APRIL2011



Newsletter of the AFS-OC

#### VOLUME XI ISSUE #2



#### **Editor's Message**

Putting together a newsletter is not an easy task. Putting together a newsletter as a volunteer is even more difficult. It takes many hours to find content and to assemble it in the newsletter. As with anything, you only get out of something what you put into it. I am fortunate that a number of people, some connected to the Ontario Chapter and some who are not, have very graciously given their time to provide content or ideas. And so I thank the people who have contributed to the three newsletters that have been produced this "season". Anyone can contribute to the newsletter. Send ideas, articles, and/or photos to:

Bill Gardner Newsletter Editor – Ontario Chapter <u>newsletter@afs-oc.org</u>.

#### 2011 Ontario Chapter Annual Meeting Summary

The Ontario Chapter Annual Meeting and Conference was held on March 4-5, 2011 at the YMCA's Geneva Park Convention resort. Fifty-eight people attended the 2-day meeting. There were 20 talks covering a range of subjects from inland fisheries to environmental flow management. Five students presented oral presentations and it was judged that Shannon Dorn (University of Waterloo) gave the best oral presentation, thus winning the EJ Crossman Award. Alyssa Murdoch (University of Waterloo) was presented with the Ontario BASS Federation Nation (OBFN) Award for the best student poster. Thirty-three members attended the Business Meeting and were treated to a great discussion led by President-Elect Dean Fitzgerald. Nominations for both the Ontario Chapter Executive Committee (ExComm) and the Student-Subunit ExComm were held and the OC has candidates for 2 of the 3 soon to be vacant positions. We are still looking for candidates to stand for President-Elect (term begins in September). If you are interested in running, please contact Silvia D'Amelio at president@afs-oc.org. We'd like to thank the very generous support of our meeting sponsors (see page 2). Photos of the event are on page 10 of this newsletter and will be available on the chapter website soon.



#### In this issue:

Editor's Message	Page 1
OC AGM Summary	.Page 1
AGM Sponsors	.Page 2
STATE's Replacement	Page 4
OBBN Training	.Page 5

Featured Institution	Pages 5/6
Student Subunit News	Page 7
World Record Fish Catch	Page 8
ROM Fish ID Course	Page 9
AGM photos	

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

APRIL 2011

Newsletter of the AFS-OC

VOLUME XI ISSUE #2



#### Watchlist of Potential Great Lakes Aquatic Invasive Species

The Great Lakes have a long history of aquatic nonindigenous species (ANS) introductions – both intentional and unintentional. As of 2007, over 180 nonindigenous species have been reported to have reproducing populations in the Great Lakes basin. The Great Lakes Aquatic Nonindigenous Species Information System has been set up to provide a database of these species as well as a watchlist of potential invaders.

For more information please see: http://www.glerl.noaa.gov/res/Programs/glansis/glansis.html

APRIL 2011

#### **Parent Society Election**

The American Fisheries Society is conducting an officer election for the upcoming year. As a current member, you are eligible to participate. The election closes June 15, 2011 at 11:59 PM Eastern Time. Please follow the instructions below to view the website and cast your ballot.

We encourage you to take advantage of this opportunity to select the Second Vice-president of the American Fisheries Society for 2011-2012. This year's candidates for office are Donna L. Parrish and Margaret H. Murphy. Their biographical information may be viewed in the April issue of *Fisheries* and are also available at the voting site below.

http://www.surveymonkey.com/s.aspx?sm=x59XB2zaU2hD\_2fsypg\_ 2fv\_2fzA\_3d\_3d

Photo below: Salmon carcass on the shore of Lake Ontario. Photo courtesy of Katie Easterling.





Photo above: Good conversations and poster presentations at the 2011 AGM. Photo courtesy of Warren Dunlop.



Photo above: EJ Crossman Award winner, Shannon Dorn (University of Waterloo), and OC Vice President, Scott Gibson. Photo courtesy of Warren Dunlop.

Photo below: OBFN Award winner, Alyssa Murdoch (University of Waterloo) and Jason Barnucz, representing OBFN. Photo courtesy of Warren Dunlop.



#### **Canada Rivers to Oceans Week**

June 8-14, 2011 marks Rivers to Oceans Week, an annual week of events to remind us that safeguarding the health of all water — local springs, creeks, streams, lakes, rivers, wetlands and even groundwater — flowing through our watersheds also improves the quality of Canada's oceans. This year's theme is **Dare to Care** about Biodiversity.

APRIL 2011

#### VOLUME XI ISSUE #2

#### **ThermoStat V2, replaces Stream Temperature Analysis Tool and Exchange (STATE)** By Nick Jones

The River and Stream Ecology Lab has recently developed a powerful stand-alone program that will replace Stream Temperature Analysis Tool and Exchange (STATE). We'd like to share what we've done. We are also interested in any feedback and ways to improve. The new software is called ThermoStat V2: Tools for Analyzing Thermal Regimes. This version of ThermoStat incorporates many of the great features used in STATE and ThermoStat V1 and more in a desktop stand-alone platform. Functionalities include:

- Import data from HOBOWare Pro and BoxCar Pro formatted text files.
- Automatic and optional data cleaning functions, e.g. outof-water days, start/end trimming.
- Daily, monthly, weekly, seasonal and annual temperature statistics.
- Graphing of annual, seasonal and monthly temperature duration curves.
- Dates of thermal maximum and minimum temperature
- Warming and cooling rates (hourly rates of change)
- Export of analysis results as ASCII text files (e.g. Microsoft Excel and Microsoft Access friendly files).
- Standardized reporting in PDF format, including graphical and tabular results.

ThermoStatV2 is free. Please send an email to

Nicholas.jones@Ontario.ca requesting the password to unzip the software. Installation instructions are provided in the reference manual. ThermoStat V2 is programmed using Matlab and compiled as a 'standalone' package. However, it is necessary to have the Matlab runtime environment on your system which is bundled in the Zip file.

Download from: http://people.trentu.ca/nicholasjones/tools.htm



Photo above: Port Dover on a windy day. Photo courtesy of Katie Easterling.

Photo below: Astyanax bimaculatus from northern Peru. Photo courtesy of Rob Eakins.



Photo below: Young-of-the-year Lake Sturgeon in a holding tank. Photo courtesy of Lisa O'Connor.





Photo left: Bill Gardner

Photo right: Ontario Ministry of Environment vessel Great Lakes Guardian in Hamilton Harbour. Photo courtesy of MOE.



Newsletter of the AFS-OC

VOLUME XI ISSUE #2

#### **Featured Institution:**

University of Windsor by William Glass, PhD Candidate

Located on the banks of the Detroit River, the University of Windsor is a comprehensive teaching and research institution. Given its position on one of the connecting channels of the Great Lakes, and proximity to Lake Erie, it is no surprise that fisheries biology is a significant component of both the school's undergraduate and graduate programs.

The University of Windsor offers several undergraduate courses that emphasize learning in fisheries related fields, including courses in limnology, stream ecology, fish biology and ecotoxicology. Several of these classes offer a field component to their curriculum. Students in the fish biology class learn collection techniques and identification of local fishes. The stream ecology class offers the opportunity to learn many field sampling techniques including backpack electrofishing, invertebrate sampling and identification, along with river mapping and other useful field and laboratory skills. In addition to these courses, the University of Windsor participates in the Ontario Universities Field Biology Program, offering a course in Great Lakes Field Biology. For two weeks every summer, students from across Ontario descend upon the University of Windsor's Great Lakes Institute for Environmental Research (GLIER). During this intensive course students experience the life of a field researcher, taking samples of fishes through the use of gill nets and seines, and sampling water, sediment and invertebrates from Lake St Clair, the Detroit River and the western basin of Lake Erie. The field component is highlighted by an overnight sampling trip to Peche Island at the mouth of the Detroit River. Along with the field experience this course also involves the students in the preparation and analysis of the samples collected, culminating in a final research paper based on the data that the students generate.

Along with the various undergraduate courses, the University of Windsor has a strong graduate program in biology which emphasizes graduate student research. The university offers access to state of the art facilities for genetic analysis, organic contaminant analysis and stable isotope analysis at GLIER, complemented by several world-class Continued on page 6 MOE is hosting a OBBN training course at Nipissing University in Bracebridge (125 Wellington Street) on 27<sup>th</sup> -29<sup>th</sup>, April 2011

This course has been organized for new Network members who intend to use OBBN methods through their employment or academic study. Our registration process, therefore, gives priority to individuals with employment or academic related training requirements. First-comefirst-served registration for people in this priority group is now open, and will continue until April 14. Registration restrictions will be removed after April 14, thus any remaining spots on our registration list will be available to anyone. There is no registration fee for this course. Refreshments and lunches will be provided. Registrants are responsible for all other meals and lodging.

E-mail Sarah Sinclair (<u>obbnassistant@gmail.com</u>) to register.

Photo below: Featured Institution: University of Windsor and the Ambassador Bridge to Detroit, MI. Photo courtesy of the University of Windsor



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

**Date** TBA

http://www.afs-oc.org

Website

2011-12 Executive Committee Elections

Newsletter of the AFS-OC

#### Featured Institution (continued from page 5)

APRIL 2011

researchers specializing in such areas as the ecology, physiology and behaviour of invasive species, conservation genetics and ecotoxicology. Some of the highlights of ongoing graduate student research include the physiology of the olfactory system in sea lamprey, the attraction of round gobies to various stimuli in the hopes of developing a possible control method, the conservation genetics of west coast salmonid populations, effects of organic contaminants on local brown bullhead populations and the study of Canadian species at risk and their possible local adaptations. A former graduate student was featured on the Discovery Channel, demonstrating a typical day researching sharks in the arctic with Mike Rowe, host of "Dirty Jobs".

The University of Windsor is currently expanding its capacity for research in fisheries with the construction of a fish hatchery on the Detroit River and the recent acquisition of a parcel of land near Lake Erie which will be transformed into a field biology station.

For more information on these and other exciting opportunities at the University of Windsor please visit <u>www.uwindsor.ca</u>.



Photo above: The author electrofishing with University of Windsor students in a stream ecology lab. Photo courtesy of Bill Glass.

#### **Canada's Fisheries - Fast Fact**

Canadian Fisheries Fast Fact is an overview of key national and regional statistics relating to aquaculture, commercial fisheries, recreational fishing and trade. The brochure also contains additional statistics regarding species and international trade.

For more information please visit the website at:

http://www.dfo-mpo.gc.ca/stats/facts-Info-10-eng.htm

#### Canadian Capture Fisheries Research Network

This network, funded through an NSERC (Natural Science & Engineering Research Council) grant of \$1million per year for 5 years, is comprised of industry, DFO and academic research groups. Eleven universities across Canada, including the University of Guelph, will conduct applied research in the area of capture fisheries. The intent is to engage university and DFO scientists in industry directed research projects.

Stay tuned for more information.

**Upcoming Ontario Chapter Training** 

To Be Announced

Date

#### Website

TBA

http://www.afs-oc.org

Newsletter of the AFS-OC

APRIL 2011

VOLUME XI ISSUE #2

#### **Student Subunit News**

At the recent Ontario Chapter AGM Business Meeting, 3 candidates stepped forward for the opportunity to lead the Student Subunit. Soon there will be an election where the members of the Student Subunit will be asked to acclaim each candidate.

The candidates are:

<u>President</u>: Lee Gutowski, Carleton University <u>Vice President</u>: Andrew Ecclestone, Trent University <u>Secretary/Treasurer</u>: Sarah Steele, University of Toronto

For more information or to become involved in the Student Subunit please contact Caleb Hasler at: <u>student-president@afs-oc.org</u>.

#### **Graduating College or University?**

The federal government's Youth Internship Program is currently seeking recent post-secondary graduates to fill vacancies in various federal departments.

For more information please visit the website at: http://www.youth.gc.ca/eng/yip/index.shtml



Photo left: Academic advisor to the Ontario Chapter's Student Subunit, Dr. Steve Cooke from Carleton University with a redhorse sucker. Photo courtesy of Steve Cooke

#### Volunteer Opportunities for Students

Looking to build your resume but can't get a job in the field? Try volunteering with one of the many naturalist organizations in the province. Ontario Nature is the provincial body that represents over 130 member groups.

For more information on a Naturalist group in your area, please visit:

http://www.ontarionature.org/discover/me mber groups/member groups alpha.php

#### **Judging Science fairs!**

Looking for a great way to put your science knowledge to the test? Try judging a science fair.

For more information: <u>http://www.youthscienceontario.ca/progr</u> <u>ams/science-fairs-ontario</u>



Photo above: Electrofishing in Shelter Valley Creek, ON. Photo courtesy of Katie Easterling.

Ontario Student Subunit EventsDateWebsiteTBATBAhttp://www.afs-oc.org

Newsletter of the AFS-OC

VOLUME XI ISSUE #2

#### "Big" Fish from Lake Simcoe area sets World

#### Record by Wil Wegman, OMNR

When most people brag about a big fish they've caught, they hold their arms out wide to show just how huge their catch was. Brent Shirley caught a big fish, too - a world record breaker. But his fish would fit easily in the palm of his hand.

Shirley made his record-breaking catch when he was doing fisheries monitoring work in August on the Talbot River, a tributary to Lake Simcoe. Brent works as a fish and wildlife technician for the Ministry of Natural Resources. He and his team of summer students were electrofishing the main channel of the river near Beaverton. In the catch, Shirley noticed one largerthan-usual fish.

"Right away I thought we had one very oversized darter on our hands, and the excitement among cast and crew that day was something we won't forget anytime soon", he recalls. "We carefully laid the fish on our tape measure and saw that it was almost eight centimetres, or about 3<sup>1</sup>/<sub>4</sub> inches long."

Shirley took several photos of his prize catch, and then continued his sampling work for the rest of the day. Shirley and other ministry staff monitor fish and the health of lakes and rivers across the province to understand trends and maintain healthy fish stocks. The data collected helps the ministry make decisions about regulating fishing.

"When I returned to the office, I couldn't wait to begin the verification process", he said. "I contacted the guru of fish identification in Ontario."

That guru is Erling Holm of the Royal Ontario Museum's Department of Natural History. Holm confirmed that the specimen was a Rainbow Darter – and a record-setter. The previous Ontario record was 7.1 centimetres in total length. The world record was 7.7 cm TL. Shirley is now a world record holder with his 7.9-centimetre Rainbow Darter.

"There's nothing quite like catching a big fish", says Shirley, a passionate angler in his free time. He admits he wouldn't mind catching a *really* big fish. "My ultimate goal is to someday catch a record fish like a Lake Trout, whitefish, bass or muskie."

Continued in right column.



Continued from left column

Rainbow Darters are members of the perch family. They're found in Canada and the United States. Usually five to seven centimetres long, they are considered an excellent "indicator species" because they have high standards for water quality and habitat.

When asked if he would bring his prize catch to the local taxidermist for posterity, Shirley replied, "Heck no; like any trophy fish, I decided to release this one back from where it came."



Photo above: Brent Shirley (far left) and his crew gather fish for monitoring on the Talbot River. Photo courtesy of Brent Shirley.

#### **Upcoming Conferences**

34<sup>th</sup> Larval Fish Conference
54<sup>th</sup> Conference on Great Lakes Research
4<sup>th</sup> N.A. Sturgeon and Paddlefish Conference
141<sup>st</sup> Annual Meeting of the AFS

#### Date

May 22-26, 2011 May 30-June 3, 2011 July 11-14, 2011 September 4-8, 2011

#### Website

http://www.larvalfishcon.org http://www.iaglr.org/conference http://www.viu.ca http://www.fisheries.org/afs2011

APRIL2011

VOLUME XI ISSUE #2

#### 2011 Ontario Fish ID Workshops

Three regular and one species at risk workshops have been scheduled:

- 1. 20-22 April 2011 (regular 3-day workshop)
- 2. 25-27 April 2011 (regular 3-day workshop)
- 3. 2-4 May 2011 (regular 3-day workshop)
- 4. 28-29 April (2-day Species at Risk workshop)

Place: University of Toronto, Ramsay Wright Building, Room 205, 25 Harbord Street (see map below).

Time: All workshops will begin promptly at 9AM and end at 5PM.

#### **Registration/Cancellation**

To inquire about availability or reserve a spot contact Cathy Dutton by phone or email (see below). Cathy Dutton, Department of Natural History, Royal Ontario Museum 100 Queen's Park, Toronto, Ontario, M5S 2C6 Telephone: 416-586-5894/ FAX: 416-586-5553 E-mail: cathya@rom.on.ca

#### **Additional Information**

For information about course content or matters other than registration, contact: Erling Holm or Mary Burridge Department of Natural History (Ichthyology) Royal Ontario Museum 100 Queen's Park Toronto, Ontario CANADA M5S 2C6 Telephone: 416-586-5760 (Erling), 416-586-5531 (Mary) FAX: 416-586-5553 email: workshop-ichthyol@rom.on.ca

For more information see **Workshops / Courses** on the **Events & Conferences** page of the AFS-OC website: <u>www.afs-oc.org</u>

#### **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: <u>http://afs-oc.org/cgi-bin/online/storepro.php</u>



#### Applied Fluvial Geomorphology Short Course

Instructor: Dave Rosgen of Wildland Hydrology Inc Location: Conference facilities at Golder Associates Ltd.,2535– 3rd Avenue S.E., Calgary, AB

Date: August 15-19, 2011

Sponsored by: Trout Unlimited Canada in Partnership with CWRA Alberta and Golder Associates Ltd

General Description: This introductory course combines lecture and field applications to familiarize students with the fundamentals of river behavior and the general principles of fluvial geomorphology, sedimentation, hydraulics, restoration, fish habitat improvement, riparian grazing management and streambank erosion.

Fax your registration to 970-568-0002 or online at www.wildlandhydrology.com

Please have items for the next issue of *The Lateral Line* submitted by September 23, 2011

# 2011 Ontario Chapter AGM in Photos (Courtery of Rob Eakins and Warren Dunlop)



Photo above: President Silvia D'Amelio presents Jack Imhof with his Certificate of Appreciation.



Photo above: President-Elect Dean Fitzgerald introduces topics for discussion during the Business Meeting.



Photo above: Dean Fitzgerald and Silvia D'Amelio address the membership during the Business Meeting.



Photo above: Halltech and LOTEK booths, just two of our many sponsors for the AGM.



Photo above: Dean Fitzgerald introduces Past-President Jon Clayton.



Photo above: YMCA Geneva Park, location of the 2011 AFS-OC AGM.