
**Recreational Fisheries Advisory Council
Minutes of the 2014 RFAC Meeting****Area 3**

Date Prepared: November 2014*Halifax and Lunenburg Counties*

The RFAC meeting for Area 3 was held on November 12, 2014 at the Best Western Plus in Bridgewater, Nova Scotia. In addition to Nova Scotia Department of Fisheries and Aquaculture staff, there were 36 people in attendance. Twelve people indicated they were here as a result of the advertisement in the Chronicle Herald or heard about the meeting on the radio. Jason LeBlanc, Fisheries Biologist, Inland Fisheries Division chaired the meeting while biologist, John MacMillan, Al McNeill, Manager of Resource Management, Darryl Murrant, Manager of Fisheries Enhancement, Andrew Lowles, Sportfish Development Officer, Coastal Resource Coordinator, Joe Hanrahan, hatchery manager, Mike McNeil, were also present. Fishery Officer Kevin Juteau, and Greg Stevens, Senior Advisor with DFO were also in attendance. The meeting began at 6:30 pm with a brief introduction of those present, and a review of the agenda by the Chair.

Licencing Update

Al provided licence sales data for 2013 and past years. Total general fishing licence sales in 2013 were 66,745 which was a slight decrease from 2012 and an increase of over 35% of 2005 sales. Salmon licences were up slightly in 2013 at 2,532. Salmon licence sales have been very consistent between 2,200 and 2,500 since 1998, reflecting the popularity of this fishery in spite of the fact that many rivers are currently closed to angling.

2014 Regulation Changes and Proposed Changes for 2015

Al reviewed the 2014 regulation changes from page 3 in the Angler's Handbook. Al also reviewed the proposed changes for 2014 on page 5.

Special Management Areas for Smallmouth Bass Regulations

Jason LeBlanc reviewed lakes recently proposed for special smallmouth bass area regulations. The primary goal of these regulations for smallmouth bass is to shift (or maintain) the size structure of bass in these lakes to favor growth and higher mean sizes in selected populations, thereby increasing the proportion of larger bass. This can be accomplished through catch and release during the spawning season (May 1 to June 15), reducing the bag limit on larger fish to three (3) and implementing a maximum size limit of 35 cm (14 in). The proposed lakes for inclusion in Special Management Areas for smallmouth bass starting in the 2015 angling season were discussed.

RFA 3

There were no objections to including Morris Lake, Halifax County for these regulations. Jason explained that Micmac, Banook and Porters lakes were considered but upon review are not recommended at this time. Jason questioned the stability of the size structure of smallmouth bass in Micmac and Banook lakes due to the recent illegal introduction of chain pickerel. Those populations will continue to be monitored. Jason also indicated that the effectiveness of these regulations will be

assessed in the coming years. Larry Shortt asked about the Porters Lake population. Jason replied our data indicate this is stunted population and the lake would not be a good candidate for a Special Bass Management area.

Sportfish Habitat Fund Report

The Nova Scotia Sportfish Habitat Fund received a budget of \$323,151 in 2014, based on 2013 licence revenues. Twenty-three community groups were involved in 2014. Total funds to Adopt-a-Stream were \$290,000 in addition to \$100,000 in funding from the Nova Scotia Liquor Commission. Four other projects received funding in 2014; the West River Sheet Harbour Lime doser project, and three boat launch/ barrier-free projects on Lake Ainsle, New Germany Lake, and Porters Lake. Al reminded those present that 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, 2015 deadline.

Al also provided the names of the seven groups which qualified for funding under the 2014 Atlantic Salmon Conservation Fund for Nova Scotia. The call for proposals for 2015 closes on Dec 19, 2014. The Fund has done well in recent years, and as a result, Nova Scotia's share of available funding for 2015 is \$103,000. Interested groups can visit the website: www.salmonconservation.ca for details and to find out which projects were funded in 2014 and earlier.

Review of 2014 Programs and Field Work

Hatchery Report / Trout & Salmon Enhancement

Darryl Murrant, manager of the Fraser Mills 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 59 of the Department's Learn to Fish projects. As well, approximately 50 trout fishing derbies sponsored by volunteer organizations received trout from the hatcheries. Support for continued stocking of Sucker Lake was expressed. A new community contact will be needed for Sucker Lake stocking.

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 this 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

Winter is long and cold. 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

2014 was the eighth 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 will provide fall parr for Margaree River, Baddeck River, Middle River and Mabou River. It is unlikely that the fall salmon season on the Middle River and Baddeck River (both stocked 2010-2014) would have been permissible without the stocking program. On the mainland, Fraser's Mills Hatchery will provide fall parr for Waugh's River. With assistance from many volunteers, successful broodstock collections took place on for West River Antigonish, West River Pictou (Fish Friends), Middle River, Baddeck River and Margaree River. Broodstock collection was attempted on Mabou River but water conditions were very high and no fish were captured.

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.

The N.S Dept. of Fisheries & Aquaculture has been working with DFO, for the past few years, to find ways to expand the number of rivers where Atlantic salmon populations can be enhanced from the Margaree hatchery. In addition to the Margaree River broodstock, salmon from Baddeck River and Middle 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.

There was some discussion about the salmon enhancement program, one person asked if we would consider the LaHave River as a candidate. Darryl said we would not as it is not open for angling, thus would not meet our criteria. Another angler noted how well the enhancement program seems to work in the Margaree. There was concern that the policy would lead to currently stocked rivers being abandoned. Greg Stevens explained the DFO's position on salmon stocking and explained the difference between the federal gene banking program and the Provincial salmon enhancement program. Larry Shortt asked if the Department was going to stock more native brook trout vs. rainbow trout. Darryl replied that the Department stocks about 20 lakes with rainbow trout and about 400 lakes with brook trout.

Community Based Enhancement Facilities

A number of community- based fishery organizations operate small scale hatcheries or incubation boxes. Trout and, in some cases, salmon eggs are delivered to these in late winter. The fry hatch in early spring and when they have developed to the point where they are able to begin feeding on their own, they are released. This usually takes place in early to mid-May. Over the last few years there were operations in New Waterford, Port Morien, Coxheath, Isle Madame, Mulgrave and Tatamagouche.

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 60 Fish Friend projects.

Promotion and Development programs

Sportfish Development Officer, Andrew Lowles reviewed the programs currently in place to help promote sportfishing Nova Scotia. Andrew began working for the Department in March and started into the Learn to Fish (L2F) Program upon arriving in Nova Scotia. Andrew explained the Learn to Fish components - classroom and fishing, and thanked the fish hatcheries for their hard work stocking fish for each event. In total, forty-nine sessions were delivered in 2014 to approximately 1,750 participants across the province. While the majority of the program is delivered to school groups, Andrew delivered sessions at IWK Children's Hospital, and to girl guides, scouts and 4-H clubs. Learn to Fish partnered with the Department of Natural Resources to deliver two days of Learn to Fish to more than 80 youth and parents at the Shubenacadie Wildlife Park in celebration of National Wildlife week. Andrew wants to recognize the contributions of Mike O'Brien, Stephen Jollymore and everyone from the Hants West Wildlife Association, as well as Mark Weare, The First Cast Radio Show, Shimano and Pure Fishing Canada for their efforts in delivering the program and for the generous donations of equipment.

While every effort was made to run Learn to Fish in all reaches of the province, two Recreational Fisheries Areas remained under represented: RFA1 (Cape Breton), and RFA4 (Digby, Yarmouth, Shelburne and Queens) . Additional effort will be made to recruit participation from these areas in 2015.

Andrew, along with Fisheries Education Assistant, Rebecca Blank instructed a number of modules of the Nova Scotia Becoming and Outdoor Woman (BOW) in September. The Department of Fisheries and Aquaculture will continue to support BOW in the upcoming years.

A number of new initiatives are in place to promote sportfishing in Nova Scotia. Andrew will be creating six RFA-specific guides to sportfishing. These will be made available at Visitor Information Centers, at trade shows and by mail request. Going forward, Inland Fisheries will capitalize on electronic and social media to deliver messages quickly and effectively. The Fisheries and Aquaculture website will be revamped to a more user friendly format, program specific Facebook and Twitter accounts will be created.

Larry Shortt asked about the "Catch fishing" booklets published by the Canadian National Sportfishing Foundation a few years ago. Andrew said yes, and Trout Unlimited had also done one. The CNSF had funding from all provinces and DFO to cover the cost of the booklet.

Warm Water Species & Invasive Species Initiatives

Special Management Areas for Smallmouth Bass Regulations

Jason LeBlanc's reported there are several lakes recently proposed for special smallmouth bass area regulations, most of which are in Halifax, Shelburne, Kings and Yarmouth counties. The primary goal of these regulations for smallmouth bass is to shift (or maintain) the size structure of bass in these lakes to favor growth and higher mean sizes in selected populations, thereby increasing the proportion of larger bass. This can be accomplished through catch and release during the spawning season (May 1 to June 15), reducing the bag limit on larger fish to three (3) and implementing a maximum size limit of 35 cm (14 in). The proposed lakes for inclusion in Special Management Areas for smallmouth bass starting in the 2015 angling season were discussed.

Aquatic Invasive Species Initiatives

Ongoing initiatives on aquatic invasive species include: (1) documenting and monitor occurrences of AIS across the province; (2) participating on AIS national committees; (3) prioritizing enforcement activities around Nova Scotia's *Live Fish Possession Regulations*; (4) building capacity for control of AIS in Nova Scotia; (5) testing and evaluating an electrofishing boat as a potential control option for specific situations; and, (6) developing a strategy (risk assessment & rapid response) which identifies options aimed at reducing the negative impacts of invasive species and conserves native species. The Division now has the use of DFO's electrofishing boat and all staff are trained. Work was carried out on several Lakes in Queens County to assess the effectiveness of this boat to capture smallmouth bass and chain pickerel. Work on this initiative will continue in 2015.

An angler asked if it would help to reduce the pickerel and bass populations if there was no bag limit. Jason replied the current limit of 25 where bass are being managed as invasives is liberal, and research shows you can't eliminate an invasive species in a waterbody by angling.

Larry Shortt asked about the possible use of rotenone to remove bass or pickerel from a lake. Jason explained we cannot use rotenone yet – until federal legislation changes. Ron Seney reported there are pickerel in Church Lake, Lunenburg County. It was also reported that Cannon and Turtle Lakes have had SM bass present since the 1990's. It was reported that Hebb Lake still has Atlantic Whitefish.

Hugh Parker asked what is the most important thing we can do to stop illegal introductions? Jason said education and outreach and reporting suspected infractions. . Greg Stevens remarked that in 20 years he has does not know of a single report to DFO of a suspected illegal introduction taking place. Another angler asked if striped bass were a threat to salmon in Cape Breton. Jason indicated there is a concern that they may be eating trout and salmon and that Cindy Breau a biologist with DFO is doing diet studies on striped bass this year.

FINS – Fisheries Information of Nova Scotia Database

Jason explained the progress made on a new database which will be used to manage, distribute and report on the biological, physical, and chemical data which supports sport fisheries. The project is divided into three phases: (1) data extraction, quality assurance and reorganization, and re-entry into new platform; (2) advanced searching, reporting and mapping functions; and (3) web-based client access. The project is expected to be completed over the next 14 months.

Coldwater Species Management

John MacMillan provided an update on the 2014 field activities related to speckled trout. Assessments were conducted to evaluate angler catches in two sea run trout fisheries on the East River of Pictou and the Barney's River. A creel survey was also conducted in the upper Mersey watershed. Staff

assisted researchers involved in Freshwater Fisheries Research Cooperative Projects. Reports of the two creel surveys are available.

The Pictou County River Association recommended that special regulation be implemented for the East River of Pictou to improve the catches of sea run speckled trout. This system is under a delayed opening and with the assistance of many volunteers a total of 80 trout were tagged prior to the opening of the angling season on 15 May. Between 15 May and 8 June, anglers were counted and interviewed to measure activity and their catch at popular angling sites. Estimated total angler effort spent on the East River was 2013 hours and resulted in the harvest of 122 speckled trout. The population estimate for sea run speckled trout was about 500 fish. Minimum exploitation rate was estimated at 30% for the season. Twenty-nine percent of the angler catch of speckled trout was longer than 35cm in East River. In comparison the percentage of large trout (>35cm) caught in a regulated fishery in Antigonish Harbour was 64% in 2006 and 53% in 2007. The percentage of large (>35cm) sea trout caught in River Denys Basin was 6 in 2008 and 14 in 2010 prior to regulatory changes to reduce harvest. Differences in catchability of brown trout and speckled trout indicate that brown trout are much more difficult to catch than speckled trout and the population of brown trout in the East River is increasing. This study or a creel survey will be repeated in 2015.

New regulations to delay the season opening for Barneys River were recommended to improve catches and protect downstream migrating Atlantic salmon kelts. An angler creel survey on Barneys River was undertaken between 15 and 20 April 2014 and these data were compared with catch information from that same time period during 1991-1997. This fishery is a popular brown trout fishery and a by-catch of few salmon occurs each year. Catch of speckled trout is consistently small relative to the catch of brown trout.

Colin Buhariwalla, has studied striped bass on the Mira River over the past two years and is now conducting a similar project on the East River of Pictou and Pictou Harbour. Striped bass in Northumberland Strait are located at the Northern end of their North American Distribution that extends as far South as Florida. In order to survive bass must seek out warmer waters in winter and that usually requires stripers to move into freshwater locations as saltwater cools to below zero to temperatures that are lethal to stripers. The Nova Scotia Power Trenton Plant produces a warm water outflow that discharges directly into the estuary of East River Pictou. Many striped bass inhabit this location during the cold winter months. A shut down of the Trenton plant in January 2013 resulted in the death of many striped bass from cold shock. Although, most striped bass in Northumberland Strait come from one large spawning population in the Miramichi River, the results of genetic analysis on East River bass stripers suggested that they may be distinct from the Miramichi population. The purpose of the current research project is to determine if an additional spawning population of striped bass is present in the Northumberland Strait.

Concerns were raised at three RFAC meetings in 2013 regarding the potential removal of gates that reduced vehicle access to lands formerly controlled by Bowater-Mersey. A recommendation was made to reduce the bag limit on trout so that the potential increased in angler effort would not result in over-harvest of the trout resource. Information on the trout resource in this region is limited and in response the Inland Fisheries Division initiated efforts to collect baseline data on this fishery. Mike McNeil, McGowan Lake Hatchery took the lead and set up a creel survey with the assistance of DNR (Kerry Miller, Terry Beck, and Jennifer Innis) and enforcement staff. Dave Dagley and Queens County Anglers and Hunters Association were interested in participating in an angler logbook survey if access was permitted. Nova Scotia Department of Natural Resources is undertaking assessments to

determine the ecological significance of this area and has decided to maintain gates/barriers on certain main roads to this region. Changes to access will be dependent after the assessment takes place. The ability to collect catch data and the need for regulatory changes can be reevaluated once the decision on access to this region is made.

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 the interests of anglers and the Inland Fisheries Division. In 2014, a total cash investment of 30k dollars was made toward FFRC projects and a total in-kind was 134k dollars. In-kind contributions were associated with labour, supervisory, and equipment from partners. In 2013, the following five FFRC partnerships received funding : 1) Freshwater Fish parasite distribution, Dr. David Cone, St Mary's University, 2) Evaluation of stream restoration, Kris Hunter, St FX University, 3) Smallmouth bass trophic level and mercury assessment, Dr. Lind Campbell, St Marys University, 4) Striped Bass tracking in Mira River, Colin Buhariwalla and Dr. Mike Dadswell, Acadia University, and 5) Evaluation of DNA of speckled trout in small streams in Annapolis Valley, Dr. Daniel Rizzante, Dalhousie University.

Dr. David Cone, St Mary's University is collecting information on common trout parasites that inhabit lakes and rivers throughout Nova Scotia. Two brochures on the black spot and the gill maggot parasite have been developed. Another on internal parasites is planned for this year. Brochures are used to inform and facilitate the collected of information from anglers on the distribution of common parasites.

Kris Hunter, Saint Xavier University, 2013 was year three of a ten year study on water chemistry, habitat and electrofishing results will be assessed to evaluate the impacts of commonly used in-stream restoration initiatives to improve habitat for trout and salmon. For the first five years the eight sites will be monitored on an annual basis to assess habitat and fish populations. In year five, four of the eight sites will be 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.

Colin Buhariwalla and Dr. Mike Dadswell, are undertaking a striped bass tracking project in Cape Breton and in Pictou Harbour.

Dr. Daniel Rizzante, Dalhousie University, DNA of speckled trout from 16 sites in 14 streams on North Mountain, Annapolis Valley, was assessed. The purpose will be to evaluate populations upstream and downstream from barriers and assess the how different populations are based on their proximity from one another.

Dr. Linda Campbell, St Mary's University is evaluating mercury levels in fish in lakes and evaluating trophic levels of species within populations.

Strategic Planning Initiative

Al McNeill explained the Inland Fisheries Division has been working on a Strategic plan which will guide the activities of the Division and the recreational fisheries programs for the next five to ten years. Staff have reviewed earlier Divisional plans, plans from other provinces and states, and drafted a plan which

includes overall goals, individual strategies and action plans as well as measurable outcomes. The key areas we are focusing on are: Responsible Governance, Fish and Fish Habitat, Shared Stewardship, Consultative and Collaborative Approach to Fisheries Management, Science-Based Decision making, and Fostering Angling Opportunities. Al said the next steps will involve completing the draft with the assistance of Policy Division staff, First Nations consultation, Anglers/general public consultation, and finally presentation to cabinet for approval and implementation.

Regarding the Recreational Fisheries Strategic Plan, it was suggested that two versions be made available; a simple Executive Summary version and a more detailed one for anyone looking for more information.

Discussion/Agenda Items from the Floor

The suggestion was made to put include a link to the RFAC presentations in the minutes which are posted on the web site.

Hugh Parker, made a presentation to the council on behalf of Joe, Near, President of the Musquodoboit River Association on proposed changes to the Musquodoboit River Special Trout Management Area. Hugh explained the group sent letters to both the Province and DFO outlining then proposal in detail, along with rationale for the requested change. In brief, the changes call for simplifying the dates so the season on the entire river runs from May 1 through Sept 30, except the small area now currently open June 1. Fly fishing only would continue to be in place between the 357 bridge and the No. 7 highway, and also during the month of September. The outer limit of the STMA would be further downstream, and . Considerable discussion regarding Musquodoboit River Regulations took place following Hugh Parker's presentation. Part of the proposal is to extend the STMA 50 meters upstream into tributaries.

One angler asked if there were any salmon in the river. Hugh said about six were hooked this year, but it was a low year. Larry Shortt though the season start should remain as May 15.

The issue of access to the former Bowater-Mersey lands was discussed. It was suggested there is a lot of angling activity there due to illegal access on OHV's. The issue of restricting access to this property was brought up. The question why is the public being restricted from Crown land was brought up. Someone mentioned that the two upper gates were open. An angler asked if someone from DNR could be present at the meeting next year to answer questions about access the Bowater-Mersey lands.

The problem of restricted access to popular lakes due real estate development, either sib-divisions or "cottage country" development was raised as well. Larry Shortt said we need to talk to developers about lake access to the public at "cottage country" developments.

Ron Seney expressed concern that people are catching salmon on the Lahave River despite closure. There seems to be little DFO presence on the river. DFO manager Greg Stevens replied that they are trying to maintain a trout fishery in spite of the fact that Atlantic salmon have been listed as endangered in the Southern Uplands and that DFO's recovery Potential Assessments have determined illegal fishing as a serious threat in freshwater.

Meeting adjourned at 9:40