# NOVA SCOTIAN INSTITUTE OF SCIENCE SESSION 2009-2010

#### PRESIDENT'S REPORT

During the past year, members of the Institute have actively engaged in furthering its mandate of promoting science in Nova Scotia. This has been achieved by: presenting a monthly program of public lectures given by expert Nova Scotian scientists,

- publishing the peer-reviewed Proceedings of the Nova Scotian Institute of Science.
- providing financial support for Regional Science Fairs,
- providing support for a number of Atlantic Provinces Council on the Sciences (APICS) undergraduate conferences by providing prizes for winning presentations
- maintaining a library
- running the annual scientific writing competition,
- developing and actively maintaining the Institutional web site at http:// www.chebucto.ns.ca/Science/NSIS/, with the great help of John Cordes.

During the past year, the lecture program of six public lectures was organized by Ron MacKay with the help of Ellen Louth and Sean Tibbets. All the lectures were held at the Nova Scotia Museum of Natural History and the Institute is indebted to the Museum for its continued support. We acknowledge the monthly help of David Christianson. The lectures involved speakers from Acadia University, Dalhousie University, St. Francis Xavier University and the National Research Council, Halifax. Feedback from the thirty to fifty members attending each lecture was positive. In addition we hosted a special lecture bye Peter Wadhams from Cambridge University in the UK to mark the 40th anniversary of the first circumnavigation of the Americas. Publicity for these events was organized by Robert Boudreau. The programme of lectures was as follows:

# Monday 5th October 2009

Ulli Hoeger (Dalhousie University), "Feel the force: mechanoreceptors and mechanoreception in Spiders", 7:30 pm Nova Scotia Museum of Natural History

# Monday 2nd November 2009

Jason Brown (Dalhousie University), "The mathematics behind the music", 7:30 pm Nova Scotia Museum of Natural History

# Wednesday 18th November 2009

A Special Lecture to mark the Hudson 70 Anniversary by Peter Wadhams (Cambridge University), "The first circumnavigation of the Americas", 7:30 pm, Nova Scotia Museum of Natural History

#### Monday 7th December 2009

Karen Harper (Dalhousie University), "Is the forest moving north? Consequences for northern communities", 7:30 pm Nova Scotia Museum of Natural History

#### Monday 4th January 2010

Panel discussion "Land protection in Nova Scotia - How do we get to 12%?", Scotia Bank Conference Theatre, Sobey Building, St. Mary's University. .

### Monday 1st February 2010

Patrick McGinn (National Research Council), "Perspectives and outlook for bioenergy: from fossil fuels to holy grails", 7:30 pm Nova Scotia Museum of Natural History

## Monday 1st March 2010

Karine Le Bris (St. Francis Xavier University), "Greenhouse effect and ozone depletion-monitoring: trace gas-detection by spectroscopic techniques", 7:30 pm Nova Scotia Museum of Natural History

#### Monday 5th April 2010

Steve Mockford (Acadia University), "Genetics, scale, and conservation: reptiles at risk in Nova Scotia", 7:30 pm Nova Scotia Museum of Natural History

#### Monday 3rd May 2010

NSIS Annual Dinner and AGM (Dalhousie University Club). After-dinner speaker Sonya Dehler (Geological Survey of Canada, Natural Resources Canada), "Using large earthquakes to study local geology".

The annual round table was held at the Scotia Bank Conference Theatre, Sobey building, Saint Mary's University on Monday 4th January 2010. The discussion with a panel of experts was on Land Protection in Nova Scotia – How do we get to 12%? Short presentations were made by David Mackinnon (NS Department of Environment and Labour), Andrea Doucette (New Page, Port Hawkesbury), Dennis Garratt (Nova Scotia Nature Trust) and Elder Albert Marshall (Eskasoni First Nation, Unama'ki Institute of Natural Resources). Questions and a general discussion followed. About fifty people attended the round table which was followed by a reception

A second round table was held on Wednesday 3rd March for which the NSIS was one of the sponsors. This was the Sixth Annual Public Meeting on Sable Island held in the Theatre Auditorium, McNally Building Saint Mary's University and included three illustrated talks by Ian McLaren, (Dalhousie University), Bill Freedman (Dalhousie University) and Zoe Lucas (Naturalist and Sable Island resident). Short presentations followed by Kevin McNamee (Director of Parks Establishment, Parks Canada), Kevin Davidson Canadian Wildlife Service) and by Mark Butler (Ecology Action Centre) on the future status of Sable Island.

A Question and Answer Session was followed by a Reception. This was a lively meeting attended by three hundred people.

The Annual Dinner and AGM was held on 3rd May at the Dalhousie University Club. Around 40 members attended and enjoyed both he dinner and the speech by Sonya Dehler on "Earthquakes and using them to study local geology"

The Proceedings are now under the editorship of Peter Wells who plans to have two issues produced during 2010 calendar year. The Institute is indebted to the editor and to members of the Editorial Board for their services.

The early proceedings of the NSIS have been digitized and are now available for viewing and Dalhousie University which houses the NSIS library has digitized the proceedings from 1886-1910 and we hope will soon make more recent volumes available. Further Details, can be found on the NSIS website

The annual Science Writing Competition was organized again this year by Robert Cook. Our congratulations to the winners in the 2010 NSIS Student Essay Competition:

Gregory Hutton,

MLIS student in the School of Information Management,

Dalhousie University, Halifax,

"Understanding Influence of Scientific Information in the Digital Age: A Study of the Grey Literature of a United Nations Advisory Group", and

Benjamin Langer,

BSc student in the Faculty of Science,

Dalhousie University, Halifax,

"The Middle Ground: why we can't save nature for nature"

Gregory and Benjamin have been invited to submit their papers for publication in the NSIS proceedings.

Plans are underway to celebrate the 150th anniversary of the NSIS. We have submitted proposals to Canada post for a special stamp to celebrate this event. In addition we hope that the application from SRES (Dalhousie University) with the support from the NSIS for the 2012 Killam lectures to celebrate our anniversary via a series of leading science speakers will be successful. We are also collaborating with the Bedford Institute of Oceanography who celebrate their 50th anniversary in 2012. We hope that the proceedings of their special lectures in 2010 will be published in the NSIS Proceedings. A small committee has been established and is continuing to work on these events.

In relation to the Anniversary and future of the NSIS Council held a Special Planning day-long planning meeting on the 14th March, 2010. This focused on improving publicity for NSIS Events, recruiting new members of the NSIS both in HRM and further afield, encouraging members to submit papers for publication in the proceedings and discussions with respect to events for the 150th anniversary.

In other activities, the Institute has again provided financial support to the ten Regional Science Fairs in Nova Scotia. The NSIS responded to a request for funding from École Rose-des-Vents, Greenwood NS. A team of six students from the school to represent the province at the First Lego League Robot Programming Competition 14th – 17th April in Atlanta, Georgia. A contribution of \$200 was provide to assist the team with expenses

In conclusion, members of the Institute are undoubtedly aware that the NSIS mission of presenting and promoting science, especially research, can only be achieved by continued activity on the part of members by serving on Council and by taking part in other activities of the Institute. As with all similar volunteer organizations, there is a need for younger members to become active as older members retire. The Institute has a long and proud history and will celebrate 150 years of promoting science to Nova Scotians in 2012. Few other Canadian organizations can boast this track record.

Finally, I thank all members of Council for their diligence and hard work during the past year.

Respectfully submitted, David H.S. Richardson May 20 2010