CREDIT RIVER ANGLERS ASSOCIATION

LIGHT LINES

Fall, 1998 **Volume 9, Number 4**

FISHERIES MANAGEMENT PLAN UPDATE

Well, the meetings continue. Once a month I meet with about 20 other people to shape the future fishery. Members from Izaak Walton Fly Fishers, Trout Unlimited and Mississauga Bass Masters all sit on the committee, as well as CVC, MNR and planning staff from the area. The mood is positive with everyone agreeing conservation and protection of the resource is the number one priority. The second priority is species mix. On this topic we are still at odds. CRAA has been pushing for steelhead to be allowed back to the electro-barrier in Inglewood but IWFFC and TU have been pushing to stop steelhead at either Streetsville or Norval. Other members of the group are unbiased (which is good) and hopefully will follow the advice of the biologists.

Several of the top biologists for Lake Ontario tributaries wrote a paper on the effects of steelhead on the upper river with estimates of the population. The consensus is clear. If steelhead are stopped at the Norval Dam they will not be able to reproduce or sustain a population! Based on IWFFC and TU's wish the steelhead run will be destroyed in the Credit River. I find it hard to believe that two fishing/conservation organizations would push for the elimination of steelhead. CRAA has suggested the electro-barrier as the acceptable dividing point between the Forks and the migratory salmonids. The biologists suggest the WILD steelhead run would be 10,000 to 25,000 fish if steelhead could reach Inglewood. The biologists also say there would be absolutely no effect on the resident fishery (which is mostly above the electro-barrier and dams). The biologists actually estimated the WILD steelhead run could be up to 50,000 steelhead if the fish could reach the Cataract. This option sends chills down the backs of some Forks fly fishers, but the biologists said there would be little or no biological change to the brown trout and brook trout in the Forks if it was full of steelhead. The electro-barrier is a fair dividing point and a generous compromise on the part of migratory anglers. Sadly, IWFFC and TU don't seem willing to share any of the river with the steelhead, salmon or the migratory browns. They are even split on whether they like Atlantics. It is this narrow view that almost destroyed the steelhead fishery ten years ago in the Credit River. It won't happen again.

Public Meetings

The MNR has set two major public meetings to take public opinion about the options. The options will be where to separate the migratory fish, Streetsville, Norval, Inglewood electro-barrier or the Cataract. Your opinion counts so BE THERE. Place YOUR vote on where YOU want steelhead to be. The MNR takes public opinion seriously. Make YOUR voice heard!

Meeting Dates

November 7 Focus Group Public Meeting
Caledon Meeting Hall

November 18 Public Meeting
Eldorado Park

The scientific data and the biologists agree steelhead MUST reach at least Inglewood to reproduce. They also need the lower sections of Silver Creek and Black Creek. The MNR now has some money to repair the electro-barrier so there are no excuses!

Credit River Anglers Association

LIGHT LINES

Contributions are welcome from
all members and non-members alike.
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THE HOME DEPOT

1998 SUMMER PROJECTS

By Mike Brady

As some of you may know, this past summer CRAA hired students for a summer work crew which did numerous rehabilitation projects on the Credit River and it's tributaries as well as collecting fees from boaters at Port Credit and Lakefront Promenade Park Launch Ramps. The work crew consisted of Aaron Bodiam, Mike Brady, Brian Morrison, Matt Richards, and Vance MacDonald.

The rehabilitation projects consisted of planting trees to shade the river, building bank stabilizers and wing-deflectors in order to halt erosion of the banks as well as to increase stream flow in order to create holding areas for fish and have faster, cleaner flowing tributaries. The projects were completed at a variety of sites throughout the watershed. Here is a short summary of each project and the long and short-term goals expected.

Silver Creek

Quite a bit of time was spent at Silver Creek, which is an extremely productive rearing stream for juvenile steelhead when they are allowed to utilize its waters.

Cedarvale Park, Georgetown

In Cedarvale Park, in Georgetown, repairs were done to 6 bank stabilizers and wing deflectors already present in the creek. All of the structures had logs added to them as the structures had not been built right or completed by previous clubs. It was evident that in the high waters of spring the creek was going right over top of the wing deflectors and not only eroding out behind the structure but also not serving its purpose by digging out the bottom of the creek to create a deeper channel. The structures were also back filled with rock to fill in and inhibit any future erosion.

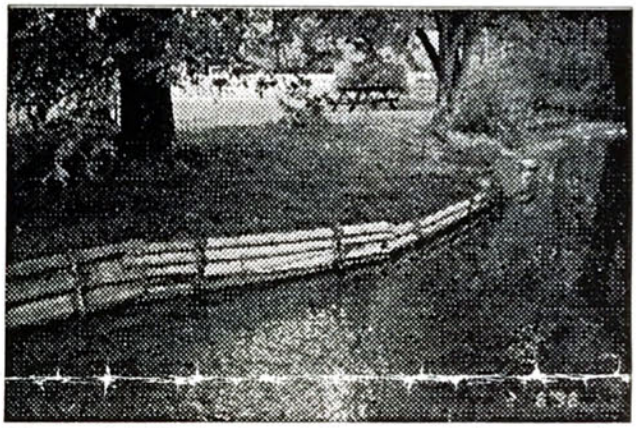

Figure 1. This bank stabilizer was built up and back filled with rock, soil and covered with sod.

One week after the repairs it was clear that the creek was already digging itself out by the repaired deflectors. Two new wing deflectors and one more bank stabilizer were also built in the park.

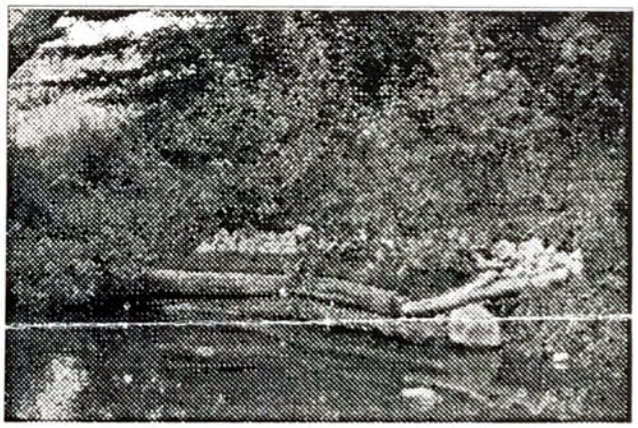

Figure 2. You can see the newly planted trees overhanging the bank stabilizer. Three steelhead smolts were observed in this site.

These structures will stop the erosion of an outside bend and increase the flow of the creek. All of the structures both new and existing were back filled with rock and topsoil, and then covered over with

Continued on page 4

sod. There were also about 1,000 trees planted in the park. Willows were planted in sections of the creek that had unprotected banks and cedars and pussy willows were distributed throughout much of the rest of the stream side area. Cedars were especially helpful in planting on and around the bank stabilizers.

Between 8th & 9th Lines, Georgetown

This stretch of creek was known to contain a large number of abandoned beaver dams that were causing the warming of the creek by creating lakes of water where there should be a fast flowing creek. When the day was done, about 20 beaver dams had been removed including two very large beaver dams one of which was 6 feet high. With this work completed the creek should remain cold during those hot summer days which will increase trout reproduction significantly.

Levi Creek

Elwood Morris Property

The work completed on Levi Creek was done below Streetsville Glen Golf Course, above the 407, on a section completely devoid of any stream side tree cover. Over 1,500 trees were planted which consisted of willows, poplars, cedars, birch, and maples. These trees will provide shade to the river as well as preventing any future bank erosion. A number of bank stabilizers and wing deflectors were built in order to increase the flow of the river and to halt bank erosion and siltation. There were also a few silt collectors placed in the creek to gather silt, which completely blankets the fine gravel bottom of the creek. Small boulders were placed in some slow sections of creek in order to create some riffle-pool-riffle water instead of the continuing slow, silt filled flows of the creek which get very warm, very quickly in the sun. This section had virtually no habitat for trout before our work, but will be a trout nursery within a year.

Credit River, Glen Williams

Over the course of the summer the work crew completed two major projects on different properties located on the Credit at Glen Williams.

Doug Biggar's Property

This property is one of a number of adjacent properties which is lacking large trees close to the river and therefore shade and habitat. There was one very large willow present on the property that was approximately 80 feet high and provided shade over the river throughout the entire day. If only all of the Credit had trees such as this one along its banks. There was some serious erosion at the base of the willow, which was filled in with the largest pieces of rock from the river in the vicinity to protect the tree. This should help to ensure that this huge willow will continue providing shade for the river long into the future.

A large number of trees, about 600 were also planted on Mr. Biggar's property. The trees planted were willows, maples, poplars, and a number of cedars. The willows and poplars should grow fairly quickly and provide shade for the river in only a few years. Although the maples and cedars take a bit longer to grow, they can grow extremely tall and live for a long, long time ensuring a shaded, cooler river for the future. If some of Mr. Biggar's nieghbours like what they see, we should have permission to plant their properties in the future. The goal of creating a much cooler Credit River is becoming that much closer with each subsequent tree and area we plant!

Bob Wolf's Property

The sight of our up-welling box and nursery was also the sight of some rehabilitation work for our

Continued on page 5

1998 SUMMER PROJECTS CONTINUED

work crew. On the lower end of the property there a several large trees, the only problem being that the trees are too far from the river to do any good in the form of shade. We planted 300 trees in the form of willows, poplars, and cedars. The trees should not only provide stream side shade for the river, but when firmly rooted also help to curb some of the erosion occurring on the banks of the river high above. The trees we planted should also stop some of the cattle on the adjacent side of the river from wandering to close to the banks and helping the erosion process along. In the spring of 1999 we will use willow stakes to stabilize/bio-engineer the eroding steep banks.

A pipe was set into Bob's lowest pond to release the colder bottom water to the river to improve water temperatures. This also made life difficult for the beaver on his property to dam up the pond. The pipe will be placed each summer and removed in the fall when the surface temperature of the pond cools off. This will keep cold water going directly into the river all summer long.

Erindale Park

A large amount of time was also spent in Erindale Park, where a lot of the results of CRAA's hard work can be seen!! The first week of the work crew's summer was spent finding, cutting, collecting, dragging, and placing the logs that were to be used in building the large wing deflector structure at the clay bank pool. The logs, which were collected from dead trees only, were collected in the forest from Erindale Park all the way to highway 403. Any of you who have walked that stretch know that is a lot of forest and a long way to drag logs around. All this work, and unfortunately CRAA did not receive the necessary permits from DFO. The proposal is still in, and hopefully by next summer we will have permission to complete the project. So for now, we can keep on walking past the clay bank flat and dream of the fish to come when it once again is the clay bank pool!

Figure 3. CRAA volunteers and employees re-building the Burnhamthorpe project.

CRAA re-built the bank stabilizer near the Burnhamthorpe Road bridge by adding logs on top of it that had been lost over the 3 years it has been there. The new logs were added and tied down, and the structure was back filled with a large amount of rock and gravel. During construction of this site we noticed two very interesting occurrences. Firstly, there is a storm sewer discharge at the site that is a little cooler than the river in summer. We noticed 1 juvenile Atlantic salmon and a dozen steelhead smolts sitting in 4 inches of water at the outflow. That same afternoon we saw a fish splashing in the shallows near us. We assumed it was a carp or lost salmon, it was mid July and water temperatures were near 30 C. As we got closer to the distressed fish we saw silver, lots of silver. The fish was near death from the hot water so we were able to grab it by hand. The picture below tells all. It was a 17.1 lb summer run steelhead. We released the fish into Mullet Creek which is cold in summer.

1998 SUMMER PROJECTS CONTINUED

In May CRAA volunteers planted several hundred cedars and willows with Councillor David Culham and scouts. About 100 large black willows were planted along the rivers edge between the pond and the barn where few trees exist. We staked each tree with t-bars to protect them from spring floods and ice, and kept weeds cut at their base to allow them to grow. If these trees can get a few years growth they will be able to stand up to the ice flows and shade the river.

Watering our trees

Due to the drought we suffered this summer we had to take a few hours each week to water all the trees we had planted. We also had to water the trees in our nursery. The results of a little care meant we only lost a few dozen trees from the thousands we planted.

CRAA CLOTHING

CRAA members are invited to order clothing with the CRAA crest embroidered in colour. The embroidered crest is identical to the crest included with your mailing (for those up to date), without the black trim.

You can place orders by mail or over the CRAA hotline. Please let us know the style, the size and the quantity you would like. You may send in a cheque for the amount or pay when you receive the clothing.

Style	Colours	Price
Baseball Cap	Tan/Dk Green peak	$13.00
	Dk Green/Tan peak	$13.00
Golf Shirt	Natural/Green collar	$35.00
	Dark Green	$35.00
Sweatshirt	Medium Green	$35.00
Nylon Jacket	Dark Green	$35.00
T-shirt	Grey (green print)	$12.00
The t-shirt is screened, not embroidered.		
Crests	2 1/4 x 4 1/4 colour	$ 6.00
Large Crest	3 ½ x 6 ½ colour	$10.00

All new and current members receive one colour crest free (they cost a fair bit to make). You may order additional crests if you wish. Colour car window stickers will be available this Fall and will be sent to all renewal members for free.

Port Credit Launch Ramps

As you know from the Summer Light Lines, CRAA was given the authority to charge money at Port Credit and Promenade Launch Ramps for fund raising to improve the Credit River fishery. The project was an astounding success. After expenses for printing and the summer students CRAA profited close to $8,000.00 which paid for additional students and a truck for the river rehabilitation crew. We have a surplus of $3,000.00 that will be held for projects next year.

CRAA hopes to continue the program next summer so we can continue or major rehabilitation projects. CRAA is indebted to The City of Mississauga, Councillors Corbasson and Culham and especially Marina Manager, Dave Broderich for all his help.

CRAA THANKS:

Outdoor Technologies for donating a Fenwick noodle rod and Abu Garcia spinning reel.

KTL Canada for donating an assortment of hooks, lures and other goodies.

Sommerville Truck Leasing rented an F150 to CRAA at cost for the summer of 1998.

Metro East Anglers for checking the water conditions for our hatchery with their tester.

Ontario Steelheaders for assisting in the Management Plan steering committee meetings.

HOW OLD IS THAT STEELIE?

CRAA completed a steelhead scale aging project this spring and summer with the help of some friends and fans. The MNR okayed the project after a bit of convincing after a collection protocol was agreed to. The scales were collected this spring and sent to a couple of the most experienced steelhead scale agers in the province. The results of the study were very positive and very surprising!

Most southern Ontario streams produce smolts at the age of 2 years. The Credit is no exception. There was a slightly higher incidence of one year smolts which only means some of our baby trout head to the lake at a smaller size. As expected, most of the one year smolts were actually fin clipped fish stocked by the MNR. Hatchery fish are big enough to smolt when stocked so this accounts for the anomaly.

The number of repeat spawners is a key indicator of the health of a steelhead river/population. The results were better than expected, although there is some room for improvement. 47% of the steelhead tested were repeat spawners. A very healthy population should be between 55% and 65%. However we also had a larger than normal return of small males (2.1) which were clearly the results of natural reproduction from the 1996 adult transfers.

Below is a representative sample of the 70 aged fish to help you better understand all the interesting information we collected from the scales. You will need to learn how to read the data so here is a short guide.

Guide to scale data.

Sex (M or F)and total length (TL) are straight forward. The fork length (FL) is the length of the fish from the head to the middle of the tail (fork).

- lk1st means the number years the fish spent in the lake before coming to spawn for its first time.
- stryr means number of years the fish spent in the stream from birth.
- lkyr means the total number of years the steelhead has lived in the lake.
- T age is the total age of the fish.
- Agem Age at sexual maturity.
- Class indicates the number of stream years followed by lake years.
- M means a maiden spawner (spawning for its first time).
- R2 means the fish is on its second spawning run, R3 is 3 years, etc.

The life history is shown as (2.3) which means the steelhead spent its first two years in the river and has lived in the lake for three years. I hope it all makes sense to you.

Examples of the scale aging data:

Sex	Clip	FL	TL	#sp	lk1st	stryr	lkyr	T age	Agem	Class	M/R2
F	RV	68	71.5	1	3	1	3	4	4	1.3	M
M	-	47	49	1	1	2	1	3	3	1.2	M
M	-	62	65	1	2	2	2	4	4	2.2	M
M	-	53	55	2	1	2	2	4	3	2.2	R2
F	-	70.5	73	2	2	2	3	5	4	2.3	R2
F	-	72	75	3	2	2	4	6	4	2.4	R3
M	-	69	71.5	4	2	2	5	7	4	2.5	R4

HOW OLD IS THAT STEELIE?

There is a somewhat generalized growth pattern that can be derived from the ages and the size of the fish. People look at us strange when we look at a steelhead and figure its age just by its size. This method is not perfect, but is fairly accurate. The table gives the average size for each age class in the Credit. This chart is for wild steelhead that spend their first two years in the river. One year smolts and hatchery fish have different growth rates and do not always fit into the chart.
After age 5 growth begins to vary greatly so the older the fish is the less accurate this aging method is. It is unusual to have steelhead over age 7, but a nine year old was sampled on the Nottawasaga in 1996. Remember, this method is not perfect, but close to 90% accurate.

Table 2. Average age for size chart

Fish length	estimated age
0-10 cm	1 (1.0)
10-25 cm	2 (2.0)
35-48 cm	3 (2.1)
48-58 cm	4 (2.2)
58-67 cm	5 (2.3)
67-76 cm	6 (2.4)
74-88 cm	7 (2.5)

Credit River Stream Watch

CRAA has initiated a stream watch program focusing on the lower Credit River (Streetsville to Port Credit) to educate the public and minimize poaching. CRAA stream watch personnel will also patrol the river up to the Cataract, but most of our effort will target the lower river due to the much higher fishing pressure.

CRAA has entered into the program with the regional Conservation Officer and the Aurora District MNR. The stream watch crew has a core group of Aaron Bodiam and Matt Groves (both Co-op students with CRAA this Fall), and Brian Morrison who is working part time for CRAA. We also have six CRAA volunteers who work with the students and the CO's from time to time.

CRAA and the CO have organized 10 patrols for the Fall through Erindale Park and the sanctuary. Two patrols have resulted in 5 no license charges and 2 sanctuary charges.

CRAA WEBSITE

CRAA member Jerry Tusa put together and launched CRAA's very own website in July, 1998. The website has had over 2,000 visits at this time. Not bad for 10 weeks. Check it out!

Http:/members.xoom.com/craa/

CREDIT VALLEY TRAIL

The City of Mississauga is planning to connect the Credit Valley Trail (Culham Trail) from Eglinton to Streetsville Park next Fall. CRAA has been included on the design team thanks to Councillor David Cullham who spearheaded the trail system 20 years ago. With CRAA's involvement we hope to assist designers in being fish friendly, to improve fish habitat and fishing opportunities. CRAA has also requested a fish viewing area be planned below the Streetsville Dam and that the fish ladder area be fenced off. This will increase the public awareness of the fishery and likely minimize vandalism at the ladder due to the public presence. Once this section is completed anglers will have trail access from Dundas Street to upper Streetsville. The trail will also make it easier for CRAA and the MNR to open more areas to fishing.

John Snobolen Visits CRAA

The honourable John Snobolen, Minister of Natural Resources visited CRAA at the Streetsville Fish Ladder with a large entourage of MNR personnel. The minister announced $55,000 in additional funding for the Credit River next year. These funds will go towards capital projects such as the electro-barrier and fish ladders, as well as the Fisheries Management Plan. More details and pictures will be in the Winter *Light Lines*.