



**PROFILE - THE OFFICIAL NEWSLETTER OF THE
AUSTRALIAN SOCIETY OF SOIL SCIENCE INC**

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Profile

AUSTRALIAN SOCIETY OF SOIL SCIENCE INC.

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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.

The ASSSI is committed to:

- Advancing soil science
- Providing a link between soil scientists and members of kindred bodies within Australia and in other countries.

Specific ASSSI 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

ASSSI MEMBERSHIP

For all Membership and CPSS applications and renewals, subscription queries and address changes, contact Linda Bennison, ASSSI Executive Officer on telephone 03 5974 1758, facimile 03 5974 1141, email asssi@bigpond.net.au

ASSSI WEBSITE

<http://www.asssi.asn.au>

PROFILE

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2003 Profile Deadlines

15 March, 15 June, 15 September, 15 December
email to organic@agric.uwa.edu.au

Advertisements

Advertisements relevant to some aspect of soil science are welcome. Charges are full page \$220, half page \$110, quarter page \$55 (GST inclusive).

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From the Outgoing President - Lyn Abbott

December 2002 brought the ASSSI National Conference (FutureSoils) to Perth and we were delighted to be host to many soil scientists from across Australia. We were also fortunate to have international representation, including the President of the New Zealand Society of Soil Science, Dr Alan Palmer. His visit reminds us of the next joint ASSSI/NZSSS conference in Sydney in 2004 and we look forward to further strengthening links between soil scientists on both sides of the Tasman in coming years.

December 2002 also brings to an end the term of the current Federal Executive and I am pleased to announce that a new truly national executive has been elected to continue the important work of the ASSSI. Dr Cameron Grant (Federal President) will be supported by Dr Neal Menzies (Federal Vice President) and Dr Annie McNeill (Federal Secretary). Dr Keith Lindbeck will continue as Federal Treasurer and I will become the Newsletter Editor.

The change from a Branch-based Federal Executive to one selected from across the whole membership heralds a change in direction of ASSSI, extending the coordinated national approach to management of ASSSI Federal Council which was facilitated over the last two years by the introduction of telephone committee meetings. This allowed direct participation of Branch Presidents in their roles as members of Federal Council and I greatly appreciated the important contributions they have made during my time as President.

As we look ahead, our attention needs to be placed firmly on the objectives of ASSSI so that we ensure that we make most effective use of our resources - and our members are our greatest resource. Please consider how you might best contribute to ongoing activities of ASSSI to promote understanding of the soil resources in this country and assist in raising community awareness of the importance of soil. We were fortunate at the FutureSoils Conference to have a message from the Secretary General of IUSS, Professor Stephen Nortcliff, who gave a clear message about our role in raising awareness of soil with the proposed establishment of the WORLD DAY OF THE SOIL on 5th December (See page 18 for further details). A Public Forum was held on 5th December during the Conference to progress the concept and to initiate the ASSSI's commitment to this international initiative.

I have many people to thank for their support during the last two years - which I have expanded upon on in my report at the General Meeting (see page 25). Very best wishes for 2003 to all ASSSI members. Lyn Abbott



From the Newsletter Editor - Rachel Poulter

Many thanks to the Queensland Branch for their extensive feedback about Profile. We will gradually make improvements. Thank you to members who have contributed articles for this edition. Please continue to send them, PhD and Master thesis abstracts are especially welcome. Deadline for information for next Profile is 15 March 2003 (send it now while you remember!).



FutureSoil - ASSSI National Conference, Perth

The ASSSI National Conference was held in Perth in December 2002. A mixture of excellent presentations, especially from our younger soil scientists, international participants, social activities and field trips combined to provide an interesting week. Thanks to Keith Lindbeck (Chair) and the rest of the FutureSoils Committee.

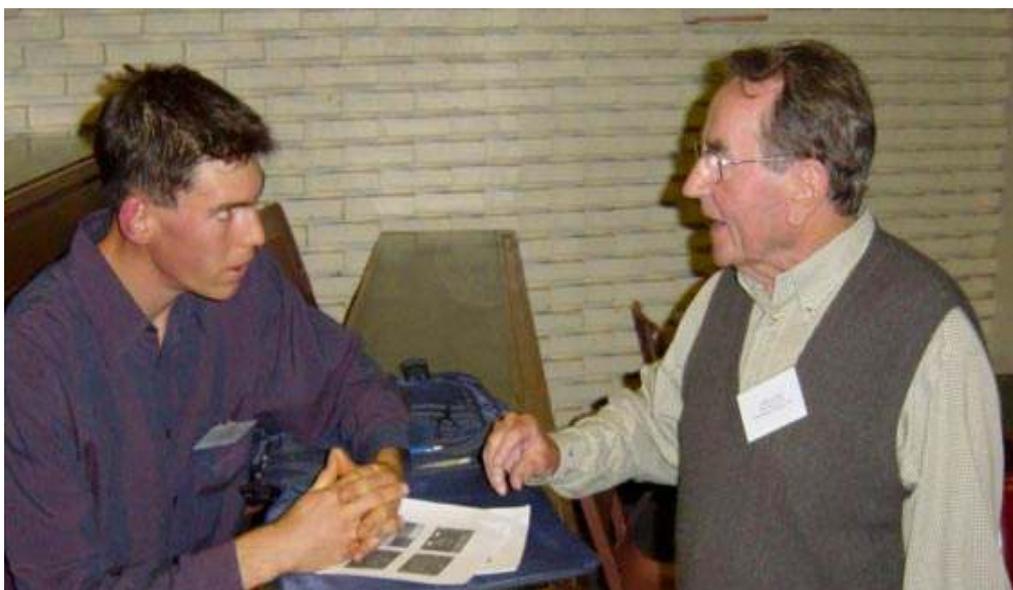


The Conference commenced with music (left) on Sunday evening.

Centre: Keynote speaker from The Netherlands, Professor Lijbert Brussaard (right) enjoyed the conference opening sundowner with Dr Blair McKenzie (centre) and Dr Cameron Grant, SA President (left).



Below: Honorary Life Member of ASSSI Professor Jim Quirk (lower right) was an active participant at the conference. Here he talks to David Deery about the research he had just presented.



Conference dinner included a wonderful buffet held at the South Fremantle Sailing Club.



A BBQ was held after two of the field trips.

Some participants dressed up for the conference dinner.



A Branch Photo from the Conference Dinner - guess which Branch? Mike Grundy who was unable to attend, was well represented by multiple copies of his photograph on sticks!



ASSSI Strategic Plan

2002 - 2006

“ASSSI promotes the field of soil science and its important relationship with wise management of the soil resource throughout Australia.”

website:<http://www.asssi.asn.au>

What is ASSSI? 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 currently comprises a Federal Council and seven Branches (Qld, NSW, Riverina, ACT, Vic, SA and WA). Liability of members is limited. Federal Council consists of: Federal Executive: President, Vice President, Secretary, Treasurer, Branch Presidents and Newsletter Editor. An Executive Officer is employed by ASSSI to be responsible for dealing with membership issues, promotional material and administration of CPSS.

Accreditation for soil scientists is available: Certified Professional Soil Scientists (CPSS)

What does ASSSI do?

- Promotes soil science to the wider community as essential for natural resource management and production.
- Sets professional standards related to soil science.
- Provides a forum for wide debate of soil science issues.
- Provides opportunities for professional development in soil science.
- Coordinates a national focus on issues related to soil, its use and its management
- Provides leadership opportunities for members, including junior soil scientists
- Provides international links (IUSS) through participation in international meetings and initiatives related to research on soil, policy development and implementation
- Participates in policy development and debate related to soils in all environments in Australia
- Takes a leadership role in discussion on education and training related to soil
- Holds conferences (joint with NZ, national and local)
- Supports the bid for IUSS Conference in 2010
- Initiates seminars, workshops, field days, field trips
- Disseminates information - books, articles, affiliation with the Australian Journal of Soil Research

Enduring Outputs

Nationally recognised accreditation for practicing soil scientists
High profile of soil science in the community
High profile of soil science in environmental decision-making processes
High quality educational opportunities and support for students
Benchmarking with related organizations
Effective communication among members
Effective communication with stakeholders
Effective communication within the community
International links
Affiliation with other related organizations

Continued on Page 7

Areas of strategic initiatives related to 6 key ASSSI objectives

1. To support initiatives which enhance the profile of soil science in Australia

- Accreditation of Soil Scientists (CPSS)
- Educational materials
- Public presentations
- Discussion with key government and industry sectors

2. To enhance expertise in soil science

- Development opportunities for junior soil scientists
- Seminars, workshops, training, field trips

3. To recognise excellence in soil science

- Medals for excellence
- Student prizes and travel awards

4. To provide a forum for discussion

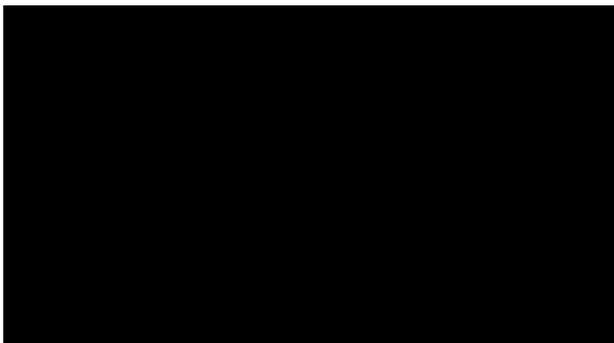
- Website, email, newsletter, seminars, conferences, workshops

5. To increase government and community awareness of soil science

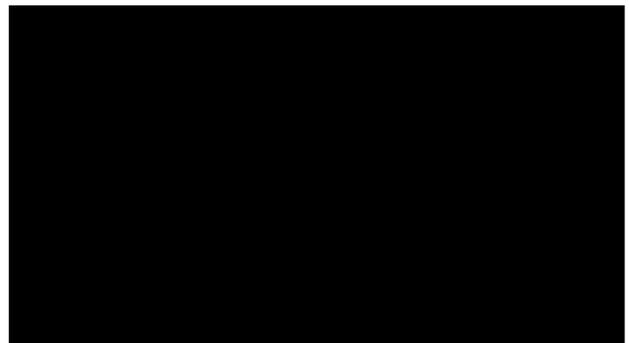
- Media updates
- Workshops

With a great diversity of interests among members, it should be possible for each ASSSI member to identify a particular activity that they might concentrate on for the next year or so. Please let your Branch Presidents know of your interest. **A strong and active ASSSI depends on participation by members.**

FutureSoils Conference Field Trip: Tagesaste plantation in the WA wheatbelt



FutureSoils Conference Field Trip: Water treatment in Ellenbrook catchment, WA for this new suburban subdivision



ASSSI FEDERAL EXECUTIVE

2003-2004

Following a national call for nominations, the following people have been appointed unopposed to the Federal Executive of ASSSI for the next two years.

President: Dr Cameron Grant (SA Branch)

Vice President: Dr Neal Menzies (Qld Branch)

Secretary: Dr Annie McNeill (SA Branch)

Treasurer: Dr Keith Lindbeck (WA Branch)

Newsletter Editor: Prof. Lyn Abbott (WA Branch)

Branch Presidents complete membership of the Federal Council. Currently these are:

Queensland: Mr Mike Grundy

New South Wales: Mr Greg Chapman

Riverina: Dr John Thompson

ACT: no appointee

Victoria: Dr Aravind Surapaneni

South Australia: To be appointed

Western Australia: Dr Andrew Rate



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19th World Congress of Soil Science 2010

Call for interest in the 19th WCSS preliminary planning committee. Dr Colin Chartres has requested anyone interested in participating in the initial stages of the WCSS Planning Committee to let him know as soon as possible. The WCSS Planning Committee will be established early in 2003.

Contact: Colin.Chartres@csiro.au

Message for ASSSI Conference Organisers:

Having attended my second ASSSI conference I would like to pass on my congratulations to the organisers. Both of these conferences have been easily the best I have attended in terms of quality of presentations and take home information. The range of presentations enabled me to appreciate the wide diversity of research interests and also to be able to try and apply some of the sciences into a holistic farm management programme. Once again congratulations on a job well done,

Shane Phillips
PhD Student, University of Adelaide

RAISING THE PROFILE OF SOIL

Suggestions from the FutureSoils Conference

At the recent FutureSoils conference in Perth, more than 100 participants recorded their ideas about activities that could be used to raise the awareness of soil. In addition, indicators of success of these activities were also considered. Here are some of the suggested activities:

1. Workshops for school students on soils
2. Develop soils visits/awareness activities with landcare groups
3. Set up community research plots on degraded soil and have people/groups 'adopt a plot'. Then continue with community field day, soil analysis, etc and follow up over time
4. Newsletters, field days, school links, information days and Save our Soils programs
5. TV series on mysteries of soil using high profile presenter
6. WEB site specifically addressing information for primary and secondary students
7. Botanic garden visits
8. Distribute free garden compost bins to businesses and public
9. Distribute free soil test kits
10. Informal grass-roots approach to raising awareness of soil issues that will feed into further more structured training.
11. Progressive learning workshops
12. Newspaper feature articles on soil in the Australian Community
13. A series of 2-10 minute segments of serious land degradation issues throughout one week of the 7.30 Report and A Current Affair
14. Training of extension teams to better equip agronomists
15. BBQs for farmer field days
16. Broad advertising of problems to the general public

17. Consistent forms of soil analysis
18. Linking research to extension delivery
19. Practical information kits available and promoted
20. Self-assessment methods for farmers to use on their own soils
21. Incorporating Soil BMP through existing agricultural programs
22. Regional workshops throughout Australia along the lines of 'Soils are Alive' but also for others areas of soil science.

Continued on Pages 26 & 29

**SEND
INFORMATION
FOR NEXT
PROFILE BY
15th MARCH 2003
to
organic@agric.uwa.edu.au**

**Include news, thesis
abstracts, ideas, information,
conferences etc.**



ASSSI AWARDS 2002

CONGRATULATIONS FROM ASSSI

JK Taylor OBE Gold Medal in Soil Science 2002

Awarded to **Dr David T Strong** for his series of 5 papers in the Australian Journal of Soil Research in 1998/1999 (co-authored with PWG Sale and KR Helyar) on the “The influence of the soil matrix on nitrogen mineralisation and nitrification”.

D.T. Strong, P.W.G. Sale & K.R. Helyar (1998) The influence of the soil matrix on nitrogen mineralisation and nitrification. I. Spatial variation and a hierarchy of soil properties. Aust. J. Soil. Res. 36: 429-447

D.T. Strong, P.W.G. Sale & K.R. Helyar (1998) The influence of the soil matrix on nitrogen mineralisation and nitrification. II. The pore system as a framework for mapping the organisation of the soil matrix. Aust. J. Soil. Res. 36: 855-872

D.T. Strong, P.W.G. Sale & K.R. Helyar (1999) The influence of the soil matrix on nitrogen mineralisation and nitrification. III. Predictive utility of traditional variables and process location within the pore system. Aust. J. Soil. Res. 37:137-149

D.T. Strong, P.W.G. Sale & K.R. Helyar (1999) The influence of the soil matrix on nitrogen mineralisation and nitrification. IV. Texture. Aust. J. Soil. Res. 37:329-344

D.T. Strong, P.W.G. Sale & K.R. Helyar (1999) The influence of the soil matrix on nitrogen mineralisation and nitrification. V. Microporosity and manganese. Aust. J. Soil. Res. 37:345-355

JA Prescott Medal in Soil Science 2002

Awarded to **Professor John W. Holmes** for his outstanding contribution to soil science in the area of soil physics and its application to solve important environmental problems.

ASSSI Publication Medal 2002

Awarded to **Dr Budiman Minasny** for his paper co-authored with Professor Alex McBratney in 2001, published in the Australian Journal of Soil Research

Budiman Minasny and Alex.B. McBratney (2001) The Australian soil texture Boomerang: a comparison of the Australian and USDA/FAO soil particle-size classification systems. Aust. J. Soil Res 39: 1443-1451

Honorary Life Memberships 2002

Honorary Life Membership of ASSSI has been awarded to **Professor Calvin Rose**, for his longstanding contribution to soil science and its application to soil erosion and its prediction, and to **Dr Bill Emerson**, for his longstanding contribution to soil science and its application to soil structure and the behaviour of clays in the environment.



New ASSSI Award for Excellence: *CG Stephens PhD Award in Soil Science*

At the last Federal Council Meeting, a new National PhD Award for ASSSI was established. The guidelines are:

1. There will be an annual National award for a PhD in Soil Science granted by an Australian university
2. The award will be named after the first winner of the Prescott Medal, the late Dr C.G. Stephens.
3. There will be a monetary component to the Award (\$500 AUD) and a certificate.
4. The award in any calendar year shall be for a degree awarded (not necessarily conferred) in the previous calendar year.
5. University Departments or Groupings may select a single PhD thesis for consideration in each year. This selection process is at the discretion of the Departments or Groupings themselves.
6. An Award Committee consisting of three financial or retired (not student) members of ASSSI (preferably not all from Universities) shall decide the thesis which is to receive the Award. This committee will also have the final word on whether any thesis is eligible by virtue of its subject material.
7. The CG Stephens PhD Award Committee will select a short list from thesis abstracts, and the final decision will be made following consideration of the entire thesis.
8. The ASSSI is not obliged to present the Award each year.
9. All short-listed theses (including the eventual winner) will receive a certificate of commendation, and the ASSSI will prepare and distribute press releases based on the findings of the thesis and interviews of the authors.
10. The CG Stephens PhD Award in Soil Science is not intended to supplant any awards made independently by Branches of the ASSSI.



TASSIE TRIP IN MARCH 2003

Tasmanian members of the Australian Soil Science Society are planning a long weekend of forest soils, viticulture and salinity in eastern Tasmania. The trip would begin at 8 am on Saturday morning, 8th March, 2003 in Launceston and conclude at 6 pm on the following Monday evening at Hobart.

In between Launceston and Hobart, the organisers have scheduled visits to soils developed on dolerite and granite, podosols and erosion in sand country, forest plantations, sinkholes, waterfalls and much more.

The weekend promises to be not only educational and informative, but also a great opportunity to relax and meet fellow soil scientists in their natural habitat. For those of us north of Bass Strait, it's also a great opportunity to visit Tasmania and share some of the island's spectacular natural heritage.

The trip is not limited to ASSSI members, so ask your colleagues or your partner to come along, too. Costs for the trip have not yet been determined, but will only need to cover bus hire, accommodation, and meals.

For more information, contact Mike Laffan (after 22 January) from Forestry Tasmania (Michael.Laffan@forestrytas.com.au,) or Peter MacIntosh (Forestry Tasmania, phone no. 03 6233 7954).

2002 Leeper Lecture and Presentations

John Williams, Chief of CSIRO Land and Water, presented the 2002 Leeper Lecture on 15 November at Melbourne University. John's lecture topic was "Farming without Harming—A Challenge for Soil Science". A synopsis of the lecture is given below.

Robert van der Graf, presented the introduction to the Leeper Lecture. He spoke of how Professor Leeper's work in soil chemistry was the foundation for his current research in waste disposal of heavy metals. Dr van der Graf was passionate that the popularisation of good science was more necessary now than ever before.

After the two lectures, Lucinda Gleadow, from Monash University, was presented with the Frank Gibbons award. This award is for the best student essay on a soils topic and includes a cash prize of \$250 and 2 year's membership to ASSSI. Lucinda's essay researched the distribution and properties of parna (wind-blown soil material) in south eastern Australia.

Concluding the formal part of the afternoon was a presentation to Dr Stuart Boucher. The presentation was in appreciation of Stuart's work over the last 10 years in convening the Leeper Lecture.

The lecture was well attended by about 100 ASSSI members, students of Melbourne, Monash and La Trobe Universities and visitors. After drinks and savouries in the Systems' Garden at Melbourne University, about 30 people enjoyed dinner together at Il Vicolo.

Farming without Harming—Synopsis of the Lecture

Dr William's talk focused on the need to modify agricultural systems in Australia to minimise deep drainage. He listed three important facets of our landscape that make Australia susceptible to degradation:

- (1) A large part of the continent is naturally salty.
- (2) The topography is generally very flat making it much easier to add water than to take it out.
- (3) The original vegetation was dominated by trees, woody shrubs and perennial grasses.

The great Australian irony, suggested Dr Williams, was that the productivity of Australian agriculture was limited by a lack of water, yet too much water, in the form of deep drainage, was a major cause of land degradation.

To farm without harm, agricultural production systems need to be developed which have less leakage of water, carbon and nutrients than current systems. These future farming systems might include commercial tree production, the use of phase and companion cropping, breeding of crops to increase their trapping of water, carbon and nutrients and strategic location within the landscape of trees, shrubs and high value annuals. Ecosystems services such as water filtration, pollination, timber, lifestyle and habitat for flora and fauna are also important functions of the Australian landscape that need to be considered in our management.

NOMINATIONS FOR LEEPER LECTURE 2003

Victorian branch members are asked to put their thinking caps on and nominate a distinguished soil scientist to present the 2003 Leeper Lecture. Branch members should already have received a request for nominations and these **nominations close on 31st January 2003**.

For more information, contact Aravind Surapaneni
by phone on (03) 5833 5223 or email Aravind.Surapaneni@nre.vic.gov.au.

LEEPER LECTURE 2002



Dr John Williams talking with Ms Lucinda Gleadow in the Systems Garden



Drs Robert van der Graf, John Williams, Aravind Surapaneni (Victorian Branch President) and Stuart Boucher with Prof. Bob Richardson (centre), Dean of the Institute of Land and Food Resources at Melbourne University, after the Leeper Lecture.

LAKE MONGO CD-ROM

Reviewed by Karen Smith

From the first minute, I was hooked on this CD. It starts with a simple slide show, and the voice of Jim Bowler saying:

‘This is a story about Australia.
A story of a landscape with a fascinating history.
A story of a people who lived in and interacted with that landscape
for more than forty thousand years.

What does it mean to be Australian?
How are we influenced by the land we live in,
and by these ancient people who lived in this landscape
before Europeans arrived.....?’

This CD explores landscape change and environment evolution; it is ambitious and bold in its attempts to do so. Like most things, it has its strengths and weaknesses, but overall it is fabulous. The CD is information dense and has both manual and automatic features. An introductory guided tour will take 15 minutes; Jim’s voice-over will guide you through maps and photos of Lake Mungo, and put it in the broader context of the Murray Darling Basin. The CD explores Australia in geological time, the Murray Darling basin, the western plains, environmental processes, Mungo geology and archaeology, people and management, and people and land synthesis. Exploring these aspects of Australia and Lake Mungo is enough to make it extremely worthy from a scientific point of view, but it is much more than this.

This CD is also the story a personal journey that started for Jim in 1967, when he began a survey of then un-named lake basins in western NSW. It is also the story of how Mungo National Park was formed, and of how within 14 years the lakes would be named the Willandra Lakes System, and become one of Australia’s World Heritage areas.

Many in the Soil Science Society will know of Jim’s work at Lake Mungo, initially presented as a PhD in 1970, which went on to become his life’s work. It is the personal story of how Mungo changed Jim’s life and went on to become a consuming passion that is a deeply rewarding feature of this CD. Jim shares many personal, philosophical and ethical reflections about Mungo, especially with regard to the scientific and cultural imperialism of the past. His descriptions of discovering human bones anticipated to be older than any previously known, and the implications of this, are deeply moving. He presents a strong commitment to reconciliation with Aboriginal people and respect for their ancient culture.

Folk in the Victorian Branch will remember the great time spent with Jim not so long ago, exploring the geomorphology of the Goulburn Valley. They may also remember Jim’s field kit and hat – and recognise on the CD a typical Jim Bowler look – there is a great video clip of Jim sitting in and talking about the Mungo landscape. This CD is a ‘must have’ for soils professionals.

For a cost of \$50.00 plus postage, it is available through Melbourne University Publishing (<http://www.mup.unimelb.edu.au/e-showcase/>), or directly from Jim Bowler himself, via email jbowler@unimelb.edu.au or by phone (03 8344 6740).

EMAIL ADDRESS FOR ASSSI asssi@bigpond.net.au

Congratulations to Louise Clark, SA on her excellent presentation at the ASSSI National Conference.

Louise Clark

Winner of the Oral Presentaion Award
at the National Conference in Perth



I was first introduced to soil science while studying Agricultural Science at the University of Tasmania.

The degree contained a wide variety of courses, but I found soil science to be the most interesting and enjoyable, which perhaps was partly due to the

enthusiastic teaching style of Richard Doyle. In the summer prior to completing my under-graduate, I was awarded a Tasmanian Institute of Agricultural Research (TIAR) summer studentship, to work with Leigh Sparrow in Launceston. The research group was investigating how attributes of Tasmanian Red Krasnozems were affected by land management intensity, with my work focusing on the liquid and plastic limit components. This provided me with an opportunity to work intensively with soil in a friendly and knowledge-sharing environment. The summer studentship lead me to pursue an honours project in soil science during my final year of Ag Science. Leigh Sparrow and Richard Doyle supervised the project, which investigated the decline of earthworms under pyrethrum in the Red Krasnozem soils of North-West Tasmania. Upon completing my degree, I spent a year working as a soil surveyor, which initially involved many hours of navigating through the bush and augering holes and then towards the end of period, extension and administration.

In 2000 I relocated to Adelaide and found work as a vineyard assessor in the McLaren Vale and Adelaide Hills regions. However, a month after arriving in Adelaide I was offered a PhD with the CRC for Viticulture at The University of Adelaide (which I accepted). My working title is *Properties and amelioration of red brown earths in vineyards drip irrigated with saline water* and is supervised by Rob Fitzpatrick (CSIRO Land and Water), Rob Murray (The University of Adelaide), David Chittleborough (The University of Adelaide), Mike McCarthy (SARDI) and John Hutson (Flinders University). The five supervisors have been a great benefit to this project, as there are a number of aspects to the work and each supervisor provides a different expertise. The majority of my experiments are conducted in the field (Barossa and McLaren Vale), then samples are collected and analysed in the laboratory. This PhD has a strong industry focus, which I have found to be a positive aspect, as is the CRCV education and training which encourages students to develop further through industry placement and/or personal development programs. My main release from work is sport; although, due to an injury in 2000 I was forced to retire from serious sport and now play social touch football, softball and basketball. I spend the remainder of my spare time catching up with friends (and family, when back in Hobart).

FUTURE SOILS CONFERENCE 2002

Gemma Nichol
Department of Agricultural Sciences
La Trobe University Victoria 3086

As a student, presenting to an audience of academics and scientists cannot only be daunting, but also downright scary. The ASSSI Future Soils Conference held in Perth, December 2002 showed however, that young presenters could do it with the best of them. It was a perfect chance to get advice and constructive criticism about your work, not to mention the copious networking that went on, seeking out future employers. The conference provided ample opportunity to talk to other people about their research projects, as did breakfast most mornings at St. George College.

The Victorian Branch of ASSSI, along with the La Trobe University, sponsored me to attend the conference and present my paper on 'The effects of magnesium on the age-hardening of soil'. I figured however, that while I was over in the west, I may as well have a good look around, so I spent the week prior to the conference exploring the amazing south west of WA. In just four days I saw landscapes dry and flat as far as the eye could see, I climbed to Bluff Knoll in the Stirling Ranges (the highest peak in south WA) where salt lakes dotted the landscape, I traveled through some of the last remaining old growth forest, and then I went caving and surfing at Margaret River! My pre-conference explorations helped me to relate to many of the presentations tackling the issues of minimizing water-use and rising ground-water, two very important topics in these times of drought. Having completed a Bachelor of Environmental Science at La Trobe University before beginning my Ph.D. in Soil Science, the implications of our lifestyle on the environment is of utmost concern to me, therefore the outlook of the conference was very rewarding. Most of the presentations that I attended had an environmental protection/conservation perspective to them, whether it was determining the perennial species most effective at lowering the ground water table, managing fertilizer use to minimize the impact on our river systems, or determining ways to improve the physical properties of soils. I sometimes found it difficult to adhere the economics of soil science to the science itself, as I like to believe that science and the environment are priceless, but I guess the unfortunate reality is that research requires money, and we could always do with more.

Attending conferences, and the ASSSI Future Soils Conference was no different, enhances my desire to get back to work and use the information I have gathered from the conference to the best of my ability. Attending conferences provides goals and objectives to pursue an answer to whatever question it is you are researching, inspired by the posters and presentations given at a conference. Thank you to the Vic branch of ASSSI, and the Department of Agricultural Sciences, La Trobe University. I look forward to attending the 2004 conference in Sydney and presenting work from my completed Ph.D.

ABSTRACTS from ASSSI National Conference PERTH December 1- 6, 2002

ASSSI Federal Council is investigating ASSSI-Member only access to the Abstracts of the 2002 National Conference. Details will be provided to members as early as possible in 2003. Access to other member-only information is also being investigated.



From the NSW Branch

PRESIDENT'S REPORT FOR 2002

10 December 2002

NSW Committee

Over the past two years there has been a wide geographic spread in the location of Committee members. The Committee members are - President: Graeme Tupper, Orange; Secretary: Brian Murphy, Cowra; Treasurer: John Crichton, Orange; Western Rep.: John Lawrie, Wellington; Vice-President: Greg Chapman, Parramatta; North Coast Rep.: Joanne Walsh, Sydney Rep.: Balwant Singh; South Coast Rep.: Roy Lawrie, and Cornstalk Editor: James Taylor, University of Sydney.

Committee members have made very worthwhile contributions to the running of the Branch. Most Committee meetings have been conducted by phone.

General Meetings

Four meetings have been held during the year:

University of Sydney: 4/3/02, speaker Roy Lawrie, NSW Agriculture: Chemical Properties of Sydney's Parklands

DLWC Windsor: 2/8/02, speaker Prof Stuart Hill, UWS: 'Redesign' for Soil, Habitat and Biodiversity Conservation

Macquarie University: 16/10/01, speaker Dr Paul Hesse: Reassessing parna in SE Australia

University of Sydney: 10/12/02 AGM, speaker Nelly Blair, Post-Graduate Student, University of New England: From paddock to particle, studying the impact of manures, fertilizers and plant residues on soil carbon and soil aggregation

Excursions:

Two excursions were conducted during the year. They were both very successful. Their success depended on a number of factors: excellent organization, interesting technical content, good social interaction between participants, welcoming hosts, and widespread appeal of their subject matter.

The Blue Mountains Tour took place in September, extending from Penrith to Newnes Plateau. The North Coast Excursion was in November, and included many soils issues in the Grafton to Lismore/Byron Bay areas.

For 2003 we are looking for people to organise excursions to other areas, and for 2004 our attention will turn to arranging tours in conjunction with the International Soil Conservation Organization Conference in Brisbane in July 2004, and the ANZ Soils 2004 Conference in Sydney in December 2004.

Field Excursion Guide

The NSW Branch agreed in principle to initiate a national soils field excursion guide. The idea is based on the "Field Geology of New South Wales" book published by NSW Department of Mineral Resources, now in its Third Edition. A "Soils" book would make the two publications excellent companion publications. The Federal Council approved the proposal. The Victorian Branch offered to contribute to it. The project has not taken off yet for the want of a volunteer to take the leadership role, but it is still on the agenda.

DAMOS

This year saw a number of sales of the publication of "Describing, Analysing and Managing Our Soil" (DAMOS), Invited Lectures for a Workshop held in Sydney 22-26 November 1999, Edited by Stephen Cattle and Brendan George, published by ASSI NSW Branch and The University of Sydney. It is an excellent publication. At year's end there were only a few copies left for sale.

PUBLIC FORUM ON SOIL

World Day of the Soil

@ FutureSoils Conference in Perth

A Public Forum on Soil was held during the National Conference in Perth on 5th December 2002. The Forum was chaired by John Colwel, well known from ABC television to Perth viewers. The opening presentation was prepared by IUSS Secretary General, Professor Stephen Nortcliff. Here is an outline of his talk.

Why is soil important? Soil is a finite resource, it is a vital part of our natural environment. Yet.... we depend on soil for so many of our daily activities.

Soil is vital to the future of mankind. Soil provides: our food, many of the fibres for our clothing, a base for our homes and a base for many of our social and sporting activities (although the least said about this the better at present!).

We have come to rely on soil for non-productive activities. We apply our wastes to soil in the form of organic wastes and waste waters. We use the soil as a natural filter of water.

Do we care? Although we acknowledge that soil is indispensable to many of our normal day-to-day activities we often treat it like dirt! We often take the soil for granted. We assume that it will always be there.

Soil is an infinite resource. Soil is not unlimited we should not waste it by poor and inappropriate use. In many parts of the world we have already used (and sometimes abused) the best quality soil and are beginning to use poorer quality soils, often with the demand for extra inputs and increased levels of care if the soils are to be productive.

Historically, soil is important. There is documentary evidence that the decline seen in many of the early civilisations in Europe, Asia Minor and elsewhere, was in part associated with a decline in the ability of the soil to produce food and fibre. This decline was often because the soil had been misused.

Why are we ignoring history? We have all this evidence of destruction of the soil in the past, but what do we do? We continue to abuse this valuable resource through inappropriate use and misuse. We must nurture the soil as if it were part of our family.

Soil is a natural asset. Although we often think principally of soil and the need to protect it because of the way we use its production function, we should not ignore the importance of soil as an exceedingly diverse habitat. Some consideration that the soil, amazingly, is still one of the underexplored frontiers!

Soil is a key element of sustainable development. At the recent Johannesburg Summit on Sustainable Development there was recognition of the need to preserve natural resources, but as in so many previous occasions the key role that soil has in achieving development was to a large degree underplayed. We need to be more vociferous!!!!

What do we do? We need to educate our politicians and opinion formers of the crucial role soil plays in ALL our lives. We must do this nationally, but perhaps more importantly we must cooperate and do this internationally.

THE DAY OF THE SOIL. As part of the drive to increasing awareness, IUSS is seeking to establish a World Soil Day. We have provisionally chosen December 5. This date was chosen because it is the birthday of the King of Thailand. The King is one of the few national leaders who has taken a lead on emphasising the importance of soil to all aspects of our lives.

Continued Page 19

YEAR OF THE SOIL. The World Soil Day is a first step, we are also seeking to establish through the United Nations 'THE YEAR OF THE SOIL'.

I hope you are able to support these ideas and convince your Federal and State Governments of the need to take positive action to conserve soil. We cannot afford to destroy this essential resource! I wish you well in your your discussions. I hope that, like me, you conclude that soil is too important to be wasted. We cannot allow our policy makers to ignore the importance of soil. Once it is lost, it is gone forever, There is no second chance! Let us join together in seeking to bring the importance of soil to the top of the environmental and political agenda.

Stephen Nortcliff, Reading. November 2002

***Thank you to the Sponsors
of the FutureSoils Conference in Perth, December 2002***

The University of Western Australia
The Department of Agriculture, Western Australia
Land and Water Australia
ERA Farming Company
CSBP

NSW President's Report Continued from Page 17

Soil Distribution Poster.

Following on the initiative of Jonathan Gray, the Federal Council collaborated with the NSW Department of Land & Water Conservation and partially financed the publication of the Soil Distribution Poster. A print run of 15,000 was arranged. Many copies have been distributed to members of the Geography and Science Teachers' Associations and other people. ASSSI members will receive their free copies in the near future. An international version of the poster was displayed at the World Soils Congress in Bangkok in August, and engendered much interest.

Cornstalk Media

Following James Taylor, post-graduate student at the University of Sydney, volunteering and being formally appointed as Cornstalk Media's Editor, there have been 4 issues of the newsletter published. This has greatly assisted communication amongst members. Most members receive their copy of Cornstalk electronically.

Student Sponsorship

During 2002 the NSW Branch has assisted three post-graduate students to attend conferences, one student to the World Soil Congress in Thailand, and two students to the FutureSoils Conference in Perth.

Soils 2004

The organization of the Joint Australia/NZ Soils Conference in 2004 is the responsibility of the NSW Branch. The next 2 years will see much activity from the local organizing committee. A brochure has been produced to promote the Conference at the FutureSoils Conference in Perth in December 2004.

NEWS FROM THE QUEENSLAND BRANCH

Crikey we've been busy over here! Three Ordinary General Meetings (OGM) involving 8 speakers have been held since the AGM in June.

Queensland OGMs

10 September 2002; Speakers: Bruce Carey, David Freebairn and Robin Ellis

Topic: New approaches to classic problems (Attendance: 30 members)

23 October 2002; Speakers: Ross Hynes, Ellisa Van Oosterhout and Elizabeth Meier

Topic: A taste of ISCO – or 'Different systems: different views' (Attendance: 16 members and 3 visitors)

27 November 2002 (Undergraduate Awards Night):

Speaker: Ashwin Kumar (USQ) - Soil infiltration parameters from surface irrigation advance data

Speaker: Jane Rigg (UQ) - An evaluation of possible nutritional limitations to cotton production induced by land-forming (Attendance: 19 members and 2 visitors)

International Soil Conservation Organisation (ISCO) conference

A cast of thousands (well, not quite that many) have been busily gearing up for the ISCO conference to be held in Brisbane in July 2004. Priorities for the committee have been the conference program, sponsorship and the 1st announcement, which should arrive in your Inbox over the Christmas break. ICMS Pty Ltd were appointed the professional conference organiser and have been doing a terrific job keeping us on our toes.

Undergraduate Student Awards

Two undergraduate student awards for excellence in soil science were presented at the November 2002 OGM. The Society congratulates this year's winners who each received a certificate, membership of ASSSI for one year, a cash prize and a book prize:

Ashwin Kumar University of Southern Queensland

Jane Rigg University of Queensland, St Lucia

Jane won an additional award on the night for best presentation.

FutureSoils Conference, Perth WA

About 16 Qld members (including 5 students) made the trip across to Perth. In case it escaped you, we were the mob waving 'Mike' masks and posing for photos...constantly.

Two students were sponsored by the Queensland Branch to attend the FutureSoils conference in December 2002. Congratulations go to Mike Donn (University of Queensland) and Joanne Burton (Griffith University). Mike and Joanne presented papers at the conference entitled 'Simulating the effects of changing equilibrium conditions for nitrate retention: a column study' and 'Transport of nutrients in runoff from lands under different management regimes on the Atherton Tableland, North Queensland' respectively. Both did an excellent job!

THANK YOU to the QUEENSLAND BRANCH for all your feedback
about PROFILE. It is very useful information.

Profile Editor



ASSSI Website Statistics for 2002

<http://www.asssi.asn.au>

These statistics only cover the period from 1st March to 30th November 2002, for which full records are available.

For general visitor statistics a 'hit count' is a term commonly used to describe these numbers, but it is a term which has many meanings and can be misleading, so different measures are included below.

Successful requests for pages (not including requests for specific pages such as "about ASSSI" or "Branches": March-November: 9390 (34 per day); Busiest Month - October: 1301 (42 per day)

Distinct hosts served: March-November: 4,088; Busiest Month - October: 782

Monthly visitor statistics: November (880); October (1290); September (1040); August (1275); July (1120); June (800); May (990); April (980); March 980

The 20 most requested pages by visitor for the period March to November 2002 (not including the default or home page) are listed below:

- 1 PROFILE 130 – June 2002
- 2 PROFILE 129 – March 2002
- 3 FUTURE SOILS CONFERENCE BROCHURE
- 4 PROFILE 131 – September 2002
- 5 PROFILE 121 – January 2000
- 6 PROFILE 126 – June 2001
- 7 ARTICLES AND OTHER ITEMS OF INTEREST page
- 8 QUEENSLAND NEWSLETTER FEBRUARY 2000
- 9 PROFILE 120 – October 1999
- 10 QUEENSLAND NEWSLETTER FEBRUARY 2002
- 11 PROFILE page
- 12 CONFERENCES AND WORKSHOPS page
- 13 PROFILE 127 – October 2001
- 14 PROFILE 123 – August 2000
- 15 PROFILE 122 – May 2000
- 16 PROFILE 128 – December 2001
- 17 QUEENSLAND NEWSLETTER, MAY 2001
- 18 QUEENSLAND NEWSLETTER, MAY 2000
- 19 MEMBERSHIP AND CPSS LIST page
- 20 QUEENSLAND NEWSLETTER, APRIL 2002

I hope these items are of interest. I have attempted to limit the use of jargon so that members can get some understanding of what traffic is occurring at their web site.

Derek Yates, ASSSI Webmaster
December 2, 2002



The Australian Soil Club is an initiative of Lyn Abbott and the Kondinin Group.

The Australian Soil Club is a national club to promote understanding of soil among land managers of all kinds. Membership will provide access to a bi-monthly newsletter, an internet discussion group and other information including seminars. The first newsletter has been distributed to all members of the Kondinin Group with their January copy of the magazine Farming Ahead. Further newsletters will be distributed only to members of the Club.

The next newsletter (March) will focus on (i) a selection of soil profiles from across Australia and issues related to management of these soils, (ii) widescale measurement of soil pH by farmers in NSW and (iii) the regular feature on soil quality, this time explaining measurement of soil texture.

If you would like to contribute information concerning your area of expertise to future editions of the Australian Soil Club Newsletter, please contact Lyn Abbott (email: labbott@cyllene.uwa.edu.au)

You can download the first newsletter from www.soilhealth.com as a PDF file. The subscription cost for joining the Australian Soil Club will be used entirely to promote understanding of soil within the community. Sponsorship of the Club is being considered to enhance to service provided to members.

Report on Alpine Soils and Geomorphology Tour Victorian Branch. 2002

What a great trip! Great company, great soils, great landscapes and sensational tour leaders. Tony Weatherly initiated the trip and organized transport, accommodation and alpine experts. Experienced alpine soils workers Ken Rowe and Heather Anderson put together a great tour booklet on the soils, geology and major vegetation types of the Mt Beauty - Falls Creek area.

Ken provided geomorphologic data from past work on the Benambra lake and lunette system, and David Rees put together tour notes on the soils and geology of the Omeo - Swifts Creek area. David also demonstrated a new erosion assessment system developed for use by forest officers in logging coups. Ian Sargeant interpreted the river plains, soils and lunette systems of the Bairnsdale area. All proved themselves worthy of tour guru status and were both enthusiastic and patient in passing information that has engaged and informed them for many years.

We had some new faces on the tour too. Ann Marie Tierney, environmental officer for the Falls Creek Resort, joined us on the first day, along with her 18 month old daughter Erica. Erica proved to be a budding pedologist, happily playing in the dirt while we looked at soil profiles, and being thrilled to bits when someone gave her a rock to look at. Just like the grown ups on the tour! Her husband Rowan Hore was able to join us later in the afternoon. Ann Marie was keen to push the boundaries of our discussions to include the management perspective, which is the focus of her role at Falls Creek.

Swifts Creek Catchments Manager Officer Karen Walker allowed herself to be lured away from the wood-chopping competition at the local pub to join our tour briefly. She showed us recent rehabilitation work done a property which was one of those bought by the Kennett Government after devastating droughts and floods in the mid 1990's.

Local Myrtleford soils consultant Leon Highland proved to be very good with the soil auger, and an excellent gate opener. Tasmanian Peter McIntosh was an enthusiastic participant who provoked many stimulating arguments on geology and soil formation and kept our resident gurus on their toes.

Continued on Page 30



ASSSI Federal Council

Minutes 208

Minutes of Federal Council Meeting 208; 27 September 2002; The University of WA

Opening: The meeting opened at 1.30 pm WST. Paterson Room, Faculty of Natural and Agricultural Sciences, The University of Western Australia

Attendance: Lyn Abbott (Hon Federal President), Andrew Rate (WA), Keith Lindbeck (Hon Federal Treasurer) (Joined meeting at 2:00pm WST) Phone: Cameron Grant (SA), Graeme Tupper (NSW), Aravind Surapaneni (Vic), Mike Grundy (Qld; joined meeting at 2:04pm WST)

Apologies: Linda Bennison (Executive Officer), Richard Harper (Hon Federal Secretary), John Thompson (Riverina),

Business arising from minutes of Federal Council Meeting 207: (none)

President's Report IUSS Congress Lyn Abbott reported on the positive experience of the Bangkok meeting and the establishment of new IUSS commissions with the consequent appointment of new personnel. Attention was drawn to the major commitment required to stage the 19th WCSS in Brisbane in 2010. A committee to run the Brisbane WCSS would be established at the ASSSI National Conference in Perth in December 2002. Also at the Bangkok meeting the 'Australian Journal of Soil Research' received endorsement by IUSS as a Cooperating Journal. Strategic Plan It was noted that the ASSSI strategic plan was useful to members to identify areas where they could best contribute to the Society. Nominations for Incoming Federal Executive At the date of this meeting only one nomination had been received (for Profile editor). It was decided by the Executive that nominations would remain open until the end of the National Conference on 6 December 2002. Branches were encouraged to approach individuals with a view to soliciting nominations for the ASSSI Federal Executive.

Executive Officer's Report: The Executive Officer presented a written report prior to the meeting which included branch-by-branch membership statistics, including numbers of unfinancial members. Overall, 613 members are financial and 257 are unfinancial. The first draft of a Handbook which includes CPSS information has been circulated to the President and Secretary of each branch and Federal Council members for comment. It was resolved that this should be edited & updated (Cam Grant (SA) to action) and a reduced version be circulated to Members with pointers to supplementary information in the ASSSI website. The EO's report commented on the proposed term of the elected Federal Executive. It was resolved to keep this at two years. Seven new members whose details were provided by the EO were approved by Federal Council. It was recommended (Aravind Surapaneni, VIC) that notification of new applications for membership include the branch to which they would belong.

Secretary's Report The Hon. Secretary's written report indicated that a single nomination had been received for life membership of ASSSI, and two nominations had been received for the JK Taylor Medal. It was considered fitting that the Society prepare an obituary for CG Stephens and the Queensland branch would approach suitable persons to do this.

Treasurer's Report The Hon. Treasurer presented a Financial Statement from 1 January 2002 to 20 September 2002.

Profile Editor's Report The Profile Editor was not present at the meeting.

Branch President's Reports Edited versions of reports will appear in Profile.

General Business ASSSI Strategic Plan Lyn Abbott was concerned that some areas of key ASSSI business were not being attended to. Branch Presidents were requested to address the strategic plan in terms of the current focus of Branches and whether there were areas for additional activity. The Strategic Plan would continue to be presented in Profile and elsewhere.

Continued Page 24

Australian Journal of Soil Research Advisory Committee Andrew Rate (WA) was nominated to replace Leigh Sullivan on the Advisory Committee of the Australian Journal of Soil Research. This nomination was endorsed by Federal executive. 'FutureSoils' Conference, 2-6 December 2002 – update Registration details had been sent out via email to members and all persons submitting expressions of interest in the conference. Early bird registrations were extended. At the date of Federal Council meeting 208 approx 30 extended abstracts had been received. Joint ASSSI/NZSSS Conference 2004 Graeme Tupper indicated that the NSW Branch was seeking support from the NZSSS; no response had been received to date. The Organising Committee was open to thematic suggestions and would publicise the conference at the National 'FutureSoils' Conference in December. The Organising Committee was currently looking at options for professional conference organisers. The venue had been confirmed as the University of Sydney. ASSSI Medals & Awards Committee The nomination for Honorary Membership would be considered at Federal Council Meeting 209. No nominations had been received for the Publication Medal; this was to be pursued by Cameron Grant (SA) in time for the 'FutureSoils' conference. ISCO 2004 Mike Grundy (QLD) foreshadowed a loan from ASSSI to underwrite the organisation of ISCO 4-9 July 2004. Lyn Abbott advised that such a loan could be sourced from ASSSI funds set aside for this specific purpose; the Executive approved a loan to the ISCO Organizing Committee of \$10,000. The further possibility of direct or indirect sponsorship by ASSSI was discussed. The Organising Committee have engaged ICMS (professional conference organisers), and are currently budgeting on an attendance of 500 delegates (cf. 700 for ISCO in Beijing). Most current activity was directed towards developing an innovative programme, and pre-conference tours were in the process of being organised. The first preliminary announcement and website would be released in the month following this meeting, in time for the ASA tri-society meeting in November. ASSSI PhD Award Any comments on the proposal developed by Andrew Rate (WA) were to be sent directly to him for discussion at Federal Council Meeting 209.

Other business (none) Meeting closed at 2:50 pm WST. Next Meeting Federal Council 209, Sunday 1 December, 3:00 pm WST.

Minutes of General Meeting (held during ASSSI National Conference)

December 3, 2002 The University of Western Australia, Western Australia

Opening: The President opened the meeting at 6.05 pm, in the Fox Lecture Theatre, University of Western Australia, in conjunction with the Future Soils Conference.

Attendance: Federal Executive: Lyn Abbott (Hon Federal President), Keith Lindbeck (Hon Federal Treasurer), Richard Harper (Hon Federal Secretary), Andrew Rate (WA), Aravind Surapaneni (Vic), Graeme Tupper (NSW), Cameron Grant (SA). Members: Colin Chartres, Robert White, Graham Price, Joanne Burton, Michael Donn, Guangdi Li, Zhihong Xu, Richard Bell, Katherine Snars, Neal Menzies, Geoff Beecher, Nilantha Hulugalle, Mila McLaughlin, Richard MacEwan, Brian Murphy, Robin Thwaites, Jason Condon, David Deery, J.P. Quirk, Cameron Gourley, Tony Weatherley, Heiko Daniel, Sam Sheridan, Blair McKenzie, Louise Clark, Najib Ahmady, Anna Cochrane, Ann McNeill, Bruce Forster, David Manning, Phillipa Tolmie, Andrew Biggs, Dan Brough, Justin Claridge, Rob Cumming, Jonathan Holland, C. Tang Visitors: Alan Palmer (President NZSSS), Philippe Hinsinger (AFES-IUSS), Bennedine Woods, Tim Blumfield Linda Bennison (Executive Officer) Apologies: Mike Grundy (Qld)

Business arising from minutes of General Meeting, Lincoln University, Dec 4th, 2000.

Minutes accepted without revision. (Reports be accepted. Moved: G. Tupper, Seconded K. Lindbeck).

President's Report – Professor Lyn Abbott Summary of major activities in the last 2 years: Minutes of all Federal Council Meetings have been placed in Profile Federal Council has met on a 2-month interval, initially using proxies for Presidents, as before, but now including Branch Presidents by teleconference. All Branches apart from ACT and Riverina have participated in meetings. Regular reports received from Branches at each meeting. These have subsequently been edited for Profile. Direct election of Federal Council instituted. Changed By-laws. No nominations apart from Profile Editor, extension to Dec. 6, when elections will be held if necessary. Executive Officer – Ms. Alice Bass resigned in 2001, Ms. Linda Bennison appointed. Lyn commended Linda on her excellent efforts since appointment, and particularly her role in streamlining the Society's activities. Strategic Plan has been written and provides a basis for the Society's activities. Electronic delivery of Profile. This is now the default mode of delivery. 2010 World Soils Congress will be held in Brisbane; thanks to the Qld and NSW branches for laying the

groundwork for this. Certified Practising Soil Scientist (CPSS) Scheme: considerable work in sorting this out, arrangements with AIAST. Visits to all states apart from Qld and Tas. Appreciation to all Branches for participating in these visits. Lyn thanked the many members of the Society who have made her tenure successful, including: The members of Federal Council including Keith Lindbeck (Hon Federal Treasurer), Richard Harper (Hon Federal Secretary), Daniel Murphy and Rachel Poulter (Newsletter Editors), the Branch Presidents - Andrew Rate (WA), Tony Weatherley & Aravind Surapaneni (Vic), Graeme Tupper (NSW), Cameron Grant (SA) and Adrian Webb and Mike Grundy (Qld), Cameron Grant (2002) and Kep Coughlan (2001) for organizing the Medals and Awards sub-committee, The CPSS sub-committee (Bob White, Rob Fitzpatrick, Rick Morse and Dennis Toohey as well as- Rob Loch for his earlier input), the web-master Derek Yates, Phil Smethurst (Tas) for coordinating activities with members in that State, Leigh Sullivan and Andrew Rate (Australian Journal of Soil Research representatives), Pam Hazelton (Australian Standards Committee), The World Congress (2010) Bid Committee and in particular Prof. Bob Gilkes and Katherine Snars, Prof. Calvin Rose for successfully bidding for the International Soil Tillage Organization (ISCO) Conference for Australia in 2004, The organizing committee of the 2002 National Soils Congress ("FutureSoils"). Winners of the Society Awards in the last two years were: 2002 J.K. Taylor OBE, Gold Medal of Soil Science, Dr David Strong, 2001 J.A. Prescott Medal of Soil Science, Dr Brent Clothier, 2002 J.A. Prescott Medal of Soil Science, Prof. J.W. Holmes, 2001 ASSSI Publication Medal, Dr. Gary Sheridan, 2002 ASSSI Publication Medal, Dr Budiman Minasny. Honorary Life Members - these were awarded to Prof. Calvin Rose and Dr. W.W. Emerson. Linda Bennison (Executive Officer) had won a Churchill Fellowship. Report be accepted. Moved: C. Grant, Seconded A. Rate.

Treasurer's Report – Dr Keith Lindbeck An unaudited report was presented. The Society's three accounts (General, CPSS and Conference) are all in surplus. The Audited report will be published in Profile. Questions: T. Weatherley re auditing the accounts of Branches. K. Lindbeck stressed that this was essential. Report be accepted. Moved: C. Grant, Seconded A. Rate.

General Business 19th World Congress of Soil Science, Brisbane 2010 – Dr Colin Chartres. Dr Chartres thanked the bid Committee and in particular Prof. Bob Gilkes, Ms. Katherine Snars and Prof. Lyn Abbott for securing this major international conference for Australia. He stressed the major nature of this meeting, with approx. 1500-2000 likely delegates, and the need to start planning the various components now. The Society should be in a position to present a clear idea of what was planned at the 18th WCSS in Philadelphia in 2006. Society members were asked to volunteer to help with various aspects of the Congress including logistics, fund raising, field trips/tours, scientific program, publication of proceedings, entertainment, trade exhibits and accounts. Volunteers to be sought via Branches and Profile.

Medals and Awards – Dr Cam Grant 25 Honorary Members were allowed under Constitution, presently 21. Some discussion about whether the 4 vacancies should be filled. Prof. Quirk suggested that the Committee search across the Society for eminent soil scientists who may have been overlooked. Prof. Abbott thanked Dr Grant for organizing the awards.

Certified Practising Soil Scientist Scheme – Prof. Robert White. Prof. White described progress with the CPSS scheme since the last General Meeting, where it had been a major item of discussion. Dr Rob Loch had chaired a committee that had investigated accreditation schemes. An agreement had been reached with the AIAST. An accreditation sub-committee had been established with Prof. White (Chair), Dr Rob Fitzpatrick, Mr Rick Morse and Mr Dennis Toohey (AIAST). Linda Bennison had drawn up a handbook for the Society, with this including all appropriate forms. 20% of CPSS members will be audited each year, to bring rigour into the scheme. The scheme will be promoted to employers and other groups engaging soil scientists in the coming year. There was general discussion re the scheme and methods of validating accreditation activities (R. Cumming) and also encouraging State Governments to insist on accreditation (A. Biggs).

Dr Allan Palmer, President NZ Soil Science Society Dr Palmer thanked the ASSSI for the invitation to the Future Soils Conference. He offered the NZSSS' support to the 2004 and 2010 Conferences. In the latter case it might be possible to offer field trips for those en route to the conference. 2004 ASSSI/NZSSS Conference, Mr Graeme Tupper, President NSW ASSSI Branch. Mr Tupper briefly mentioned the planning for the 2004 Conference.

Other Business There was no other business. Close The meeting closed at 6.58 pm WST.
Next Meeting Australia/New Zealand Soils Conference, Sydney Dec 2004.

Book Review:

Methods of Soil Analysis Part 4, Physical Methods.

Hard cover, \$100US available from ASA-CSSA-SSSA in Madison, WI, USA, or go to www.soils.org

Methods of Soil Analysis (MOSA) Part 4 Physical Methods, 2002 edition is the 5th book of an occasional series produced by the Soil Science Society of America. It represents both an update on the previous MOSA (published in 1986) and a considerable expansion on the sometimes sketchy approach used in 1986. MOSA Part 4, Physical Methods, comprises nearly 1700 pages of detailed description of techniques for carrying out nearly all physical measurements on soils and soil water. The only exception which I could spot to an exceptionally thorough coverage was the field of gamma ray densitometry which is still rather sketchy.

The book was edited by Warren Dick, Clarke Topp, and Jacob Dane, and written by 124 authors from all over the world including many Australians. It jumps straight into messy topics like geostatistics (195pp) starting with basic soil variability measurement and progressing to analysis of soils data using fractals, time series, wavelets, and fuzzy sets. Chapters on solid phase measurement techniques (212pp) start with taking a soil core, covers topics such as atterberg limits, linear extensibility and particle size and progresses to soil mechanics detail of penetrometer measurements. The chapter on soil solution phase (659pp) covers all the water measurement methods from oven drying, through neutron meters and tensiometers, to EM and NMR techniques. There are similarly comprehensive sections on water flow, solute transport (single and multiple, miscible and immiscible), air permeability, thermal capacity and conductivity, and soil erosion. The list is too long to detail here - the index alone is 23 pages. I will supply a full index to the Profile editor for inclusion on the web site.

In most cases the sections start with the basics and progress to advanced techniques. Many chapters feature an 'emerging technologies' section. The book is NOT designed as an undergraduate text and definitely not an 'easy read'. It is a comprehensive documentation of soil physical technology. Many, but not all, sections, fill the role of a comprehensive field or laboratory manual on the use of a technique - among these is that on the neutron moisture meter (which I co-authored). Others concentrate on providing a comprehensive theoretical treatment. All sections provide a comprehensive bibliography and there is a 30 page keyword index provided.

I recommend this book as a comprehensive and up to date reference on all aspects of soil physics technology.

Cliff Hignett, Soil Water Solutions, cliff.hignett@soilwater.com.au

RAISING THE PROFILE OF SOIL

More suggestions from the FutureSoils Conference

23. Promote BMP's for soil related NRM issues and lobby policy makers to enhance effective implementation
 24. Monitor change in attitudes of farmers
 25. Monitor changes on farm and off farm
 26. Give more attention to the next generation as well as trying to educate their parents
 27. Recognise target and focus on that
 28. Extension program/formal education/research activities- all conducted as a National Program
 29. Display of soil profiles
 30. Field trips on soils
 31. Press releases
 32. Showing yield comparisons between healthy and unhealthy soils
 33. Debate about soil issues on national TV
 34. Need to be clear about what the market segments are and what their needs are and then develop activities around these. Also need to be clear about the benefits to be derived from targeting specific markets
 35. Talk Dirty radio series and competition linked to questions on the website
 36. Have a basic course in soil science introduced to all courses at tertiary level, especially Economics, Commerce, Law, Medicine, Engineering, Arts, Philosophy and Science - an integrative holistic approach - not primarily focused on production but emphasising the importance of healthy soil for functioning of ecosystems.
-

Australian Journal of Soil Research

8 Issues per year from 2002

ISSN 0004-9573

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AJSR, established in 1962, is now in its 40th year of publication, and is a leading international journal of soil sciences published from the southern hemisphere. It publishes research papers, viewpoint articles, and review articles on research that promotes understanding of soils in Australia, New Zealand and the south-west Pacific, as well as those in tropical and Mediterranean environments. Keeping pace with new developments, the journal now publishes papers encompassing environmental pollution and site remediation. The journal enjoys a high ranking (measured by impact factor, immediacy index, and total cites in 2001) amongst its competitors.

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ASSSI Members will be able to subscribe to the Australian Journal of Soil Research via their 2003 ASSSI membership renewal. The cost will remain at \$80 for electronic and \$105 for paper, which is a discounted price for financial members of the society. If you have any queries please contact Linda Bennison ASSSI (Executive Officer) to take advantage of this offer.

AUSTRALIAN JOURNAL OF SOIL RESEARCH

Contents Volume 40, No.7 2002

Lowest-Cost Soil Moisture Sensor



← ECHO Probe
Specifications
Range: Zero to saturated volumetric water content.
Measurement time: 10ms.
Accuracy: ±3% typical, ±1% with soil specific calibration.
Resolution: 0.002 m/m.
Output range: Dry soil 375 to 1000mV, Air 255 to 260mV. Voltage output proportional to volumetric water content.
Power requirement: 2.5VDC @ 3mA.
Operating temperature: 0-50°C.
Dimensions: 25.4cm L x 3.2cm W.
Dataloggers: Connect directly to any datalogger.

← ECHO Check
Specifications
Measurement speed: Less than 1s.
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CPSS NEWS

A new CPSS Handbook is being prepared and will be circulated in early 2003. In addition, the CPSS Website is being upgraded to better meet the needs of members.

RAISING THE PROFILE OF SOIL

More suggestions from the FutureSoils Conference

37. TV Program
38. Focus the National Science Week on soils in the theme chosen
39. Enter a soils project in the university outreach program to secondary school students
40. Develop a soils practical for secondary students
41. Develop a soil biology analysis component into regular soil analysis for farmers
42. Present soil issues to the media in a positive context (most soil stories are about adverse effects - erosion, salinity etc)
43. Engage the artistic community - authors, artists etc to include soil in their work
44. Get involved in 'adopt a scientist' programs in schools or 'soil clubs' for urban children
45. Highlight the importance of soils to culture - soil as a metaphor for identity or as a foundation of society
46. Establish a network with a target group (emails, phone calls, newsletters)
47. Educate school teachers: support them in delivering information to school students
48. Public lecture at Universities on soils in ecosystems

To be continued in March Profile

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**AJSR is available on the web
[www.publish.csiro.au/journal/
ajsr/index.html](http://www.publish.csiro.au/journal/ajsr/index.html)**

CONFERENCES

Any conferences, courses, seminars or workshops coming up?
Send *Profile* the details and we'll feature them here

Jan 2003: Soil Science Society South Africa - 50th Anniversary Congress www.soils.org.za

2-6 Feb 2003: 11th Australian Agronomy Conference 'Solutions for a better environment'
Deakin University Geelong, Victoria www.cdesign.com.au/agro2003

24-26 March 2003: Fifth International Conference on Electromagnetic Wave Interaction with
Water and Moist Substances, New Zealand

25-27 March 2003: British Ecological Society Annual Symposium, Biological Diversity and
Function in Soils, Lancaster, UK

July 2003: International Soil Tillage Research Organisation, Queensland
Tel (07) 5460 1354 Fax (07) 5460 1367 j.tullberg@mailbox.uq.edu.au

4-9 July 2004: ISCO International Conference. Brisbane 2004
<http://topsoil.nserl.purdue.edu/iscohome/>

6-10 December 2004: Joint ASSSI/NZSSS Conference, Sydney

July 2010: World Congress of Soil Science, Brisbane

ALPINE EXCURSION *Continued from Page 22*

Peter's 20 years experience in the south of New Zealand provided him with plenty of ammunition for our tour gurus. New soil society member Gary Clark (also known as Gary Cooper or Clark Gable) and his wife were also keen tour accomplices.

Heather Anderson dazzled us with her colorful and practical field work wardrobe; she managed to look both functional and elegant in the landscape. Many aspire to this, but few achieve it. Nick Uren proved to us just what retirement can do to relax a person. Needless to say a bit of red wine on tour helped too. Nick was the tour red wine sommelier. The lame and the incontinent kept tour groupies concerned and amused on the second day, with David Rees's back playing up, and Karen Smith's bladder causing a somewhat abrupt stop and a mad scramble to find a tree.

On a more serious note, this type of extended tour provides a great opportunity for information transfer from experienced members of the society with great depth of knowledge, to new and less experienced members. Many thanks to those who generously gave of their time and knowledge for this trip. What we need now is a Tasmanian trip. Thankfully, Peter McIntosh is currently taking up this challenge (see announcement on Page 11).

Karen Smith

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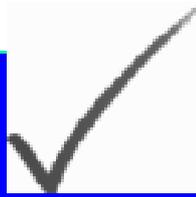
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