



PRSSS

PACIFIC REGIONAL SOCIETY OF SOIL SCIENCE

**C/O DEPARTMENT OF SOIL SCIENCE
UNIVERSITY OF BRITISH COLUMBIA
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Message From the President

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Annual membership fees are \$10.00
Student membership fees are \$5.00

If the recent B.C. government employment postings are any indication, employment opportunities and prospects for foresters, environmental scientists and land resource management professionals seem strong. Provincial Forests and Environment, Lands and Parks Ministries offer the greatest number of positions, well over one hundred, with a few positions opening up in the Agriculture, Fisheries and Food Ministry as well. In the Forestry ministry it is obvious the recent adoption of the new Forestry Practices Code is the driver behind the push to hire professionals, since technically and academically capable personnel will be required to implement the high level of forestry management the Code prescribes. Glancing through the postings the opportunities appear equally balanced between "in service" and "out of service" positions. The "out of service" jobs especially offer encouragement to students enrolled in forestry, environmental sciences and resource management courses and to recent graduates starting out in their careers.

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Of course not all of the posted positions are suitable for soil scientists, many are for biologists, especially with fish and wildlife related education and experience, many are for foresters specifically, including silviculturalists, timber harvest specialists, planners and administrators, and many are for engineers. A considerable number, however, are for people with "earth science" backgrounds, including hydrologists, geomorphologists and land resource officers and managers. Professionals with soil science backgrounds who apply, including Registered Professional Foresters (RPF's), Professional Geoscientists (P.Geo's) and Professional Agrolgists (P.Ag's), will certainly have valuable knowledge, skills and experience to bring to these positions.

For forestry in B.C., and I suppose in agriculture as well, we can only hope the tide has turned, where we begin to appreciate that it is the land, and in particular, the soils and the climate, which represent the true resource for growing trees, not simply the trees themselves. Certainly, the implementation of new practices prescribed under the Forestry Practices Code is a bold effort to try and safeguard the 'sustainability' of our forest lands, and particularly our soils. It is a sign of optimism to see that employment opportunities, in this case through the public sector, are opening up for individuals who actually have such an understanding of our land resource, and who are able to describe, assess and explain the processes interacting between the soil, the plants (i.e. the trees and understory), and the atmosphere as a whole system. Moreover, these developments should bode well for the private sector as well, with spin-off opportunities for testing laboratories, equipment suppliers and a wide host of consultants. Now is certainly the time to look forward to new approaches for soil scientists.

CJSS Update

The Canadian Journal of Soil Science (CJSS) has announced new manuscript submission guidelines. New sections in the journal highlight the topics where papers are encouraged, and are (1) Review and Topical Mini-review (ideas for papers in these sections should be cleared with the Editor before they are prepared), (2) Ecology, biological processes and plant interactions, (3) Composition and chemical processes, (4) Physical processes and interfaces, (5) Genesis, landscape processes and relationships, (6) Contamination and environmental stewardship, (7) Management for agricultural, forestry and urban uses, (8) Open (for special series of papers). Peer-reviewed conference proceedings are now published. They also indicate new author options, such as double-blind reviews and expedited handling. New manuscripts should be submitted to the CJSS, Journals Section, 907-151 Slater Street, Ottawa Ontario K1P 5H4.

Upcoming Events

Vancouver Permaculture Network Workshops May 4, 1996-Planning and developing a public permaculture garden; May 18, 1996 - Urban permaculture design. Contact Siobhan Ryan (daytime) @ 873-4335 or Harold Waldoek (evenings) @ 874-0161.

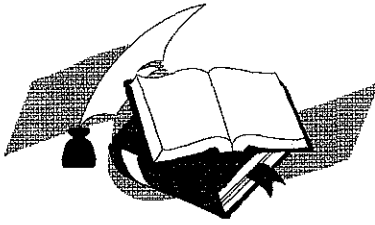
Soil and Environmental Chemistry Workshop The workshop is part of the Pacific Northwest Section Meeting of the Association of Official Analytical Chemists International. Western Washington University, Bellingham, Washington, June 26-28, 1996. Contact Yash P. Kalra, Canadian Forest Service, 5320-122 St., Edmonton AB, T6H 3S5. ykalra@nofc.forestry.ca Phone: (403)435-7220; Fax:(403)435-7359

51st SWCS Annual Conference July 7-10, 1996, Keystone, Colorado. Contact SWCS, (515) 289-7331.

Natural Resources GIS/GPS Training Conference Columbia College, Sonora CA. May 28-30, 1996. Contact Tom Lockhart @ (209) 474-1492.

2nd International Conference of the European Society of Soil Conservation. Munich, Germany Sept 1-7, 1996. Contact Dr. K. Auerswald @ fax: 49-81-81-714-466.

International Symposium Boron in Soils and Plants. Chiang Mai, Thailand. Sept 7-11, 1996. Contact Dr. B. Rerkasem fax: 66-53-210000.



New Books

The Soul of the Soil: A Guide to Ecological Soil Management, Third Edition. By Grace Gershuny and Joseph Smillie. 136 pp., 1995. Access, P.O. Box 2008, Davis, CA 95617. \$16.95 softcover.

Soil Conservation, Third Edition. By Norm Hudson. 391 pp., 1995. Iowa State University Press, 2121 S. State Avenue, Ames, IA, 50014-8300. \$29.95 softcover.

Ground Water Recharge Using Waters of Impaired Quality. By the National Research Council. 283 pp., 1995. National Academy Press, 2101 Constitution Ave. N.W., Washington, DC 20418. \$39.00 softcover.

Natural Management of Woods: Continuous Cover Forestry. By J.E. Garfitt. 250pp., 1995. John Wiley and Sons, 605 Third Avenue, New York, NY 10158. \$59.95 hardbound.

Managing Land as Ecosystem and Economy: a policy report. Edited by Alice E. Ingerson. 40 pp., 1995. Lincoln Institute of Land Policy, 113 Brattle St., Cambridge, MA 02138-3400. \$14.00 paperback.

Membership Directory

In response to the requests of many members, the PRSSS executive are proud to include the membership directory of our society in this edition of the PRSSS Newsletter. Included in this list are the names, addresses, contact numbers, email addresses and professional interests of our approximately 130 members. Please let us know as soon as possible if you are aware of any incorrect or missing information in this directory.

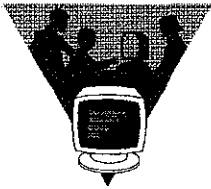
Membership Dues

A note to our members regarding our membership dues policy. The small number (e.g. 95) in the right hand corner of the mailing list label means that membership fees are due in March of the year listed. This policy evolved out of the traditional date of the spring Workshop (February) at which time most members paid their dues for the following year. The traditional Spring Workshop was not held in 1994 so many members did not get the opportunity to pay their fees. This resulted in having to catch up on some "slack" in the membership fees. I am happy to report that most members are paid up to march 1996 and beyond. If members receive this renewal notice and think that their fees are not yet due, it may be that they were caught up in the "slack" of 1994 until now. If you have any questions regarding your membership standing, please let me know at 822-2783 (UBC Department of Soil Science) or at traichel@unixg.ubc.ca.

Sincerely,

Sandy Traichel

PRSSS Secretary



PRSSS Goes On-line!!!!

Just a reminder that the PRSSS and the BC Chapter of the SWCS (Soil and Water Conservation Society) have jointly established an electronic mailing list that can be used as a forum for Soil Science Information. Membership and use of the list is available to anyone interested in Soil Science, whether or not they are members of either the PRSSS or the SWCS.

We can use this list to discuss anything pertinent to Soil Science in B.C., including:

1. News about upcoming contracts,
2. Information on government policies,
3. Questions on and advice about lab or field procedures,
4. Opinions about current soil issues (e.g. Forest Practices Code)
5. Ideas for future PRSSS or SWCS activities,
6. Information on courses available at UBC and elsewhere,
7. Internet resources for Soil Scientists.

Membership in the list is free and available to anyone with an email address. You can sign up by sending email to Bill Denham (wtdenham@unixg.ubc.ca) and indicating you want to be on the list. If you want to submit messages to the list, just send email to the address soil-discussion@unixg.ubc.ca - any message you send to this address will automatically go out to all members of the mailing list. Once you are on the mailing list, you will automatically receive in your email all messages which have been sent to the list. If you have any questions or comments, please contact Bill Denham at the above email address or (604)224-7004.

PRSSS ENROLMENT / MEMBERSHIP RENEWAL / CHANGE OF ADDRESS

Name

Employer

Title

Professional Interests

Address

Postal Code

Telephone Work:

Home:

email address

Comments/Suggestions

Please Find Enclosed:

\$10 (\$5 Student) 1 Year Membership

\$20 (\$10 Student) 2 Year Membership

1995 Fall Evening Session Synopsis

The Forest Practices Code and its Significance to Soil Science

Markku Kostamo

Kristine Weese, of the Ministry of Forests Integrated Resources Branch, laid the ground work for the evening by presenting an informative discussion on the history and development of the Forest Practices Code (FPC). Marty Osberg, of the Ministry of Forests Research Branch continued the discussion by highlighting several issues within the Code that are relevant to Soil Science.

The FPC had its early beginnings with the Forest Resources Commission which was formed in 1989. In 1991, the commission recommended a "single all-encompassing code of forest practices". In July 1994, the Forest Practices Code of British Columbia Act was passed in Legislature. The Act did not come into effect until June, 1995 and many of the regulations are being phased in over the next few years. The FPC regulatory framework consists of the Act itself, Regulations and Guidebooks. The Act is the legal framework for administering the FPC. The regulations elaborate on the Act by outlining specific forest practices obligations. For FPC Act and Regulations, call Crown Publications at 386-4636, for Guidebooks, call 1-800-565-4838.

The goals of the FPC regarding soil conservation include maintaining forest soil productivity and preventing off-site environmental damage. More specifically, these goals include the following objectives: maintain, protect or enhance the physical, chemical and biological conditions of forest soils; avoidance of forest practices that cause excessive displacement of the forest floor; and rehabilitation of degraded forest soils. The provisions of the FPC regarding soil conservation include definitions, assessments, mapping, restricted operations, operational planning, compliance surveys, soil rehabilitation and penalties.

Definitions can be found in the BC FPC Act, Regulations and guidebooks. Soil disturbance is defined in the Act itself and each type of soil disturbance is elaborated upon in the regulations. The following "hazards" are all determined in accordance with the procedures set out in the FPC guidebook, *Hazard Assessment Keys for Evaluating Site Sensitivity to Soil Degrading Processes*: compaction, surface soil erosion, soil displacement, forest floor displacement and mass wasting. Potentially unstable terrain, low, moderate and high likelihood of landslides are all determined in accordance with procedures specified in the FPC Guidebook *Mapping and Assessing Terrain Stability*.

Assessments must be carried out by Forest Licensees, prior to preparing an operational plan, of the impacts of forest practices on site and soil conditions, terrain, terrain stability and the hazards associated with instability. Forest development plans must show all areas with a moderate or high likelihood of landslides and Silviculture Prescriptions must indicate the sensitivity of soil to disturbance, critical site factors and terrain stability hazards. Restricted operations deal with harvesting and trail building in areas which are subject to high likelihood of landslides following timber harvesting or surface soil erosion with a sediment delivery to streams. Operational Planning requirements include providing information and following guidelines regarding the site sensitivity site to soil disturbance in both Silvicultural Prescriptions and logging plans.

Compliance with the FPC Regulations may be assessed to ensure that the soil disturbance limits specified by the Silviculture Prescription have not been exceeded. Non-compliance by licensees could be costly. Administrative penalties ranging between \$50,000 and \$100,000 per infraction may be levied by senior officials in the MoF. Court ordered penalties up to \$500,000 and imprisonment maybe administered for serious offenses.

All of this sounds like a fair bit of work being generated for soils specialists. Although, initially the Act required a Professional Geoscientist or Engineer to do the work, it is becoming obvious that in many situations, such as erosion control and rehabilitation of degraded soils, a soils specialist would be more suited to providing expertise.

1995 Fall Evening Session Synopsis

The Farm Practices Protection Act: History and Development

Sandy Traichel

The second half of our evening session covered the history and development of the Farm Practices Protection (Right to Farm) Act. Dave Sands works with the B.C. Ministry of Agriculture, Fisheries and Food on rural/urban conflict and "right to farm" issues. Dave Sands showed a number of slides which were stark examples (some of which bordered on hilarious - except for the people who have to live them!) of farm/urban interface incompatibility. Along the way, he explained various aspects of the Act such as the purpose for a new Act, some of the definitions involved and how it will be implemented.

A new Act was developed because BC's farming regions are becoming increasingly urbanized; therefore we need better ways of addressing and resolving community conflicts between the "neighbours". This legislation is unique in Canada because the Act links the "right to farm" concept with bylaw powers of local government. The act simultaneously amends the Municipal Act in order to encourage planning by local governments that includes agriculture and to ensure local bylaws reflect provincial standards for farming. The new legislation will create a new Farm Practices Board which will be responsible for hearing complaints against farming under the Act.

The Ministry is in the process of identifying and defining "normal farm practice" and recognizing areas where regulations may be required. The farm community will play a key role in establishing and defining normal farm practices and standards for bylaws. Geoff Hughes-Games used the Evening Session as an opportunity to get feedback from the audience regarding some of the issues around defining normal farm practice and bylaw standards.

Some key definitions in the Act include "farmer", "farm business" and "farm operation". The specific activities covered by the Act are "farm operations", meaning those practices needed to grow, produce, raise or keep animals or plants. It includes aquaculture, game and fur farming but excludes forest practices and raising pets or exotic animals. It also includes processing and selling the products of the farm.

The effect of the Act will be that farmers who meet conditions (as defined in the Act) will be exempt from nuisance and miscellaneous bylaws of local governments made under specified sections of the Municipal Act. As long as a farmer is carrying out "normal farm practices" within the Agricultural Land Reserve or other permitted areas and he/she is complying with the Health Act, pesticide Control Act or Waste Management Act and any land use regulation, the farmer is protected from unwarranted nuisance complaints. Citizens who have concerns about farm practices can initially consult with the local Ministry office who will attempt to resolve the issue. Any formal complaints will be referred to the Farm Practices Board.

The proposed Farm Practices Protection (Right to Farm) Act signals a new era for local governments, farm communities, the Ministry of Agriculture, Fisheries and Food and the Agricultural Land Commission. The passage of the Act will result in farming being brought into the planning mainstream. British Columbia is now in a position to effectively address agricultural issues and do so in a manner sensitive to local concerns and other important resource considerations. This Act will also provide more security for farmers to conduct their businesses within a fair and supportive regulatory climate. If we are serious about ensuring agriculture's sustainable future we must work to foster the partnerships that have been forged through the development of this new and important Act.

18th Annual PRSSS Spring Workshop
“New Approaches for Soil Scientists”

Saturday April 20, 1996.

Room 166 MacMillan Building, University of British Columbia

- 0830 to 0900 Registration and refreshments
- 0900 to 0915 Introductory remarks. Trevor Murrie, President PRSSS.
- 0915 to 1000 GIS as an organizational tool for better handling and utilization of soils data and information. Kent Watson, Soils and Environmental Consultant.
- 1000 to 1030 The Land Analysis and Decision Making Model (LANDS). Dr. Dave Moon, Agriculture Canada, Research Branch.
- 1030 to 1045 Coffee and refreshments
- 1045 to 1115 Problems with data characteristics required for the LANDS model. Dr. Dave Moon, Agriculture Canada, Research Branch.
- 1115 to 1200 To Be Announced.
- 1200 to 1300 Lunch (provided) and PRSSS Annual General Meeting. AGM begins at 1220.
- 1300 to 1340 “Hypertext” as a presentation tool. Sandy Brown, Ph.D. Candidate, Resource Management Science.
- 1340 to 1420 Soil Science on the Internet. Michael Goldstein. Soilcon Laboratories Ltd. and Bill Denham, UBC Graduate Student.
- 1420 to 1500 Setting up a “Web” Site. Brent Foote, Foote Print Publishing.

Pre-registration Fee \$12.00 (includes lunch). Registration on April 20 \$15.00 (also includes lunch). Participants are encouraged to register in advance as seating in the afternoon session is limited to 60 people. Please send registration form and fee payment to PRSSS c/o Department of Soil Science, University of British Columbia, Vancouver, BC, V6T 1Z4.

Sponsored By: Pacific Regional Society of Soil Science
UBC Department of Soil Science