

# ASSSI 'Quickens' Up for GST

The ASSSI Federal Council invited accountant, John Littleproud (Robertson Scannell Services Pty Ltd), to address their last meeting regarding the implications of the GST for the Society. As a result of that meeting, David Lester has prepared a guide to the impact of the GST on ASSSI membership and branches (page 6). The Federal Council also approved the expenditure for the purchase of *Quickbooks*® software and training for the Honorary Treasurer and Executive Officer. It is hoped that the use of this accounting software will streamline the management of the Society's finances and assist with GST compliance.



**ABOVE: ASSSI Federal Treasurer, David Lester, and accountant, John Littleproud, discuss the implications of the new tax system for the ASSSI.**

## **In this issue**

- **GST implications for ASSSI**
- **Making soil monoliths**
- **T.J. Marshall receives OAM**
- **Author etiquette**
- **Tour reports from several states**

## AUSTRALIAN SOCIETY OF SOIL SCIENCE INC.

ARBN 080 783 106

ABN 96 080 783 106

The Australian Society of Soil Science Incorporated (ASSSI) was founded in 1955 to work towards the advancement of soil science in the professional, academic and technical fields. It comprises a Federal Council and seven branches (Qld, NSW, Riverina, ACT, Vic, SA and WA). Liability of members is limited.

### Objectives

- To advance soil science
- To provide a link between soil scientists and members of kindred bodies within Australia and in other countries.

### Specific Objectives

- To promote the field of soil science
- To further the expertise in soil science of members
- To be a forum for discussion on soil science
- To increase government and community awareness of soil science
- To liaise and cooperate with other organisations in support of mutual interests
- To encourage research and extension in soil science
- To promote wise management of the soil resource throughout Australia

### Membership

For all membership and CPSS application and renewals, subscription, queries and address changes contact Alice Bass, ASSSI executive officer on Mon-Tues 10.00am - 4.30pm and Wed 10.00 - 1.30pm. See back page for contact details.

### ASSSI Website

<http://asssi.rivercorp.com.au>

### PROFILE

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### Advertisements

Advertisements relevant to some aspect of soil science are welcome. Charges are full page \$200, half page \$100, quarter page \$50. Information about ASSSI conferences, courses, scholarships etc is published free.

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## *From the president*

I will take this opportunity to report on the outcomes of the IUSS council meeting which I attended in April. First, I must thank Federal Council for its financial and in principle support for the trip to Bangkok to represent ASSSI and place the bid for the 19th Congress on the table. In addition to the IUSS council meeting the Thais arranged a symposium, which occupied the first two days.

### **International Symposium - Soil Science: Accomplishments and Changing Paradigm for 21st Century. (17-18 April).**

The Soil and Fertilizer Society of Thailand and the Land Development Department of Thailand organised the symposium and attracted 140 participants, plus about 33 members of IUSS Council. For each session, they had a Master of Ceremonies, a Chairperson and a Secretary. At the end of each session, each presenter was thanked and given a small present. All the papers will be published by the Thai Committee within the next 6 months. Most of the papers dealt with the accomplishments and progress in the various commissions of IUSS. except the first, given by Dr W Blum, Secretary-General of IUSS, on 'Challenges for soil science at the dawn of the 21st century'.

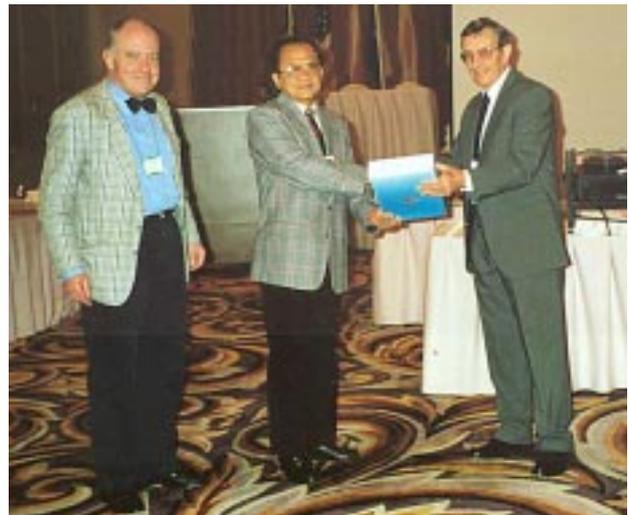
### **Response to bid to host the 19th World Congress of Soil Science.**

I was given the opportunity to propose ASSSI as the host for the 19th WCSS to be held in Brisbane in 2010. The presentation received immediate and unanimous applause. The Secretary-General commented favourably and indicated that "informal consent be given to ASSSI to proceed with planning". All present (from only 17 countries) approved of this move. However, it was pointed out that the IUSS Rules indicate that advice must be given to all member societies via the Bulletin, (next issue is due in June), and that a formal vote for approval would be taken at the council meeting of IUSS in 2004, 6 years before the Congress. I have since received a formal response from Secretary-General Blum, confirming the IUSS council's decision. In summary, I received very positive feedback from all IUSS council mem-

bers present.

I would be surprised if there will be another country to claim the 19th Congress. Most people were expressing their wish and were looking forward to coming here in 2010, even though it is 10 years away.

1. Decision to progress - At the recent ASSSI Federal Council Meeting, Council decided it was prepared to take the risk with this venture. The refundable deposit required by the Brisbane Convention and Exhibition Centre is \$3,000, to hold the booking. When the IUSS council gives its approval for the Congress, (probably in 2004), the BCEC will require the remainder of the 7.5% of the gross room-hire.
2. Dates to hold Congress - I asked several of the key people at the meeting in Bangkok, and several Australian members involved with universities about dates for the Congress and most agreed that mid July would suit. The European and North American mid-summer vacation is at that time and the Australian universities are also likely to be on vacation, so there is a possibility of accommodation in some of the residential halls, although transport from these to BCEC may be an issue. Council made the decision to book the BCEC for Monday 12 to Saturday 17 July 2010.



**ABOVE: Graham Price presents the ASSSI bid for the 2010 International Soils Congress to Dr Sompong Theerawong and Dr Winfried Blum.**

The 17th WCSS will be held on 14-21 August, 2002 most likely at the Queen Sirikit National Convention Center. IUSS council members present were given a tour of the centre and it is very impressive. I have all the details in a brochure.

Scientific program for 17th WCSS - Theme: Confronting the Realities of the 21st Century. The program was developed under the old scientific structure of ISSS. A separate report from the meeting in Bangkok is being prepared by their program

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## From the President *(continued)*

committee. All Commissions, some Sub-commissions and some Working Groups will hold 4 or 5 Symposia during the Congress. Each symposium will have one plenary address and 4-6 short oral papers. Some Working Groups may co-sponsor a related symposium. There will be a large poster component, also to be run in the same categories as the oral papers.

The broad program is as follows. 1. Opening Ceremony 2. Scientific Structure - (The Thais have about 35 members involved in the various scientific committees.) 2.1 Plenary lecture (1st day) 2.2 Oral presentations- 6 parallel sessions for 4.5 days, with approximately 460 papers in all (2 invited and 12 orals per day) 2.3 Poster sessions - estimated 400 papers per session to be viewed between 1 pm and 2 pm each day. 3. Scientific Tours - Pre, post and mid-conference tours are being planned.

It was indicated that tours would probably be around Thailand, Malaysia, Indonesia and perhaps Vietnam. A post-conference tour as a part of the 17th Congress is in the hands of WA Branch, with Vice President Lyn Abbott and Bob Gilkes as the people who will liaise with the Tours Organising Committee in Bangkok, Thailand. The cost of registration for the 17th WCSS is likely to be in the order of US\$400 (early registrants) and US\$500 for full registration. A cheaper rate for students will be offered, but there are no details yet.

### **President-elect and Vice President-elect.**

The US National Academy of Sciences nominated Dr Donald Sparks, the current President of the Soil Science Society of America, who comes from the University of Delaware, and Dr Gary Petersen, from the Pennsylvania State University, for the positions of President-elect and Vice President-elect respectively, for the period August 2002 to July 2006. The 18th World Congress will be held in Philadelphia, Pennsylvania, from 10-15 July, 2006.

At the 17th WCSS, there will be an election for the positions of Chairpersons of the new Divisions, Commissions and Working Groups. Some may be filled by the incumbent, some may change, depending on people's availability, age, scientific standing, etc. These people will hold office for the next 4 years, from 2002 to 2006. Then, at the 18th WCSS, the ASSSI organisers will have to propose the candidates for the same positions for the period 2006 to 2010. The voting procedures are outlined in the revised Bye-laws.

### **IUSS Executive Committee (to be called the Bureau).**

The Executive Committee of IUSS is as follows: - President - Dr Sompong Theerawong, Vice President - Dr Irb Kheoruenromne, President-elect - Dr Donald Sparks, Vice President-elect - Dr Gary Petersen, Secretary-General - Dr Winfried Blum, Deputy Secretary-General - Dr Hans van Baren, Treasurer - Dr P Luescher, 1st Past President - Dr Alain Ruellan, 3rd Past President - Dr A Tanaka.



**ABOVE: Members of the IUSS Bureau  
Drs Hans van Baren (L), Irb  
Kheoruenromne, Gary Petersen,  
Donald Sparks, Sompong Theerawong  
and Winfried Blum.**

### **Changes to Bye-laws.**

It was proposed under the new IUSS Rules that Bye-laws referring to membership fees, be structured so that the full member, being a national society, should pay a minimum of US\$100 (assuming a minimum of 50 members), or where there are more than 50 members, a scale of fees based on ability to pay for each member of the national society. For example, US\$5 /member for the more affluent countries, US\$1 for the poorest and US\$3 for the intermediate ones. There would be opportunity to negotiate with the Budget and Finance Committee if a national society found it impossible to pay the required amount.

### **New Scientific Structure of IUSS**

Basically, the objective is to improve interdisciplinary interaction through all Divisions of IUSS.  
*Graham Price*



## Letters

### Soil Quality Article in *Profile* 122

I was very pleased that Graham Price pointed out in the April 2000 issue of *Profile* the two articles he had read in SSSAJ 63(5), i.e. R.E. Sojka and D.R. Upchurch "Reservations regarding the soil quality concept", and R.R.van der Ploeg et al. "On the origin of the theory of mineral nutrition of plants and the Law of the Minimum". These articles had also caught my eye and were certainly worthy of bringing to the attention of a wider audience. Thanks Graham and the authors.

I have a further comment on soil quality. A few years ago in a large group discussion at a North American Forest Soils Conference I expressed major reservations about the concepts of soil quality, soil health, and several other vague terms. Although very few participants actually disagreed with me, very few also actually felt confident or 'free' enough (employer loyalties, I suspect) to voice an opinion in the group forum. Expression of considered views on either side of the debate should be encouraged firstly within the scientific community in venues like *Profile*, journals and conferences, secondly in the wider community in public forums and the popular media, and thirdly amongst policy makers when we have the chance to assist in formulating policies related to these issues.

In my view, the more articles like that by Sojka and Upchurch the better, because they encourage scientific scrutiny of terms used widely in the popular press and scientific literature without very much appreciation of the lack of widely accepted definitions and measures.

*Philip Smethurst*

CSIRO Forestry and Forest Products and  
CRC for Sustainable Production Forestry,  
Hobart, Tasmania

***Profile* welcomes letters, particularly those which promote debate and discussion. Please send contributions to the editor.**

### MAKE SURE YOU ARE PROTECTED

If you or your branch are organising an event you MUST notify the federal executive, to guarantee insurance cover.

An event is any activity other than ordinary meetings - workshops, training sessions, and ESPECIALLY field trips.

Send an outline of the activities involved, the time, date and venue of the event to:

David Lester

Incitec Ltd, PO Box 623 Toowoomba QLD 4350

tel 07 4639 7403 fax 07 4639 7410

David.Lester@incitec.com.au

Please notify David at least one week before the event.



## From the editor's desk

Welcome to this edition of *Profile*. I'm sure you are all tired of hearing about the GST but included in this issue is the essential information about how ASSSI is situated in the new taxation environment. Please take the time to read it.

Thank you to those members who have responded to my requests for articles. There are plenty of stories, and lots of useful information which can be shared through the pages of *Profile* and a small effort from a large number of people makes a great newsletter. I look forward to hearing from more of you again soon.

*Jonnie White*

## Soils Theses

### Ms Genevieve Kelly

Master Agricultural Science, University of Melbourne

*Phosphorus Sorption of Herbert River Soils and Implications for Water Quality*

Supervisors: Tony Weatherley and Deli Chen

### Mr Andrew Smith

Master Agricultural Science, University of Melbourne

*Nitrogen cycling and grain nitrogen fixation in ameliorated sodic soils*

Supervisors: Deli Chen and Phil Chalk

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# GST and the ASSSI

The changes to the taxation legislation in Australia has resulted in new systems being developed within the society. These changes will affect both how the society operates financially, and also how we support our members. In response to this Honorary Treasurer, David Lester has answered some frequently asked questions below.

## **1. Why is my membership subject to GST?**

The society has a turnover of over \$100 000 every second year (i.e. when we run the soils conferences) and therefore has to register for the GST. It was viewed as being simpler to adopt the same system to operate each year, hence, immediate registration for GST. Most services are now liable for GST. As the society's membership subscription runs for a calendar year, and the new tax commenced on 1 July, one-half of the 2000 subscription was liable for GST. To be able to collect GST, the society now has an Australian Business Number (ABN) and is registered for GST with the Australian Taxation Office (ATO). The society's ABN is 96 080 783 106. Should you require a tax invoice please contact Executive Officer, Alice Bass.

## **2. What happens to the GST that I pay on my subscription?**

At the end of each tax reporting period, the society adds up all the GST it has collected and deducts from this amount, the accumulated tax credits for goods and services it has purchased over the preceding 3 months. If this amount is a positive number, the society forwards this amount as payment to the ATO. If it is a negative amount, the society lodges a claim for a reimbursement from the ATO. In order to manage the GST collected and tax credits accumulated, the society has purchased an accounting package to hopefully streamline much of this. It is currently in the process of being configured with the society's auditor assisting, and should hopefully be in operation within a couple of weeks.

## **3. What will change with my future subscription?**

ASSSI subscription notices will be compliant with the ATO tax invoice requirements. Alice and David are currently working on preparing this.

## **4. I am an overseas member, how does GST affect me?**

As your membership is from an Australian society, you are liable for GST.

## **5. I am an IUSS member, how does GST affect me?**

As the IUSS is an overseas organisation, GST is not liable on the subscription to IUSS.

## **6. How does GST affect ASSSI branch payments?**

The subscriptions sent annually to members show the total charge, made up of the Federal and appropriate state branch fees. GST is then calculated and added to this. Previously, at the end of each calendar year, the federal treasurer would calculate the number of subscriptions received on behalf of each branch and then forward that amount to the respective branch treasurer. Under the new system, the anticipated process is that the federal body would have to receive an invoice from each branch prior to payment of branch fees. This has raised a number of other issues associated with branches, all of which are under investigation by the federal executive, and will be communicated to branch executives as information comes in.

## **7. How does GST affect sponsorship for ASSSI events?**

Sponsorships requested for conferences or other ASSSI activities are subject to GST.

## **Did you apply for CPAG from the AIAST but not yet received acknowledgement?**

When applying for CPAG status this year many people forgot to fill in their name and contact details on the reverse of the Continuing Professional Education form. If you have not yet received confirmation of your CPAG status from the AIAST this may be because your form cannot be identified.

If you suspect this is the case, please contact Abigail Millman of the AIAST and either provide a copy of your Continuing Professional Education form with name and contact details attached, OR list at least three of the items included in the form so that yours can be identified. This issue does NOT affect applications for CPSS.

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# T.J. Marshall receives OAM

**The subject of this month's Life Member Profile, Dr Tim Marshall, recently received an Order of Australia Medal as part of the 2000 Queen's Birthday Honours List. The members of ASSSI congratulate him on his award and on a lifetime of achievement in soil science.**

## Early Years

Born in 1907, Tim Marshall attended a one teacher primary school in the wheat-sheep belt of Western Australia. After secondary education he undertook studies at the University of Western Australia and graduated in 1928. He then took up a position in the CSIRO (then CSIR) surveying soils in the Murray irrigation areas. During this time he gained a Masters degree from Adelaide University for work in texture standardization and in 1936, Professor J. A. Prescott recommended him for an overseas scholarship.

Tim received a PhD from the University of California, Berkeley for work on the hydraulic conductivity of unsaturated clays performed under the supervision of Prof. G.B. Bodman.

Shortly after his return to Adelaide, war broke out and Tim was seconded to work on sites for airstrips in Queensland. He then worked on soil stabilization and army farms in the Northern Territory and Ord River regions.

## Career Highlights

After the war years the CSIRO Division of Soils, with John Taylor as Chief, underwent a period of rapid growth and Tim was appointed Officer in Charge of the Division's Soil Physics Section. With new ideas and new methods research flourished. Joining him in the early years were researchers such as Gordon Aitchison, Jim Quirk, Keith Norrish, Geoff Stirk, John Holmes, Don Macintyre, Cliff Gurr, Bill Greacen and Bill Emerson. They joined at different stages, and after a few years some went abroad for further training, some took soil physics to the regional laboratories, and some left the Section for a leading role elsewhere. As a team, the Section advanced knowledge on water measurement, water movement in unsaturated soil, water entry, water balance, the structure, strength and swelling of soils, and soil resistance to root penetration. Tim says that the award of the OAM recognizes this. His personal research contributed to the output until the early seventies when he served at times as Assistant Chief or Acting Chief of the Division.

## In Retirement

Tim retired in 1972, along with his wife Ann who had been lecturing in Geography at Adelaide University. They moved to Melbourne where they still reside in a communal setting with extended

family. Far from resting in retirement however, Tim immediately took up an invitation by Cambridge University Press to prepare a textbook, and John Holmes joined him on this. "*Soil Physics*" was first published in 1979 with a second edition released in 1988 and a third came out in 1997 with Calvin Rose as a co-author. One reviewer said of the third edition, "there is no better book on soil physics, in English or in any other language".

## Involvement with ASSSI

Tim was Federal President of the ASSSI from 1967-68, at the time of the 9th World Congress of Soil Science held in Adelaide. The organisation of the Congress was a mammoth task, effectively taking out a year of the research life of those involved. Tim has also been involved in IUSS (then ISSS) Commissions on Soil Physics and Soil Technology. Tim was awarded the Prescott Medal in 1974 and received Honorary Life Membership in 1989.

## Future of Soil Science

Tim believes that the problems of soil deterioration and of inefficient use of scarce water for irrigation are looming ever larger, and that soil structure research has still a long way to go. Progress is likely to continue on methods for measuring water content and other properties using large sample volumes of soil to cope with variability.



**ABOVE: T.J. Marshall in 1972 addressing a joint meeting of the Soil Physics and Soil Technology Commissions of the ISSS in Israel.**

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## Branch news

### QUEENSLAND 38th AGM

The Queensland Branch held its 38th AGM on 16th June at which several executive positions changed hands. The new committee consists of President **Kylie Hey**, Vice-president **Adrian Webb**, Secretary **Gillian Kopittke**, Treasurer **Angus McElnea** and Newsletter Editor **Kristie Watling**. This is a young and dynamic committee keen to take on the challenge of providing benefits for all Qld Branch members for the coming 12 months. The meeting was held at the St Lucia golf club and a delicious meal was followed by the more formal part of the evening with presentation of student awards and the out-going president's address.

The 1998 Postgraduate Award was presented to Dr **Jason Olsen** who responded by thanking his supervisors **Malcolm Hunter**, **David Edwards** and **Vic Galea** for their advice and support in his study on the effects of mycorrhizal networks in tomato, corn and capsicum. He also thanked the Department of Primary industries for their support and his wife, Toolah, for her continuous encouragement throughout the study period. The 1999 Postgraduate Award winner was announced as Dr **Claire Cote** and she was invited to receive her award at a meeting later in the year. Three undergraduate awards were also presented at the AGM.

Out-going president, **Rob Loch**, delivered his presidential address entitled 'Structures for Stormwater Control - Sinning Against Nature ... or ... How Technology Transfer Can Go Astray'. This interesting talk focussed on structures and other methods used for the control of erosion in agricultural lands and how the principles developed had been transferred to the rehabilitation of mined land.

### SOUTH AUSTRALIA

#### Book on SA Soils on the Drawing Board

In May, 1999, a Workshop was organised by the SA Branch to discuss activities that might be worthwhile for the Branch to pursue in future. The Workshop was very successful and it generated a list of quite focussed activities. A suggestion that was

given high priority was that the Branch should publish a book on South Australian soils that would serve as a practical handbook and as a textbook specifically relating to the understanding and management of South Australian soils.

The Branch Committee has taken up this suggestion and organisation of the book "Soils of South Australia: Distribution, Properties and Management" and its content has now been initiated. It was acknowledged that the sustainable management of agricultural and horticultural land requires land managers and their advisers being able to access relevant, up-to-date, basic information on the soils of the state and information on sustainable land management technologies. It is intended that the book, in association with a forthcoming major PIRSA publication on agricultural soils of SA, should be an important guide for current land managers, as well as educating managers recently entered into the industry, or studying at a tertiary level.

The Branch Committee has nominated **Ken Lee** as Hon. Editor-in-Chief, with **Rob Fitzpatrick**, **Mike McLaughlin** and **Paul Dalby** as Co-editors. An outline List of Contents has been prepared and forty-two authors have been invited to contribute sections of the text. There has been an enthusiastic response from those invited, and it seems that the project is assured of success. It is intended that the book will be published in 2003.

#### SA Branch Members Honoured

Professor **John Holmes**, formerly of the Division of Soils, CSIRO, and then professor of environmental science at Flinders University, recently opened a building named in his honour on the Waite Campus in Adelaide. There was quite a gathering of present and former CSIRO scientists.



**ABOVE: John Holmes opens a building named in his honour on the Waite Campus**

Congratulations are also due to Dr **Roger Swift**, past Chief of the Division of Soils, CSIRO, and more recently CSIRO Land and Water, who was awarded a Fellowship of the Australian Academy of Technological Sciences and Engineering late in 1999.



**ABOVE: Roger Swift was awarded a Fellowship of the Australian Academy of Technological Sciences and Engineering.**

## VICTORIA

### Biennial General Meeting

The Biennial General Meeting of the Victorian branch was held at the University of Melbourne on the 27 July 2000. The meeting was addressed by Dr **Ken Peverill**, General Manager, Environment and Resources Group, Agriculture Victoria, DNRE. Ken used this opportunity to present a personal perspective on the development of soil science in Victoria, from early soil surveys in the Mallee (Useful Mallee



**ABOVE: Present at the Victorian Branch BGM are outgoing president Austin Brown (L), Robert White, Ken Peverill and Hosain Riazi (R).**

soil, Desert soil, Useless Mallee soil) through to Victorian Resources on-line (<http://www.nre.vic.gov.au/web/root/Domino/vro/vrosite.nsf/pages/vrohome>). Ken did a little crystal ball gazing as well, suggesting where soil science will be in another 30 years and this gave rise to some lively debate about soil science in Victoria. The debate continued over lunch at Jimmy Watson's Wine Bar in Lygon St, Carlton.

A new committee was elected for the 2000-2 period. **Tony Weatherley** (President), **Austin Brown** (Immediate Past President), **Aravind Surapaneni** (Vice President), **Helen Suter** (Secretary), **Andrew Smith** (Treasurer) and **Karen Smith, Peter May** and **Alison Cassar** (Members). A vote of thanks was given to the outgoing committee for the excellent series of workshops, excursions and seminars over the last two years.

### Victorian Branch on the Web

Visit <http://www.soils.landfood.unimelb.edu.au/soils/asssi-vic/> for information on excursions, seminars and other activities that have been held by the ASSSI Victorian branch. A recent edition are notes and maps from the April East Gippsland field trip - well worth a look.

### Beijing International Symposium on Land Reclamation

*May 16-19, 2000 "Mine Land Restoration and Ecological Restoration for the 21st Century"*

Land reclamation is becoming a major political priority in China. Some 200 people attended the Land Reclamation Symposium with about 50 coming from Europe, North and South America. **Robert van de Graaff** (Melbourne) was one of 2 Australian attendees. Between 1993-97 the Australian Government, through AusAID, contributed to increasing the capability to rehabilitate disturbed lands in China, especially areas damaged or threatened by acid drainage from sulfide spoil. As a result the China-Australia Research Institute for Mine Waste Management (CARIM) was set up as a specialist group in the Beijing General Research Institute for Mining and Metallurgy (BGRIMM). CARIM staff was very visible in the conference organisation and in the presentation of good papers. The Chinese coal industry and various Government bodies and universities have also developed significant expertise before and during the establishment of CARIM, and this was evident in their presentations.

The conference included a field trip to a major coal-mining area around Tangshan. Reclamation covered many aspects from revegetation (mostly for economic crops and timber) to completely integrated agricultural systems, where produce is fed to farm

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animals or pets (e.g. feeding dogs with residue from the chicken and pig farming), and the wastes are again put back on the land. Land that had subsided due to removal of coal at depth was converted to fishponds, and at one site holiday homes had been built nearby so that visitors could fish from their veranda. Elsewhere the subsided areas were backfilled with slag and ashes and covered with soil for growing fodder crops. The integrated agricultural aspect was called "ecological reclamation". Many other topics were also dealt with during the conference.

The organisers deserve commendation for running a smooth conference and having the Proceedings ready at the start, and having first-class instantaneous translation on the first day of plenary papers.

### **Leeper Lecture 2000**

The 2000 Leeper Memorial Lecture will be held on November 17, at 5 pm, in the Turner Lecture Theatre (Botany Dept, The University of Melbourne), with refreshments following in the Systems Garden. This public lecture is hosted jointly by the Vic Branch of ASSSI and the Institute of Land and Food Resources, the University of Melbourne.

The lecturer this year will be given by Prof **Bob Gilkes**, on the topic "Why Australia is losing its soil: ignoring the lessons of history". Bob is the head of Soil Science and Plant Nutrition at the University of WA. Before he speaks, there will be a short address by **Ken Rowe** (Formerly Officer in charge, Land Resource Surveys in the Department of Conservation, Forests and Lands as it was known), whose work has been influenced by Leeper. After the refreshments in the Systems Garden, there will be a dinner at University House at a cost yet to be negotiated.

## **WESTERN AUSTRALIA**

### **Activity at Murdoch University**

Associate Professors **Richard Bell** and **Bernie Dell**, and Dr **Longbin Huang** are working on a number of ARC Large and Small grants to determine critical stages of pollen development during which shortage of boron impairs development irreversibly, and then to determine the physiological and biochemical roles of boron in reproductive development. Later this year Longbin Huang will spend 6 weeks at Kyoto University, Japan to use their immunocytochemical techniques to characterise the location of boron binding sites in floral tissues of wheat.

Dr **Adil Asad** (External and Internal Boron Requirements of Plants) and Dr **Ros Chhay** (Management of Seedling Nutrition in Lowland Rainfed Rice) completed their PhD's in the last 6-9 months. Adil is now a Post-doctoral Fellow at the University of Queensland and Ros Chhay is Team Leader of the

Integrated Nutrient Management programme of the newly created Cambodian Agricultural Research and Development Institute. Chhay is also the Cambodian Team leader of a joint project with Murdoch and CSIRO Land and Water to develop a system to reduce risk in the adoption of improved rice production technologies. He's made two visits to Perth in the last 6 months, and was able to attend his graduation ceremony during the later of these two visits.

Dr **Christopher Clarke** was one of four scientists invited by the State Salinity Council in mid-1999 to make an initial assessment of the impact that reducing recharge would have on the extent of dryland salinity in the agricultural areas of WA. Christopher starts work shortly on a 3 year Murdoch University Post-Doctoral Fellowship to follow up this work by quantifying recharge and discharge rates in landscapes in the wheatbelt of WA.

**Richard Bell** attended the International Rice Research Conference at IRRI, Los Banos in the Philippines in late March and presented 4 papers on his group's work. He had discussions with a number of rice scientists that should lead to further collaborative research in future years on the management of nutrients in the lowland rainfed rice ecosystems.

Richard Bell together with **Kuruvilla Mathew** and **Goen Ho** at Murdoch University are organising the 2nd International Conference on Remediation and Management of Degraded Lands (REMADE LANDS 2000) which will be held at the Esplanade Hotel, 30 Nov to 2 Dec 2000.

### **Fourth WA Symposium on Ions in the Soil-Water-Plant Continuum**

The WA Branch of the ASSSI, together with the Chemistry Centre (WA), sponsored the Fourth WA Symposium on Ions in the Soil-Water-Plant Continuum. The symposium was held at Agriculture WA, South Perth, on Wednesday 26 April. Professor **Jim Quirk** of the University of Western Australia delivered the keynote address on "Ions in the Micropores". Researchers from CSBP Futurefarm, CSIRO, Agriculture WA, Murdoch University and The University of WA presented a total of 9 oral and 6 written papers on various aspects of soil chemistry - plant nutrition covering topics including nitrogen, phosphate, sulphur and boron nutrition, soil acidity and plant physiology. **Zed Rengel**, UWA, presented an overview of the likely future of research into plant nutrition, covering topics including molecular biology, GIS (Geographic Information System), computer simulations and web-based teaching. Abstracts of the papers are available. For further information, contact Dr David Allen at the Chemistry Centre (WA) (phone 08 9222 3031, email [dallen@ccwa.wa.gov.au](mailto:dallen@ccwa.wa.gov.au)).

*(continued page 14)*

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# Soil 2000 : Conference Report

## **An update from John Adams on the organisation of the joint NZSSS and ASSSI Conference to be held in Christchurch in December.**

Kia ora to all those *Profile* readers who are intending to be at Lincoln in early December for the Soil 2000 conference. This report will bring you up to date with where we are at with the organisation and what you can expect while you are here.

Abstracts for contributed papers were due by 1 June and like all good scientists, virtually all of you submitted your abstracts in an avalanche on 31 May or 1 June. Latecomers dribbled in for around a week and we now have around 280 offered papers which is excellent. Thank you for your contributions. Slightly over half of these are from Australia which is a great response and clearly we will have a large Australian attendance. We hope to notify you of acceptance and format (oral or poster) by 31 July though it may be a little later. We also hope to have the first draft of a programme in place by then.

The conference will open with a reception on Sunday 3 December incorporating a powhiri (Maori welcoming ceremony) from the local Taumutu hapu. The formal conference opening will be on Monday morning by the New Zealand Minister of Research, Science and Technology and will also include a plenary address from the Secretary-General of the International Union of Soil Science, Professor Winfried Blum. Further plenary sessions will be held on other days of the conference. At this stage it looks as if we will be running four concurrent sessions of oral papers with additional sessions for poster papers. The conference will probably conclude after lunch on Friday 8 December.

Several of you have expressed interest in the two pre-conference tours. The North Island tour which will be led by David Lowe and Megan Balks from the University of Waikato will travel from Auckland through Hamilton, Rotorua and Taupo before returning to Auckland for flights to Christchurch. The South Island tour will be led by Peter Almond and Phil Tonkin from Lincoln University and will travel from Christchurch across the Southern Alps, traverse the West Coast and return via the Mackenzie Basin. Given the interest expressed so far, both will take place but there is a limit on the available places so intending participants should register early. Those interested in the South Island tour should note on their registration form the need for accommodation at

Lincoln or Christchurch on Saturday 2 December and make appropriate payment. Note too that anyone wanting a single room during the tour (cf. twin share) will need to pay an extra charge of around NZ\$200 on top of the prices quoted in the Registration circular.

The mid-conference field trips are scheduled for the Tuesday afternoon of the conference (5 December) and they will conclude with dinner at local Canterbury vineyards. December 2000 is the 150th anniversary of the main European settlement of Canterbury. The conference dinner will reflect this (you will need to come to see how) and will also feature a Maori concert party. The partners' programme is being left informal at this stage but will be organised once we know the demand. If your partner is going to be here, please let us know on the registration form.

Canterbury weather is always variable and commonly quite windy so come prepared for a range of temperatures. In particular, a warm jacket might be needed but it may also be very warm if we have a spell of the well-known nor-west weather.

We look forward to welcoming you to Canterbury (home of the Super 12 triple champions, the Crusaders - sorry, I couldn't resist that) and to Lincoln University in particular. Get your registration forms completed well before the early-bird date of 2 October and look forward to what we believe will be an excellent conference.

*John A. Adams*

*Chairman, Organising Committee*



**ABOVE: Historical Ivey Hall at Lincoln College, venue for the joint ASSSI/NZSSS Soils 2000 conference in December**

# Soil Monoliths experience a revival

**We've all seen plenty of them, but have you ever wondered what goes into making a soil monolith? For the benefit of younger members, or those who have never had to do it before, Simon Eldridge of the CSIRO in Townsville and formerly NSW Agriculture in Grafton, has compiled this step-by-step guide to constructing a soil monolith, and discusses their use in soils extension.**

Soil monoliths have recently been rediscovered as an excellent extension tool for educating landholders and the community on land management issues. Over the last couple of years, NSW Agriculture has been making a number of sets of soil monoliths for several regions of the state. These have proven to be a great success in NSW where they have been used for agricultural extension projects in the North Coast and the Sydney Basin as well as in local government workshops on the management of Acid Sulfate Soils. During the last two years they formed an important part of displays mounted at the Sydney Easter Show as well as the Australian Museums Biodiversity Display. Many members of the NSW branch helped to man the soil display at the Landcare stand in 1999.

The sugar industry is currently considering the use of soil monoliths for extension in the tropics. A monolith collected as a soil core over a sugarcane plant stool would have the potential to very effectively illustrate the plant soil interaction via the root distribution through the profile.

Although soil monoliths have been around for over a hundred years (Vanderford 1897), their form and method of production has been continually evolving and improving over this time. The ways in which they are used in extension has also been rejuvenated. More effective styles of presenting information have been adopted, resulting in a message actually being communicated to the observer.

## **What are Soil Monoliths? / Why are they Useful for Extension?**

'Soil Monolith' is the name given to a collected sample of a soil profile which has been preserved in its natural undisturbed condition. The great advantage of soil monoliths is that they are portable and allow a number of soils to be compared, examined and



**ABOVE: Soil monoliths - a great success in community education**

discussed at the one site, without having to travel between often widely separated sites.

Each Soil Monolith also tells a story through its physical and biological features. By examining the monoliths, many of the physical limitations to land use become apparent. The monoliths may also be an alternative to a soil pit at a field day, especially if bad weather or poor access is a problem. If used initially during an indoor presentation, a monolith usually stimulates greater interest in any following inspection of the soil profile in the field. Critical features seen in the monolith can then be examined in more detail in the soil pit.

## **NSW Agriculture Method of Production**

The following outline is a very brief summary of the Soil monolith production method developed by Nawash Haddad (Senior Technical Officer-Engineering NSW) and Roy Lawrie (Senior Soil Scientist NSW) with a minor contribution from myself while based at Grafton Agricultural Research Station. This only outlines the basic principles of the approach. *Roy Lawrie intends to present more details at the NZSSS / ASSSI Soil 2000 conference in New Zealand in December.*

### Step 1 - Core Collection

Undisturbed soil cores (150mm diameter and 950mm long) are collected from selected representative sites using a proline auger. Care is taken to keep some vegetation at the surface intact with the soil profile.

### Step 2 - Picking Back the Soil Core

The undisturbed soil cores are then cut in half lengthwise using a stonemason's circular saw, before having the flat cut surface of one of the core halves glued onto the backing board. This is then carefully picked back to reveal the natural features of the soil profile. The best visual effect in the monolith is achieved by leaving some vegetation intact on top of the monolith and allowing the roots to overhang the picked back monolith face by about 3cm. This allows the observer to see the vegetation interacting with the soil.

### Step 3 - Preserving the Soil Monolith

Sealwall BONDCRYL 737(r) - a waterbased 100% acrylic product was chosen as the bonding agent for this method of monolith production. This was based on the fact that it dried clear, was durable, and had a high U.V resistance. The fact that it was waterbased means that it is easily diluted to allow it to penetrate low porosity or fine textured soils. The soil monolith is impregnated with the bonding agent by applying a 1:3 dilution to the surface as a prolonged sequence of light misty sprays. A trigger action pump spray bottle with the nozzle adjusted to the finest mist setting was found to work well. The finishing point is achieved when the monolith is very firm and strongly coherent, and this was generally reached with between 10 to 15 light misty spray applications over a working day.

### Portability, Durability:

The compact size of the soil monoliths produced by this method, meant that they could easily be transported around in cars to talks and presentations. Other features to help with their longevity were: the removable clear perspex covers which were made to protect the soil profiles from prying hands at agricultural shows; and foam lined wooden boxes to protect them during transit.

### Presentation of Information:

A particular drawback with the soil monolith displays of the past has been the presentation of the soil information on them. This has often tended to take the form of tabulated soil chemistry data and sometimes very technical morphological descriptions of the horizons. This may be stimulating enough for



**Step 1 - The soil core is cut in half and glued to the backing board.**



**Step 2 - The soil core is picked back to expose the natural features of the soil.**



**Step 3 - The picked back soil profile is impregnated with the bonding solution.**

soil scientists, but unfortunately it has the opposite affect on less technical audiences. The recent NSW projects have involved using plain English descriptions of the soil, and most importantly allow this accompanying information to be varied to suit the intended audience by using detachable text panels. The flexibility that comes with this detachable text panel approach is an important advance. It has been found by experience that fewer words and simpler messages and the use of familiar local soil names works best for land managers and local audiences. For a more technical audience, the text panels can then be easily replaced with ones with more detailed information.

Following the successful application of this technology in NSW we are now gearing up to apply it in the sugar industry.

**References:** Vanderford, C. F. (1897) The Soils of Tennessee. Univ. Tennessee Agr. Experiment Station. Bulletin 10(3):1-139.

**Photos:** Courtesy of NSW Agriculture.



**ABOVE: The final product - soil monolith displays ready for extension.**

*(continued from page 10)*

### Conference of the WA Branch

“Soils 2000”, the three yearly conference of the WA Branch of the ASSSI was held on 11 to 13 July 2000 at the Muresk Institute of Agriculture in partnership with the Environmental Consultants Association (WA) Inc. A one-day mid conference tour highlighted the role of soil science in land management in the scenic Avon Valley, in which the conference venue was located. The theme of this year’s conference was “making our science more useable”.

### Other News

Dr **Don McFarlane** announced that will be taking up a position as Director of the Resource Information Services Division in the Water and Rivers Commission from the 7th February 2000. In his new position he will be responsible for managing information on the state’s water resources (surface waters, groundwater, rivers and estuaries, pollution etc). During his 16 years with AGWEST Don led three research groups - Surface Hydrology, Soils and Catchment Hydrology. For seven years he also led two South Coast programs - Sustainable Agricultural Systems and SRD. Areas of research that he was involved in include surface water management (especially drainage of waterlogged areas), geophysics, satellite remote sensing, water erosion and catchment hydrology. He helped attract more than \$7m of research funds in these areas. While Chairman of SCRIPT, the South Coast region received an additional \$7m in funding, including \$3.3m for the

South Coast Productivity Grants. In the past few years Don has led a review of salinity R&D priorities in the state, and the Land Monitor and Salt Scenarios 2020 projects. Dr **Julia Fry** will be Acting Manager, South Coast SRD Program until the position is advertised.

**Bob Gilkes** retired from his position as Head of Department of Soil Science and Plant Nutrition at the University of WA at the beginning of May. He says that he will now be able to devote a proper amounts of his time to fishing and his three grandchildren. The new Head is Professor **Zed Rengel**.

New additions to the staff of Soil Science and Plant Nutrition at the University of WA are Dr **Christoph Hinz** who will teach soil physics; Dr **Dan Murphy** a research officer within the Centre for Land Rehabilitation; Dr **Zakaria Solaiman** who will be working with A/Prof **Lyn Abbott**.

Recent departures include Drs **Angélica and César Varajao** geologists from the Universidade Federal de Ouro Preto, Brazil. They worked on Brazilian soil kaolins and itabirites (BIF) respectively. **Tomo Taeki** returned to the Chiba Institute of Technology. **Brenda Rohl** has become warden of St Columba College. **Lyn Abbott** continues to run her highly successful courses on the living soil for farmers and recently organised a symposium on Organic Agriculture attended by 120 participants.

Several postgraduate students graduates from Soil Science and Plant Nutrition at the University of WA with MSc and PhD degrees in recent months including **Yash Pal, Abbas Samadi, Satendra Kumar, Carmel Staniland**.

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*The University of Western Australia*



**Short Course**

## **APPLIED CONTAMINATION CHEMISTRY**

The Centre for Land Rehabilitation & Environmental & Earth Sciences P/L are presenting a two day course in Perth, at UWA, November 28<sup>th</sup>-29<sup>th</sup>, 2000.

Utilising the expertise and experience of university researchers and industry practitioners, this course will cover:

- 1) introduction to clay mineralogy and other aspects of earth chemistry.
- 2) applied contaminant organic chemistry.
- 3) applied redox and inorganic chemistry for contaminants.
- 4) chemistry and quality assurance.

Consultants, analysts, environmental scientists, waste management and mining personnel as well as government regulators would all benefit from attending. Cost : \$750.

For more information, call either:  
Sandra Maynard  
Training & Extension Officer 08 9380 3827  
Email: [sandra.maynard@uwa.edu.au](mailto:sandra.maynard@uwa.edu.au)

Or Phil Mulvey 02 9922 1777  
Email: [eesi@zeta.org.au](mailto:eesi@zeta.org.au)

Or visit our web site:  
<http://www.clr.uwa.edu.au>

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# New Member Profiles

## Christoph Hinz - Western Australia

I am a native German from a small town in North-Western Germany. I studied Geology at the University of Giessen and the Technical University of Aachen. Before completing my studies in Geology, I spent one year as a visiting student at the Institute of Soil and Water, The Volcani Center in Israel. There I was exposed to problems of irrigated soils and salinity.



**ABOVE: Christoph working on a dye tracer experiment at a mine site in WA**

Being fascinated by the experimental work done in soil science, I decided to learn more about the physics and chemistry of soils. I successfully applied for a Fulbright scholarship that took me to Louisiana State University, Baton Rouge, U.S.A. In the Department of Agronomy I studied heavy metal sorption, kinetics and transport in soil and completed my Ph. D. in 1992. I also was affiliated with the Department of Civil and Environmental Engineering where I worked on pesticide transport and biodegradation.

In 1993 I moved to Zurich, Switzerland, to join the Soil Physics group at the Swiss Federal Institute of Technology. There I worked on a multi-disciplinary project on organic pollutants in unsaturated soil. In 1996 I joined the Institute of Soil Science and Forest Nutrition at the University of Goettingen, Germany. Besides teaching introductory soil physics, I worked on solute transport and water balance problems of forests.

In February 2000 I was appointed as a Lecturer in Soil Physics at The University of Western Australia. I work on water flow pattern in field soils in relation to soil structure and plant growth. I believe that my ASSSI membership will provide the chance to be actively involved with the soil science community in Australia.

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## Kate Düttmer - New South Wales

I graduated from the University of New South Wales this year, with a Bachelor of Science in Applied Physical Geography. Throughout my time in the School of Geography at UNSW, I was involved in many soils projects, especially relating to acid sulfate soils. My Honours project, which was completed in conjunction with work by Bill Semple at the NSW Department of Land and Water Conservation in Orange, looked at the variability in soil chemical properties across a site affected by dryland salinity and revegetated with perennial grasses.

We found that even across a very small area (28 by 54 metres), soil pH in water ranged from 4.8 to 8.3, and ECe ranged from 4.66 to 62.23 dS/m. Related work in Central Western NSW is continuing and we hope to publish our results soon, as we feel that these ranges in properties may have important implications for soil sampling and site characterisation of areas affected by dryland salinity.



**ABOVE: Kate works with State Forests of NSW.**

I am now a Technical Officer at State Forests of NSW, in the Forest Research and Development Division in Sydney. I am currently working on the CRC for Greenhouse Accounting project, with Dr Annette Cowie and Dr Kelvin Montagu, determining levels of carbon in forests for Kyoto Protocol carbon accounting purposes. This includes looking at the biomass and carbon levels for above-ground carbon pools (trees, litter and other vegetation), as well as the below-ground pools of tree roots and the soil, across a range of different environments. As this project is in its early stages, it is a great time to be involved. A lot of new and exciting things are happening.

I joined the ASSSI so that I could keep up to date with the current research and ideas in the field of soil science in Australia. Being able to share work with other interested people is the most important part of research, and this can be achieved through organisations such as ASSSI.

## NEW MEMBERS

The ASSSI would like to welcome the following new members:

### **Judy Drake**

B App Sc  
NSW Agriculture  
NSW Branch  
Areas of Interest:  
research of  
contaminated soil

### **Mark Fraser**

B App Sc  
Charles Sturt  
University  
Riverina Branch  
Areas of interest: soil  
survey,  
sedimentology, soil  
acidity

### **Judy Hornbuckle**

B Eng (Env)  
UNE/CSIRO  
Riverina Branch  
Areas of interest:  
irrigation and sub-  
surface drainage

### **Jeffrey Hoffman**

B App Sc Dip App Sc  
Charles Sturt  
University  
Riverina Branch  
Areas of interest:  
water extraction,  
primary production

### **Kevin Wilkinson**

B Agr Sc PhD  
DNRE Victoria  
Vic Branch  
Areas of interest:  
mineralogy,  
composting, organic  
matter

### **Cassandra Scheffe**

B Agr Sc (Hons)  
DNRE Victoria  
Vic Branch  
Areas of interest: soil  
chemistry in  
viticulture and  
cropping

### **Lindsay Evans**

BA WDA  
NSW Agriculture  
Riverina Branch  
Areas of interest:  
irrigated soils,  
extension

### **Leslie Dawes**

B App Sc  
Queensland  
University of  
Technology  
Qld Branch  
Areas of interest: soil  
chemistry and on-  
site sewage  
treatment

### **Christoph Hinz**

Dip (Geol) M Sc PhD  
University of WA  
WA Branch  
Areas of interest:  
solute and water  
transport, sorption  
and retention of ions

### **Ellen Bumstead**

B Land Res Sc  
CSIRO  
Qld Branch  
Areas of interest:  
agricultural  
production systems

### **Cathryn Geiger**

B Agr Sc  
(undergraduate)  
University of  
Queensland  
Qld Branch  
Areas of interest: soil  
erosion, land  
management

### **George Bumstead**

B Env Sc  
(undergraduate)  
University of Qld  
Qld Branch  
Areas of interest:  
undergraduate  
studies

### **Jodie Smith**

B Sc (Hons)  
University of NSW  
NSW Branch  
Areas of interest:  
acid sulfate soils,  
chemistry of  
canefield drainage

### **Katharine Düttmer**

B Sc  
State Forests of NSW  
NSW Branch  
Areas of interest: soil  
chemistry in dryland  
salinity

### **Mohammad Hamza**

B Sc M Sc PhD  
Agriculture WA  
WA Branch  
Areas of interest: soil  
physics, soil-water-  
plant relationship

### **Claire McMahon**

B App Sc (Hons)  
University of WA  
WA Branch  
Areas of interest: soil  
carbon, soil  
mineralogy

### **Fadly Yusran**

M Sc  
University of WA  
WA Branch  
Areas of interest: soil  
chemistry, fertility

### **Elizabeth Meier**

B Agr Sc  
(undergraduate) B  
Bus  
University of Qld  
Qld Branch  
Areas of interest:  
undergraduate  
studies

### **Andrew Harley**

B Sc (Hons)  
University of WA  
WA Branch  
Areas of interest:  
fertiliser properties  
of silicate minerals

**A copy of the ASSSI  
membership  
application form is  
available from  
Executive Officer  
Alice Bass.**

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# From Another Editor - *Author Etiquette*

**In response to a *Profile* reader's request, Jenny Fegent, Managing Editor of the Australian Journal of Soil Research has agreed to prepare a column on issues relating to scientific writing.**

Jonnie invited me to write a column, possibly a regular column, on aspects of science writing. To kick it off, the topic is Author Etiquette, because-as my father-in-law says-it's nice to be nice.

Momentum for this series can be easily maintained if you provide me with your questions or comments about any aspect of scientific writing or the peer review process (jenny.fegent@publish.csiro.au). No topic will be deemed too difficult, or too simple, but please keep within the scope or you will certainly be testing my expertise.

## **Authorship**

Before you submit an article to a scientific journal, ensure that all named authors agree to its submission and approve of the intended journal. You may think it is a kind gesture to include someone's name on the author list without consultation, but the surprise could turn nasty if they disagree with the thrust of the paper, or even the presentation. Likewise, check that you haven't left anyone out-the biometrician, the research assistant, the vacation experience student, the co-supervisor?

Provide all of the authors with a final submitted draft, and keep them informed on the progress of revision, if for no other reason than to prevent the 'How could you have written that under my name?!' telephone message.

## **Submission**

Submit your paper to one journal only. Seems obvious to almost everyone. Let's examine the reasoning. In almost all instances, the author is assigning some copyright, or alternatively a license to publish, to the publisher, which means an exclusive right to publish, say, the text and Abstract. That means you can't assign copyright to another publisher unless the paper is withdrawn or released.

Imagine the chaos that would ensue if submission to two or more journals were 'allowed'. The goodwill of referees, on which peer review relies completely, would be stretched as their desks buckled under the weight of the extra manuscripts, many of which would be duplicates. And if a paper were accepted by two journals, would it be published twice? Fortunately, those few papers that are submitted to more than one journal are usually revealed, since journals from opposite sides of the globe seek experts internationally to act as referees, and our hunt often leads to the same laboratory.

## **Acknowledgments**

This is your opportunity to include those who have given you some support, be it financial, intellectual, a pair of hands, etc. You can always add to the list at revision-you might even feel inclined to thank a referee!

Acknowledgment of sources Recognition through citation should be given to those who paved the way for your work. A less-than-thorough literature search may lead to the omission of critical background papers. This will look very bad to the referees, who quite likely wrote some of those missing papers (remember that editors do literature searches too). Similarly, try to avoid excessive self-citation, which tends to be much more noticeable on other people than on oneself.

Source of methods can be tricky. Some are almost lost in antiquity; some are used so often that reference seems unnecessary. Better, though, to err on the side of thoroughness and cite the source of the original method, as well as any modifications. This applies to statistical methods too-state the source and where the reader can refer to the method, which may be a textbook.

## **Disagreement with a previously published paper**

Your results may not concur with those of another research group, and it is, of course, proper that you discuss this disparity in your Discussion section. However, instead of saying 'Our results clearly conflict with those of Bloggs (1996). How he generated his data is anyone's guess', try 'Our results differ from those of Bloggs (1996), and we were unable to reproduce his data using the method he described'. Likewise, instead of 'Bloggs (1996) only took measurements to 10 cm and failed to recognise the effect of residual fertiliser', try 'Our sampling regime was more comprehensive than that of Bloggs (1996), and we obtained records of fertiliser history'. Put yourself in the other person's shoes, and remember that Bloggs cannot respond immediately.

If you have a general problem with a published paper, the correct way to proceed is with a written comment on that article, submitted to the journal in which the paper was published. Your comment will itself be assessed, and the original author invited to reply.

You may have other issues of etiquette and ethics we can discuss. Until next time, be nice.

*Jenny Fegent*

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**www.publish.csiro.**  
**au/journal/ajsr/index.html**



## Book reviews

### **Parent Material and Soils : A Guide to the Influence of Parent Material on Soil Distribution in Eastern Australia**

J.M. Gray and B.W. Murphy (1999) NSW DLWC Technical Report No. 45

Reviewer: Andrew Biggs, Queensland Department of Natural Resources  
Email: [andrew.biggs@dnr.qld.gov.au](mailto:andrew.biggs@dnr.qld.gov.au)

Messrs Gray and Murphy are to be congratulated on their efforts in capturing some key principles of soil science in an easy to read, well illustrated book. The purpose and scope of the book are well described in the Introduction, setting the scene for the subsequent discussions.

Gray and Murphy describe parent materials in both geological and pedological contexts, with some handy reference tables that all will find useful to bridge the gap between the two themes. They follow this scene-setting with some useful discussion concerning the basic relationships between parent material properties and resultant soil properties. Many examples are given throughout the text, ensuring clarity of discussion and the underlying points. A lot of authors could learn from this style!

My criticisms of this text are few. Although the title says eastern Australia, it should more accurately be described as south-eastern Australia as the examples are derived from the NSW soil data system. It is unfortunate that the authors did not include more tropical and sub-tropical examples. There is certainly no shortage of literature concerning the soils of those areas.

The formatting of the soil profiles in Appendix 2 is not very easy on the eye. I know as well as any the problems associated with getting databases to produce print ready formats of soil profile data, but given the formatting effort elsewhere in the book, it would have been a minor task to change the layout of the Appendix to a more readable style.

On a technical note, in Appendix 2, Profile 185 is described as a Ferrosol. Its surface texture is given as FSCL (analytical data indicating 13% clay), with an abrupt boundary to a B horizon (40% clay). According to my interpretation of the ASC, this

would key out as a Chromosol before a Ferrosol. It is also disappointing that a full ASC was not given for each profile, despite the presence of adequate data.

In summary, a good book covering many fundamentals, and highly recommended for the novice or those who wish to revise their knowledge of parent material/soil relationships.

*Andrew Biggs*

Reviewer: Peter Wilson, Senior Soil Scientist, Queensland Department of Natural Resources

Email: [peter.wilson@dnr.qld.gov.au](mailto:peter.wilson@dnr.qld.gov.au)

This report outlines how and why parent material influences soil distribution and soil properties. It also gives an indication of the likely soil types and soil properties from different parent materials, under various climatic and drainage conditions, in eastern New South Wales.

The sections on "Factors of soil formation classification of parent material", "Properties of parent material that influence soils" and "The influence of parent rock material on specific soil properties", give good overviews. These sections are particularly valuable for understanding and predicting soil properties not only for certain regions of New

### ***Parent Material and Soils: A Guide to the Influence of Parent Material on Soil Distribution in Eastern Australia***

**DLWC Technical Report No. 45**

**J.M. Gray and B.W. Murphy 1999**



- Detailed modelling of soil properties based on parent material, climate and drainage.
- Detailed description and chemical analyses of all major parent materials.
- Discussion on how different soil properties are influenced by parent material.
- Over 50 charts showing soil distribution relationships derived from DLWC soil database.

**Copies of the report are available from:**

The Information Centre  
Department of Land and Water Conservation  
23-33 Bridge St, Sydney NSW 2000  
Tel: 02 9228 6415, Email: [infocentre@dlwc.nsw.gov.au](mailto:infocentre@dlwc.nsw.gov.au)  
Cost: \$20

South Wales, but to Australia as a whole. These sections are easy to understand and provide a logical sequence of the principles of parent material influence on soils formation and their properties.

The main section on "Modelling of soil distribution based on parent material and environment" attempts to correlate site data and soil groups (based mainly on Great Soil Groups) to expected soil properties. Modelling or predicting soil properties in relation to landscape processes is fundamental to understanding, managing, allocating and using our land resources. For a given parent material and general rainfall category, actual soil properties (as interpreted from site data) are generally correlated to expected soil properties. However, the use of frequency of Great Soil Groups to indicate soil proper-

ties creates a little confusion because, as the authors state, a Great Soil Group can have a range of soil properties. The use of Great Soil Groups does not work well especially when other variables in soil formation should have been taken into account, as outlined in Section 8: Causes of uncertainty.

The use of the Australian Soil Classification may have been a more useful classification system to correlate predicted and expected soil properties. However, the use of historic data from 8000 sites is an automatic restraint to using the Australian Soil Classification.

Overall, the publication will provide useful information to students, soils and extension personnel new to the area of pedology.

*Peter Wilson*

## MEMBERSHIP CERTIFICATES

By now all Ordinary, Retired and Student members WHO HAVE PAID THEIR YEAR 2000 MEMBERSHIP FEES should have received their membership certificates. If there are any problems with incorrect name spelling etc, please contact me and I can send a replacement.

This certificate is issued only once - if a member changes Status e.g. from a Student Member to an Ordinary Member, then a new certificate will be issued. All new members will receive a certificate once Federal Council has ratified their applications.

Membership Certificates for Honorary members are on their way, if they have not already been sent by the time you receive this issue of Profile. They have taken a bit longer to arrange.

All CPSS members, who have paid their Year 2000 accreditation fee, had the opportunity on the reverse side of the CPE hour's form, to indicate whether they wanted a replacement certificate issued by the AIAST. If not, they will receive the usual bromide and sticker.

Please contact me if there are any questions regarding the certificates.

*Alice Bass*  
*Executive Officer.*

## FINANCIAL MEMBERS OF THE SOCIETY AS AT 26th JUNE 2000

Branch	Paid Ordinary	Paid Retired	Paid Student	CPSS	Total Members	Paid
WA	28	7	0	11	60 (+ 2 honorary)	77%
NSW	58	7	13	28	156 (+ 3 honorary)	68%
Qld	88	12	17	28	204 (+ 5 honorary)	71%
Riv	23	1	7	2	45	73%
SA	35	14	4	4	86 (+ 3 honorary)	66%
Vic	60	8	5	7	113 (+ 3 honorary)	71%
WA	51	7	8	3	82 (+ 3 honorary)	84%
Int	8	1	0	1	14	71%

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# Clay 'Festival' in Adelaide

**Jock Churchman reports on the Australian Clay Mineral Society Conference held in Adelaide in April.**

The 17th Biennial Conference of the Australian Clay Minerals Society ACMS2000, held in Adelaide from 9-14 April, was an ambitious undertaking. It included the traditional conference, with two days of oral papers and also posters, plus a full day field trip. In addition, it also included an ambitious two-day post-conference excursion, a first-ever pre-conference Techniques Workshop, and, as a part of the conference programme, the 2nd International Symposium on Activated Clays. All in all, it was a real Clay Festival, held, appropriately, in Australia's Festival State of South Australia.

The Conference, including all its components, was very successful. The main conference attracted 40 delegates, including 3 who came directly from South America (2 from Venezuela, and one from Argentina), two directly from New Zealand, and one (a Keynote Speaker), directly from the USA.

Besides that, the composition of the delegates displayed Australia's multicultural diversity with most having been born elsewhere (a show of hand was taken to provide empirical proof for this Presidential hypothesis). The Workshop attracted 20 delegates, as did the post-conference excursion to the Yorke Peninsula (South Australia's little Italy - look at the map). The South American delegates provided 3 of the 9 papers in the International Symposium, which followed the 1st International Symposium on Activated Clays, involving South American and Australian scientists and held in Argentina in 1998.

Dr Doug Hunter, from the University of Georgia was a Keynote Speaker at both the Techniques Workshop and the conference. Dr Tony Eggleton, from the Australian National University gave another Keynote address in the form of the Brindley Invited Lecture he had presented to the Clay Minerals Society in 1999. Topics covered at the conference, held at the Waite Campus of Adelaide University and CSIRO Land and Water, included clay geology, spectroscopy, colloidal behaviour, soil clays, industrial applications, environmental applications, clay

modification, clay-organic interactions, catalysis, and others aspects of clay science. The Techniques Workshop covered X-ray diffraction, electron microscopy and surface analysis, X-ray spectroscopies, infrared spectroscopy and thermal analyses and also introduced delegates to the sophisticated surface analysis laboratories at the Ian Wark Institute of the University of South Australia, who hosted the Workshop.

The mid-conference excursion in the Adelaide Hills introduced delegates to the occurrence, genesis and mining of clays, the use of clays for delivering herbicides to grape vines, contamination issues, land degradation, acid sulphate soils and the formation of novel minerals in wet, salty and acidic environments. On the post-conference excursion, participants were

introduced to a controversial landfill issue, to a number of quarries and mines, including an underground copper mine, acid sulphate soils (coastal, this time), and to tillage trials. No one could complain that the conference did not provide variety, and we haven't even mentioned the many social aspects! In this context, it was notable that Tony Eggleton was presented with a Life Membership of the Society at the Conference Dinner, which was held, naturally, in a winery.

The scope and

success of the conference was very largely due to the large, yet efficient, and enthusiastic committee responsible for its organisation. Its members were: Jock Churchman (President), John Keeling (Secretary), Mark Raven (Treasurer), Lew Barnes, Will Gates, Peter Self, Rob Fitzpatrick, Rob Murray, Malcolm Wright and Marek Zbik. The newly elected committee of the ACMS is Tony Eggleton (President), Richard Greene (Secretary), Mark Raven (Treasurer), Robyn Westcott, Berlinda Crowther, Will Gates and Jock Churchman (as Past President). The next conference will be held in 2002, most probably in rural New South Wales. Watch this space! (ACMS web page is found at <http://www.unisa.edu.au/acms>).



**ABOVE: The ACMS2000 post conference tour visited a limestone quarry on the York Peninsula. Here participants inspect a clay filled solution cavity in fossiliferous limestone.**

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# To the Snowys and Return

**A small group of intrepid ASSSI members recently ventured into the far reaches of the East Gippsland region seeking to expand their knowledge of the soils of the region. Nick Uren reports on the trip.**

On 26-28 April 2000 the Victorian Branch held an excursion to East Gippsland. The tour was organized and led by David Rees of the Centre for Land Protection Research (DNRE) at the Rylah Institute. Those in attendance were Robert Edis (University of Melbourne), Sam Grover (U of M), Austin Brown (State Chem Labs), Kate Lumb (State Chem Labs), Gary Sheridan (DNRE), David Rees (DNRE), David Burrow (DNRE), Nick Uren (La Trobe University), and two retired gentlemen of considerable knowledge Jim Rowan and Ken Rowe.

We were blessed with fine sunny weather on each day. The excursion got off to an excellent start when we pulled in to the Nicholson River Winery. Ken Eckersley the winemaker and viticulturist gave us a run down of his operation and some of the management problems. Logically it was impossible to depart therefrom without a preliminary titration and some representative samples.

In the vicinity of Orbost we observed some soils formed on Tertiary sediments and on more recent Quaternary alluvium of the Snowy River flats. The river between Orbost and Marlo, a mature stream, is well-confined by its levees and is at a higher elevation than the flood plain. Yet again we discussed the likely and unlikely origins of coffee rock in the soil formed in a deep dune out past the old rubbish tip; the surface of the Bh horizon was parallel to the soil surface both across the slope and down the slope and please note there were no obvious signs of pyrites nor of pyritic oxidation. That evening Robert, Gary and Nick took on the Orbost locals at pool and won handsomely.

North from Orbost to the Victoria-NSW border is virtually all forest and is inhabited with feral animals of all kinds. No one noticed us as we began our second day with three soils formed on Ordovician

sediments and one on Devonian granodiorite. The former three soils are all characterized by strong aggregation of red clay B horizons while the latter on lower and less well-drained slopes; the steep slopes of all sites, apart from being obvious, had given rise to surface soil movement to varying extents.

We then proceeded in a northerly direction along ridge roads, such as Cooney Ridge Road and Yalmy Road, completely surrounded by hardwood forest (silvertop, brown stringybark) - the road to Paradise we were told, and came across a little oasis in the midst. The soils on a small patch of Tertiary basalt had given rise to much more luxuriant growth than the soils on the surrounding Ordovician sediments - was this Paradise?

At our next stop near Goongerah we met

Butterfly and his companion Helen where we heard all about their WWOOF (Willing Workers on Organic Farms) farm. Butterfly was weary from all the hard work he had to do to grappling with weeds and fending off feral animals and birds. A litre of glyphosate (concentrate) would be a wonderful present. We left this wilderness, some uplifted at such enterprise and such oneness with Nature whilst others - some



**ABOVE: David Burrow, Sam Grover, Gary Sheridan and Austin Brown clear fallen timber from Paradise Road under the watchful eyes of Edis et al. who remained in the minibus.**

of the taxpayers - felt a bit angry. Incidentally, Goongerah was the only place in Victoria where under Jeff Kennett's government a new school was established but at the same time the camping ground was closed. Its closeness to the forest of the Errinundra Plateau may have had something to do with both events.

Near Brown Mountain, on the northern perimeter of the Errinundra National Park, we inspected a gradational profile formed on Ordovician sediments. Here the rainfall is about 1000 mm or more, the wet sclerophyll forest includes shining gum, mountain

*continued page 25*

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# Dolerite, Sodium and Salinity in Tasmania

**Richard Doyle from the University of Tasmania reports on a field excursion to examine the pedology of Tasmanian soils in the company of several noted soil scientists.**

On May 30th, sixteen intrepid earth scientists headed out from Hobart on a south-east Tasmanian soils excursion. The wind howled and the rain poured and we very nearly cancelled! Soil specialists from DPIWE, University, Forestry, Mineral Resources, CSIRO/CRC Forestry, private consultants and retired soil legends came along.

The tour of "The Soils of the South" was organised by Richard Doyle of the University of Tasmania and Stacey Spanswick of the DPIWE Tasmania. The aims of the day were to stimulate ideas and discussion and to get Mr Ken Nicolls, a retired CSIRO Division of Soils "Guru", and Dr John Beattie, soil stratigrapher extraordinaire and noted Butler-ite, to review current ideas on soil formation on dolerite. Ken Nicolls, Richard Merry and Kevin Tiller have in the past all written scientific papers (Richard Merry did his honours thesis) on the properties and formation of soils above dolerite.

The University of Tasmania group ran the morning session that covered new ideas on the

pedology and stratigraphy of soils developed above dolerite in SE Tasmania. Richard Doyle has an Aus-Aid funded student Rafael Osok (from Ambon, Indonesia) working on the stratigraphy, pedogenesis and erosion history of these soils. The University of Tasmania soils group are proposing a complex erosional-depositional history for the podsollic and black soils on dolerite. They have separated, on field properties, at least four separate materials, three depositional and one in situ, in the doleritic soil materials. However, up to six separate materials may exist in any one soil profile. The role of local topography on sedimentary facies changes and hydromorphic features was also discussed. Aspect appears to have a marked impact on soil properties on slopes >15 degrees at Tasmania's southerly latitude (42° S), and this is being further investigated by Rafael. The debate was loud and vigorous and much work lies ahead proving the pudding.

The afternoon session examined the twin issues of sodicity and salinity on the University farm at

Cambridge. An acid, magnesian sodic soil (soloth) and acid-alkaline sodic soil (solidised solonetz) occur on the farm. The acid sodic soil is considered older, with dolerite clasts in the subsoil weathered throughout, while the acid-alkaline sodic soil has only weakly weathered dolerite fragments in the subsoil. The Tertiary sediments, which underlie both soils, are salt bearing to depths of 12+ m in the valley. Both sodic soils are thought to result from Holocene leaching of salts from late Pleistocene salinisation episodes. The landscape in which both soils form is dissected by a fluvial channel in which saline discharge occurs. The modern salinity and the presence of both acid



**ABOVE: Rugged-up Tasmanian soils group members ponder the great chemical mysteries of acid, magnesian, sodic soils on the University farm at Cambridge near Hobart. From left Darren Kidd, Peter Johnson, Rafael Osok, Chris Grose, Neil Meadows, Bill Cotching, Rob Moreton, Steve Forsyth, Ken Nicolls, Peter McIntosh, John Beattie, Stacey Spanswick and Ron DeRose (Richard Doyle not visible, last seen bogged in sodium saturated clays deep in the soil pit).**

and alkaline sodic soils also suggests acidification proceeded salinisation and eventual sodification.

Salinity was the final topic of the day. The key issue being concern over salinisation of on-farm water storages. Tasmania appears not to be in trouble so much from widespread land salinisation, but rather, regular saline seeps and slow but progressive salinisation of on-farm dams are appearing as major problems. The damming of natural drainage depressions restricts annual flushing of salts released at seep points and from throughflow. This results in a slow deterioration in farm dam water quality. This is becoming an important issue as land use diversifies toward arable forms of agriculture dependent on suitable irrigation water.

Aeolian deposits and soil classification also got a Guernsey during the day. Ken Nicolls (now in his 80's) said he enjoyed the day's heated and vigorous debates despite the cold inclement weather. Having accused Richard Doyle of "seeing stone-lines in his



**ABOVE: Ron DeRose and Andrew Hammond (DPIWE) descend slowly into the bowels of the uni farm SOLOTH, Peter McIntosh (Forestry Practices Board), Steve Forsyth (Mines Dept) and Neil Meadows (M.Sc. Student) stand at the ready to rescue the intrepid pit explorers. Note lovely large soil columns in mid profile. Sticky sodic clays, haematite tiger mottles and an angular unconformity await the brave pit explorers.**

sleep", Bill Cotching commented he had not had so much fun arguing pedology since his days in the NZ Soil Bureau. Bill is now organising a Soil Science Workshop to be held in Launceston on Tuesday the 25th of July. All current soil research in Tasmania will be presented in a series of 15 minute presentations and posters. A conference report will follow in Profile.

## To the Snowys and Return

*(continued from page 23)*

grey gum, silver wattle, ferns and leeches! A marked contrast with the next site, near the Vic-NSW border, on the southern edge of the Monaro Tableland, less than 800 mm of annual rainfall, a strongly duplex profile with a yellow clay subsoil. Near Bonang two other duplex profiles with brown subsoils were inspected where the accession of colluvial material and possibly discharge had clouded their origins.

Since it was getting dark and we were thirsty we hastily made our way to the Delegate River Tavern - a true oasis, a true Paradise! Here we made good our deficiencies but the pool champions of Orbost were no match for the Man from Snowy River! Early the next morning, those who had not been to Mount Delegate (1308 m) before, braved the frost and cold breeze for a view of the forests, fog and a few mountain peaks. David Ingram from the DNRE took us

through the battles which need to be waged if catchment management programs are to be successful. We viewed the partially successful rehabilitation of an area used as a source of gravel for road making - a zone of thermal metamorphosed Ordovician sediments flanking a Devonian intrusion of granite. The duplex soil with a red-mottled clay subsoil was prone to erosion by water and so the quarrying activities only made a bad situation worse.

The drive from Dellicknora along the Deddick River across McKillops Bridge on the Snowy River and thence is worthwhile. A stop off at the Little River Gorge is also worthwhile. The brief stop at Buchan to view a terra rossa was the last before setting off for Melbourne. It was stimulating to see some new country in the presence of new and of old faces and to see so much peroxide reactive manganese! Thanks are due to David Rees for organizing the tour and to Robert Edis for his skilful handling of the minibus.

**AUSTRALIAN SOCIETY OF SOIL SCIENCE INC.**  
**AUDITED ACCOUNTS**  
**FOR THE YEAR 1 JANUARY 1999 TO 31 DECEMBER 1999**

**NOTE 1: STATEMENT OF ACCOUNTING POLICIES**

The financial statements are a general purpose financial report that have been prepared in accordance with applicable Accounting Standards and other mandatory professional reporting requirements and the requirements of the Associations Incorporations Act, Qld. The financial statements have also been prepared on the basis of historical costs and do not take into account changing money values or, except where stated, current valuations of non-current assets. Cost is based on the fair values of the consideration given in exchange for assets. The accounting policies have been consistently applied, unless otherwise stated.

The following is a summary of the significant accounting policies adopted by the society in the preparation of the financial statements:

**(a) Income Tax**

The society has been granted Tax Exempt Status under section 50-50 of the Income Tax Assessment Act 1997.

**(b) Basis of Accounting**

The accounts have been prepared on a cash basis whereby income and expenses represent receipts and payments during the financial year, and do not reflect accruals of income and expenditure (except where specifically stated).

**PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31st December 1999**

<u>GENERAL</u>		
	<u>INCOME</u>	
258	Advertising	905.00
4492	Interest Received	5165.05
25068	Subscriptions	52398.34
23633	Workshop Fees	450.00
<u>53451</u>	<u>GENERAL</u>	<u>58918.39</u>
	<u>EXPENSES</u>	
8593	Administration Charges	11165.00
647	Advertising & Promotion	-
1100	Auditors Remuneration - Fees	2250.00
290	Bank Charges	1360.90
250	Catering Meetings	386.31
915	Filing Fees	26.00
2649	Insurance	1550.00
-	Internet Expenses	195.00
715	Legal Costs	-
78	Postage	680.35
	Printing, Stationery & Consumables	405.69
484	Promotion	-
9623	Publications - Newsletter	13929.94
300	Refund Fees	-
8000	Sponsorship	-
3816	Subscriptions	4758.00
-	Telephone	1124.33
10483	Travelling Expenses	1720.55
4200	Wages	23604.00
1287	Workshop Expenses	15125.19
<u>53430</u>		<u>78281.26</u>
<u>21</u>		<u>(19362.87)</u>

<u>CONFERENCE</u>		
<u>INCOME</u>		
1187	Interest Received	183.87
80126	Registration Fees	-
9100	Sponsorship	-
		<u>          </u>
90413	CONFERENCE	183.87
<u>EXPENSES</u>		
70	Advertising & Promotion	-
1078	Bank Charges	-
31312	Conference Expenses	2420.28
688	Insurance	-
551	Postage	-
	Printing, Stationery &	
20805	Consumables	886.88
4311	Secretarial Fees	-
2885	Travelling Expenses	636.60
18642	Venue Expenses	-
541	Withholding Tax - TFN	-
		<u>          </u>
80883		3943.76
		<u>          </u>
9530		(3759.89)
		<u>          </u>
<u>SURPLUS/(DEFICIT) FOR YEAR</u>		
<u>GENERAL</u>		
21	General	(19362.87)
9530	Conference	(3759.89)
		<u>          </u>
9551		(23122.76)
		<u>          </u>

**CAPITAL ACCOUNTS FOR THE YEAR ENDED 31st December 1999**  
1998

<u>CAPITAL AND CURRENT ACCOUNTS</u>		
<u>MEMBERS FUNDS</u>		
113200	Balance at Beginning of Period	122750.95
(9551)	Surplus/(Deficiency) for Period	23122.76
		<u>          </u>
122751		99628.19
		<u>          </u>

**BALANCE SHEET AS AT 31st December 1999**

1998		
<u>PROPRIETORS FUNDS</u>		
122751	MEMBERS FUNDS	99628.19
		<u>          </u>
REPRESENTED BY		
<u>INVESTMENTS</u>		
67733	St George Bank - Term Deposit	68857.30
<u>CURRENT ASSETS</u>		
1086	St George Bank - General A/c	-
	St George Bank - General	
22414	Support A/c	5852.20
11975	St George Bank - Salary A/c	2274.59
19543	St George Bank - Conference Ac	16128.50
	St George Bank - Business	
-	Cheque A/c	6515.60
		<u>          </u>
55018		30770.89
		<u>          </u>
122751	NET ASSETS	99628.19
		<u>          </u>



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## *Federal Council minutes*

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The 194th ASSSI Federal Council Meeting was held on the 25th May 2000 at the University of Southern Queensland, Toowoomba.

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### **1. Opening**

The President opened the meeting at 10.40 am by welcoming all present.

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### **2. Attendance**

Present: G Price, L Sullivan (NSW), D Lester, J White, C Ahern (ACT and Qld proxy), J Thompson (WA proxy) and J Standley (Riverina proxy). Apologies: D Edwards, R Loch, N Menzies and S Raine. J Standley was appointed Minute Secretary in the absence of S Raine.

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### **3. Minutes of the 193rd Council Meeting**

G Price moved that the minutes of the previous meeting be accepted as a true and correct record, seconded L Sullivan. Motion carried.

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### **4. Business arising from the minutes**

4.1 Re 6.1: The mail-out by AIAST of forms indicating the ASSSI fee due by CPSS members are expected to be posted by the end of May.

4.2 Re 6.3: Production of membership certificates is still being finalised.

4.3 Re 4.5 and 4.6 S. Raine to write to the chairperson of the CPSS Soil Science Assessment Panel and also of the CPSS Standards Committee (via A Millman of the AIAST) requesting each to meet and report to the next Council Meeting.

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### **5. President's report**

5.1 G Price spoke to a previously circulated report on the IUSS Council meeting in Bangkok and asked the Federal Council to approve reimbursement of accommodation and sundry travel costs to a value of \$1200. G Price indicated that he had already thanked Brisbane Tourism and Ansett for their generous support of a return airfare to Bangkok. C Ahern moved that the President be reimbursed \$1200.00, seconded L Sullivan. Motion carried.

5.2 G Price indicated that changes to the IUSS By-laws, approved at the IUSS Council meeting in

Bangkok have already been communicated to all members of ASSSI Council.

5.3 Minutes of two meetings of the Organising Committee for the Joint National Conference in New Zealand have been received. As at 23/5/00, five people had registered and 22 papers from Australia, NZ, South Africa, France, UK and USA had been received.

5.4 IUSS Secretary-General Prof W Blum is expected to attend Soils 2000 and present a plenary paper as well as an address of welcome from the IUSS. He will apparently be attending a conference in Perth about 1 week prior to the NZ conference and has indicated a wish to call on eastern Australian colleagues en route to NZ. P Hazelton has already invited him to Sydney, but there may be an opportunity for him to visit Brisbane if he is notified of our wish for such a visit. G Price and incoming Queensland Branch President K Hey are to write and invite him to visit Queensland.

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### **6. Secretary's report**

L Sullivan moved that the inwards correspondence be received and the outwards accepted, seconded J White. Motion carried.

6.1 Notes arising from the correspondence include: a) receipt of the lodgement of the 1998 annual financial statement by the ACT Registrar General; b) ABN application has been sent; c) new chief executive officer for AMEEF is Mr Chris Burnup.

6.2 The members of the Prescott Medal Committee are now B Bowden (WA) (Chair), K Coughlan (Qld) and L Sullivan (NSW). Nominations for the medal had been forwarded to the Committee.

6.3 No nominations for the Publication Medal were received.

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### **7. Treasurer's report**

7.1 D Lester reported that the 1999 auditor's statements prepared by Robertson Scannell Services Pty Ltd, Toowoomba, are now ready to be signed and the statement to be published in Profile. The Council congratulated the Treasurer on having the 1999 audited accounts finalised within 5 months. It was noted that the deficit was due partly to the payments for the 1998 Contaminated Lands Workshop being made in 1999 (income banked in 1998), the reduction in paid subscriptions and the new cost of our Executive Officer. Moved D Lester that the Treasurer's report be received and the accounts for payment be approved, seconded C Ahern. Motion carried.

7.2 The question of how Branch expenses relate to Council for GST purposes was posed. D Lester to provide a comment in Profile and send guidelines to

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Branch treasurers.

7.3 The desirability of preparing an indicative budget for the next Federal Council was noted, especially with respect to membership subscriptions for 2001 (to be decided at the next Council Meeting in readiness for mailing of notices by late December). D Lester to prepare an indicative budget for 2001 to present to the next meeting.

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## 8. Editor's report

J White reported that 800 copies of Profile (Issue 122) had been printed instead of 1100. Noted : a) a video and two books received for review; b) contributions on improving scientific writing and to the Soil Scientist's scrapbook discussed; and c) correspondence from P Smethurst and B Sojka (USA) in relation to G Price's article about reservations in defining soil quality.

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## 9. Address by the auditor on GST

John Littleproud of Robertson Scannell Services Pty Ltd discussed some of the implications of the GST. These included: a) the need for meticulous record keeping and cash flow considerations; b) tax invoices, subscriptions and sponsors; c) quarterly business statements; d) ABN numbers for Branches as well as Federal Council; e) GST for various types of membership subscriptions; f) preferred arrangement for the renewal of the contract with the Executive Officer after December 2000 (to be reviewed at the next Council meeting). D Lester moved that subject to the Treasurer's review of the Quickbook software and inspection by the Executive Officer, Federal Council authorise purchase of Quickbook software and training for one or both officers, to a limit of \$1000 expenditure, for implementation by the Executive as soon as possible, seconded C Ahern. Motion carried. Treasurer to arrange purchase of software. Council Executive to review the contract with the Executive Officer and prepare for renewal.

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## 10. Executive Officer's report

10.1 A Bass reported that active membership is currently 756 members. 516 subscriptions have been paid this year and 200 unfinancial members were transferred to the inactive list. She requested further assistance with the mailing of reminder notices and certificates. G Price moved that we allow Alice Bass to employ an assistant for an extra 10 hours to assist the mail out of certificates and receipts, the total payment to be within the allocation of \$600, seconded C Ahern. Motion carried.

10.2 Applications for membership from 19 people were tabled. G Price moved that all the applicants be admitted to the Society, seconded J Standley. Motion carried.

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## 11. General business

11.1 R Loch was in WA so there was no report from the Accreditation Sub-committee.

11.2 L Abbott reported in respect of the Student Development Committee that each Branch would be invited to submit, for promotion, a list of activities and awards to students.

11.3 Proposed By-law changes. After discussion G Price moved that the proposed changes to By-laws 7, 17, 22 and 28 be approved, seconded C Ahern. Motion carried. Following the response by Dr J Churchman from SA, G Price and S Raine will review By-law 29 and report back to the John K Taylor Trustees. G Price also moved that proposed changes to Clause 27 of the Constitution (re Public Officer) be balloted through the membership, seconded C Ahern. Motion carried.

11.4 D Yates has notified the Federal Council that the existing ASSSI website host is expected to be closed down from the 26 May. Alternative host sites were discussed. J White moved that D Yates take up the option of registering the site name "asssi.asn.au" and redirecting it through a company to his office server for a cost of \$99 p.a., seconded J Thompson. Motion carried. S Raine to write and thank D Yates for his work on the website in the past and J White to liaise with D Yates in relation to site content and location.

11.5 The proposed field trip after the 17th Congress in Bangkok was planned for southern Western Australia in August 2002 and would be noted in Profile. It was noted that this field trip would be completely separate from the National Conference which is proposed for December 2002.

11.6 Support has been received for the bid to host the 19th IUSS World Congress from the NZSSS and NSW, Qld, SA, Riverina and WA Branches. A Steering Committee to liaise with the IUSS and BCEC has been formed with Federal Council nominees R Gilkes (WA) (Chair), N Menzies (Qld), A McBratney (NSW) and P Rengasamy (SA) and the ASSSI President ex officio. G Price to write to the NZSSS to request that they nominate a member. S Raine to write to each Branch Secretary inviting a nominee within the next three months. G Price to circulate the terms of reference to the Steering Committee and Federal Council members for comment. After discussion about times most suitable for northern hemisphere delegates and Australian University vacations, D Lester moved that the dates for the 19th Congress be 12th - 17th July 2010, and that G Price book the BCEC with a holding fee of \$3000 refundable deposit (confirmatory deposit due in 2004),



## Conferences

**21-25 Aug 2000**  
**Advances in Carbon and Nutrient Cycling and Catchment Processes in Managed Forests, Brisbane**  
tel (07) 38757494  
fax (07) 38757459  
p.saffigna@mailbox.gu.edu.au

**4-6 Sep 2000**  
**Eurosoil 2000, University of Reading, UK**  
Dr JH Gauld  
tel 01221 318611  
www.bsss.bangor.ac.uk

**17-23 Sep 2000**  
**1st International Symposium on Phosphorus in the Soil-Plant Continuum, Beijing, China**  
www.general.uwa.edu.au/u/soilweb/welcome

**25-26 Sep 2000**  
**China Australia Conference on Soil and Water Quality, Nanjing PRC**  
tel 08 8303 6780  
fax 08 8303 7104  
hmclelland@adelaide.edu.au

**22- 27 Oct 2000**  
**11th International Soil Conservation Organisation Conference, Buenos Aires, Argentina**  
www.isco2000.org.ar  
fax (5411) 46289491

**28-29 Nov 2000**  
**Applied Contamination Chemistry, University of WA, Perth**  
tel (08) 93803827  
sandramaynard@uwa.edu.au

**3-8 Dec 2000**  
**NZSSS/ASSSI National Soils Conference 2000. New Horizons for a New Century, Lincoln University, New Zealand**  
Shrewsbh@lincoln.ac.nz  
tel 64 3325 2811  
fax 64 3325 3840  
www.lincoln.ac.nz/cted/NZSSS

**7-11 May 2001**  
**4th International Conference on Environmental Geochemistry in the Tropics, Townsville, Queensland**  
andrew.noble@tvf.clw.csiro.au  
tel 07 4753 8550  
fax 07 4753 8600

**8-13 July 2001**  
**Third International Conference on Mycorrhizas, Adelaide**  
tel (08) 8303 7351  
fax (08) 8383 6511  
sally.smith@adelaide.edu.au

**3-9 Aug 2001**  
**12th World Fertilizer Congress on Fertilization in the Third Millennium, Beijing, China**  
http://www.pb.fal.de

**14-20 Aug 2002**  
**17th World Congress of Soil Science, Bangkok Soil Science: confronting New Realities in the 21st Century**  
tel (662) 940 5787  
fax (662) 940 5788  
www.17wcss.ku.ac.th

**July 2003**  
**International Soil Tillage Research Organisation, Queensland**  
tel (07) 5460 1354  
fax (07) 5460 1367  
j.tullberg@mailbox.uq.edu.au

### **NZSSS/ASSSI Soil 2000 Conference 3-8 December 2000**

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2 October**

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coming up?  
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## **Federal Council Minutes**

*from page 29*

seconded L Sullivan. Motion carried. Two Branches had offered immediate financial assistance. G Price will write to all Branches explaining the need for contributions to a Congress Account to meet needs foreshadowed by the Steering Committee as the project develops.

11.7 G Price indicated that he expected to attend the next Organising Committee Meeting for the 2000 National Conference to be held on June 30th in Christchurch (using frequent flyer points).

11.8 The inefficient handling of CPAg/CPSS applications and the entity proposal for the AIAST prompted a discussion of the relationship between the AIAST and the ASSSI. It was resolved that this issue should be discussed in more detail at the next Council meeting.

### **12. Closure**

The President declared the meeting closed at 5.40 pm. The next meeting of the Federal Council will be held at the USQ on 24th August.

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