

# Profile



Newsletter of the Australian Society of Soil Science Inc Issue 149 June 2007

## SOIL ART BY KRISTIE WATLING



This soil art features sediment dug from an irrigation channel near Mungindi west of Goondiwindi on the Qld/NSW border. The blue colour is natural and a product of monosulfides forming in the channel sediments. Water in the channel had a pH of 5.8, an EC of ~9300 uS/cm and 0.13 % sulfur using the chromium reducible sulfur method. The soil in this area is a thin veneer of alluvia over the Griman Creek Formation, a marginal marine Cretaceous sedimentary sequence. There is plenty of salt in the regolith, supplying the sulfate needed for formation of monosulfides. Similar sites in the area have a groundwater pH of 3.7 and EC of ~52 000 uS/cm (same EC as seawater).

Do you have any fabulous soil art photos? If so, the Profile editor would love to use them. Email your photographs and descriptions today.

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## FROM ASSSI PRESIDENT STEPHEN CATTLE



Since the last edition of Profile, I hope many of you have had a chance or a reason (eg subscriptions) to access the ASSSI website. If you have accessed the site in the last month or two, you will have seen its 'look' has changed enormously, with the colour scheme now matching that of the new ASSSI logo introduced in late 2006. Also, quite a bit of new content has been added to the site, with more to be added in the near future. While there is still a fair way to go, it is the intention of the Federal Council to not only make the site more aesthetically pleasing and easy-to-navigate, but also a more useful site for both members of the Society and 'surfers' from the general community.

A critical step towards achieving those goals will be the partitioning of the site into Public and Members Only sections. Until now, anyone with an internet connection has been able to browse all parts of the ASSSI website, so there has been no particular advantage of being an ASSSI member in this respect. Over the coming weeks I am expecting this partitioning to take place, with a variety of pages and documents to be 'locked away' behind the Members Only link. Some of the pages and documents to be placed in the Members Only section include branch information, honorary life members (who will each have a separate page), state soils, downloads, subscription renewals, current and archived issues of Profile/Soils News, CPSS accreditation and diary information, ASSSI constitution and ASSSI shop. I can particularly recommend the Downloads page where we are consolidating useful documents, presentations and recordings derived from ASSSI activities. All financial members of the Society will be notified of the login and password arrangements for access to the Members Only pages.

However, as was discussed at the recent Federal Council meeting, the role of our website is not just to act as an information source for members, but also to raise the profile (there's that cliché again) of the discipline of soil science in the minds of the 'surfing' public. To that end, members of the Federal Council agree that the publicly available ASSSI webpages should include a general overview of Australian soil and Australian soil issues, jargon-free state soils information, headline articles from the current issue of Profile, a thorough list of relevant soil-related web links, a membership application form, a list of accredited CPSS and their specialisations, the ASSSI events calendar, and when they become available, answers to Frequently Asked Questions and ASSSI position papers. The Federal Council has formed a small committee to compile answers to FAQs on carbon storage in soil and soil amendments involved in biological farming. It is hoped these papers will be the nucleus of more thorough position papers down the track. Once again, if you feel strongly about one or both of these issues, please contact the ASSSI Office so that we can involve you in the process of composing the FAQ answers and position papers.

Moving to the mechanics of the re-vamped ASSSI website, at the moment only ASSSI webmaster Derek Yates and website designer Louise Cuschieri can upload and alter website material. In due course, however, it is expected that the ASSSI president, executive officer and six branch webmasters (nominated by each Branch) will be able to upload to various parts of the site. The Federal Council has asked branch presidents to seek out webpage-savvy members to become branch webmasters, so contact your branch president if you're keen to serve the society in this way. At this point, I'd also like to publicly acknowledge the efforts of Derek and Louise during this webpage overhaul. Both have been very patient and efficient in suggesting and implementing various structural and cosmetic changes to the site as it has evolved, and I'm sure all members will agree that the new site is a vast improvement on the previous one.

In summary, I would like to see the ASSSI website become a rich information resource for members and an interesting advertisement for soil science for the general public. At this stage, we have commenced a major overhaul of our website, improving its navigability and utility, and soon we hope to add to the value of being an ASSSI member by introducing a Members Only section packed full of potentially useful information, documents, presentations and products.

Until next issue, happy clicketty clicking,

Stephen Cattle CPSS Stage 3

Profile June 2007

### CONFERENCE ABSTRACTS ONLINE

Abstracts of all keynote, oral and poster presentations from the 2006 Adelaide conference are now on the ASSSI website.

You can find them at

<http://www.asssi.asn.au/downloads/ASSSI-ASPAC-ACMS%20Abstracts%202006.pdf>.

## LETTERS

### Geological reference site for soils

Does anyone know of such a thing as a Geological Reference Site for soils? There is a yellow earth at Garie trig in Royal National Park (Sydney) and the rangers have been told it is such a site. I would be grateful for any information. While this query is for a specific site, it raises some interesting issues. We now have a state soil and at least one soil site (Prospect) preserved. Perhaps the 'heritage' and 'conservation' value of soils is a matter we could pursue. I know there have been moves in this direction and that it is difficult to get widespread political or popular support. But I wonder who else cringes as the RTA covers good soil exposures in road cuttings with sprayed concrete or tar. And if an alliance with the geologists might be strong enough to get signage equivalent to the 'This creek is part of .. catchment and flows to .. river' - we could suggest 'This soil is a Red Chromosol and one of the NSW's most productive agricultural soils' etc while the geologists might like 'This is the .. granite formed ... million years ago'.

Ann Young, [annbob@nsw.chariot.net.au](mailto:annbob@nsw.chariot.net.au)

## NEW ASSSI MEMBERS

Welcome to the following new ASSSI members:

### NSW branch

Jessica Drake  
Warren Hicks  
Brian Jenkins  
Joseph McDermott  
Nathan Odgers  
James Quilty  
Chris Smith  
Helen Squires  
Christopher Watson

### Qld branch

Diane Allen  
Richard Haynes  
Dave Little  
Jyoteshna Owens  
Pamela Pittaway  
Mark Silburn  
Wannipa Soda  
Oliva White  
Nathan Zurig

### WA branch

Natasha Banning  
Georgina Holbeche  
Yamin Ma  
Shahab Pathan  
Terry Rose

### Vic branch

Kai Rebenburg  
Cassandra Schefe

### SA branch

David Davenport #

### Riverina branch

Richard Hayes  
Elissa Strong

## 2008 SOIL CONFERENCE: THE LIVING SKIN OF PLANET EARTH

Soil: The living skin of Planet Earth is the theme of the joint Australian and New Zealand Soil Science conference to be held in Palmerston North, 1-5 December 2008. The conference is being organised by the New Zealand Society of Soil Science and ASSSI in conjunction with the International Year of Planet Earth 2008. ASSSI president Stephen Cattle has been invited to join the organising committee, and we hope will attend two of the planning meetings (one this year and one next).

Conference symposia are: Valuing natural capital, Soils and the carbon economy, Integrated environmental management, Sustaining soil biological health and function, The water crisis, The salinity crisis, Soil acidification, Horizons for soil science education, and a joint meeting of the IUSS Commissions 4.1 (Soils & the environment) and 4.3 (Soils & land use change). Field trips being offered include a pre-conference field trip from Auckland to Palmerston North led by David Lowe (University of Waikato) and Bob Stewart (Massey), four intra-conference field trips, and post-conference trips from Palmerston North to Wellington (led by Tessa Mills, HortResearch) and from Wellington to Picton and Christchurch, led by Peter Almond (Lincoln University).

If you are interested in attending the conference and any of the field trips, please complete the pre-registration form included in the first conference circular at <http://conferences.massey.ac.nz/Soils2008/index.htm>. #

## NOMINATIONS DUE FOR CG STEPHENS PHD AWARD

If you are an ASSSI member and have completed a PhD in soil science at an Australian university in the past year, you are eligible to apply for the CG Stephens PhD Award in Soil Science. The award recognises excellence in postgraduate study and nominations for the award are due by 30 June. Read the full details on the ASSSI website at <http://www.asssi.asn.au/general/awardcondstephens.htm>. #

## ASSSI AND SOIL SAMPLING STANDARDS

ASSSI has been asked by Australian Standards to help develop standards for sampling and analysis of soil and biota. Previously, ASSSI has helped develop standards for

- sampling and investigation of potentially contaminated soil-volatile substances
- sampling and investigation of potentially contaminated soil non-volatile and semi-volatile substances
- validation procedures for chemical analysis of agricultural and contaminated soils
- investigation of potentially contaminated soil and deposited dust as a source of lead available to humans.

Standards Australia prepares and publishes most of the technical and commercial standards used in Australia. To ensure that the latest scientific and industrial experience is involved in the development of standards, committees of experts are drawn from academia, industry, and government bodies. As such, the requirements or recommendations in the published Standard are a consensus of the views of representative interests.

After a Standard has been drawn up by the committee, it is circulated to interested parties who are invited to submit comments. The document and comments are then reviewed by the committee. After a consensus of views of the committee and representative interests the Standard is published. After publication Australian Standards are under continuous review and updated regularly to take account of changing technology.

ASSSI has been represented on Committee EV/009-01 since 1995 and is acknowledged on each Australian Standard published by this committee. Pam Hazelton (CPSS Stage 3) of the University of Technology Sydney is ASSSI's current representative on the committee.

If you'd like to know more, contact Pam at [Pam.Hazelton@eng.uts.edu.au](mailto:Pam.Hazelton@eng.uts.edu.au). #

### ABOUT ASSSI

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 six branches (Qld, NSW, Riverina, Vic, SA and WA). Liability of members is limited.

ABN: 96 080 783 106

### 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

### MEMBERSHIP

For all membership and CPSS application and renewal enquiries contact the ASSSI executive officer Linda Bennison at [office@asssi.asn.au](mailto:office@asssi.asn.au), phone 03 5622 0804 or fax 03 5622 0806.

### PROFILE CONTRIBUTIONS

All contributions to Profile are welcome and can be sent to the editor at [rebecca.lines-kelly@dpi.nsw.gov.au](mailto:rebecca.lines-kelly@dpi.nsw.gov.au), 02 6626 1319, or PO Box 468 Mullumbimby NSW 2482. Email contributions are preferred. Please email photos as separate attachments.

### PROFILE DEADLINES 2007

30 August, 30 November.

### PROFILE ADVERTISING

Advertising in Profile is welcome, and must be relevant to some aspect of soil science.

Rates are: \$220 full page, \$110 half page, and \$55 quarter page.

Information about conferences, courses, scholarships etc is published free.





# ASSSI Clothing Range now available

## ◀ POLO SHIRTS



**MENS SIZES:** small: medium: large: extra large

**COLOURS:** yellow: white: stone

**COST:** \$40

## POLAR FLEECE VEST ▼

**MENS SIZES:** small:  
medium: large: extra  
large

**COLOURS:** tan

**COST:** \$45



## RUGBY JUMPERS ▶

**MENS SIZES:** small: medium:  
large: extra large

**COLOURS:** navy blue with  
white collar

**COST:** \$50



## PEAKED CAPS

OR

## CRICKET HATS

**COST:** \$20



Clothing items can be ordered on the ASSSI web site member subscription link.

Please contact the Federal Office for further information;  
[office@asssi.asn.au](mailto:office@asssi.asn.au)

## 2007 CPSS ACCREDITATION



CERTIFIED PROFESSIONAL  
SOIL SCIENTIST

The following Certified Practising Soil Scientists (CPSS) have been accredited and issued with the 2007 CPSS electronic seal. Please note that the list of accredited CPSS and their areas of expertise are on the website at <http://www.asssi.asn.au/members/accredlist.htm>

### STAGE THREE

Dr Peter Bacon  
Woodlots and Wetlands  
CASTLE HILL NSW

Dr Warren Bond  
CSIRO Land and Water  
CANBERRA ACT

Dr Stuart Boucher  
School of Geography & Environmental Science  
MONASH UNIVERSITY VIC

Dr Stephen Cattle  
Faculty of Agriculture, Food & Natural Resources  
UNIVERSITY OF SYDNEY NSW

Mr Greg Chapman  
Dept. Environment & Climate Change  
PARRAMATTA NSW

Dr Alexander L Cogle  
Department of Natural Resources & Water  
MAREEBA QLD

Mr Peter Fogarty  
Soil & Land Conservation Consulting P/L  
JAMISON ACT

Dr Cameron Grant  
School Earth & Environmental Science  
THE UNIVERSITY OF ADELAIDE SA

Dr Christopher Guppy  
School of Rural Science and Agriculture  
University of New England ARMIDALE NSW

Dr Pam Hazelton  
The University of Technology  
SYDNEY NSW

Mr Ian Hollingsworth  
EWL Sciences Pty Ltd  
WINNELLIE NT

Mr Bruce Hudgson  
Multifert Agencies  
MELTON VIC

Dr Nilantha Hulugalle  
NSW Dept. of Primary Industries  
Australian Cotton CRC ACRI  
NARRABRI NSW

Dr Takashi Itakura  
Heggies Australia Pty Ltd  
LANE COVE NSW

Mr Geoff Kew  
WILLETTON WA

Dr Robert Loch  
Landloch Pty Ltd  
HARLAXTON QLD

Dr Simon Lott  
EA Systems Pty Ltd  
ARMIDALE NSW

Dr Bennett Macdonald  
Centre for Resource and Env. Studies  
Australian National University ACTON ACT

Mr Richard MacEwan  
R&D Division  
Department of Primary Industries  
Bendigo Centre BENDIGO VIC

Mr Stuart Macnish  
MWH Australia  
INDOOROOPILLY QLD

Dr David McKenzie  
E.A.Systems Pty Ltd  
ORANGE NSW

Mr Rick Morse  
Morse McVey & Associates P/L  
PICTON NSW

Dr John Murtagh  
LanSci Management Pty Ltd  
RUNAWAY BAY QLD

Dr David Nash  
Department of Primary Industries  
ELLINBANK VIC

Mr David Orr,  
Impact Fertilisers PL  
LAUNCESTON TAS

Dr Robert (Bob) Patterson  
Lanfex Laboratories  
ARMIDALE NSW

Mr Graham Price  
Nutrient Management Systems PL  
CLEVELAND QLD

Mr John Rasic  
John Rasic Pty Ltd  
SEACLIFF PARK SA

Dr George Smith  
HIGHFIELDS QLD

Mr Henry Smolinski  
WAFDA  
KALAMUNDA WA

## **STAGE TWO**

Mr Justin Adams  
MWH  
MILTON QLD

Mr Robert Banks  
"Trafalgar"  
EMERALD HILL NSW

Ms Laura Beaupeurt  
BeauCon Services Pty Ltd  
NOWRA NSW

Mr Peter Graham  
Environmental & Earth Sciences NSW  
NORTH SYDNEY NSW

Dr Gunnar Kirchhof  
School of Land & Food Sciences  
University of Queensland ST LUCIA QLD

Mr Andrew Macleod  
Morse McVey & Associates P/L  
PICTON NSW

Mr Greg Madafiglio  
Envirowest Consulting Pty Ltd  
ORANGE NSW

## **STAGE ONE**

Mr Justin Galloway  
FSA Consulting  
TOOWOOMBA QLD

Mr Scott Hardy  
Whitsunday Shire Council  
PROSERPINE QLD

Dr Patrick Hulme  
Sustainable Soils Management  
WARREN NSW

## **CPSS STUDENT AFFILIATES**

Ms Georgina Holbeche  
The University of Western Australia  
SUBIACO WA

Dr Wayne Strong  
TOOWOOMBA QLD

Dr Robert Van de Graaff  
Van de Graaff and Associates PL  
MITCHAM VIC

Mr Kenneth Wetherby  
KG and CV Wetherby Soil Survey Surveyors  
CLEVE SA

Mr Larry White  
Paladin-White P/L  
STRATHFIELDSAYE VIC

Dr Malem McLeod  
Tamworth Agricultural Institute  
NSW Department of Primary Industries CALALA  
NSW

Mr Jamie McMaster  
Outsourced Environmental  
THE BASIN VIC

Mr Nathan Robinson  
R&D Division  
Department of Primary Industries Bendigo Centre  
BENDIGO VIC

Mr Mark Stuckey  
Environmental & Earth Sciences  
FOOTSCRAY VIC

Robyn Tucker  
FSA Consulting  
HORSHAM VIC

Mr Martin Philcox  
MBP Consulting  
MOUNT PLEASANT SA

Mr Peter Zund  
Soil Specialist  
BATTERY POINT TAS

Ms Yamin Ma  
The University of Western Australia  
NEDLANDS WA #

## CPSS UPDATE

### New CPSS accreditations

At the last meeting of the CPSS Accreditation Board the following scientists gained accreditation;

Georgina Holbeche, University of Western Australia, was admitted as CPSS student affiliate.

Yamin Ma, University of Western Australia, was admitted as CPSS student affiliate.

Dr Chris Guppy gained Stage 3 accreditation.

Dr Nilantha Hullugale was readmitted to Stage 3.

Dr Geoff Kew gained Stage 3 accreditation following a stage reclassification.

### Diary deadline is 8 July 2007

Round 2 assessment of Ongoing Professional Development (OPD) diaries is 8 July 2007 in readiness for the CPSS board's July meeting. If you require assistance with your diary please contact the Federal Office.

### Invitation to ASSSI members to apply for accreditation

ASSSI members who wish to apply for CPSS accreditation need to lodge their application by 8 July. If you require assistance with your CPSS application please contact the Federal Office.

### CPSS promotions

CPSS board members will be in attendance at the following events to promote CPSS, assist current and potential CPSSs with their applications and OPD diaries.

9 July: Digital Soil Mapping Day Parramatta NSW

11 July: Contaminated Soil Remediation Workshop Monash University Clayton VIC

24-28 September: On-Site '07 UNE Armidale NSW

### Professional indemnity and public liability insurance quotes available

Jardine Lloyd Thompson can provide members with quotes on their professional indemnity and public liability insurance. If you are interested please call either David Piacentino or Bill Hogg on 1300 655 931. A discount is available for ASSSI members so please identify yourself as a financial member.

Members thinking of retiring from consulting may like to ring JLT for advice on insurance cover during the first couple of years of retirement when there may be some legal liability for work done in the previous years (run off cover).

### Discussions with EIANZ

Two members of the Board met with representatives of the Environment Institute of Australia and New Zealand to discuss accreditation and opportunities between ASSSI and EIANZ. Further discussion is likely to take place later in the year.

### CPSS briefcase available

Accredited scientists should consider promoting themselves as CPSS with a CPSS branded 'soft' briefcase (pictured right). Cost of the briefcase is \$65 which includes postage and orders can be emailed to the federal office [office@asssi.asn.au](mailto:office@asssi.asn.au). #





## SOIL SOLUTIONS FOR A CHANGING WORLD WCSS UPDATE

### IUSS Bureau visit to Brisbane

Roger Swift, Neal Menzies and Steve Raine met with IUSS Bureau representatives Alfred Hartemink and Steve Nortcliffe at Gatton Qld, 2 May 2007. The group also visited the congress venue to view the presentation rooms, speakers' preparation room and media conference room. Alfred and Steve were pleased with progress and impressed with the Brisbane Convention and Exhibition Centre. They are particularly keen to see the website up and 1st announcement out. As are we all!

### Logo, website and announcements

Initial designs for the congress logo were received from the graphic artist earlier this month. The organising committee has since provided feedback which was collated for the following executive meeting. Suggestions from the organising and executive committees have since gone back to the graphic artist and we hope that the final version will soon be ready for use.

The website is now waiting on the logo to be finalised and is being launched this month. The website will be constantly updated with key announcements relating to the program and notices relating to the calls for abstracts – please check regularly at [www.19wcss.org.au](http://www.19wcss.org.au).

Indicative dates for announcements are:

1st announcement	June 2007
2nd announcement and call for abstracts	July-Aug 2008
Registration brochure and program release	July 2009

### Science committee

Four representatives of the science committee held a teleconference recently. Division chairs have contacted their Divisions and Commissions to outline how the process will work, with the aim of a coherent set of symposia. Fairly tight timeframes have been set for the return of suggestions from Divisions and Commissions.

### Sponsorship

The sponsorship subcommittee met on Friday 15 June to finalise the patron sponsor proposal and discuss likely 'Top 10' sponsors of the congress. If you are interested in sponsorship or know of any company interested in being a sponsor, please contact Philippa Tolmie.

### Tours

Pre- and post-conference tours are a feature of each WCSS and we aim to provide a diversity of high quality tours for the 19th WCSS. Leigh Sullivan is coordinating these tours and has developed procedures for their establishment. For more information on WCSS tours please contact Leigh at [leigh.sullivan@scu.edu.au](mailto:leigh.sullivan@scu.edu.au).

### IUSS Inter-Congress Council meeting

This week-long program, to be held in Brisbane 29 June-4 July 2008, will be organised by Kristie Watling, in her role as chair, social and ancillary events. The schedule will comprise IUSS Executive, Council and Division meetings, a full day symposium, and field day. The symposium and field day will be hosted by the Qld branch.

### Questions, questions

Please contact Liz Cuffe [liz@ccm.com.au](mailto:liz@ccm.com.au) or Philippa Tolmie [philippa.tolmie@nrw.qld.gov.au](mailto:philippa.tolmie@nrw.qld.gov.au). #



## IUSS DIVISION/COMMISSION UPDATES

Currently 8 of the IUSS Division/Commission Chairs/Vice Chairs are also ASSSI members: Alex McBratney, Budiman Minasny, Jock Churchman, Lyn Abbott, Mike McLaughlin (CPSS Stage 3), Ravi Naidu, Richard Burns and Chris Smith. Profile asked them for updates on their work and received the following responses. We will keep you up to date with all Divisions and Commissions in coming issues of Profile.



### ***Division 4: The role of soils in sustaining society and the environment***

#### **Lynn Abbott reports on developments in Division 4.**

Division 4 takes soils information generated in the other three Divisions along with developing new scientific information and addresses public literacy in soil science, education, international conventions, consequences of human activities on soil ecosystems, policy issues, food security, history of the discipline, etc. It involves integration of scientific knowledge of soil so scientists, policy makers and specialists remote to soil science may understand soil as an essential natural resource at the Earth's surface. Division 4 seeks to provide soil science input into decision-making and address special issues that will be brought to the attention of the IUSS, especially in relation with the human and socio-economic use of the soils.

The Commissions in this Division are: 4.1 Soils and the environment, 4.2 Soils, food security, and human health, 4.3 Soils and land use change, 4.4 Soil education and public awareness, and 4.5 History, philosophy and sociology of soil science.

#### **Commission 4.1: Soils and the environment , chair Brent Clothier NZ**

This Commission will work with Commission 4.3 to present a joint session at the 2008 New Zealand / Australian Soils Conference on environment and land-use change. The program is not finalised and suggestions are welcome.

#### **Commission 4.2: Soils, food security, and human health, chair Charles Rice USA**

Professor Rice is working on international activities for this area and welcomes suggestions from the Australian soil science community.

#### **Commission 4.3: Soils and land use change, chair Leo Condrón NZ**

Dr Salcedo (vice-chair) and Professor Condrón are planning a special issue of a journal on the impact of land-use change on soil function in sustainable ecosystems. Knowledge of the effects of land-use change on soil function will be collated and implications for sustainable management of the soil resource in different regions of the world will be considered. Recommendations for future research in this area will be included.

#### **Commission 4.4: Soil education and public awareness, chair Ray Weil USA**

Professor Weil and Dr Drohan are preparing ideas for symposia for Commission 4.4 including

(i) delivery of soils information to non-agricultural users (eg related to public health, tracking long term disease (fungal diseases), lead toxicity, forensic science, soils databases for public legislation/policy on food security land use and business (other than agriculture, such as geo hazards) The chair would like contacts in Australia who might be one of the above non-agricultural users of soils information.

(ii) attracting young people to a soils career – how to turn around our failure which would include issues such as - soil science education, declining enrolments, rethinking soil science education for the masses, bringing in people from companies that make career guidance tests and materials for high schools, appealing to student subcultures, getting basic soils into the curriculum for non-traditional fields like architecture, landscape architecture, anthropology, archeology, geology, geography, civil engineering, ecology, earth science. The chair needs contacts in Australia who are involved with career counselling in secondary schools. Also people who are from universities who have successfully integrated soil science into the curricula of some of the related fields listed above.

#### **Commission 4.5: History, philosophy, and sociology of soil science, chair Edward Landa USA**

The commission released Issue #14 of its newsletter in March 2007 (Eric Brevik, editor), and the second issue is planned for mid 2007. Edward Landa and Christian Feller are currently preparing a book, 'Soil and Culture', which will explore the cultural dynamics of soil as a key ecosystem component. It will cover human perception of soil in

ancient, indigenous, and modern societies, depictions of soil in art, literature and popular culture, use of soil materials as an artistic medium, human interactions with soil in urban landscapes/living space, diet, war, and criminal investigations, and the role of the unconscious in the perception of soils and elaboration of scientific theories in soil science.



## ***Commission 2.4: Soil mineralogy***

### **Jock Churchman explains what is involved as chair of Commission 2.4.**

I have attended two World Soils Congresses (Acapulco 1994 and Philadelphia 2006) and have always wondered how their programmes were organised, although I must admit it never really bothered me. Now I am finding out. At Philadelphia I was elected chair of Soil Mineralogy Commission which is No. 4 in Division 2:-Soil properties and processes). I found this out by attending the business session set aside for this Commission at the Congress, along with fewer than 10 brave souls, although, interestingly, the results of the prior election had already been announced in New Zealand Soil News (was this a scoop on Profile, or a leak?). However, having been elected, I was surprised when some days later, someone asked me, why didn't you attend the Division 2 business session? No one had told me I should, so I didn't even notice it in the program for the Congress. Never mind, I've seen my share of meetings.

Just recently, however, Chris Smith, for the organising committee, and vice chair of Division 2, requested that each of the Division's chairs and vice chairs come up with proposals for symposia for the Brisbane Congress and that seemed to go pretty smoothly by email. It's not for me to disclose any details at this stage, but Division 2 Chairs and vice chairs all seem to have taken this task seriously, imaginatively and, most encouragingly, have emphasised multi-disciplinary topics in their proposals. If the other Divisions have done a similarly good job, it augurs well for a good Congress program.

I now think it is interesting having a turn at chair of a Commission. I am actually very keen to show how mineralogy can still be a central discipline for a lot of soil science. It struck me that there was a lot of mineralogy presented at Philadelphia even if this work was not given in mineralogy sessions. Soil mineralogy as a sub-discipline has been in decline for some time now but I think this is because it has been seen in narrow, traditional terms of crystalline minerals only. I think our time will come again, and where better to start the revival than Australia, at the Brisbane Congress. In many ways, Australia has kept the soil mineralogy flag flying in the IUSS. Bob Gilkes was chair of the Commission at the first of the Congresses I attended and Rob Fitzpatrick had the same position at the last one. I am looking forward to Brisbane: I hope I speak for all Australian soil scientists.



## ***Commission 2.5: Soil chemical, physical and biological interfacial reactions.***

### **Richard Burns, vice chair of Commission 2.5, reports on progress.**

We have been much occupied in planning our symposia for the 19th WCSS. All five Commission 2 chairs and vice-chairs are in contact to determine overlaps and complimentary areas as well as to identify any important missing topics. At present, Commission 2.5 is proposing symposia on the interactions of proteins with soil surfaces and consequences for microbes, plants and the environment; the bioavailability of metals and organics and impacts on soil and water quality; and the soil-root interface - microbial community dynamics and microbe-plant communication. Over the next few months there will be much email traffic and some meetings before an agreed list emerges. A number of those involved in Commission 2 will meet to discuss WCSS symposia during the 3rd Enzymes in the Environment Conference in Viterbo, Italy in July 2007 ([www.3ic-enzymes.com](http://www.3ic-enzymes.com)) and in 2008 the 5th ISMOM conference in Pucon, Chile ([www.ismom2008ufro.cl](http://www.ismom2008ufro.cl)) will be an opportunity to finalise topics and speakers. #



## SOIL SECRETS OF NORTH WEST NSW 22-24 MARCH 2007

This report is an edited version of a report by Richard Greene (CPSS Stage 1) published in the NSW branch newsletter *Cornstalk*.



Soil secrets of north west NSW was preceded by a seminar on soil carbon sequestration organised by the Catchment Management Authority at its offices in Dubbo. Soil scientists and farmers heard from John Lawrie (CMA Dubbo), Michael Kiely (farmer from Goolma, NSW), Brian Murphy (DNR Cowra, CPSS Stage 3) and Greg Chapman (DNR Parramatta, CPSS Stage 3), on a range of issues related to practical ways of sequestering and measuring organic carbon, and collating soil data bases on factors affecting OC.

The intrepid soil scientists then set off to explore the north west's soil secrets with help from Greg Chapman and John Lawrie. They looked first at Dubbo's urban salinity and its reactive shrink-swell

clay soils which cause problems for houses built on them. The group then moved to a road cutting on Talbragar River near Brocklehurst to speculate about the origin of some basalt deposits over a sandstone formation, and to a quarry to look at more sandstone deposits overlain by ferruginous hardpan materials. That evening the group wined and dined under the stars at Dubbo Western Plains Zoo and went on a lantern spotting tour, speculating on the

**Above: Is it Pilliga Sandstone or Kalinidi Beds? Richard Greene ponders.**  
**Below: Enjoying dinner at Western Plains Zoo**

lifestyle and habits of the inmates of the enclosures.



Day 2, Friday, put participants' endurance skills to the test as they ventured out to agricultural areas west and north-west of Dubbo. At Stuart Crawford's farm 'Backwater Park' near Narromine, they looked at permanent seed beds treated with gypsum and lime and trickle irrigated using buried T-tape, and Pat Hulme and Dave Duncan explained the background to the Nyngan soil mapping project. At 'Gin Gin Hills' near Trangie, the group inspected outcrops of Cretaceous sediments along the current course of the Macquarie River and then moved to Scott McCalman's 'Jedburg' property near Warren where the farming systems use no-till cropping, controlled traffic and cover crops. Late in the afternoon, just as they were really getting desperate, the group was finally rewarded with two opened soil pits to inspect (and argue about) on 'Magonedine' owned by Ann and Ray Williams. The two soil profiles of cracking clays both had high levels of subsoil salinity. And that night, after travelling on to the Warrumbungles, the weary but still enthusiastic group gathered at the local Skywatch Observatory for a well earned Thai meal and drinks while listening to a lively talk on pasture cropping by local farmer Glenn Middleton. A long session on star gazing from the roof of the observatory wore out even the most enthusiastic amateur astronomers in the audience.





**Soil scientists examine the latest specialised one pass tillage equipment on weakly self-mulching clay soils on a back plain of the Eastern Carrabear soil landscape near Coonamble.**

Saturday began with a working breakfast, the NSW state branch executive holding an OGM. The group then visited Glenn Middleton's 'Lynwood' farm to view pasture cropping and rotational grazing first hand, and saw a demonstration of direct drilling techniques by another farmer, Ambrose Doolan, who also practises pasture cropping. On the return trip to Dubbo the group saw the damage caused to the Pilliga Nature Reserve by the January 2007 fires, and over lunch Greg Chapman discussed soil mapping in the Southern Brigalow Bioregion.

The final stop at Snake Gully catchment near Gollan to study Aeolian sediments coincided with a local dust storm. Ann Smithson from DNR explained the evidence for aeolian sediments being a source of salt that leads to the dryland salinity in central NSW, and led the group on an inspection of some spectacular gully erosion in the catchment. #



**Roy Lawrie (CPSS Stage 3) explains the finer points of the basalt contact zone north of Dubbo.**

## **REUNION OF QLD SOIL CONSERVATION STAFF SEPTEMBER 2007**

A reunion of staff involved in the former DPI, Division of Land Utilisation (and what went before and after it) will be held from Friday 14 September to Sunday 16 September at the Bunya Mountains Conference Centre. The reunion will be for staff involved in soil conservation extension and research, land resource assessment, drafting, engineering and admin/clerical services plus those that have been involved in this work prior to and post DLU. Around 500 names appear on the database. In conjunction with the reunion, ASSSI is planning field tours of the Kingaroy District on the Friday and of Central Darling Downs on the Sunday, as well as a seminar at the Bunya Mountains Centre on the Saturday. These three functions are open to the public. For more details go to the ASSSI website [http://www.asssi.asn.au/asssi/flash/content/news&events/events\\_new.asp](http://www.asssi.asn.au/asssi/flash/content/news&events/events_new.asp) or contact Bruce Carey at [Bruce.Carey@nrw.qld.gov.au](mailto:Bruce.Carey@nrw.qld.gov.au) or Howard Briggs at [viable.options@uqconnect.net](mailto:viable.options@uqconnect.net). #





## YARRA VALLEY FIELD TRIP, ANZAC DAY



### **Richard MacEwan (CPSS Stage 3) reports on the Victorian branch's Anzac Day soils excursion.**

Victorian honorary life member of ASSSI and well known soil consultant Robert Van de Graaff (CPSS Stage 3) ran an excellent excursion on Anzac Day to look at geology, geomorphology, soils, ecology and land use in the Yarra Valley. A mixed band of scientists including native tree expert Leon Costermans, geology surveyor Fons Vandenburg, hydrogeologist John Webb and other distinguished experts gathered at the first site in the metropolitan built up area, the old plateau remnant on Silurian shales and mudstones at Tunstall Park, amongst remnant *Eucalyptus cephalocarpa*. Larry White (CPSS Stage 3) did the honours, augering deeply into the park soil, a texture contrast soil, probably a sodosol showing classic indicators of waterlogging, although it was bone dry. We then proceeded via the dissected slopes in Donvale, *E. cephalocarpa* absent, to the deeply weathered Tertiary basalt in Chirnside Park. At Plantes Hill, a landslip site generated a lot of discussion about housing developments before we proceeded on to more rural parts of the Yarra valley. We visited very old alluvial fans (again with *E. cephalocarpa*), and an alluvial terrace, and old unstable colluvium near Warburton. Robert van de Graaff kindly provided hire of the minibus as well as acting as our chauffeur and tour guide. Thanks Robert for a great trip. #



**Above: Fons Vandenburg leads debate about the nature of colluvial processes at a site near Warburton.**

**Above right: Robert van de Graaff (kneeling) and .....Larry White, showing you are never too old to hang up your auger.**

## VICTORIAN GEOMORPHOLOGY REFERENCE GROUP

### **Richard MacEwan pays tribute to Victoria's geomorphologists.**

Geomorphology and soils gained a high profile at the 'Place and Purpose' conference held in Bendigo on 30-31 May. This showcase of spatial models and visualisation tools for natural resource management was attended by over 200 delegates from all over Australia and an audiovisual proceedings of the event is currently being compiled.

Brien Nelson, an elder from the Jaara Jaara tribe welcomed the delegates to country, and the Victorian Minister for Agriculture, the Honourable Joe Helper, opened the conference and presented certificates of recognition to some of Victoria's 'elder statesmen for soil and land'.

Over the last 12 years a small group of mostly retired scientists have been shepherded by DPI soil scientist David Rees to develop a framework for the geomorphology of Victoria. The framework is hierarchical and aligns with the approach adopted in the Australian Soil Resources Information System (ASRIS). Several members of the GRG are also long standing ASSSI members who have contributed to soil science and society for many years. Contributors to the geomorphological framework include pedologists with specific areas of interest well known to the society such as Jim Rowan (Mallee), John Martin (Wimmera and Riverine Plains), Ken Rowe (north eastern Victoria) and Ian Sargeant (life member) whose contribution includes the Gippsland and Northern Riverine Plains.

More information about the Geomorphology Reference Group and the framework can be found at [http://www.dpi.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform\\_geomorphology](http://www.dpi.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphology). #

**Below: Members of the Victorian Geomorphology Reference Group on the steps of the Capital Theatre. From left, Nathan Robinson (CPSS Stage 2), Bernie Joyce, John Nielsen, Jim Rowan, Ken Rowe, David Rees, Minister for Agriculture Joe Helper, Mark Imhof and John Martin. (Absent: Ian Sargeant, Neville Rosengren, Peter Dahlhaus and Richard MacEwan.)**



## 2007 INTERNATIONAL AGRICHAR INITIATIVE

More than 100 people from 13 countries met at Terrigal NSW from 29 April to 2 May to discuss current research findings and future research directions into agrichar, organic matter that has been charred by pyrolysis and then incorporated into soils. Presentations at the 2007 International Agrichar Initiative conference reported that agrichar in soils reduces nitrous oxide emissions and nutrient leaching but the mechanisms are not yet well understood and require additional targeted research. Work is also needed into the costs of producing and applying the charred materials; currently pyrolysis of biomass feedstocks associated with waste management is the most economically feasible. Key issues include economics of agrichar production systems, monetary value of agronomic benefits, soil biological benefits, impacts on greenhouse gas emission, char classification systems, accreditation processes, and establishment of demonstration projects. Newcastle University, UK, has offered to host the 2008 conference. A new text on biochar science and technology is currently being prepared and will be released at the 2008 conference. Some presentations from the 2007 conference are available at [www.iaiconference.org](http://www.iaiconference.org). #



## SOIL SCIENCE IS IN GREAT SHAPE

Soil science is in great shape and flying high according to Sydney University soil scientists Alex McBratney and Budiman Minasny, and Alfred Hartemink from World Soil Information, in response to Philip Baveye's article in the March edition of Profile.

We seem to have been overcome by doom and gloom. In the March issue of Profile in a reprinted North American article we were assailed by disaster, trouble and crises in soil science. It reminded us of the navel-gazing of the 'Is pedology dead and buried?' discussion a few years ago. Do any of you remember the 2004 SuperSoil Conference? One of the keynote speakers proclaimed that there would probably be only one soil science professor left in Australia in a few years. At the moment this prognostication seems to have gone awry, as soothsaying often does.

As far as we can tell we now have more professors than ever – about ten and likely to grow further. A quick head count of non-retired full-time academic professors in our universities suggests three at the University of Queensland, one at the University of Southern Queensland, one at Southern Cross University, one at Sydney University, one at the University of South Australia, two at Adelaide University, and two at the University of Western Australia. (There are probably more – so an update in Profile would be welcome.)

How well are these professors going? At the moment in Australian universities we have the Research Quality Framework exercise. One extremely important, but by no means the only, measure of quality is citation score. A particularly useful measure of this is the so-called 'h index'. This index was proposed by Hirsch (2005) as an assessment of the research performance of individual scientists. It is based on the number of papers published by the scientist and how often these papers have been cited. Hirsch defined it as: 'a scientist has index h if h of his/her total number of papers have at least h citations each.'

We recently conducted a study on the h index of some 280 soil scientists across the globe (Minasny et al 2007) and found that h index is linearly related to the scientific age of the scientist, with  $t$  representing the number of years since the first published paper. The average relationship between h index and scientific age for soil scientists is  $h = 0.7 t$ . This means that on average 10 years after a soil scientist's first publication, the top 7 papers should have been cited more than 7 times.

So if we compare our Australian professors with the earlier study (Figure 1), we see that by world standards we are doing very well. Most of our professors are above the  $h = 0.7 t$  line, which is the average for soil scientists, and some are really high-flyers, near or above the  $h = t$  line (which characterises a successful scientist in a main discipline such as physics).

There are some differences between sub-disciplines of soil science, on average the h index for soil biologists > chemists > physicists > pedologists. Jock Churchman (also in the March Edition of Profile) showed that publication in soil science by Australian researchers is increasing at a rate of 4% per year.

So, in summary, we have more professors than ever, and they are, for the most part, high flyers, scientifically. Moreover, the two highest flyers are women. So we think Australian soil science is in pretty good shape.

There's no need to be doomy or gloomy – let's get on with it.

### References

Baveye P, Jacobson AR, Allaire SE, Tandarich JP and Bryant RB 2006. Whither goes soil science in the United States and Canada? *Soil Science*, 171: 501-518.

Hirsch JE 2005. An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences of the United States of America*, 102, 16569–16572.

Minasny B, Hartemink AE, McBratney AB 2007. Soil science and the h index. *Scientometrics* (In Press). #

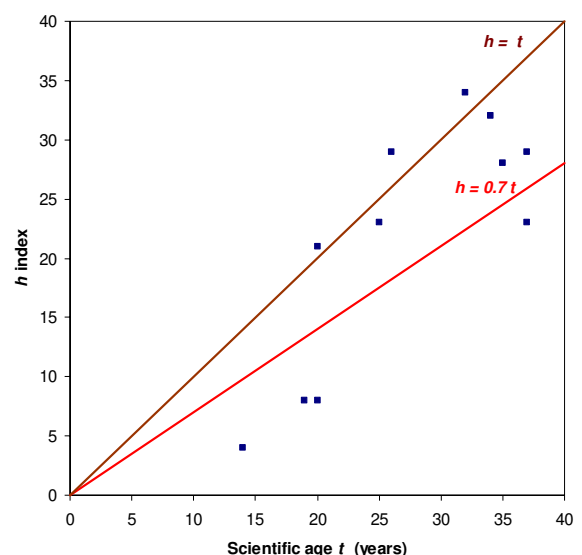


Figure 1.  $h$  index for Australian professors in soil science as a function of their scientific age  $t$ .



## BIOMATS AND SEPTIC FAILURES

**Biomats that form in the soil absorption systems that treat septic tank effluent have far more influence over long-term absorption levels than soil texture or saturated hydraulic conductivity according to recent University of Queensland research.**

ASSSI member Cara Beal was awarded her PhD in April for her work in predicting hydraulic failure in septic tank systems. As part of her research, supervised by Neal Menzies and Gunnar Kirchhof from UQ and Ted Gardner from the Department of Natural Resources and Water, she surveyed 19 councils in south-east Queensland about their management of septic absorption systems (SAS) and the number and type of septic system failures.

'A common SAS failure was surcharging trenches, observed predominantly in soils of low permeability,' Cara said. 'Reported frequency of SAS failures was quite low (usually < 1% per year), but there was a widespread opinion by councils that this was a substantial under-reporting of the real situation.'

As part of her research Cara applied septic tank effluent to repacked sand, ferrosol and vertosol soil columns over 16 months, at equivalent loading rates of 50, 35 and 8 L/m<sup>2</sup>/d, respectively. Biomats 1 to 2 cm thick developed in all soils with corresponding hydraulic resistances of 27 to 39 days.

She found that the biomats reduced a four order of magnitude variation in saturated hydraulic conductivity (Ks) between the soils to a one order of magnitude variation in long-term acceptance rate (LTAR).

'While initial soil Ks is likely to be important in the establishment of the biomat zone in a trench, LTAR is predominantly influenced by the biomat resistance and, to a lesser extent, the unsaturated soil hydraulic conductivity, and not the Ks of a soil', she said.

Cara also found that in times of high effluent flows, most of the effluent soaked into the soil through the upper side walls of the trench above the biomat.

'Modelling and field studies demonstrated that during extreme trench loadings such as extended rainfall events or episodic shock loads, the permeability and extent of the biomat-free upper sidewalls is the ultimate determinant of trench hydraulic failure,' she said.

Cara's modelling also indicated that during peak hydraulic loading in saturated permeable soils, high effluent flow rates above the biomat can occur. These flows are likely to be a pathway for effluent contaminants such as nitrate to enter the groundwater.

The current Australian and New Zealand Standards (1547:2000) do not recommend the use of soil absorption systems in low permeable soils. Cara's research suggests that the use of absorption systems in high permeable soils should not be recommended either, or at least avoided where possible. 'There are plenty of other on-site wastewater systems that are suitable, for these soils,' she said. 'There is a lot of evidence out there reporting plumes in shallow sandy aquifers underlying non-sewered areas that predominantly use septic systems.'

Cara is now working at the Department of Natural Resources and Water in the water cycle sciences group, and can be contacted at 07 3896 9221 or [Cara.Beal@nrw.qld.gov.au](mailto:Cara.Beal@nrw.qld.gov.au). #



**Cara Beal digs up a soil absorption trench in a red ferrosol with help from the only friends she made (not surprisingly) during her field work.**

## SOILS TRAINING

### QLD REFRESHER TRAINING COURSES

Queensland branch is currently organising its 2007 refresher course, and is also collating notes from all refresher courses held since 1985. When completed, these notes will be available electronically. In the meantime, the branch asked Henry Parsons (CPSS Stage 2) to investigate what soils refresher training was needed in Queensland. Below are his findings, first published in the May 2007 edition of the branch's newsletter.

As a senior engineer in a large (international) and growing consultancy I and many others in my field(s) both as a geotechnical engineer and a soil scientist have lamented the lack of graduates from soil-based university courses. In fact other than an agricultural science course at Gatton and a diploma level (UG3) level soils technology/science course at Armidale, there are no genuine soil science degrees being run by universities in this part of the world. In fact most engineering courses have dropped soil (and even geology) units from their syllabuses, the argument over the past 10 years being that high school graduates lack the maths and science basics to handle science units, so 'keep them to the bare minimum'. Unfortunately in our field a sound knowledge of soils is the bare minimum.

So as a result there has been a decided lack of new soil scientists joining the work force and worse, a reduction in the number of people in allied fields with sound soils knowledge. This, combined with the now booming economy (and increased demand on agriculture for many reasons) has meant fewer skilled people available and a higher than ever demand in all areas of soil science. Additionally, people in positions to pass on some of the key soils knowledge (industry and Government and the ASSSI) are busier than ever, so the problem is not being addressed. Private sector companies recognise the need to participate where possible to assist organisations like ASSSI to attempt to rectify the situation.

All acknowledge the need to reintroduce soils courses both at university level and to continue and hopefully improve those offered as one off or refresher courses by ASSSI (and anyone else who will participate).

I have attempted below to summarise just what may be included in future short courses, focusing on repeatable modules of approximately 2 hours. Given the importance of time to most parties involved, a basis of four modules, each of two hours duration (including any questions or assessment), in a day does not seem excessive. By grouping modules either by day of presentation (for multi-day courses), or into afternoon and morning sessions, a degree of flexibility is allowed and this allows otherwise too busy parties to participate. Often private companies are more than happy to pay an attendance fee, but simply can't afford the time to attend courses that are only relevant in part to whatever field the company is in.

If it is felt (or proven) that some modules are more popular than others (and this may be based on the location of presentations such as rural vs urban environments), these modules can be included on two days at different times (ie morning session one day, afternoon the next). Alternatively, if it is decided to run several shorter format courses throughout a year, say three one day courses, then these popular modules can be included in two or more of the presentations.

I have attempted to summarise the basis of possible future courses aimed at combined agricultural and engineering input and attendance. There may appear to be a bias towards engineering, but if one looks closely, the soil science is common in 80% of what appear to be engineering modules. Of course other agricultural modules can be added, or modules renamed.

#### **Refresher training course: Suggested 2 hour modules**

1. Origins of soils and their fate: Basic geology, lithology, transport mechanisms
2. Classifying soils and common descriptive techniques: Clays and other soil types, classification (ASC and Engineering systems: McDonald and USC), soil profile descriptions, practical (texture, colour, moisture etc), what else is needed on a soil log eg location, date, co-ordinates etc
3. Mapping and describing soils and landscapes: Soil distribution / landscapes, use of GIS systems, availability of published data (maps, tests, websites), types of soil assessments (ASS, erosion potential, GQAL, resource studies, salinity), a practical soil mapping exercise
4. Moisture related soil properties of clay, silt, sand and gravel: Moisture state and retention (practical), soil consistency (practical), in situ / inherent strength, compaction of soils, permeability, shrink swell characteristics

5. Hydrogeology and soils: Micro vs macro permeability, the water table / deep drainage, permeability, effluent disposal, catchment hydrogeology / groundwater
6. Chemistry affecting soil behaviour: Soil sodicity and salinity, managing sodic soils and salinity, acid sulfate soils, contamination of soils
7. Soil science for agriculture: nutrient retention and loss, soil biology (biota), impacts of pesticides, maximising crop yield, progressive cropping and soils
8. Erosion and soil conservation: Erosion and sediment control - general, techniques for agriculture, ECS plans for construction and infrastructure, dispersive soils - liming and gypsum, managing mine tailings
9. Use of soils in mining and construction: Managing mine tailings, open cut planning, construction of temporary roads, rehabilitation and planning for it
10. Soils in agriculture for growing crops and construction: Aeration and mechanical impedance, maximising crop yield, retaining nutrients, topsoil retention, acid sulfate soils. #

## **NSW DIGITAL SOIL MAPPING DAY JULY 2007**

The NSW Branch of ASSSI has invited leading digital soil mapping specialists to showcase their work at Parramatta on 9 July. The morning program provides updates on digital elevation models, radiometrics and geophysics, electromagnetics, and advances in soil testing which can be used to enhance the quality of soil mapping. The afternoon talks will outline practical applications of these technologies and participants with experience have the opportunity of doing 5 minute poster presentations. The day counts as seven hours CPSS credit. Places are strictly limited and bookings will be taken on a first come first served basis. For details go to <http://www.asssi.asn.au/downloads/2007DigitalSoilMapping.pdf>. #

## **CONTAMINATED SOIL REMEDIATION JULY 2007**

ASSSI's Victorian branch has organised a symposium on remediation of contaminated land at Monash University on Wednesday 11 July. The symposium is relevant to anyone interested in contaminated soils, their remediation and legislative requirements. Topics to be covered include basic composition and structure of soil components, organic and inorganic contaminants and their interactions in soils, site assessment issues, regulatory considerations for the management of contaminated sites, phytoremediation of contaminated sites, and current and emerging remediation technologies. For more details go to <http://www.asssi.asn.au/downloads/vic/SymposiumContaminatedSoils.pdf>.

## **UWA SOIL COURSE OCTOBER 2007**

The Centre for Land Rehabilitation at the University of Western Australia, Perth, will run a two day workshop on understanding, describing and classifying soil on 29-30 October. The course aims to provide a basic understanding of soil properties through a combination of lectures, laboratory work and field examination of soil profiles for agricultural advisers, engineering & environmental consultants, environmental & rehabilitation officers, regulators & others interested in describing and classifying soils for management research and regulatory purposes. Participants will learn to describe and classify soil profiles to the requirements of The Australian Soil Classification (Isbell 2002), following the procedure prescribed in the Australian Soil and Land Survey Handbooks. Further details at [http://www.clr.uwa.edu.au/events/understanding\\_describing\\_and\\_classifying\\_soil](http://www.clr.uwa.edu.au/events/understanding_describing_and_classifying_soil), or you can contact Anita Krsnik at [clradmin@cyllene.uwa.edu.au](mailto:clradmin@cyllene.uwa.edu.au), telephone (08) 6488 3827, fax (08) 6488 1050. #

## **ACID SULFATE SOILS TRAINING COURSE AVAILABLE**

The Centre for Acid Sulfate Soil Research (CASSR) is seeking expressions of interest in an accredited acid sulfate soil management course to be run in 2007. The four day course is aimed at professionals working with acid sulfate soil materials, in particular people involved in preparation, assessment, implementation and monitoring of acid sulfate soil management plans. Day 1 covers definitions, formation and distribution, relevant legislation and desk top identification. Day 2 covers laboratory and field assessment, and understanding and interpreting results. Day 3 focuses on management, including a review of Local Environment Plan, management options, and monitoring. On Day 4, participants develop a management plan for an acid sulfate soil case study. This management plan is the course assessment. Courses will initially be held in Lismore NSW, but will run in other areas if there is enough interest. Courses can also be tailored to meet specific needs of individual organisations. For more information email the Centre for Acid Sulfate Soil Research at [cassr@scu.edu.au](mailto:cassr@scu.edu.au). #

## SOIL SCIENCE PAPERS

### **AJSR PAPERS 45:3 2007**

#### **Characteristics and genesis of two strongly weathered soils in Samar, Philippines**

Ian A Navarrete, Victor B Asio, Reinhold Jahn and Kiyoshi Tsutsuki

#### **Properties of regolith beneath lateritic bauxite in the Darling Range of south Western Australia**

GA Kew and RJ Gilkes

#### **Phosphorus sorption–desorption by purple soils of China in relation to their properties**

M Li, YL Hou and B Zhu

#### **Growth of Eucalyptus species in a Brown Kandosol, and changes in soil phosphorus fractionation following fertilisation**

Terrence A Short, Peter M Kopittke, David R Mulligan and Neal W Menzies

#### **Scattered native trees and soil patterns in grazing land on the Northern Tablelands of New South Wales, Australia**

Brian R Wilson, Ivor Growns and John Lemon

#### **Long-term trends in fertility of soils under continuous cultivation and cereal cropping in southern Queensland. IX. Simulation of soil carbon and nitrogen pools using CENTURY model**

CR Chilcott, RC Dalal, WJ Parton, JO Carter and AJ King

#### **Persistent improvements in the structure and hydraulic conductivity of a Ferrosol due to liming**

JM Kirkham, BA Rowe and RB Doyle

#### **Rietveld-based mineralogical quantitation of deferrified oxisol clays**

ME Alves, YP Mascarenhas, DH French and CPM Vaz

#### **Field calibration of ThetaProbe (ML2x) and ECHO probe (EC-20) soil water sensors in a Black Vertosol**

JL Foley and E Harris

Abstracts of each paper can be found at <http://www.publish.csiro.au/nid/84/issue/3758.htm>.

### **AJEA SOILS PAPERS 47:6 2007**

#### **Application of composted pig bedding litter on a Vertosol and Sodosol soil. 1. Effect on crop growth and soil water**

RD Armstrong, C Eagle, V Matassa and SD Jarwal

#### **Long-term effects of NPK fertiliser and manure on soil fertility and a sorghum–wheat farming system**

MC Manna, A Swarup, RH Wanjari and HN Ravankar

#### **Impact of heavy metal toxicity on plant growth, symbiosis, seed yield and nitrogen and metal uptake in chickpea**

PA Wani, MS Khan and A Zaidi

Abstracts of each paper can be found at <http://www.publish.csiro.au/nid/72/issue/3749.htm>.

## SOILS NEWSLETTERS

### **New IUSS Bulletin 110 now online**

IUSS Bulletin 110 is now online. It contains a detailed report on the 18th World Congress of Soil Science, IUSS Divisional reports, the favourite soil science books of colleagues in Egypt, S. Korea and Canada, and reports of meetings and reviews of recent soil science books and publications. Download it at <http://www.iuss.org/bull110files/IUSS%20Bulletin%20110.pdf>.

### **Soil history newsletter**

The 14th Newsletter of the Commission on the History, Philosophy and Sociology of Soil Science of the IUSS and the SSSA Council includes articles on the soil history website, an overview of WCSS presentations of soil history in different countries, an article by Rattan Lal on the history of agriculture and the plough, and an article by Benno Warkentin on the former British West Indies. Download it at [http://www.iuss.org/Newsletter\\_Number%2014.pdf](http://www.iuss.org/Newsletter_Number%2014.pdf)



## **Pedometron newsletter**

The 21st Pedometron newsletter compiled by the Commission chair Murray Lark and vice chair Budiman Minasny includes articles on plans and activities of the IUSS Working Group Digital Soil Mapping, early pedometric problems and early pedometricians, nominations for the best paper awards in pedometrics (a good tradition), soil bibliometrics and the h index, variability of SOC, fractals and multifractals (not of your bones), the Pedometrics conference in August 2007 (Germany), reports of conferences and courses, vacancies, and a short profile of a pedometrician and non-pedometrician. Download the newsletter at <http://www.iuss.org/Pedometrons/Pedometron21.pdf>.

## **Soil morphology and micromorphology newsletter**

This newsletter is published twice a year with news, announcements, awards, upcoming meetings, and reports concerning soil morphology or micromorphology. Download the latest issue at <http://www.iuss.org/Newslettermicro.pdf>.

## **New geoscience education newsletter**

The Australian Geoscience Council is publishing an e-newsletter, GeoEdLink, to promote geoscience education. The newsletter will be distributed as widely as possible among teachers, teacher organisations, geoscience organisations, universities and interested individuals. To subscribe to the newsletter type 'subscribe' in the subject line and send an email to [agc\\_edlist@geoed.com.au](mailto:agc_edlist@geoed.com.au) with no words in the body of the email.

## **SOILS DATABASES**

### **World Soil Information Database**

This database holds more than 20,000 reports, books and maps, as well as digital databases on soil and land resources. There is on-line access to over 3500 soil maps; over 110 full-text reports; country-specific searches based on Google maps; and a pull-down menu with soil science links. Access it at <http://library.wur.nl/isric/>.

## **NEW SOILS BOOKS**

### **Australian soil fertility manual 3rd edition Graham Price (ed) CSIRO**

This book provides a working knowledge of agronomic terms, soil-plant relationships and principles of fertiliser use. Details at <http://www.publish.csiro.au/nid/20/pid/5338.htm>.

### **Interpreting soil test results: What do all the numbers mean? Pam Hazelton & Brian Murphy 2007 CSIRO**

This is the second edition of 'What do all the numbers mean', originally written for officers in the NSW Soil conservation Service. The authors have reviewed and revised the text so that it is useful for a wide range of professionals from agriculturists to engineers. Details at <http://www.publish.csiro.au/nid/20/pid/5352.htm>.

### **Managing arsenic in the environment: From soil to human health Ravi Naidu et al (eds) 2006 CSIRO**

This book brings together the current knowledge on arsenic contamination worldwide, reviewing the field, highlighting common themes and pointing to key areas needing future research. Details at <http://www.publish.csiro.au/nid/18/pid/3478.htm>.

### **Soil microbiology, ecology, and biochemistry 3rd Edition Eldor Paul (ed) 2007, Academic Press**

This edition include six new chapters on the latest techniques for studying soil organisms and their processes. The new chapters cover bio-remediation, soil molecular biology, biodiversity, global climate change, basic physiology and ecological interpretations. IUSS members receive 10% discount. Details at [http://www.elsevier.com/wps/find/bookdescription.cws\\_home/708941/description#description](http://www.elsevier.com/wps/find/bookdescription.cws_home/708941/description#description).

### **Dirt: The erosion of civilisations**

#### **David Montgomery 2007 University of California Press**

University of Washington geomorphologist David Montgomery examines how soil erosion led to the fall of civilisations from Mesopotamia to Rome and is now threatening our civilisations because there are very few places left with fertile soil to feed large populations. Details at <http://www.ucpress.edu/books/pages/10599.html>. #

## READ ANY GOOD SOILS BOOKS LATELY?

Queensland branch members Philippa Tolmie and Kristie Watling have suggested that ASSSI members compile a list of soils books (not text books) that are 'good interesting reads'. As starters they suggest the books below and want to hear others' recommendations.

### **Dirt - the ecstatic skin of the earth**

**William Bryant Logan, 2007 Norton UK**

This collection of articles about different facets of soils was first published by Riverhead Books in 1995 and has just been reissued by UK publisher WW Norton. A Guardian review said: 'Logan's prose is full of a passionate wonder for the chemistry and the alchemy of the dirt from which all life is born and to which we will all return.' Find out more at <http://www.wwnorton.co.uk/book.html?id=250>.

### **Out of the earth: Civilisation and the life of the soil**

**Daniel Hillel, 1992 University of California Press.**

This book takes us through thousands of years of settlement, erosion and subsequent destruction of civilisations, lessons we are still learning. Details at <http://www.ucpress.edu/books/pages/2653.html>. Hillel also has a new book out, 'The natural history of the Bible: An environmental exploration of the Hebrew scriptures', published by Columbia University Press earlier this year. Details at <http://www.columbia.edu/cu/cup/catalog/data/023113/0231133626.HTM>.

### **Soil and health online library**

<http://www.soilandhealth.org/01aglibrary/01aglibwelcome.html>

You may also be interested in some of the long out of print soil publications collected on this site. They include titles by Louis Bromfield, Cyril Hopkins and Sir Albert Howard, and 'Topsoil and civilisation' by Tom Dale and Vernon Gill Carter. If you want to read about soil management before World War 2 this is the site for you.

**If you have any favourite soil 'reads' email the details to the editor, Rebecca Lines-Kelly at [rebecca.lines-kelly@dpi.nsw.gov.au](mailto:rebecca.lines-kelly@dpi.nsw.gov.au).**

## SOILS CONFERENCES

### **Healthy Soils symposium**

July 3-4 2007, Twin Waters Qld. <http://www.healthysoils.gov.au/>

### **Contemporary geography for Australia: Institute of Australian Geographers conference**

July 2-6 2007, Melbourne. <http://www.sages.unimelb.edu.au/IAGconference/index.html>.

### **5th Australian controlled traffic farming and precision agriculture conference**

July 16-18 2007, Perth. [www.actfa.net](http://www.actfa.net)

### **Forest soils and ecosystem health, Sunshine Coast**

August 19-23 2007. <http://www.griffith.edu.au/conference/isfs2007/content01.html>.

### **Organic matter stabilisation and destabilisation in soils and sediments, Adelaide**

September 23-26 2007. [www.clw.csiro.au/conferences/organic/](http://www.clw.csiro.au/conferences/organic/).

### **On-site '07: Innovation and technology for on-site systems, UNE Armidale**

September 24-28 2007. Call for abstracts deadline 31 January. <http://www.lanfaxlabs.com.au/onsite07>.

### **Soil environmental and criminal forensics conference**

October 30-November 1 2007. [www.soilforensicsinternational.org](http://www.soilforensicsinternational.org)

### **High resolution digital soil sensing & mapping, Sydney**

February 5-8 2008. [http://www.iuss.org/HRDSM\\_Flyer3.pdf](http://www.iuss.org/HRDSM_Flyer3.pdf).

### **2nd International Salinity Forum: Salinity, water and society, Adelaide**

March-31-April 3 2008. <http://www.internationalsalinityforum.org>.

### **15th ISCO Conference, Budapest**

May 18-23 2008. <http://www.isco2008.com>

### **Eurosoil Congress: Soil, society and environment, Vienna**

August 25-29 2008. [www.ecsss.net](http://www.ecsss.net)

### **Joint NZSSS-ASSSI conference: Soil -The living skin of Planet Earth, Palmerston North NZ**

December 1-5 2008. <http://conferences.massey.ac.nz>

# ASSSI FEDERAL COUNCIL MINUTES JUNE 2007

## Minutes for Federal Council Meeting 234 Friday 8 June 2007 teleconference

### 1. Opening

S Cattle opened the meeting at 15:05.

### 2. Attendance

Stephen Cattle (President), Brendan George (Secretary), Linda Bennison (Executive Officer), Bob White (Vic President – till 16:55), Kristie Watling (Qld President), Rebecca Lines-Kelly (Profile Editor – till 17:15), Ganga Hettiarachachi (SA President – till 16:50), Clayton Butterly (SA), Dan Carter (WA President), Jason Condon (Riverina President), Alice Melland (Treasurer), Richard MacEwan (Vice-President), Brian Murphy (NSW President – 15:20 onwards), Alec McKay NZ President (15:25 – 16:20).

### 3. Apologies

Neal Menzies (19th WCSS Representative), Cam Grant (CPSS Board Representative).

### 4. Minutes of previous Federal Council Meeting 233

Bob White moved, seconded by Rebecca Lines-Kelly, accepted unanimously.

### 5. Business Ex-minutes Federal Council Meeting 233

Business arising from the previous FC meeting were carried out within specific topic areas listed below.

### 6. President's report

#### 6.1 ASSSI website

Steve Cattle outlined some of the significant updates to the ASSSI website. The web designer, Louise Cuschieri, has done a great job in tastefully overhauling and streamlining the site. There are now separate page templates for each branch, each state soil and each honorary life member. We now need to populate these pages starting with the respective state soils. The President requested that the branches nominate a branch person to be the contact and lead person for the state content on the website. Discussion considered the layout and what content should be on the open website and what is for members only. Information including soil resource information and the layout for Honorary Life Members (such as photos of members in action and their personal view of contributions to soil science) was discussed. Further consideration will occur out-of-session but expect articles such as the Minutes and (to be scanned) previous Profiles for the members only section. It is critical to determine what level of information is appropriate for the respective target audiences (of the general public and the members).

#### 6.2 Position papers

The President outlined the idea of developing position papers for identified key issues. To achieve this we need to identify a member who can act as the 'champion' and coordinator of the Frequently Asked

Questions (FAQ) and Position Paper documents. The aim is to leverage off those already working in the nominated areas of soil science. These coordinators should consult widely with other experts who are ASSSI members.

Issues suggested include (i) the impact of climate change on soil and role for soil in adaptation and mitigation; (ii) biological farming and soil amendments; (iii) soil erosion; (iv) soil carbon; (v) soil fertility.

Discussion focussed on the need to clearly identify the primary audience and then design for this and the general public (an important but secondary audience). Can the papers be prepared and available when an issue is raised in the media? FC decided to form a sub-committee for more detailed consideration to report back at the next FC meeting. Committee members are: Alice Melland, Rebecca Lines-Kelly, Kristie Watling and Brian Murphy.

The expected output will be electronic files of FAQs and Position Papers (e.g., pdf) and these will effectively carry the imprimatur of the Society. It is likely that such papers will lead to discussion within ASSSI and achieving a consensus view could be problematic.

#### 6.3 Tasmanian branch

The President has written to individuals in Tasmania to gauge interest regarding the establishment of a separate and independent branch. There is good interest but concern regarding the requirements of branch establishment.

The Victorian branch President offered to assist with the 'paperwork' side of establishment.

Further discussion will occur during coming months including a planning meeting within Tasmania.

### 7. Treasurer's report

The term deposit account is to be closed and consolidated. There has been a delay as paperwork is completed, but transfer is expected within the month.

Online membership processing well with approximately 450 members processed. Figures indicate a significant reduction in the time involved in processing memberships compared to previous (manual) system.

The Finance Review Committee (FRC) met on April 24th after which the 2006 accounts were sent to the Society's auditor. The audit has since been completed. The financial statement for 2006 needs to be tabled at an Annual General Meeting this current calendar year. The financial statement is to be posted on a restricted area on the Society's website so that it is available to members only. Financial statements for 2006 are yet to be received from all branches. Statements will be reviewed by the FRC.

19th World Congress of Soil Sciences funding – received and reviewed the proposed budget from the 19th WCSS Organising Committee. A bank account



has been established and seed funding (in conjunction with the Qld branch) has been deposited. The balance of the Society's bank accounts as at 7/06/07: ASSSI National Cheque A/c \$10 824.00, ASSSI National Business Maximiser \$69 400.00 ASSSI St George Term Deposit \$62 551.56\* 19th WCSS account \$21 745.00

\* This account will be closed and money transferred to the National Business Maximiser Account. The seed funding of \$10 000 for the last National Conference has been repaid by the SA branch. Following review by the Finance Review Committee and endorsement by Federal Council an account was established as 'seed money' for the 19th WCSS (Brisbane 2010). \$21 750 was transferred and the Queensland branch transferred \$10 000. Further funds will be transferred by the Federal Council after the conference account funds become available.

## **8. Executive officers report**

The EO presented a summary of the recently attended Community Information Strategies Australia conference and the relevance to ASSSI. Outlined the need to update the ASSSI database (ie the format and functions not the member list). Currently 543 of 829 members are financial.

## **9. Secretary's Report**

### **9.1 Correspondence In**

Canberra Convention Bureau – 2007 Canberra meeting planners guide.

Letter to ASIC regarding Officer Bearers.

Copyright Agency Ltd – payment of royalties

### **9.2 Correspondence Out**

Nil other than operational email

## **10. Profile Editor's Report**

Minutes to be included in Profile. Awaiting some information and photos for next edition. Profile will be sent out in June.

## **11. CPSS Board Report**

Fifty one members are currently accredited from the first Board Meeting including the first two student affiliate CPSS. The Board decided against a stand at the Healthy Soils Conference in QLD due to the high cost but will be at the On-Site 07 conference at Armidale. Two members of the Board met with representatives of the Environment Institute of Australia and New Zealand to discuss accreditation and opportunities between ASSSI and EIANZ. Further discussion is likely to take place later in the year.

## **12. National Conference Report**

Next conference is a joint one with the NZ Society of Soil Science in Palmerston North, scheduled for Dec 1 – 5 2008 ([www.nzsss.rsnz.org](http://www.nzsss.rsnz.org)). The conference theme is "Soil – the living skin of planet earth". Alec Mackay, the NZSSS President, outlined the current NZ activities and preparations for the conference. NZ Society has about 400 members with

a 'young cohort' identified at the last conference (200 members attended).

Discussed the opportunity to close the gap between the Societies (e.g., access to newsletters etc).

The NZSSS is interested in feedback on the conference content and note the first flyer has been sent out). Discussion focussed on the opportunity of other sessions relating to applications of soil science (e.g., soil science and consulting, soil science "Master Classes", soil science and policy-making). These are also useful to claim accreditation hours. There will be a pre-conference and post-conference trip as well as four intra-conference trips aiming to give a variety of options.

## **13. 19th World Congress of Soil Sciences**

N Menzies unavailable to report (travelling).

Next meeting of the Organising Committee is set for June 19, 2007. Inter-congress meeting is due in July 2008 in Brisbane; ASSSI (Qld Branch) organises the meeting and the IUSS delegates are self-funded.

There is a four day IUSS meeting and one day symposium and one field day. IUSS need an outline by August 2007 with Kristie Watling to respond on behalf of the Society.

## **14. General business**

### **14.1 Award committee membership**

Membership for the J.A. Prescott Medal, J.K. Taylor, ASSSI Publication Medal, C.G. Stephens Award and Publication Review Committees was discussed.

### **14.2 Corporate membership**

Discussion was carried over till the next Federal Council meeting recognising that there is a need to understand what are the benefits to Society, and also what the organisations see as the benefits. A short discussion paper will be produced for Profile.

### **14.3 ASSSI membership leave**

Outline of issue will be developed and circulated prior to the next Federal Council meeting. Issue to be considered in more detail at the next meeting.

The FC recognises this as an important issue.

### **14.4 IUSS nominations**

Nominations for the four IUSS Divisional Second Vice-Chairs have been received by the Federal Council for consideration. These positions are filled by the National Society hosting the next IUSS World Congress (i.e. ASSSI). Discussion was carried over and will be completed out of session.

### **14.5 Membership nominations**

There were 28 new nominations to be considered by Federal Council and approved for membership. The President moved that members are accepted subject to final approval; Brian Murphy seconded - passed. Diane Allen, Natasha Banning, David Davenport, Jessica Drake, Richard Hayes, Richard Haynes, Warren Hicks, Georgina Holbeche, Brian Jenkins, Dave Little, Yamin Ma, Joseph McDermott, Nathan Odgers, Jyoteshna Owens, Shahab Pathan, Pamela Pittaway, James Quilty, Kai Rebenburg, Terry Rose, Cassandra Schefe, Mark Silburn, Chris Smith,

Wannipa Soda, Helen Squires, Elissa Strong, Christopher Watson, Oliva White, Nathan Zurig,

#### **14.6 Accounts**

Accepted by Federal Council and approved for payment.

#### **14.7 Other**

ACLEP National statement could be of interest to the Society – K Watling to obtain more information prior to next meeting.

Healthy Soils Symposium is scheduled for the Sunshine Coast in July. R MacEwan attending and will report back.

#### **15. Close**

The meeting was closed at 17:40 local time.

The next meeting of Federal Council will be a teleconference meeting on September 7th, 2007.

## **ASSSI FEDERAL COUNCIL MINUTES MARCH 2007**

### **Minutes for Federal Council Meeting 233 Friday 9 March 2007 teleconference**

#### **1. Opening: S Cattle opened the meeting at 3:00 pm.**

**Attendance:** Neal Menzies (Past-President), Stephen Cattle (President), Brendan George (Secretary), Linda Bennison (Executive Officer), Bob White (VIC President), Brian Murphy (NSW President) [till 4:00 pm], Kristie Watling (QLD President), Rebecca Lines-Kelly (Profile Editor), Ganga Hettiarachachi (SA President) & Mark Thomas (SA), Dan Carter (WA President), Jason Condon (Riverina President), Alice Melland (Treasurer), Richard MacEwan (Vice-President).

#### **2. Apologies**

Graham Price (CPSS Board Representative), Cameron Grant (Chair, Organising Committee, 2006 Conference)

#### **3. Minutes of previous Federal Council meeting 232**

Brian Murphy moved, seconded by K. Watling, accepted unanimously.

#### **4. Business Ex-minutes Federal Council meeting 232**

**Item 4.1** N Menzies to clarify the financial support from the IUSS and the obligations arising from these contributions. NM has written to members who attended the 2006 IUSS Congress and has received comments on the Congress observation which will be passed on to the 2010 IUSS Congress Organising Committee. There has been much feedback and other countries wanting more interaction. Concern over the cost of the congress, but the high cost is a function of the process and will not be significantly lower. Completed

**Item 4.2** L Bennison has circulated an un-financial member list to the Branches. It was resolved that the current amnesty on the payment of arrears from un-financial members will be extended to the 31<sup>st</sup> March 2007. Branch Presidents to review list of un-financial members with a view to follow up individuals before termination of memberships. S Cattle to prepare a cover letter regarding termination of membership to un-financial members which will accompany appropriate subscription notices.

**Item 4.3** The Publications Committee for 2007 will include N Menzies (Chair) and G Rayment (Qld Branch). Branch Presidents to finalise additional nominations to the Publications Review Committee. Awaiting for nomination; Branch Presidents to consider at state level and request for members to nominate. Completed

**Item 4.4** S Raine to circulate the list of Committee members to Branch Presidents. B George to update and circulate.

**Item 4.5** S Cattle and L Bennison to initiate discussions regarding a more explicit working relationship with the NZSSS and follow up options. Cattle has made initial (but unsuccessful contact). We need a closer relationship before the next joint conference. Follow up to occur during April. Current president is Alec Mackay from AgResearch at Palmerston North.

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

##### **5.1 ASSSI Executive Officer position**

S Cattle reported on the need to formalise the process for the engagement of the Executive Officer. As the Society moves into a more corporate image and behaves in a more corporate manner, this issue is becoming increasingly important. The President outlined the following process: The ASSSI Federal President seeks the counsel of the Federal Executive (Vice-President, Treasurer, Secretary) to assess the performance of the existing EO and to assess the existing Agreement (contract) between the EO and the Society. The remuneration of EOs of similarly-sized not-for-profit-organisations is compared to that offered by ASSSI. The Executive attempts to align the EO remuneration package offered by ASSSI to the "industry standard", depending on the profitability of the Society over the preceding two years. The President negotiates the new two (2)-year Agreement of Services with the EO, using the remuneration package agreed to by the Executive. Each January, the Executive reviews the EO's remuneration in light of the preceding year's financial report. Discussion was conducted regarding the role of the EO and the operation of the CPSS. Recognition of the balance between competing roles and activities was recognized with the President to finalise an agreement for consideration in the next month. Further contract negotiations will be completed three months prior to expiry in the future:

## 5.2 Position papers of the society

S Cattle outlined discussion held with Julian Cribb (in Adelaide at the conference) regarding the need to communicate soil science issues to the media, policy makers/politicians and the general public. One option is to consider the development of position papers to address specific issues relevant to the Society and released to the media only when a related issue/event/crisis/policy/announcement occurs, so as to gain maximum impact. J Cribb advised against the 'scattergun approach' to releasing position papers and against the direct lobbying of relevant ministers. S Cattle proposed "that the Society fund several small gatherings of eminent soil scientists (who are also members of the Society) from around the country to formulate a handful of position papers to be later released under the auspices of ASSSI. Discussion ranged regarding: What are the issues (eg soil carbon)? Who is the target? How do we pay for it? Would the paper seek consensus? A paper expresses the views of society but heterogeneity of opinion is welcome (even necessary). Is this an opportunity to engage younger members of the Society? Several issues are unresolved and will be further discussed before the next Federal Meeting.

## 5.3 Tasmanian Branch of the Society.

S Cattle noted that there are currently 16 ASSSI members domiciled in Tasmania and that this represents a critical mass capable of hosting a future national conference. He raised the issue for discussion regarding the opportunity to encourage a Tasmanian Branch to form. The Victorian Branch is prepared to add support.

**Action: B H George to check the paperwork requirements of the constitution.**

**Action: S Cattle to send a letter to Tasmanian members and request that these members put forward a proposal.**

**Action: B White to write and encourage with preparation of a business plan.**

## 6. Treasurer's report

A Melland noted that the society remained in a strong financial position last year and Federal Council approved expenditure in 2006 of around \$26,000 which reduced the surplus. The majority of the funds were spent on congress and conference support in line with the society objectives of promoting the field of soil science and furthering the expertise of members.

The St George account will be closed and the money transferred to the Business Maximiser account.

ACT branch account was closed with money transferred to NSW and Federal branches (thanks expressed to Mac Kirby).

Short-term loss for 2006 but this will become positive when all fees returned (SA to clarify).

2006 Branch payments be approved for payment as circulated (Approved).

The balance of the Society's bank accounts as at 7/03/07.

ASSSI National Cheque Account \$14 185.72

ASSSI National Business Maximiser \$75 155.02

ASSSI St George Term Deposit \$62 551.56\*

## 7. Executive Officers Report

7.1 The major activity has been the introduction of online membership enrolment, ASSSI corporate clothing and subscriptions.

7.2 Council agreed that the website should reflect the new colour background shading and imagery as presented in the tabled printed material.

7.3 EO advised that Microsoft has a donor software program which ASSSI qualified for and is in need of. Council voted that the society does not purchase hardware and that the EO loads ASSSI software as required onto work computers.

7.4 Offer to medal holders tabled to next meeting.

## 8. Secretary's Report

Correspondence In: Nil other than operational email

Correspondence Out: Nil other than operational email

## 9. Profile Editor's Report

Previous *Profile* was well received.

Under pressure to meet the deadlines for next *Profile*.

## 10. CPSS Board Report

CPSS student affiliation in place. 14 Expressions of Interest to join scheme. Board wants to target leading scientists to help increase the visibility of the scheme. Need champions within the University system to encourage greater participation and recognition of value. First round of diaries to check in the following quarter.

## 11. National Conference Report

Next conference is a joint one with the NZ Soil Science Society in Palmerston North scheduled for Dec 1 – 5 2008. The conference theme is Soil – the living skin of planet earth. Basic flyer with information is available from the NZSSS Website ([www.nzsss.rsnz.org](http://www.nzsss.rsnz.org)).

**Action: S Cattle will contact president to see what is occurring and to see if a member of the ASSSI can sit on the organising committee to ensure continued feedback and communication.**

## 12. World congress

N Menzies reported on the organisation of the upcoming (2010) World Soil Congress and will be seeking more detailed feedback and input from the FC as the organisation begins in earnest. A local organising committee has been established with the following membership: Chairs Mike Grundy & Steven Raine, IUSS President Roger Swift, IUSS Vice President Neil Menzies, NZSSS Representative Ron McLaren, Carillon Representatives Ashley Gordon & Liz Cuffe, Budget and Finance chairs Graham Price & Angus McElnea, Communication/marketing Kylie Hay, Sponsorship & fundraising Clive Bell, Mid-conference tours Andrew Biggs, Pre/post conference tours Leigh Sullivan, Social and ancillary events Kristie Watling, Program Cameron Grant, Secretariat S Cattle noted the relatively large registration costs compared to the ASSSI conference. Funding as a



float is required and a more detailed proposal will be sent to the ASSSI executive and reviewed by the Finance Review Committee. The need for a major sponsor was further discussed, noting that the World Congress is a wonderful opportunity to raise interest in soil. Inter-IUSS congress meeting to assist with development will be hosted in Queensland in July 2008 (by ASSSI with Qld branch carrying out activities).

### **13. General business**

#### **13.1 Membership nominations**

The following memberships were considered by Federal Council and approved for membership: David Bayel, Kate Hughes, Nicole Hughes, Neil McGinn, Fernando Rodriguez, Claire Russell, Paul Shand, Michael Short and Timothy Weaver. Lapsed members renewing are Darren Grant (VIC) and Carolyn Alford (nee King) (NSW).

Note was made that some nominating members were not financial and had been asked to forward their subscription dues. In the event that this payment was not received in time several Council members

provided support as nominators. These names are recorded on the membership applications.

#### **13.2 Members use of acronyms**

After discussion the President moved that FC not endorse that members use acronym MASSSI and prefer that people who think this is important move to accreditation and utilisation of CPSS – Agreed.

#### **13.3 IUSS elections 2007-08**

The FC seeks nominees from our membership for the IUSS election of Division and Commission chairs before June 30. Can state presidents please seek suitable nominations.

#### **13.4 Other**

R Lines-Kelly noted the need update of executive contacts for *Profile*.

Science teachers association in Qld want to increase soil input and also what resources are available for schools (e.g., CDs and websites for Primary and Secondary students.)

### **14. Close**

The meeting was closed at 5:25 pm local time. The next meeting of Federal Council will be a teleconference meeting on 8 June 2007.

## **SOIL ART BY RICHARD MACEWAN**

The photo is from a colluvial site in the Yarra Valley that we visited with Robert van de Graaff near Warburton on Anzac Day. As you can see, highly mobile material, steep slope, deep colluvium, possibly a red dermosol.



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