

THE SOILED PROFILE



NEWSLETTER DEPARTMENT OF SOIL SCIENCE UNIVERSITY OF MANITOBA “bringing you the latest dirt”



UNIVERSITY
OF MANITOBA

For general inquiries or if you have material to include in the newsletter:

Lynda Closson
University of Manitoba
Room 362 Ellis Bldg
Winnipeg, MB R3T 2N2

Phone: 204 474-8153, Fax: 204 474-7642
Email: lynda.closson@umanitoba.ca
Past issues of the Soiled Profile are on our
webpage: [umanitoba.ca/afs/soil science/](http://umanitoba.ca/afs/soil%20science/)

13 April 2018

Upcoming:

Tuesday, May 1, morning – Soil Science annual spring orientation. More details to follow.

Department Staff Away:

Wole Akinremi	Apr 23-May 7
Paul Bullock	Apr 16-27
Mario Tenuta	Apr 15-27

News:

Marla Riekman named 1st Year Diploma Teacher of the Year

Marla was the instructor for Soil 0420 his term. It was her first time teaching the course after Dr. Tee Boon Goh retired so she had big shoes to fill. She received much more than just a passing grade after being voted by the students as 1st Year Diploma Teacher of the Year. The award will be presented when classes resume this fall. Congratulations Marla!

Lindsey McKenty featured in PMUser

All of the Agroecology students were interviewed after their final presentations on March 29. The first of a series of feature articles in PMUser about undergraduate research at the University of Manitoba is now online. It features Lindsey McKenty, who did her Agroecology project under the supervision of David Lobb. To see the article, [click here](#).

2018 Manitoba Schools Science Symposium – Call for Volunteers

The MSSS will run from April 26th – 29th (www.msss.mb.ca) and includes over 500 students from grades 4-12. Volunteers are needed for all four days in varying capacities, below.

Thursday April 26th - Set up: 1-4pm, Max Bell Centre; Registration: 4-9pm, Max Bell Centre

Friday April 27th and Saturday April 28th - Student Support: 8:30am – 3:30pm, several shifts available during the day, and lunch will be provided to all volunteers.

Sunday April 29th - Awards: 10:00am – 4pm, Lunch will be provided.

Please email the Volunteer Coordinator, Chelsea Zhu (chelsea.zhu23@gmail.com), if you can help.

Passing of former Soil Science graduate student – Jim Nielsen



Jim Nielsen, of Goodlands, MB, died on March 10, 2018. He received, from the University of Manitoba, a Bachelor of Science in Agriculture in the Soil Science program and completed a M.Sc. in our department in 1972. For a short time after his M.Sc., he was an instructor in the diploma program. He also worked for The Manitoba Department of Agriculture, Canadian International Development Agency, as well as establishing his own Consulting Company from which he worked internationally, as well as in Canada both in the fields of agriculture and in environmental impacts. He started farming in partnership with his parents and continued his involvement in the farm throughout his life. Jim is survived by his wife Viola, their three children and seven grandchildren. Many of you may

remember Jim's daughter, Jennifer Nielsen, who also completed a M.Sc. in Soil Science in 2013 under the supervision of Bob Eilers and Tee Boon Goh.

Jim loved playing sports. Carl Shaykewich has shared a photo of the Soil Science hockey team circa early 1970's. Jim is in the front row to the right of the goalie (Carl).

Condolences are offered to Jim's family and have been posted online on behalf of the department (<https://www.wheatlandfs.com/notices/Jim-Nielsen>).



Paper of the week:

Huang, Q; **Badreldin, N; Lobb, DA; Li, S**; Feng, G; McConkey, BG. 2017. Uncertainty and Sensitivity Analyses of the Modified Wind Erosion Equation for Application in Canada. *Land degradation & development* 28(7):2298-2307.

Opportunities:

Canadian Society of Soil Science – Office Manager/Registrar/Book Keeper

CSSS is seeking a new contractor to complete the roles of Registrar, Office Manager and Book Keeper to support the management and operation of the society. The present work load is about 150 hours per year. The contract is annual but preference is for those who can make at least a 2-5 year commitment. Payment is quarterly at a fixed rate. An individual may apply, but it is essential there is an alternative person to ensure continued management and operation of the business office.

The job entails:

- maintenance of membership records;
- soliciting membership renewals with an on- line system;
- managing funds from membership renewals and journal subscription sales;
- preparation of 2-5 invoices per year;
- writing and obtaining signatures for about 30 cheques per year;
- semi-annual delivery of financial record;
- preparation of 3 newsletters per year using materials provided by others;
- distribution of materials by way of an email list server 2-3 times per week;
- and about once a year conduct on- line voting for Council positions or on other issues.

From time to time there may be special projects that will involve the contractor. The contractor answers to the Council, but most specifically to the President, who changes annually, and the Treasurer, who changes every 2-4 years. Knowledge of website operation and social media are desirable. Membership in the society is mandatory, as outlined in the CSSS Rules and By-Laws.

Interested parties are encouraged to contact Steve Sheppard at sheppards@ecomatters.com as soon as possible. Applications should include a short resume and a maximum one page statement of qualifications for this role, before **April 30**.

Soil Health Liaison, Soil Health Institute, Research Triangle Park, NC

The Soil Health Institute (SHI), a non-profit organization created to safeguard and enhance the vitality and productivity of soil through scientific research and advancement, seeks a Soil Health Liaison. This part-time position (estimated 12-20 hours per week) is a 1-3 year term appointment, renewable per annual performance contracts. The incumbent will serve as a central SHI liaison to numerous stakeholder Action Teams who volunteer their time and expertise to advance soil health.

Duties include:

- Regularly organizing and facilitating video-conferences/face-to-face meetings with numerous Action Teams to advance SHI priorities in research, measurements, economics, communications/education, and policy;
- Serving as a positive, helpful contact for ensuring strategies for advancing soil health are implemented in a timely manner;
- Coordinating and communicating Action Team needs and progress to SHI leadership;
- Preparing reports documenting progress of all Action Teams for distribution via SHI's newsletter, website, and social media outlets; and
- Assisting SHI staff with travel, meeting, and other logistics, as requested.

Experience that has clearly demonstrated proficiency in personal relationship skills and organizational skills, while working with groups of individuals is required. At least one college degree in a Natural Resources related field (e.g., Soil Science, Environmental Management/Science, Agronomy, Ecology, Economics, etc.) is desired. The position is located at the Soil Health Institute's office near Research Triangle Park, NC. Compensation to be commensurate with experience. To apply, email a letter of application addressing the experience required, curriculum vitae, college transcripts and the names/contact information of four references to Mr. Byron Rath: brath@soilhealthinstitute.org. Please include "Soil Health Liaison" in the email subject line. First review of applications will begin on **April 22, 2018**, but the position will remain open until filled.

Community Engagement Fund 2018-2019

The Presidential Advisory Committee on University/Community Engagement is requesting proposals for the Community Engagement Fund (formerly the Major Outreach Award). The maximum level of support is \$5,000 to \$7,000. The general purpose of community engagement is to enlarge and enrich the contacts between the University of Manitoba and all segments of the community through such means as:

1. increasing access to the existing programs of the University;
2. extending the nature and range of the programs and services it offers;
3. sharing more effectively with the community the resources of the University; and
4. drawing on the talent, experience, and resources within the community.

The Community Engagement Fund guidelines and application form are located here: [click](#).

Please note that Deans and Directors are asked to rank proposals for the Community Engagement Fund if there is more than one application from their unit. Deadline for applications to be received in my office is Friday, **May 11, 2018**.

Postdoctoral Research Associate Position, Soil Microbial Ecology, Agriculture and Agri-Food Canada, Ottawa, ON

A postdoctoral research associate position is available in the lab of Dr. Ed Gregorich, at the Ottawa Research & Development Centre, Agriculture & Agri-Food Canada (AAFC), located in Ottawa, Ontario. This position will work closely with other AAFC researchers including, Drs. David Overy (Ottawa), Bobbi Helgason (Saskatoon), and Henry Janzen (Lethbridge). The research will focus on understanding the role of microbial by-products in the formation of stable soil organic matter (SOM) fractions. Decomposition of plant litter and SOM will be linked to microbial DNA profiling and their chemical biomarkers to characterize the microbial and biochemical processes that transform litter into recalcitrant SOM fractions. The intent is to understand key parts of soil C cycling as influenced by plant litter decomposition and resulting changes on soil microbial diversity, affecting the health and productivity of soils.

The position will include some combination of the following activities:

- assisting with field work at research sites across Canada (Ontario, New Brunswick, Saskatchewan and Alberta)
- conducting and/or coordinating biogeochemical analyses, including ^{13}C stable isotope probing
- DNA and RNA extraction and sample preparation for targeted high throughput sequencing or metagenomics analyses

- mass spectrometry-based metabolomics experiments assessing microbial small molecular weight metabolites
- data analysis and manuscript preparation
- presentation of results at national and international scientific meetings
- assist with lab organization and mentoring graduate and undergraduate students.

The successful candidate must have a Ph.D. with a research focus in soil microbiology, soil science, biogeochemistry, or a closely related field with preference given to those with experience in molecular methods. Preferred candidates will also possess the following attributes: A strong publication record from their Ph.D. (papers published, in press, or submitted); creativity, independence, and the desire to learn new things; excellent communication skills, both written and oral. The position is renewable annually, contingent upon funding and/or job performance. A start date of August 1, 2018 is ideal, but alternative timelines will be considered and should be noted in the cover letter. All questions about the position and application materials should be submitted to: Ed Gregorich (ed.gregorich@agr.gc.ca).

Applications should consist of a single pdf file that includes: a brief cover letter (no more than 2-pages) that highlights past research accomplishments, how your previous experience will benefit this project and your future research goals, a curriculum vitae, names and contact information for three references.

Offres de maîtrises et de doctorat, Université Laval, Ste-Foy, QC

Voici des annonces de postes de maîtrises et doctorat pour le nouveau projet de Chaire-RDC sur la conservation et restauration des sols organiques cultivés qui vient d'être approuvé par le CRSNG (Professeur Jean Caron Université Laval). Veuillez cliquer sur les liens pour obtenir de l'information.

https://gallery.mailchimp.com/ca7fd4410b9dab34e3ef8b381/files/f2414471-0441-49b6-acab-99c2da844285/RDC_Conservation_et_Restauration_des_sols_organiques_MSc_Optimisation_implantation_des_cultures_de_biomasses.pdf

https://gallery.mailchimp.com/ca7fd4410b9dab34e3ef8b381/files/5454a70d-24fd-4422-897b-b8b90d1573e8/Chaire_Conservation_et_Restauration_des_sols_organiques_MSc_Blocage_de_oxydation.pdf

https://gallery.mailchimp.com/ca7fd4410b9dab34e3ef8b381/files/0ac22ca3-a7d4-40a5-8706-a5f57566b6a5/Chaire_Conservation_et_Restauration_des_sols_organiques_MSc_carto_et_besoin_en_amendements.pdf

https://gallery.mailchimp.com/ca7fd4410b9dab34e3ef8b381/files/6e83b0e1-684e-4824-b773-0c61b074db78/RDC_Conservation_et_Restauration_des_sols_organiques_MSc_Érosion_sols_organiques_cultivés.pdf

https://gallery.mailchimp.com/ca7fd4410b9dab34e3ef8b381/files/fbd1afd5-ae0e-4fc1-a760-76329dc465d3/RDC_Conservation_et_Restauration_des_sols_organiques_PhD_Régie_culture_biomasses.pdf

Jacynthe Dessureault-Rompré, agr., Ph.D., Professionnelle de recherché, Sols organiques cultivés, Université Laval, Pavillon Environtron, 2480 boul Hochelaga, Université Laval, Ste-Foy, Québec, Canada G1V 0A6
jacynthe.dessureault-rompre.1@ulaval.ca .

Events:

Canadian Meteorological and Oceanographic Society, Lecture Series, April 18, 2:00 to 3:00 p.m., Klaus Hochheim Theatre, 5th Floor, Wallace Building

“Toward Seamless Weather and Climate Earth-system Prediction”

Dr. Gilbert Brunet, Director of the Meteorological Research Division (MRD), Environment and Climate Change Canada (ECCC).

The remarkable increase in skill of current weather forecasts has made society more and more dependent on them day to day for a whole range of decision making. Climate change is now widely accepted and the realization is growing rapidly that it will affect every person in the world profoundly through high-impact climate and weather events.

One of the important challenges of our societies is to remain at the cutting-edge of modelling and predicting the evolution of the fully coupled environmental system: atmosphere (weather and composition), oceans, land surface (physical and biological), and cryosphere. This effort will provide an increasingly accurate and reliable service across all the socio-economic sectors that are vulnerable to the effects of adverse weather and climatic conditions, whether now or in the future. This emerging challenge was at the center of the World Weather Open Science Conference (Montreal, 2014). The outcomes of the conference are described in the World Meteorological Organization (WMO) book: Seamless Prediction of the Earth System: from Minutes to Months, (G. Brunet, S. Jones, P. Ruti Eds., WMO-No. 1156, 2015). It is freely available on line at the World Meteorological Organization website. We will discuss some of the long-term goals of this effort and provide examples of Earth-system modelling and prediction from urban scales to global scales.

3rd European Sustainable Phosphorus Conference, June 11-13, 2018, Helsinki

POSTERS: Deadline for poster submission is **30 April 2018** latest. Full details of themes and required format submission can be found [here](#).

FULL PROGRAMME: now online at www.phosphorusplatform.eu/programmeESPC3.