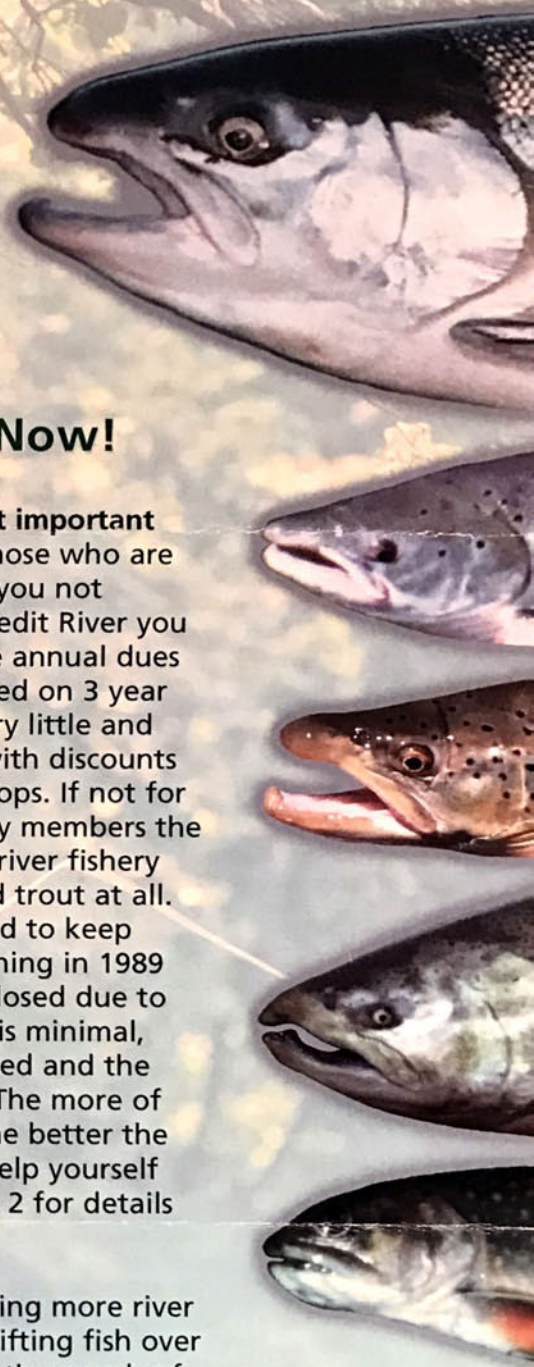


# LIGHT LINES

## JOURNAL OF THE CREDIT RIVER ANGLERS

WINTER 2002

Volume 13 Number 1



### President's Message – Anglers Must Act Now!

by John Kendell

I have had the fortune to fish for steelhead and stream trout for 25 years, first learning to chase these great fish on rivers like the Pretty, Silver, Beaver, Pine and Bighead. Sadly what I enjoyed as a youngster at the family cottage near Collingwood is now a shadow of its former self. My children and yours may never know the joy we as anglers have had if the decline in our fisheries continue. There is no single source at fault for the decline, but a mixture of droughts, global warming, urbanization, agriculture, increased fishing pressure, over harvest of fish stocks, stocking on wild populations, and archaic regulations to protect the fish from anglers.

As anglers we must do something about it and NOW! All too often anglers make excuses why they can't help like "I'm too busy" or "I don't like what some guy said from your club." The problem is too many people make excuses and the fishery suffers. The Credit is a prime example: thousands of anglers are fishing during the fall season and yet only 10 people come out to help plant trees or stock fish. Often it is the same ten people and that reality is common to most groups working to improve fishing. For the members reading this you have made an important step, by joining and saying I am part of CRAA and I support the work.

**Joining CRAA is the most important step you can take!** For those who are not members, why have you not joined? If you fish the Credit River you should be a member. The annual dues are as low as \$18.00 (based on 3 year membership) which is very little and offset many times over with discounts at participating tackle shops. If not for the hard work of so many members the Credit would not have a river fishery for migratory salmon and trout at all. The club originally formed to keep Erindale Park open to fishing in 1989 after the city wanted it closed due to the mess. Well, the mess is minimal, poaching is greatly reduced and the fishery is getting better. The more of you who join and help the better the fishing will become. So help yourself and join CRAA! See page 2 for details and our address.

CRAA members are opening more river to fishing, stocking fish, lifting fish over barriers, planting tens of thousands of trees, improving fish habitat and working to reverse the impacts of urban flooding and erosion. Your benefiting from all this work and more, like the boulder placement and the new section open to Hwy 403.

What are you waiting for. Stop making excuses and join to improve your fishing!



## Credit River Anglers Association

### LIGHT LINES

Contributions are welcome from all members and non-members alike. Send your articles of interest, messages, or suggestions to:

Light Lines Editor  
Credit River Anglers Association  
128 Queen Street South  
P.O. Box 42093

Mississauga, Ontario L5M 1K8

E-mail: [craa97@yahoo.com](mailto:craa97@yahoo.com)

Website: [www.craa.on.ca](http://www.craa.on.ca)

CRAA 24 hr Hotline (905) 814-5794

### Contributors

John Kendell, Vince D'Elia  
and Mike Brady

### CRAA Executive

President ... John Kendell  
Vice President ... Mike Tost  
Treasurers ... Jack Gibbons, Jim Kendell  
Secretary ... Carlo Mendoza  
Membership ... Jürgen Richter  
Volunteer Coordinator ... Aaron Bodiam  
Fish Rearing ... Mike Tost

### Commercial Advertising

Please contact us for current sheet.

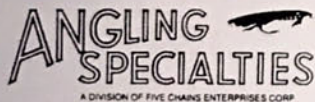
## CRAA Members Only Receive 10% Discount at These Retailers!



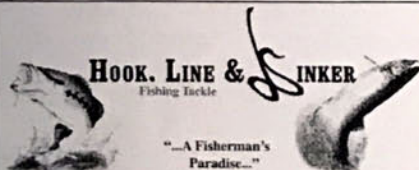
"Toronto's Fly Fishing Centre"

61 Front Street East  
Toronto, Ontario  
M5E 1B3

(416) 869-3474  
[wilsons@ca.inter.net](mailto:wilsons@ca.inter.net)  
[www.wilsonnorvis.com](http://www.wilsonnorvis.com)



325 Central Parkway West, Unit 42  
(Corner of Confederation Parkway)  
Mississauga, Ont. L5B 3X9  
Tel. 905-275-4972



Ray Collesso  
(519) 766-HOOK  
(4665)

email: [hls@on.albn.com](mailto:hls@on.albn.com)

380 Eramosa Road  
Guelph, Ontario  
N1E 6R2

# News and Announcements

## Streetsville Fish Ladder

After operating the ladder for several years with damaged hinges and welds from years of vandalism the MNR has had the fish ladder repaired. Thanks go to Ken Cornelisse of the MNR for making sure the project was completed prior to his move to another MNR office. The hinges were replaced, broken welds were repaired and the ladder is ready to go. The fish ladder is closed for winter and will be opened in March when the river is free from ice and the steelhead are ready to go.

## Fishery Management Plan

The plan, which began as a series of meetings in Jan, 1998, 4 years ago has yet to improve the fishing in the Credit River. I hope it will, but to date there has been minimal action on what most anglers would consider the priority of the plan, to allow steelhead past Norval to Inglewood and install a barrier in Inglewood to segregate the resident trout from the migratory trout and salmon. Until this occurs and a fish ladder is built at Norval the steelhead fishery of the Credit will be dependent on CRAA's many great efforts to pass fish over Streetsville Dam and our hatchery operations. The deadline for the new barrier to be installed is 2005, but that would mean we have to wait until 2010 for the first returns of wild, born in the middle Credit River steelhead to return. CRAA is constantly pushing for action to install the barrier and re-open access to steelhead and brown trout past Norval.

## Bronte Creek

Bronte Creek remains a healthy system, but temperature continues to limit the trout and salmon species, as well as poor base flow in summer. CRAA has several projects planned for Bronte Creek over the next few years to improve the fishery and the river. The fishing season, access and rehabilitation are the top issues. The contentious issue is steelhead access past Lowville Dam, which has been a partial to complete barrier since 1993 when a small group of resident fishers persuaded the MNR to change the dam to stop steelhead access. See the article on page 5 for more details.

## Hatchery Report

The hatchery continues to pump out good numbers of steelhead to ensure there is a great steelhead fishery in the future. This year close to 225,000 steelhead fry have been stocked into the middle of the river, as we have done for the past 5 years. In addition to the steelhead we managed to stock close to 1,500 Atlantic salmon into Black Creek at our usual stocking site in June. The Atlantics averaged 4-5 cm in length, better than past years. For the first time we also raised and stocked migratory brown trout (about 5,000 fall fingerlings at 8 to 16 cm in length in September). We have 39,000 brown trout fry and 9,000 Atlantic salmon fry in the hatchery at this time. Based on the successes we hope to build up the migratory brown trout population in anticipation of future access to spawning areas with steelhead.

## MNR Biologist – Ken Cornelisse Moving

Ken has transferred from Aurora to the Guelph district and will be working on the Grand River and area. Since Ken lives five minutes from Guelph it was a sensible move over the hour plus commute to Aurora, but we will miss him. Ken was always fair and unbiased when it came to fish and the contentious issues that have manifested on the upper river and he always wanted to get his waders wet and help out

## Resident Brown Trout Study

As part of the Credit River Fisheries Management Plan it was agreed to study the winter migration and habitat of resident brown trout from the Forks of the Credit. Concerns were raised by Bob Morris that a barrier may effect the seasonal movements and since no data exists regarding this a study will be completed this year. CRAA, MNR, IWFFC, TU and U of Guelph will be involved. CRAA is providing at least \$2,000 to fund the project through CFWIP.

# Superior Steelhead

by Jon George

*This article was originally printed in Osprey – Issue 39, re-printed courtesy of the author.*

Introduced to the Canadian side of Lake Superior in the late 1800s, steelhead from the West Coast of the North America have thrived, adapting to local conditions and environments to develop distinct wild populations. In this article, Jon George, senior operations fisheries specialist with the Ontario Ministry of Natural Resources, gives us a fascinating account of the steelhead on his side of Gitche Gumee, including their natural history and how the Canadian government and local steelhead anglers banded together to overcome past harvest. The author welcomes reader comments. He can be reached at [jon.george@mnr.gov.on.ca](mailto:jon.george@mnr.gov.on.ca)

Steelhead anglers brave rain, sleet and snow, stand waist deep in roaring icy cold rivers and spend massive amounts of money on the finest fishing tackle in an effort to match wits with one of the most exciting salmonids in North America. To the fisheries managers, steelhead (*Oncorhynchus mykiss*) are fascinating to study. They present a complex set of life history strategies and an amazing ability to adapt and thrive, even in marginal coldwater environments. Their ability to colonize has resulted in widespread, successful introductions throughout the globe. Unfortunately, like many salmonids, wild steelhead populations are seldom abundant, making them sensitive to over fishing. Careful management of habitat and minimizing harvest are critical to maintaining healthy populations.

In the late 1800s, steelhead from the Pacific Northwest were introduced into the Great Lakes. In Lake Superior, the large headwaters of the Great Lakes system, natural reproduction and colonization of steelhead was rapid. The first stocking program in Lake Superior, initiated in 1883, was likely made up of stock from California's McCloud River. Stocks originating from Redwood Creek in California, the Willamette and Rogue rivers in Oregon and tributary streams of the Olympic Peninsula and the Columbia River in Washington made up additional plantings. By 1920, steelhead were well established along the north shore of Lake Superior. The steelhead is technically an anadromous or sea-run rainbow trout. Wild migratory rainbow trout in the Great Lakes are also called

steelhead due to their appearance, life history strategies and ancestry.

In Canadian waters of Lake Superior, little management of steelhead populations was needed, or, for that matter, even attempted following their introduction. Fish stocked in the late 1800s were left to fend for themselves in a remote, uninhabited wilderness. This proved to be an excellent management strategy that has enabled steelhead to thrive in most suitable tributary streams and rivers along the 800 miles (1,100 km) of rugged Lake Superior shoreline. This is virtually the only large geographic area in the Great Lakes where steelhead have been allowed to adapt to local conditions free from any negative genetic effects from stocking programs.

Lake Superior separates Minnesota, Wisconsin and Michigan from Ontario, Canada by 31,820 sprawling square miles of ice-cold water, with depths plunging to 1,333 feet. It is the largest, deepest and coldest of the Great Lakes. The Canadian side is comprised of a rugged, wilderness shoreline similar to the Pacific Northwest except that it does not have high, snow capped mountains. Boreal mixed hardwood and softwood forests and muskeg wetlands cover the granite Precambrian Shield. Steep gradient streams tumble over bedrock and gravel substrate and are frequently interrupted by waterfalls and long stretches of whitewater. Development is limited to small paper mill, mining and railway communities that dot the shoreline along the Trans-Canada Highway. The only major urban areas are the cities of Thunder Bay in the extreme west and Sault Ste. Marie on the southeastern shore of the lake. The climate, moderated by the water of Lake Superior, is considered to be modified continental. Lake Superior moderates winter temperature while having a cooling effect during the summer months. In spite of this influence, the north shore of Lake Superior has one of the harshest temperature regimes for steelhead in North America. Mean winter air temperatures range from 5 to 14 degrees Fahrenheit (-10 to -15°C) and can reach extremes of -40°F (-40°C). Tributary streams remain ice-covered from November to May.

The salmonid community of Lake Superior's north shore is a complex mixture of both native and introduced species coexisting with steelhead in

both the lake and stream environments. Two chars, the eastern brook trout (*Salvelinus fontinalis*) and the lake trout (*Salvelinus namaycush*) are indigenous species, composed of both resident and migratory populations. In addition, a variety of salmonids have been introduced, including brown trout (*Salmo trutta*) in the late 1800s, pink salmon (*Oncorhynchus gorbuscha*) in 1957, and coho (*Oncorhynchus kisutch*) and chinook salmon (*Oncorhynchus tshawytscha*) in the late 1960s. Like steelhead, these introduced salmonids quickly colonized and are now considered established species in most of Lake Superior. This multi-salmonid community has created an attractive and diversified recreational fishery.

The life history characteristics of Lake Superior steelhead populations are similar to stocks in their native range, though survival adaptations from the original genetics have become further modified through natural selection. The result is localized populations that vary considerably, each having developed a unique set of adaptations. Spawning takes place in the spring, though mature fish may enter their home stream as early as August of the previous year. Mature steelhead migrating in the fall will generally move a considerable distance upstream before overwintering.

These early migrants are usually the first to spawn in the spring and appear to be necessary to fully seed headwater locations. Fall migrants have an advantage over spring migrants due to warmer water temperatures and more stable flow regimes. These environmental conditions create a greater window of opportunity to navigate obstacles such as waterfalls. The life history strategy of fall migration may have developed from summer run steelhead transplanted from their native environment.

Many Lake Superior tributaries also receive a fall migration of immature steelhead that have spent one or two years in the lake. These appear to be feeding migrations corresponding to freshets, preferred temperatures and the presence of salmon spawning activity. It is believed that these fish return to the lake prior to freeze-up. Spring spawning migrations usually begin in April and are over by early June,

## Superior Steelhead, *continued*

though a few adults in a scattering of tributaries migrate in March and July. These migration patterns are influenced by a variety of factors, including discharge, water temperature and geographic location. Redd construction may occur from early April to mid-June, peaking between late April and May.

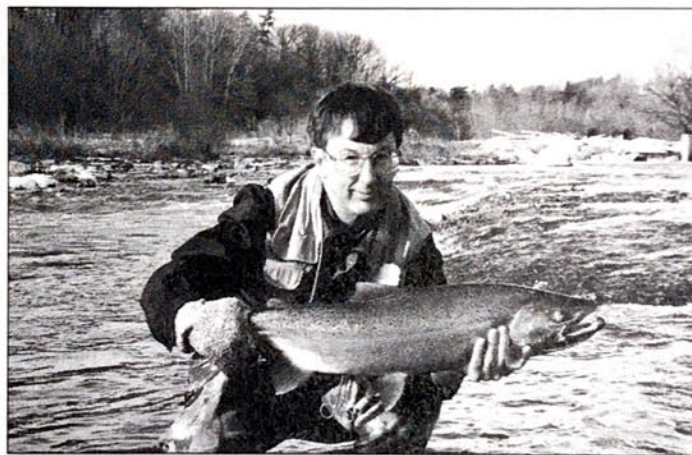
Juvenile steelhead spend one to three years in their home stream prior to migrating to Lake Superior as smolts. Two years of stream life is the dominant pattern in most small streams; three years is rare. While one-stream-year dominance is rare in most wild Great Lakes steelhead populations, several small tributaries found along the northwest side of Lake Superior have adult steelhead populations expressing a one-year smolting history of greater than 80 percent. This unique adaptation may be due to poor yearling habitat or interactions from resident fish. Another interesting life history strategy is found in tributaries that have low summer flows or dry up completely. Adults spawn in the feeder stream but the juveniles are often forced prematurely to the lake. In spite of their small size they appear to survive quite well, especially around bedrock embayments and boulder structure. The cold water temperatures of Lake Superior and the lack of inshore predators probably contribute to their survival.

Once in the lake, most steelhead remain for two years before embarking on their first spawning migration, though males often mature following only one year in the lake. In some populations, three and four lake years at first spawning are common, especially for female steelhead.

Lake Superior's steelhead appear to have evolved the ability to spawn multiple times, a characteristic that appears to be prerequisite for optimal recruitment. Most healthy populations have repeat spawning levels for both sexes of between 50 and 70 percent. Males tend to have higher natural mortality and therefore lower repeat spawning, probably due to multiple spawning events (within the year) and the period of time spent in spawning streams. In relatively pristine populations males may spawn three to four times in successive years while females commonly have four to six spawning migrations.

While in the lake, feeding is focused primarily on terrestrial insects and freshwater shrimp (*Mysis*). As a result of the lake's cold and unproductive environment, growth rates of steelhead are predictably slow. Mature adults range from 12 to 16 inches (30 to 40 cm) after one lake year, 18 to 22 inches (46 to 56 cm) following two lake years and 23 to 26 inches (58 to 66 cm) after three years spent in Lake Superior. Steelhead larger than 28 inches (70 cm) are rare in most populations and are considered to be trophy quality by most anglers.

Historically, angling regulations in Canadian waters of Lake Superior were quite liberal. No closed season existed for steelhead and the bag limit was five fish without any size restrictions. This left wild stocks extremely vulnerable to over exploitation, especially during



*Jon George with a nice Credit River steelhead.*

spawning migrations. Fortunately, the remote nature of the lake's north shore kept angling pressure on steelhead populations low into the early 1970s. However, during the 1970s and 1980s, the high quality angling opportunities for wild Lake Superior steelhead were realized. As fishing pressure increased, excessive harvest soon followed.

By the late 1980s steelhead anglers noted symptoms of a declining steelhead fishery. Catches were dwindling and average size was considerably reduced. The North Shore Steelhead Association (NSSA), an active angling club in Thunder Bay, Ontario, lobbied the Ontario Ministry of Natural Resources (OMNR) for a lake wide assessment of the status of steelhead stocks in Lake Superior. The result was a cooperative venture between government biologists and anglers. The

assessment study solicited volunteer anglers to sample catches during the spring spawning migrations over a four year period – corresponding to one generation of steelhead. The volunteers were given sampling kits and collected length, sex and scale samples (to provide age estimates) from mature fish in each stream they fished. Life history strategies were extrapolated from the scale samples by sex and used to assess the health of steelhead stocks. Steelhead anglers collected close to 4,000 samples from 32 north shore streams between 1991 and 1994. Sixteen streams with the greatest sample size were used to assess the health of steelhead stocks.

The biological data collected indicated that fishing mortality was excessive, especially close to urban areas. There

was a general trend of low repeat spawning corresponding with a high annual mortality rate. In several cases there were very low numbers of maiden spawners and dramatic fluctuations in year classes that were symptomatic of inadequate spawning success resulting in stock recruitment

problems. In 1994, based on this information, a steelhead status report recommended maintaining an open season but restricting the bag and possession limit to one fish. An interim regulation of two fish, one over 20 inches (50 cm) and one under 20 inches (50 cm) was enacted in 1996. This was followed by the formulation of a working group made up of interested parties from along the lakeshore. Their mandate was to review the assessment data, solicit input from resource experts, and obtain public input and to recommend management strategies. In the spring of 1999, the limit for steelhead was reduced to the original recommendation of a one fish bag limit for western Lake Superior (Thunder Bay to Marathon). A two fish limit was established on the eastern side of the lake from Marathon to Sault Ste. Marie. In addition, a minimal size

## Superior Steelhead, *continued*

restriction of 27 inches (69 cm) total length was deemed necessary to protect critically low populations in two urban streams located in Thunder Bay.

One particular western Lake Superior tributary, considered heavily exploited during the 1991 to 1994 lake wide assessment, was closed to public access by the landowner in 1994. The Ontario Ministry of Natural Resources took this opportunity to launch a more quantitative study to evaluate the effects of exploitation on steelhead. This was accomplished by obtaining population estimates and life histories data for at least two generations (eight years) after closure.

Volunteer anglers, in partnership with the Ontario Ministry of Natural Resources, were again called on to capture steelhead, collect biological data and apply tags and clips to the fish prior to live release. Population estimates were calculated through mark and recapture, using fin clips and tags, from one spring to the next. Life history strategies by sex were obtained from the scale samples. Each year, 250

to 350 adults (30 to 35 percent of the estimated population size) were captured, tagged or fin-clipped, biologically sampled and released. At the outset of the project in 1994, the adult population size was estimated to be 600 fish, the repeat spawning level was 30 percent and recruitment of small fish was low. By the spring of 2000, the population had risen to 1,200 adults (plus or minus 25 percent), recruitment had stabilized. 60 percent of fish had previously spawned – some as many as four to six times – and large trophy-sized fish were again present.

Two additional bits of information that came from this study were fishing/handling mortality rates and homing of adults back to the same stream. Approximately 2,000 steelhead were angled, biologically sampled and tagged from 1994 to 2000. The mortality rate was estimated to be two percent in spite of water temperature that reached 57°F (14°C). Tagged steelhead were captured over a wide area of Lake Superior but the stray rate of adults to other tributaries in subsequent years was only two percent.

This quantitative study illustrated the value of restrictive harvest limits and the benefits of using volunteers. Not only did volunteers provide an inexpensive and viable method of collecting valuable data, angler involvement and input made final management decisions more acceptable to the resource users. Angler participation in the more quantitative study has resulted in solid public support for the restrictive harvest regulations that are now in place.

Steelhead are a valuable game fish in the Canadian waters of Lake Superior. Their elusive nature, reputation as an energetic fighter and potential to reach trophy sizes combine to provide a high quality angling experience to a wide variety of anglers. Thus, continued maintenance of the integrity of these wild stocks is a highly desirable goal for fishery managers. Through cooperation with anglers and the introduction of regulations is based on solid scientific evidence, there is strong reason to believe that steelhead stocks in Lake Superior will continue to provide quality angling for generations to come.

## Bronte Creek Projects by CRAA

*by John Kendell and Brian Morrison*

In April of 2000 CRAA officially adopted Bronte Creek due to its close proximity to the Credit River and the important fishery for both migratory and resident fish it sustains. Bronte Creek is well known to steelheaders and salmon anglers in Southern Ontario. Although Bronte is a small system compared to the Credit, it provides another great opportunity to catch steelhead, salmon and resident browns and brookies close to home.

The standard but deadly threats for a partially urbanized watershed in this part of Ontario are why we, as anglers must work to protect and enhance our local rivers. Massive urban development, storm sewers, deforestation, agriculture, phosphorus loading, chemical pollutants, golf courses and dewatering (just to name a few) all threaten to damage or destroy the fragile wild salmonid fisheries we enjoy so close to home. Although some anglers lay the blame of species decline on another species, it is humans that are the most common cause. Most species declines or losses are the direct result of critical habitat damage or loss caused by humans, such as flooding, siltation,

loss of groundwater, loss of spawning areas, etc. In many healthy Southern Ontario streams and rivers many or all species of salmon and trout coexist. Only when habitat is lost do we see population changes or shifts and the fingers start pointing, usually at steelhead or salmon. CRAA prefers to rehabilitate the habitat using science and skip the absurd finger pointing at another species of fish!

This summer CRAA will be completing several exciting projects on Bronte Creek and Limestone Creek. At this time permission and funding have been finalized for work in PetroCanada Park to stabilize eroding banks, reforest open areas and add to fish habitat. Two farms on Limestone Creek with little or no riparian vegetation will be reforested to a 20 m buffer (or greater) and an open field on Bronte Creek above the escarpment will be planted. We also hope to reforest and improve habitat on the upper Limestone which has a strong, but limited brook trout population. The section of Limestone Creek we will plant is important habitat to brook trout, steelhead, brown trout and salmon reproduction.

Working with Dave Featherstone, the Halton C.A. ecologist we will continue to plan more projects, contact landowners and improve habitat for all salmonids. We are also exploring opportunities to remove dams on the system which block fish movement and cause significant temperature stress for the trout and salmon juveniles in summer. Research will continue into why the lower river does not support juvenile salmonids.

CRAA has also asked the MNR to change the fishing regulations for the lower river (Rebecca Street to Highway 5) to an all year section with a 1 fish limit (minimum 30") during the extended season for all trout and Pacific salmon species. This is consistent with the regulations we are requesting on the Credit River extended fishery as well. The regulation would then legalize the spring fishery on Bronte while limiting harvest of all trout and salmon in the lower river and protecting the important maiden spawning brown trout and steelhead which have wild, self sustaining populations.

# Steelheading the Lower Niagara River

by Aaron Shirley

## The Critical Link to Boating More Fish: Boat Control

One cold January morning, as I backed my aluminum boat down the icy launch ramp to the lower Niagara River, I couldn't help but notice a strong wind blowing up-river. I immediately thought to myself "this is going to be a cold day of steelheading!" My good friend Joe and I established a game plan together as I started up my Honda, letting it warm up in the frigid winter waters. We came to the conclusion that targeting two drifts near the New York shoreline would be a good idea to keep out of the wind. It wasn't long after we started drifting that we realized avoiding the 40 km/h winds would not be a possibility, so we decided to garb-up and brave the elements!

I recall lowering my Minn Kota Maxxum into the river and pointing my bow straight into the gale-force wind. I had to turn up the foot-pedal setting to maximum in order to properly present our baits in the most natural fashion, coinciding with the bottom current. The wind was so strong, that it was actually blowing us up-river slightly without any boat control. As we pretty much seemed to troll by all the other boats sitting still on the drifts, we boated steelhead after steelhead while others watched in almost disbelief. While other frustrated anglers who were drifting near us, one by one, slowly decided to leave that morning, Joe and I continued to consistently boat fish all day. We ended up with over thirty hook-ups during the course of that day, mostly fishing without any other boats around us.

So, what were we doing to have such success while others were struggling for a hit? It's quite simple actually – effective boat control. Steelhead ultimately prefer to have their food naturally drifting along with the bottom current in streams and rivers. If your baits are not drifting along the bottom naturally, the fish will more than likely ignore your offerings. Float-anglers and fly-fisherman have known this for years, and capitalize on landing more fish with this knowledge in the smaller streams and rivers. If

you think about it... why would a steelhead hit your bait that is unnaturally defying the current and/or drifting in an unnatural manner? This is especially true when drifting egg sacks, artificial eggs or flies. In my experience, this precision in obtaining boat control is not as critical when using live shiners or baits with a lot of action, such as Kwikfish or jigs.

## Effective Methods for Boat Control

To achieve matching a typical three-way rig drifting naturally with the bottom current, you must control your boat to adjust for the top currents and wind, while using the least amount of weight as possible. I most commonly use 1/4-ounce and 1/2-ounce weights on my rigs to steelhead the lower Niagara River from my boat, employing the heavier weights for the faster drifts. I have found the best indication of what the bottom current is doing is not as complicated as you may be thinking... basically, I watch what my fishing line is doing. If I see my line going under the boat, off to the side, or drifting away from the boat, I know I have to start controlling the boat with the trolling motor. For example: when I see my line wandering in any specific direction, I use the foot-pedal on my bow-mount trolling motor to turn the 'arrow' at the top of the trolling motor in the direction my line is wandering and push the 'momentary switch' at the desired speed setting to maintain bottom contact. When I have bottom contact and the line is more vertical again, I will take my foot off the momentary switch and drift free.

When my line starts to wander again, I repeat the process (sometimes consistently in windy conditions or heavy current). I also try to keep my line as vertical in the water as possible, being careful not to let out too much line (having a lot of line out will cause you to snag the bottom more often, and you will also lose sensitivity for those subtle takes). You do not necessarily have to use a bow-mount trolling motor for effective boat control, however, I believe it is the best tool. I have used a tiller outboard and electric motor to achieve boat

control, but they are limited in my opinion. Effective boat control will take some time to master (especially in the heavier currents), but learning to have precise control of your drifting methods will be well worth the effort undertaken!

## Equipment, Rigs & Baits

I prefer to use quality 8-1/2 foot, medium-power rods with a fast action for steelheading the Niagara River. I believe the fast action of the rod helps with 'feeling bottom' and detecting subtle takes from wary steelhead. Furthermore, the length of the rods still allows for the flexibility needed for fighting feisty steelies. I also like to use high quality spinning reels with excellent drag systems spooled with 10-pound test (as thin as 8-pound) for a main line. I then tie my main line to a small black three-way swivel, choosing to employ three-way rigs to bounce naturally along the bottom. I then knot on a 4- to 7-foot leader of 4- to 6-pound line, with a hook tied on the business end of the leader, with the longer, lighter leaders and smaller hooks applied during clear water conditions. An 8-pound, 8-to 12-inch dropper line with a 1/4-ounce or 1/2-ounce weight rounds out the rig. I personally use my own home made weight system for the Niagara River, though the standard pencil lead weights or slinkies are a good option. I use roe bags for bait in various colours and sizes quite extensively, but also utilize skein chunks, corkies, yarn, single eggs, streamers, Kwikfish (with 8-pound leaders), emerald shiners, night crawlers and trout worms with good success!

So, next time you're planning an action-packed trip to the lower Niagara River for steelhead, make sure to charge up those deep-cycle batteries, choose appropriate attire and take along a large thermos with a hot beverage. Hey, it's hard to improve on a day full of steelies, but having *all* the right equipment never hurts!

*Aaron is available for guiding you. You can contact him via e-mail at [aashirley@hotmail.com](mailto:aashirley@hotmail.com)*

# Make Your Own Floats – It's Easy!

by John Kendell

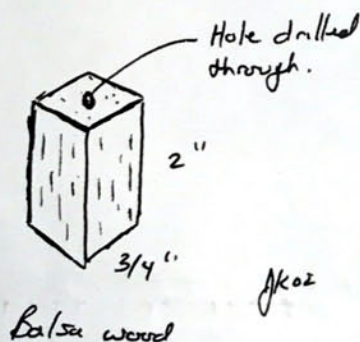
Float fishing is perhaps the most effective means of fishing rivers for salmon and trout. Sure, there are other methods, but the float allows you to suspend your hook at the proper depth and present a drag free drift at any depth, in fast, slow or deep water. Whether you present a roe bag or a fly, float fishing is deadly, but can be costly too. For those new to the sport it is common to lose many floats on a fishing trip and with a cost of 2-3 dollars it can add up. Well, here is the way you can make some floats at home, customize them as you like and fish away.

## Materials:

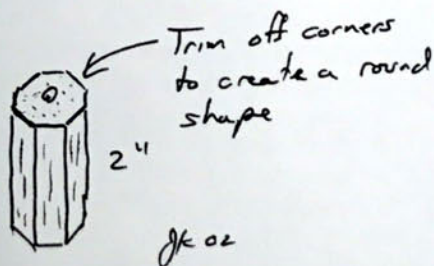
Balsa wood ( $\frac{3}{4}$ " x  $\frac{3}{4}$ " ) square stick cut into 2" lengths  
Power drill  
Drill bit  
Sandpaper (#40 and #180)  
Bamboo skewers  
Varathane or other urethane varnish  
Brightly coloured paint  
 $\frac{1}{8}$ " surgical tubing (cut into 5 mm lengths)

## How to:

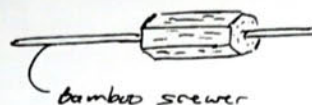
You can purchase the balsa wood from a model shop in your neighbourhood (there is a good one in Streetsville). I suggest  $\frac{3}{4}$ " x  $\frac{3}{4}$ " sticks, about 36" in length to start. Cut the stick into 2" sections, or to the length you want your floats to be. Then, take a small drill bit and drill a hole ( $\frac{1}{16}$ " to  $\frac{1}{8}$ " ) in the centre of each square.



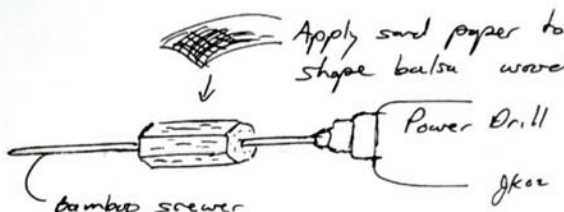
To speed up the process you can trim the corners of the cube with a sharp knife (be careful though).



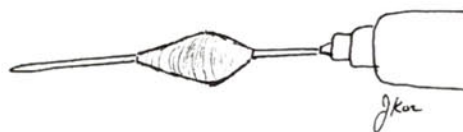
Now place a bamboo skewer into the drill and slide the pre-drilled cube onto the skewer. Turn the drill on so the balsa cube spins as if it was on a lathe.



Now use the coarse (#40) sandpaper to shape the float into the desired shape (like a teardrop) and sand until smooth.



Then switch to the fine (#180) sandpaper to finish smoothing the wood.



Remove the new float from the bamboo skewer and place a shorter (4"-5") skewer to be used as the quill for the float. You can glue the quill in place (crazy glue) or leave it unglued if the fit is tight. Make sure the quill extends past the top and bottom of the balsa wood.



Now dip the float into varnish and allow to dry. Repeat with a second coat to ensure the wood is sealed. Now, with a fine brush paint the yellow or orange paint around the top. Once you are happy with the painting apply two additional coats of varnish to seal the paint.



Add the tubing once the finish is dry and GO FISHING!

# Storm Water and Flooding Threaten Our Rivers!

by John Kendell

The greatest threat to all rivers and the fish within them is storm water and flooding from urbanization. As the Cities of Mississauga, Brampton, Halton Hills and Orangeville grow the Credit River is pushed further into what will be an unstoppable demise if major changes do not happen quickly. As forest and farm land are turned into subdivisions, with paved roads and driveways, roof tops, down spouts going directly to the river, industrial areas, shopping malls and parking lots we lose another small chunk of the Credit River. In tiny pieces nobody really notices it, but now, with over 20% of the watershed urbanized the damage is obvious to those who visit the river.



Many of you have become accustomed to the river being muddy and flooded after rainfall, but it should NOT be this way. Rivers that remain in pristine condition such as many Gaspé flows run clear after 3" of rain. That same rainfall on the Credit would lead to near catastrophic flooding. The pictures accompanying this article are from rainfall under 1" yet the mud, flooding and impacts on the river are obvious. The pictures of Carolyn Creek show just how bad it can become. Carolyn Creek was a small stream with chub and the odd trout 20 years ago. Now it dries up in summer and bursts its engineered banks after a thunder- storm. Historically it likely was home to Atlantic salmon, now it cannot support fish or insect life. It also poses a threat to residents, especially children, due to flooding. The negative effects don't end there! All that water flooding from all the urbanized creeks causes the Credit River's main channel to become over widened, shallow, and eroded, filling in pools, destroying spawning beds, and washing in riparian vegetation. The flooding and erosion force engineers to line the banks with armor stone and rip rap, and change



a natural river into a storm sewer conduit to the lake. The costs are very high, millions spent to armor stream banks, millions more on flood damage and millions are lost in revenue from the loss of fishing time and loss of fish.

History is full of lessons, but not enough people want to learn. During the 1930s and 40s the lower Credit River almost dried up in summer. Pictures from 1910 show flooding on a scale I have never seen in the spring thaw, with the river 14' deep over the old Streetsville Dam. Sadly we have no flow data or pictures from 1820 when the river teamed with Atlantic salmon, but we do have writings from some early settlers who talk of endless fish and spearing salmon in July in what is now Erindale Park.

The Credit River is healthier today than it was 120 years ago, but what we have gained is being lost rapidly by poor storm water management and massive urban expansion. Developers are not forced to follow new regulations, but the regulations that were in place at the time of permitting. It's the same mentality as someone being diagnosed with a disease 10 years ago and continuing to treat them with 10 year old medicine when a cure was already discovered.



The damage can be reversed! Urban areas MUST mandate eaves trough disconnection to allow water to infiltrate the ground. Industrial and shopping areas must have large storm water retention and settling ponds to absorb and clean runoff. Residential areas must also have storm water ponds to collect runoff from the roads and settle it before releasing it to the river or tributary. Finally, storm water ponds MUST be larger, deeper, capable of absorbing 50 mm of precipitation and releasing it over a 10 day period and bottom draw to release cold water to the river. Developers MUST prevent mud and silt from entering the storm sewers and rivers on all sites. There are laws against it but the pictures tell another tale! In the short term it may cost a little more, but in the long term (20-50 years) it will save billions of dollars in erosion prevent and property value.

Write your local politicians to push for better storm water management. We will all benefit!



## Graphic Design

Midnight Type and Graphics

445 Selsey Dr., Mississauga, ON L5A 1B7 Tel (905) 897-6816

## Printing

RP Graphics Group

425 Superior Blvd., Unit 1, Mississauga, ON L5T 2W5 Tel (905) 795-1110