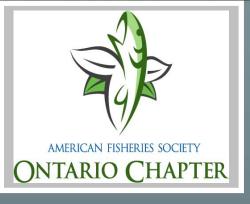
JANUARY 2011



Newsletter of the AFS-OC

#### VOLUME XI ISSUE #



## **President's Message**

Winter has set in and what was at one time the 'slow season' has become just as overwhelming as summer field seasons. This is the time of year where most of us toil over piles of data, overdue reports and correspondence as we watch the snow pile up. It is this time of year that your ExComm works tirelessly on yet another hugely successful Annual General Meeting. Many people including Scott, Lynn and Jon are putting in many hours planning this event as newbies like Dean and I try to keep up! We are in the process of developing an agenda and a call for presentations has been issued (see back page). If you know of anyone who would be interested in presenting please encourage them to contact any member of the Executive Committee.

Registration is now available online for this year's AGM (March 3-5, 2011). Look for the program to be available in February.

To close I would like to wish each of you a wonderful New Year.

Silvia D'Amelio Pres**iden**t – Ontario Chapter

## Goulais Bay–Best of intentions, unintended consequences

By Jack Mihell, BScF

This is a story with a sad ending, involving unwise shoreline manipulation. The scene is Goulais Bay, a large shallow horseshoe shaped bay of Lake Superior, containing no islands. My family purchased a half-acre lot with 100 feet of shoreline in the late 1950's.

The backshore rises very gradually, with a foot and a half of organic material over beach sand. The foreshore, if that is the proper term, also falls very gradually, such that one may walk almost a half mile out without having to swim.

In the 1950's the shoreline was rocky/swampy. Reeds grew out into the water for a distance of about 120 yards, in about a foot of water. They were up to 6 feet in height, over an inch around, and grew very thick. The sand in which they grew was very firm – so firm, in fact, that the previous owner of our property frequently drove his Willys Jeep all through the weed bed. Waves, no matter how high on the open bay, could never reach shore. My parents figured that if these reeds were eliminated, waves would bring in sand, as was evident in many other local bays of Lake Superior without reeds.

Consequently, in 1959, we and the neighbouring family hired a D6 Cat bulldozer and pushed the large boulders back from the shoreline into the swampy backshore. We then manually hoed, raked, shoveled and wheel barrowed smaller rocks and made a smooth sub-beach, expecting a future deposition of sand. At the same time, I cut the reeds with a grass scythe in front of our two properties. I recall it took three cuttings, a few weeks apart. As soon as the reeds started to grow above water, I would cut them again at sand level. They were not let to breath, consequently drowning within one season. (continued on page 3)

## In this issue:

President's Message	Page 1
A Habitat Story	Pages 1/3/6
Student Colloquium at CCFFR	RPage 2
View from Up Here	Page 4
.The Siscowette	Page 5

Featured Biologist.....Page 5/6/9 Student Subunit News .....Page 7 Student Employment Info.....Page 7 2011 AGM Announcement.....Page 8 San Marco Museum Petition.....Page 8 JANUARY 2011

## The Lateral Line

Newsletter of the AFS-OC

#### VOLUME XI ISSUE #1

## **CARS Student Sub-section of the Education Section Hosts Student Colloquium at CCFFR**

By Caleb Hasler, Canadian Aquatic Resources Section (CARS) Communication Officer

On Saturday January 8, 2011 at the Canadian Conference for Fisheries Research (CCFFR) held in Toronto, Ontario, CARS hosted a student colloquium. Panel members were Steven Cooke, a professor from Carleton University; Martin Koops, a scientist with Fisheries and Oceans Canada; Scott Gibson, a species-at-risk biologist with the Ontario Ministry of Natural Resources and former consultant; Karen Murchie, a recent PhD graduate and a post-doc; and John Lark, the president of Coherent Advice and a long time fixture at CCFFR. Panel members were asked to talk about their backgrounds, their careers, and mainly focus on the paths they took to their current positions. They also provided very valuable "sage" advice to over 60 students (17 universities were represented!). The students then had an opportunity to ask questions and interact with the panel members.

Some of the highlights were: 1) Finding out that it is ok to have a bad day, week, or even year- just stick with it, move to plan "b" if you have to; 2) Involvement with AFS or other professional societies is a must for success; 3) Having a lunch buffet in the room really helps bring in the crowd; 4) Be careful with your cover letter- make sure you talk about and provide examples for all of the job requirements; 5) Don't be afraid to approach people at a conference, no one bites that hard; 6) The Rotary Club and the Society for Fisheries Society of the British Isles has funding opportunities for travel and research.

Many thanks to the CARS executive committee for helping to plan the event, Rob McLaughlin and Nick Collins for logistical planning of the conference and the colloquium, Mike Donaldson for helping with the colloquium and taking pictures, and to all of the panel members. Also, many thanks to the other fisheries professionals that participated in the colloquium and helped to address many of the questions brought forth.



Photo above: AFS-OC President Silvia D'Amelio Photo below: Ice fishing at the 2010 AGM during a break.



The Ontario chapter is proud to be associated with:



www.fishdb.ca

## **Albinism in Fish!**

A recent article on the Muskies Inc. website describes a very large albino Musky that was caught last fall. In the wild albinism is rare but in the aquarium trade it is quite common. For more information on albinism in fish check out: http://www.muskiesinc.org and http://www.squidoo.com/albino-fish

JANUARY 2011

Goulais Bay (continued from page 1)

The project met with evident immediate success. Sand started to accumulate that fall of 1959. So encouraged we were that next season I cut reeds in front of the next adjacent two properties.

Within a decade we had a beautiful beach, about a foot or so deep of fine sand. I have pictures of the 1959 and 1968 conditions. By this time, the total shoreline was being bought up and "developed", with almost total elimination of the reed bed by others. What a wonderful success story, so we all thought. My first realization of what could happen came by taking a B.Sc.F. course between 1966-70, and studying plant and animal ecology. I took a closer more observant look at what was happening. With the reed bed gone, pike no longer spawned out front. Once prolific, it was becoming harder to catch the "dozens-a-day" count that we knew in 1959.

Shiner minnows that we easily caught for bait in early days were in less abundance. So were crayfish and frogs. Broods of ducks were down as well. Our sand was disappearing! Waves that brought it in were now taking it further away down the shore, finally to accumulate at someone else's shoreline with a projecting point of land. Weeds were now growing on our sub-beach.

Not only that, our shoreline was eroding with each bash of November waves. We were losing prized trees as well as footage; about 7 large ones, within two decades and 20 feet of shoreline.

But the worse change was to the former area of reed bed. The oncehard sand was gone and the underlying, gooey clay now predominated. We now sunk up to our knees when walking out to reach firm sand beyond the former reed bed. Recreational swimming and boating were fast becoming less pleasurable. Several large, deep clay holes presented (and still do) serious threats to small children and had/have to be marked with tree branches. By the early 1970's, lot owners were erecting shoreline walls to try to keep back the waves and retain their shoreline. My father built one of concrete and in doing so, took a massive heart attack wheel barrowing cement for it, in 1974. (continued on page 6)



Backroad GPS Maps OutDoor Recreation MAPS FOR YOUR GPS!

Changing the way we explore the outdoors - Popular Mapbook series goes high-tech.

Please visit our dedicated GPS Maps site at: www.gpsmaps.ca



Photo above: Aerial photo of Goulais Bay, Lake Superior

Photo below: Checking out the silt traps at Caledon Lake, photo by Jon Clayton, Credit Valley Conservation



### **History Bytes**

Since the Ontario Chapter was formed in 2004 there have been six Annual General Meetings (AGMs). In 2008 we held our business meeting at the Parent Society meeting in Ottawa. We have had one joint AGM in Duluth with the Wisconsin and Minnesota chapters; we have had one AGM at the Frost Centre in Dorset, and we have had four AGM's at Geneva Park in Orillia. The Northwest Ontario Chapter had 18 AGMs starting in 1981 with the last one taking place in 2000. The Southern Ontario Chapter had 15 AGMs from 1989 to 2003, with the majority being held at the Frost Centre.

JANUARY 2011

VOLUME XI ISSUE #1

## The View from up Here By Bill Gardner

I recently took the Canada Firearm Centre's Possession and Acquisition License (PAL) course. This course, combined with the Hunter Education course is the 1<sup>st</sup> step to me trying my hand at hunting. I am not really sure that I will like it but I wanted to try it. I was about 5 or 6 when I first fired a gun. It was a .22 caliber rifle. My father took me to the old gravel pit near our house and we shot at tin cans. Over the next few years we shot that rifle and my Dad's .303 Lee-Enfield rifle a few more times in those pits. The next time that I clearly remember shooting a rifle was in the basement of local high school in Aurora, when I was about 13 years old and in Air Cadets. Over the next 4 years I would shoot many rifles during shooting competitions. When I left cadets my chance at shooting ended as the old Gravel Pit was now a subdivision. Each of us in the fisheries field knows (or knows of) someone who carries a firearm as part of their job. DFO's Fisheries Officers, MNR's Conservation Officers, Environment Canada's Wildlife Officers are the 3 main positions that come to mind but I recently had a conversation with an OMNR friend who told me of her recent work trip to collect terminal buds from old growth Poplar trees. Yup, that's right, these folks use shotguns to collect samples for a study on Poplar trees and the easiest way is to shoot them down. When I sought further information on the use of guns and forestry I was rather surprised to learn many people in the Forestry side had a story about using a rifle to collect tree/leaf samples. So, it got me to wondering if firearms are ever used to collect fish samples. Yup, in the great State of Vermont, in Lake Champlain only, there is a legal "hunt" for fish. Between March 25 and May 25 the "hunter" gets up into a tree stand above the waterbody and when they see some fish (pickerel, northern pike, carp, garfish, bowfin, mullet, shad, suckers, bullhead and other cull fish) swim into shore they shoot near the fish. Apparently, the shock stuns the fish and they float up to the surface. The "hunter" then climbs down from the tree to retrieve the fish before it awakens. Who knew that my decision to take the PAL could possibly lead me back to fishing?



Photo above: John Lark addresses students during the Student Colloquium at CCFFR

Photo below: *Cordylancistrus* sp. from northern Peru, photo by Rob Eakins, EcoMetrix Incorporated.



Photo below: Checking out the posters at the 2010 AGM





Photo left: Bill Gardner

Photo right: The RV Kiyi docked in Thunder Bay, photo by Pete Addison.



## **Featured Biologist:**

Dr. Richard A. Ryder by Nigel Lester and Terry Marshall

"By 1959, the need for a fisheries management programme in northern Ontario became obvious and an inventory programme was launched that spring ... It is hoped that, over a period of at least five years, enough information can be gathered from representative lakes ... on which to base a suitable fisheries management plan embodying the principles of wise use and sustained yield ... The science of limnology is basic to our work ... Once the physical and chemical characteristics of a lake are understood, fish population studies become more meaningful ... Some information has come to light as a result of the first two seasons ... in general, northern Ontario waters are less productive ... The cause of this phenomenon is probably two-fold: nutrient concentrations ... are considerably lower ... [and] growing season is shorter ... fishery productivity ... in northern Ontario ranges from one half to two pounds per acre ... in contrast, most southern Ontario lakes can yield annually four to ten pounds per acre" (Ryder 1961)

These quotes, published almost one half century ago, demonstrate the considerable insight and foresight that Dick Ryder brought to Ontario's Department of Lands and Forest (now MNR) during his early years. Born in 1931, he developed a passion for nature as a youth, fishing the banks of the St. Clair River in Windsor. In 1947, he lied about his age to gain summer employment with the Department Lands and Forests in Algonquin Park. He received his formal training in fisheries at the University of Michigan before being joining the "Department" in 1954 as District Biologist in Port Arthur. From 1959-1961, he led the Northern Lakes Fisheries Inventory. In 1961, he was recruited to the main office in Toronto as coordinator of the Coldwater Fisheries Management Program and then to South Baymouth (Manitoulin Island) as Research Scientist and Director at the Lake Huron Research station. In 1968, he returned to northwest Ontario and established the Productivity Research Unit at Thunder Bay where he worked until his retirement in 1995. His pioneering work in northern Ontario included extensive study of water chemistry and resulted in the first "edaphic" map of Ontario in 1964, demonstrating that concentrations of total Continued on page 6

## The Siscowette

Profiling women in science in the Great Lakes

If you are looking for information on Women in Science in the Great Lakes basin, Dr. Yolanda Morbey at the University of Western Ontario publishes a newsletter on Women in Science. Check it out at:

### http://publish.uwo.ca/~ymorbey/

Photo below: Featured Biologist Dr. Richard Ryder.



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

Date

March 3-5, 2011

Website

http://www.afs-oc.org

2011 Ontario Chapter AGM

Newsletter of the AFS-OC

Featured Biologist (continued from page 5)

JANUARY 2011

dissolved solids (TDS) varied according to glacial history. This map was proposed as an initial 'nutrient' index for predicting the potential fish production of lakes. Dick recognized that productivity was also affected by morphometric and climatic factors, and the roles of these factors were elucidated in subsequent publications.

The famous morphoedaphic index (i.e., potential fish yield is proportional to the square root of the TDS : mean depth ratio) was published in 1965, based on an empirical relationship observed for north-temperate lakes. This paper attracted world-wide interest and led to research studies in other climatic zones that elucidated the effect of climate.

During his career he published more than 60 peer-reviewed papers. Although best known for his pioneering work on fish productivity, Dick has made valuable contributions elsewhere. He performed extensive field research on the behaviour and ecology of walleye, and contributed this knowledge through the authorship of the 'Walleye' and 'Sauger' chapters in the Freshwater Fishes of Canada (Scott and Crossman 1973), along with numerous other publications. His interests have also included the structure and dynamics of fish communities, and his publications have offered insight into how these attributes are related to the health and integrity of aquatic ecosystems.

Throughout his career, his knowledge of aquatic ecosystems was frequently solicited by provincial, national and international panels, committees and editorial boards. Dick served the International Joint Commission and the Great Lakes Fisheries Commission by helping to develop indicators of ecosystem quality. He was a member of the Biodiversity Science Assessment team for Environment Canada and consulted widely on environmental issues related to mining, forestry, hydro-development, and fish harvesting.

Dick's interest in fisheries extended well beyond Ontario. His Continued on page 9

#### Goulais Bay (continued from page 3)

As we were one of the first to cause the problem, we now became one of the first to start to correct it.

I tried several times to replant the large round reed from other sources still in the bay. My many attempts met with only one success, and after 35 years it has not spread. However, another type of reed has come in on it's own-a triangular, smaller less dense variety. We now protect this introduction and it seems to be doing the job. Waves no longer crash into shore and the root mat has firmed up the clay somewhat. The receding water level may have something to do with this, however.

We now have many broods of waterfowl annually in front of our reedy shoreline; ducks, herons, sandhill cranes, plus bald and golden eagles, harriers and hawks. Frogs are on the increase but fish species are still in decline, including minnows, plus crayfish.

What was done in one year (for us) will take a lifetime to undo. I was 13 when I (to a large extent) started it, and I probably won't see a final correction. People are still cutting reeds.

One final avengement: Forty-nine years! later, in 2008, I was walking out front, wallowing through the clay beyond the new reed bed. The suction of this clay bed is so powerful that a great deal of effort must be expended to pull each step up. My left achilles tendon snapped like a bowstring. Subsequent reattachment was unsuccessful. I had it coming, I guess. I deserve part of the sad ending.

**Upcoming Ontario Chapter Training** 

To Be Announced

Date

TBA

http://www.afs-oc.org

Website

JANUARY 2011

## **Student Subunit News**

The Ontario Student Subunit is a province-wide organization of Chapter members who are also Society student members attending post secondary educational facilities within Ontario. Membership within the Student Subunit is dictated by the bylaws of the subunit. The Ontario Student Subunit provides representation for and attention toward issues concerning students of fisheries and aquatic sciences.

**<u>President</u>**: Host monthly conference calls with the Student Subunit Executive, plan student events (socials, colloquiums, retreats, workshops), help to plan course for students, participate in monthly parent chapter conference calls, help plan and execute (with the parent chapter) the AGM.

<u>Vice President</u>: Participate on monthly conference calls, assists the President with his/her duties

<u>Secretary/Treasurer</u>: Participates on monthly conference calls, assists the President and Vice President with their duties, records meeting minutes, controls the finances (with the parent chapter treasurer's assistance).

For more information or to become involved please email Caleb Hasler at: **student-president@afs-oc.org**.



Photo left: A Trent University grad student and a DFO intern survey the spawning substrate using a DIDSON sonar.

## 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/indexeng.htm

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

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. http://www.fisheries.org/afs/hutton.html



Photo above: OMNR and DFO students and staff remove fish from nets during a juvenile Lake Sturgeon project.

### **Ontario Student Subunit Events**

Date

March 3-5, 2011

## Website

http://www.afs-oc.org

2011 Ontario Chapter AGM

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

## **2011 Ontario Chapter Annual General Meeting**

By Jon Clayton, Past President - Ontario Chapter

I expect that by now there are few, if any, Ontario Chapter members who have not yet heard that this year's Annual General Meeting and Conference will again be held at YMCA Geneva Park in Orillia. For those of you, who have not yet booked this in your calendars, block off March 3-5, 2011. This year's return promises to be better than ever, with an informative list of speakers and poster presentations, social events, raffle, and a chance to renew old friendships or make new ones. Of course we will be handing out awards for the best student poster and oral presentations again this year.

The agenda for the meeting should be completed in early February but for those of you familiar with the format, we won't be deviating too much from previous years. There will be a social on Thursday night. Friday is a full day of talks, with the business meeting and main social event scheduled that evening. Saturday is a morning of talks and then we wrapup at lunch.

During the event, we will be holding our annual Business Meeting, where we invite you, the member, to come out and provide your thoughts on where the Chapter should be going in the future. If you have ideas for training courses or lectures this would be a great venue in which to share your ideas. It is also where we will be holding elections for the open positions for the following year. This year we will be looking to fill the positions of President-elect and Vice President. Although the intention to serve is stated at this meeting, the position doesn't actually start until September 2011. If you want to get involved, this is certainly the way to do it!

As done last year, registration will occur online. We are not anticipating any issues but please let Rob Eakins or Lynn Bouvier know if you encounter any problems with registration. To register, visit the OC website and log in to the online store at: http://afs-oc.org/cgi-bin/online/storepro.php

I hope to see all you at Geneva Park. The meeting has always proven to be a very informative session and this year is not expected to be any different!

## PETITION TO SAVE THE SAN MARCO MUSEUM IN PERU

This message is to inform you of a threat to the future of the largest biological scientific collections in the oldest Peruvian institution, the Natural History Museum (Museo de Historia Natural). The authorities of the University of San Marcos in Lima, Peru have unilaterally decided to propose the construction of a building in the area presently occupied by the Natural History Museum. Their plan under the pompous name of Academic, Cultural and Research Complex does not offer the needed housing for the largest scientific collection in the country, nor for any improvement of research facilities for the study of its biodiversity. Despite that the role of the museum in the life of the University has been widely recognized and praised by the same authorities, since their affiliates contribute a large part of the scientific publications of the institution (in peer reviewed journals like PNAS, Science, Nature); they have ignored or diminished the role and needs of the scientific legacy housed in the museum. There is almost a complete lack of financial support of the authorities of the university to the Natural History Museum with a budget of less than 108000 US dollars per year, only 35% of which is devoted to the activities related to the scientific collections. The Natural History Museum in Lima is an institution over 80 years old that includes the largest collections of the flora and fauna of the country. The herbarium includes over 500,000 plant specimens, the mammal collection near 37000, birds 28000, amphibians and reptiles 50000, fish 450000, insects and arachnids 750000, mollusks 30000, geological samples and fossils 9000. It also includes historical collections made by naturalists during the XIX and part of the XX centuries such as Raimondi, Taczanowski, Jelski, Stolzman, Weberbauer, Weyrauch, Eigenmann, and Koepcke.

To sign the petition online please visit: http://www.petitiononline.com/musm1710/petition. html

### **Upcoming Conferences**

2011 Ontario Chapter AGM
34<sup>th</sup> Annual Larval Fish Conference
54<sup>th</sup> Annual Conference on Great Lakes Research
141<sup>st</sup> Annual Meeting of the AFS

## Date

March 3-5, 2011 May 22-26, 2011 May 30-June 3, 2011 September 4-8, 2011

## Website

http://www.afs-oc.org http://www.larvalfishcon.org http://www.iaglr.org/conference http://www.fisheries.org/afs2011

JANUARY 2011

VOLUME XI ISSUE #1

Featured Biologist (continued from page 6)

association with the UN Food and Agriculture Organization brought him to numerous countries in Africa (Egypt, Sudan, Ghana, Burundi and Uganda) to advise on fisheries management practices in newly created reservoirs. He provided similar advice to the governments of Finland and Guatemala, and he assisted Argentina in designing a fisheries resource inventory for inland lakes and reservoirs. Dick joined the American Fisheries Society in 1953 and served as its President in 1981. He remains as one of its longest standing members and the Society has honoured him with the Award of Excellence (North Central Division) in 1992, the Fisheries Management Hall of Excellence in 1999, and the Meritorious Service Award in 2001. In 1993 he received an Amethyst Award from the Province of Ontario for his contributions to fisheries science. His contributions have also been recognized by the Science Council of Canada, the Rawson Academy of Aquatic Science, and Environment Canada.

Soon after retirement, Dick was diagnosed with Parkinson's disease, the effects of which have hampered his ability to pursue retirement plans. He has been unable to follow through with plans to write a history, describing over 50 years of his involvement in fisheries science. Chapters of that history are eagerly related whenever one chats with Dick. He is forever interested in discussing our science, whether it be old or new ways of thinking. Although, after a chat with Dick one sometimes wonders whether there are any new ways of thinking!

Interested in learning about DFO's Experimental Lakes Area, located near Kenora, ON? Just click on the link below and watch the video.

http://www.science.gc.ca/default.asp?Lang=En&n=2AF9A497-1

#### **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



### Planning & Executing Successful Rotenone & Antimycin Projects

This 4 <sup>1</sup>/<sub>2</sub> day training course stresses public involvement, safety, planning, & application techniques from the recently released AFS *Rotenone SOP Manual*. This course was developed to meet the U.S. Environmental Protection Agency reregistration requirements that rely on the label and standard operating procedures for the piscicides, rotenone & antimycin.

When: May 2-6, 2011 Where: Huntington Wildlife Forest, Newcomb, NY Tuition: \$900 (\$800 AFS members) For class information, please contact: Brian Finlayson, 530.957.0333, briankarefinlayson@att.net or visit: www.afs-oc.org

# Deadline for items for the next issue of *The Lateral Line* is March 11, 2011

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

**First Notice and Call for Presenters** 



## Annual General Meeting March 3-5, 2011 Geneva Park, Orillia

## Join us for our 2011 Annual Meeting and Conference at the Geneva Park Conference Centre, on the shores of Lake Couchiching near Orillia.

We are currently seeking oral and poster presenters for the 2011 AFS-OC Annual General Meeting and Conference. Interested presenters should provide their topics by February 4, 2011 and abstracts must be submitted by February 11, 2011. There are limited slots available for oral presentations. Poster presentations can also be accommodated. Presentations are being solicited for all aquatic resource topics, and on completed studies, preliminary results, or case studies. Once topics are approved, abstracts should be submitted as email attachments in Microsoft Word format to Silvia D'Amelio (president@afs-oc.org).

Student presenters are eligible for the E.J. Crossman Award for Best Student Paper. An award for Best Student Poster will also be presented.

For additional information, please contact:

Silvia D'Amelio Rm. 270, Axelrod Building University of Guelph Guelph, ON, N1G 2W1 Tel: 519-824-4120 ext 52760 Fax: 519-780-1696

Email: president@afs-oc.org

Registration is available online. Members and students are eligible for discounted rates. <u>www.afs-oc.org</u>