes of lime were spread over the headwaters of Barren Brook, an important tributary to the West Branch St. Mary's River.

"It looks a bit like a moonscape," says Charlie MacInnis, a habitat restoration consultant who quarterbacked the project for St. Mary's River Association.

The Barren Brook aerial liming, with a budget of \$200,000, was a first for the St. Mary's River. In total the three-year project will receive \$1.2 million from the Coastal Restoration Fund to complete restoration work within the West Branch of the St. Mary's. That branch of the river has been particularly hard hit by the legacy of acid rain in Nova Scotia.

Nova Scotia's Southern Uplands rivers, which mostly spill into the Atlantic Ocean along the Eastern Shore, the South Shore and the Fundy coast, have been hardest hit by high acidity in the soil and waterways, explains Nicholas MacInnis, a habitat restoration specialist with the Nova Scotia Salmon Association. He also consults with the SMRA, as project manager for the acid mitigation project.

The St. Mary's—at 250 kms the longest river in the province—is the grandest river of the Southern Uplands. Like the West River Sheet Harbour, parts of the St. Mary's have been severely compromised by high acid levels. A perfect storm of conditions—a geologic underlay rich in heavy metals, depleted topsoil from generations of agricultural and lumbering activity, degradation of bordering wetlands, and the devastating impact of acid rain during the industrial expansion that followed World War II —have led to water acidity levels that have caused Atlantic salmon returns to tumble over the past 40 years.



Charlie MacInnis

Nicholas MacInnis

A 2013 report by the Canadian Science Advisory Secretariat describing salmon population modeling for the St. Mary's, forecast "a 73% probability of extirpation within 50 years in the absence of human intervention or a change in survival rates for some other reason."

What has led to this perilous situation for the Atlantic Salmon in the St. Mary's?

"Over the last 200 years of land clearing and industrial forestry, we've lost our top layer of topsoil," says Nicholas MacInnis. "That topsoil had all sorts of organic material that buffers against acidic rain. We've basically lost the goodness out of our soil."

Photos of the Barren Brook liming project

The helicopter dumps a dusting of agricultural lime over the wetlands of Barren Brook, just one of dozens of trips each day for nine days.





The road gets leveled into Barren Brook to smooth the passage for the big trucks coming from the lime pit in the Musquodoboit Valley.

Photo: Charles MacInnis

Another ton of lime is loaded into the bucket, destined for the wetlands of the West Branch of the St. Mary's River.

11

Barren Brook liming project a first for SMRA

Continued from page 9

To counter the chronic acidity problem, the river needs to bump up its base content in the form of agricultural lime. It's like an 850-tonne stomach antacid for the ailing river.

"The lime sweetens up the soil and it sweetens up the water," says Charlie.

"[Barren Brook] is the first project we've completed outside the Sheet Harbour pilot project," explains Nicholas. He and his father Charlie MacInnis spent much of 2019 undertaking extensive water chemistry testing on the West Branch of the St. Mary's to collect baseline data, and also identify the best location for the aerial-based liming application.

"We chose Barren Brook as the project site because there was excellent spawning and juvenile rearing habitat," says Nicholas. "The goal was to improve water chemistry and increase the amount of juvenile salmon production in that river. In the end, we'll have more returning adults."

From the early 1900s, the St. Mary's was one of North America's famed angling rivers for Atlantic salmon, attracting "sports" from across the continent. But salmon returns began to drop noticeably in the '80s. Fishery scientists pointed to the effects of acid rain as a major threat to persistence and recovery of the Atlantic salmon stock in Southern Uplands rivers.

"We've basically lost the goodness out of our soil." — Nicholas MacInnis

In post-war North America, the industrial boom created by new power plants and factories pumped countless tonnes of unmitigated sulfur and toxic gases into the jet stream above the continent. Here in Nova Scotia, we're the "tailpipe of North America," where the accumulated toxic particles gathered in the clouds rain down on our forests, lakes and rivers.

By the late 1980s, government regulations finally tightened up to reduce toxic sulfur emissions, one of the chief causes of acid rain. But much of the damage had already been done. The soil and the water had effectively been burnt by the acid rain. In the brooks and wetlands around Barren Brook, MacInnis and his team planted three pH probes capable of taking real-time readings of the water's acidity level. They collected pH data from the spring of last year through December, bracketing the period of the liming application.

The scientists will measure whether insect production improves, and whether the water pH improves at the test location. Department of Fisheries and Oceans has a site on Barren Brook where they do annual electrofishing for juveniles, the third metric the project will be evaluating.

Many of the tributaries that run into the St. Mary's have such low pH that there are few survivors of any salmon born there. MacInnis says many of the natural landscape features that once mitigated the acid problems are gone, including stands of old growth forest and bio-diverse wetlands.

Those big forests and complex wetlands are a long way from returning. But efforts to mitigate the damage, through habitat restoration and acid mitigation, are still ramping up. Furthermore, with increased political interest in establishing protected spaces, the long term outlook is looking bright on the St. Mary's River for the first time in decades.

Last fall's aerial liming of Barren Brook was a oneoff, explains Charlie. This summer's work will be limited to monitoring the site and analyzing the collected data.

Will the liming make much difference in the grand scheme to Nova Scotia's longest river? The West Branch alone of the St. Mary's covers 450 sq. km.; the 80 hectares that was limed last fall amounts to less than one square kilometer.

Still, the MacInnis team is optimistic the efforts of the SMRA and NSSA to mitigate acid in the water, along with careful restoration and preservation of salmon redds, can make a difference in turning around the health of the St. Mary's River. Nicholas says it's possible that a watershed the size of Barren Brook could support 300–600 adult returning salmon a year.

"If we pair liming with good instream habitat, it should make a difference."

ASF overcoming challenging Covid year

Continued from Page 8

Adapted tagging and tracking programs took place and we were able to continue research into what is killing salmon in ocean, which is important for salmon rivers. Another all positive step in 2020 for all salmon rivers was the continuation of Greenland agreement. Despite some challenges with overages in the first few years this agreement working and saving is significant numbers of salmon. Reporting has increased significantly from less than a third of the professional catch to now around 90% of all catch. For the first time we have an accurate picture of what is happening in Greenland. By coupling better reporting with reductions in quota and season length, we have reduced the catch of this mixed stock fishery, coinciding with more of large reports salmon returning to rivers throughout North America.

It is estimated our current and past conservation agreements with Greenland have now allowed roughly 200,000 additional large salmon to return to their home rivers to spawn. Closer to home aquaculture has probably been one of my busiest files this past year and one where we have seen some major success.

This past year we saw a major expansion into Nova Scotia waters by Cermaq abandoned due in part to our opposition. The ASF aided in the formation of a new provincial coalition, the Healthy Bay Network (HBN), that will help to unify and give voice to communities and organizations in the aquaculture debate.

Conservation agreements with Greenland have now allowed roughly 200,000 additional large salmon to return home.

We have also been working on Longshore shellfish the application and working our partners here on the East Coast and the West Coast to try to stop the impacts that open net pen aquaculture is having on our wild salmon through the development of an Aquaculture Act and the by working to the Liberal ensure government's commitment to get the pens out of the water by 2025 is honoured.

Earlier in the year I also spent a significant amount of time working on Gold Mine issues.

We worked with our partners to successfully advocate for more protected places, which will both help protect wild Atlantic Salmon habitat and help prevent impacts on rivers from the impacts of gold mines.

With the SMRA and the NSSA we released a spawning video and press release and gave several presentations on how these gold mines (Cochrane Hill and Beaver Dam in particular) threaten wild Atlantic Salmon.

This advocacy was very effective, getting local, regional, and national media attention.

Kris Hunter is a former president of the SMRA, and recently worked for 12 years as a lab instructor at St. F. X. University before joining ASF.



Perspective

Should Atlantic salmon be listed a species at risk?

By Deirdre Green, SMRA

The Minister of Fisheries and Oceans Canada will decide later this year whether to list some populations of Atlantic salmon under the Species At Risk Act (SARA). How did we get to this point? Will a SARA listing help or hinder Atlantic salmon? And how can we as concerned individuals ensure we have a voice in this matter?

Let's first consider a little background: For the purposes of assessment, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), divided wild Atlantic salmon in our country into 16 population subgroups, and over the course 2010-2011 of assessed all subgroups. Their analysis included data from 1993 to 2008. This time period was thought to be selected as it roughly represents three generations of Atlantic salmon, and COSEWIC was hoping to identify trends.

They relied on information already available to complete their assessment, most of which was obtained from Fisheries and Oceans Canada (DFO) and heavily derived from a select few rivers that DFO monitors across the provinces.

COSEWIC's findings were that some populations of Atlantic salmon were not at risk, that there was not enough data to assess some, with others being of special concern, threatened endangered. **COSEWIC** or presented their assessment and recommendations DFO to between 2010 and 2011. DFO's internal process concluded during 2014-2015, where a departmental recommendation on listing would have the Deputy gone to and Ministers office.

Since that time, it appears to have sat dormant. Various river non-profit groups, organizations, Indigenous communities, anglers and other concerned individuals were surprised to hear, just before Christmas of 2020, that DFO intended to make a decision on the SARA listing sometime in 2021.

Interestingly, there has been litigation in other parts of the country, on different species, where Fisheries and Oceans Canada (DFO) and Environment and Climate Change (ECC) has been accused of not living up to their obligations under SARA. Could this be the impetus here for DFO to take swift action to list Atlantic salmon?



Regardless of the why, we have arrived at a place where DFO intends to make a decision. And as a concerned resident of Nova Scotia, where two Designatable Units (DU's) are in question, I intend to be as informed as I can be on this matter.

As someone who loves the outdoors, hiking, gardening and catch and release angling, I value any productive initiative that preserves wild places and that provides the best opportunity for wild species to survive and thrive. Recognizing that the purpose of a listing under SARA is to 1) prevent species from becoming extinct; 2) provide for their recovery and; 3) conserve biological diversity, I am not convinced that these goals will be accomplished with a SARA listing.

Perspective

SARA salmon listing can alienate concerned groups

Continued from page 13

Eric Taylor, former chair of the Committee on the Status of Endangered Wildlife in Canada states, "There's nothing in (SARA), nothing mandated, that actually says you have to do anything to help the animals and plants on the ground".

When a species is listed under SARA there is a general prohibition against harming and harassing that species. This has been known to impact critical research, restoration and recovery efforts.

Even if it's just another layer of legislative red tape, that could result in slowing down an already painfully slow process, is that legislation necessary and is it helpful? Does DFO not already have the regulatory tools required to address the rivers and populations in question?

They have partners involved in extensive scientific research, restoration and recovery work. They have the Wild Atlantic Salmon Conservation Policy.

When you have all the necessary tools, I cannot understand why DFO is unable to work with the existing framework to further enhance the recovery of Atlantic salmon.

There is already one population of wild Atlantic salmon in Canada that has been listed under SARA, the Inner Bay of Fundy (IBoF)



population. Since being listed in 2003, what gains have been made? Conservation is a human activity and Atlantic salmon need people who care. This SARA listing effectively alienated conservation groups and individuals who took an active interest in this aquatic species. The IBoF population remains on the verge of extirpation.

As indicated above in the words of Eric Taylor, a SARA listing does not compel DFO or other government agencies to take the necessary actions to help the species listed. It does not mandate that DFO address what they acknowledge to be high level threats to Atlantic salmon (ie. poaching, aquaculture, invasive species, at sea mortality, etc).

In addition, there appears to be a lack of evidence for SARA listings preventing land use practices that threaten, harm or harass a species or their residence (i.e. forestry or mining operations that have OR have the potential to devastate habitat). On the matter of data, DFO has a fiduciary duty to ensure current and accurate data is being collected and used to make appropriate decisions.

COSEWIC's recommendation to list some populations of Atlantic salmon under SARA, was based on the analysis of data obtained from 1993 to 2008. New, precise data is needed as this timeframe does not capture the impact of ongoing work being accomplished in Atlantic salmon conservation: Greenland namely, the moratorium, river bv river restoration and recovery work, the effects of limiting the use of coal in Central North America, acid rain mitigation, etc.

I believe DFO's broad brush approach to managing rivers by Designatable Units (DU'S) does not factor in the regional or ecological differences of these watersheds. Nor does it acknowledge the extensive habitat and restoration work being completed by individual NGO's and river groups.

For instance, the St. Mary's River is part of the Southern Upland DU and when you compare it to other "index rivers" within the DU, it is clear that a river by river management strategy is imperative. Lumping the St. Mary's in with the Lahave shows illogical how the existing decision-making process is.

Adopt A Stream continues river restorations

By Amy Weston, Nova Scotia Salmon Association

This past year, despite the uncertainties, added protocols, and delays caused by COVID-19 pandemic, many groups that participate in the Adopt A Stream program found ways to carry on most aspects of their important river work.

While some groups had to modify work practises, such as crew size and carpooling, project work planned by the St. Mary's River Association did not require too much adjusting, as it continued to focus on West Branch channel restoration. Being large in scale, with structures built by excavators, this work always requires social distancing!

In all, 17 Adopt A Stream projects across the province were able to proceed, with great results. River associations, First Nation organizations, and environmental community groups carried out restoration of approximately 121,000 square metres of migration, spawning, rearing, over-wintering, and cool water summer refugia habitat for salmon, trout, and other aquatic life.

Habitat connectivity was an important component of several projects; passage was improved to 75 kms

for migrating fish seeking spawning areas and cooler water.

Several projects also focused on bank stabilization to reduce sedimentation, and protecting and restoring riparian habitat by planting more than 5000 trees along rivers and streams. 2020 was another very dry summer. Habitat restoration that addresses overwidened streams and river channels consolidates low flow, creates deeper pools, and increases resiliency in the aquatic ecosystem.

Protecting and re-establishing well-vegetated buffers will provide bank stability, shade the stream, contribute leaf litter and insects, moderate run-off during rain and snowmelt, and protect water quality. These riparian zones are important habitat for many, many species of wildlife. The work that groups do to improve conditions in their local rivers is more critical than ever, as we adapt to a changing climate.

With warmer weather around the corner, the NSSA and our partner groups are looking forward to getting back in our rivers.



Informed community must rally to support salmon

Continued from page 14

I personally would like to see a Do Not List decision from DFO. This would compel the federal government to look at the tools they have already available and formulate actionable plans for the conservation and recovery of Atlantic salmon.

They would be required to report back to DFO's senior executive on a five-year timeframe. Concerning any species at risk, a higher level of accountability is needed to ensure those with the power to effect real change, do just that. Atlantic salmon cannot afford to be swept under the rug or hidden beneath layers of legislative red tape. There is much that we might debate, but it is clear Atlantic salmon need us ALL. As engaged, passionate and informed community members we must rally together to work with what we have today to ensure it is here for all our tomorrows.

How can you help? Listen, learn and advocate. The public commentary period to voice your concerns to DFO was extended to March 15th, 2021. The public should direct their letters to DFO and their MP. For those who do not wish to write their own personal submission, the Nova Scotia Salmon Association and Atlantic Salmon Federation have direct links on their websites for sending letters to both.

NSSA https://www.nssalmon.ca/ ASF http://www.peopleforsalmon.com /

¹⁶ Thoughts on protecting our healthy future

By Bill & Brenda Carpan, SMRA

The St. Mary's River Association's four decades of work seems to offer a temporary reprieve for the decline of St. Mary's River's Atlantic salmon. But there are many issues that threaten longterm sustainability.

I fear climate change will, over time, cause significant decline in the rich biodiversity of the St. Mary's River watershed. For example, recent and increasingly-frequent long dry summer periods are killing many of the wild endangered Atlantic salmon adults and juveniles. This has been partially mitigated by the Association's habitat improvements and land protection.

Our images from Cumminger's Pool in 2002, found on the facing page, highlight an issue that has only worsened in the past near 20 years.

Ducks Unlimited Canada has redeveloped a wetland in Stillwater (next to our home) that is part of the watershed. More sources of water like this one — cool, unpolluted water — are required to support the river's ecosystem. Forestry clear cuts, roads, culverts, and lack of shade from the sun affect water quality and temperature, thus threatening survival of species. Much has been accomplished environmentally through legislated protection, but much more is needed.

Take for example the province's protection of the Archibald Lake Wilderness area. Archibald Brook, that drains MacDonald Lake and Archibald Lake, is one of the largest and most important tributaries of the St. Mary's and helps mitigate negative effects of climate change in a diversity-rich and particularly sensitive environment.

We also urge governments to fully investigate areas of Guysborough County that should be protected as valuable potential parkland rather than surrendered to industrial use for short term gain.

Health concerns are so very important in these worrisome times. Those residents who have respiratory ailments are at risk from mining projects. I suffer from COPD (chronic obstructive pulmonary disease) and have been medically advised that the proposed project trucking dust containing arsenic particles 24/7 for six years past our home will put me at serious risk. To be safe, we'll move elsewhere should the Cochrane Hill Gold Project be approved by government.

Others seeking a healthy place to live are currently buying rural NS properties. All they want is a healthy place to live, and that's why Brenda and I live here. We are witnessing an era where technology-enabled good jobs follow the people (rather than people following jobs) and the people are coming here!

Rural NS communities may see growth opportunities, providing that we have the technological infrastructure like broadband internet and cellular network coverage to support them.

Let's keep it safe and healthy so that residents and people from the rest of the world will want to live in or visit rural Nova Scotia.

Bill and Brenda Carpan are longtime supporters of the SMRA and advocates for protecting our precious waterways.



Four Seasons at Cummingers Pool, St Mary's River, NS

Photo Essay by Brenda & Bill Carpan







DFO cancels fieldwork for Southern Upland

By Megan Wilson, DFO

Fisheries and Oceans Canada (DFO) were not able to complete an Atlantic salmon assessment in 2020 for Nova Scotia's Southern Upland. When the pandemic struck in March all of our fieldwork was cancelled, including the smolt and juvenile electrofishing assessments on the St. Mary's River and smolt, juvenile and adult assessments on the LaHave River.

Our assessment team spent their time working from home and were able to focus on work that had been set aside, such as tidying up datasets, improving analysis techniques, updating safety protocols and preparing for future work. In October, some of the COVID-19 restrictions were lifted and assessment staff were able to start collecting data at the Morgan Falls Fishway on the LaHave River and complete swim thru assessments in Eastern Cape Breton.

The Coldbrook Biodiversity facility team had another busy year in 2020. While some staff were required to work from their homes, a skeleton crew remained at the Biodiversity facility taking care of the salmon onsite. In the spring, as part of the Southern Upland interim captive rearing pilot program, 145,000 unfed fry were released into the St. Mary's River system. There were 82 smolts and 162 fry released into the St. Mary's River from the captive reared group that were not required in the spawning plan.

A kelt collection had been planned for spring 2020 but this was cancelled due to COVID-19 restrictions. In September, 266 fall parr were collected from the West Branch (Chisholm Brook) and East Branch (Black Brook).

In November, staff at Coldbrook Biodiversity Facility spawned 90 St. Mary's River crosses resulting in approximately 400,000 eggs.



DFO- Coldbrook Biodiversity staff collecting fall parr at Black Brook.

No pre-spawn mature adults were released this year but 18 post-spawners were released at Silvers Pool in mid-December.

Additionally, due to COVID-19 and provincial travel restrictions, we were unable to conduct cryopreservation activities but are hoping to resume in the fall of 2021.

As we continue to work our way through this pandemic we are hopeful we will be able to complete assessment work on the St. Mary's River in 2021. Planning meetings for upcoming 2021 interim captive rearing pilot activities have taken place and we will be in contact with SMRA for their input and involvement in future collections.

We look forward to continued collaboration with the SMRA on assessment and monitoring activities within the watershed and we wish everyone a Happy and Safe 2021.

Megan Wilson is a researcher with Department of Fisheries and Oceans

19

Successful year for St. Mary's habitat restoration

By Kenny Silver, SMRA Vice president

We had another busy and successful year on the restoration front restoring the habitat of the St. Mary's River. In addition to the Coastal Restoration Project which was in year two, we received funding from the Atlantic Salmon Conservation Foundation, Adopt-A-Stream, Big Spruce Brewing and several smaller private donations.

We have reached 20 kilometres of restored river and this year's work included several sites along the West Branch of the river, liming a portion of the Barren Brook watershed, and conducting our annual redd count program in the fall. Much of the restoration work was funded by the Coastal Restoration Fund and is discussed in another article in this Newsletter.



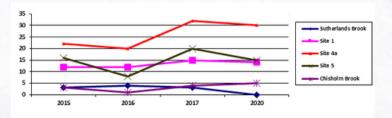
we used the Adopt-A-Stream, ASCF, and Big Spruce Brewing funds to install a variety of structures in the West River in the Upper Caledonia area. The picture above shows the completed work. The dry summer and low water was good for completing the work, but was not ideal for fish survival.

With the low water and hot weather, many of the smaller brooks dried up completely and water temperatures approached lethal levels for juvenile fish. The water levels were suitable for doing the redd counts again this year. After a couple years of high water in the fall, water levels remain high enough for adult salmon to reach the headwaters, but low enough to observe the redds.

This is the sixth year that the redd survey has been attempted and total spawning numbers vary year to year based on total adult returns. In 2020 water conditions were ideal for completing the count. Overall, the restored sites have three to six times more redds than the Control Chisholm Brook site.

Over the years, we have provided many square meters of improved spawning habitat. It is encouraging to see the spawning activity has remained high at each of the sites being monitored while random observation shows there is also spawning taking place throughout the entire restored areas of the river.

While we have no means to count the total number of returning salmon, anecdotal information about salmon returns from area residents, trout anglers, and other recreational users on the river suggest a strong return. While a few of these returning fish may be progeny of those eggs laid during the first year of the restoration project, only a small portion of the upper section of the river would have been restored. Over the next few years more of the returning fish will have hatched and spent their juvenile years in these restored areas.



Redd counts from 2015-2020

SMRA Operations's Report for 2020

By Megan Myers, Interpretive Centre Manager

2020 has come and gone (thank goodness)!

Caleb Jordan was back for his third season with us as our summer student. He and I made the most out of the quiet tourist season by updating and revamping the Interpretive Centre. We painted the walls and created a museum exhibit plan outlining our plans for the museum over the next three years. We completed the first section of new displays and Hannah Pearo painted a stunning mural depicting the salmon lifecycle. I am looking forward to continuing to develop the new displays this season with the help of our museum committee. We will also be revamping the entrance area to give it a fresh new look.

We ran a successful crowdfunding campaign to raise money for our NOPE campaign in collaboration with the Small Change Fund. We were able to raise \$7900 to put towards this worthy cause. Thank you all so much for your donations!

We received funding from the Change Lab Action Research Initiative which is a post-secondary education partnership designed to support Nova Scotia communities with academic and research expertise. This allowed us to hire Liam MacDonnell, a St. FX student to research the process of applying for Canadian Heritage River Status. This is a huge undertaking and having Liam outline the process, work on a pre-screening report, and obtain letters of support was a great help. We believe that the St. Mary's River Association is an ideal candidate for the Canadian Heritage Designation and that this designation will bring much needed recognition to the watershed and result in many opportunities for the community.

As always, please remember to renew your annual memberships. This can be done in person at the association or through our gift shop at https://www.stmarysriverassociation.com/gift-shop.html. Tax receipts can be issued online.

2021 marks the 20th anniversary of the opening of the Interpretive Centre so keep an eye on our Facebook page and website for updates on upcoming events for the 2021 season and be sure to stop into the Interpretive Centre to check out our new displays!

Here's to 2021!

Treasurer's Report for 2020

Prepared by Gwen Boutillier, SMRA Treasurer

In the absence of an AGM in May of 2020 due to the coronavirus, following is a summary of the finances of the St. Mary's River Association for the fiscal year of 2020. Our Financial Statements (unaudited) are prepared by Antigonish Tax Services in Antigonish NS. A detailed copy of the Financial Statements can be found online on our website at stmarysriverassociation.com.

Revenue

Total revenue for the year was \$401,645.

Most of our revenue is derived from government and partner organization grants. Other revenue is received from memberships, donations, wage subsidy and operation of the Interpretive Centre in Sherbrooke NS.

Expenses

Total expenses for the year was \$427,079. Most of the expenses incurred by the organization are for the operation of the Interpretive Centre (including salaries, insurance and office supplies) and the habitat restoration of the river.

The closing balance on March 31, 2020 was \$53,607. We would like to acknowledge our supporters for their purchase of memberships and for donations received in 2020. We would encourage you to renew your membership online or by sending a cheque, if you have not already done so.

Thank You!

21

Ecology Action Centre supports NOPE

By Karen McKendry and Raymond Plourde, EAC

2020 was a year when everyone realized more profoundly how important our connection to the natural world is — for both our mental and physical wellbeing. We need nature and more than ever, nature needs us, to protect and preserve the web of life.

For 50 years this ethos has been embodied in the work of Ecology Action Centre (EAC), Nova Scotia's oldest and largest environmental advocacy organization, where we take action on biodiversity conservation, climate change, and environmental justice. Our work responds to threats to nature in Nova Scotia, and also helps equip communities that want to move in more sustainable directions.

EAC is proud to stand with and actively support the SMRA's N.O.P.E. campaign to stop the proposed open pit gold mine at Cochrane Hill, which we view as a direct threat to the St. Mary's River, its wildlife, its people and its future. We all have a special connection to the river and can't help but get fired up and take action when this amazing place is in jeopardy.

EAC has also been advocating for years for the legal protection of a series of Crown land properties along the river. Last year we celebrated when the Province finally designated these important, wild areas as St. Mary's River Provincial Park (totalling 7,937 acres.

These Crown lands are now NOT available for mining, forestry, or subdivision and development. They ARE available for free public access, and can be counted on to continue providing wildlife habitat and other ecosystem services. They add to the quality of life along St. Mary's River, and are an asset that tourism and eco-tourism operators can count on being there in the future. We hope to see the same wisdom prevail as the Province deliberates over designating the lands and waters of Archibald Lake as a Wilderness Area. Ecology Action Centre continues to advocate for the protection of both the proposed Archibald Lake Wilderness Area, nearby Lewis Lake Wilderness Areas, and hundreds of other worthy parcels of Crown land across Nova Scotia. Many of these parcels of land were proposed and consulted on in the 2013 provincial Parks and Protected Areas Plan.

As long as the Cochrane Hill project is still being considered through the joint federalprovincial impact assessment process, the threat of the mine remains.

We are determined to help make sure that a giant open pit gold mine and its millions of tonnes of industrial waste will never be allowed to loom over this beautiful, healthy and delicate river system. Along with SMRA and a many of local residents, we say NOPE!

Karen McKendry is the Ecology Action Centre's Wilderness Outreach Coordinator; Raymond Plourde is the Senior Wilderness Coordinator.



²² Nova Scotia Nature Trust starts legacy push

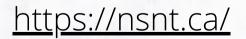
By Tanya Colburne, NSNT

In 2006, the Nature Trust embarked on the St. Mary's River Conservation Legacy Campaign.

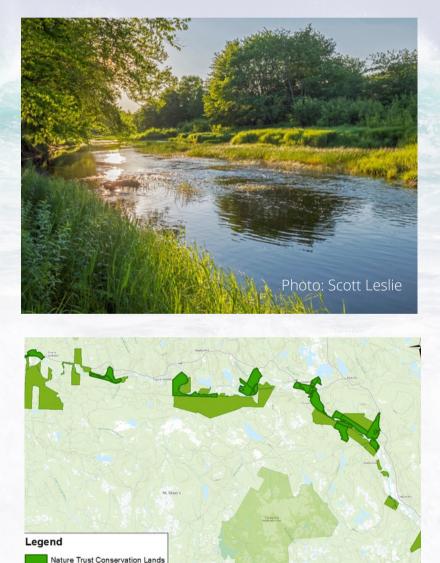
The campaign's goal was to protect the rare ecological gems of the river through private land conservation, and to create a ribbon of green— a corridor of intact riparian habitat along the river that will restore and ensure the ecological health of this very special place, forever.

It has been a long journey, but our efforts continue, as we celebrate the many milestones realized to date. The conservation legacy began with the generous donation of two properties by the late Sandy and Shirley Cameron.

We acquired five additional sites through purchase purchase/part and part donation. Then in 2014 we protected our first property through a conservation easement, in partnership with Dr. Hardy and Barbara Eshbaugh. Additional land purchases and generous land donations by David and Faye Sobey and Paul and Marsha Sobey brought the total to 14 conservation sites. By the end of March, the protected areas network will include 16 conservation lands, encompassing over 1650 acres of ecologically rich and significant habitats and over 21 kilometers of pristine river shoreline.



This land assemblage effort is complemented by 7,600 acres of adjacent and nearby Crown-owned lands, recently designated as a Provincial Park. Together, the Nature Trust and provincially protected lands encompass almost 9,000 acres and over 50 kilometers of shoreline, some of Nova Scotia's last intact and ecologically important floodplain forests, old growth hardwood and hemlock forests, and important habitat for endangered wildlife from Wood Turtle and birds to Atlantic salmon.



St. Marys River Provincial Park Other Protected Areas

Nature Trust part of major biodiversity success

Continued from page 22

Amid the biodiversity crisis, and at a time when nature is needed now more than ever, the Nature Trust is proud to be part of a major biodiversity win for the province, via the protection of the St. Mary's River. This achievement exemplifies what can and must be done to reverse the biodiversity crisis: permanent, legal securement of important habitat; focus on biodiversity hotspots and species at greatest risk of extinction; and preserving landscape connectivity and corridors. This land conservation work is a critical complement to the in-stream and shoreline restoration work, salmon conservation, community education and outreach work being done by other conservation and watershed groups on the river.

As the biodiversity and climate crises grew, and the Government of Canada committed to protect 30% of Canada's land for nature by 2030, the Nature Trust stepped up conservation efforts with an ambitious campaign to double our protected areas network by 2023.





In the fall of 2020, we launched the Twice the Wild campaign. We will double the lands we protected in our first 25 years of conservation, in just a few years, including new lands on the St. Mary's River. Through generous funding partnerships, we have created a once-in-a-lifetime opportunity to leverage four additional dollars for every dollar donated towards our four million dollar campaign goal (leveraging another \$16 million to save land).

Over the last 14 years, the collective efforts of landowners, volunteers and important partners like the St. Mary's River Association, have achieved significant conservation results, and engaged many new supporters and friends in our habitat conservation efforts — encouraging trends, and ones we hope will continue. However, success in keeping biodiversity from the brink depends on all of us, the citizens of Nova Scotia, Canada and beyond, so we must continue to step up and do our part.

On behalf of all of us at the Nova Scotia Nature Trust, I would like to express our sincere gratitude to all of you, our incredible donors, our fantastic volunteers, and our cherished conservation partners who continue to play such a critical role in our conservation success on the river. Find out more about the #twicethewild campaign and keep up-to-date with the latest Nature Trust conservation news and events by visiting our website (https://nsnt.ca/), following us on Facebook, Instagram and Twitter, and joining our e-list. Or feel free to reach out to me at any time.

Here's to the St. Mary's River - forever wild!

Tanya Colburne is the Director of Philanthropy and Engagement for the Nova Scotia Nature Trust



A viable alternative to open pit mining

By John Cameron, SMRA

Recently, I was visiting my old friends OOG (Old Old Guide) and AWOC (A Wise Old Crow) at their home near Crow's Nest. Guysborough Co. The Crow family have lived there for hundreds of years. AWOC spends a lot of his did his time. as ancestors. observing the St. Mary's River Valley. Consequently, he has a perspective on nature and life that eludes most of us.

As OOG and I sat on his porch observing the splendor of the valley we heard a caw (call) from our old friend AWOC. "I have been giving a lot of thought to this proposed open pit gold mine at Cochrane Hill, and I continue to be deeply troubled," he cawed.

"My concern is rooted in the novel, *Two Solitudes*, the title of a wonderful book by the renowned Nova Scotia novelist Hugh MacLellan. The book, written in 1945, is a fictional account of the perceived lack of communication between English and French – speaking Canadians. Sadly, the fictional account of 1945 is a reality in 2020."

(Incidentally, Hugh MacLellan married a woman from Sherbrooke.)

Let me frame the area under discussion. To the west is the St. Mary's River, one of the bestknown rivers in Atlantic Canada; to the east is Country Harbour, described as the most picturesque harbour in North America; to the north is Melrose; and to the south is Stillwater. The proposed mining development is planned within this area. Humourist John Cameron visits OOG (Old Old Guide) and his friend AWOC (A Wise Old Crow)

Solitude is defined as a state of being undisturbed, unspoiled or a wilderness area. Although solitude is not traded on the Exchange, it is priceless!

Interestingly, we have two solitudes at play at Cochrane Hill. The dynamics of solitude are very much on the minds of many citizens in the Municipality of St. Mary's, as an open pit gold mine is being proposed for the unspoiled wilderness area of Cochrane Hill.

On the one hand there is the concentration of a relatively few wealthy investors (living in their own solitude) far removed from the life and cares of Guysborough Co., and controlled by a junior mining company from Australia.

On the other hand there is a large dedicated group of local and seasonal Nova Scotians who are deeply concerned about the real and lasting devastation that an open pit gold mine could bring to the area.

Our region of Nova Scotia is a tourist destination, as well as a seasonal and retirement paradise. As such, anything that will encourage and promote these assets needs to be celebrated.

Obviously, the prospect of an open pit gold mine does not conjure an image of 'paradise'. In life we depend so much on our reputation. As we have discussed before, our reputation will be 'trashed' with an open pit gold mine located in the heart of a 'natural treasure'. I cannot think of another area in Nova Scotia that represents peace and natural beauty in a more profound way. The community of Melrose was named after Melrose, Scotland, which was recognized as the best place to live in Scotland in 2018. Many of us believe that our Melrose is equally attractive and one of the best places to live in Nova Scotia.

Stillwater, as the name suggests, denotes peace and quiet and scenery that parallels the Margaree Valley.

"There is no economic, social, or environmental justification for an open pit mine to be established at Cochrane Hill," said OOG. "I do not need to remind you that we are living in a time of unprecedented unpredictable and weather patterns, with numerous flash being reported with floods increasing frequency. Open pit mines are in the view of many 'a disaster waiting to happen'."

There is a viable alternative to an open pit mine, that would complement our natural environment and enhance our reputation as a great place to live, work and visit. There is growing and enthusiastic support for a Provincial/Federal Wilderness Park, encompassing the area from the St. Mary's River to Country Harbour. This concept has the potential to create long term jobs and complement our natural environment and not destroy it!

Now that is something to 'crow' about !"

St. Mary's River focus of NSSA WATER project

By Amy Weston, Nova Scotia Salmon Association

The St. Mary's River is among the eight priority rivers which are the focus of the NSSA led Southern Uplands WATER project for Aquatic Species at Risk. Launched last year, and funded in part by the Canada Nature Fund, the project aims to create watershed stewardship plans to guide restoration in the watersheds, with particular attention to four species-at-risk: Atlantic Salmon, American Eel, Atlantic Whitefish, and Brook Floater (a freshwater mussel).

We have been actively collecting data and information about current conditions, changes, and species distribution for each of the watersheds, through direct field sampling, as well as data mining of earlier studies and reports.

Last summer, temperature loggers were deployed at 72 locations across the eight watersheds, recording temperature every 15 minutes from mid–June through to the end of October. A key way we are aiming to learn more about the distribution of each species is through the use of environmental DNA. Water samples taken at 108 sites will be analysed at Dalhousie University, to identify the four target species as well as two invasive species – Smallmouth Bass and Chain Pickerel. This coming field season, detailed water chemistry analysis will be conducted, and temperature loggers will be redeployed.

We are also seeking local community knowledge of the watersheds. This past fall, NSSA's recovery research scientist Fielding Montgomery led online community meetings for each watershed.

Recently, project outreach volunteers from each watershed have been helping us to engage local knowledge holders. A survey has been designed to include watershed, river, and site-specific information from people who spend time in and on the river. Please share your knowledge, and help in the development of robust watershed stewardship plans for the St. Mary's.

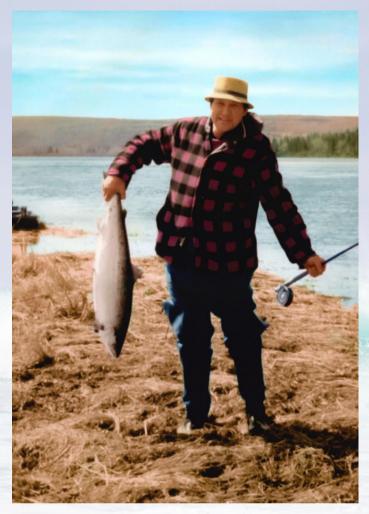
The survey can be found at:

http://www.nssalmon.ca/southernuplandssurvey



²⁶ Fishing Memories - the good ol' days

By Glenn MacDougall, contributed



Wesley MacDougall with a St. Mary's River salmon.

This picture was taken Sunday, May 2, 1976 and is of Wesley MacDougall of Trenton N.S. who was one of the "regulars" on the St. Mary's from the '60s until the downturn of salmon fishing on the river in the 1990s. The fish is a 22 lb salmon, the first one caught on the St. Mary's system that year. The salmon season started on May 1 of that year, the day this fish story started.

I am Glenn MacDougall, the son of Wesley, and I was 15 years old at the time of this story. My father woke me up as usual during fishing season on Saturday morning and asked if I would like to go fishing for salmon or trout. Knowing the chances of catching a salmon were slim in the month of May on the St. Mary's I opted for trout and that is what we did. We went to South River in Antigonish County and had a very good day catching our limit of nice sea trout.

The next day, May 2, I was awakened with the same question and after such a good day on Saturday I said let's go trout fishing again. After I got up my father said I think we will go salmon fishing instead. I am sure it was extremely hard for him to not be on the St. Mary's on opening day.

We made the drive to the river and arrived there sometime after 7:00 am and to our surprise there was no one at what we called the Head of The Lake which was the area from McKeen's Bank to Melrose Lake. We made the walk to our river boat which was tied with many other boats at The Bungalow pool.

The water was rather high which was not uncommon at this time of year. I sat in the front of the boat and my father at the rear. These boats were wider at the front than the rear so they would hang straight in the current while fishing. They would usually be 18 to 22 feet and this one was 20.

My father paddled us down to where the river runs out into Melrose Lake, bypassing a lot of good water to get there. This was not too surprising as that was one of his favorite spots for early season salmon. He anchored the boat and took about 3–4 casts. Apparently he

Salmon memory for a lifetime

Continued from Page 26

wasn't happy with the exact spot so we pulled the anchor and adjusted the position of the boat. Seemingly more content with this spot, he turned around in the boat and started casting.

After only about 6–10 casts the line came tight and a large fish was on the line. At this time of year it was not uncommon to hook "slink" or "black" salmon, fish that have spawned the previous fall and are returning to the ocean. They are very skinny and not known to be the best of fighters due to their poor condition. Usually you can tell a slink from a "fresh" salmon on the first jump the fish makes as you can see the depth of the fresh salmon.

After this salmon's first run it jumped clear of the water and at that point we both realised this was a large salmon fresh in from the sea and being in prime condition we knew a lengthy battle was ahead.

The large salmon in this part of the river were known for very long runs some 75 to 150 yards or more, out into the lake ending many times with a leap clear of the water and this fish was not to disappoint. There were many long runs with leaps as the fish tried to rid itself of the # 2/0 Cosseboom in its mouth. The battle went on for quite some time as with most fresh salmon at this time of year usually lasting from 45 minutes to an hour or more.

I do not remember just how long the fight lasted but I do remember my father fighting the fish and barking orders as to where to position the boat during the fight. This was not an easy task as my father was a rather large man and as I said earlier I was at the wrong end of the boat for maneuvering it easily. We had many laughs over this afterward. After some time the fish began to tire and we got the boat to shore where landing it would be easier. As was usually the way when the fish was ready to be landed he would hand the rod to me and then he would gaff the fish.

As I was holding the rod I remember hoping the fish would take one more long run into the lake so that I could play him for a bit, while at the same time hoping he does not get off while I held the rod.

"We both realised this was a large salmon fresh in from the sea ... we knew a lengthy battle was ahead."

Just as we were landing the fish another fisherman arrived with a camera and took this picture. He said he was there the day before and there had been quite a few fishermen around but no fish were hooked. Later the picture arrived home in the mail and it was always one of my father's favorite photos.

We did not bring a cooler this day and we looked around for some snow to put on the fish. Snow was not uncommon to find this time of year, but this particular year none could be found. My father paddled us all the way back up to the Bungalow Pool, close to a mile upstream laughing all the way! With no way to keep the fish cool we decided to drive home with our trophy.

They say Atlantic Salmon are the fish of a thousand casts – this one wasn't. It had to be the best start to a salmon season that I have ever witnessed. It was a great day and one of many great memories made on the St. Mary's River.

Funding Partners

The Elizabeth Wakeman Henderson Foundation NSLC Adopt a Stream Program Nova Scotia Salmon Association Atlantic Salmon Conservation Foundation NS Student Careers Skill Development Program Canada Summer Jobs **Big Spruce Brewing** North Atlantic Salmon Conservation Organization Paypal Giving Fund Canada Small Change Fund COVID 19 Emergency Support Fund for Heritage Organizations CEAA **CLARI Fund** Department of Fisheries and Oceans Coastal Restoration Fund Sobey's Foundation **Inland Fisheries Department of Natural Resources** Indigenous Environmental Network and Western Mining Action Network Mini-**Grants** Program Municipality of the District of St. Mary's All donors and supporters of our Bi-Annual Dinner/Auction Event All Donors to our Nope Campaign Anonymous Donors

We cannot do what we do without our funding partners, our advisory council and our members.



Thank You to Our Sponsors

Visit St. Mary's



Rediscover Nature... Experience a New Kind of Play... Explore our River's Beauty

Adventure Starts Here



Municipal Office

8296 Highway 7, Sherbrooke Phone: 902-522-2049 www.saint-marys.ca

Thank You to Our Sponsors



Waterfront lots available on the St. Mary's River where the river meets the Atlantic Ocean

Phone: 902-522-2881

Fax: 902-522-2276

P.O. Box 280

Sherbrooke, N.S. B0J 3C0

STEP INTO 1867

tookevillage.novascotia.ca ~ 1-888-743-7845

Sawmill Landing is a new development in Sherbrooke, Nova Scotia. Excellent location for your retirement dream house or summer retreat. Enjoy nature at your doorstep with boating, hiking, biking, fishing and relaxing.

For more information:

Phone: 902-328-4338 or 902-522-2343 Email: waterfront@bellaliant.net

www.sawmilllanding.com

Thank You to Our Sponsors



George F. MacDonald & Sons

Bulldozing & Trucking

- * Bulldozing
- * Trucking
- * Excavating
- * Gravel
- * Road Building
- * Snow Removal



RR# 5 New Glasgow, Nova Scotia B2H 5C8 Bus: 902-922-2007 Fax:902-922-2411

E-mail: gfmacdonaldsons@ns.sympatico.ca

If undelivered return to: St. Mary's River Association PO Box 179 Sherbrooke, Nova Scotia, Canada B0J 3C0



Drone photos contributed by Tim Myers

