
**Recreational Fisheries Advisory Council
Minutes of the 2015 RFAC Meeting**

Area 6

Date Prepared: November 22, 2016

Cumberland and Colchester Counties

The RFAC meeting for Area 6 was held on November 17th, 2016 at the Best Western Plus Glengarry, Truro, Nova Scotia. Nova Scotia Department of Fisheries and Aquaculture, Inland Fisheries Division Staff present were John MacMillan, Andrew Lowles, Biologists, Fisheries Management, Steve Thibodeau, Supervisor, Fraser's Mills Fish Hatchery and Rebecca Blank, Technician, Fraser's Mills Fish Hatchery. There were seven people in attendance including Beth Lenentine, Manager, DFO, Coldbrook Hatchery and Jack McNeil, Fisheries and Oceans Canada. The meeting was chaired by Andrew Lowles.

2016 Regulation Changes and Proposed Changes for 2017

Andrew reviewed the regulatory change protocol that has been followed for several years. Regulatory changes may be proposed from government or the public. The regulations are reviewed internally and some are presented at the RFAC and published under the proposed changes in the Angler's Handbook. At the following RFAC, proposed changes and data relevant to those changes are presented for input from anglers. A decision is then made with DFO on the implementation of proposed regulations.

John presented the results of the River Denys study. The River Denys sea trout fishery and population was previously assessed in 2008 and 2010 as well as 2016. Regulations were changed in 2012 and included a change in the season opening to 1 May, a reduction in the daily bag limit to three trout and a size limit that allowed for the retention of one trout over 35cm. The preliminary results of the 2016 study indicated that the regulations improved the quality of the sea trout fishery. The percentage of large trout (>30cm) caught by anglers increased from 47% to 70% and the percentage of very large trout (>35cm) caught by anglers increased from 17% to 29%. Improvement in the quality of the sea trout fishery has also been observed in the West River of Antigonish after that system was designated a Special Trout Management Area. Reducing harvest can improve seatrout fisheries.

Currently regulations in Special Trout Management Areas vary in bag limit, season, and size limit. A more consistent approach is needed to reduce the complexity of regulations on Sea trout fisheries. For all Special Management Areas that have a bag limit of more than one trout, proposed changes include a change in the bag limit to 3 trout with a size limit of 35cm that allows for the retention of one large (>35cm) trout. Changes to a season opening to 1 May will also be considered in the future.

The practice of catch and release has increased from 25% in 1980 to 60% in 2010. John reviewed tips to improve survival rate of released fish. Ten out of ten fish prefer water and it is important to keep air exposure to a minimum. When unhooking a fish try to keep the fish in the water at all times. Photos can be stressful and if you decide to take a picture, keep air exposure to a minimum (10 seconds). If the fish

has swallowed the hook deeply or is bleeding, consider adding fish to your creel or cut the line and release immediately. Cutting the line can reduce mortality significantly. Water Temperature is also related to handling mortality. In May, cool water temperatures can benefit survival and as water temperatures warm to 20C there is a greater incidence of release mortality. Handling your catch with wet hands instead of using a net is beneficial. The type of net used can impact release mortality. The use of knotted coarse mesh can damage fish by removal of protective slime and scales. If the use of nets is warranted or preferred the use of rubberized nets or knotless mesh can reduce harm to your catch.

John indicated that there were no regulation changes proposed for this region.

A question was raised about the Stewiacke River and an angler stated that increasing the bag limit would not improve the trout fishery. John indicated that only those STMAs that currently have a bag limit over one trout would be impacted by proposed changes. Stewiacke River STMA currently has a bag limit of one trout and the bag limit will not be changed.

An angler supported idea of promoting tips to releasing fish in the Anglers Handbook.

Discussion on status of Wallace River sea trout trout fishery was deferred to the end of the meeting.

Hatchery Report / Trout & Salmon Enhancement

Steve Thibodeau, Supervisor of the Fraser's Mills fish hatchery, gave a brief overview of the provincial fisheries enhancement programs. The Dept. of Fisheries & Aquaculture operates three hatcheries; Fraser's Mills Hatchery in Antigonish Co., McGowan Lake Hatchery in Queens Co., and Margaree Hatchery in Inverness County. Spring and fall stocking lists were made available and Steve noted they are both on the Departmental web site, <http://novascotia.ca/fish/sportfishing/hatchery-stocking/>

In an effort to sustain the very popular recreational trout fishery, each spring the hatcheries stock approximately 200 lakes across Nova Scotia. Most of these are stocked with brook trout; additionally, over 20 lakes are provided with Rainbow trout from the Fraser's Mills Hatchery. In recent years much of this stocking activity has been directed to lakes in populated centers, providing recreational angling opportunities to an increasingly urban population and helping to maintain an important sportfishing industry. There are now over 25 wheelchair accessible, barrier-free facilities in Nova Scotia. Most are located on sites that receive trout from the hatcheries. Last year trout were made available to support 63 of the Department's Learn to Fish projects. As well, approximately 50 trout fishing derbies, sponsored by volunteer organizations, received trout from the hatcheries.

Fall Trout Stocking

Trout stocking with finger-sized juvenile trout is carried out in October and November. Lakes stocked in the fall are typically more remote than the spring-stocked lakes, but still have significant fishing pressure. These fish are presumed to grow for a season before becoming large enough to contribute to the creel. Approximately 175 lakes receive brook trout in the fall. Most brown trout stocking takes place at that time of year. The majority of brown trout stocking takes place in rivers where the fingerlings have access to estuaries where they can grow quickly.

Winter Trout Stocking

Nova Scotians are encouraged to remain active all year and many do so by getting out and enjoying time ice fishing for trout. Twenty lakes, including the Bras d'Or Lakes, are stocked with either rainbow or speckled trout in November and December, in anticipation of the winter season. Several other lakes which are stocked in the spring remain open year round, as well.

Atlantic Salmon Enhancement Program

2016 was the tenth year that the Department of Fisheries & Aquaculture has been working to support the Atlantic salmon and enhance the fishery. On Cape Breton Island, the Margaree Hatchery provided fall parr for Margaree River, Baddeck River and Middle River. It is unlikely that the fall salmon season on the Middle River and Baddeck River (both stocked 2010-2015) would have been permissible without the stocking program. On the mainland, Fraser's Mills Hatchery provided fry and fall parr for West River Antigonish. With assistance from many volunteers, successful broodstock collections took place on for West River Antigonish, West River Pictou (Fish Friends), Middle River, Baddeck River, Mabou River and Margaree River. In addition to providing brook trout for local watersheds and selected sites on Cape Breton Island, the Margaree hatchery typically supplies 130,000-160,000 parr each fall and 30,000-40,000 Atlantic salmon smolt in the spring, for the Margaree River.

Broodstock salmon from Baddeck River, Middle River, Mabou River as well as the Margaree River are now held at Margaree Hatchery to provide eggs for next year's production. Broodstock from West River Antigonish and West River Pictou (Fish Friends) are held at Fraser's Mills Hatchery.

Fish Friends

Fish Friends is an educational program, sponsored by the Nova Scotia Salmon Association and maintained through the hard work of many dedicated volunteer organizations. Aquarium units are set up in participating school class rooms and teachers are provided with educational material about the trout and salmon life cycle. Children get to watch the eggs hatch, and the fry develop. They feed them for a few weeks and then release them into a local stream. Last year the hatcheries were able to provide eggs to approximately 70 Fish Friend projects.

Guest Speaker

Beth Lenentine, Fisheries and Oceans, gave a presentation on the live gene bank program at Coldbrook Biodiversity Centre in support of recovery efforts for Atlantic salmon on the Stewiacke River. In the fall of 2015, about 500 adult salmon were stocked into the Stewiacke River. In the Spring of 2016, a salmon was mistaken for a large brown trout and was retained by an angler. Beth presented plans to form a consortium to focus enforcement and awareness campaigns on areas such as Stewiacke River that have been stocked with endangered adult Atlantic Salmon.

An Angler asked Beth if there were additional rivers that would be included in IBOF gene banking program. Beth indicated that they are working at capacity now with the Gaspereau River in Nova Scotia and Big Salmon River in New Brunswick

Promotion and Development Programs

Former Sportfish Development Officer, Andrew Lowles reviewed several provincial programs in place to promote fishing within Nova Scotia. There are two demographics that are underrepresented and continue to be a focus of Nova Scotia's recreational angling community: young people and women. These two demographics are deliberately targeted through the delivery of two programs: **Learn to Fish** and **Becoming and Outdoor Woman**. The Learn to Fish (L2F) Program focuses on exposing young anglers across the province to recreational angling. This year was the largest year ever for the Learn to Fish Program, seeing more than 3,000 students in 2016, nearly doubling our efforts over the past 3 years. The program was delivered in school classrooms, but has been extended to include high school students. Again, this year, Andrew visited IWK Children's Hospital, Scouts and Guides Canada, and 4-H groups. As last season's effort was lacking representation from certain areas of the province, additional effort was made to more evenly spread across the province this year. This was successfully achieved with increased representation from RFA 1 (Cape Breton).

Andrew wants to thank the provincial hatcheries; Frasers Mills and McGowan Lake, for their efforts in meeting the increased stocking demands associated with the growth of the program. Andrew also wants to thank the Hants West Wildlife Association and Mark Weare, along with his volunteers for their continued support of the program.

Becoming an Outdoor Woman (BOW) was again a great success. Hatchery Technicians, Marielle Turner and Rebecca Blank, instructed several modules at the fall BOW program. Thanks to Don Taylor for his continued support of the program and volunteering his time. In February 2016, Winter BOW was a great success in Cape Breton. The Ice Fishing portion of the program was increased to include a 3rd session as well as Saturday evening Fly Tying. Andrew thanked Gordie MacKinnon and Cole Porter for their continued support of the program.

Andrew will be continuing to manage the Anglers Handbook and Summary of Regulations in 2017. The National Sportfish Survey was distributed by mail and a trial online version this year. Data is returned to Fisheries and Oceans for sorting, formatting and will be returned to Nova Scotia Department of Fisheries and Aquaculture in early 2017.

Nova Scotia has initiated a commissioned report to evaluate the Sportfishing Industry in the province, as well as to make suggestions on growing the industry. This report will evaluate the current fisheries and infrastructure resources available within the province and compare these to other fishing destinations in Canada and the eastern United States.

Funding Programs

Nova Scotia Sportfish Habitat Fund

Andrew Lowles reviewed the Nova Scotia Sportfish Habitat Fund, which received a budget of \$273k in 2016, based on 2015 licence revenues. Twenty-four community groups were involved in 2016. Total funds to Adopt-a-Stream were \$237k in addition to \$100k in funding from the Nova Scotia Liquor

Commission. Two other projects received funding in 2016; \$18k to the West River Sheet Harbour Lime doser project, and 20k to the West River Sheet Harbour helicopter liming project. The Sportfish Habitat Fund provides money to projects that improve angler access to the resource such as boat ramps and fishing piers, and encouraged anglers to review the on-line application and consider submitting projects before the March 1 deadline.

Atlantic Salmon Conservation Foundation

Andrew also reviewed projects funded by the Atlantic Salmon Conservation Foundation. Several projects were supported by the Fund and included: 1) acid rain mitigation plans for the 13 priority watersheds for Southern Upland Salmon in Nova Scotia, 2) improving fish passage on lower Chéticamp River (Phase II), 3) initial South River watershed planning and restoration including the installation of a temperature device, 4) LaHave River watershed project, 5) ongoing enhancement of the Mabou and Inverness watersheds, 6) Sackville Rivers Association river restoration, and 6) West River Sheet Harbour liming and counting fence projects.

Freshwater Fisheries Research Cooperative

The Freshwater Fisheries Research Cooperative (FFRC) was established several years ago to facilitate applied research with universities. This initiative was set up to address fisheries management questions and address the research interests of anglers and the Inland Fisheries Division. In 2016, a total cash investment of 35k dollars was made toward FFRC projects and a total in-kind was 99k dollars. In-kind contributions were associated with labour, supervisory, and equipment from partners. In 2016, the following four FFRC partnerships received funding: 1) Evaluation of stream restoration, Kris Hunter, St FX University, 2) Impacts of Aluminum toxicity on salmon and trout, Dr. Shannon Sterling, Dalhousie University, and 3) Evaluation of angler catches in the Upper Medway River, Amanda Lavers, Mersey Tobeatic Research Institute.

Kris Hunter, Saint Xavier University, 2016 was year six of an eleven-year study on water chemistry, habitat and electrofishing results to evaluate the impacts of commonly used in-stream restoration initiatives to improve habitat for trout and salmon. The eight sites were monitored on an annual basis to assess habitat and fish populations. This year, three of the eight sites were restored and monitoring will continue for another five years post-restoration. Long term studies are needed to evaluate annual natural fluctuations in order to obtain a true picture of the impacts of restoration.

Dr. Shannon Sterling, Dalhousie University is evaluating the toxicity levels of Aluminum and PH in streams in the Southern Uplands of Nova Scotia. The information to be produced by this survey is important for planning the initiatives to restore wild salmonid populations, such as terrestrial liming, habitat restoration and increasing habitat connectivity. The purpose is to identify streams in the Southern Upland regions that have high aluminium levels and the data collection will focus on key periods in the life cycle for salmon and trout (smolt stage in May, etc.). This project is a part of the West River Sheet Harbour Project where a lime doser is in place to improve water quality by reducing acidity.

Amanda Lavers, Mersey Tobeatic Research Institute, conducted an angler creel survey in the Upper Medway system. Anglers expressed concern about overfishing and the spread of invasive smallmouth

and pickerel in the Upper Medway region as these lands have been turned over from Bowater Mersey to the Province and they are now more accessible. Volunteer angler check points were established on main access roads in May and June. These data will allow for comparison of the results of similar surveys in Keji Park and in the Tangier Grand Lakes Wilderness Area, as well as, provide a baseline for the evaluation of any future changes in regulations in this region.

Discussion/Agenda Items from the Floor

Wallace River is receiving additional pressure since bait restrictions have been put in place in River Philip. Request was made to consider Wallace River into STMA and reduce harvest to improve and sustain the sea trout fishery. A request was also made to add Wallace River to the Salmon Enhancement Program.

Soldiers Lake was drawn down as a part of Nova Scotia Power operating procedures for a prolonged period in 2016 and this was believed to have a negative impact on the fish and wildlife. Turtle nests were flooded when water levels were restored on Soldiers Lake.

An angler asked how far salmon parr move in a river system. Salmon parr can swim far distances depending of differences in habitat, season, and barriers to upstream movement. Precocious parr will travel up and down a river system in search of large mature female salmon.

A request was made to allow more volunteers (weir fishers, etc.) to collect information on the salmon smolts and adults that are captured every year as a part of normal fishing operations.

Andrew reported that the proportion of women anglers in Nova Scotia is much less compared to other provinces. An angler suggested that we should promote top women anglers through the media to encourage more female participation. A commercial to promote women in fishing was a suggestion.

An angler believed that opportunities for kids has been curtailed by restrictions that do not permit dip netting for smelts on weekends. He recommended that one day on the weekend should be open to catching smelts as it is a fun activity for young anglers. John indicated that we would pass his request to DFO for consideration.

There were conflicting points of view expressed on the benefits of an online angling licence. One believed that elder anglers would not participate and most audience members were supportive.

Angler asked if we could include other regulations on other fisheries (shellfish, mackerel, etc) in the Anglers Handbook. We agreed to look at the options and one may be to include a link to the DFO website that would contain information on other recreational fisheries in the Anglers Handbook.

There was some general discussion about the Striped bass fishery and its value and the desire to change regulations and allow for more retention.