Newsletter of the AFS-OC



President's Message

Late Fall 2013. "Yard Work". Possibly the most feared phrase for the fall angler. (Although in serious contention and nipping closely at its heels might be the dreaded "Dinner With My Folks" - "I know you wanted to go bass fishing, sweetie, but we're having dinner with my folks that day..."). The heavy rain, wind, and yes, ice storms of the past few weeks have blown almost every leaf down on my lawn and the rake now seems like a natural extension of my arms. As I heap and pile, cart and compost these remnants of our green summer, my mood is not melancholy, in spite of the gray skies and the stiff breeze off Lake Scugog. Many people think of spring as the season of renewal, but fall has its share of new beginnings as well. There is the start of the academic year, from JK to Post Grad alike, the autumnal equinox, and of course, the char are spawning. Now that's my idea of fall colours! After all, if the tamaracks are turning yellow, the lake trout are spawning... (N.B. That's what they told me up North, at least. Could be an Old Husband's Tale. Feel free to call me on it.). The earth spins, and as eggs incubate under ice and the surrounding countryside is

Continued on page 3

2013 Ontario Chapter AGM Summary by Katie Easterling

The 2013 Ontario Chapter Annual General Meeting and Conference was held February 27th to March 1st at the YMCA's Geneva Park in Orillia. The theme this year was "Fisheries Management in the Age of Austerity". There were 52 registrants (23 of which were students) for the 2-day meeting. Nineteen talks covered a range of subjects including *The future of* fisheries and aquatic ecosystems in Canada by our keynote speaker, Dr. Steve Cooke, the MNRs discussion of environmental DNA detection to find invasive and endangered species and emerging tools for data collection and education in fisheries. Six students gave oral presentations and it was judged that Lee Gutowsky (Carleton University) gave the best, thus wining the E.J. Crossman Award. Alexandra Muhametsafina (Carleton University) was presented with the Ontario B.A.S.S. Nation (OBN) Award for the best student poster. The Business Meeting was held on Thursday afternoon and all present were treated to great discussions -- about potential future AGM venues, NCD technical committees, membership, as well as ExComm duties and elections -- led by President-Elect Ann Rocchi. Steven Cooke and Lee Gutowsky discussed CARS and Student Subunit activities, respectively. Brian Morrison presented Certificates of Appreciation to Past Presidents John Clayton, Dean Fitzgerald and Silvia D'Amelio. We'd like to thank the very generous support of our meeting sponsors. Photos of the event are on page 10 of this newsletter and will also be available soon on the Chapter website.



Networking is just one part of the AGM. Photo by: Warren Dunlop

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Newsletter Editor: E-mail: newsletter@afs-oc.org

Newsletter of the AFS-OC

Welcome to our new Newsletter Editor: Nicola Lower

Nicola is biologist with over 16 years of work experience in the field of natural resource management and fisheries biology. Nicola completed a B.Sc. in Environmental Life Science at the University of Nottingham, UK, and an M.Sc. in Natural Resource Management at the University of Leicester, UK. Her Master's research was conducted at the Enonkoski Finnish Game and Fisheries Research Institute in eastern Finland and investigated the effect of kinship on Arctic char. In England, Nicola worked as a Fisheries Biologist and Project Manager on multi-disciplinary programs for The Centre for the Environment, Fisheries and Aquaculture Science (CEFAS). Nicola completed her PhD with the University of Portsmouth part-time while working at CEFAS, and her research investigated the sub-lethal effects of contaminants throughout the life cycle of the Atlantic Salmon. In 2007, Nicola was awarded a Canadian Commonwealth Fellowship from the Department of Foreign Affairs and International Trade and came to Ontario to work at the University of Guelph. Nicola spent three years working as a Post-Doctoral Research Fellow at the University of Guelph investigating the migratory behaviour of Sea Lamprey within the Great Lakes. Since 2010, Nicola has been working as an environmental consultant and Senior Fisheries Biologist for AECOM. Nicola is a project manager and leads environmental baseline studies, environmental effects monitoring, and permitting and approvals, and contributes technical expertise to the assessment of impacts and mitigation for a variety of development activities, with a focus on the Mining, Power and Water Management sectors. Nicola manages a team of accomplished scientists within the Water and Natural Resources Practice Area, and is the operations manager of the Guelph Office.



The Executive Committee is seeking a volunteer to act as a Regional Representative for the Greater Toronto Area for 2014. It is our hope that the Regional Representative would be able to phone in to our monthly conference calls (early evening on the last Thursday of every month, approx. 1 hr.), encourage more people in their region to join the Ontario Chapter, attend or even hold functions in your region, talk up the Quebec AFS national meeting in August of 2014, use social media (Facebook, Twitter, etc.) to provide news from your region, and maybe do some old-school write ups for our website, newsletters, etc. If you like networking, sharing fisheries news and ideas, and would like to contribute to your Chapter in this manner, please send a note to Ann Rocchi (president@afs-oc.org).



Photo above: The Hoskin Scientific booth in our sponsor's area, at the 2013 AFS-OC AGM. Photo by Warren Dunlop.

Sponsors for the 2013 AFS-**OC Annual General Meeting**

We thank all of the sponsors for their generous support and encourage you to use their services.

The Ontario chapter is proud to be associated with:



www.ontariofishes.ca



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The HOBO UX120-014M is an LCD data logger which can accept a variety of probe types (J, K, T, E, R, S, B or N). This allows for a broad measuring range from -260 to 1820°C.

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DECEMBER 2013

The Lateral Line

Newsletter of the AFS-OC

VOLUME XII ISSUE #2

President's Message (continued from page 1)

blanketed in snow, (or a granular salt/slush mix, if you live in southern Ontario), the coming winter gives all the animals that laboured long and hard in summer (for instance, say, Fisheries Biologists), a chance to regroup. A chance to hunker down, a hot toddy in hand, perhaps, to wait out the cold and plan for the upcoming year.

And what plans your AFS Ontario Chapter has for the year ahead! Coming in as your new Chapter President, I have the benefit of great and enthusiastic returning members to the ExComm and some equally enthusiastic and freshly-minted appointees. Please join me in welcoming Sean Stuart as President-Elect, Jessica Wright as Vice President and Nicola Lower as Newsletter Editor. A huge thank you to retiring ExComm members, our erstwhile Newsletter Editor, Bill Gardner, and our Past President, Dean Fitzgerald. An especially big shout out to Brian Morrison for serving as Chapter President last year, for his commitment to our Ontario Chapter, and for continuing with the Executive Committee as our Past President for this year. As always, contact information for all the ExComm is posted on the AFS Ontario Chapter website (http://www.afs-oc.org/excomm.html) and we wait with bated (not baited) breath to hear from chapter members.

Since September, your ExComm, veterans and rookies alike and in conjunction with our Student Subunit, have been brainstorming for increased learning and networking opportunities for our chapter. Initial ideas for the 2013-2014 year include increased regional representation, a website makeover, support for the Canadian Aquatic Resources Section (CARS) at the AFS National Meeting in Quebec City August 17 to 21, 2014, and encouraging a good representation of our own Chapter at this meeting. That's the short list....

But for ideas to be put into action, we need as many engaged members as possible. I challenge each of our 161 Ontario AFS members to bring a friend into the fold, read this newsletter, bookmark and check frequently our website, as well as that of our Student Subunit, read, learn, mentor, teach, advise, attend a conference, develop professionally, connect on Facebook, Twitter, by teleconference and in as many face to face meetings as possible to keep up the great fisheries work that we as colleagues are conducting to earn that hot toddy. I look forward to working with all of you. Hopefully, all this hard work and planning over the winter will earn a few days

Continued on page 4



Photo above: The Lotek booth in our sponsor's area, at the 2013 AFS-OC AGM. Photo by Warren Dunlop.



Photo above: E.J. Crossman Award winner Lee Gutowsky (Carleton University), with AFS-OC President Brian Morrison. Photo by Rob Eakins.



Photo above: Ontario B.A.S.S. Nation Award winner, Aleksandra Muhametsafina (Carleton University) with OBN Representative, Robin Gaspardy (on left). Photo by Rob Eakins.

History Bytes

The Southern Ontario Chapter (SOC) began featuring biologists in their February 2001 newsletter (Volume I, Issue I). The SOC featured 3 biologists in total (Erling Holm, Deborah Martin-Downs and Bob Morris). The Northwest Ontario Chapter (NWO) newsletter did not profile any biologists. The Ontario Chapter has continued the tradition started by the SOC and has featured 7 biologists since its inception in 2004 (Tom Pratt, Karen Murchie, Robert Eakins, Dr. Richard A. Ryder, Ed Malindzak, Derek Parks and Chris Bunt.

Newsletter of the AFS-OC

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Book Review: The Great Lakes Ecosystem: Uses, Abuses and the Need for a Course Correction by Dr. Murray Johnson Review by Dr. Charles K. Minns

After Murray Johnson's retirement from Fisheries and Oceans, many of his friends and colleagues expected and hoped that he would write a book about ecosystem management in the Great Lakes. Johnson's book has arrived and it was worth the wait. His writing style is as clear as ever, and the chapters are well-researched and augmented with insightful quotations. While Johnson has a point of view, the tone is not preachy but quietly insistent.

Eighteen chapters are divided among four parts. Part 1, Creation and Settlement, has historical chapters on geology, colonization, settlement, and industrialization, that help bring the Great Lakes alive with the local histories and interesting details. Part 2, Exploitation of an Ecosystem, has chapters on water, fish, farming, forests, and minerals, where the post-colonial development uses and misuses of these resources are explored in moderate detail with rich examples. Part 3, A Pyramid of Environmental Issues, has chapters on eutrophication, toxic chemicals, alien invaders, acid precipitation, and climate change, where the history and science of each issue is summarised alongside review of any controversies and the progress of efforts to manage the issue.

Finally, Part 4, Charting a New Course, has a series of chapters seeking to integrate many of the challenges raised by the historical course of development and negligence in the Great Lakes basin with the wider issues that confront humanity everywhere: the ever-weakening role of governance as corporatism dominates, marginalization of science, the trumping of environmental and social concerns by economic imperatives, and the extent to which our focus on energy and technology developments has been delaying the necessary transition toward ecological and social sustainability. Johnson shows us how the Great Lakes ecosystem is a macrocosm

The language and level of detail in Johnson's book is well-suited to its intended role as foundation reading for senior high school students, university and college undergraduates, and the interested general public.

President's message (continued from page 3)

on our favourite lake or stream next season as well. Give your in-laws twenty bucks and send them to the movies, there are lunkers lurking out there with your name on them!

Tight lines everyone,

Ann Rocchi AFS-OC President president@afs-oc.org

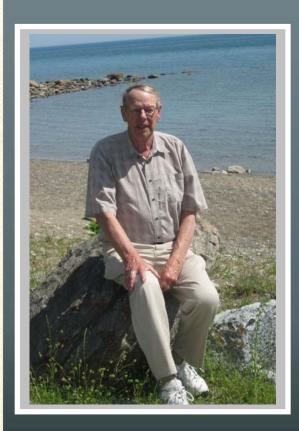


Photo above: Dr. Murray Johnson relaxes beside Lake Huron.

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Photo left: AFS-OC President Ann Rocchi



Photo right: Robin Gaspardy (DFO) and Chris Martin (OMNR) sample Lake Sturgeon on the Rainy River. Photo by Bill Gardner.



Newsletter of the AFS-OC

Featured Biologist: Dr. Chris Bunt by Horton Fitch

"Chris doesn't work. He just plays in the river" jokes Chris's wife, Penny. It's easy to understand how she could think that way. What jolly fun it is to spend countless hours setting up intricate experiments, processing and analyzing data, and writing papers, reports and proposals. How about all the time on the computer, phone and in the field with clients, colleagues and research assistants, collecting extremely useful and valuable data, but also just as often dealing with inevitable, incessant and eternally irritating bouts of Murphy's Law-iosis. Despite this, Chris has managed to remain married and in business for over fifteen years with a small consulting company called Biotactic Fish & Wildlife Research Inc. that he founded before finishing his PhD in Biology at the University of Waterloo (he wishes he had taken some business courses). But, what a time that was - a frenzy of fieldwork and fun living in a tent beside the Grand River for three consecutive 6-month field seasons. There were countless adventures (sometimes dangerous and scary), tons of crazy stuff that probably shouldn't be written until Chris is dead and around 18 scientific papers published in peer-reviewed journals prior to starting an NSERC post-doc at U. Illinois Urbana-Champaign. This time was spent largely in the boathouse at QUBS (coincidentally the same place Chris first began using underwater videography to monitor nesting behaviour of bass back in 1989 while he was an NSERC funded undergrad at University of Toronto) and the old wet-lab at the pumping station on the Grand. The project focused on the effects of varying silt loads on the cardiac output of Rockbass from lakes and from rivers – vastly different habitats where this species has adapted and evolved with extremely different siltation regimes. Anyway, enough of that...

Canada is far too cold for Chris in the winter. He is more acclimatized to living in a tent in Costa Rica for a year, and collecting insects along with running night-time eco-tours in the cloud forests of Monteverde (1993-1994). So when faced with the insanely difficult choice of splitting his two-year post-doc across the planet either to the jungles of the Amazon or the oceans around Australia—it was a no-brainer. Chris and Penny packed their tents and backpacks and headed off to live on Saunders Beach in Northern Queensland. What a place they had—complete and perfect tropical paradise. Rather than continue studying fishways in Australia, the choice was made to continue building upon Chris' extensive telemetry experience and apply his acquired knowledge to the Great Barrier Reef. He used exmilitary grade 3-D radio-linked acoustic telemetry to collect data on tagged coral trout during and after the reproductive season. These data are useful



Photo above: Dr. Chris Bunt with a Payara (*Hydrolycus scomberoides*) from the Amazon River, Brazil. Photo by Horton Fitch.

Photo below: Dr. Chris Bunt with a Northern Pike (*Esox lucius*) and staff on the Grand River, ON. Photo by Horton Fitch.





Photo above: Slimy Sculpin (*Cottus cognatus*). Photo by: Patrick Rivers.

Upcoming Ontario Chapter Events

Nigel Lester and an OMNR Fisheries Policy individual (TBA) discuss fish monitoring and policy

Jim Lichatowich discusses salmonid conservation and the broader issues that affect fisheries managers

Date

29 January 2014

26 March 2014

Website

http://www.afs-oc.org

http://www.afs-oc.org

Newsletter of the AFS-OC

VOLUME XII ISSUE #2

Book Review (continued from page 4)

However, it was also clear to me that many of the current generation of scientists, managers, and policy geeks working in Great Lakes ecosystem management agencies would benefit from reading this book, as many seem to have little appreciation of the history of Great Lakes misuse and the valuable lessons learnt in the period of the 1960s to 1990s. As Johnson notes, past mistakes are often repeated as the baseline shifts when the past fades from memory.

In the final chapter, Johnson makes a reasoned argument for working toward "a Friendly-User Ecosystem". Today, governments everywhere seem set on undoing any progress made toward better conservation and protection of the natural environments upon which all humanity is unavoidably dependent. Instead, governments are intent on yielding to the excesses of corporate economic imperatives, often at the expense of the people and democracy and with scant regard for the environment. This book provides a strong argument, well-grounded in the shared history of successes and failures in the Great Lakes ecosystem, for a better, sustainable path into the future. I strongly recommend everyone read and share this book.

You can download Dr. Johnson's book at: www.greatlakesreport.com.

Featured Biologist (continued from page 5)

for design and establishment of marine protected areas (MPAs) to facilitate sustained conservation of this extremely ecologically and economically important grouper. But again, as they say, even the sun sets in paradise, so the two biologists continued on to New Guinea, New Zealand, Hawaii, Tofino BC and finally back home, where they shocked everyone there who thought the two were stuck somewhere in Alaska. That summer (2002) Chris and a good friend built an office, lab and workshop at a farm by the Grand River in Kitchener. Nearby, Chris also has a wetlab, Black Redhorse hatchery (currently housing endangered wavy-rayed lamp-mussels for U of G and redhorse) and a prototype fishway monitoring system (PIT telemetry coupled with streaming online underwater videography and automated data collection) that is used to maintain performance of the same fishways Chris began studying (and camping beside) back in the good old grad-school

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And the Winner is....

The Student Subunit presented their 1st Mentorship Award to Dr. Lynda Corkum from the University of Windsor. The award was announced at the 2013 AFS-OC AGM but Dr. Corkum and Bill Glass had to wait for a warm day to take the photo.

Congratulations Dr. Corkum!





Photo above: Lamprey wounds on a Lake Sturgeon (*Acipenser fulvescens*) from the Rainy River, ON. Photo by William Gardner.

Upcoming Ontario Chapter Training

Date

Website

To Be Announced

TBA

http://www.afs-oc.org

Newsletter Editor: E-mail: newsletter@afs-oc.org

Newsletter of the AFS-OC

Do youth education programs yield tangible and measurable improvements in fish condition and survival?

by Caleigh Delle Palme

Recreational fishing is a popular leisure activity and is an important factor socially, culturally and economically. Catch-and-release is a common practice among recreational fishers in which fish are caught and released immediately. The concern with catch-and-release angling is that after they are released, fish may experience sub-lethal consequences and a variable proportion die.

Along with recent findings of catch-and-release mortality, it has been found that social factors and incorporating human dimensions are critical for successful conservation and management initiatives. The effectiveness and quality of educational methods within angling communities may have an important role for successful management. In several European countries, there are mandatory angler education programs and recent studies have shown that anglers are generally not opposed to participation in such programs.

Although plenty of effort and research has been put into the development of best handling practices intended for education, there have been no empirical studies to document whether angler education programs have the potential to yield tangible and measurable improvements to fish condition and survival. In my thesis, educational strategies regarding catch-and-release best handling practices are being tested on groups of children. The results of the study will provide insight on the effectiveness of educational methods and recommendations concerning outreach practices can be made in order to enhance and increase the abundance of educational programs in recreational fisheries.

The participants of this study are children between the ages 8-10 that are members of Scouts Canada. Troops of approximately 30 children arrive at Dow's Lake in Ottawa, Ontario and are split randomly into three groups (a control group and two treatment groups). With the help of volunteers from the AFS-OC student subunit and the Fish Ecology and Conservation Physiology Lab at Carleton University, the three groups of children each partake in a different educational program. In all three groups, the children learn how to identify the various species of fish in the system. They also learn about water pollution and healthy fish habitat. In the control group there is no mention of catch-and-release best practices. The 1st treatment group (T1) learns about

Continued on page 8



Photo above: Jacqueline Chapman leading the 'Control' group



Photo above: Sam Wilson and Jessica Taylor leading the first treatment group (T1).



Photo above: Vivian Nguyen leading the second treatment group (T2)



Photo left: Brown Algae (*Fugus* sp.) Photo by: Amber Lahti

Photo right: Green Sunfish (*Lepomis cyanellus*) captured in ditch along Highway 406. This capture represents a range extension for the species in southern Ontario. The fish was relocated to the Welland River. Photo by: David Praskey



Newsletter of the AFS-OC

Featured Biologist (continued from page 6)

days. Since then Chris and his small army of staff (between 2 and 5 fulltime), assistants, colleagues, students, and volunteers have collectively published 34 peer-reviewed scientific publications on a wide range of topics including fish passage, movement and habitat preference studies, surgical techniques, ontogeny of larval and juvenile redhorse, zebra mussel impacts on fish, spawning and reproductive behaviour and underwater monitoring using video and telemetry. In addition he and his staff have prepared over 40 commissioned studies and reports for 36+ international clients. Lots of projects take place in the Grand River, Thames River, Welland River and in the United States. In addition, most of Chris's work is broadly focused on endangered and threatened species and fish migration often using underwater monitoring and telemetry, particularly in fish passage facilities and near dams or other areas that may be challenging for migrating fish to negotiate. In 2005 Chris began experimentation and testing of a dynamic and broadly adaptable linked underwater observatory system consisting of underwater nodes equipped with high quality video cameras, infrared illumination, temperature sensors, telemetry antennas and a patent-pending underwater self-cleaning lens mechanism. These PC-driven nodes have been deployed from Ottawa to Montana, with mobile systems in use in Oregon, New Brunswick and Wisconsin. Much of the recent excitement has been centered on the image-analysis based fish counting systems deployed for the MNR in the Saugeen and Beaver Rivers in Ontario. These systems also broadcast data and live underwater video of fish passage at the upper ends of the Dennys Dam fishway and Thornbury fishway and generate so much online interest that the servers need to be upgraded to prevent them from crashing all the time. Go ahead and have a look at the data and archived video that has already been collected (http://www.biotactic.com/BRAVO.htm). Imagine the scientific value of all of this when there are several decades of standardized data available from many sites for analysis in light of such things as environmental and climactic change associated with the athropocene epoch. Chris' success at Biotactic has taken him around the world several times with business and field work in Massachusetts, Nevada, Arizona, Texas, Louisiana, Montana, Wisconsin, Florida, South Korea, Argentina and Brazil. He has presented papers with varying degrees of success, but with lots of excitement and enthusiasm while socializing with colleagues from around the world. The other most awesome place Chris traveled to for business (fishing) was the Amazon in November 2012. This most inspirational adventure (fishing) was tightly sandwiched between CART tagging blue suckers in Texas in October and fixed-station data retrieval, boat/aircraft tracking in Texas and Louisiana in February 2013.

Continued on page 9

Do youth education... (continued from page 7)

catch-and-release best practices with visual aids showing both the "do's and don'ts". The second treatment group (T2) which learns the same catch-and-release best practices as in (T1), also participates in a hands on demonstration of those best practices.

After their lessons the children start angling for bluegill and pumpkinseed.



When fish are caught they are removed from the hook by the child, the fish are placed into a nearby cooler for assessment. Lab members assess the fish, using RAMP (Reflex Action Mortality Predictors). Five factors are measured; equilibrium, tail grab, head complex, body complex and vestibular-ocular response. Lab members also determine the degree of injury from hooking and note any bleeding. The fish are then fin-clipped for identification and placed into a retention net to monitor short- and long-term survival. The whole process will be repeated with multiple times to collect an appropriate data set. So, do youth education programs yield tangible and measurable improvements in fish condition and survival?

Find out in a future AFS-OC newsletter!

Upcoming Conferences

67th CCFFR

74th Midwest Fish and Wildlife Conference

57th IAGLR

144th Annual Meeting of the AFS

Date

January 3-5, 2014 January 26-29, 2014 May 26-30, 2014 August 17-21, 2014

Website

http://www1.uwindsor.ca/glier/ccffr/ http://www.midwestfw.org/ http://iaglr.org/iaglr2014/ http://afs2014.org/

DECEMBER 2013

The Lateral Line

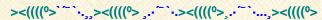
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VOLUME XII ISSUE #2

Featured biologist (continued from page 8)

Biotactic expects to conduct some super exciting telemetry and habitat work with large catfishes in Amazonian tributaries as well as tracking native Brazilian fishes through several fishways at ecologically ruinous mega-dams. Many of these monstrosities have been identified as problematic (for varying reasons related to such things as extreme predation by Payara – *Hydrolycus* sp., *Rhaphiodon* spp.). Add in radically disparate habitat and hydraulic conditions across dam interfaces and the possibility that many South American fishways simply appear to act as ecological traps. South American fishways simply do not appear to function as anticipated, largely because they are based on designs that seemed to work with North American and European fishes but with neo-tropical species, not so much.

Bunt now lives in a very nice house (he actually lives in the tent in the backyard) next to the Grand River with Penny and their two budding biologist and SCUBA diving progeny (seven year old Jacob and four year old Sam). Jacob was the inspiration behind a not-for profit website his Dad started a couple of years ago to provide opportunities for exploration, education and fun while learning about the importance of conserving fish and their habitat (www.onefishatatime.com). Jacob actually thinks the website is his. There is a treasure trove of amazing all-original art for kids to color and play with along with puzzles and games, lesson plans for teachers, and great rainy day activities for kids. Chris would very much enjoy using these except that his kids have him down at the river all the time, rain or shine, hunting beasts by rod and net. And yet, Chris doesn't seem to mind this one bit because in the end, he doesn't really work. He just plays in the river.



Newsletter Editor's Message

Well that's it, my last newsletter as Editor. I would like to thank the Presidents that I have served under; they have all contributed their time to this newsletter. Thanks also to all of the people who contributed to the newsletter over the years by sending in articles, photos and comments, especially Katie Easterling. My final and biggest thank you goes to Rob Eakins, the Chapter Webmaster and a wonderful person. Rob was always quick to send out the newsletter to the members after he had acted as the final set of eyes, correcting typos and fixing fonts. Finally, I have to acknowledge my wife, Elaine Mallory for her help and patience. This has been a great learning experience for me. I hope you, the membership, have enjoyed it as well. Please join me in welcoming Nicola Lower as the new Editor.

Cheers, Bill

AFS-OC Online Store

Looking for gifts for the boss, the intern, that special someone? Look no further than the Ontario Chapter On-line store. Check it out at: http://afs-oc.org/cgi-bin/online/storepro.php



Would you like some committee experience? Want to get involved?

We are always looking for volunteers to assist or lead committees. For more information or to get involved email President Ann Rocchi at president@afs-oc.org today.

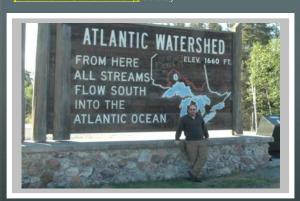


Photo above: Bill Gardner at the top of the watershed. Photo by Robin Gaspardy.

If you have items for future issues of *The Lateral Line* please submit them to the Newsletter Editor (newsletter@afs-oc.org).

2013 Ontario Chapter AGM in Photos

(Courtesy of Rob Eakins and Warren Dunlop)



Photo above: President Brian Morrison welcomes everyone to the 2013 AGM.



Photo above: The Student Subunit ice fishing derby begins.



Photo above: Keynote Speaker-Dr. Steven Cooke



Photo above: AFS-OC President-Elect Ann Rocchi



Photo above: Dr. Chris Wilson talks about eDNA.



Photo above: Checking out the posters



Photo above: Brian Morrison presents the Certificate of Appreciation to Past-Past- Past-President Jon Clayton