



## PRESIDENT'S MESSAGE

It is the last week of May, but summer seems to have arrived early this year, at least in Southwestern Saskatchewan. At the Semiarid Prairie Agricultural Research Centre (SPARC) in Swift Current, where I work, the summer students have been here for almost a month, seeding at SPARC (and for most local producers, too) is finished, and there is the smell of smoke and a haze in the air from wild-fires in Alberta. Rain is forecast for tonight and tomorrow, which will make all the farmers, home gardeners and fire fighters happy.

Summer will also bring our annual conference. Information about the conference is shown later in the newsletter. It will be an exciting meeting, with lots of international participants this year. Also in this newsletter is the agenda for the CSSS AGM, to be held on Tuesday July 7. Please plan to attend. If there is anything you would like to add to the agenda, please let me know. One topic for discussion will be the future association of CSSS with AIC. The mandate of AIC has changed, and their fees have gone up. Council thinks we should discuss these changes during the AGM, and decide as a group about our future affiliation. If you cannot attend the AGM but have a strong opinion about this issue, please send an email to me ([barbara.cade-menun@agr.gc.ca](mailto:barbara.cade-menun@agr.gc.ca)), or to anyone on Council, and we will add your comments to the discussion.

Also in the newsletter are some changes to Council. Thank you Sina, and welcome Amanda.

I wish you all an enjoyable summer, with a good mixture of hot sunny days and gentle rainstorms to make everyone happy. I look forward to seeing many of you in Montreal.

*Barbara Cade-Menun*  
CSSS President

**President**

Barbara Cade-Menun  
Agriculture and Agr-Food Canada  
Box 1030, Gate 3, Airport Road  
Swift Current, SK S9H 3X2  
Ph: 306-778-7245  
Email: barbara.cade-menun@agr.gc.ca

**Past President**

David L. Burton  
Dalhousie University  
P.O. Box 550  
Truro, NS B2N 5E3  
Ph: 902-893-6250  
Email: dburton@dal.ca

**President-Elect**

Maja Krzic  
University of British Columbia  
2357 Main Mall  
Vancouver, BC V6T 1Z4  
Ph: 604-822-0252  
Email: maja.krzic@ubc.ca

**Secretary**

Amanda Diochon  
Lakehead University  
955 Oliver Rd  
Thunder Bay, ON P7B5E1  
Ph: 807-343-8444  
Email: adiochon@lakeheadu.ca

**Treasurer**

Kent Watson  
Thompson Rivers University  
426 Azure Place  
Kamloops, BC V2E 2R1  
Ph: 250 371 5578  
Email: kwatson@tru.ca

**Eastern Councillor**

Nathan Basilko  
Laurentian University  
Sudbury, ON P3E2C6  
Ph: 705-675-1151  
Email: nbasiliko@laurentian.ca

**Western Councillor**

Bobbi Helgason  
Agriculture and Agri-Food Canada  
107 Science Place  
Saskatoon, SK S7N 0X2  
Ph: 306-975-6510  
Email: bobbi.helgason@agr.gc.ca

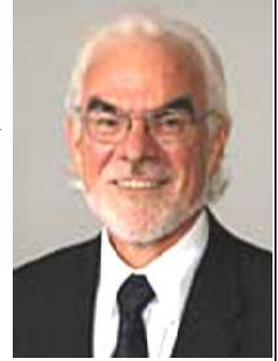
**Graduate Student Representative**

Carolyn Wilson  
Dalhousie University  
P.O. Box 550  
Truro, NS B2N 5E3  
Ph: 506-524-2176  
Email: cr829263@dal.ca

**CJSS Editor**

Francis Zvomuya  
University of Manitoba  
362 Ellis Building  
Winnipeg, MB R3T 2N2  
Ph: 204-474-9932  
Email: zvomuyaf@cc.umanitoba.ca

On June 30, Dr. Dan Pennock will be retiring from the Department of Soil Science at University of Saskatchewan after 26 years of outstanding service to the soil science community. He is well known nationally and internationally for his expertise in landscape-scale soil processes and as an outstanding teacher.



In 2005, Dan co-founded the Pedology Sub-committee of the CSSS and has served as co-chair since its inception. He served as president of the CSSS in 2008 and was named a Fellow of the CSSS in 2010.

Currently, he is the Canadian representative on the FAO Intergovernmental Technical Panel on Soils (ITPS), where he has played a major role in the development of the Revised World Soil Charter and the first-ever Status of the World Soil Resource Report.

Dan's excellence in teaching has been recognized through several teaching awards, including the North American Colleges and Teachers of Agriculture (NACTA) award in 2005 and the University of Saskatchewan Master Teacher Award in 2006. He has mentored countless undergraduate and graduate students over the course of his career, and has been a strong advocate for experiential learning both through the development of new courses and programs and in his campus leadership roles as Associate Dean Academic in the College of Agriculture and Bioresources and as Vice-Provost Teaching and Learning. His work has made a lasting impression on his discipline and his university.

Congratulations Dan on an excellent career – all the best in retirement!

*Angela Bedard-Haughn*



**Thank you to Outgoing CSSS Council Secretary Sina Adl**

On behalf of the Society and Council, I would like to offer our sincere thanks to Sina Adl for his dedicated service as Secretary since 2013. Sina had to step down from his post due to unexpected circumstances this spring.

*Barbara Cade-Menun*  
*CSSS President*

## Update on Intergovernmental Technical Panel on Soils and the Global Soil Partnership

It is almost two years since the Global Soil Partnership (GSP) and its scientific advisory body, the Intergovernmental Technical Panel on Soils, were formed under the auspices of the UN's Food and Agriculture Organization. To date the two organizations have been responsible for three major initiatives.

The first, the declaration of 2015 as the International Year of Soils by the United Nations, has done great things to raise the visibility of soil throughout Canada and in many countries. I hope that you have a chance to participate in and contribute to IYS activities in your region.

The second major activity has been the production of the Status of the World's Soil Resources report by the ITPS. This is the first of an ongoing series modeled on the highly influential IPCC reports. The main report is over 600 pages long and has contributions from over 200 authors, including a healthy contingent of Canadian authors. The report focuses on soils from an ecosystem services perspective, and has regional reports on the state and trend of threats to soil functions. The North American section has contributions from twelve Canadian authors, and reviews were provided by a further five Canadian soil scientists. All of the CSSS authors and reviewers I dealt with were very willing to participate despite tight deadlines, and I am grateful to them for their contributions. The report is currently under review by the full GSP, and if approved will be released on December 5, 2015 – World Soil Day in the International Year of Soils (probably a great day to buy a lottery ticket!).

A third product is a revised World Soil Charter, replacing the original charter that was adopted by the FAO in 1981. The charter contains a series of principles and actions that flow from these principles, including a definition of sustainable soil management. The charter is under consideration by the highest body of the FAO this June, and, if passed, becomes binding on all member states including Canada. I had the pleasure of presenting the charter to the GSP plenary last July, and had an all-too-rare chance to re-live my Ph. D. thesis defence as I was grilled for 2-3 hours on two consecutive days by the assembled FAO ambassadors. All and all it has been a productive two years, and I am grateful to the CSSS for the opportunity to serve on the ITPS as the Canadian representative.

*Dan Pennock*

*Canadian Representative on the Intergovernmental Technical Panel on Soils*

## New Secretary for CSSS Council

*Dr. Amanda Diochon*

Amanda graduated with her PhD in Earth Science from Dalhousie University in 2009. Before starting as an assistant professor in the Geology Department at Lakehead University in 2012, she had the opportunity to work under the direction of Dr. Ed Gregorich at the Eastern Cereal and Oilseed Research Centre in Ottawa as a Visiting Fellow. Amanda's research focuses on soil organic matter cycling in agroecosystems, the boreal forest and the Arctic. She is particularly passionate about using stable isotopes and soil organic matter separation techniques to better understand how management practices and environmental change affect soil organic matter stores. In the CSSS she has been leading a survey and study of the state of post-secondary soils education in Canada.



## Annual Meeting Update

The Joint Annual Meeting of ISMOM-CSSS-AQSSS is right around the corner (5-10 July 2015 at McGill U in downtown Montreal). We are ready to celebrate the International Year of Soil. The scientific program is online now, registration is open and accommodation is still available.

More than 375 abstracts have been submitted in 18 scientific sessions and over 300 participants from all over the world are already registered for the conference. The opening reception will be held on Sunday (July 5), and scientific sessions will be held on Monday, Tuesday, Wednesday and Friday. Field trips are planned for Thursday (July 9). A banquet will be held on Wednesday evening, which will include the CSSS awards. The banquet (and lunches each day) is included in the registration fee.

Seats are available for 4 field trips, the pre-symposium short course and the workshop. The deadline for the call for Nomination for the P.M. Huang Award is June 5th. There will be lots more happening at the conference including a movie showcase. Don't miss out! More information is available at <http://ismom2015.conference.mcgill.ca/index0f50.html?p=home>

*Asim Biswas*

*Member of the Organizing Committee*

**SOIL INTERFACES FOR SUSTAINABLE DEVELOPMENT  
(ISMOM 2015)**

**5 – 10 July 2015  
McGill University, Montreal**

**JOINT MEETING OF**

**PLENARY KEYNOTE SPEAKER: Dr John Duxbury**

**More than 20 scientific sessions on topics such as:**

- **Organo-mineral interactions in soil**
- **Analytical and methodological advances in soil science**
- **Soil microbiology**
- **Agricultural greenhouse gas emissions**

**Abstract Submission: Closes 28 February 2015**

**Early Bird Registration: Closes 15 April 2015**

**Website: <http://ismom2015.conference.mcgill.ca/index0f50.html> Contact: [joann.whalen@mcgill.ca](mailto:joann.whalen@mcgill.ca)**

## **CSSS Annual General Meeting—Agenda**

**6:00 p.m. Tuesday July 7**  
**Ballroom A, New Residence Hall, McGill University**

Call to Order: Barbara Cade-Menun

Approval of agenda

Minutes from 2014 AGM: Amanda Diochon

Business arising from 2014 minutes

Treasurer's Report: Bobbi Helgason for Kent Watson

President's Report: Barbara Cade-Menun

Report of Committees:

Awards committee: Maja Krzic

Education sub-committee: Maja Krzic

Pedology sub-committee: Dan Pennock

Year of the Soil Committee: Barbara Cade-Menun

Intergovernmental Panel: Dan Pennock

CJSS Editor's Report: Francis Zvomuya

Student Representative's Report: Carolyn Watson

Western Councillor's report (website): Bobbi Helgason

Eastern Councillor's report (newsletter): Nathan Basiliko

Resolutions

Resolution of Appreciation

New Business

Appointment of financial reviewers: Bobbi Helgason for Kent Watson

Progress on 2016 Meeting (Kamloops): Maja Krzic

Proposal for 2017 meeting (Trent): Mehdi Sharifi

Continued affiliation with AIC: Barbara Cade-Menun

14. Business arising from the floor:

15. Adjourn

## A Successful, Interdisciplinary, 18-Year-and-Running Ethiopia-Canada Collaboration

The Soil Science Department at the University of Saskatchewan has been involved in a project in Southern Ethiopia continuously for 18 years. Since 1997, IDRC/CIDA/DFATD have granted Hawassa University (HU) and the University of Saskatchewan (U of S) continuous support for collaborative projects. Ensuing collaborations and relationships between Uof S and HU researchers led to strengthening soil, agronomy and nutrition research at Hawassa. This project was recently renewed for another three years for “scaling-up pulses innovations in Ethiopia”, and it is one of Canada’s success stories in Africa. Ethiopia is the largest recipient of Canadian development funding, and this is IDRC’s longest running project. The partnership now includes colleagues in the Departments of Plant Sciences, Food and Bioproducts, the College of Pharmacy and Nutrition, and Social Science. Through this relationship, more than 100 graduate students have been trained. Some of our former students are now serving as lecturers at HU, training new cohorts and enhancing our collaborations. Others are gainfully employed in research institutions, academia, with NGOs, and governmental sectors. Hawassa University now has enhanced strengths in soil and plant sciences, and in the School of Nutrition, Food Science and Technology. These developments led to Hawassa University being selected in 2013 as one of two Centres of Excellence in Nutrition in Africa.

Ethiopia is amongst the countries with the highest prevalence of protein-calorie malnutrition and micronutrient deficiencies. The soils of Ethiopia are deficient in macro- and micro-nutrients due to severe degradation and cannot support good crop growth and development. To counterbalance these problems, we have identified best-fit practices to increase pulse productivity, soil health and human nutrition. These have included student training in research and building local capacity to train graduate students. Demonstration plots with volunteer model farmers in villages across the region were established to show the effects of variety selection and agronomic practice. One result from this new practice is that participating farmers have now a second cash crop of biofortified chickpeas or haricot beans added to their cereal (teff) growing season.

The biofortified chickpeas are particularly rich in zinc and iron to counter local micronutrient deficiency. Micronutrient deficiency in diets leads to stunting in children with accompanying health issues that limit the potential of children. It is called hidden hunger and one of the World Health Organization’s priority issues. Mothers participating in the project are shown how to prepare pulse-based complementary food for young children with enhanced varieties of pulse seed, and receive education in nutrition.

Due to the success of the program so far, we are now facilitating change in the regional agricultural and food systems by expanding across the southern region to reach up to an anti-



Right: Prof. Sheleme Beyene (lead researcher at Hawassa University); second right: David Usher (Canada’s Ambassador to Ethiopia); others: farmers and researchers at a demonstration site.

pated 350,000 households, from the approximate 7000 currently engaged. This strategy involves the fine-tuning and scaling-up of intensive pulse crop based farming systems, agri-food processing and marketing, and nutrition interventions. Farming households in the project area are involved in the pre-scaling up operational research, verification trials and technology adoption, as they are the direct beneficiaries of the changes.

Our partners in the scaling-up phase include the regional government in the public health and agriculture sectors, international non-governmental organizations and private partners. The end-goal of this project is contributing to the Agriculture Growth Program as articulated in Ethiopia's Comprehensive African Agriculture Development Plan (CAADP). It is improving caloric nutrition, dietary protein composition, and some micronutrient deficiencies of households. The research is establishing protocols and guidelines for health and agriculture regional authorities to further scale-up and scale-out as they take ownership of the project.

*Sina Adl*

## Remembering Our Friend and Colleague Yashpal Kalra

Yash P. Kalra passed away November 28, 2014 at the age of 74. Yash is survived by his wife, son and daughter, brothers and sisters and many nieces and nephews.

Yash was a soil chemist with the Canadian Forest Service for 43 years. Throughout his distinguished career, Yash made many contributions to the scientific community. He was an active member of 13 professional societies and served as President for six of these. Yash received numerous awards and honors and was a Fellow of AOAC International, Canadian Society of Soil Science and the Indian Society of Soil Science.



In addition to his career, Yash was an outstanding humanitarian. He was involved with 28 local charities, and in 2011 the City of Edmonton awarded him with a "Salute to Excellence Citation Award" for his years of contribution to his community.

Those who knew Yash know that he loved trivia and had a fantastic memory. Yash could, if challenged, write the entire periodic table, including molecular weights. He had a witty sense of humor and always a smile.

Yash was a member of the Canadian Society of Soil Science since 1964, which was one of the longest associations with CSSS. The first Annual Meeting that he attended was in Montreal in 1967. Yash made enormous contributions to CSSS. As Secretary (1993-1995), he was also Editor of the CSSS Newsletter. Yash also had the distinction of being the only Canadian Forest Service, Natural Resources Canada scientist to have served as CSSS President (1996-1997). Yash often said that "CSSS is one of the best societies in the world". He was one of the most vibrant Presidents of CSSS.

Some of his many contributions are: Chair, Awards Committee; Chair, Scientific Sessions at the Annual Meetings; Member President's Student Poster Awards Committees; Reviewer of CJSS; Presented oral and poster papers at the Annual Meetings, Co-authored a chapter in the CSSS book Soil Sampling and Methods of Analysis.

For his significant contributions to the CSSS and soil science, Yash was named a Fellow at the Annual Meeting in Charlottetown in 1999.

*Joe Crumbaugh*

## UPCOMING CONFERENCES

- **Rhizosphere 4** conference “Stretching the Interface of Life”  
21-25 June 2015 in Maastricht, the Netherlands <http://www.rhizo4.org/>
- In celebration of 2015 as the International Year of Soil, the CSSS will hold out annual meeting **Soil Interfaces for Sustainable Development (ISMOM 2015)** jointly with the International Union of Soil Sciences and the Association québécoise de spécialistes en sciences du sol July 5-10<sup>th</sup> in Montreal: <http://ismom2015.conference.mcgill.ca/>
- Earth Educators' Rendezvous will be held at the University of Colorado, Boulder July 13-17, 2015: [http://serc.carleton.edu/earth\\_rendezvous/2015/index.html](http://serc.carleton.edu/earth_rendezvous/2015/index.html)
- The Canadian Society of Agronomy along with 12 other Canadian and US Societies will hold their annual meeting **Botany 2015**. July 25-29 in Edmonton: <http://www.botanyconference.org/>
- **The 70th Soil and Water Conservation Society International Annual Conference Coming Home to Conservation: Putting Science into Practice** will be held July 26-29, 2015 in Greensboro, NC: [http://www.swcs.org/en/conferences/2015\\_annual\\_conference/](http://www.swcs.org/en/conferences/2015_annual_conference/)
- The Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, and Entomological Society of America will hold a joint annual meeting **Synergy in Science** November 15-18 in Minneapolis, MN, USA: <https://www.acsmeetings.org/2015-data-stewardship>
- The Canadian Soil Science Society will meet jointly with Pacific Regional Soil Science Society in Kamloops, BC, May 16-19, 2016. Save the date! And watch for more information.

## CSSS – Business Office

**Contact: Steve Sheppard**  
P.O. Box 637,  
Pinawa, Manitoba, Canada  
R0E 1L0

Telephone: (204) 282-9486  
Fax: (204) 753-8478  
Email: [sheppards@ecomatters.com](mailto:sheppards@ecomatters.com)  
Website: [www.csss.ca](http://www.csss.ca)