



Fisheries and Aquaculture

Inland Fisheries Division

PO Box 700
Pictou, Nova Scotia
B0K 1H0

Bus: (902) 485-5056
Fax: (902) 485-4014
Email: inland@gov.ns.ca

Area 5 Western: Annapolis, Hants and Kings Counties

Recreational Fisheries Advisory Council Minutes of the 2011 Fall RFAC Meeting

The RFAC meeting for Area 5 was held on November 9, 2011 at the Super 8 motel in Windsor, Nova Scotia. In addition to Nova Scotia Department of Fisheries and Aquaculture staff, there were 17 people in attendance. Al McNeill, manager of sport fish management chaired the meeting while biologist Jason LeBlanc, senior fisheries technician Reg Madden and sportfish development officer Tara Marshall from the Nova Scotia Department of Fisheries and Aquaculture were also present. Bill Whitman, Coastal Resource Coordinator, with Department of Fisheries and Aquaculture was in attendance. Greg Stevens with Department of Fisheries and Oceans was also present. The meeting began at 6:35 pm with a brief introduction of those present, and a review of the agenda by the chair.

Changes to the RFAC Schedule

Al McNeill reviewed the suggestions for changing the RFAC meeting format that the Department received from the Spring meetings. Suggestions included starting earlier or meeting on week-ends, spend less time talking about our programs, more time for discussion of issues from the floor, focus on regional, not Provincial projects or projects from other RFA's. Several people suggested advertising the meetings more. All preferred the current format, rather than "Town Hall", or "Open House" style meetings.

Al outlined the changes the Department has made including moving the start time to 6:30, placing regulation changes and other topical items at the beginning of the agenda, keeping the focus regional as much as possible, limiting presentation time from staff and having printed reports available for those who would like more detail. A press release and advertising budget was approved to buy radio and print advertising. We will also keep the current meeting format. One change the Department has decided to make is to reduce the frequency of RFAC meetings to once per year in the fall. Al explained the reason for this change as a Department decision to better utilise staff and financial resources. Preparing reports and presentations for meetings, travelling, attending meetings and working on action items from meetings is time consuming for staff at a time of year which is very demanding for hatchery and management staff.

Each spring, Inland Fisheries staff attend and present at four major provincial angling association AGM's, speak with thousands of anglers at the Sport and RV Show, and meet anglers on the river during spring creel surveys, all of which provide an excellent opportunity to get feedback from anglers on a variety of issues and concerns. The Department will re-allocate money saved from staff travel to Spring RFAC meetings for fall meeting advertising. We will also maintain a rotation of meeting locations for the fall RFAC meetings similar to past rotations.

Proposed Regulation Changes for 2012

AI McNeill reviewed the 2011 regulation changes from page 3 in the Angler's Handbook. AI also reviewed the Proposed changes for 2012.

Licencing

AI McNeill discussed progress the Department has made on a number of licencing issues that have been raised in past RFAC meetings. These included regulation changes to reduce anglers who fish intentionally for a species during the closed season for that species under the guise of angling for another species which has an open season. AI said the problem still exists but the Department is trying to find solutions to trouble spots without closing the entire season. Discussions took place with DFO after the ZMAC meetings in May to consider the impact of closing certain salmon pools to all angling during the summer months on selected rivers where problems are occurring. As a result, many pools were closed on the Medway, LaHave, and St. Marys Rivers to protect early run salmon.

Other licencing issues were: difficulties in purchasing a licence from a vendor late in the season, under-reporting of catch and effort (poor returns for General and salmon licence stubs), and being able to purchase a fishing licence on-line. To resolve these problems, in 2011, all Department of Natural Resources field offices will ensure general fishing licences are available until the end of the general fishing season in September. At the end of the 2011 angling season, prizes will be offered to selected anglers who submit their licence stub (report card) to the NSDFA by the end of December for both general and salmon licences. Three names will be drawn at random from the returned licence stub report cards for both salmon and general licences and awarded prizes. We hope this incentive will increase the number of licence stub returns.

AI provided a brief over view of the current state of electronic licencing and reporting. The Department has been working with the Departments of Natural Resources and Service Nova Scotia and Municipal Relations to build an electronic licencing system for roll out in 2012. Unfortunately, this goal will not be reached in 2012, The Departments are still exploring alternative funding sources to finance the new system. AI also reported that the mail-out for the 2010 survey of Sportfishing in Canada took place in January with 2788 questionnaires mailed out. The return rate was 53% which was the highest return rate in Canada. A report on the Survey results will be published in 2012.

Review of 2011 Field Activities

Cold Water Species Management

Understanding the factors that limit the number of salmonids in a river system can be very helpful and result in a greater return from the hard work of community groups involved in stream restoration initiatives. Water temperature is an important factor that limits the usage of habitat by brook trout in the summer, and the most productive trout streams in Nova Scotia tend to remain cool throughout the warm months. Community based organizations were provided with Hobo® temperature loggers that were deployed to record temperatures on the main branch of the river, in small streams, and air temperatures. In 2010, water temperature data was collected from a total of 46 sites on nine river systems. Identification

and the prioritization of cool and intermediate streams should be a consideration in the planning of future restoration initiatives.

The following individuals who participated in the water temperature monitoring project including: Dane Thompson, ACAP Cape Breton; Joe Near, Musquodoboit River Watershed Society; Wayne Forbes, Cobequid Salmon Association; Bob Rutherford, NSLC Adopt A Stream; Colin O'Neil, Sackville Rivers Association, Allison McIsaac, Eskasoni First Nation; Dave Cameron, Mabou & District Community Development Association; Matt Smith, Avon Peninsula Watershed Preservation Society.

Brook trout populations were assessed in two lakes in Halifax Regional Municipality in 2011. Portuguese Cove Lake, located approximately 12 km South of Halifax, is under general regulations and five trout can be retained each day of the retention season. Blueberry Lake is located, approximately 6km West of Halifax. Blueberry Lake is a Special Management Area and is under catch and release only regulations. Angling gear has been restricted to fly or lure only to improve survival rate of released trout. Anecdotal accounts from anglers indicated that a decline in the trout fishery in Blueberry Lake was associated with environmental disturbance that resulted from road construction while twinning the 103 Highway. Both study lakes are acidic (4.8 - 5.0 pH) and located close to the headwaters of two stream systems. Inflowing and out-flowing streams were small, approximately 2m stream width, during low-flow conditions in summer.

The presence of fish species that are known as serious competitors of brook trout such as: perch, smallmouth bass, chain pickerel, white sucker, were not sampled in either study lake. The only known competitor captured was American eel and this species is assumed to be ubiquitous in Nova Scotia water systems. The presence of killifish and golden shiner may benefit the brook trout fishery as they function as forage species for larger trout. Large differences in catch per angler hour suggest that the population density is much greater in Blueberry Lake compared to Portuguese Cove Lake. These data are supported by the result of the mark and recapture population estimates and demonstrate that the number and biomass of brook trout is much greater in Blueberry Lake (37 fish-ha⁻¹ and 6.3 kg-ha⁻¹) compared to Portuguese Cove Lake (14 fish-ha⁻¹ and 2.6 kg-ha⁻¹). Mean size of the catchable population was smaller in Blueberry Lake compared to Portuguese Cove Lake. Population density reflects the level of crowding among individuals in a population. Increased crowding can impact growth and result in lakes being inhabited by many small brook trout that, depending on angler preference, may or may not provide a valued fishing experience.

Reductions in mortality associated with angling can result from changes associated with angling regulations. Blueberry Lake is under special management where all trout caught must be released. Portuguese Cove Lake potentially experiences a greater removal of brook trout by angling and this factor may result in reduced levels of crowding and increased size of the brook trout caught. Blueberry Lake provides an angling opportunity where anglers can catch a greater number of trout per hour and the size of the trout caught may be slightly smaller than other lakes that may be impacted by angler harvest and competition from other fish species.

Impact of habitat improvement structures on fish populations

The objective of the electrofishing study was to evaluate the response of trout and salmon populations and habitat conditions to common habitat restoration initiatives used in Nova Scotia streams. Salmonid population data from eight study sites on streams in Antigonish County. This year represented year one of a long term (10-12 year) study to evaluate impacts of habitat restoration initiatives. The habitat assessment component of this research is being conducted under the direction of Saint Francis Xavier University with support from the Nova Scotia Freshwater Fisheries Research Cooperative.

Special thanks to all of the volunteers and professionals that were involved in the three projects. Organizations include St Mary's University, Saint Francis Xavier University, Halifax Wildlife Association, and Trout Nova Scotia.

One angler remarked there is not a lot of research or stocking activity in Annapolis County. Jason Leblanc replied most lakes stocked in this RFA are done in the spring, as the number of lakes with bass and pickerel preclude fall stocking with smaller trout.

Reports of the AAS water temperature monitoring project, Halifax lake trout assessment Project, and electrofishing project will be available online shortly:

<http://gov.ns.ca/fish/sportfishing/reports/>

Nova Scotia Freshwater Fisheries Research Cooperative (NSFFRC)

The objective of the FFRC is to augment current initiatives designed to assess and improve Nova Scotia's sport fishery by forming partnerships with universities, government agencies, and other organizations. In 2011, six projects received support from the Department of Fisheries and Aquaculture through the FFRC. These included: 1) Brook trout population parameters in seventeen lakes in Nova Scotia, 2) Sea trout migration patterns and habitat preference with acoustic tagging and tracking, 3) Trout parasite prevalence and distribution, 4) Impact of habitat improvement structures on fish populations, 5) Invasive species impacts on native fish communities, and 6) Annual changes in stream densities of salmon and trout. Partners for these projects included: Dalhousie University, Saint Mary's University; Acadia University, Saint Francis Xavier University, Fisheries and Oceans, Nova Scotia Adopt A Stream, and Nova Scotia Salmon Association.

Invasive Species Initiatives

Jason LeBlanc provided an overview of aquatic invasive species (AIS) issues in Nova Scotia and summarized the regulation changes made in 2011 to help address illegal introductions of species such as smallmouth bass and chain pickerel. A primary pathway for illegal movements of AIS is transfer by anglers from one water body to another to attempt to create fisheries for those species. It is illegal to introduce fish into fish habitat, regardless of the species, without a permit. Despite this, new populations of invasive species such as smallmouth bass and chain pickerel continue to threaten native fish populations, particularly speckled trout. The open season for smallmouth bass was closed in 2011 in RFAs 1, 2, 6 and the eastern portions of RFA 3 to attempt to remove any incentive anglers may have for continuing illegal introductions to these areas. This

approach will be re-assessed in the coming years as to its effectiveness, however for now, no new lakes for smallmouth bass will be open to angling in these areas unless they fit into a broader management plan for AIS.

One angler asked why there is a five fish bag limit for smallmouth bass if they are considered an invasive species? Jason said studies have shown that angling alone cannot remove enough bass or pickerel to bring back native fish populations.

Unauthorized introductions of live fish is considered the key pathway for the spread of AIS in Nova Scotia. However, to a lesser degree the inappropriate use of live bait, mis-use of unwanted aquarium trade fish (eg. goldfish) and water diversions (eg. intentional or natural due to spring snow melt and rain events) also contribute to the problem. Jason indicated that an *Aquatic Invasive Strategy* for Nova Scotia will be developed to address many of these pathways. The Strategy will focus on: (1) legislation, regulation and compliance; (2) risk management; (3) science; and (4) engaging stakeholders. Some initiatives have already begun on better understanding the role of live bait, developing early detection and rapid response frameworks and engaging stakeholders. An AIS Working Group has been formed which is made up of the major sportfishing organizations of the Province. The NS Salmon Association, Canadian Association of Smallmouth Bass Anglers, Trout Unlimited, Trout NS, the Atlantic Salmon Federation and the Responsible Bass Anglers of NS have representatives on the Working Group. The Working Group's mandate provides for exchange of AIS information and enhanced planning, cooperation and coordination of AIS activities.

Jason also provided a progress report on the draft live fish possession regulations that are intended to address the ongoing problem of unauthorized introductions of live fish. The draft regulations allow for a general prohibition of the possession of live fish in Nova Scotia. The intent provides Nova Scotia with an enforceable regulation specifically designed to address the vector or pathway for illegal introductions and allow for interception of live fish before they are illegally released. Exemptions to the general prohibition were discussed that allow for legitimate activities that require the possession of live fish to continue and/or are permitted under other authorities. When enacted, fish caught, regardless of the species, must be returned back to water as quickly as possible and with the least amount of harm or killed immediately and counted towards the daily bag limit. Jason indicated that when this regulatory approach is implemented, practices such as high grading and utilizing holding devices for live fish will no longer be permitted (eg. live wells or coolers, stringers, holding boxes, buckets, etc). Jason added that the Department understands that many anglers and angling practices will be affected by a prohibition of the possession of live fish and that anglers will have to adjust but contends it is a necessary change to minimize the potential for further illegal introductions and maintain a sustainable sport fishery for native fish species. AIS are believed to be the second largest threat to native fish communities after habitat loss.

An angler asked why the Department could not inform aquarium owners not to release goldfish into wild areas? Jason replied part of the new Aquatic Invasive Species strategy will be to educate the public and aquarium trade about the consequences of releasing goldfish and other species into the wild.

Extension

Atlantic Salmon Enhancement

AI McNeill gave a report of the salmon stocking and broodstock collection activities from 2011. Approximately 38,000 smolt, 41,000 fry/eggs, and 140,000 salmon parr were stocked in spring and fall, 2011 into five rivers - the Wauchs, St. Francis Harbour, Margaree, Middle and Baddeck rivers.

The Nova Scotia Sportfish Habitat Fund received an allocation for \$311,024 in 2011, based on 2010 revenues from fishing licence sales. Amy Weston provided AI with some slides from the Adopt-a-Stream program from 2010. Twenty-eight community groups were involved in 2010. In 2011, Adopt-a-Stream received \$280,000 from the Sportfish Habitat Fund as well as an additional \$100,000 from the Nova Scotia Liquor Commission. Amy organised the third annual Adopt-a-Stream Workshop in Truro in April which allowed many groups from around the province to network and share ideas. Three projects other than Adopt a stream were funded by the Sportfish Habitat Fund in 2011: the West River Liming project, the Barrier-free fishing pier at Trenton Park, and the Murphy Lake board walk restoration.

AI also provided the names of the seven groups which qualified for the 2011 Atlantic Salmon Conservation Fund for Nova Scotia. AI reminded people that the call for proposals for 2012 closes on Dec 17, 2011. The NS Advisory Committee will meet in February, 2012 to review the proposals for next year. Interested groups can visit the website: www.salmonconservation.ca for details on how to apply and to find out which organisations were successful in 2011.

Promotion and Development

Tara Marshall presented a review of the Departments promotion and development activities in 2011. The Learn to Fish (L2F) program was delivered 39 times across the province and 11 events were held in HRM. L2F events usually start mid April and finish up at the end of June. There were many new schools participating this past spring and over 1600 youth took part in the introductory fishing program across the Province. Tara would like to thank all the volunteer L2F instructors, Nova Scotia Federation of Anglers and Hunters, and the sponsors (Shakespeare, Lucky Strike, Berkley, Shimano).

One new group of youth participating in L2F is the mental health division of the IWK Children's Hospital. The mental health unit approached our department explaining that many of the youth at their facility would like to go fishing. Our first event with the hospital was well received and they approached us to have a long term fishing program in place with their patients. We have committed to two L2F's per season with the IWK, mental health division. We would like to thank Tony Rodgers and the Federation of Anglers and Hunter for their support with the youth fishing initiative for youth at the IWK.

We followed through with our initiatives with Department of Natural Resources, partnering on youth fishing program collaboration. We delivered an L2F family event at Shubenacadie Wildlife Park, to celebrate National Wildlife Week. We delivered two L2F sessions along

Beaverbank Lake to help celebrate Kids in the Forest Day. Five schools from HRM participated, encompassing 285 students. We provided a fisheries training workshop to DNR Education Officers who, in turn delivered three fishing workshops at Laurie, Dollar and Porter's Lake Provincial Parks. Additionally, three camping parks (Mira River, Dollar and Ellenwood) participated in the Tackle Share Program. This program was modeled after the one put on by Ontario Federation of Anglers and Hunters. Fishing rods, tackle, safety gear, an a how-to booklet are on loan free of charge to park visitors. Each participating park also sells fishing licences. The Tackle Share Program was well received and will be expanding this spring/summer. We will be continuing to partner with DNR on all of the youth fishing initiatives. We would like to thank the Halifax Wildlife Association and the Canadian Association of Smallmouth Anglers for the help with our youth fishing initiatives.

We had an amazing fall BOW (Becoming an Outdoors Woman) program. We delivered two trout fishing classes, two fly fishing classes, one tasty fish class and one fly tying evening session. New this fall was the "Taste of the Wild" showcase. We cooked moose, bear, deer, elk, partridge, white perch, smallmouth bass, speckled trout and salmon. This event helped us with our BOW Cookbook sales and we tasted about 14 recipes for game from our cookbook. We would like to thank the Nova Scotia Salmon Association for their support in the BOW scholarship program. Their contribution helped send 2 participants to the Fall workshop.

Winter BOW is scheduled for February 17-19, 2012 at the Gaelic College of Celtic Arts & Crafts, St. Ann's, Cape Breton. We will be teaching two ice fishing classes, learning to build smelt rigs and do a fly tying session in the evening. Additionally, we will have a "Taste of the Wild" showcase to help sell our BOW cookbooks. Also, February 18-19, 2012 is our free Winter Sportfishing Weekend. A few sportfishing associations across the province hold winter fishing events for families on the free weekend.

Just a reminder about our Photo Contest, and Kids Art Contest, we are taking entries until the end of December. The photo contest has 5 categories, general, scenic, species, family and young angler. The Best of Show prize is a fishing licences for a lifetime, so some really nice prizes and winners will be featured in the Anglers Handbook.

We are providing some incentives to anglers who return the General and Salmon Fishing Report Card. Prizes in the General fishing licence category include an Okuma spinning reel, Emery med/light action spinning rod, Berkley fireline, and four Mepps trout lures (first prize), Grohmann knife (2nd prize), and 3rd prize is a BOW cookbook, Fish Nova Scotia ball cap and pewter pin. In the Salmon licence category, 1st prize is an Okuma fly reel, floating fly line, and a box of 12 Atlantic Salmon flies, 2nd prize is a Grohmann knife, and third prize is a BOW cookbook, Fish Nova Scotia ball cap and pewter pin. Prizes will be drawn in January, 2012, and winners will be notified by mail.

Additional Presentation

Daniel Quinn from Acadia University gave a short presentation of her preliminary findings on invasive species research she is conducting.

Discussion/Agenda Items from the Floor

A request was made to have St.Croix Lake opened for a winter fishery.

A request was voiced to not raise the cost of fishing licenses.

Comments were made that more Adopt-A-Stream work should be conducted in RFA 5.

The meeting adjourned at 9:25pm.