

c/o Department of Soil Science
University of British Columbia
Vancouver, B.C. V6T 1Z4
TEL: 822-2783 FAX: 822-8639

November 1993

A BRIEF HISTORY OF HUT 021

I joined the UBC Faculty in 1946 and was present to see Hut 021 built and occupied in 1948. At that time, UBC enrolment had increased from 2000 to 10000 students and the University was seriously overcrowded. UBC was awarded emergency funds from Ottawa. It used some of these to construct Hut 021 and other teaching units located in the University orchard. They were designated "O" because this area had been developed as an orchard by the Faculty of Agriculture and later abandoned in the depression when the University was almost closed. The emergency funds were awarded to Departments on the basis of need and then the Departments took on responsibility for planning the structures.

Before getting place in the Huts, Soils was part of the Department of Agronomy and its space was as follows:

- Two offices in the Agriculture Building (now the Mathematics Annex), one shared by Dr. Dave Laird and Mr. Lawrence Farstad of the Federal Soil Survey and the other by Dr. Bert Brink and myself.
- Use of the small Agronomy Laboratory in the northeast corner of the Agriculture Building. This later became the Laboratory for Soil Microbiology.
- Use of the top floor of the Agronomy Barn. This was heated when needed, with a wood stove, shared with Agriculture Canada Soil Survey, and used to conduct quick soil tests for farmers.
- An Army Hut on the West Mall converted to give the laboratory in Introductory Soils. I shared it with Ted Fennell who later became Analyst for the City of Vancouver.

President

Barbara Cade-Mennun
Department of Soil
Science
UBC
822-4458

Vice-President

Rhian Evans
Department of Soil
Science
UBC

Secretary

Trevor Murrie
Coordinator
Sumas Prairie Soil
Conservation Project

Treasurer

Martin Carver
Resource Management
Science
UBC

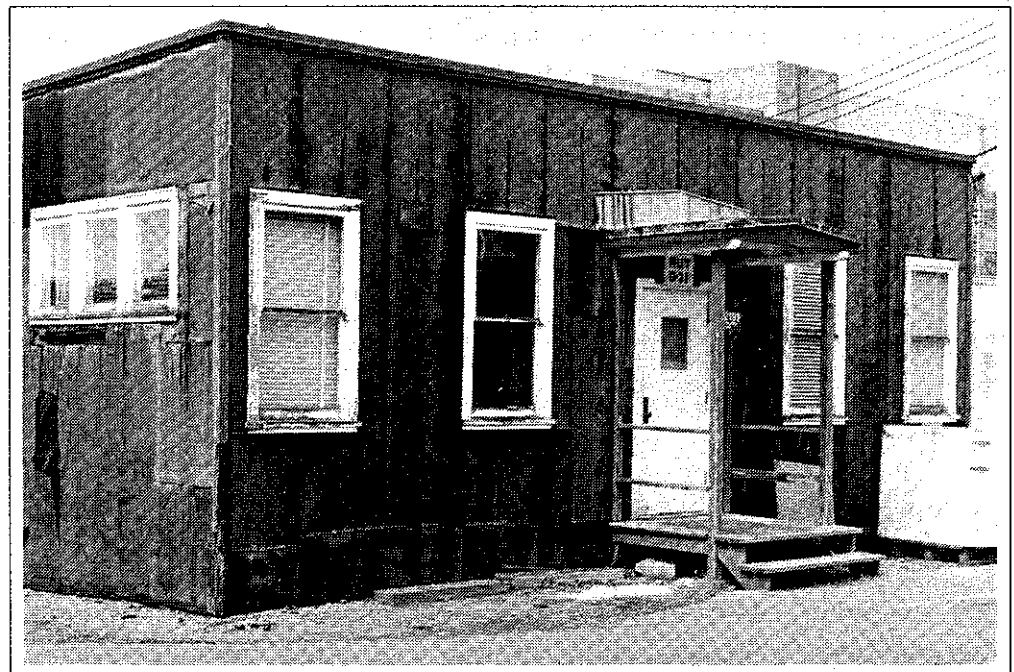
Newsletter Editors

Kathy Cook
Department of Soil
Science
UBC
E-mail address
kcook@unixg.ubc.ca

Martin Carver
Resource Management
Science
UBC

Eveline Wolterson
Environmental
Consultant
Pottinger Gaherty Ltd.
300-626 Bute Street
Vancouver, B.C.
V6E 4E8

Annual membership fees
are \$5.00
Student annual
membership fees are
\$3.00



In view of this limited space and the fact that many students were electing to Major in Soils (in 1950 an all-time record of 22), it is not surprising that the largest structure in the Orchard group was awarded to Agronomy. It was designated Hut 023 and had a working area of 3500 ft². I planned it to provide facilities for Introductory Soils, Soil Physics, Fertility, Conservation, Chemistry, Genesis, Morphology, and Classification, a reading/soil-monolith room, and an office.

I have very pleasant memories of the next few years. One reason was that the Aggie playing field was located just across the road in front of the Huts. The Geophysics Building now occupies this space but for years it was a favourite recreation area for soils students and staff. I remember playing touch football with Jim Beaton when he passed to George Dargie who crashed into a tree with disastrous results. The Aggie Field was also the first practice area for the B.C. Lions and I enjoyed sitting at my desk watching Coach Stukas running his charges up and down the field.

Hut O21 and O22 were also built at this time. Hut O22 was for the Department of Dairying and when the Faculty of Agriculture moved into the MacMillan Building, Huts O22 and O23 were destroyed to make room for the Geological Sciences Building.

Physical Plant Records show that Hut O21 was built in 1948 using lumber frame construction on concrete pads and that it had a useable space of 2200 ft². From the beginning, like the Huts around it, the exterior was covered with black tar paper. This produced a very depressing appearance. Although many suggestions were made to change its exterior to something more attractive, the original tar paper remained and became sadly worn and torn!

Before the 1960s, Hut O21 had been used by a series of Departments - Biochemistry, Pharmacy, Dairying, and the B.C. Research Council as I recall. After this, Soil Science shared Hut O21 with the Department of Dairying. Soils used the large laboratory, office, and seminar room at the front (1500 ft²) and Dairying the smaller laboratories at the back.

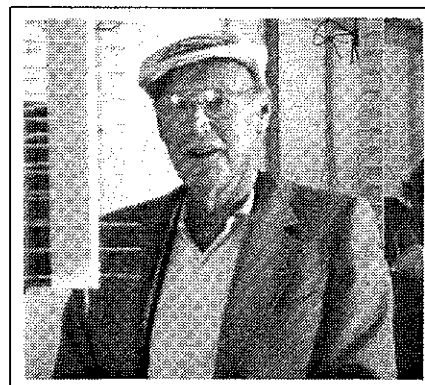
Soils converted the large area to a classroom by installing blackboards at the front, work tables in the centre, and mounted its soil monoliths around the walls. It made a very valuable facility for laboratories, lectures, seminars, and student offices. Historically, it is of interest to note that the first meeting of the B.C. Soil Science Workshop was held there.

For several years when the Faculty of Agriculture first occupied the MacMillan Building, Soil Science moved out of Hut O21. However, its space in the new building was too small and in 1970 the Department moved back. However, in this case it took over the entire hut and refitted it with desks and facilities for Soil Fertility. This was offered by a new and popular Faculty member, Dr. Art Bomke.

A further important change in the use of Hut O21 occurred in 1977 when the Department introduced work in soil biology. Dr. Allan Carter was hired to initiate this program and the Hut was reorganised to accommodate it, producing a very congested and, at times, complicated situation.

When I retired in 1980, Hut O21 was showing signs of serious wear. However, its resourceful students and staff still organised enjoyable Christmas Parties and other memorable events. To commemorate Hut O21's final day, members of the Soil Science Department gathered together for a last nostalgic tour. Now that Hut O21 has been torn down, its unique character and history will be remembered only by the many friends who took part in the social events and other interesting and educational experiences.

C.A. Rowles
Honorary Professor
Soil Science
UBC



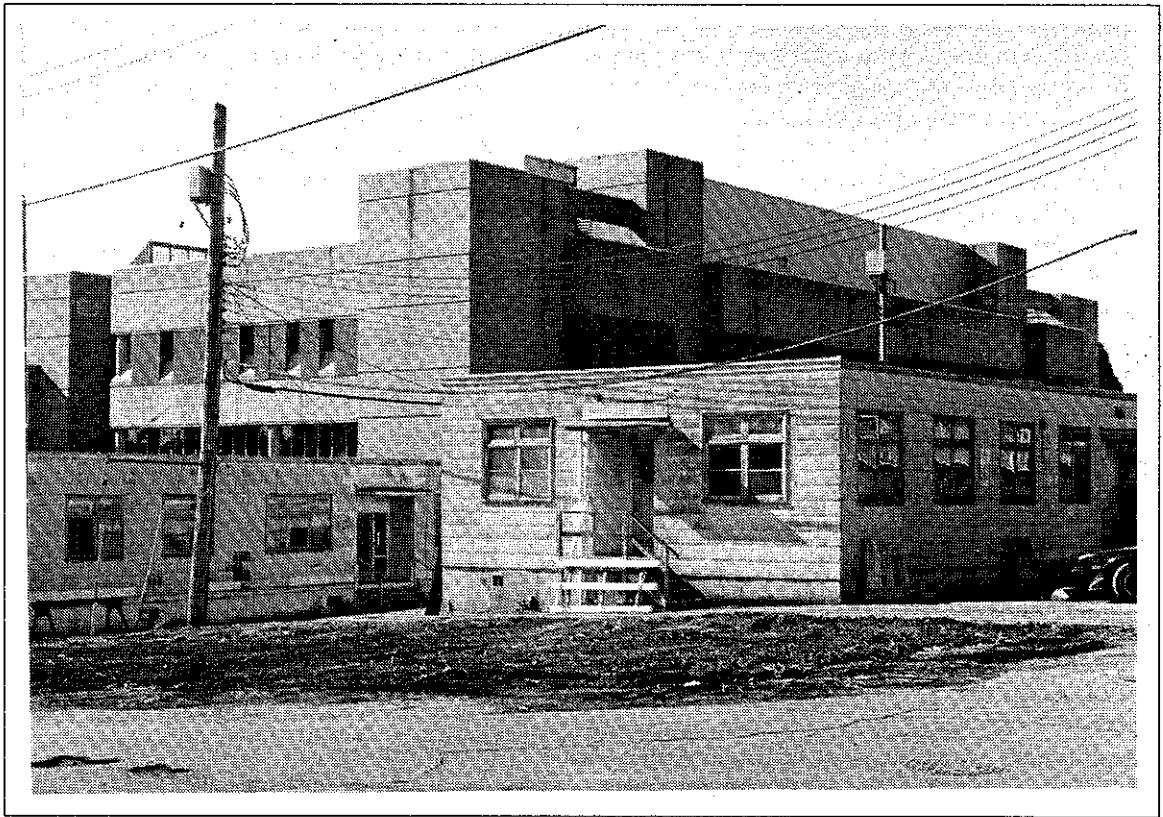
Also in this issue...

- ... Eco-Research Project at UBC
- ... Final Presentations for the Canada-BC Soil Conservation Program
- ... Synopsis of PRSSS Membership Survey, June 1993



Gathering of the Soil Science Department on Hut O21 Demolition Day

photo by Bernie von Spindler



The remains of Hut O21

photo by Bernie von Spindler

PROSPECTS FOR SUSTAINABILITY:

SUSTAINING THE ECOSYSTEM FUNCTION OF THE LOWER FRASER BASIN, BRITISH COLUMBIA

As part of the Government of Canada's Green Plan initiative, the three councils (Natural Science and Engineering Research Council, Social Science and Humanities Research Council, and the Medical Research Council) formed a Tri-Council Secretariat to solicit and fund innovative and integrated "Eco-Research" at Canadian Universities. Of the several dozen applications received by the Secretariat, only five across Canada were successful. One of the proposals submitted by a group of faculty members at the University of British Columbia was successful in the competition. The general objective is to address integrated institutional, scientific, and technical solutions to sustaining ecosystem function.

The geographical focus of the study is the Lower Fraser Basin, from Hope to Howe Sound, as this region captures most of the issues considered critical to longer term "sustainable development". It is an area of diverse natural ecosystems, diverse peoples and cultures, diverse natural resource dependence, an increasing population and urbanization, and a major global trading centre. The universal issues of global change, of land and water supply and management, biodiversity, pollution, and livability, may all be identified in this geographical location. The simple questions that are being addressed include: what kind of ecosystem do we have, what forces and processes shaped it historically, what kind of an ecosystem do we want (in 30 years!), and what is feasible?

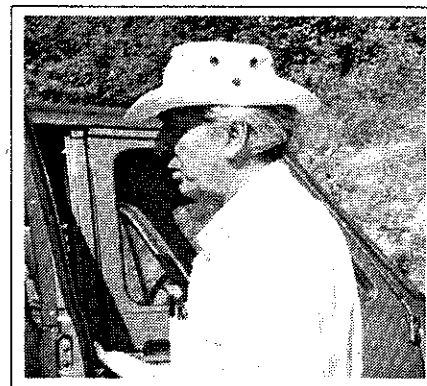
The project involves over 50 graduate students, PDFs, support staff, and faculty members and is lead by Dr. M.C. Healey, Director of the Westwater Research Centre and by Dr. J. Robinson, Director of the Sustainable Development Research Institute, at the University of British Columbia. In addition to the core grant from the Tri-Council Secretariat, other agencies are collaborating in the program. As part of the project, community and stakeholder communication and cooperation is important. To this end, meetings and workshops with groups, such as B.C. Ministries of Agriculture, Food and Fisheries and Environment, Research Branch of Agriculture Canada, Environment Canada, Fisheries and Oceans, B.C. Hydro, B.C. Federation of Agriculture, Federation of B.C. Naturalists, First Nations Groups, Environmental Groups, representatives of Municipal governments and private consultants, have been held and liaison will continue throughout the duration of the project. The project has three foci, namely the terrestrial ecosystem, the river and river margins, and the terrestrial urban. Each of these foci groups are guided by a coordinating group to facilitate

overall integration of the program.

The terrestrial component is addressing the historic and current exchanges between the environment and economy and how these have influenced biodiversity and contaminant burdens in the basin. The river and river margins group will focus on analyses of the sources of fates of toxic substances entering the river system and the impact of these materials. The urban-terrestrial focus is targeting the dependency of the urban ecosystems on natural capital (air, soil, water) both within and outside the urban area and how this dependency is related to environmental problems and community health. The integration of these three foci is aimed at defining "what do we want" in practical and feasible terms and exploring the consequences of policy scenarios for a sustainable ecosystem.

Agriculture, forestry, fisheries, and mining (transport) have had a major impact in shaping the Lower Fraser Basin. The natural attributes of climate, soil and water are central to the human livability of the region. Thus, soil scientists from UBC and outside UBC are playing key roles in this ambitious program. These individuals are collaborating with economists, demographers, engineers, plant scientists, anthropologists, hydrologists, geographers, biologists, and sociologists in an exciting interdisciplinary project. Graduate students in Soil Science and Resource Management Science involved in the project are provided with an exceptional and exciting opportunity to address sustainability concepts and "environmental" Soil Science.

L.M. Lavkulich
Professor
Department of Soil Science
UBC



**FINAL PRESENTATIONS, FEBRUARY 23-24, 1994:
CANADA-BRITISH COLUMBIA SOIL CONSERVATION PROGRAM**

The three-year Canada-British Columbia Soil Conservation Program is ending in March, 1994. The project was jointly funded by the Federal and Provincial Governments. It funded Producer Conservation Groups and research projects in the areas of soil and water conservation, and livestock waste management. A two-day seminar to wrap-up the program will be held on February 22 and 23, 1994 at the Matsqui Town Hall, Matsqui, B.C., and is sponsored by BCMAFF Resource Management Branch (formerly Soils and Engineering) in Abbotsford. This seminar will take the place of the B.C. Soil Science workshop normally held at this time. Please note also that it is not being held during the UBC reading break.

The seminar will include presentations from all groups funded under the program. This includes 4 livestock and 6 soil-producer conservation groups and 10 research groups. South Coast B.C. Soil Conservation groups worked on reducing soil erosion from wind, water and overcropping through cover cropping, the use of livestock manures, and soil conservation equipment. Peace river Soil Conservation

groups worked on minimum tillage and cropping strategies to reduce erosion. Livestock Conservation groups worked on improving manure application methods to reduce pollution, monitoring pollution from livestock manure and determining appropriate application rates of manures for various crops. The research projects funded and their principal investigators are listed below.

Everyone is welcome to attend the two-day seminar. There will be no pre-registration. More information will be available in early January, including the agenda and the topic of each speaker. Proceedings will be available in early February for those who would like them. If you would like more information, please wait until early January and then telephone either:

**Ruth McDougall at 562-7252 or
Resource Management Branch at 852-5363.**

Ruth McDougall
Hog Producers Sustainable Farmers Group

Research Projects funded by the Canada-British Columbia Soil Conservation Program

PRINCIPAL INVESTIGATOR	PROJECT NAME
Dr. D. Moon Agriculture Canada, Vancouver	Information Management System for the Abbotsford Aquifer
Dr. M. Novak University of British Columbia, Vancouver	Loss of Soil Nitrogen by Leaching and Denitrification
Dr. B. Zebarth Agriculture Canada, Agassiz	
Dr. G. Kowalenko Agriculture Canada, Agassiz	Quantification of Selected Soil Processes
Dr. S. Bittman Agriculture Canada, Agassiz	Minimizing Environmental Impact of Corn Production
Dr. C. Arshad Agriculture Canada, Beaverlodge	Soil Quality under Different Tillage Systems
Dr. A. Bomke University of British Columbia, Vancouver	Conservation Farming Systems in the Western Fraser Valley
Mr. Brad Stennes	Economic Analysis of Soil Conservation
Dr. V. Lo University of British Columbia, Vancouver	Waste Treatment System for the Swine Industry
Dr. L. Lavkulich University of British Columbia, Vancouver	Organic Soil and Exposed Mineral Soil Properties

RESULTS OF PRSSS MEMBERSHIP SURVEY

I would like to thank everyone who responded to the Membership Survey sent in the June newsletter. PRSSS members obviously have very strong feelings about the Society. Of the 140 surveys set out, 64 were returned (46%), which was more than we had expected. We would like to use these survey results to help with planning the Society's activities, and for issues such as funding, which can only be decided at our Annual General Meeting, which not everyone can attend. Note: not everyone answered every question, and for some questions, more than one response could be given, so the totals may not add to 100%.

Annual General Meeting

Forty percent of respondents sometimes attend the AGM, 30% often attend, and 30% never attend. Holding the AGM at a luncheon during the workshop was preferred by 50% of respondents, 20% preferred an evening meeting during the workshop, and 6% an evening meeting at some other time. Most respondents attended the AGM only when attending the workshop. Many pointed out that a 1 hour lunch does not always give adequate time to address all of the Society's business. Out-of-province members were rarely able to attend.

Fee Increase

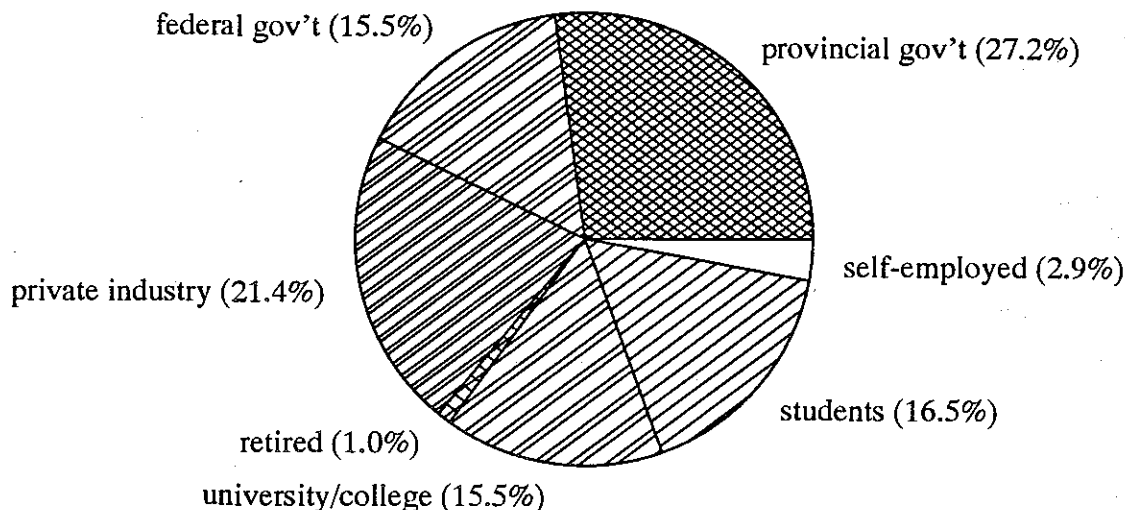
A large majority of respondents (91%) favoured an increase in fees. Most (59%) were willing to pay \$10 (\$5

for students), while 17% would go to \$20 (students \$10). Other suggested increases were \$15/\$7, and \$8/\$4. Some respondents said that the fees should be increased to whatever is necessary, as they are quite low now, while others felt that the Society did not appear to need the money, and that a stronger case should be made for a fee increase. Several felt that the improvements in the newsletter warranted an increase. This is an issue which we will discuss at the next AGM.

BC Soil Science Workshop

This annual workshop, the organization of which is now shared by the PRSSS and the SWCS, is attended often by 44% of those returning the survey, sometimes by 47% and never by 9%. Most (77%) felt that it should be an annual event, while 13% felt that it should be held every second year. The workshop has generally been held at UBC in February, and 78% felt that this was still a good location, while 69% liked the time of year. Some respondents (23%) would rather hold the workshop on a weekend, while 66% preferred weekdays. Of the various workshop styles suggested, 61% like the conference style which we now use, with invited or volunteer speakers giving short presentations. Eleven percent liked poster sessions, 20% chose panel discussions, 33% thought field tours would be interesting, 33% would like to see a workshop format with discussion groups, while 3% wanted instructional sessions for new skills and techniques. The comments indicated that most felt that all of the suggested styles have merit,

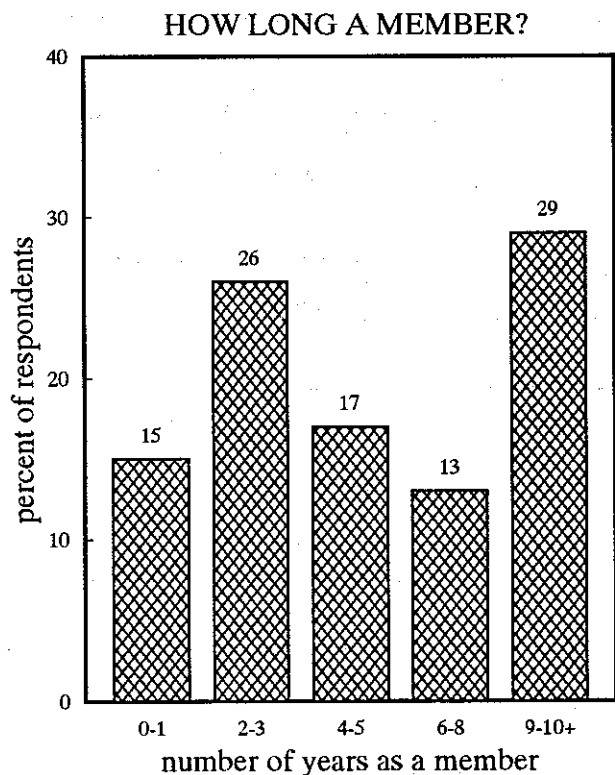
PRSSS MEMBERSHIP PROFILE: EMPLOYMENT



and that the content was more important than the format. Many people suggested that the format, timing and location be varied from year to year.

Newsletter

We currently put out 3 issues per year of the PRSSS Newsletter. The majority of respondents (80%) felt that this was fine, while 11% wanted more issues, and 3% suggested fewer, but longer, editions. No one answered the 'not at all' category, much to the relief of Kathy, our newsletter editor! We suggested a number of topics which the newsletter could cover, including: general soil science, BC soils news, reports from BC regions, current UBC news, news of members, book reviews, upcoming events, and job listing. The responses were almost evenly split among these topics. Most people felt that any of the suggested topics would be suitable. One nice member commented: 'I like the newsletter very much, and compliment the editors for their efforts. It is a valuable contribution to BC Soil Science.'



Evening Session

Only 12% of respondents often attend the fall evening sessions, 38% sometimes attend, and 46% never attend. Most (61%) felt that it should be held on a weekday evening, and 72% said that the fall was the best time of year. The majority (60%) of respondents thought that one session per year was adequate, while 20% would prefer more. As some respondents pointed out, an evening session is hard for members living out of Vancouver to attend. A good suggestion was to videotape the workshops and evening sessions for those members unable to attend.

Membership

We asked for this information to tell us a bit about our members. This will help in part with planning activities, but also tells us if we are attracting new members, or if people join only if they have been members of the UBC Soil Science Department. Most survey respondents (64%) live in the Lower Mainland, 14% live on Vancouver Island, 8% in central BC, 6% in northern BC, and 6% live outside of BC. The provincial government employed 28%, 16% worked for the federal government, 22% for private industry, 16% at universities and colleges, 17% were students, 3% were self-employed, and 1% retired. The majority of respondents (70%) work in a soil science discipline. Others listed resource management, forestry, teaching, farming, ecology, environmental planning, contamination and remediation. Educationally, we have all had some college or university, and the numbers were fairly evenly divided among BSc, MSc and PhD. Half of those surveyed have degrees in soil science from UBC, 31% have soil science degrees from other universities, and 14% have degrees in other fields. Nearly all (84%) of our members have in some way been affiliated with the UBC Soil Science Department. Lengths of membership varied: 0-1 years: 15%; 2-3 years: 26%; 4-5 years: 17%; 6-8 years: 13%; and 9-10+ years: 29%. Most (84%) joined the PRSSS for professional interest, 31% for general interest, 9% to learn about UBC friends, and 5% joined out of curiosity. Some suggested that there be more coordination with the CSSS, and several commented that the PRSSS was a good society, which helps to hold soils people together.

Thank you once again to everyone participating in the survey.

B. Cade-Menun
PRSSS President

**NEW ACTING HEAD
DEPARTMENT OF SOIL SCIENCE
UBC**

Dr. Brian Ellis has been appointed Acting Head of the Department of Soil Science for the period of August 16, 1993 to June 30, 1994. Dr. Ellis has taken on this appointment in addition to his duties as Head of the Department of Plant Science and will provide administrative leadership to the Department of Soil Science. He replaces Dr. Tim Ballard who was Acting Head for the Department for the past three years.

In place of the
Annual B.C. Soil Science Workshop

**FINAL PRESENTATIONS
CANADA-BC
SOIL CONSERVATION PROGRAM**

February 23-24, 1994

Matsqui Town Hall
Matsqui, BC

NEW PUBLICATIONS

Agricultural Chemicals and Chemical Mutagens by Dr. C.L. Sanoria, Professor of Agricultural Chemistry, Banaras Hindu University, Varanasi, U.P. India. 1993. 509 pages; hard cover. US\$70.00 (by registered air mail). Available from R.K. Sanoria, New D-1, Tulsidas Colony, BHU, Varanasi-221005 (U.P.) India.

Methods of Analysis of Soils, Plants, Waters, and Fertilisers. Edited by Dr. H.L.S. Tandon. Pages 144+vi. US\$60 inclusive of airmail charges. Available from Fertiliser Development and Consultation Organisation Attn: Dr. H.L.S. Tandon, 204-204A Bhanot Corner, 1-2 Pamposh Enclave, New Delhi-1108 048, India. Phone 91-11-6417801, FAX 90-11-6862196.

ENROLMENT / MEMBERSHIP RENEWAL / CHANGE OF ADDRESS

NAME: _____
EMPLOYMENT: _____
POSITION: _____
ADDRESS: _____

POSTAL CODE: _____
TELEPHONE: _____ FAX: _____
AREA OF CONCENTRATION: _____
COMMENTS / SUGGESTIONS: _____

PLEASE FIND ENCLOSED \$5.00 ANNUAL MEMBERSHIP FEE _____

RETURN TO: Pacific Regional Society of Soil Science
c/o Department of Soil Science, University of British Columbia
139, 2357 Main Mall, Vancouver, BC V6T 1Z4