North Shore
Steelhead
Report

A North Shore Steelhead Association Publication
Volume 9 - Spring 2011

Recycling Steel

By Keith Ailey

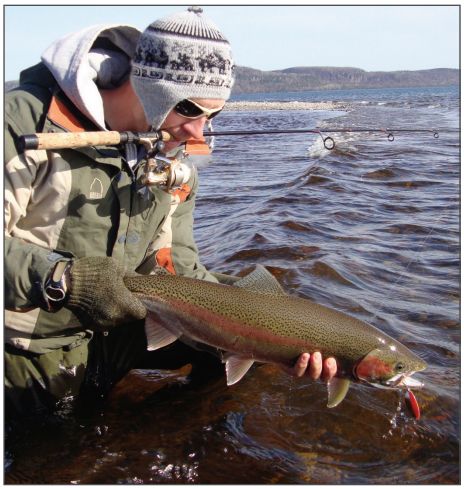


Photo by Adam Munshaw

The spring of 2010 was anything but normal. A concoction of unusual circumstances including minimal snow the previous winter, an early thaw, and no precipitation to speak of in the traditionally wet month of April, resulted in a very unconventional steelhead run.

As if they knew trouble was brewing, many steelhead were already in the rivers when the ice broke in the first week of April. As water levels dropped, the situation became serious. Some areas had to be temporarily closed to fishing while our conservation officers stayed on high alert. Meanwhile, those of us who ventured downstream to Lake Superior found that, just off shore, many fish were simply waiting. Some of these fish were dark in colour, and showing wear and tear from entering the shallow rivers before apparently dropping back to the safety of the big lake.

To help us understand what is happening on North Shore rivers, we can look at the long-term steelhead research projects on the McIntyre River and Portage Creek. Made possible through a partnership between the Ministry of Natural Resources and the North Shore Steelhead Association, these valuable studies indicate a trend. Adult populations in both systems have declined in recent years, in part, due to severe environmental conditions (hot dry summers, cold dry winters), that affect the survival of juvenile steelhead in the stream environment. In spite of low numbers, both these steelhead populations have a high percentage of large, repeat spawners capable of producing many juveniles, if suitable environmental conditions exist.

Our commitment to catch and release helps protect these valuable repeat spawners. The two major factors affecting the success of catch and release angling are hooking location, and the degree of physiological stress suffered by the fish.

Key Factor #1 – Hooking location. It has been proven that deep-hooking fish, in the esophagus or gills, leads to high mortality. In comparison, when a fish is hooked in the mouth or jaw area, mortality is negligible, typically less than 1%.

Using angling techniques like float fishing, casting hardware, and drifting yarn or flies allows anglers to immediately see or feel the strike and set the hook. In contrast, "plunking" live bait will allow fish time to swallow a hook. With deep-hooked fish, use pliers to cut the line as short as possible.

Key Factor #2 – Physiological Stress. Stress refers to the combination of the fight a fish puts up prior to being landed, angler handing methods, and the amount of time spent out of the water.

We can minimize the stress we cause steelhead by doing a few simple things. Using proper gear; rods with some 'backbone', and reels spooled with tough line, to allow us to land fish in a reasonable amount of time. Over-playing a steelhead on its already-difficult spawning run will lead to exhaustion and higher stress. Landing the fish by hand is preferable to using an old-style net with rough mesh, which will remove protective slime and scales. As well, we should minimize handling time, keep the fish in the water as much as possible, while avoiding contact with the eyes and gills. To understand how a fish feels out of water, try holding your breath while you unhook the fish and snap a photo. While taking that glory shot, it is very important to keep the fish in the water, or at least off the ground, while supporting the fish's weight with both hands. Finally, resuscitating the fish before release will ensure maximum chances of survival. To resuscitate properly, we hold the fish upright, facing into the current so that water can flow through its mouth and out its gills. Most fish will swim away, but it's important to remember that any fish that dies after release is considered the one fish you are allowed to keep. If you're fishing the McIntyre or Neebing River, you must do everything you can to release the fish because the 27-inch minimum size restriction prohibits you from taking an undersized fish, no matter how injured it appears to be.

As anglers, we have a responsibility to help manage our fishing resources as responsibly as we can. Right now, the effects of climate change, including unpredictable water levels and temperatures, are putting a new stress on our steelhead populations. We can all do our part- by using proper landing, handling and release techniques, our steelhead stocks should rebound.

Inside This Issue

NORTH SHORE Steelhead ASSOCIATION

Better Times Ahead!

by Tom Whalley, President NSSA

Olivia Korkola with her first steelhead!

I've been at this game of Steelhead fishing for over 30 years, and I've never seen anything like the spring of 2010. Be the fish gods' willing, I hope to never see one like it again …

The first signs of trouble began to show in mid winter, when snowfalls across the Northwest came up short of average, and warm winter temperatures led to less than normal ice cover on area water bodies. Those of us who spend our winters exploring the region by snowmobile, often found ourselves 'running out of snow' in areas which would usually see us waist deep, or more. For many, the reprieve from shovelling was welcome, but for those of us hoping for a steady and abundant spring runoff, the lack of snow was worrisome, and we worried with good reason.

In late March, an unusually warm and breezy period began, and what little snow had accumulated was quickly vaporised and carried away on the wind. In a few short days, the minimal spring runoff was gone, and as we waited for rain which did not come, a serious situation unfolded. Following their ancestral instincts, the usual waves of Steelhead entered their natal streams for the spawning migration, and found themselves facing a serious shortage of water. Flows were at or near historic low levels across the North Shore, and migrating Steelhead found themselves' trapped in streams by the low water, unable to ascend to the headwaters or retreat to the safety of Lake Superior. Large numbers of fish were forced to 'hole up' in the few areas which had enough depth to keep them hidden, and were often unable to do even that, leaving them exposed to predation. Many seasoned and conscientious anglers went to look, but were so concerned for the welfare of the stocks that they could not bring themselves to fish, and simply went home to wait for rain. In streams without barriers, fish dashed in at night, spawned and left the streams quickly for their own safety, providing little angling opportunity.

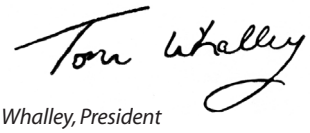
As time went by, and days became weeks, the situation became critical. On the MacIntyre river, conservation officers were forced to institute temporary closures on sections of the stream, to protect fish from some less savoury characters who had discovered easy pickings. On McVicar creek, reports of poaching and unregulated First Nations harvest were commonplace. Migrating fish at the Current River Fish ladder were stranded when flows were insufficient to support both fish passage and the hydroelectric facility, and needed to be rescued by volunteers from the NSSA.

Conservation officers raised concerns about fish being trapped and overexploited in small streams along Lakeshore Drive. East of Nipigon, large rivers had become trickles, and small streams all but dried up. All in all, it appeared that the spawning population was in trouble, and that their progeny were at risk of being left high and dry.

Too late for quality angling, but perhaps soon enough to ensure a successful hatch and good summer habitat for young of the year, the rains finally came in late May. With luck, the years' progeny may have been saved, but there are questions as to the survival of adult Steelhead, which were heavily stressed by the low water conditions. It is our hope that losses were not too severe, but only time will tell the impact of the drought of 2010 on the overall health of Steelhead spawning stocks.

Now the good news: this winter, the snows have returned, chest deep and dense in areas of the North Shore. Fall rains were substantial, and streams seem to be carrying good over-winter flows. It also appears that strong year classes from 2007 to 2009 are about to enter the fishery, replacing some of the adults we may have lost due to the drought of 2010. Although we've learned that things can change quickly, it appears that water will return this spring, and with water will come Steelhead, guided to the headwaters by age-old instinct.

Better times are ahead … be the fish gods' willing.



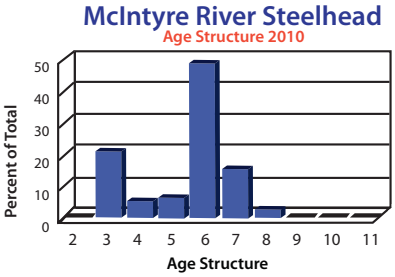
Tom Whalley, President

McIntyre River Rainbow Trout Population Study after 3 years

After the electronic fish finder was removed from the McIntyre fishway in 2007 the NSSA sought a means of determining the population of Rainbow Trout population. Starting in 2008 the NSSA decided to perform a mark and recapture survey similar to the ongoing Portage Creek study for the five years.

Anglers from the NSSA took to the stream to collect scale samples and biologically sample adult steelhead during the spring spawning migration. Over the spawning run (mid April to the end of May), anglers catch (using normal angling practices) and biologically sample (length, sex, scale sample) each steelhead. In addition, a unique fin clip is also applied each year. Life history information (stream and lake years, age at maturity, total age and number of spawning events) is obtained by analyzing scale samples. Population size is calculated using a Petersen Population Estimate. Fish are marked (fin clip) in one year, and based on the proportion of clipped fish captured the following spring, population size can be estimated.

This year the run started extremely early (April 9th) and in very low water conditions. Every effort was made to handle captured fish in as gentle a fashion as possible. Randy Beamish, head of the angling team, reports that numerous larger fish were captured which are likely the 2004 year class, but that other smaller fish were also sampled. The dry spring allowed for a larger number of fish to be captured this year as compared to other years. A total of 279 fish were captured of which 26 were recaptures from 2009, and 17 recaptures from 2008. The current population is estimated to be 1255(95% confidence). The study will continue for the next two seasons.



Proud Supporter of the
North Shore Steelhead Association

The NSSA has had a long and successful relationship with the local Canadian Tire Stores in Thunder Bay. This year we are extremely happy to announce that the local stores have donated a gift card worth $1,000.00 in their continued support to help the NSSA continue to advocate the conservation and preservation of the cold water fisheries in the region

Canadian Tire Corporation's two locations in Thunder Bay, one on Arthur St, and the other at the Thunder Center, have long provided our members the availability of a variety of fishing products for all species during all the seasons.

Bruce Stone owner of the Arthur Street store explained to Frank Edgson, secretary of the North Shore Steelhead Association that "Canadian Tire recognizes the value of the contributions that the NSSA makes to the fishing community in the area. The Canadian tire stores appreciate the work that the NSSA is doing in our community to promote and conserve the cold water fishery."

Don Osborne, store manager at the Arthur Street location, explains that the retail sales of outdoor products is very important to the Thunder Bay and area stores, and that by supporting local organizations such as the North Shore Steelhead Association, helps to promote both the organization and Canadian Tire Stores involvement with the community"

The North Shore Steelhead Association is proud of the sponsorship arrangement with Canadian Tire and looks forward to continuing this positive relationship with a community leader in sporting goods that wants to support both fishing in general and local conservation efforts. We applaud Canadian Tire for it's commitment to the community. The NSSA is proud to be able to promote the patronage of this important retail operation in our region and City.

Open seven days a week to serve you better!

Propane, Camping, Fishing, Hunting, Hiking and Sporting goods.

SOUTH
1221 Arthur St. West, Thunder Bay, ON
Phone: (807) 457- 4235
Hunting and Fishing Licenses available.

THUNDER CENTER
939 Fort William Rd., Thunder Bay, ON
Phone: 807-623-1999
Gas Bar and Car Wash available.

Current River Fishway

Low flow traps fish in Current River fishladder

The dry spring of 2010 presented a challenge to the management of the fishladder flows due to extreme low water conditions. At one point the fishladder was dewatered which left 2 fish stranded in the 3rd step pool from the top (see the photos below). Upon discovering the stranded fish, the NSSA worked with the City and the MNR to capture the fish and release them into Boulevard Lake. This unfortunate incident punctuated the need for an improved water management plan which would see water in the fishladder maintained at all times during the migration periods. The NSSA is hopefull that a minimum flow rate can be established.

On a positive note, we are now sure that fish locate and use the fishway, which puts to rest the question of the functionality of the fishway!

In addition, the NSSA also became aware of obstacles to migration under such low water levels. On August 17, 2010 the NSSA removed a small amount of rock on a 5 foot cliff which will now allow migrating fish another route to follow when ascending this partial barrier. Also, two deflector logs were installed in the river bed to facilitate movement from the top pool, to the pool at the base of the fish-way in the Current River. This small project will improve migration corridors during low water flows.

Special thanks to the following contributors :

Adamson Consulting, Bruce Adamson P. Eng. Monty Plater of Hertz Equipment Rentals, Sandy Smith of Garden Lake Timber, and ServiceMaster of Thunder Bay.

McIntyre River Bank Stabilization Project

The North Shore Steelhead Association contributed financial support to the Lakehead Region Conservation Authority to fund the fish habitat enhancement component of this bank stabilization project. The NSSA was assisted in this project by contributions from the Thunder Bay District Stewardship Council and the Ontario Federation of Anglers and Hunters Zone B) in support of this project.

The project involved the placement of amour rock to the hillside similar to what has been done in other sections of the river, however in this pilot project, several large root balls and large rocks were placed at the low water mark which will reduce flow rates and enhance fish habitat. Soil was added to the rocks on the slope and plantings of native species of dogwood and willow will help return the area to a natural setting.

The Ontario Stewardship Ranger Crew along with members from the Thunder Bay District Stewardship Council and the North Shore Steelhead Association planted dogwood and willow shrubs on Tuesday, August 24th 2010.

The North Shore Steelhead Association is a non-profit organization comprised of dedicated volunteers committed to the enhancement, conservation and preservation of our cold water fisheries in the tributaries of Lake Superior.

Fisherman's Park Update

This project began in 2009 and is a multi year project aimed at turning a neglected City owned property into a park area for all residents of Thunder Bay. The area is adjacent to the Current River and is one of the favourite fishing locations for smelt, walleye, and rainbow trout. With financial contributions from the Ontario Federation of Anglers and Hunters, and the involvement of numerous community businesses, this project has continued to move forward.

May 11, 2010 | 01

Thanks to the Thunder Bay District Stewardship Council for their cleanup event at "Fisherman's Park" held on May 11th 2010 as part of the 'Spring Up to Clean Up' campaign.

June 21, 2010 | 02

Tree Planting On Monday June 21st the first tree planting event was held.

Special thanks to Hydro One Forestry Division for the generous contribution of the 25 trees which were purchased from LCR Estates and to Tim Ross for all his help in selecting suitable species.

July 15, 2010 | 03

On July 15th 2010 the trail and main areas were attacked by a team of volunteers equipped with weed whackers, intent on keeping the area looking tidy.

September 22, 2010 | 03

Tom Jones General Contracting, along with Harris Rebar donated the labour and materials to complete the footings for the shelters which will be built next year. The concrete was provided by NOR-Shore Ready-Mix at a discounted rate.

The City of Thunder Bay's Clean, Green & Beautiful Awards recognize building and renovation projects that enrich the life of the community through public art, beautification, heritage and environmental greening. On November 22, 2010 the NSSA was presented with the Gold Award in recognition of our Fisherman's Park project. The award was presented to George Clark by Mayor Lynn Peterson.

February 2, 2010 | 03

Beginning on February 2nd the advanced carpentry students at Confederation College began to construct the 3 shelters which will be located on the site come spring.

The disassembled shelters will be stored at the Park's North facility until we arrange for a construction day.

Portage Creek Update

Kallem Kennedy with a tagged Portage fish.

The number of adult steelhead spawning in consecutive years has increased from less than 100 individuals in the early 1990's to over 1000 from 2004 to 2008 There is generally a higher natural mortality in male fish resulting in lower repeat spawning numbers for that gender. Following the end of harvest in 1994, survival to multiple repeat spawning for both sexes has increased. In Portage Creek, repeat spawning steelhead over nine consecutive years has been documented using tag recaptures. In 2010, 82% of the spawning population were repeat spawners. Of this total 44% had spawned at least four times, eight had spawned in seven consecutive years and two large females were on their eighth spawning migration (validated by tag returns). The repeat spawning rate is abnormally high due to the strong 2004 year class (all repeats in 2010) and the lack of new fish recruiting into the spawning population from subsequent years.

The Portage Creek steelhead study will continue on an annual basis until at least 2012. This annual data will be used to monitor the effects of climatic variables on a cold water salmonid community, to evaluate changes in adult steelhead life history strategies, and to utilize Portage Creek as an Index Stream for managing North Shore steelhead populations.

McVicar's Creek Tree Planting Project

Volunteers lend a helping hand.

The shoreline tree plant is the first phase of a multi-year project involving the Thunder Bay District Stewardship Council, North Shore Steelhead Association, and the City of Thunder Bay to enhance the McVicar's Creek ecosystem. This year's tree plant focused on the area between the Thunder Bay Expressway and Wardrope Avenue. On June 8th 2010 members of the NSSA joined with members of the Thunder Bay District Stewardship Council to plant numerous trees along the shore of the McVicar's Creek. The NSSA has committed funding in support of this project in 2011.

Cooperative angler
Program & fish handling workshop

Thursday, April 7, 2011 • 7pm-9pm
at the Valhalla Inn (Viking Room)

The Cooperative Rainbow Trout Angler Program involves the collection of biological information from adult rainbow trout caught by recreational anglers during the spring spawning period (April - June) in tributaries of Lake Superior's north shore. The information gathered by anglers provides valuable life-history information that can be used to assess the status and health of the rainbow trout fishery.

The session will include a brief presentation on the origin and benefits of the Cooperative Angler Program, a presentation on the sampling protocol and a segment on fish handling techniques. Anglers who sign up for the program will receive a sampling kit and a spool of Sufix Fishing Line for participating. Anglers who hand in 15 or more samples for the 2011 sampling season will be entered into a draw for a Rapala Northcoast Steelhead Rod and Rapala Seeker Spinning Reel valued at over $250. Other participating anglers will have the chance to win a tackle package consisting of Sufix Fishing Line, Gamakatsu Hooks, and an assortment of lures from Rapala, Luhr Jensen, Storm and Bluefox!

Non-members of the NSSA will also have the opportunity to sign up for memberships at a cost of $10 at the information session.

For additional information on this program and the information session, please contact Davis Viehbeck, MNR Stewardship Coordinator at **(807)475-1481** or **davis.viehbeck@ontario.ca**

NSSA Membership Application

Name _____

Address _____

City _____ Province _____

Phone _____ Postal Code _____

E-mail Address _____

Dues are renewable each January. Dues paid by new members in November are applied to the following year's dues.

☐ 1 year - $10 ☐ 2 year - $20 ☐ 3 year - $30

Make cheques payable to:
North Shore Steelhead Association, P.O. Box 10237, Thunder Bay, ON P7E 6T7

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Forward to:
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