



### PRESIDENT'S MESSAGE

I am honoured to serve as president of CSSS and look forward to the challenges and opportunities ahead. Thank you for giving me this opportunity.

During the CSSS elections, I stated to the membership that I believe the success of any organization requires a realistic, forward looking vision that embodies what the organization has been while meeting expectations for the future, that it must capture the richness of heritage yet willingly move forward. I said our biggest challenges are finding our meaningful role in this millennium, internationally, environmentally and philosophically; enhancing our profile alongside more modern and charismatic organizations; assessing our size, structure and focus. I will work with you and Council towards developing and achieving our vision for this new millennium with the opportunity for growth and a focus to encompass the issues of the day.

Since becoming President-Elect I have been thinking a lot about the role of soils and the CSSS. As an educator I see our graduates entering a world where words, and of course acronyms, like Kyoto, GMOs, EIAs, CCME, carbon credits and sustainability are part of our everyday language. It is also a world in which we are recognizing that our future is in our ability to understand and work with our planet to maintain its carrying capacity not exceed it. A major part of that is, and must continue to be, soils related. Although many of us no longer belong to "soils" departments or units, I see soil science becoming even more diverse and essential as a foundation for newer sciences. As soil scientists and practitioners we are part of ecological or environmental engineering, reclamation, restoration, remediation, waste management, brownfield development, resource management and urban planning. As members of CSSS we must strengthen our identity, define our perspective on current issues, and show clearly our commitment to our soil resources.

Our annual meeting in Seattle was a huge success. It was the first time we met with our American counterparts. The other

## **CSSS Council**

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Council members and I were pleased with our welcome and the depth of interest in what we are doing as a society and as soil scientists and practitioners.

I was delighted to see the large number of students in Seattle. The students are our future and I am proud we have so many awards and travel opportunities for them. Our rejuvenation through our graduate students appears strong but it must be further encouraged. We need to do more than give them awards, we need to help them see the society as their professional home, serve as their mentors and open our minds to what they see as potential new directions for our future.

I am proud to be part of CSSS and I recognize that all of us must take seriously the need to inform our membership, and in so doing, provide the catalysts for interesting, essential, ongoing, lively discussions. Through our conferences, meetings and newsletters we believe we can keep informed and up to date on what is happening in the industry that we have chosen for our professions and careers. To that end I look forward to seeing you at the 2005 meetings in Halifax (May 15 to 18) with the Geological Association of Canada, the Mineralogical Association of Canada and the Canadian Society of Petroleum Geologists. Planning is underway for some unique sessions that reflect our interdisciplinary focus. The conference theme is "Building Bridges – across science, through time, around the world". This is truly reflective of our need to expand our profile in the many areas that are a part of and peripheral to, soil science.

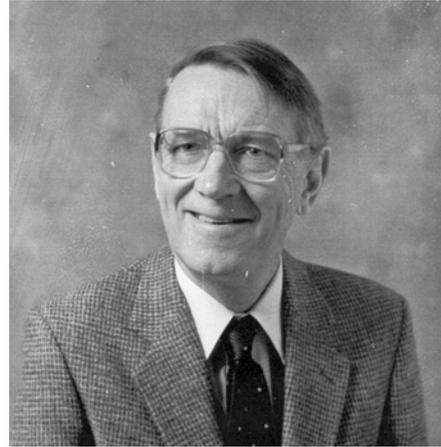
As we come to the close of this year, we also come to some changes in our Council membership. I sincerely thank Ed Gregorich for his term as president. Ed was a fine leader and represented us well. Also thanks to Frank Larney who finished his term as Western Councilor. Frank and Ed were instrumental in making our meetings in Seattle such a success. Welcome to Craig Drury as President-Elect and Xiying Hao as Western Councilor. I look forward to working with both of you and the rest of Council.

As we settle into our winter (it is finally snowing here in Edmonton) and look forward to the holiday season, I wish you all the best for a delightful end to this year and beginning of 2005. May you be blessed with friends and family, contentment in your work and the opportunity to make a difference in your own world, however large or small its boundaries.

Anne Naeth  
President CSSS

**In memoriam  
Dr. Robert Hedlin**

Dr. Robert Hedlin, a past president of the Canadian Society of Soil Science, died November 20, 2004 in Winnipeg at age 83. He obtained a B.S.A. degree at the University of Saskatchewan, a M.Sc. Degree at the University of Alberta and a Ph.D. degree in 1950 at the University of Wisconsin.



Bob's career in agriculture was spent at the University of Manitoba in the Department of Soil Science. He was head for 27 years. Bob was the first agriculturist to recognise that fallowing land was not essential in cropping systems in Manitoba. He introduced the concept of continuous cropping which was the foundation for a doubling in agricultural production during the 1970s and 1980s. His publication, "Manitoba's Agricultural Land Resource", in 1967, outlined the changes in land management practices needed for increases in crop production. Bob initiated and fostered research in soil testing. The tests developed under his leadership are widely used for agronomic recommendations as well as for environmental assessments and monitoring. Bob supported teaching and research in soil science locally and internationally with departmental staff being part of teaching and research programs in developing countries. His support of programs for the systematic survey of soils of Manitoba was appreciated by provincial and federal soil scientists.

Bob's legacy is the many students, both undergraduate and graduate, who gained an appreciation for soil science and land stewardship under his tutelage. He will be remembered as a friend and colleague by all who worked with him. We extend our deepest sympathy to his family and friends.

Geza Racz  
University of Manitoba  
Brandon, MB

**CSSS – Business Office**

The CSSS Business Office is here to help with:

- membership concerns
- updated CSSS membership list
- CJSS journal subscriptions
- society publications

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## **News from the CSSS Annual Meeting Seattle, WA, Oct. 31-Nov. 4, 2004**

### **Student Awards Competitions**

The student awards competitions at the Seattle meetings were most exciting with the highest number of participants in many years. We had 63 students from 11 universities compete. The presentations and posters were of excellent quality, making the work of the judges difficult indeed. I am most grateful for all of the judges who participated, and again thank them for their contributions. Thanks to Gerry Coen and Eric Beauchamp for their assistance on the Awards Committee and their efforts in determining the travel award winners. Congratulations to the students for their impressive presentations.

For each of the Bentley and President's awards, first prize was \$500, second prize was \$300 and third prize was \$200. Travel awards were \$500 each.

#### **Bentley Oral Presentation Winners**

- 1<sup>st</sup> Suzanne Graham, University of Alberta
- 2<sup>nd</sup> Carol Luca, University of Saskatchewan
- 3<sup>rd</sup> Tom Yates, University of Saskatchewan

#### **CSSS President's Poster Winners**

- 1<sup>st</sup> Lindsay Tallon, University of Saskatchewan
- 2<sup>nd</sup> Janna Shymko, University of Manitoba
- 3<sup>rd</sup> Catherine Chan, University of Guelph

#### **Judges**

Joselita Arocena, Art Bomke, Scott Chang, Gerry Coen, Ben Ellert, Don Flaten, Xiyong Hao, Frank Larney, Jim Miller, Gary Parkin, Mike Rutherford, Mario Tenuta, Clarke Topp, Bert Vanden Bygaart and Fran Walley.

#### **Student Travel Awards**

- Catherine Chan, University of Guelph
- Sara Dickenson, University of Northern British Columbia
- Xiaojuan Feng, University of Toronto
- Suzanne Graham, University of Alberta
- Kirsten Ketilson, University of Alberta
- Andrew Olinski, University of Guelph
- Joanne Passmore, University of Guelph
- Chub Shunthirasingham, University of Toronto
- Peter Sorokovsky, University of British Columbia
- Lindsay Tallon, University of Saskatchewan
- Xiao Tan, University of Alberta

- submitted by Anne Naeth, CSSS Awards Coordinator, 2004

## News from the CSSS Annual Meeting Seattle, WA, Oct. 31-Nov. 4, 2004



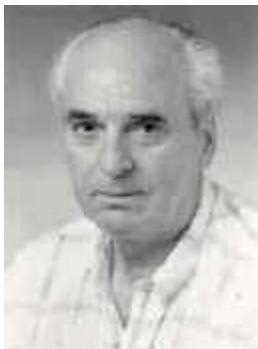
Student award recipients at the CSSS Annual Meeting in Seattle, 2004.

Council members at the CSSS Annual Meeting in Seattle, 2004.



CSSS Past President Ed Gregorich passes the gavel to CSSS President Anne Naeth.

## Congratulations to Dr. Leslie (Les) M. Lavkulich Fellow – CSSS 2004



Professor Les Lavkulich is elected a Fellow of the Canadian Society of Soil Science in recognition of his outstanding commitment to teaching and mentoring students and colleagues, his wide ranging contribution to theoretical and applied earth sciences research, and for his significant contribution to administration for the University of British Columbia and the soil science community.

Dr. Lavkulich was born and raised on a farm in southern Alberta. He studied soil science at the University of Alberta where he received a B.Sc. in 1961 and an M.Sc. in 1963. Further graduate work at Cornell University, New York, led to the award of a Ph.D. in 1967. He joined the Department of Soil Science at the University of British Columbia as an Assistant Professor in 1966. He was promoted to Associate Professor in 1971 and to Professor in 1975. In 1980 Dr. Lavkulich was appointed Head of the Department of Soil Science, and Chairman of the interdisciplinary Resource Management Science program in the Faculty of Graduate Studies. In 1995 Dr. Lavkulich was appointed Chair of the program now re-named Resource Management and Environmental Studies (RMES). In 2002 the Sustainable Development Research Institute was incorporated into the Institute for Resources and Environment and re-named as the Institute for Resources, Environment and Sustainability. The legacy of his interdisciplinary efforts continues to support natural resources research and teaching. He officially retired from the University of British Columbia on June 30, 2004; however, he continues to work as Professor Emeritus.

Professor Lavkulich is an outstanding teacher and thrives at mentoring students. He has a real gift for taking complex processes and presenting them to students in a clear and readily understandable form. He has developed and taught 18 different courses ranging from *Introduction to Soil Science* to *Perspectives on Resources and Environment* and advanced *Topics in Soil Chemistry and Pedology*. He has supervised more than 31 B.Sc., 46 M.Sc., and 23 Ph.D. theses. In 1996 he received the UBC Killam Teaching Prize, which is awarded for outstanding achievements at both the undergraduate and graduate levels.

Over his 37 plus years as an active researcher Dr. Lavkulich has contributed to many aspects of theoretical and applied science. He approached all research with scientific rigor but studied processes that influenced how to manage soils to protect our environment to the benefit of mankind. Efforts in studying clay mineralogy, Podzol genesis, amorphous minerals, soil and atmosphere carbon dynamics, phosphorus retention and pesticide dynamics in soil-water systems are key contributions of his research. Dr. Lavkulich has published over 100 papers in refereed journals, contributed to 5 book chapters and prepared numerous reports and presentations at scientific meetings.

Dr. Lavkulich has contributed to the discipline of soil science as President of the Canadian Society of Soil Science (1981) and as a founding member of the Pacific Regional Society of Soil Science. He has served on more than 17 committees, including NSERC and Agriculture Canada Grant Selection Committees. Dr. Lavkulich epitomizes the dedicated teacher and scientist and how one can unselfishly help others. Above all of his many academic achievements and his important research contributions to soil science, Dr. Lavkulich's obvious passion for the subject and his ability to inspire that passion in others is perhaps his greatest contribution to soil science.

Maja Krzic  
University of British Columbia

Gerry Coen  
Agriculture and Agri-Food Canada

## **Congratulations to Dr. Ahmet R. Mermut Fellow – SSSA 2004**

Dr. Ahmet R. Mermut was named a Fellow of the Soil Science Society of America on November 2, 2004 at their annual Awards Luncheon in Seattle. He is well known as an active member of the Canadian Society of Soil Science, and served as the President in 2003. He also was named a Fellow of the Canadian Society of Soil Science in 1999 and served as Editor and Associate Editor of the Canadian Journal of Soil Science.

Dr. Mermut is a Professor in the Department of Soil Science at Harran University in Turkey and Adjunct Professor in the Department of Soil Science at the University of Saskatchewan. He serves as the Chair of Div.-I of the International Union of Soil Science. Dr. Ahmet Mermut earned his Ph.D. from University of Ankara, with the support from the Agricultural University Wageningen, the Netherlands. His research is mainly in the areas of pedology, geochemistry, and mineralogy. He has served as associate editor of *Clays and Clay Minerals*, is currently serving as editor of *Scientific World*, and is on the editorial board of the *Ethiopian Journal of Natural Resources*.



Dr. Ahmet Mermut receiving his SSSA Fellow award from J. Thomas Sims, SSSA President at the ASA/CSSA/SSSA/CSSS Meeting in Seattle, 2004.

### **CSSS CareerSite**

The CSSS has launched a new service on its website ([www.csss.ca](http://www.csss.ca)) to provide employers and career seekers with an electronic recruitment tool specifically for the professional soil science industry. For more information, please visit the CSSS web site at [www.csss.ca](http://www.csss.ca) and click on the Job Postings link.

## **In Recognition**

### **Gerald M. Coen, Ph.D., FCSSS (P.Ag., CPSS)**

After 35 years of dedicated service, Dr. Gerald Coen has retired from the Research Branch of Agriculture and Agri-Food Canada.

Gerry attended Olds College before obtaining B.Sc. and M.Sc. degrees from the University of Alberta. He went on to receive a Ph.D. from Cornell in 1969 after which he joined Agriculture Canada at the Soil Survey Unit in Edmonton.

For the next 15 years, Gerry managed and directed the pedological component of a huge Bio-physical inventory of the Mountain National Parks in western Canada. This work, coordinated on behalf of the National Parks Service, with Canadian Forestry Service and the Canadian Wildlife Service, covered Waterton, Banff, Jasper, Yoho, Kootenay, Glacier and Revelstoke National Parks. Gerry was particularly sensitive to quality control requirements and on a one-year sabbatical he helped compile the Canadian Soil Survey Manual.

Gerry was head of the Alberta Soil Survey Unit from 1986 to 1998 where he served on several federal-provincial conservation research initiatives. He also coordinated the consolidation of 60 years of soil survey information in Alberta into a single, seamless digital database (AGRASID) which is an invaluable resource for present land-based predictive, sustainability and modeling initiatives. During all of this time Gerry kept very close ties with the University of Alberta where, as an adjunct professor, he taught courses in Chemistry and Soil Survey and supervised several graduate students. Gerry then spent five years at the Lethbridge Research Centre where he concentrated on applications of the WEPP model.

Dr. Coen took his professional responsibilities very seriously. He is a long-standing member of the Alberta Institute of Agrologists and holds a CPSS recognition with the American Society of Agronomy. But, it is in the service area that Gerry has left his greatest legacy. As a member of the CSSS, he served as Associate Editor of the CJSS and spent nine years on Council, including a stint at President in 1991. He was recognized with a Fellowship in 1997. He has been on the organizing committees of every soils conference in Alberta in the last 30 years including the ISSS, CSSS and SWCS. In addition, Gerry was an active Scouter for over 20 years and was recognized by the Boy Scouts of Canada with a Medal of Merit in 1998.

Dr. Gerald Coen is a credit to Soil Science. His kind of ability and dedication is rare indeed. We wish him well.

Wayne Pettapiece  
Alberta Agriculture

Xiying Hao  
Agriculture and Agri-Food Canada

The CSSS Newsletter is published three times a year (Fall, Winter and Spring). Contributions from members are most welcome. Please send contributions by email to the Eastern Councillor.

## NEWS FROM CJSS

The Canadian Journal of Soil Science (CJSS) is an important international science arm for the CSSS and provides an excellent showcase for soil science research. Some interesting statistics for the CJSS are as follows:

1. Submission rate in 2003 was 97 manuscripts. This is an increase over the last two years and just above the four-year (1999-2002) average of 94 manuscripts.
2. The ISI impact factor (IF) in 2002 and 2003 was 0.689 and 0.965, respectively. The latter IF was above the five-year average (1998-2002) of 0.760. This places the CJSS just below the major soil science journals (IF for *Soil Science*, *Soil Science Society America Journal*, and *Soil Biology and Biochemistry* are 1.00, 1.38, and 1.92, respectively), and above the *Australian Journal Soil Research* (0.763) which is similar in size and scope to CJSS. To help maintain and increase the IF, emphasis needs to be placed on the continued expansion of CJSS to accommodate more international papers, increased publication of short review papers, and publication of special issues or sections of international interest.
3. There has been an increase of manuscript submissions from outside of Canada over the last two years. However, more emphasis could be placed on attracting papers from the United States. The rejection rate (29%) remains relatively low compared to other journals, and is within the range of previous years (17-36% from 1997 to 2002). The overall low rejection rate is probably due to the high quality (both linguistically and scientifically) of most submitted manuscripts.

4. In 2003 we published: 51 regular scientific papers, 1 special issue (10 manuscripts). Total pages: 646.

The CJSS is interested in publishing more review papers, especially short review papers. These serve as an important means of scientific communication. If you have an idea or specific topic for a short review please let me know.

Martin Carter  
Editor, CJSS  
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[www.nrc.gc.ca/aic-journals/cjss](http://www.nrc.gc.ca/aic-journals/cjss)

### CSSS Members Get Discounts on AIC Journal Subscriptions

CSSS members receive a discount (about 60% off the full rate) when they subscribe to any of the following journals:

- ◆ Canadian Journal of Soil Science
- ◆ Canadian Journal of Plant Science
- ◆ Canadian Journal of Animal Science

A CSSS member can subscribe to receive each of the three journals in paper format, in paper format plus electronic access, by electronic access only, or any combination thereof. An electronic-only subscription to all three journals costs less than \$90.00 (plus tax) per year. For more information, contact Steve Sheppard ([sheppards@ecomatters.com](mailto:sheppards@ecomatters.com)).

## SOIL CLASSIFICATION AND GENESIS WORKING GROUP

As reported in the last newsletter, many members of the CSSS are concerned about the future of the Canadian System of Soil Classification (CSSC) and, more generally, about the compilation and distribution of information about Canadian soils. This concern arises in part from the uncertain future of the Soil Classification Working Group (which oversaw the revisions to the CSSC summarized in the Third Edition) within Agriculture and Agri-Food Canada. There is also a broader concern that the retirement of many of the surveyors who mapped soils over the past three decades is causing a great loss of knowledge from our discipline, and that action from the CSSS is needed to prevent this loss of knowledge from occurring.

We were able to convene a meeting in Seattle of fifteen Canadian soil scientists concerned about these issues. The outcome of that meeting was that the group agreed we should approach the CSSS about creating a formal group within our national society to ensure that the CSSC remains a vital and evolving part of our discipline. The group also felt that we must compile and disseminate high-quality information about Canadian soils, and that a major effort among pedologists throughout Canada is needed to ensure that this occurs. An obvious first step is the creation of a CSSS-sponsored web site to disseminate images and explanatory text

of Canadian soils. Ultimately, we hope to develop a publication series in the Canadian Society of Soil Science to ensure that our existing knowledge is synthesized and that new issues in soil genesis in Canada are clearly identified and explored.

Several of the participants commented that it was refreshing to meet with a group of scientists in Seattle with a shared passion for ensuring that pedology remains a vital part of Canadian soil science. We look forward to working with the CSSS on this critical initiative.

If you are interested in participating in this initiative, please contact Dan Pennock at [pennock@sask.usask.ca](mailto:pennock@sask.usask.ca)

### Soil and Environmental Science Dictionary

The Soil and Environmental Science Dictionary, published by CRC Press in conjunction with the Canadian Society of Soil Science, is available to CSSS members at a 50% discount off the cover price (\$69.95 USD). To ensure you receive the discount, please mention the promotional code 281 BC.

To order, contact: CRC Press, Tel: 1-800-272-7737; Fax: 1-800-374-3401; email: [orders@crcpress.com](mailto:orders@crcpress.com)

### CSSS Online

See the CSSS web site homepage at <http://www.csss.ca> for Newsletters, Council, Business Office, Annual Report, Events Page, Careers, Student News, important links and much more. Be sure to check our new CSSS CareerSite – just click on Job Postings.

## **NORTH AMERICAN PROFICIENCY TESTING PROGRAM 2004 ANNUAL REPORT**

The North American Proficiency Testing Program (NAPT) provides a mechanism for soil and plant analytical laboratories to assess their performance in relation to a large group of labs performing the same analyses on the same soils. This is a critical part of any laboratory QA/QC program, and has contributed to significant improvements in lab proficiency since the program was initiated in 1996.

In 2004, there were a total of 164 laboratories enrolled in the NAPT soils program, of which 22 were from Canada. Enrolled labs received four sets of exchange samples during the year, each consisting of five different soils. Results from the analyses of these soils are submitted to the program coordinator, who provides statistical analysis of the results and prepares reports. This report lists the individual results for each analysis that was completed, along with the median value for that analysis and the Median Absolute Deviation (MAD) value. Median and MAD are used as indicators of central tendency and variance rather than mean and standard deviation, because they are less sensitive to extreme values (outliers) in the data set.

The NAPT Oversight Committee is made up of representatives from SSSA, CSSS, SPAC, regional soil test committees, and private labs. The committee meets annually at the ASA annual meeting, as well as periodically between meetings by conference call. The main topic for discussion at this year's meeting (aside from the fiscal and operational discussions) was the potential for using NAPT as an external check on lab performance, to meet the requirements of the USDA-

NRCS for nutrient management planning. In response, a pilot program has been initiated for the north-western states, using surrogate clients to submit double blind samples to labs that have enrolled in this Performance Assessment Program (PAP). This is unlikely to affect any of the Canadian labs, but it will be interesting to see how well the program works in the US, and whether there is a role for a similar program in Canada.

I would welcome any comments or feedback about the NAPT program, or about lab performance in general. You can contact me by phone at (519) 271-9269, or by email at [keith.reid@omaf.gov.on.ca](mailto:keith.reid@omaf.gov.on.ca).

Keith Reid  
Ontario Ministry of Agriculture and Food  
CSSS representative to NAPT Oversight Committee

### **SCOPE Environmental Books**

SCOPE, the Scientific Committee on Problems of the Environment, was established by the International Council of Science in 1969. Several of their recent environmental books cover topics potentially of interest to CSSS members, such as global biogeochemical cycles, and are priced for the student and postdoctorate pocketbook. More information is available at [www.islandpress.org/books/SCOPE.html](http://www.islandpress.org/books/SCOPE.html) or contact John W.B. Stewart, SCOPE Editor-in-Chief at [jwbstew@island.net](mailto:jwbstew@island.net)

## Student News

ADAM GILLESPIE is a graduate student with Drs. Richard Farrell and Ken Van Rees in the Department of Soil Sciences at the University of Saskatchewan. Adam's research is examining root exudates. These include a wide spectrum of primary carbon substrates as well as some products of secondary metabolism. In phytoremediation systems, root exudation patterns in part control the microbial populations responsible for hydrocarbon transformation/degradation. These exudates promote a diverse microbial population that may enhance degradation through the existence of an assortment of metabolic pathways, as well as providing specific compounds that act as contaminant analogs, signal molecules and co-metabolites. An understanding of these patterns is important in applications of this technology. The overall objective of this study was to examine how chemistry in the rhizosphere changes when plants are grown in hydrocarbon-contaminated soil. This was accomplished through three major studies: (i) a comparison of methods to recover rhizosphere soil; (ii) establishment of an analytical method to extract and characterize root exudates from rhizosphere soil; (iii) analysis of the rhizosphere chemistry from plants grown in hydrocarbon-contaminated and non-contaminated soil.

MARGUERITE REIMER is a graduate student (M.Sc.) with Dr. Annemieke Farenhorst in the Department of Soil Science at the University of Manitoba. Aspects of her research include the mineralization and sorption of herbicides in Manitoba soils amended with fresh hog manure and municipal biosolids, as well as the effect of long-term hog manure applications on herbicide mineralization. Herbicides of interest are glyphosate (the active ingredient in Roundup), trifluralin (a relatively persistent soil-applied herbicide) and 2,4-D. Municipal biosolids tended to increase 2,4-D mineralization when compared

to manure-amended soils and a control. On the other hand, fresh manure applications either had little effect or suppressed the mineralization of glyphosate, trifluralin and 2,4-D. Soils with a history of manure application showed an increase in the mineralization of trifluralin, but did not have a consistent effect on glyphosate mineralization. Practical implications of this research for producers suggest that herbicides applied to soils amended with biosolids will mineralize more quickly and to a greater degree than in soils amended with manure. Increased mineralization reduces the risk of herbicide carryover and subsequent crop injury, as well as reduces environmental impact.

CSSS student members were well represented in Seattle. Posters looked great and the oral contributions were well received. On a different note, I am planning to graduate next year and the council will need a new Graduate Student Representative. Any students who are interested, should contact Anne Naeth or me.

I would like to encourage all student members to stay in touch and be active in the council. Enjoy your semester.

Vimy Glass  
CSSS Graduate Student Representative

### **AIC – Informed. Credible. Current.**

The Agricultural Institute of Canada (AIC) continues to evolve to meet its members' needs through networking opportunities, professional development and information access.

For more information, visit their website at [www.aic.ca](http://www.aic.ca).

## **Soil Sampling and Methods of Analysis 2<sup>nd</sup> Edition**

The 2<sup>nd</sup> edition of *Soil Sampling and Methods of Analysis* is now well underway. The 1<sup>st</sup> edition of SSMA was published by CRC Press in 1993. The new edition will have seven subject sections plus several appendices. Each section has two editors. Similar to the 1993 book, a contract with CRC Press has been initiated that directs all royalties to CSSS and provides a 50% discount on book purchase for CSSS members.

Sections, with editors in parentheses, covered in the 2<sup>nd</sup> edition are as follows: Collection and Preparation of Soil Samples (Gary Patterson and Charles Tarnocai); Soil Test Analyses (Jeff Schoenau and Ivan O'Halloran); Soil Chemical Analyses (Yoong Soon and Will Hendershot); Soil Biological and Ecological Analyses (Ed Topp and Cathy Fox); Soil Organic Matter Analyses (Ed Gregorich and Mike Beare); Soil Physical Analyses (Denis Angers and Frank Larney); and Soil Water Analyses (Dan Reynolds and Clarke Topp).

If you have ideas, material, or methods that would be suitable for the new edition, please contact Martin Carter (carterm@agr.gc.ca) or Ed Gregorich (gregoriche@agr.gc.ca).

## **Nutrients and Their Impact on the Canadian Environment**

The Canadian Fertilizer Institute's Agronomy & Environment Committee recently sponsored a scientific review of the Canadian federal government's report, "Nutrients and Their Impact on the Canadian Environment", published in 2001. The Soil Resource Group in Guelph, Ontario, conducted this review and produced a 41-page report. The review agreed with the conclusion that "the best and most advanced science should continue to be integrated into practical solutions to maintain or improve the quality of Canadian air, water and soil environments". It noted, however, that agriculture's share of nutrient loading had been overstated, and that detrimental impacts had been over-emphasized. For example, evidence on the frequency of nitrate contamination, and the level of harm attributed toward amphibians, was found to be weak. The review is intended to stimulate dialogue on the advancement of the science supporting nutrient management for improved quality of air, water and soil. It is available on the regional Web site of the Potash & Phosphate Institute of Canada, at <http://www.ppi-ppic.org/Northeast>.

Tom Bruulsema  
Potash & Phosphate Institute of Canada

## UPCOMING CONFERENCES

**Jan. 30-Feb. 4, 2005**

9<sup>th</sup> International Symposium on  
Soil and Plant Analysis  
Cancun, Mexico  
[www.spcouncil.com](http://www.spcouncil.com)

**Feb. 5-11, 2005**

Society for Range Management  
58th Annual Meeting  
Fort Worth, TX  
[www.rangelands.org](http://www.rangelands.org)

**Feb. 9-12, 2005**

International Conference on  
“Sustainable Crop Production in  
Stress Environments: Management  
and Genetic Options”  
Jabalpur, India  
[www.jnkvv.org](http://www.jnkvv.org)

**Feb. 17-21, 2005**

American Association for the Ad-  
vancement of Science Annual  
Meeting  
Washington, DC  
[www.aaas.org](http://www.aaas.org)

**Mar. 16-18, 2005**

Humic Science and Technology  
Conference VIII.  
Boston, MA  
[www.hagroup.neu.edu](http://www.hagroup.neu.edu)

**Apr. 25-27, 2005**

International Salinity Forum. Man-  
aging Saline Soils and Water: Sci-  
ence, Technology and Social Is-  
sues  
Riverside, CA  
[www.waterresources.ucr.edu](http://www.waterresources.ucr.edu)

**May 15-18, 2005**

Canadian Society of Soil Science  
Annual Meeting with GAC, MAC  
and CSPG  
Halifax, Nova Scotia  
[www.halifax2005.ca](http://www.halifax2005.ca)

**June 26-July 1, 2005**

International Grassland Congress  
Dublin, Ireland  
[www.igc2005.com](http://www.igc2005.com)

**Aug. 7-12, 2005**

Ecological Society of America  
90th Annual Meeting  
Montreal, Canada  
[www.esa.org/meetings](http://www.esa.org/meetings)

**Aug. 8-11, 2005**

Earth System Processes 2  
Calgary, AB  
[www.geosociety.org/meetings/  
esp2](http://www.geosociety.org/meetings/esp2)

**Aug. 22-27, 2005**

3rd International Conference on  
Sustainable Agriculture for Food,  
Energy and Industry  
St. Catherine's, Canada  
[www.icsagr-fei.org/conference](http://www.icsagr-fei.org/conference)

**Sept. 12-16, 2005**

International Conference on Hu-  
man Impacts on Soil Quality At-  
tributes (HISQA)  
Isfahan University of Technology  
Isfahan, Iran  
[www.iut.ac.ir/cesoil](http://www.iut.ac.ir/cesoil)

**Sept. 14-19, 2005**

15th International Plant Nutrition  
Colloquium  
Beijing, China  
[www.cau.edu.cn/ipnc](http://www.cau.edu.cn/ipnc)  
[www.ipnc15.com](http://www.ipnc15.com)

**Nov. 6-9, 2005**

AIC Conference – Sustainable  
Agriculture  
Quebec City, Canada  
[www.aic.ca/conferences](http://www.aic.ca/conferences)

**Nov. 10-12, 2005**

World Science Forum—Budapest  
2005  
[www.sciforum.hu](http://www.sciforum.hu)

**November 17-25, 2005**

3<sup>rd</sup> International Conference on  
Soils of Urban, Industrial, Traffic,  
Mining, and Military Areas  
(SUITMA),  
Cairo, Egypt  
[www.eun.eg/suitma](http://www.eun.eg/suitma)

**Apr. 8-12, 2006**

International Conference on Hy-  
drology and Management of For-  
ested Wetlands  
New Bern, North Carolina  
[www.asae.org/meetings/  
Forest2006/index.htm](http://www.asae.org/meetings/<br/>Forest2006/index.htm)

**For more conferences, visit our  
website at <http://www.csss.ca>**

## CSSS Annual Meeting 2005

A joint meeting of the Geological Association of Canada, Mineralogical Association of Canada, Canadian Society of Petroleum Geologists and Canadian Society of Soil Science will be held at Dalhousie University, Halifax, Nova Scotia from May 15-18, 2005. For more information, please visit the conference web site at [www.halifax2005.ca](http://www.halifax2005.ca) or contact the organizers at [hfx2005@gov.ns.ca](mailto:hfx2005@gov.ns.ca).