

NOVEMBER 1985



Pacific Regional Society of Soil Science

Editorial

We would like to thank Art Bomke for his contributions on recent Canadian Society of Soil Science activities. This issue also contains preliminary information on the Annual General Meeting and the Tenth B.C. Soil Science Workshop, both to be held at UBC in February, 1986. Another issue of the Newsletter, early in the new year, will provide details for the AGM. We encourage all contributions for the next issue of the Newsletter, including viewpoint/opinions, problems, current projects/research, member news, reports/articles, or reviews of publications of interest to our readers, etc.

PLEASE SEND NEWSLETTER IDEAS CONTRIBUTIONS TO: Mike Curran (c/o below)

SOME MEMBERS HAVE NOT PAID FOR 1985 YET! (this will be your last newsletter if you don't cough up). Dues for 1986 (still \$5.00 per year, \$3.00 for students) are due on or before Jan. 1, 1986. We have enclosed a Membership Application; if you know of anyone who should be a member, please pass it on.

REPORT OF CSSS WESTERN COUNCILLOR

A number of issues of possible interest to soil scientists in B.C. were discussed at the Jan. 18, 1985 meetings of the Canadian Society of Soil Science (CSSS) Council held in Ottawa. These are summarized in the following report. You are encouraged to pass along to me opinions or suggestions on any of these or other CSSS related items.

CSSS Organization

The desirability of CSSS instituting function-oriented divisions was discussed at length during the 1984 Annual Meetings at Banff, with no clear resolution. The views expressed were divided between those who a) opposed divisions, b) favored discipline-oriented divisions (eg. soil physics, soil fertility, etc.), and c) favored functional divisions: 1. Agricultural soils, 2) Forest soils, and 3. Reclamation and conservation. Could CSSS serve your needs better with a divisional structure? If so, what divisions would be appropriate?

Awards

Interest income on the profit from the 1980 ISSS Conference in Edmonton has exceeded \$100,000 and the interest is being used to provide a number of travel awards. You may be interested to note that a total of twelve \$800 awards are now available to assist CSSS members to attend the 1986 ISSS Congress in Hamburg, F.R.G. Emphasis will be placed on the following criteria in making the awards: 1) Applicant to give a paper, serve on a working group or act in some other official capacity, and 2) The applicant's justification of need for financial assistance. The applications will close on Dec. 15, 1985. Look for the announcement in

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the CSSS Newsletter.

Council approved an annual award in the amount of \$500 to be administered by the ISSS for the purpose of assisting young (<35 yrs) scientists from developing countries to attend scientific meetings. The award will be made available in cooperation with the soil science societies of other developed countries.

CSSS President John Stewart was given a travel award to enable him to travel to Eastern Canada to present a series of four lectures. Past President Murray Miller toured Western Canada last year on behalf of the CSSS.

Soil Degradation

A broadly based conference on soil degradation problems and policy will be held in 1986 in Saskatoon. It is envisioned to bring together scientists, farmers and politicians with the objective of recommending policy response to Canada's soil degradation problems.

CSSS 1985 Annual Meeting

The theme of the AIC Conference in Charlottetown, P.E.I. was "Food, who will produce it." Consistent with this theme, CSSS held joint sessions: with the Canadian Society of Agricultural Economics, concentrating on soil degradation; and a second with the Canadian Society of Agricultural Engineering on erosion, water movement, and land utilization of wastes. These sessions were quite thought-provoking and more dialogue between soil scientists and other professionals should be facilitated.

The 1986 CSSS Annual Meeting will be held in Saskatoon in conjunction with the AIC. Council decided that in 1987, we will be meeting at Carleton University (Ottawa), but separately from the AIC.

CSSS Membership

I have been appointed to chair the CSSS Membership Committee and I would like to encourage each of you to seriously consider joining the CSSS. (A CSSS Membership Application is attached for your convenience.) It is no longer mandatory to belong to the Agricultural Institute of Canada to become a CSSS Member. The CSSS provides a National forum for promoting soil science and environmental protection through its Annual Meeting, Workshops, and publications. However, it can only be effective by providing a "home" to soil scientists, regardless of the area in which they are applying their science. I think the diverse interests of B.C. soil scientists have a lot to offer CSSS and I hope that you will either join or maintain your membership in the CSSS.

Finally, the CSSS Council will be meeting again in mid January. If you have any concerns or ideas you want me to raise, please contact me prior to that time.

Art Bomke  
Western Councillor, CSSS

## UBC SOIL SCIENCE DEPARTMENT CURRICULUM REVIEW

The Department of Soil Science has established a committee (Hans Schreier, Mike Novak, Charlie Rowles, and Art Bomke, Chairman) to review the Department's course offerings and make recommendations for changes. In this regard, it would be helpful to have input from soil scientists, UBC alumni, and others, as to the following:

- What should receive high priority in our undergraduate curriculum?
- How have you been served by your B.Sc. program?
- What suggestions do you have for curriculum changes?
- What elements of our curriculum should not be changed?

Feel free to comment on specific courses or the nature of the general program. We would greatly appreciate hearing from you.

### STUDENT CHAPTER

About twenty students signed up for the Bamfield field trip which was proposed by Wayne Temple for early September. However, when it came time to come up with the firm commitment (cash), not enough students came through. This trip will most likely be organized again in the future, with hopefully better success.

#### Geology Field Trip

Dr. John Clague from the Geological Survey of Canada led a geology tour, concentrating on the diverse surficial geology in the Chilliwack area. This trip was organized by Paul Sanborn, with about 12 people attending; a wet, good time was had by all. This or a similar tour will most likely be repeated next year.

Future trip plans include a private tree farm operated by Mr. Tom Wright (former Dean of Forestry), and the UBC Research Forest. Any suggestions are welcome and encouraged!

### TENTH B.C. SOIL SCIENCE WORKSHOP

This year's focus is on "Degradation of Forested Land - "Forest Soils at Risk"". The Workshop will again be held at UBC, February 20 and 21, 1986, in room 166 of the MacMillan Building. Papers and posters are invited; see attached Call For Papers.

### INFORMATION REQUEST - SLASHBURNING

Slashburning is an issue of great relevance to many of us in operational forestry and forestry research. Short-term slashburning effects on site conditions affecting tree growth and nutrition may be considered understood for the major site factors (eg. the macronutrients). However, the longer-term effects of slashburning - those that determine the net effect on long-term site productivity - have not been well studied. Clearly, the sooner we gain knowledge of long-term effects the better; therefore, any past research sites (or trials) dealing with slashburning can provide very useful information or feedback regarding current

forestry practices.

As part of a B.C. Ministry of Forests research contract to UBC (Tim Ballard), I am compiling a compendium on past slashburning research and trial areas that can still be relocated on the ground. Of particular interest are 1) settings with fire impact or revegetation data related to specific points on the ground, and 2) areas that have been severely burnt after logging (eg. reburnt areas). Knowledge of nearby unburnt or less burnt settings is of interest (but not essential), for the above type of areas. Any research or trial areas fitting the above general criteria AND older than 15 years are of great interest.

Sites younger than 15 years since treatment are of interest if more complete burn impact or regeneration data are available (eg. have one or more of the following measures: depth of burn and/or residual forest floor, fuel loading and/or consumption, mineral soil exposure before and/or after burning, vegetation and/or regeneration descriptions, and/or plot photos).

If you know of any such areas or feel your agency or colleagues may have such information, please do not hesitate to contact me at your earliest convenience (details may be sorted out later). It is important that our list of contacts be established shortly to enable inclusion of the information within the time limits of the contract (report due March, 31, 1986).

For your convenience, you may include a quick note to me with your cheque for the 1986 PRSSS membership fee (due Jan. 1, 1986) and I will get back to you as necessary.

Thank you for your cooperation,  
Mike Curran, (ph 228-2783)  
Soil Science Dept., UBC  
(c/o above address)

#### MEMBER NEWS, Etc.

Dr. Shannon Berch has been appointed as NSERC University Research Fellow in the Department of Soil Science at UBC (5 yr. term that may lead to tenure). Shannon comes to UBC from an NSERC Post Doctoral position at the USDA Pacific Northwest Forest and Range Experimental Station in Oregon. She recieved her Ph.D. from Universite Laval in Quebec, and is an expert on mycorrhizae. Shannon will be responsible for teaching and research related to soil biology.

Mike Curran has been appointed as a Sessional Lecturer for the fall semester at UBC. He is teaching the forest soils portion of Soil 302 while Tim Ballard is on Study Leave until December, 31, 1985.

Cathy Hamlen has joined the ranks of our talent exports to the Prairies through the PFRA. Cathy joins John Heinonen in Peace River, Alberta. (Gary Bank is in Saskatoon, and Craig Wood is in Lethbridge.)

Les Lavkulich has been re-appointed to another five-year term as Chairman of the department of Soil Science at UBC.

Lawrence Lowe, of the Department of Soil Science, has been appointed to the position of Associate Dean of the Faculty of Agricultural Sciences at UBC.

Anne MacAdam has started an M.Sc. program in Forest Soils at Oregon State University in Corvallis. Anne has been working on slashburning-related research for the B.C. Min. Forests in Smithers.

Dave Moon has taken over as Land Resource Unit Head for the B.C. Soil Survey Unit at the Agriculture Canada Research Station on N.W. Marine Dr. in Vancouver.

Dr. John Omuetti, who visited the UBC Soil Science Dept. last fall, is spending his sabbatical leave there this winter. He is currently doing research on soil mineralogy. John is a member of faculty at the University of Ibadan in Nigeria.

Joan Sawicki won the NDP nomination for the provincial constituency of Burnaby Willingdon at the nominating convention on Sept. 20.

Keith Valentine moved to Ottawa in August to take up the position of Soil Inventory Section Head with Agriculture Canada.

Staff at the CFS Pacific Forestry Centre (new name) have moved into their new office building on Burnside Road in Victoria. (Perhaps we can get an inside story on this and current research in an upcoming Newsletter?)

#### In Memoriam:

Dr. David G. Laird passed away Oct. 6, six days after his 96th birthday. He received degrees from the Universities of Toronto and Wisconsin, joining the UBC faculty in 1921. Dr. Laird was instrumental in the development of our discipline in B.C. He retired in 1954 as chairman of the Department of Soil Science, and remained active in his field for many years. Dr. Laird was one of our Society's first Honorary Members and Professor Emeritus of Soil Science.

#### Book Reviews

D.R. Nielsen and J. Bouma (eds.), 1985, Soil Spatial Variability, Pudoc, Wageningen, 243 p. (Available from: Unipub, P.O. 1222, Ann Arbor, MI 48106; \$us 18.75 + 2.50 shipping charge.)

This collection of 11 papers is based on the Las Vegas SSSA meeting in 1984. Three of the articles may be of particular interest to our readers: "Transect sampling for reliable information on mapping units" (de Gruijter and Marsman), "Spatial variability: its documentation, accomodation and implication to soil surveys" (Wilding), and "Soil variability and soil survey" (Bouma). These focus on some of the practical methods for incorporating variability considerations in surveys. The rest of the papers deal with more research-oriented approaches to studying soil variability. The topics covered include the design of crop yield experiments, geostatistical methods and the study of leaching processes.

The whole issue of soil variability is one which all soil scientists have to face eventually. Although this reviewer certainly hasn't followed the literature in this field closely, there does appear to be a gap between pragmatic, soil survey approaches to the problem and the more sophisticated geostatistical studies. It would be really useful to see a more integrated handbook-style treatment of the subject which would explain the basics of the more advanced techniques. For example, I looked in this collection in vain for introductory definitions and discussion of such things as semivariograms and kriging. None of this seems to have made it into textbooks yet, but many of us would like some basic definitions of what these techniques are all about. Perhaps something along these lines is already in print; can any of our readers comment?

Paul Sanborn, UBC

Diedrich Schroeder, 1984, SOILS - Facts and Concepts -, Translated from German and adapted by P.A. Gething, Published by Int. Potash Inst., Bern/Switzerland. 140 p. (Available through UBC Bookstore for \$ 12.95.)

This little book presents an excellent summary of all the main aspects of soil science. Prof. Schroeder devised this notebook to serve as an "aide memoire and summary" to be useful to students and graduates in all fields related to soil science. The Translator notes that over 30,000 copies of this book have been sold in German-speaking countries since the first edition appeared in 1969. The English edition includes some extra material, such as the FAO World Soil Classification and US Soil Taxonomy. This is a very impressive summary of incredible proportions that I have found very useful. (Sorry Paul, no direct treatment of soil variability.)

Tisdale, S.L., W.L. Nelson, and J.D. Beaton, 1985, Soil Fertility and Fertilizers, 4th ed. Collier Macmillan Canada Ltd. (Available at UBC Bookstore)

This nearly universal soil fertility reference has been rewritten by a member of PRSSS, Dr. Jim Beaton, and now includes a substantial number of references to Canadian soil fertility problems. It is an excellent reference source for most areas of soil fertility.

Of Interest to Our Readers (from British Soc. Soil Sci. Newsletter 7)

Ego Trips!

'I have the pleasure of inviting you to attend a RESEARCH TRENDS SYMPOSIUM IN SOIL SCIENCE to be held in Bermuda.....'

Have you been invited to contribute your L75 to attend this or similar symposia in exotic places with, once your initial L75 is recieved, all expenses paid. A series of these letters which describe the recipients as 'leaders in their fields' have been sent to a wide variety of scientists throughout the UK from an address in New York. If you have recieved such a letter North Yorkshire Police, Fulford Road, York YO1 4BY, will be very pleased to hear from you.

MEETINGS

- Dec. 1-6, 1985. Annual ASA, CSSA, SSSA meetings in Chicago, Ill. (Contact Am. Soc. Agron. 677 South Segoe Rd., Madison, Wisconsin 53711 or call (608) 273-8080.)
- Dec. 1-6, 1985. Soil Compaction Symposium, in conjunction with ASA meetings above. (Contact Ward Voothees, Chair, Division S-6, USDA-ARS, North Central Soil Cons. Res. Lab., Morris, MN 56267.)
- Feb. 18-19, 1986. Alberta Soil Science Workshop in Calgary, Alberta. (Contact Dr. J.F. Dormaar, Ag. Canada Res. Station, Box 3000, Lethbridge, Alta T1J 4B1 or call (403) 327-4561.)
- Feb. 20-21, 1986. Tenth B.C. Soil Science Workshop -SEE DETAILS ATTACHED-
- Feb. 20, 1986. PRSSS ANNUAL GENERAL MEETING -in conjunction with above, -details in next Newsletter-
- Apr. 21-23, 1986. Third Hydrogeological Conference, Saskatoon, Saskatchewan. (Contact Mr. H. Maathius, Co-Chairman, Saskatoon 1986, Saskatchewan Research Council, 30 Campus Drive, Saskatoon, Sask. S7N 0X1.)
- Apr. 28- May 2, 1986. International Workshop on Quantified Land Evaluation Procedures in Washington, D.C. (Contact Prof. K.J. Beek, ITC, P.O. Box 6, 7500 AA Enschede, Holland.)
- May 5-8, 1986. Tenth Canadian Symposium on Remote Sensing, theme: "Technology for Value", at Westin Hotel in Edmonton, Alberta. (Contact M. Diane Thompson, Technical Committee Co-Chairperson, INTERA Technologies Ltd. #1200, 510 5th St. S.W., Calgary, Alta T2P 3S2 or call (403) 266-0900.)
- July 6-10, 1986. Canadian Society of Soil Science annual meetings, theme: "The Age of Information", in Saskatoon, Saskatchewan. (Contact Dr. E. de Jong, Dept. Soil Sci., Univ. of Saskatchewan, Saskatoon, Sask. S7N 0W0.)
- Aug. 13-20, 1986. 13th International Congress of Soil Science in Hamburg, Fed. Rep. of Germany. (Contact Prof. Dr. K.H. Hartge, Inst. f. Bodenkunde, Univ. Hannover, Herrenhauserstrasse 2, D-3000 Hannover 21, F.R. Germany.)

ALL CONTRIBUTIONS TO YOUR NEWSLETTER ARE ENCOURAGED AND WELCOME!

MEETING NOTICE - CALL FOR PAPERS

- MEETING: Tenth B.C. Soil Science Workshop
- THEME: Degradation of Forested Land - "Forest Soils at Risk"
- DATES: February 20 and 21, 1986
- LOCATION: Room 166, MacMillan Building, University of British Columbia
- SPONSORS: B.C. Ministry of Forests  
B.C. Land Resource Science Lead Committee  
Soil Conservation Society of America (B.C. Chapter)
- TOPICS: Causes and Effects - Harvesting  
- Road Building  
- Site Preparation  
Soil Disturbance/Productivity Relationship  
Predicting Soil Disturbance  
Rehabilitation  
Economics of Soil Degradation and Rehabilitation  
Research Needs
- PAPERS: Invited  
Contributed  
Poster
- REGISTRATION FEE: Anticipated to be not more than \$10
- PROCEEDINGS: Will be published. All papers, including posters, will be included in the proceedings if the manuscripts have been submitted to the Editor by the end of the meeting. If, because of time and space limitations we cannot accept some papers, the author(s) can, if they wish, submit a manuscript to the Editor for possible inclusion in the proceedings. The proceedings will be published by the Research Branch, Ministry of Forests.
- CONTACTS: Mr. Gerry Still, RPF P.Ag. (Organizing Committee Chairman)  
Regional Pedologist  
Nelson Forest Region  
Nelson Phone 354-6279
- Dr. Dan Lousier, P.Ag. (Proceedings Editor)  
Ecology Program Manager  
Research Branch  
Ministry of Forests  
Victoria Phone 387-3338
- DEADLINES: Title, author(s), abstract submitted to the Organizing Committee Chairman or Proceedings Editor by 01 December 1985. Manuscripts must be submitted to the Proceedings Editor by 21 February 1986  
Further details will be available on 01 December 1985

\* This deadline has been extended to Dec. 13, 1985 for PRSSS members (because of Newsletter timing). If you intend to contribute please contact Dan Lousier with at least a title and list of authors. (Abstracts are desirable.)

Members of the Canadian Society of Soil Science also have the privilege of joining and are encouraged to join the Agricultural Institute of Canada if they:

- graduated in agriculture from a university of recognized standing or
- graduated not in agriculture, but are engaged in work of an agricultural nature.

Members who meet either of the above but have had less than three years post-graduate agricultural training and/or work experience would be eligible to become a junior member.

- I would like to receive an application form for membership in the Agricultural Institute of Canada.

The specific activities of the Society include:

- Responsibility for the Canadian Journal of Soil Science. Members get a 50% reduction in the cost of the Journal.
- Planning and conducting the annual meeting to discuss topics of importance to soil scientists and others.
- Distributing a quarterly newsletter reporting on the affairs of the Society and its members.
- Awarding of Fellowships to outstanding soil scientists.
- Providing travel awards for international exchanges of soil scientists.
- Sponsoring or co-sponsoring national and international conferences with other organizations.
- Publishing special reports, glossaries and books.
- Preparing special papers on specific topics in soil science for governments, the scientific community or the public in general.

The Society is affiliated with the Agricultural Institute of Canada, the International Society of Soil Science, and the Geoscience Council of Canada.

## AN INVITATION

### TO JOIN THE

## CANADIAN SOCIETY OF SOIL SCIENCE

The Canadian Society of Soil Science comprises individuals engaged in all aspects of soil science. Members come from diverse areas including agriculture, forestry geography, geology, remote sensing, environmental science, and land planning.

The main goal of the Society is to promote the wise use of the soil resource for the benefit of all society, in both the short-term and for the future, congruent with the preservation and enhancement of environmental quality.

The Society provides a forum, through its annual meeting, workshops, publications and newsletter for interchange among the various subdisciplines and professional interests of its membership which includes students, teachers, researchers, practitioners and disseminators of knowledge in the broad field of soil science.

Membership in the Society is open to any individual having a post-secondary school degree or diploma.

CSSS MEMBERSHIP APPLICATION

Name \_\_\_\_\_

Title Dr.  , Mr.  , Ms.

Address \_\_\_\_\_  
\_\_\_\_\_

Province \_\_\_\_\_ Postal Code \_\_\_\_\_

Telephone \_\_\_\_\_

Employer \_\_\_\_\_

Position \_\_\_\_\_

Post-Secondary Education

(Please indicate highest degree/diploma)

Ph.D  , M.Sc.  , B.Sc.

Diploma

Institution \_\_\_\_\_

Specialization \_\_\_\_\_

Date Received \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Membership, including Journal  
(\$36.00) \_\_\_\_\_

Membership, excluding Journal  
(\$21.00) \_\_\_\_\_

Student membership\*,  
including Journal (\$17.00) \_\_\_\_\_

ISSS membership (\$11.00) \_\_\_\_\_

Total \_\_\_\_\_

Membership fees apply for the  
calendar year and are due January 1.

Please make cheque payable to  
CSSS and mail to:

The Canadian Society of Soil Science  
c/o - Dr. A.A. Bomke,  
Dept. of Soil Science,  
248-2357 Main Mall,  
University of B.C.  
VANCOUVER, B.C. V6T 2A2

\*Certification of Student Status

\_\_\_\_\_ is a  
Name  
student in my department.

Degree being sought

B.Sc.  , M.Sc.  , Ph.D.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Position

Fields of Interest  
(Indicate up to three)

- Agriculture/Fertility
- Chemistry/Biochemistry
- Classification/Genesis
- Conservation/Management
- Forestry
- Geography/Land Use
- Microbiology
- Mineralogy
- Physics

Other \_\_\_\_\_

## THE PACIFIC REGIONAL SOCIETY OF SOIL SCIENCE

MEMBERSHIP APPLICATION

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: hm. \_\_\_\_\_ wk. \_\_\_\_\_

EMPLOYER: \_\_\_\_\_

Regular Membership - 1986 = \$5.00

Student Membership - 1986 = \$3.00

Please make cheque payable to The Pacific Regional Society of Soil Science,  
and mail to:

Treasurer, Pacific Regional Society of Soil Science  
c/o Department of Soil Science  
University of British Columbia  
248 -2357 Main Mall  
Vancouver, B.C. V6T 2A2