

#### **President's Message**

I spent some time last night getting my hockey pool picks organized. Going through the stats of various players and teams, I noted that some things have stayed the same this vear. I'll never hear the end of this, but even with the changes the Leafs made over the summer, they do not seem to have much of a team again this year. Unfortunately, I have to say the same for my favourite team, the Habs. The lack of change also applies to me. Due to our inability to recruit a new President and President-Elect, I am staying on as Chapter President. Having the same President for two years running hasn't happened since Les Stanfield was President for the first two years of the southern Ontario chapter (in 1988). One change I would like to note is Newsletter Editor. Deb DePasquale started as editor in 2005 and has done a fantastic job for 4 years. Because of a very hectic schedule, she has decided to step down and Bill Gardner has stepped up to continue the tradition of well written newsletters. I would like to thank Deb for her contribution and well organized articles and I would like to welcome Bill back to the ExComm.

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### **Bioengineering Course April 21-22, 2009**

By Andrea Hibbert

The Introduction to Bioengineering course was held in St. Clements on April 21 and 22, 2009 to an eager audience of conservation authority, consultant, municipal, provincial and federal agency staff. The course covered all aspects of bioengineering from theory to principals to permits and approvals to installation and construction techniques. Presenters included Samantha Mason from Conservation Halton, Glenn Harrington from Harrington and Hoyle Ltd., Jack Imhof from Trout Unlimited Canada, Dave Beaton from Credit Valley Conservation and Harry Reinders from R&M Construction. All of these presenters provided their expertise on the subject at hand.

Day 1 included classroom presentations in the morning and most of the afternoon. At the end of the day, the group went out to harvest materials (mostly trees) that would be needed for the bioengineering site on Day 2.

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#### President's Message (continued from page 1)

An important update I would like to make mention of is the recent decision by the Parent Society to change insurance companies. I like to think that the letter we sent to Gus Rassam explaining our displeasure at how Canadian Chapters were insured (or not insured, actually) helped with this change. Regardless, Canadian Chapters can now be covered through the US insurance at a cost of \$150 US annually. This is much less than the \$5,000 we were looking at under the previous company. Now that doesn't mean we can go and get hurt at the next AFS-OC event, but should something happen in the future, we now have insurance.

Though this has been a tough year for me, personally, this has been another great year for the chapter. Thanks largely to Samantha Mason, the chapter helped to support another very successful bioengineering workshop. We helped out and attended the Tri-Chapter meeting in Duluth. Finally, thanks to the efforts of many people at the Annual Meeting in Ottawa in 2008, we currently have our largest bank balance ever. I would like to thank the hard-working members of the ExComm who made my year as president run smoothly and helped move along a number of ongoing chapter initiatives. I would also like to thank you, the general membership, for continuing to promote and support the chapter in your everyday activities.

Though we are currently still searching for the next President and President-Elect, I can only see positive things for the chapter as we look towards the second decade of this century. We are organizing a lecture night with Ken Minns scheduled for next month. For those of you who miss Geneva Park, we are planning our regular AGM in Orillia from March 4-6, 2010 and it will be a good time to reconnect with friends, as well as meet new ones. The Student Subunit is very active and continues to grow. Our bank balance will allow us to tackle new projects and further expand the membership. Finally, the renewed interest in CARS will allow Canada to have a stronger presence with the parent society.

Completely switching gears, I hope you find this installment of the Chapter newsletter to be interesting and enlightening. Bill Gardner is back with the View from up Here, and we have an update from the 2009 Annual Meeting in Nashville. The ExComm is always looking for new and interesting articles so feel free to contact us with your ideas, latest projects or updates.

Jon Clayton, Ontario Chapter President



AFS-OC President Jon Clayton



The Magpie River, Wawa, ON



OMNR Fish tug-Everett H, Lake Superior, ON

The OMNR has created a webpage to which they publish Fisheries Management related Environmental Registry notices which are also published in the Environmental Registry. This website will make it easier for fisheries related information to be disseminated rather than having to pour over the Environmental Registry itself:

#### Bioengineering Course (continued from page 1)

On day 2, the group was chauffeured around to a number of bioengineering sites that Harrington and Hoyle Ltd. had completed over the past 15 years in the Waterloo area. Each project was explained in detail as to its history, the purpose of the project, what structures were successful and suggestions for future projects.

The bioengineering site was located on Clair Creek in the City of Waterloo, where the group fabricated brush mattresses and fascines, and placed them along two outside banks to help stabilize the erosion of the creek. Live stakes were hammered throughout the brush mattresses and twine was roped around the stakes and along the bottom of the fascines to help secure our structure in place. The group managed through the bitter cold to install all structures needed to help combat the erosion.

Many thanks go out to Samantha Mason for putting on a great introductory course for us novice bioengineers.



#### **Name the Newsletter Contest**

Do you have an idea of what the newsletter of the Ontario Chapter AFS should be called? If so we want to hear from you. Email your ideas to: <a href="mailto:newsletter@afs-oc.org">newsletter@afs-oc.org</a>

A team of esteemed judges will decide on the winning name and the winner will receive a bag o' swag.



Steephill Falls Dam and Magpie River looking downstream.

The Ontario chapter is proud to be associated with:



http://www.fishdb.ca/

#### **History Bytes**

The Northwestern Ontario Chapter of the AFS was formed on February 27, 1979 and was officially incorporated on September 25, 1995. The Southern Ontario Chapter of the AFS was formed in Toronto on September 14, 1988. Both chapters were dissolved (and the Northwestern Ontario Chapter was un-incorporated) when the Ontario Chapter was formed in 2004.

#### The View from up Here

By Bill Gardner

One of the things I love about my job is that it takes me to wonderful places around the Great Lakes basin. Nestled in the Canadian Shield, surrounded by the sights and sounds of the Boreal forest at the terminal end of Hwy 614, the town of Manitouwadge, Ontario (population: 3300) began life in the 1950s as a mining town. Just outside of the town limits the Pic River, which was used to drive logs until the mid 1970s, winds its way unimpeded 100km downstream from Manitou Falls, past the Pic River First Nation and Pukaskwa National Park until it reaches Lake Superior. At times, one can travel by river with almost no difficulty (a riffle at km 13 forces you to tilt your motor) but at other times (like this year) major slumps occur that almost completely block the river. Naturally dystrophic, the water resembles chocolate milk as it winds its way downstream picking up clay and other suspended solids. The Pic supports populations of Walleye, Northern Pike, Muskellunge, Rainbow Trout and Lake Sturgeon. I first came to Manitouwadge in 2002 working on a project to collect genetic samples from the Pic River's Lake Sturgeon population. Years later, a partnership between the Anishnabek/Ontario Fisheries Resource Centre and DFO, with help from the OMNR, Trent University, and the State University of New York brought me back to Manitouwadge last summer and again this summer to capture, mark and recapture those same Lake Sturgeon. Like any Northern Ontario city or town, Manitouwadge has a long history associated with the natural environment. Logging trucks, tree planters, boats and ATVs are all so common in Manitouwadge that when we drive by with our ATV's or boat the townspeople don't even blink an eye. There are modern buildings (city hall and the high school) and very old buildings (the arena and library) but mostly the town looks like most other small towns in Northern Ontario. Sadly, many of these towns are in decline, people are moving away to find work elsewhere. I was, however, pleasantly surprised this summer when I met the pharmacist who hails from the Caribbean, the pizza maker who hails from Russia and the cashier in one of the grocery stores (there are two of them) who hails from China. My question to each of them was "How did you end up in Manitouwadge?" All had the same answer. It seems that it isn't just work that takes one to wonderful places, love and marriage do as well.

Happy Fishing! Bill

# **Looking for Information on Species at Risk?**

#### http://fisc.er.usgs.gov/afs/

This website provides access to maps and lists of imperiled freshwater organisms of North America as determined by the American Fisheries Society (AFS) Endangered Species Committee (ESC). At this website, one can view lists of animals by freshwater ecoregion, by state or province boundary, and plot distributions of these same creatures by ecoregions or political boundaries.

Both the AFS and U.S. Geological Survey (USGS) have a long standing commitment to the advancement of aquatic sciences and sharing that information with the public. Since 1972, the ESC has been tracking the status of imperiled fishes and aquatic invertebrates in North America. Recently, the fish (2008) and crayfish (2007) subcommittees provided revised status lists of at-risk taxa, and the mussel and snail subcommittees are in the process of completing similar revisions. Historically, the revised AFS lists of imperiled fauna have been published in Fisheries. With rapid advances in technology and information transfer, there is a growing need to provide to stakeholders immediate and dynamic data on imperiled resources. The USGS is a leader in aquatic resource research that effectively disseminates results from those studies to the public through print and internet media. A Memorandum Of Understanding formally establishes an agreement between the AFS and USGS to create this website that will serve as a conduit for information exchange about imperiled aquatic organisms of North America. This website is interactive which allows visitors to provide information for consideration by the AFS committees about distributions, status, or threats to listed or proposed taxa on lists.

(Reprinted courtesy of the USGS and AFS)







RIGHT PHOTO: Landslide on Pic River, near Marathon, ON. Photo courtesy of: Robert Foster, Northern BioScience.



# DFO dedicates new Fisheries Research vessel after DFO Scientist and AFS member, Dr. John R.M. Kelso

The CCGS Kelso is classed as a Near Shore Fisheries Research Vessel. This vessel supports federal science within the Great Lakes basin and carries out a multitude of fisheries science, including trawls, box core sampling, bottom sampling and water quality analysis to support the Aquatic Ecosystem Management Research Division, Water Quality Monitoring & Fish Surveillance, Water Science & Technology, and Great Lakes Laboratory of Fisheries and Aquatic Sciences.

The vessel is named after Dr. John R. M. Kelso, who passed away May 18, 2004 at the age of 59. Dr. Kelso's career spanned more than 35 years, 25 years of which he spent leading the team at the Sault Ste. Marie satellite office of Fisheries and Oceans Canada's (DFO) Great Lakes Laboratory for Fisheries and Aquatic Sciences. His career at DFO focused on studying the possible effects that issues such as acid rain, invasive species and habitat degradation had upon fish populations. Known for taking students and young scientists under his wing, he was extremely well published in numerous Canadian and International scientific journals.



#### 2010 Ontario Chapter Annual Meeting

To be held March 4-6, 2010 at Geneva Park in Orillia. Please visit the website for further details.

http://www.afs-oc.org/



## 2010 Canadian Conference for Fisheries Research

(CCFFR)

This years meeting, held jointly with the Society of Canadian Limnologists, will be held in Winnipeg, MB on January 7-9, 2010.

http://www.phys.ocean.dal.ca/ccffr/

#### **Upcoming Ontario Chapter Events**

Dr. Ken Minns (U of T Professor and DFO Scientist Emeritus) will be giving a lecture on: Measuring Productive Capacity of Fish Habitats: A Progress Report

November 12, 2009 7:00 to 8:30 pm.

Royal Botanical Gardens Café Annex See page 9 or website for details.

www.afs-oc.org

#### **News from the Canadian Aquatic Resources Section (CARS)**

CARS held their Annual Meeting during the 2009 AFS Annual Meeting in Nashville. A number of issues were discussed. Most importantly, a call for nominations will soon be sent out to all members to nominate individuals for the incoming executive committee. There was also discussion about forming a new initiatives committee, and the possibility of hosting a CARS colloquium at this year's CCFFR. In addition, CARS has a new website and an evolving online newsletter

(http://www.fisheries.org/units/cars/index.htm). If anyone would like more information regarding CARS, please email Caleb Hasler

#### Pleasure Craft Operator's Card now Mandatory

As of September 15, 2009 the law requires all operators of pleasure craft fitted with a motor and used for recreational purposes in Canada to have proof of competency. This is generally in the form of a Pleasure Craft Operators card. These may be obtained through many organizations after passing a written test for a small fee. For more information please visit the Transport Canada website at:

http://www.tc.gc.ca/marinesafety/debs/obs/paperwork/paperwork operator.htm

## 4<sup>th</sup> International Natural Channel Systems Conference

Tentative date – September 2010. This is the 4<sup>th</sup> in a series of conferences exploring the science and practice of managing stream corridors using principles from fluvial geomorphology, ecology, and engineering. The theme for this conference will be: **Stream Corridor Management: Restoring our Natural Infrastructure**. Please visit <a href="http://www.naturalchannels.ca">http://www.naturalchannels.ca</a> for upcoming notice of the Call for Papers and details.

# **Upcoming Training from HTI- Hydroacoustics**

Using Acoustic Tags to Track Fish
<a href="http://www.htisonar.com/at short course.htm">http://www.htisonar.com/at short course.htm</a>
4-5 February 2010, Seattle, WA USA

This short course addresses all aspects of tracking fish movement (and other aquatic life, such as eel, shrimp, crab) with acoustic tags, including three-dimensional tracking with submeter resolution. Acoustic tags are effective for estimating survival, monitoring migration patterns, and observing behavior. This course includes a variety of applications and course manual is included. \$300.00 USD, per student. Class has 15 seats available.

Using Hydroacoustics for Fisheries
Assessment
<a href="http://www.htisonar.com/ha\_short\_course.htm">http://www.htisonar.com/ha\_short\_course.htm</a>
11-12 February 2010, Seattle, WA USA

The hydroacoustic short course covers mobile and fixed-location survey techniques, and subjects include basic hydroacoustic theory, deployment logistics, data collection and processing, as well as typical results. Hydroacoustics are effective tools for enumeration, detecting presence/absence, revealing abundance and distribution, as well as trajectory patterns. Split-beam, single-beam, and multi-beam frequency techniques are discussed in detail. Class has 15 seats available.



#### **Upcoming Ontario Chapter Training**

Applied Fluvial Geomorphology with Instructor Dave Rosgen

June 7-11, 2010

Visit <u>www.afs-oc.org</u> for details.

#### **Student Subunit News**

# Karen Murchie of Carleton University receives prestigious scholarship

Karen Murchie, a student at Carleton University in Ottawa, received the J. Frances Allen Scholarship from the American Fisheries Society (AFS) at its 139th Annual Meeting in Nashville, Tennessee, on September 1, 2009. The award is presented annually to an outstanding female AFS member and doctoral candidate who is conducting aquatic research. Murchie is a NSERC Ph.D. student in the Department of Biology at Carleton University in Ottawa, Canada. She is also a member of the Flats Ecology and Conservation Program at the Cape Eleuthera Institute in The Bahamas where she conducts her field studies under the co-supervision of Dr. Steven Cooke and Dr. Andy Danylchuk. Karen's dissertation research is focused on linking organismal biology with environmental variability and ecosystem processes in tropical tidal flats systems. Specifically she is using bonefish as a model to determine how animals make a living in such dynamic environments and how energy flows through the interconnected habitats that make up the tidal flats system.

#### **OEEC 2009 Meeting Summary**

Queen's University hosted a very successful Ontario Ecology and Ethology Colloquium (OEEC) on April 26<sup>th</sup> to 28<sup>th</sup> with over 80 registrants, with 56 oral and 18 poster presenters. Three well-known researchers (Dr. Christina Caruso, University of Guelph; Dr. Lauren Chapman, McGill University; Dr. Paul Martin, Queen's University) presented thrilling plenary talks on topics ranging from biodiversity and conservation in African fish to latitudinal trends in patterns of evolution. Student presentations covered a broad diversity of topics including many relating to fish biology such as alternative female reproductive tactics in Kokanee Salmon and contamination accumulation in the American eel. The OEEC Organizing Committee carried out an environmentally-friendly conference, with such "green" initiatives as biodegradable name badges and environmentally friendly USB keys as conference gifts. The Ontario Chapter is proud to be a continuing sponsor of this important undergraduate event.

## **Employment Opportunities for Students**

Are you enrolled in a college or undergraduate university program? Are you interested in working in your field of study but are unsure of how to go about doing it?

If you are a University or College student (a Post Secondary student) and are interested in working for the federal government then try the Federal Student Work Experience Program (FSWEP): http://jobs-emplois.gc.ca/fswep-pfete/index-eng htm

Or if the Provincial government is more your style then try the Summer Experience Program (SEP): <a href="http://www.gojobs.gov.on.ca/SEP.asp">http://www.gojobs.gov.on.ca/SEP.asp</a>

If you are a high school student and are interested in experience in this field consider the AFS's own Hutton Junior Fisheries Biology Program: http://www.fisheries.org/afs/hutton\_gen.html

As well, be sure to visit the AFS-Ontario Chapter Employment Opportunities page for the latest job postings and employment links for a variety of potential employers including Conservation Authorities and consulting firms.



Photo: Students listen at the 2008 Crossman Symposium



LEFT PHOTO: Karen Murchie receives the J. Frances Allen Scholarship from AFS President Bill Franzin. Photo courtesy of Todd Maszaros, Tennessee Wildlife Resources Agency.

RIGHT PHOTO: FSWEP students backpack electrofishing in Northern Ontario



#### 2009 AFS Annual Meeting in Nashville

By Katie Stammler (University of Western Ontario) and Russell Bobrowski (Trent University)

The 138<sup>th</sup> Annual AFS meeting held in Nashville, Tennessee was definitely an event to remember. The conference center was located in the heart of the Music City with nearby access to great Southern dining and the infamous Music Row – where many of us spent late nights rockin' out country style at Tootsie's, and Coyote Ugly to name a couple. The hosts of this year's event went all out with socials planned every night where ample food and BEvERages were supplied. In keeping with past years, Tuesday afternoon and evening were devoted to student activities. The student-mentor lunch was a great opportunity to quiz a pro on how to land your dream job while scoring a free lunch. After lunch, a diverse group of professionals spoke at the student colloquium, providing inspiring insight into past experiences and future expectations in the changing field of fish and fisheries. The day was capped off with a student social at the Wild Horse saloon, offering opportunities for students to catch up with old friends and make new connections over food, drink, dancing and pool. It was also where we learned our fearless leader Caleb Hasler does a mean Two Step! After a long drive through the heart of Tennessee, the traditional Southern BBQ at Sleepy Hollow did not disappoint. The All Society Social was a great success with something for everyone – basketball, horseshoes, mini golf and jousting. On top of all the fun activities, Nashville's organizing committee did a great job planning lots of interesting symposia covering all the fishy topics one could hope for. We are looking forward to seeing all of you next year in Pittsburgh, PA! If you are you planning on attending the 2010 AFS Annual Meeting please visit the website at:

http://www.fisheries.org/afs10/

#### AFS-OC Award Winners at 2009 Nashville Meeting

The Ontario Chapter was well represented at the 2009 AFS Annual Meeting in Nashville. Listed below are the names of the recipients for a slew of awards. Congratulations to all.

**Steven Cooke** - Distinguished Service Award

**Karen Murchie** - Francis J. Allen Award, Skinner Memorial Award, Peter A. Larkin Award

Caleb Hasler - Skinner Memorial Award, Peter A. Larkin Award Marie-Ange Grave l- Skinner Memorial Award

Alison Colotelo - Honourable mention for the Skinner Memorial Award, Equal Opportunities Travel Award Constance O'Connor - Honourable mention for the Skinner Memorial Award



Photo: from left to right: Alison Colotelo, Caleb Hasler, Marie-Ange Gravel, Karen Murchie, Constance O'Connor, Steven Cooke

#### **Upcoming Conferences**

North American Lake Management Society A.D. Latornell Conservation Symposium 70<sup>th</sup> Midwest Fish and Wildlife Conference Canadian Conference For Fisheries Research Ontario Chapter-AFS Annual Meeting October 27-31, 2009 November 18-20, 2009 December 6-9, 2009 January 7-9, 2010 March 4-6, 2010 http://www.nalms.org/ http://www.latornell.ca/ http://dnr.state.il.us/MIDWEST/ http://www.phys.ocean.dal.ca/ccffr/ http://www.afs-oc.org/

# Measuring Productive Capacity of Fish Habitats: A Progress Report; A lecture by Ken Minns Royal Botanical Gardens Café Annex 7:00 pm November 12<sup>th</sup>, 2009

The principle of "No Net Loss of Productive Capacity" has been the guiding concept in Canadian fish habitat management since 1986. Still there is much confusion about how to assess net change and what exactly productive capacity is or is not. Here a critical review of methods of measuring productive capacity will be presented, beginning with a brief history of Canadian fish habitat management in policy and practice. Productive capacity and related concepts are examined. Then methods of measuring productive capacity are classified and reviewed along with some sample case studies. The review leads to a systematic framework for assessing the utility of particular methods. The likely future course of method development is charted. The linkages with evolving practices in cumulative impact assessment and ecosystem-based management are considered. Finally conclusions will be drawn and some recommendations offered.

#### World Fisheries Day- November 21, 2009

World Fisheries Day is celebrated every year on November 21 throughout the world by the fisher folk communities. This day is celebrated through rallies, workshops, public meetings, cultural programs, dramas, exhibition, music shows and demonstrations to highlight the importance of maintaining the world's fisheries. World Fisheries Day helps in highlighting the critical importance to human lives, of water and the lives it sustains, both in and out of water. Water forms a continuum, whether contained in rivers, lakes, and ocean.

#### **AFS-OC Online Store**

Looking for stocking stuffers for the boss, the intern, that special someone?

Look no further than the Ontario Chapter online store. Check out our website at:

http://afs-oc.org/cgi-bin/online/storepro.php





In the next issue: Featured Biologist. View from Up Here DFO's newest facility.

Update on the 2010 AFS-OC Annual Meeting Plus lots of other exciting information