

PRSSS

Pacific Regional Society of Soil Science

PRSSS Executive

- **President:** Brian Wallace
- **Vice President:** Vacant
- **Secretary:** Lesley Dampier
- **Treasurer:** Maryam Mofidpoor
- **Newsletter Editor:** Mike Shum
- **Director:** Liz Freyman
- **Director:** Andy Jakoy
- **Director:** Art Bomke
- **Director:** Rachelle Lalonde

President's Message

I would like to thank all present and past members of the Pacific Regional Society of Soil Science for developing an outstanding organization committed to the discipline of Soil Science. I was introduced to PRSSS in 2004 as an undergraduate student attending the annual spring workshop leaving as a new member and an Executive. During the next year, I had the pleasure to meet dozens of members who encouraged me to pursue further involvement with the small, yet influential community of educators and professionals from PRSSS. I am very happy I made this decision, as I will be attending graduate school at UBC in the fall studying soil science. Without my involvement with this organization, it is unlikely I would have made this decision. I would like to sincerely thank all members for their kind words and encouragement during the past year that gave me the confidence to pursue further study in this exciting field. I look forward to the upcoming year!

Last year's newsletter had president Art Bomke identify three areas where he would like to see PRSSS progress; a continued service to the membership, an increase in communication among soil science educators and professionals across BC, and encourage young people to get involved. Considering the positive feedback received following the fall field trip and the spring workshop, continued service to the membership was met. Communication among soil science educators and professionals will continue to be improved during the upcoming year as Art Bomke has agreed to be a director on the PRSSS Executive focusing on this issue. My story told at the beginning of this message is living proof that young people have been encouraged to get involved, congratulations!

This year's Executive; including Liz Freyman, Andy Jakoy, Lesley Dampier, Mike Shum, Art Bomke, and myself are pleased to introduce two new members to the group: Rachelle Lalonde and Maryam

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Mofidpoor. A huge thank you goes out to Susan Ames whose outstanding service as treasurer will be missed, but we know her presence within the PRSSS community will not be lost completely. We look forward on announcing upcoming plans for the fall field trip and spring workshop for 2005-06.

Brian Wallace
President

What's Happening in the PRSSS...

PRSSS Website – Visit www.prsss.ca

We have a website. The website will be updated routinely to reflect the needs of the membership. Please provide feedback on what you would like to see on our website!! We also need more photographs so please send us any soils pictures that can be used on the website. Feedback and photos can be sent to Liz.Freyman@gov.bc.ca.

Pacific Regional Society of Soil Science Bookstore

The PRSSS has a store of Soil & Land Inventory Maps & Reports for BC. For further information on availability, inventory, or updated pricing, please contact Andy Jakoy at 604-736-7225 or burtonjakoy@yahoo.com or visit the PRSSS website (www.prsss.ca).

Joint PRSSS & SWCS Fall Field Trip

Saturday September 24, 2005 - Planning has begun!! We will be sending a notice on the theme in the near future. Please contact us for more information.

prsss@vcn.bc.ca

RECENT SOIL GRADUATES - congratulations on your accomplishments!

Julia Wagner, M.Sc. (Spring 2005) UBC

Brian Wallace, B.Sc. (May 2005) UBC

Andrew Smith, B.Sc. (May 2005) UBC

Joanne Willis, B.Sc. (May 2005) UBC

Danielle Dodd, B.Sc. (May 2005) UBC

Amanda Brown, B.Sc. (May 2005) UBC

27th PRSSS, 2005 Spring Workshop **“Fields of Convergence: The Diversity of Contemporary Soil Science”**

The 2005 spring workshop, held March 19th, was a great success. “Fields of Convergence: The Diversity of Contemporary Soil Science” was presented by the PRSSS and the Soil and Water Conservation Society – BC Chapter (SWCS) and was attended by 69 individuals. The Vancouver Branch of the British Columbia Institute of Agrologists also generously sponsored the event.

The day began with a keynote address from Dr. Anne Naeth who wears two hats -the Associate Dean of the Faculty of Agriculture, Forestry and Home Economics at the University of Alberta (U of A) and the President of the Canadian Society of Soil Science. She opened with a look into her research interests which includes soil disturbance and land reclamation. She closed with a thoughtful discussion of new directions in western Canadian soil science.

Theresa Duynstee from the Greater Vancouver Regional District followed with an overview of the region’s liquid waste management system. She discussed the region’s biosolids management program, Nutrifor, and some of the many projects that the region is pursuing including land application projects.

A PhD candidate from the Biometeorology Group at UBC, David Gaumont-Guay, spoke next about the role of soil respiration processes in the carbon balance of boreal forest ecosystems. David discussed the biophysical factors driving temporal and spatial variability in soil respiration. He also provided an overview of the development of new technologies being used to measure the CO₂ exchange between forests, the soil and the atmosphere.

Next participants chose to participate in a discussion led by Dave Sands regarding the development of a Soil Protection Act for BC or join Nathan Basiliko, Rachelle Lalonde and Lucie Jerabkova for a tour of UBC’s Belowground Ecology Group laboratory facilities. Participants enjoyed the opportunity to have a lively discussion and get off their feet.

Dr. Bill Chapman, Ministry of Forests, next discussed the Soil Conservation Effectiveness Evaluation. This tool is used to assess effectiveness in the policies and practices used to conserve soil productivity and hydrologic function within cutblocks. The development of new tools like this are important for monitoring forest values under the new Forest and Range Protection Act.

Kim Sutherland from the Ministry of Agriculture, Food and Fisheries then described the use of GIS technology to analyze farmland use and agricultural land needs within the Fraser Valley East. This analysis is useful for both agricultural and municipal planning.

PRSSS and SWCS would like to thank all of the speakers for generously giving their time to speak at the event. We would like to thank all of those who participated in the workshop. If you have any suggestions of themes or speakers for the 2006 spring workshop, or if you would like to help plan next year’s event, please contact PRSSS at prsss@vcn.bc.ca.

by Lesley Dampier

In Memory of Michael Goldstein

P.Ag., C.Arb. B.Sc.'78, M.Sc.'84

1951-2005

We lost one of our colleagues on February 27th. Mike battled cancer the last few years. Many of us remember him as a person whose passion was soils and environmental physics – always excited and dedicated about solving environmental problems. He lived by his beliefs that good critical thinking based on science was a tool that we have available and that we should use to make it a better world. Mike started Soilcon in 1979 and through that worked on a wide range of consulting projects but he also was a keen researcher, tirelessly looking for pragmatic solutions such as his work on the development of a soil sampling tool, a soil climate computer model (FSCPM) and the design of forest climate monitoring facilities, to name just a few. Many of us attended his memorial service where we recognized many of our colleagues but the church was filled with so many other people. We learned that there was a whole other side to Mike. People stood up from the CCEC Credit Union to talk about how he was a founding member of the credit union.

We met his early Vancouver friends whom he was involved with in starting a co-op. He was an active racewalker and belonged to a large active group and they had many stories to tell of how



they learned so much when they walked through the forests. His siblings told us about his childhood and even then he was experimenting in science in the basement - oops! His neighbors came. We met his adult children and Arline. He had such a full life. We wish Arline and his children all the best and we will miss a colleague whose dedication to the science and soils was undeniable and who had so much more to contribute, leaving us too early.

By Susan Ames

Ashcroft Ranch Field Trip – June 18

This full day BCIA field trip started from Vancouver on a Maverick coach at 6:30 am. By the time the bus left Abbotsford, we were up to 31 head. Three and a half hours later, we picked up another 11 head at our first stop on the ranch on Hat Creek Road.

A lot of valuable information was covered throughout the day, so here is a summary of our activities. The ranch is 4200 ha and was purchased by the Greater Vancouver Regional District (GVRD) in 2000. The purpose of the trip was to see the proposed 200 ha landfill site, and learn about land use activities on the ranch. The GVRD will continue to lease out the rest of the ranch. Currently activities include ranching, growing ginseng, bee keeping and some logging. The ranch follows the Trans Canada hwy for several km, south of Cache Creek.

Our tour took us to an area to view the remnants from the 2003 fire. Remnants consisted of blackened trees which covered what seemed to be a vast area. There is some silviculture logging at higher elevations. Controlled burns are practiced on encroaching forest to preserve grasslands. Water usage is of concern, with low annual precipitation and high evapotranspiration. Current projects include a shared water diversion between Ashcroft and Vask - an estimated \$1.5M project. In the meantime, they are working at maximizing gravity fed water. Water usage is regulated through the 23 water licenses that the Ranch currently holds.

Lunch was served from the back of the pick-up truck, that had amazingly voluptuous sandwiches catered by Horstings Farm out of Cache Creek. Sandwiches were washed down by pie, which the locals were most excited about. The ground was wet and muddy. The area has had quite a bit of precipitation this year relative to the annual rainfall of 9 inches.

Mike Dedels spoke to us about range management on the ranch. The ranch submits a range use plan, in which Mike reviews and monitors on an on-going basis. Mike also puts out grazing licenses. With the different biogeoclimatic zones on the ranch varying at elevations from 300-1700m, Mike identified a



number of the plant species found on the grasslands. It's surprising the diversity of plants/flowers on the land, where as when you see it from the road, it just looks like fields of yellow grass. There were so many great little flowers. The dominant forage is blue bunch wheat grass, and the grasslands are monitored for weeds, using practical biological, chemical and mechanical control when needed.

We then relocated to a site with several plots where biosolids have been applied at various rates and continue to be monitored. Dr. Tom Forge of Aggasiz research station is actively looking at chemical, biological, and physical properties in soil. Dr. Reg Newman of the Kamloops research station, also involved in the project and is looking at the effects on plant community.

Next stop on the ranch, Chai-Na-Ta Farm's ginseng crop. Ziggy was kind enough to come all the way out from Lillooet to talk to us about Chai-Na-Ta's ginseng operations, with 800 acres in production in BC alone. They also have crop in Ontario and Wisconsin. The crop is grown on raised beds to avoid phytophthora infection. Cost of production is roughly \$30/acre with yields up to 5200 lb dry root/acre. Virtually all of their crop is exported, as it is much cheaper to process the product in China! Last but not least, the growers get very angry when kids use the black cover as a trampoline. . .but what fun! Visit their site for more information: www.chainata.com



The bus then headed off to the proposed landfill site. Holly Suggit briefed us on the cattle

operation. Currently, there is a terminal herd of about 850 cow/calf pairs. A terminal herd is one in which all calves are culled and they are currently working towards a maternal herd. For whatever reason, the ranch people failed to tell us that they had recently filled the road we were taking up to the site. About halfway up, the bus sank, literally. The ground was soft and sticky, and covered halfway up the tire on the front left side of the bus. The tour resumed on foot, which was also entertaining in the wet, sticky clayey soil. It just kept balling under peoples' shoes.

Jonn Braman of the GVRD gave us a quick Landfill 101 session. The proposed 200 ha site on the ranch is currently in the regulatory development phase. 30 ha of land will be used at a time. This site's expected life is 100 yrs at 500,000 tons/yr with 450,000 tones of that coming from the GVRD!! 35 to 40 trucks are running up there 360 days/yr. Cache Creek is expected to close now in 2008. As at Cache Creek, the plan is to recirculate the leachate. Approximately 18,000 gallons of water/day are used for dust control in Cache creek in addition to the recirculated leachate! These are only a few of the facts presented on this issue. There are many more details at http://www.ashcrofranch.com/landfill_project.htm, or Jonn invited people to contact him for additional information. His email is jbraman@gvrd.bc.ca.

Meanwhile, two hours, and two full size John deer tractors later, one at the front of the bus with chains and one at the back, the bus was backed down the windy road to safety with

minimal damage. The bus driver, a little shaken up, hopped out of the bus, and lit up a cigarette, in relief?

We were back on the road shortly after. At this point the beverages were in the cooler at the back of the bus, and the bus driver put on a movie for us (or was it really for him?). We made it all

the way back to Abbotsford for a 9 pm dinner, only 2.5 hours behind schedule. It was a long day, but a great event planned by the BCIA. Many thanks to the Vancouver branch for organizing the trip and inviting PRSSS members along for the ride.

by Natasha Smyth

Upcoming Events

- Aug 8-11, 2005. Earth System Processes II. Calgary AB. Geological Society of America. <http://www.geosociety.org/meetings/esp2/>
- Aug. 9-12, 2005. 9th International Conference on Diffuse Pollution, Johannesburg, South Africa. <http://www.iwa-wisa-2005.com/>
- Aug 17-19, 2005. Hydrotechnical Engineering: Cornerstone of a Sustainable Environment. Edmonton. <http://www.hydrotechnics.ca/hydro2005>
- Aug. 22-27, 2005. The Third International Conference on Sustainable Agriculture for Food, Energy and Industry, St. Catharines, ON. <http://www.icsagr-fei.org/conference>
- Aug 25-27, 2005. A Future Beneath the Trees: International Symposium on Non-timber Forest Products, Community Economic Development and Forest Conservation. Victoria. <http://www.royalroads.net/cntr/ntfpconference/program.html>
- Aug 27-29, 2005. 9th Iranian Soil Science Congress, Tehran, Iran. <http://www.soiliran.org/>
- Aug 28-29, 2005. Buy BCWild Conference 2005: BC Industry Conference and Trade Show. Victoria. <http://www.royalroads.net/cntr/buybcwild/>
- Sept. 12-16, 2005. Human Impacts on Soil Quality Attributes. Isfahan, Iran; <http://www.iut.ac.ir/cesoil/HISQA.htm#arm>
- Sept 13-15, 2005. 10th International Specialist Conference on Watershed and River Basin Management 2005. Calgary, Alberta. <http://content.calgary.ca/CCA/City+Hall/Business+Units/Waterworks/Events/IWA+Watershed+Conference+2005.htm>
- Sept 25-28, 2005. "The Value of Trees", 26th Annual Conference, Pacific Northwest Chapter of the International Society of Arboriculture. Victoria. <http://www.pnwisa.org/conference.html>

Soil Websites

- Canadian System of Soil Classification, 3rd Edition (<http://sis.agr.gc.ca/cansis/taxa/cssc3/index.html>)
- The Soil Landscapes of British Columbia (<http://srmwww.gov.bc.ca/soils/landscape/index.html>)
- BC Journal of Ecosystems & Management (<http://www.forrex.org/publications/JEM/home.asp>)
- The Soil Science Society of America (<http://www.soils.org/>)
- Canadian Land Reclamation Association (<http://www.clra.ca/>)

PRSSS MEMBERSHIP RENEWAL

Please check appropriate fee

Regular	1 year	\$10
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Student	1 year	\$5
	2 year	\$10

Total Amount Enclosed \$ _____

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Dear member,

Please submit your membership fees together with the form below to ensure that you are remaining on our mailing list. The due date of your fees is indicated on the address label on the envelope. If you have chosen to receive the newsletter in electronic form, you will receive a notice stating your due date shortly. In case of any questions, please feel free to e-mail us at prsss@vcn.bc.ca. We'd also like to ask you to indicate any changes of your contact information. Thank you very much, we greatly appreciate your contribution. Sincerely, *your PRSSS executive.*

PRSSS ENROLMENT / MEMBERSHIP RENEWAL / CHANGE OF ADDRESS

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Please include me in the PRSSS Directory: **Yes:** _____ **No:** _____
Please send me the PRSSS Newsletter by: **E-mail:** _____ **Regular Mail:** _____

Please make checks payable to **Pacific Regional Society of Soil Science.**

If you have any questions regarding your membership standing, please contact Lesley Dampier at 604-777-9788 or ldampier@sylvis.com.