



FOR FRIENDS & ALUMNI OF THE ACADIA DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCE

# GREETINGS FROM THE HEAD OF DEPARTMENT



Hello all alumni and friends of the Earth and Environmental Science Department at Acadia University. It's been another busy year

and we continue to grow! We have 150 majors enrolled in our three programs and our spring field schools are expected to be larger than ever in the coming year. Our challenge will be finding the space and instructors to fit everything in!

Hands-on experience continues to be an important part of our three programs. Field courses and trips are an important component of our classes and research but we also are committed to providing training in the use and application of analytical equipment. Nelson O'Driscoll runs the Center for Analytical Research on the Environment (CARE) in the Irving Centre. CARE has been instrumental in providing students with experience using lab equipment and techniques aimed at the quantification of contaminant fate and understanding processes that support healthy ecosystems. Pam Frail runs the rock room in the basement of Huggins and makes the thin sections that we use in our petrology labs.

In both CARE and the Rock Room students become familiar with how we investigate the world around us. One of our biggest challenges moving forward will be finding ways to support and upgrade the equipment in E&ES. New initiatives for 2015 include exploring ways of involving alumni and industry in the support of our labs and facilities.

Our contact with alumni continues to be very important as it helps us guide our programs and also provides a perspective on the opportunities that our undergraduate programs provide. Whether you are a practising Geoscientist or Environmental Science professional or have pursued another career path we'd love to hear how those experiences affected you. We'd also like to get feedback on the format of our newsletter; is hardcopy preferable to a pdf? Let us know! Finally, we are planning on establishing an E&ES reunion event at homecoming in 2015, stay tuned for more details! Please feel free to send your contact info and a career or family update to Rob.Raeside@acadiau.ca

All the best in 2015!

Ian Spooner

Department of Earth and Environmental Science, Acadia University, Wolfville, Nova Scotia, B4P 2R6 ees@acadiau.ca Follow us on Twitter at @EES Head

# DEPARTMENT NEWS

Keep up to date with the department by visiting the departmental website at http://ees.acadiau.ca/

## **REGINALD MOORE (1932 -2014)**



Dr. Reginald Moore, former professor at Acadia University, died on 2 February in Kentville, NS. Reg grew up in southwestern Ontario, and graduated from University of Western Ontario before going to the University of Michigan to complete his PhD. He and his wife Pat moved to Wolfville in 1960, and he taught at Acadia until he retired in 1992. Reg's interests were soundly based in the Windsor Group, which generations of students from Acadia will well remember for their

exercises and assignments making endless thin sections or peels of limestone. One of his students commented, "Certainly a most "memorable" professor. I TA'd for him, and in a perverse way, rather enjoyed it. He certainly gave me the latitude to develop the labs in the way I saw fit! I will never forget the first sentence of a first question on one of his exams. "Explain the etymology of the titular words". To which I had to raise my hand and ask him to explain everything after the word "explain"!"

Following his retirement, Reg donated his extensive collection of materials from the Windsor Group (some 32 cabinets) to the Nova Scotia Museum, and embarked on a second career of learning languages, living for periods in Greece, Cuba and Mexico. Although Reg has been retired for 22 years, he is well known to many students since then, often seen working in his garden in front of Kent Lodge, Wolfville's oldest house.



Chris White receiving the medal from Hon. Z. Churchill, NS Minister of Natural Resources, with Michael Gravelle, Ontario Minister of Northern Development and Mines, and Greg Rickford, Minister of Natural Resources Canada looking on

### **ALUMNI SPOTLIGHT**

Chris White, adjunct professor at Acadia, and senior geologist at the Nova Scotia
Department of Natural
Resources was awarded the 2014 Provincial and Territorial Geologists Medal.

The winner of this medal is selected by an independent evaluation committee consisting of a representative from industry, academia and the Geological Survey of Canada.

Roger Tomlinson, Doctor of Science honoris causa Acadia, "father of GIS", died on 9 February, 2014. Dr. Tomlinson was

a member of the class of 1960. After he left Acadia he made a career in the field of geographic information systems (GIS) - hence the attribute "Father of GIS".



Roger Tomlinson,

### **STAYING CONNECTED**

We love to keep in touch with the graduates from our programs. Whether you are working in the environmental or geological industries, or have used your degree to leverage a career in another area, or have discovered a completely different area to work in, or have retired – we want to know what you are doing. So do drop us a note to ees@acadiau.ca (that message goes to Ian Spooner), and help us update our files. As an added bonus, if you provide us with your email address, we will be able to provide you with our newsletters in a more timely manner than via Canada Post! Rest assured we will not distribute or sell your email addresses – we will use it exclusively for this type of communication.

### THE VIEW FROM SECOND YEAR FIELD SCHOOLS

### By Rob Raeside

The second year field school is a staple of Geology and Environmental Science curricula in North America. This is the course that usually seals it for majors – either to continue or seek something else. If you are reading this, presumably you are in the first category there! Upper year students and graduates look back on their field school experience as the time when the subject really started to come together, and we strive to ensure that will always be so. What is it about field school that makes it so pivotal in the program? First, learning is experiential - no longer are the examples hypothetical, or single specimens pulled out of a drawer. Now students have to find that fold in the rhyolite or insect in College Brook, and distinguish it in its own environment. Second, we are out in the elements – no sitting in class, suffering from last night's excesses in the library or the Anvil, but bracing sea air of the Northumberland Strait, or spring breezes in the Irving wood lot by Acadia. Third, learning is done as a group - some exercises are done en masse, others are done in small teams, but always students are required to collaborate, talk about it, combine their thoughts and opinions. Finally, learning occurs non-sequentially. While investigating the insect life of early spring, a porcupine may be spotted in the canopy, or while dealing with rock contacts, crystals of tourmaline may be spotted. These "asides" are now being put in context in the memory file. Students and graduates both can take heart that your instructors benefit just as much from the experiences as you do!



Geology students atop the rhyolite plug at Arisaig



**Environmental Science** students analysing lake cores

Every year the E&ES

WE NEED YOUR HELP!

## THE (NEW!) BERMUDA CARBONATE SEDIMENTOLOGY FIELD SCHOOL

This spring the department launches a new field school focused on investigating the modern and Pleistocene carbonate sediments of Bermuda. Although traditionally offered biennially, this excursion will now be offered annually as a credit course. We will anticipate that there will be some spaces available for alumni (from all of our programs!) interested in understanding the development of carbonate reefs, hydrocarbon source rocks and reservoirs! This year the course will run from April 25 to May 2, 2015. If interested, please contact Dr. Peir Pufahl (peir.pufahl@acadiau.ca) for further details.



# **STUDENT NEWS**

# Fletcher Geology Club



On the first weekend of October, a group of 23 geology, environmental geoscience and environmental science students participated in an expedition to the Lunenburg area. In the teeth of gale-force winds and salt spray, several were successful in panning for gold. Following a hike along the cliff top to view the caves at the Ovens, we visited some glacially scoured outcrops at Feltzen South, including a spectacular mushroom interference fold, partly outlined by the group above.



Students from Acadia attended the Atlantic Universities Geoscience Conference, held at the University of New Brunswick, 23-25 October. On Thursday evening, Eletcher Club president and treasurer, Céline Porter and Thomas Bagley competed in the CSEC Challenge Bowl, taking second place. On Friday, students participated in field trips to the Mount Pleasant and Sussex areas, and toured the lab facilities at UNB. On Saturday students presented their research papers.





The 2014 Science Atlantic (Environment)
Conference was held at St. F.X. University on
15 March. Congratulations to Amanda Loder,
the winner of the Best Communication Award
at the conference for her presentation on
metals in gastropods in the Tantramar Marsh.
Lewis Mahon spoke on biotransport of trace
elements in coastal Nova Scotia; and Monica
Reed on the monitoring of fish and porpoise
in the Fundy FORCE area near Parrsboro.



In late September, before midterms got underway, members of the Fletcher Club and ESSA were actively exploring the region. Students visited the Ontree Climbing Park, at Martock to practice their skills in ropework, tree climbing, and getting a head for heights. Here you can see some members happy to be back on the ground, while others continue to scale the ropes 10 m above them.