### LAKE ONTARIO'S NORTH SHORE RIVERS

By John Kendell

What do all rivers that flow into Lake Ontario from Mississauga to Cobourg have in common? Lots of steelhead, as well as speckles, browns and salmon. But what geographical similarity do these rivers share that is so vital to the survival of the trout and salmon that we all love? The Oak Ridges Moraine!

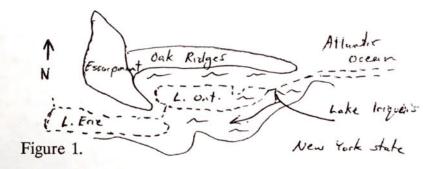
The Oak Ridges Moraine is the singe most important geographical feature that is the life line of all the rivers from Mississauga to Cobourg. This land formation runs almost parallel to Lake Ontario's north shore from the town of Caledon to the Trenton area.

So why is the moraine so important? The creation of the Oak Ridges Moraine began roughly 20 000 years ago, give or take 5 000 years. This was the era of the Wisconsin Glaciation, the most recent glacial period to hit North America. A moraine is a geographical feature that is created at the foot of a glacier as it ploughs along the ground. This is literally a pile of rocks, dirt, and anything else that was in the way of the glaciers movement. After the glacier melts a small hill remains.

What makes the Oak Ridges Moraine exceptionally large is due to the influences of two glaciers, the Lake Ontario Lobe and the Georgian Bay Lobe. As these two masses of ice literally bulldozed billions of tonnes of

sand, soil, clay and rock they finally ran into each other about 50 km north of Toronto. Remember that the glaciers that once covered this area were 2 000 m to 3 000 m thick (that's 10 000 feet thick!), so pushing a three hundred foot thick pile of dirt would be easy work.

Over a period of thousands of years as the glaciers retreated the Oak Ridges Moraine was the only dry land above the glacial Lake Iroquois (now Lake Ontario) shown in Figure 1.



Over time as the ground rose higher above sea level the lake shore retreated from the Oak Ridges Moraine exposing the land most of our houses are built on. At this point the time is about 12 000 years ago. Lake Iroquois was still connected directly to the Atlantic Ocean as shown in Figure 1. Ottawa and Pembrooke were still under the Ocean. It was at this time that Atlantic salmon entered Lake Ontario. Unfortunately they could not reach Lake Erie due to Niagara Falls.

Continued on page 4

# Credit River Anglers Association LIGHT LINES

Contributions are welcome from members and non-members alike.

Send your articles, comments and suggestions to:

Light Lines Editor
Credit River Anglers Association
60 Dundas Street East, P.O. Box 48042
Mississauga, Ontario L5A 1W0
Or call the CRAA 24-hr Hotline

(905) 608-0169

Commercial advertising rates: 1/16 page – \$15, 1/8 page – \$30, 1/4 page – \$50 Maximum size 1/4 page.

Newsletter production: 200 copies per issue Printed on recycled paper.

### **UPCOMING EVENTS**

#### **FEBRUARY**

### 16-18 SPRING FISHING SHOW

We need you to help out at the show. Give the hotline a call and leave your name, number and times you can help out. CRAA volunteers have free access to the show, however you must be on the registered list with the show organizers.

Last year CRAA provided 30 volunteers to the "Junior Angler" area. Don't miss this opportunity to be involved.

#### MARCH

### 26 BEGIN FISH LADDER OPERATION

This opening date is tentative and is entirely dependant on the weather. If we have another warm March like last spring CRAA will open the fish ladder earlier.

### APRIL

### 11 CRAA ANNUAL GENERAL MEETING

The CRAA General Meeting will be held tentatively at the CVCA Offices in Meadowvale. We will be holding elections, an awards ceremony, discussion of the 1996 projects, and guest speakers that will be discussing rod construction.

### 1-20 FISH LADDER OPERATION

The fish ladder will be operated normally for the first three weeks of April which have traditionally been the most productive times at the ladder. We're going to need a lot of volunteers so make sure you come out and help. This spring will be our best spring steelhead lift ever!

### 1-20 STEELHEAD TRANSFER

After the incredible success last spring with the steelhead transfer CRAA will again be moving fish beyond the upstream barriers. The data from the MNR showed a 500% increase in steelhead juveniles above the Norval Dam, even though the summer of 1995 was one of the hottest on record! That's solid proof of the success from our steelhead transfer!

### APRIL-MAY TREE COLLECTIONS

APRIL 5, 6, 13, MAY 5

CRAA will collect up to 5 000 trees and shrubs to begin our own tree nursery to supply our tree planting rehabilitation days. There will be at least six days of tree collection at various sites in the Credit Valley where CRAA volunteers will transplant cedars, small pines, poplars and willows into pots. The trees will be stored at the CVC nursery over the year and will be used as we need them.

# **HUTTONVILLE CREEK UPDATE**

After two years of intensive rehabilitation work by CRAA and the CVC the upper sections of Huttonville Creek are showing outstanding improvement. If your traveling up Mississauga Road near Highway 7 stop and look at the fruits of our labour. To date a 1.5 km section of this creek has been transformed from an open field with eroding banks and a very serious phosphate problem into a cold water creek. The base flow is improving and water temperatures are staying much cooler during the summer.

In the section where the willow trees were planted in 1994 the changes are most evident. The small willow saplings were only two feet tall when they were planted.

After a short 16 months the willows are up to ten feet tall and have developed many branches. By the end of the 1996 summer the willow trees will completely shade the section of creek they are planted along.

The cedar trees CRAA transplanted to this section of river in 1995 are also doing very well. Some of the trees which are up to ten feet tall have taken hold and begun to grow. Although the cedars do not grow as fast as the willows they are best suited for areas along small creeks and therefore should have a very positive effect on the creek and surrounding area.

CRAA will be continuing our tree plantings further down Huttonville Creek this summer.

### ANNUAL GENERAL MEETING

DATE:

APRIL 11, 1996

TIME:

6:30 PM

LOCATION: CREDIT VALLEY CONSERVATION AUTHORITY OFFICES

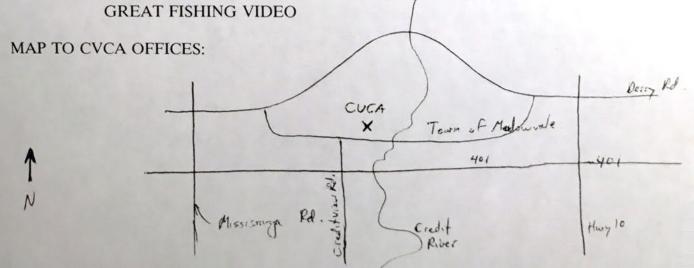
AGENDA:

ELECTIONS

**AWARDS** 

**DISCUSSION OF 1996 PROJECTS** 

**GUEST SPEAKERS** 



### LAKE ONTARIO'S NORTH SHORE RIVERS

The landscape became forested over time with a mainly deciduous forest dominating. The rivers stabilized and slowly cleared all the silt that remained before forests had existed. The water was cold and clear and the rivers became saturated with Atlantic Salmon. Even in summer the rivers had a strong flow of cold water. This is where the importance of the Oak Ridges Moraine comes in.

Figure 2 shows how precipitation falls on the moraine and where it travels from there. After interception with the forest it infiltrates into the porous ground and becomes groundwater. The Oak Ridges Moraine is mainly sand and gravel which are the best types of material for groundwater infiltration and water storage. With vegetation cover to stabilize the soil and prevent erosion the water is free to soak into the ground to become purified before it escapes as an ice cold spring feeding the rivers.

Mosuine Growd water flow
Figure 2.

Groundwater can also become pressured as it sinks into the ground. This can happen if it sinks into an area of the ground that is covered with an impermeable layer such as clay. As the pressure builds up the water breaks through soft areas in the surface (Figure 3.). This type of spring is referred to as an artesian spring. Due to the underground water pressure the water bubbles out of the ground like a small fountain.

spring. Due to the underground water pressure the water bubbles out of the ground like a small fountain.

Figure 3.

The ground water that seeps out of the ground in valleys and artesian wells are the life blood of all our rivers. Without a stable forest on the Oak Ridges Moraine the water will not soak into the ground and many of the springs and artesian wells will dry up. Without the Oak Ridges Moraine in healthy shape there would be no trout and salmon in our rivers. The moraine must be kept forested with minimal human impacts such as golf courses, housing developments, deforestation, aggregate mining and landfill sites. Remember what I wrote in the Spring Lite Lines about the decline of the Atlantic salmon. When the Oak Ridges Moraine was deforested between 1820 and 1930 it quickly became a scene out of the Sahara Desert with sand dunes and no vegetation. Without the vegetation to hold the soil and sand the rainwater just ran off into rivers causing flooding. Without groundwater to feed the rivers and keep them cold in the summer the salmon could not survive.

Most of the land between the Oak Ridges Moraine and Lake Ontario is flat with a cover of clay. Clay is almost impermeable and therefore has very little groundwater. Thus there are very few springs that enter the rivers once they leave the moraine, so without Oak Ridges Moraine our rivers are in big trouble.

So the next time you are traveling up any road that heads north from Lake Ontario watch for the Oak Ridges Moraine. It's very obvious. If your traveling up highway 10 the hill you must drive up at the Forks of the Credit Road intersection is the Far western edge of the moraine. On highway 400 the moraine begins around Canada's Wonderland.

# 1995 VOLUNTEERS/SPONSORS

1995 was another year where so many people took time out of their busy schedules to help out with CRAA events and rehabilitation projects. In 1994 CRAA had 47 different volunteers come out and work over 3000 hours. In 1995 we surpassed the record set the year before with 56 with a total of 3500 hours. This does not include the time that executive members put in to running the club.

NAME # OF WORK DAYS (31)	
John Kendell	27
Aaron Bodiam	21
Rick Matusiak	17
Grant McGuie	16
Mike Evans	15
Alex Matusiak	14
Mike Wiedamann	14
Jack Gibbons	13
Jerry Kaspard	10
Grant Davidson	9
Paula Carrasco	8
Russ Jacobson	7
Kevin Velica	7
Steve Waud	6
Shaker Srouji	6
Jon Bisset (MNR)	5
Chris Goh	5 5
Jason Neglia	5
Mike Tost	5
Zoltan Bankuti	4
Justin Bankuti	4
Keith Burrows	4
Bob Morris	4
Peter Niclassen	4
James Niclassen	4
Jayson D'Andrea	3
Tony Gomez	3
Dave Lizmore's Class	3 days
Debbie Purgavie	3
Russ Scott	3
Darren Appleton	2
Shane Bury	3 3 2 2 2
Bob Ernst	2

NAME # OF	WORK DAYS (31)
Caroline Goh	2
Derrick Hussey	2
Bryan London	2
Derek McNair	2
Jameel Mohammed	2
Harry Nijhar	2
Adrianna Nijhar	2
Natasha Nijhar	2
Rojan Rajaratnam	2
Jurgen Richter	2
Joel Sotomayer	2
Ron Turalinski	2
Diana Wiedamann	2
Chris Winadicto	2
Brad Cansick	1
Nelson Domigues	1
Mark Goh	1
Darryl Goh	1
Mitch Hames	1
Donna McNair	1
Angela Nijhar	1
Bob Small	1
Tasso Smythe	1

### **CRAA SPONSORS**

### TALON RODS

The distributors of TALON RODS have been very generous to CRAA. In 1995 they donated two rods to CRAA for use as prizes at fundraising events. The rods are new on the Canadian market but have already found a niche with anglers who have tested them. CRAA is grateful to Ian and Brian for their generosity and foresight to active angling clubs like the Credit River Anglers Association.

### KODIAK

For the second year running KODIAK has been our biggest sponsor providing us with footwear and sporting goods for prizes at all of CRAA's events.

Continued on page 6

#### SPONSORS CONT'D

### KODIAK CONT'D

We look forward to more support in the future from Grant Davidson who was the key to the sponsorship.

#### ADVANCED TAXIDERMY

James and Shawn have given an exceptional opportunity to all current CRAA members. Simply by belonging to CRAA any member will receive a whopping 25% discount on any mount done at ADVANCED TAXIDERMY. Make sure you take advantage of this generous offer.

#### ANGLING SPECIALTIES

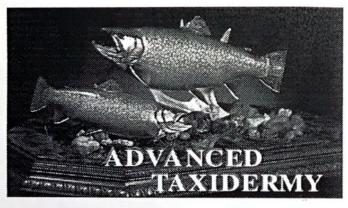
The owners of ANGLING SPECIALTIES have continued to support CRAA by offering a 10% discount to our members. They have also been very helpful at selling tournament tickets and raffle tickets. Make sure you drop by, especially if your a fly tier.

#### THE BAITWORKS

Bruce, owner of **THE BAITWORKS** has always been active in improving the fishery. For the past ten years he has been involved in enhancing the steelhead population in southern Georgian Bay. Bruce also offers a 10% discount to CRAA members in good standing. Next time your in Thornbury drop in and say hello.

### REDWING TACKLE

The owners of **REDWING TACKLE** have donated 'Blackbird Floats' and other products to CRAA over the last two years as prizes for the CRAA Salmon Tournament and raffle prizes. CRAA thanks Barry and all his employees for their sponsorship.





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# **MOUNTING A FISH?**

## **Advanced Taxidermy**

All CRAA members with valid membership card are now eligible for a 25% discount on all mounts done by ADVANCED TAXIDERMY.

### **RESERVOIR PIKE ON ICE**

By Aaron Bodiam

Any fish through the ice is fun, but pike are the king when it comes to hard water fishing. Put away those delicate rods and pull out the serious gear for reservoir pike. Reservoir! That's right! The Orangeville Reservoir has some of the biggest northern pike in southern Ontario just waiting to give you the fight of your life.

Orangeville Reservoir is only forty minutes north of Mississauga on the north eastern edge of Orangeville. The reservoir is the result of an abandoned gravel pit being flooded about 25 years ago. At that time bass and perch were stocked into the lake and it was opened as a fishery. In the last ten years the reservoir has produced perch up to 16 inches long and bass weighing in excess of six pounds! However, the big fish on the block changed a few years ago when someone illegally stocked northern pike into the reservoir. They adapted well and in the last two years have been showing up in huge numbers.

In 1994 an angler who was fishing in June landed a 23 lb monster pike. Good luck finding comparable fish south of Perry Sound!

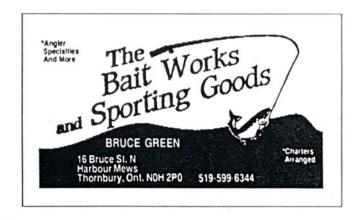
### WHERE AND WHEN TO FISH ON ICE

The first ice is usually the best fishing on the reservoir (contact the Credit Valley Conservation Authority for ice conditions (905) 670-1615). Look for pike along the edge of weed beds, points, and reefs. These are the key spots in early winter.

It can be a game of patience, after setting your bait in key locations you have to wait; sometimes hours, sometimes seconds! Tip-ups are my preferred way to fish, using heavy line with a large hook tipped with a 6" sucker. However, if jigging is your game than come prepared with big spoons like the Williams Wabler or big Rapala's. And don't forget your wire leaders.

As winter progresses the fish begin to move from shallow areas to the deeper sections of the lake. However, below 17 feet the water is anoxic (void of oxygen) so fish will not venture below that depth. In shallow water the pike often congregate around bottom structures such as drop offs, boulders, and any woody debris. The Orangeville Reservoir also offers the opportunity to watch your bait be engulfed by a monster pike. The water is crystal clear with bottom being visible up to 15 feet deep.

For ice hut rentals, ice conditions, and the operating times of the reservoir call the CVCA at the number above.





### THE MICHIPICOTTEN RIVER

By Shaker Srouji

Where is the Michipicotten River? Only minutes away from downtown <u>Wawa</u>. It may be a long drive, but it's worth it for tough Lake Superior steelhead and big chrome fall chinook salmon.

The Mich, as it's known by the locals is a little bigger than the Credit, about five times bigger! The fishing begins in late April when the river is free of ice and has lowered following the spring runoff. The steelhead are in and you need to find them.

The most popular section of the Mich to fish is between the power dam and Lake Superior. This stretch of river is roughly ten miles long and littered with rapids and holding pockets. Closer to the dam the river narrows slightly and becomes faster and deeper, the perfect water for chrome steelhead. Just remember, in this section wade carefully, it's very dangerous.

The best time to fish the river is Sunday and Monday because the water level is lowered when power generators are shut down for the weekend. From Tuesday to Saturday it's fishable, but the water will be four feet deeper and the current is hazardous.

With the best days in mind, the best fishing is usually close to the dam. As the fish run the river they are completely blocked by the 40 m high power dam that does not have a fish ladder. When fish give up jumping at the dam they will drop back to the lower river to spawn and recover.

This is a tough river. It's hard to fish and the fish have to work hard to survive in the fast water. This makes the Mich's steelhead stronger than fish from Lake Ontario. Although it is unusual for steelhead to grow

larger than 10 lbs, one half that size will easily spool you in the fast water if your not fast enough.

When it comes to bait I always start with roe. However, with so much water to fish I will experiment if I haven't hooked a fish in the first hour. The best technique is to try everything in your vest until you find what works. Sometimes it is roe, other times it may be a Kwikfish, or a Little Cleo, or an assortment of flies.

To reach Wawa take highway 400 to Highway 169. At Sudbury take Highway 17 past Sault Ste Marie and three hours later your in Wawa. The drive is roughly ten hours through some of the most beautiful countryside, but watch for all the MOOSE.

