



NEWSLETTER

Volume 8, Number 3

November 1996

BLAME IT ON THE FIELD SEASON!

PAST PRESIDENT'S MESSAGE

Doug Clark (as of May, 1996)

NCD RIVERS AND STREAMS TECHNICAL COMMITTEE MEETING

I attended the Rivers and Streams Technical Committee meeting in Rock Island, Illinois early in April to give a presentation on the Watershed Report Card and a briefing on Ontario's Natural Channel Design perspective. The U.S. Chapter reps showed a keen interest in both initiatives and are looking to the SOC to make available these documents and assist with implementation.

ANNUAL MEETING & "HABITAT THAT WORKS" SEMINAR

See what you missed! Included in this issue is a photo insert of the Annual Meeting. About 50 members and new members joined us in Dorset for a weekend of talks, our annual meeting and some outdoor (and indoor) activities.

On behalf of the SOC Executive I would like to thank Deborah Martin-Downs, the five Seminar Speakers, and everyone who helped make the March "Habitat that Works" seminar a success. Despite the provincial government strike this Chapter initiative still boasted over 50 attendees. I'm sure those who attended will agree with me that this was a top-notch continuing education event and I am confident that the forthcoming Design Workshops will provide outstanding opportunities to expand our fisheries knowledge and understanding.

AFS - Southern Ontario Chapter EXECUTIVE MEETINGS

The Southern Ontario Chapter Executive Committee (EXCOM) holds monthly meetings at various locations in the GTA. They are open to all SOC members. Contact a member of the Executive for more information.

CONTEST!

"LOOKING FOR A FRESH NEW IMAGE!"

The Southern Ontario Chapter of the American Fisheries Society is looking to change their image. The call goes out to you, SOC members, to come up with a fresh new logo for your chapter.

The new logo must identify the AFS and SOC. Sizes and uses must be flexible and must be digitizable. The prize for designing such a logo is \$300 or a fishing trip for four on the OSPREY, courtesy of Tarandus Associates Limited.

All logos are judged by the Executive Committee and the SOC reserves the right not to award the prize should no suitable logo be found. Artwork will not be returned and will become property of the AFS-SOC.

GET YOUR SUBMISSION IN SOON!

Get Your Copy Now!***'Natural' Channel Design:******Perspective and Practice***

by Dan Shrubsole

465 PAGES, PAPER; 1994

PRICE \$37.00 + G.S.T.

Stream Analysis and Fish Habitat***Design: A Field Manual***

by R. Newbury and M. Gaboury

256 PAGES, PAPER; 1993

PRICE \$60.00 + G.S.T.

Also, the Southern Ontario Chapter of the American Fisheries Society is now a retailer of publications and products of the Ontario Ministry of Natural Resources. The Chapter is offering this material to members at 20% off list price. (Aerial Photographs are not presently available at discount.)

Further information regarding products and publications can be found in the MNR Products Catalogue, which was included with the last newsletter. If you did not receive a catalogue, please contact any editor at Tarandus Associates Limited and a copy will be sent to you.

The above noted publications/products can be obtained by contacting Barry Myler at 905-840-6563 at Tarandus Associates Limited.

**Rehabilitation of Fish Habitat Workshop:
Design and Construction**

Are you confused by blueprints? Are terms like granular A, crusher run and geotextile Greek to you? Are you involved in a project that just doesn't seem to be going right? Do you want to become more involved in the implementation of your projects but are not sure how? Then this workshop is for you. The Southern Ontario Chapter is presenting the Design and Construction of Fish Habitat Workshop.

In this three day workshop, we will walk through the process of habitat design and the preparation of construction drawings for habitat improvement on a real section of river. We have chosen to use a real river reach of the Don River, not only to provide a more meaningful workshop, but also, the design can be used by a local interest group as they attempt to improve fish habitat in the watershed.

On day one, we will spend the morning introducing participants to the design process, appropriate design philosophies, and hydrology/hydraulics before we venture out to the field for an afternoon of field measurement. We will stress the integration of disciplines on working groups to simulate the real life need to work in teams.

On day two, we will begin by developing conceptual designs for the reach assigned to each working group. Instruction will be provided on turning the conceptual design into a detailed design drawing - standards, terminology, scale etc.. We will spend a session on materials available for use including stone types, erosion control mats and prefabricated rolls and mats for specific applications.

Armed with all of this information, participants will be charged with developing their conceptual design into a detailed plan, including specifications and materials.

On Day three, we will explore the implementation of the project including choosing a contractor, contract administration and the realities of managing phasing, vandalism, safety considerations and construction timing.

We are aiming to hold the Workshop in June 1997. Look for a brochure being mailed to members and affiliated organizations. If you want more information or are interested in reserving a spot, contact Deborah Martin-Downs at Gartner Lee Limited.

MOVING?

Please help us keep our membership list current by notifying the Chapter of your new address. Change of address information should be sent to:

Shawn Taylor
Membership Coordinator
M.M. Dillon Limited
Box 1850, Station A
Willowdale, Ontario
M2N 6H5

WHAT'S COMING!

Workshop For SOC - Please refer to cover page of the Newsletter. As further details become available, members will be notified. Also note, a brochure announcing the official date, location and sign-up details will be sent to all members.

ANNUAL MEETING 1997! - Next year's annual meeting is slated for the end of February and will hopefully be held at the Frost Centre in Dorset. Again, when details are finalized, members will be notified.

DECEMBER

1-5, 1996 - Third Marine and Estuarine Shallow Water Science and Management Conference. Holiday Inn on the Boardwalk, Atlantic City, New Jersey. Contact Edward Ambrogio or Ralph Spagnolo, U.S. Environmental Protection Agency, 841 Chestnut Street, Philadelphia, PA 19107; 215/597-3697.

4-5, 1996 - 11th Annual Center for Environmental Information Conference, Arlington VA, USA.
(e: ctreninfo@igc.apc.org).

FEBRUARY

1-4, 1997: Molluscs '97: Symposium on the Molluscs of the Indo-West Pacific and Australasian Region, Rottneest Island, Western Australia, Australia. (F.E. Wells, Western Australian Museum, 1 Francis Street, Perth, W.A., Australia 6000; t: 9-427-2745; f: 4-3860-574; e:j.booth@niwa.cri.nz).

9-14, 1997: 5th International Conference & Workshop on Lobster Biology and Management, Queenstown, New Zealand. (John Booth, NIWA, P.O. Box 14-901, Wellington, New Zealand; t:4-3860-300; f:4-3860-574; e:jbooth@niwa.cri.nz).

MARCH

17-19, 1997: 4th Thematic Conference on Remote Sensing for Marine and Coastal Environments, Orlando, Florida, USA. (Robert Rogers, ERIM, Box 134001, Ann Arbor MI, USA 48113-4001; t:313-994-1200 ext. 3382; f:313-994-5123; e:rogers@erim.org).

APRIL

6-10, 1997: 7th Annual Meeting of SETAC-Europe, Amsterdam, The Netherlands. (Rod Parrish, SETAC, 1010 N. 12th Ave., Pensacola FL, USA 32501; t:904-469-1500; f:904-469-9778).

7-11, 1997: Radionuclides in the Oceans, Part 2, Norwich and Lowestoft, UK. (MAFF, Lowestoft, UK; t: 44-1502-562244).

**American Fisheries Society
Southern Ontario Chapter
EXCOM Members**

President:	Deborah Martin-Downs
(T)	(905) 477-8400
(F)	(905) 477-1456
E-Mail:	dmdowns@ibm.net
Past President:	Doug Clark
(T)	(905) 670-1615
(F)	(905) 670-2210
President Elect:	S. Donald Speller
(T)	(905) 840-6563
(F)	(905) 840-6128
E-Mail:	dspeller@direct.com
Vice-President:	Ed DeBruyn
(T)	(905) 336-6436
(F)	(905) 336-4819
Secretary:	Dave Gibson
(T)	(905) 704-2227
(F)	(905) 704-2044
Treasurer:	Barry Myler
(T)	(905) 840-6563
(F)	(905) 840-6128
E-Mail:	tarandus@direct.com

SOUTHERN ONTARIO CHAPTER NEWS

For those of you who missed the Annual Meeting in Dorset, the following is an explanation of the Watershed Report Card. The American Fisheries Society - Southern Ontario Chapter is proud to support the works of the Watershed Report Card and would like to inform those of you who have not yet heard of this publication.

In 1990, the concept of watershed management was being actively promoted by the coalition group, Fishermen Involved in Saving Habitat (F.I.S.H.). Among many other organizations, F.I.S.H. recognized that the community had to take a much more active role in managing their watershed by adopting a common vision of watershed protection and/or restoration. From this concept, the Watershed Report Card was proposed as a tool to address watershed issues through community stewardship. The methods outlined in the Watershed Report Card program will allow any group to complete an inventory

of their watershed, implement assessment and monitoring tools to determine the health of the ecosystem, develop a restoration plan, and monitor the success of their efforts.

Through the initial support of the Southern Ontario Chapter of the American Fisheries Society and the Ministry of Natural Resources, we have been able to hold two writer's conferences and complete the Bronze Level to a field draft stage. Les Stanfield, Chair of the Watershed Report Card would like to extend a personal thank you for all the support received from the Southern Ontario Chapter thus far.

We have envisioned three manuals in the series. Each level requires a different focus of activity. For example, at the Bronze Level, the group explores and maps the watershed in a series of overlays, then identifies possible trouble spots. At the Silver Level, the group tries to determine the health of the area based on an in-depth assessment of the sites previously identified at the Bronze Level. Using individual modules designed for specific habitat types, groups can determine where remedial action and/or long-term monitoring would be most beneficial. Finally, the Gold Level involves taking corrective action based on problems identified at the Silver level and encourages continued monitoring of the watershed.

In addition to the manuals for general interest groups, we have developed the Teacher's Guide to the Watershed Report Card, Bronze Level, which aims to promote the teaching of the watershed concept within the Ontario education system. Future Teacher's Guides are planned for the Silver and Gold Levels as well.

Set up in a similar format to Project Wild and FishWays, the Teacher's Guide to the Watershed Report Card uses hands-on activities to introduce the important concepts in the Bronze Level before the students go on to mapping.

THE 1996 ANNUAL MEETING AT A GLANCE

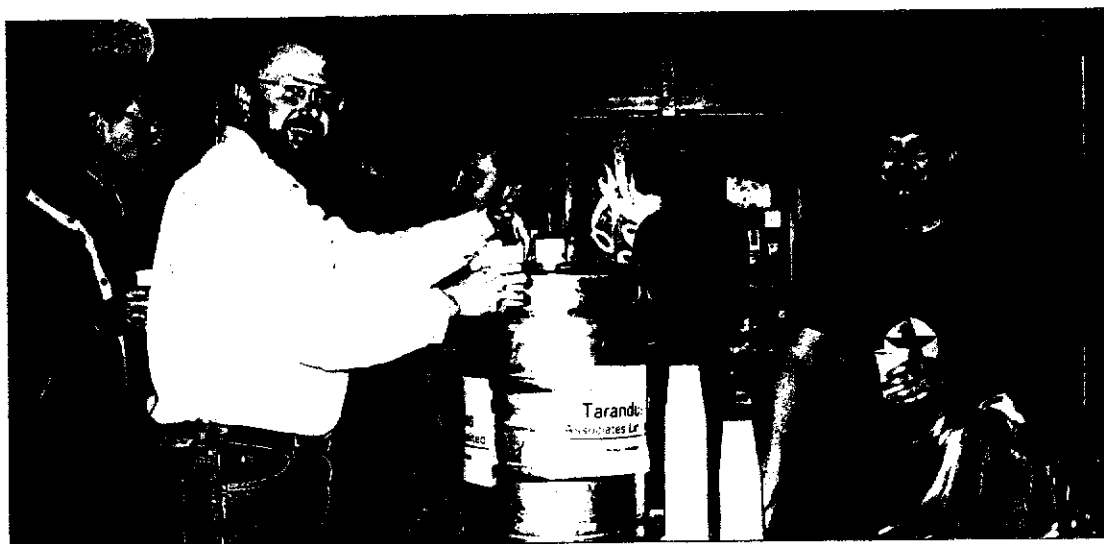
(It seems so long ago)



A great student turnout.



Doug Clark (President), Dave Gibson (Secretary) and Deborah Martin-Downs (President-Elect) share a laugh at the Annual Business Meeting.



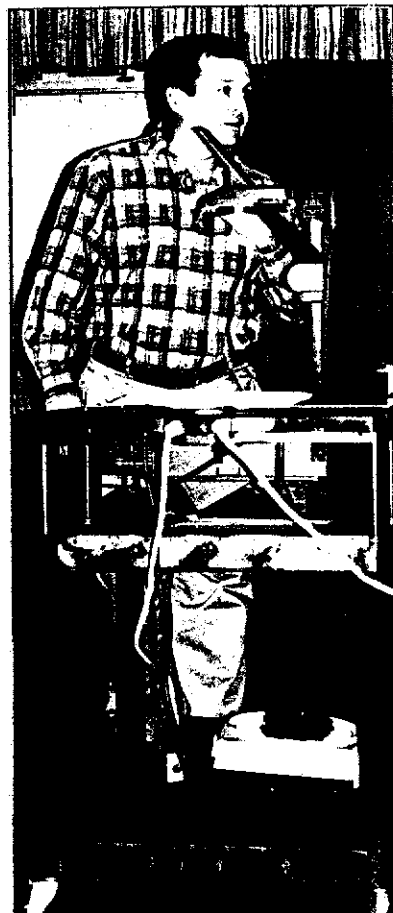
Refreshments flow freely at the post-meeting social



David Balsillie (ADM-MNR) outlines current government policies.



Tom Coon (President - Central Division) discusses AFS issues.



Don Speller (SOC Treasurer) discusses money matters.



Shawn Taylor reviews current membership.



Ken Minns (DFO), Gary Bowen (MOEE), and Les Stanfield (MNR) debate current topics.

The Silver Level is currently being developed. We have a number of volunteer writer's and teams gathering tools for the various assessment modules. It is vital that the assessment activities in the Silver Level are scientifically credible. In order to achieve a high level of confidence in this area, we have proposed to test the assessment tools against methods used by the scientific research community in Ontario. One such example will be to test the Stream Assessment module against the "Methodology for Assessing Fish Communities and Salmonid Biomass in Southern Ontario Streams" being developed by the Lake Ontario Salmonid Unit. We have submitted proposals for financial support to the Great Lakes 2000 Clean-up Fund and the Ministry of Natural Resources for the testing program and continued development of the Silver and Gold Levels.

Further financial support for the Watershed Report Card has come from a variety of sources over the years, including: the Ontario Ministry of Natural Resources, Ontario Ministry of Environment and Energy, Canadian Heritage Rivers Secretariat, Laidlaw Foundation, Copper Trust, Environmental Partners Fund 94\95, McLean Foundation, North Central Division of the American Fisheries Society (AFS), Canadian Aquatic Resources Section of the AFS, Ontario Cattlemen's Association, and the Association of Conservation Authorities of Ontario (ACAO).

Another level of partnership was formed with the StreamKeepers Program (Federal Department of Fisheries and Oceans, British Columbia). After the realization that these outreach programs are similar in nature, an agreement was made to write the new WetlandKeepers program in conjunction with the wetland module of the Watershed Report Card. Both organizations feel it is easier to share resources as well as keep information for community groups consistent.

Other plans for the Watershed Report Card are to organize a steering committee to implement a support program that would provide training workshops and a network of advisors across the province. In this regard, we are exploring partnerships with the various agencies to build on networks that are already in place.

Directors of the Watershed Report Card:

Les Stanfield, Chair of the Watershed Report Card - a research biologist with the Lake Ontario Assessment Unit of the Ministry of Natural Resources. (613) 476-1545

Allyson Kelly, Communications - (613) 399-5068 (author of this article on the WRC)

John Parish, Treasurer - a geomorphologist with Ortech International. (905) 877-1431

Robert Marshal, Director of F.I.S.H - Member of Save the Rouge Valley System, Black Creek Project and Trout Unlimited. (416) 289-9520

CURRENT RESEARCH

SOC has provided research funds to A. Mark Hartley for his research into the hydraulic properties of riffle-pool sequences in relation to channel design and fish habitat. The following abstract provides a brief summary of Mark's work.

HYDRAULIC PROPERTIES OF RIFFLE - POOL SEQUENCES IN RELATION TO CHANNEL DESIGN AND FISH HABITAT
by A. Mark Hartley, B.Sc., P.Eng.

ABSTRACT

Engineers are being required more and more often to incorporate the complex spatial and temporal variability of river systems into their designs of open channels.

Typically this requirement takes the form of either the creation or maintenance of fish habitat in compliance with the federal Fisheries Act. While a considerable amount of knowledge has been gained with respect to either open-channels hydraulics or fish habitat assessment there still appears to be some difficulty in completely understanding the physical processes involved in the formation and maintenance of rivers (natural channels) and ultimately fish habitat.

Compounding this problem are the uncertainties of the complex biological and ecological interactions within the riverine environment.

The purpose of this research is to thoroughly investigate the hydraulic performance of two gravel streams in rural Southern Ontario in order to deduce linkages between engineering designs of natural channel systems and the physical requirements of fish habitat. The hydraulic performance will be studied by measuring such parameters as velocity, shear stress, depth and substrate characteristics of riffle-pool sequences. A quasi-two-dimensional hydraulic model will be used in an attempt to improve on the predictions of the hydraulic parameters of previous hydraulic models used in fish habitat studies. This study will increase the ability to measure and predict change to fish habitat and reduce present difficulties in applying the "no net loss" principle of the federal Fisheries Act.

AFS INFO.

Courtesy of the "*FISHERIES*" magazine, the following information may be of some interest to you.

The American Fisheries Society (AFS) World Wide Web page has extended its service as a benefit to members. The job listings section is completely re-vamped and has links to 29 sites that offer job opportunities. Our site also links to many other sites of interest to fisheries professionals.

Check out the Web! As of 1 July, the program and abstracts for the annual meeting of the AFS are available for browsing and searching on the World Wide Web. You can find meeting information and more at <http://www.great-lakes.net/partners/afs> or link to the meeting home page through the AFS home page (<http://www.esd.ornl.gov/AFS>), which by the way now includes AFS staff listings and tables of content for all AFS journals and Fisheries.

WE WANT YOUR INPUT!

Your contributions and comments on the newsletter are extremely important and always welcome. We would like to include a variety of columns and comments, such as a student's column or present research column for example. Please send in whatever contributions and suggestions you might have. Remember, this is your newsletter and we are counting on members to give us input to make this newsletter a vital part of the Southern Ontario Chapter.

Contact the Editors at:
AFS-SOC NEWSLETTER
 c/o Tarandus Associates Limited
 18 Regan Road, Unit 24
 Brampton, Ontario
 L7A 1C2
 Telephone: (905) 840-6563
 Facsimile: (905) 840-6128

E-Mail:
tarandus@idirect.com

Your Co-Editors Are:
 Tara Boisvenue
 Barry Myler
 Richard Pope

Who says Fisheries Biologists are not cultured? Following is a poem for your perusal.

A Salmon's Lament at the Estacada Fishway
By E.A. McGregor, 1923

Oh tell me, brother Homo,
What you think I'd better do;
Here I am from deep salt water
With a dress of silvery blue.

I have struggled up Columbia's
Dang'rous waters set with seines,
Dodged 'twixt salmon wheels and
gill nets--
Overtaxed my meager brains.

When I reached the broad Willamette
Something told me to turn in,
And I swam past Portland City--
Urban sewage on my skin.

Icy waters of the Clack'mas,
Fed by sparkling mossy springs,
Aroused my latent instincts,
Formed by ancient salmon kings.

Up the stream to Estacada,
O'er many a baffling falls,
I was urged forever onward,
Onward up the cascade walls.

Ever dodging wary anglers
and evading cruel spears,
I arrive at Estacada--
Rather tattered for my years.

Up the stream to Estacada,
With my load of salmon eggs;
I would that I might shed my fins
And grow a pair of legs!

Some greedy corporation
Has built a mighty dam--
Eighty feet above the river--
For mercenary Man.

True enough they built a "fishway"
On the placid eastern side,
Fraught with crooks and bends
and zig-zags--
But they've not supplied a guide!

So here, at Estacada,
With my fifty-hundred eggs,
Alas has Nature failed me
In my desp'rate need of legs.

A slave to instinct habit,
I must batter at the falls,
Which splash o'er rocky ledges
'Neath the massive concrete walls.

For Nature's built within me
A law both wise and rash:
You who'd gain the crest,
Leap where the waters splash.

Oh men of greed and money,
You've reared a lofty dam;
Your whirling turbines capture
All the kilowatts they can.

I would that you might ponder
On the ages that have passed;
Of our countless generations
I fear I'm near the last.

Long e'er you men of fortune
Had your "easy-money" dreams;
In fact, before the white man
Ever saw our western streams:

In those virgin days primeval
My silvery chinook tribe
Fairly dammed the river's current
As we swarmed from ocean tide.

My breed is doomed to perish,
Your dams obstruct my way,
Our spawning runs are baffled,
My eggs I'll never lay.

Shame, greedy men of Mammon,
Though your golden turbines turn
You have stilled my silv'ry fam'ly
By your projects bold and stern.

Yes, I'm here at Estacada
With my fifty-hundred eggs,
After dodging seines and gill nets--
But I lack a pair of legs.

And an Alpine guide should lead me
Up your stupid mystic route,
Which is far too steep and dizzy
For a salmon or a trout.

(This poem was extracted from the Oregon Chapter of the
AFS, the Piscatorial Press, Spring 1996 edition.)

MNR Products/Publications

20% Off

The Southern Ontario Chapter of the American Fisheries Society is now a retailer of publications and products of the Ontario Ministry of Natural Resources. The Chapter is offering this material to members at 20% off list price. Available products include:

- Ontario Base Maps (OBMs) •
 - Provincial Series Maps •
 - Digital OBMs •
 - Territorial Series Maps •
- Forest Resource Inventory Maps •
 - "G" Township Plans •
- Recreation Series Maps •
 - MNR Publications •
 - Posters •
 - MNR Videos •

Please note that Aerial Photographs are not presently available at discount. For further information regarding these items, consult the *MNR Products Catalogue* which has been included with this SOC newsletter.

For Digital OBMs,
send orders to:

Mr Gerry Leering
c/o Greer Galloway Group Inc
973 Crawford Drive
Peterborough Ontario
K9J 3X1
Tel: (705) 743-5780

For all Other Items,
send orders to:

Mr Don Speller
c/o Tarandus Associates Limited
18 Regan Road, Unit 24
Brampton Ontario
L7A 1C2
Tel: (905) 840-6563