



The link between soils and water quality was the theme for the NSW Branch's field trip last November. Yerranderie is less than 100km from the Sydney CBD, but is isolated from the city by Lake Burragorang and its surrounding catchment area. As the main source of Sydney's drinking water, the catchment area is largely out-of-bounds, and public access to Yerranderie is normally from the west through Oberon.



The huge rockfall in sandstone cliff line overlooking the drowned Burragorang valley. The top of the cliff is 400m above the water level in the reservoir.

**PROFILE IS  
AVAILABLE ON THE  
ASSSI WEBSITE**

Profile

## AUSTRALIAN SOCIETY OF SOIL SCIENCE INC.

ARBN 080 783 106

ABN 96 080 783 106

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

### Objectives

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

### Specific Objectives

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

### Membership

For all Membership and CPSS application and renewals, subscription, queries and address changes contact Linda Bennison, ASSSI executive officer on telephone 03 5974 1758, facimile 03 5974 1141 or email [asssi@gsv.com.au](mailto:asssi@gsv.com.au)

### ASSSI Website

<http://asssi.asn.au>

### PROFILE

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### 2002 Profile Deadlines

15 March, 15 June, 15 September, 15 December

### Advertisements

Advertisements relevant to some aspect of soil science are welcome. Charges are full page \$220, half page \$110, quarter page \$55 (GST inclusive). Information about ASSSI conferences, courses, scholarships etc is published free.

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All contributions are welcome, text preferably by email. Please send to the editor, Rachel Poulter, Soil Science and Plant Nutrition, The University of Western Australia, Nedlands, WA 6907.

fax 08 9380 1050, email [organic@agric.uwa.edu.au](mailto:organic@agric.uwa.edu.au)



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## *From the President - Lyn Abbott*

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Recently I visited ASSSI members in NSW (Parramatta), Canberra and Riverina (Wagga Wagga, Yanco and Griffith). It was informative to catch up with members from these Branches and I was able to discuss issues such as CPSS and a proposal for future elections of the ASSSI Federal Executive.

Now that Branch Presidents actively participate on Federal Council by teleconference rather than by proxy, views of Branches can be expressed more timely and effectively. I would like this to continued in Profile so that more information is available for discussion of topical issues and new initiatives.

I believe it is now also timely to review the manner in which the Federal Executive of ASSSI is elected. For many years there has been an unofficial agreement to rotate the Federal Executive around Branches (although this was not constitutional). With new technologies it is now not necessary to have members of Federal Executive located at one place. Indeed, the use of teleconferencing and email means that communication is rapid and effective and totally independent of location. It is my opinion that Branches provide a very important role in ASSSI by concentrating attention to local issues and by facilitating organization of local events (including student activities) in addition to their participation at a national level. ASSSI activities are also possible in areas where Branches are not formed (eg Tasmania). It may be necessary to review the dissemination of funds to allow ASSSI membership fees to be used to the advantage of members in areas where Branches are not formed or are not currently active.

At the next meeting of Federal Council, amendments to By-Laws are being considered with the objective of changing the process for election of Federal Executive. Federal Council would no longer rotate around Branches (which is not constitutional) and a term of 3 years for the Council is proposed. The suggested changes are listed later in this edition of Profile. They have already been circulated to members of Federal Council and will be discussed at the Federal Council meeting on Friday 31st May.

I would also like to draw your attention to the ASSSI Strategic Plan which has been adopted as a working document against which activities of ASSSI - at Federal and Branch level - need to be matched. I have nominated 2002 as the 'year of action' for ASSSI to focus on its objectives. Although we have excellent objectives as a Society, we are doing little to achieve some of them. Unless we see everything we do within an overarching framework, it is difficult to identify objectives that are not being addressed. All Branches will now report to ASSSI Federal Council on their activities in the context of this strategic plan. The plan is not static and will be reviewed or course, but for the time being it provides a template for advancing the important business of ASSSI.

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## *From the Newsletter Editor - Rachel Poulter*

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Thank you for your contributions to this edition of Profile. We require additional information from individuals and Branches for the June Edition (deadline for submissions is **15th June 2002**). What is happening in your part of Australia? Have you given a seminar? Have you submitted a thesis? Have you participated in important discussions about soil science? Please send us a summary or abstract. The purpose of Profile is to disseminate information that would not otherwise be available to most members (eg through scientific publications). We only received one response to our request for thesis abstracts in the last Profile. We hope to double or triple that for the June edition.

Please submit all information for Profile to:

**[organic@agric.uwa.edu.au](mailto:organic@agric.uwa.edu.au)**

Some members requested a change in format of Profile to make it easier to read on a computer. Thanks to Bryony Abbott for re-formatting this edition of Profile in response to that request.



## ASSSI Awards

Congratulations to Dr Ken Lee for his award of Life Membership of ASSSI.

Congratulations to Dr Brent Clothier for winning the Prescott Medal for 2001.

Congratulations to Mr Gary Sheridan who has won the ASSSI Publication Medal for 2001.

Sheridan G, So HB, Loch RJ, Pocknee C, Walker CM (2000). Using laboratory scale rill and interill erodibility measurements for the prediction of hillslope scale erosion on rehabilitated coal mine soils and overburdens. **Australian Journal of Soil Research** 38, 285-299.

## Previous Winners of ASSSI Medals



### JA Prescott Medal

C.G. Stephens (1972)  
T.J. Marshall (1974)  
J.P. Quirk (1975)  
R.G. Downes (1976)  
K. Norrish (1977)  
J.K. Taylor (1978)  
N. Collis-George (1979)  
R. Brewer (1980)  
B.E. Butler (1981)  
C.H. Williams (1982)  
G.D. Hubble (1983)  
C.G. Hallsworth (1984)  
J.R. Freney (1985)  
K. Lee (1986)  
M. Raupach (1987)  
P.H. Walker (1988)  
O.T. Denmead (1989)  
K.G. Tiller (1990)  
R. Gilkes (1991)  
W.W. Emerson (1992)  
J.N. Ladd (1993)  
R. French (1994)  
G. Aylmore (1995)  
K. Northcote (1997)  
R.W. Fitzpatrick (1998)

A. Rovira (1999)

M.J. Mulcahy (2000)  
B.E. Clothier (2001)

### JK Talyor Gold Medal

R.J. Coventry (1984)  
N.J. Barrow (1988)  
L.F. Molloy (1992)  
P.M. Chalk / C.J. Smith (1996)  
O.T. Denmead (1998)

### ASSSI Publication Medal

Sidhu (1979)  
J. Knight (1980)  
W.H. Utomo (1981)  
D.J. Chittleborough (1982)  
C. Chartres (1983)  
R.J. Loch (1984)  
Anand (1986)  
Hainsworth (1987)  
N. Menzies (1989)  
S. Boucher (1991)  
H.J. Ni (1995)  
K. Greenwood (1996)  
G. Sheridan (2001)

Nominations for ASSSI  
Medals for 2002

Send nominations NOW  
for

**JK Taylor Medal  
Prescott Medal  
ASSSI Publications  
Medal**

to Richard Harper

[richardh@calm.wa.gov.au](mailto:richardh@calm.wa.gov.au)

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## PROPOSED CHANGES TO BY-LAWS

By-law 1 Delete words "Central Office" and replace with the words "Executive Officer".  
Delete word "one-third" and replace with the word "one-half".

*ASSSI does not have a "Central Office" any more, but rather an Executive Officer that operates as a central office. There are other references to the central office in the Constitution but these can be changed as appropriate later.*

By-law 3 Delete words "Central Office" and replace with the words "Executive Officer".  
*See comment under By-law 1.*

By-law 9 Delete word "two" and replace with the word "three".

It is recommended that Council hold office for three years. This has a number of benefits: *Reduced costs for calling of nominations and postal voting every three years instead of every two AND The Council would operate more efficiently with the first year consolidating, the second year and third year being action years.*

By-law 10 Delete title and replace with new title "Vacancy in Office of President"

Delete sub-section (a)

Delete sub-section (b) and replace with:

"(a) If for any reason, the Office of the President becomes vacant during the first year of any two year period, a new ballot for the position of President will be held in accordance with the general procedure prescribed in the By-law governing the election of offices of the Council, all dates being equally amended as required."

Delete word (c) and replace with (b)

Delete Sub-section (d)

By-law 11 Delete title and replace with new title "Election to Office of the Council"

Sub-section (a) - delete words "Vice-President" and replace with the words

" President, Vice-President, Honorary Secretary, Honorary Treasurer and Honorary Editor".

Sub-section (a) - delete the words "the office of Vice-President" and replace with the words "these offices".

Sub-section (b) - after the word "nomination" add the words "for an elected position".

Sub-section (b) - delete words "as Vice-President" and replace with the words "in that elected position".

Sub-section (b) - delete the words "a duly elected Vice-President" and replace with the words " the duly elected office".

Sub-section (d) - delete the word "November" and replace with the word "August".

Sub-section (d) - delete the words "following fifteenth day of December" and replace with the words "fifteenth day of September".

Sub-section (f) - delete the word "December" and replace with the word "October".

Sub-section (f) - delete the word "Vice-President" and replace with the word "office".

Sub-section (g) - delete the words "of a Vice-President" and replace with the words "to an office".

New Sub-section:

"(h) The President, the Vice-President, the Honorary Secretary, the Honorary Treasurer and the Honorary Editor shall be financial members of the Society."

*These changes allow for election of all Executive positions (including the Editor) and for the elections to be undertaken during August/September with the result known no later than 15 October in any election year.*

By-law 12 Delete title and replace with new title "Vacancy in an Office other than President"

Sub-section (a) - delete the words "the office of Vice-President" and replace with the words "an office".

Sub-section (a) - delete second reference to "Vice-President" and replace with the word " office".

Sub-section (b) - delete the words "a Vice-President" and replace with the words "an office".

Sub-section (b) - delete the word "advanced" and replaced with the words "amended as required".

Delete Sub-section (c)

*As all Executive positions will be elected, this By-law needs to be amended to cover all elected positions (except the President covered in By-law 10) not as it currently states for the Vice-President.*

Continued on Page 9

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# ASSSI Strategic Plan

2002 -2006

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

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

**What is ASSSI?** The Australian Society of Soil Science Incorporated (ASSSI) was founded in 1955 to work towards the advancement of soil science in the professional, academic and technical fields. It currently comprises a Federal Council and seven Branches (Qld, NSW, Riverina, ACT, Vic, SA and WA). Liability of members is limited. Federal Council consists of: Federal Executive: President, Vice President, Secretary, Treasurer Branch Presidents, Newsletter Editor. An Executive Officer is employed by ASSSI to be responsible for dealing with membership issues, promotional material and administration of CPSS.

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

## What does ASSSI do?

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

## Enduring Outputs

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

*Continued on Page 7*

**Areas of strategic initiatives related to 6 key  
ASSSI objectives**

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

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

***2. To enhance expertise in soil science***

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

***3. To recognise excellence in soil science***

- Medals for excellence
- Student prizes and travel awards

***4. To provide a forum for discussion***

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

***5. To increase government and community awareness of soil science***

- Media updates
- Workshops

**Notes from the Victorian Branch (Tony Weatherly President):**

The high plains tour was a success with 12 participants spending 3 nights away examining the soils of the Bogong High plains (lead by Ken Rowe and Heather Anderson), the soils of the Tambo valley (with David Rees) and the Bairnsdale area (with Ian Sargeant). Peter McIntosh (Forest Protection Board, Tasmania) also attended. The biennial general meeting of the Victorian branch will be held on 21 June. A new committee will be elected with Aravind Surapaneni the President elect.

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# **SOIL MANAGEMENT IN AN ESTABLISHED IRRIGATED VINEYARD, ON A HARD RED DUPLEX SOIL**

**Abstract of MSc Thesis June 2001**

Ashley D Wheaton

Department of Agricultural Sciences, School of Life Sciences,  
Faculty of Science, Technology and Engineering  
La Trobe University, Victoria

Hard red duplex soils (HRDS) cannot sustain economically productive vineyards without careful management. An experiment was conducted at Rosbercon Vineyard, Picola from 1995 to 1998 in a vineyard block of Chardonnay on Ramsey rootstock planted in 1972. The hypotheses tested were: a) transient waterlogging decreases root growth and grapevine performance, and b) hardening of soil decreases root growth and grapevine performance. Three soil managements were compared over 3 years, testing for improved soil physical and chemical properties, root growth and grapevine performance. Microjets irrigated the vine-line soil where randomised treatments of grown ryegrass (rye) (Autumn/Winter) or wheat straw (ws) (15 t/ha year round), gypsum application (+gyp or -gyp) (12 t/ha) and slow (slow) (5 mm/h) or fast wetting (fast) (15 mm/h) were applied. Rye maintained soil macropores (> 30 mm diameter) 33 months after tillage, kept the soil soft (< 1 MPa) to a greater depth and had higher concentrations of grapevine roots than ws. +Gyp maintained the soil soft to a greater depth and improved water penetration to 250 mm depth compared with that of -gyp. Soil electrical conductivity (EC) to 500 mm depth was increased by at least 36 %, approximately 15 months after application of 12 t/ha gypsum, and the effect was maintained at least 40 months after application. The increase in EC was associated with a decrease in spontaneous dispersion to 500 mm depth. The concentration of water-soluble plus exchangeable  $\text{Ca}^{2+}$  at 0-100 mm depth, however, was decreased in ws compared with that of rye. This decrease may have been due to the formation of  $\text{Ca}^{2+}$ -organic complexes. Forty months after the application of gypsum, the exchangeable sodium percentage (ESP) was decreased by at least 26 % at a depth of at least 500 mm.

Grape yield increased markedly from year 1 (9.3 t/ha) to year 2 (34.0 t/ha), however, treatment differences in yield were not significant. Yield was stabilised in year 3 (16.7 t/ha), with no significant difference between treatments, however, the yield was greater than the commercial Chardonnay crop (5.3 t/ha) at Rosbercon Vineyard. The commercial Chardonnay crop in year 3 did receive 75 % of the water applied to the experiment (4.5 ML/ha) due to water restrictions. Vegetative growth of grapevines in the experiment improved in year 2. Grapevines of rye treatments had significantly greater pruning weights (0.93 kg) than did those of ws treatments (0.81 kg). This was consistent with improved soil properties and root growth in these treatments. There were no significant differences for pruning weight between treatments in year 3, with the average weight across the experimental plot at 0.81 kg. Grapevines were in balance (yield to pruning weight ratio) in years 1 (9.0) and 3 (12.1), however, unbalanced in year 2 (23.5) due to a large increase in yields relative to pruning weights. There was no change to soil physical and chemical properties, root growth and grapevine performance in response to fast or slow treatments.

Vineyards with hard-setting and crusting surface soil can maintain soil physical and chemical properties in a condition that encourages root growth, if gypsum and a covercrop such as ryegrass are included in the management of the vine-line soil. Together with timely and appropriate volumes of irrigation, the porous surface soil will provide adequate aeration for growing roots. Thus, providing grapevines with the opportunity to achieve potential grape yield, vegetative growth and grape quality.

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## Items from SA-Branch for Federal Council to consider

- 1. CPSS review:** Rob Bramley argued that proposed Review should be delayed until 2003 to allow sufficient time for CPSS members to evaluate scheme (Oct 2002 considered too early for this). Bramley suggested Review should be targeted at two groups of CPSS members: those who remained with scheme from its inception, and new members + those who re-joined after quitting. Criteria for evaluation should include things such as i) do CPSS members have greater voice in nationally important matters that affect soils? ii) Is CPSS scheme well marketed? and iii) is certification process run smoothly/tightly – at least more so than before?
- 2. ASSSI Awards:** Mike McLaughlin suggested that Profile publish all previous winners of Awards at least once per year when nominations called for (perhaps names could be listed on Web site and referred to each year at call for nominations).
- 3. Bequests to ASSSI:** Cliff Hignett presented Council with a draft *Bequest Request* for Society to use in establishing various Named Awards to encourage soil science in Australia. The draft needs to be given to a professional marketer so it can be put into appropriate form for sending out to potential donors.

## AUSTRALIA'S BID FOR 19<sup>th</sup> IUSS World Congress in Brisbane (2010) Steering Committee

Katherine Snars [Secretary: ksnars@agric.uwa.edu.au]

Bob Gilkes [Chair]

Neal Menzies [Qld Branch ASSSI nominee]

Leigh Sullivan [NSW Branch ASSSI nominee]

Ron McLaren [NZSSS nominee]

Clive Bell [CMLR by invitation]

Colin Chartres [CSIRO Canberra by invitation]

Lyn Abbott [Hon. Pres. ASSSI for information]

Alex McBratney [NSW Branch ASSSI nominee]

Mike McLaughlin [SA Branch ASSSI nominee]

Roger Swift [Univ. of Queensland by invitation]

Robert White [Univ. of Melbourne by invitation]

Phil Mulvey [NSW by invitation]

Jenny Fegent [Editor AJSR for information]

*Continued from Page 5*

By-laws 13 and 14

Delete By-laws 13 and 14

By-law 15

Delete the number "15" and replace with the number "13"

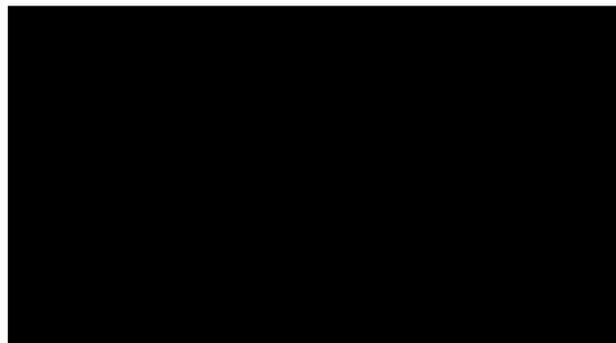
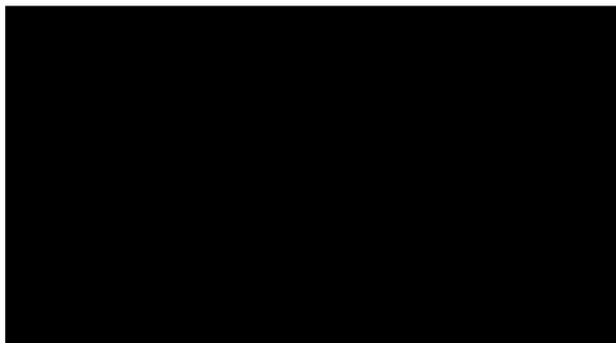
By-law 16

Delete the number "16" and replace with the number "14"

Delete the words "Honorary Secretary, Honorary Treasurer and a financial member" and replace with the words "Honorary Treasurer and two financial members"

By-laws 17 to 32

Amend each By-law number by decreasing by two (ie. these By-laws are renumbered 15 to 30).



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## NSW Branch Field Trip to Yerranderie

### Roy Lawrie, NSW Agriculture

Members from inland NSW travelled this way, to meet up with others from Sydney and Wollongong who came via Camden, accompanied by Sydney Catchment Area staff along a route normally closed to the public. Both groups were able to inspect contrasting soils near the abandoned Jooriland homestead just upstream of the Lake. Linda Henderson of the Department of Land and Water Conservation has been working on a soil survey of the catchment area. Linda showed participants a deep loamy soil developed on the young alluvium of the Wollondilly River, and an interesting red earthy soil found on the Silurian porphyry that sits beneath the sedimentary rocks of the Sydney Basin. Erosion and slope stability are major issues for catchment management particularly in the steep, dry woodland area of the lower Wollondilly where there is virtually no underlying grass or shrub layer to protect the soil surface.

Peter Bacon and Judy Rawling explained how regrowth of vegetation was being encouraged on disturbed ground around the headworks of abandoned underground coal mines scattered through the rugged eastern catchment. Longwall mining techniques, which induce landscape subsidence, were a common practice. A very long 100m high scar in the near vertical sandstone cliff face has recently been left by an enormous rock fall above old underground workings overlooking the Lake. Retreat of the escarpment in earlier times has left huge blocks of sandstone scattered on the steep slope below the cliff line, some over 10m in diameter.

The mines at Yerranderie mainly produced silver, continuing up until the 1950's. The town was largely abandoned by 1959, cut off by the rising waters of Lake Burragorang. The tailings dumps covering the shafts are still completely bare of vegetation. The sulfidic minerals in the dumps are slowly oxidising and producing highly acidic leachate (pH 3) containing various heavy metals in soluble form.

Drops of Raupach pH indicator squirted on the surface of the tailings produces a rainbow of colours.



Participants on the verandah of the former Yerranderie Post Office.



This slab hut was built as a boarding house for the miners at Yerranderie.



Linda Henderson, DLWC, explaining the features of the profile formed on the terrace of the Wollondilly river.

*Photo credits: C.E. Lowan Turton, NSW Agriculture Linda Henderson, DLWC*



The mine tailings still bare of vegetation after more than 50 years, are eroding badly. Ground water leaching through the heap is monitored at the bore standpipe in the foreground.

Within a square metre, the pH varied over a range of about 4 units, indicating that oxidation of the sulfidic minerals is very uneven, and still has a long way to go. Mark Stuckey took participants around the old mining area, where leachate is being monitored and runoff controlled as part of an interim management plan. Stratified bands of eroded sediment containing jarosite were exposed in the dried out beds of derelict sedimentation ponds down slope of the tailings dumps. Members working in coastal areas more familiar with acid sulfate soils were able to compare the different site conditions, and discuss possible management strategies with their colleagues from inland areas.

Most participants stayed overnight at Yerranderie in the restored old post office. The isolated location, the abundance of wildlife, and the contrasting vegetation and landscape features also contributed to the overall experience.

Many thanks go to Glen Capararo and Amelia Stein of Sydney Catchment Authority, for providing the opportunity to participate in an outstanding and highly stimulating field trip.

Looking along the broken wall of an abandoned settling pond, almost filled with dried out tailings. Standing in the erosion gully in the centre participants are discussing management options, having admired finely laminated sediments containing jarosite, exposed in the gully walls.



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# *QLD Branch - Adrian Webb President*

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## **General Management**

- AGM – Our annual general meeting is scheduled for June 14, probably at Toowoomba.
- Student support for international travel – proposing to support student travel to deliver papers at international soils related conferences- up to \$1000 in any year.
- Numbers – concerned at drop in financial members. Considering strategies.
- CPSS – considering discussions with key clients to gauge their needs/expectations.
- ASSSI structure – will hold special meeting to ascertain attitudes and issues.
- Branch to collaborate with Environment Institute of Australia National Conference in Brisbane in August 2002. Will provide tour guides for two of several concurrent field trips. Have been offered free booth to promote ASSSI in return for assistance and promotion through our meetings and newsletter. Have been invited to participate in closed forum on accreditation.
- Propose to run poster competition over the next couple of years to develop a suite of posters demonstrating application of soil science to knowledge on management of natural resource management and production issues. This could be implemented as a national activity if there is sufficient interest. Qld Branch still considering details; might be prizes of the order of \$500 or more for three per year.

## **Ray Isbell Memorial Service**

- About 30 colleagues joined 20 or so close friends and family at memorial service near Boonah to celebrate Ray's achievements. Great day fitting of a great soil scientist!

## **Students Information Night**

- At ordinary general meeting had our information night with students informing them of soil science career paths – mainly examples from 4 speakers who identified many common aspects. Very enjoyable night commenced with food and beverage.

## **Controlled Traffic**

- Meeting next month at U of Q Gatton campus. 2 speakers Don Yule and Jeff Tullberg on controlled traffic – current knowledge.

## **Refresher Training Course – 22-24 April Cairns**

- Organisation on track; 20 registrations so far. Approx 35-40 expected. Close to break even point now. Branch underwriting to \$3000 if needed.
- Proceedings from Toowoomba being enhanced with special NQ focus papers.
- 15 registered for field trip on 24<sup>th</sup> from coast to range country west of Atherton Tableland.

## **Mountains to Mangroves Trip 10 May**

- to provide networking opportunities among members, students and community in the use of soil science to manage natural resource issues in the Sunshine Coast and hinterland.
- to discuss issues related to water quality, erosion and nutrient management impacts from specific land use practices;
- to identify opportunities for future activities for the ASSSI.
- 30 members and approx 20 students indicating participation in trip from Maleny plateau to Bribie passage to discuss soil / land use issues. Barung Landcare Association assisting in organisation. About a dozen staying over at Joondoburri Lodge, Bribie Island.

## **ISCO Conference 2006**

- Have been approached by Brisbane Convention Centre marketing group about hosting the ISCO conference in 2006 in Brisbane.
- Documents sent as separate attachments for discussion at meeting on 22 March.
- Queensland Branch highly supportive of proceeding with the bid for the 2006 international conference.
- Propose that ASSSI Federal Council support and co-manage the bid.

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## *NSW Branch - Graeme Tupper President*

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### **Ordinary General Meeting, at University of Sydney, 4 March 2002**

The meeting began with a seminar at which Roy Lawrie gave a talk on the chemical properties of Sydney's Parkland Soils. This was very well received and provided some insight into the soils within the City of Sydney, some aspects of the City's history, and how some of the present-day parkland management issues have resulted from disturbances of the environment due to European settlement. The seminar was followed by a Branch business meeting, at which reports from a Committee meeting held earlier in the day were presented. The following is a summary of that meeting.

### **ANZ Soils Conference, Sydney 2004**

Tentative Plans:

- Conference to be held in early December 2004
- Flyer will be prepared for distribution at the Perth Conference
- Organising Committee to be small: Graeme Tupper, Balwant Singh/Alex McBratney, Roy Lawrie
- Sub-Committees for specific activities including Pre- and Mid- Conference tours: Greg Chapman, coordinator, Stephen Cattle, Roy Lawrie
- Pre-Conference Tour: Blue Mountains & Central West: Sydney to Dubbo
- Mid-Conference Tour: many possibilities, including Homebush Bay, Tocal, Harbour Cruise, Wollongong, Parks & Gardens, Archaeology, urban soils issues
- Timing:
- Pre-Conference Tour: 2-4/12/04
- Welcome & Get Together Sunday 5/12/04
- Conference: Mon-Fri 6-10/12/04, with mid Conference Tour Wednesday 8/12/04
- Venue: University of Sydney: College accommodation is being checked out, adequate facilities are available for the main plenary sessions, parallel sessions, poster presentations, technical expo. A tentative booking has been made for the Eastern Avenue Conference Complex – favourable rates are available for ASSSI. Other facilities are also potentially available, if needed in addition or as an alternative. Quotations are being obtained.
- Other arrangements are under consideration, with the fundamental decisions being needed in the next few months.

### **Newsletter**

The Cornstalk Media quarterly newsletter is in production again, after a year's absence. James Taylor is Editor, and the first issue has been distributed by e-mail, and is about to be posted to others.

### **2002 Program**

A draft schedule of technical and ordinary general meetings has been drawn up.

Field trips are being planned to fit around major national and international conference activities, with trips to the Blue Mountains and North Coast.

For 2003, field trips are being planned for the Central West/North West, and the Southern Highlands. The Central West tour will once again incorporate participation in the Central West Conservation Farming Association annual seminar/field day. This group has made soil management their number one priority/focus. It is a very progressive group of farmers. The 2002 field day attracted about 1200 participants. During these trips groundwork will be laid for the trips which will take place with the 2004 conference. All trips will be thoroughly documented, for the benefit of the participants, and as material to go into the proposed national "Soil Excursion Field Guide".

### **ASSSI Courses.**

Following on the very successful one-week course on Describing Analysing & Managing Our Soils (DAMOS) which took place in November 1999, tentative plans are being made for 1 to 2 day courses during the next 2 years. These could cover topics such as waste disposal on soils, soil contamination, irrigation and water balance, and impact of soil management on water quality. Plans will be firmed up over the next few months.

*Continued on Page 15*

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## NSW Student Sponsorship and Prizes

**IUSS Conference in Bangkok:** ASSSI NSW is offering partial sponsorship on a competitive basis to one post-graduate student.

**ASSSI Conference in Perth 2002:** partial sponsorships are being offered for students on a competitive basis, with conditions attached, including that the student has to be a member of ASSSI.

It is proposed to hold a student seminar day in April 2003, at which students will be given the opportunity to give a presentation on their current research work. The best presentations would receive awards, and each student who participates given a formal recognition. Balwant Singh and Brian Murphy will form a committee to develop a more detailed proposal.

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**The following was recently endorsed by ASSSI Federal Council:**

**Letter of invitation to participate in a resolution to the Council of the International Union of Soil Sciences for a “global enhancement of soil organic matter.**

Dear Colleague:

The Soil Science Society of America (SSSA) solicits your support of a resolution advocating global enhancement of soil organic matter. SSSA recently approved a position statement on carbon sequestration advocating a global increase in soil organic matter. The text of this statement may be viewed from the SSSA Home Page ([www.soils.org](http://www.soils.org)). The rationale for this position comes from the benefits of enhanced soil organic matter for (1) reducing the net rate of increase in greenhouse gases, (2) increasing plant productivity and (3) improving environmental quality.

Our soils are the fundamental foundation of our life and our economy. Soil organic matter is a key component in nutrient cycling for crop production and environmental quality, and is an important determinant of soil physical, chemical and biological characteristics. Our soils, along with water, air and sun are the major resources that sustain our food supply and terrestrial ecosystems. Our stewardship of soil resources must maintain or enhance soil organic matter. We propose the following draft resolution for your consideration:

**“We resolve that soil organic matter is a resource that must be restored and increased globally to reduce the net rate of increase in greenhouse gases, to increase plant productivity and improve environmental quality.”** *Global climate change, food security and environmental quality are interrelated issues of importance to all Nations and our Planet, and these can be favorably and simultaneously addressed by global enhancement of soil organic matter.*

Your suggestions for any changes in this resolution are welcome. We plan to have an agreed resolution presented to the Council of the International Union of Soil Sciences at the 17<sup>th</sup> World Congress of Soil Science, Bangkok, Thailand, August 14-21, 2002. This resolution will be presented on behalf of all organizations that provide their support.

We also encourage promotion of understanding of the importance of soil organic matter in ecosystem sustainability and its role in social, economic, and environmental issues. Our joint efforts in educating the public about the benefits of soil organic matter and in promoting conservation agriculture practices will protect and preserve our Earth for future generations.

Robert J. Luxmoore, Past President, Soil Science Society of America  
295 Solomon Hollow Road, Harriman, Tennessee, USA 37748  
[luxmoorerj@ornl.gov](mailto:luxmoorerj@ornl.gov)



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## *Federal Council Minutes*

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### **Minutes of Federal Council Meeting 204 January 25, 2002 The University of Western Australia**

#### **1 Opening:**

The meeting opened at 1.35 pm. Paterson Room, Faculty of Agriculture, The University of Western Australia

#### **2 Attendance:**

Lyn Abbott (Hon Federal President), Richard Harper (Hon Federal Secretary),  
*Phone:* Tony Weatherley (Vic), Graeme Tupper (NSW), Cameron Grant (SA), Adrian Webb (Qld), Linda Bennison (Executive Officer)

#### **3 Apologies:**

Keith Lindbeck (Hon Federal Treasurer), Andrew Rate (WA), Rachael Poulter (Riverina Proxy, Profile Editor)

#### **4 Business arising from 203rd Federal Council minutes:**

None.

#### **5 President's Report**

##### **5.1 Profile**

Lyn noted that the December issue of Profile was about to be published and requested notes to include in a discussion paper on a proposal for a national election of Federal Executive. Proposed changes were summarized in §5.2.1 in the minutes of FC 203.

Discussion re the mode of distribution of Profile and accessibility (e-mail vs web-site access). Profile is currently available from the web-site. E-mail distribution now needs to be implemented – technical issues are being resolved by the EO.

##### **5.2 CPSS**

Since FC 203 we have agreement with AIAST. CPSS will be managed by the ASSSI Executive Officer. This will involve establishment of a committee with three members from ASSSI and one from AIAST. Lyn described the need for a coordinated approach to get recognition of the value of accreditation by employers. Adrian noted a major issue was identifying why employers would or would not take accreditation into account.

A small working group will be convened with membership confirmed at FC 205. This will devise a strategy to both raise awareness of accreditation and also resolve the issue of employers recognising the need for accreditation. Lyn will coordinate this group.

##### **5.3 Strategic Planning**

A short discussion document had been circulated. Lyn again indicated that 2001 had been a year of planning and priority setting by Federal Council. 2002 was a year for action.

##### **5.4 Initiatives for 2002**

Lyn suggested meetings with Aboriginal groups with respect to soil. Similarly, she reiterated the need for Branches to identify initiatives.

*Continued on Page 17*

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## Minutes of Federal Council Meeting 204 *Continued*

### 5.5 Passing of Ray Isbell

Mr Ray Isbell (ex CSIRO Soils) died recently and the Federal Council expressed their condolences. Ray had made an outstanding contribution to Australian soil science, and in particular understanding the distribution, properties and classification of Australian soils. An obituary for Profile is being prepared by David Smiles.

### 6 Executive Officer's Report

Since the last meeting, the EO has been preparing subscription notices and working with the President on a joint ASSSI and AIAST letter for ASSSI members, updating them on the changes to the CPSS accreditation scheme.

Subscription notices have been recently posted to all members. Of interest, five subs have been returned to the ASSSI office within one working day of despatch to members.

Feedback from one member has indicated that we could improve how Profile is distributed electronically. The EO made the point that if the Society is serious about reducing its reliance on print then it will need to get serious about delivering Profile electronically.

Discussions have been had with the web-master Derek Yates re updating the web site direct from the ASSSI office via a link.

Linda requested that branches notify her when members die so that notices were not sent out unnecessarily.

### 7 Secretary's Report

None.

### 8 Treasurer's Report

None.

### 9 Profile Editor's Report

December issue will be published in two weeks.

### 10 Branch President's Reports

Edited versions of reports will appear in Profile.

### 11 General Business

#### 11.1 Awards

Cam Grant will report at the next meeting.

#### 11.2 Australia Post

An ad hoc group will be convened by Richard Harper to determine whether Australia Post will produce a series of stamps with a soil theme.

### 12 Close

Meeting closed at 2.40 pm.

### 13 Next Meeting

Federal Council 205 March 22, 1.30 pm, WST.

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**Send information for the next Profile by 15th June 2002**

Thesis abstracts

Abstracts for IUSS Congress, Thailand

Articles - field trips, seminars, workshops etc

Student activities

New Member Profiles etc

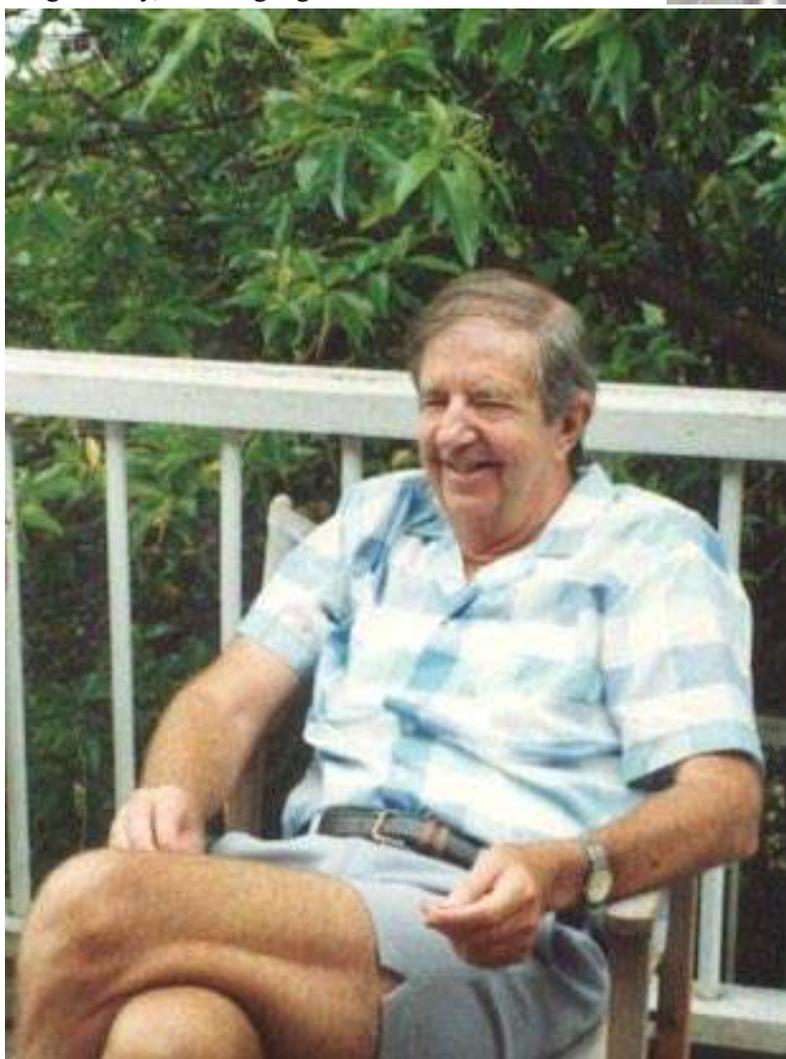
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# OBITUARY

## Ray Isbell Memorial Service

Many soil science society members will have very fond memories of Ray Isbell who died after a period of ill health just after Christmas 2001. Ray had a special place for many of us in Queensland.

Ray's brother Graham and his family extended a special invitation to Ray's friends to celebrate his life at a memorial service at the farm near Boonah on Sunday 24 February. About 30 colleagues joined 20 or so close friends and family at the memorial service to celebrate Ray's achievements, and heard John Williams Chief of CSIRO Land & Water give a wonderful address describing Ray the person, and his achievements. Very memorable attributes were his willingness to give his colleagues time to seek his advice or discuss issues, and his quiet manner. It was a great day, befitting a great soil scientist!



ASSSI National  
Conference  
PERTH  
December 1-6  
2002

***FUTUREsoils***

[http://  
www.agric.uwa.edu.au/  
soils/futuess/  
index.html](http://www.agric.uwa.edu.au/soils/futuess/index.html)

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# OBITUARY

## **Dr Ernest Gordon Hallsworth** **Scientist and Teacher 1/10/1913 – 14/2/2002**

Ernest Gordon Hallsworth was a loving husband, a caring father, a great teacher, a man of supreme optimism and a leader who encouraged all adventurous scientific research. He was also a witty raconteur, a genial host and an excellent and adventurous cook. Until a few years ago Gordon, as he was known, still enjoyed tennis and badminton. He was born in Ashton under Lyne in Greater Manchester in 1913 and was educated at Ashton Grammar School and the University of Leeds from where he graduated with first class Honors in Chemistry. He was subsequently awarded a PhD and on the basis of his pedological studies in New South Wales received the Doctor of Science degree at the University of Leeds. His first appointment was as assistant lecturer in Agricultural Chemistry at the University of Leeds during the years 1936-40. He was appointed as a Lecturer/Senior Lecturer at the University of Sydney where he trained many prominent Australian soil scientists. During his period in Sydney he married Elaine Seddon in 1942 (dec.1970).

He returned to England in 1951 to an appointment as Professor of Agricultural Chemistry and Dean of the School of Agriculture at the University of Nottingham School of Agriculture at Sutton Bonington. He remained there until 1964 and was Dean of the School for nine years. Before his appointment, the Sutton Bonington Agricultural College had been a centre where aspiring young farmers were trained and studied for diplomas in agriculture. The University of Nottingham had recently acquired the College and established it as its School of Agriculture. Dr Hallsworth guided the College, recruited first class academic staff, and was responsible for a comprehensive building and re-equipment programme. Under his guidance the School prospered and attracted a constant stream of undergraduates and postgraduates, eager to study at what became recognised as probably the leading Agricultural faculty in the British universities. In 1960, during his time at Sutton Bonington, he had a sabbatical year as Visiting Professor of Soil Science at the University of Western Australia.

He returned permanently to Australia in 1964, when he was appointed by CSIRO as Chief of their Division of Soils (1964-73) with headquarters in Adelaide and regional laboratories in Canberra, Perth, Brisbane and Hobart. During his tenure as Chief (1964 – 1973), the Division enhanced its already outstanding reputation as a research organisation, in Australia and internationally. In 1968, an International Society of Soil Science Congress was staged in Adelaide. Dr Hallsworth was at this time the President of the International Society and was the President of the Congress, which was a great success and attracted about 1,500 soil scientists from around the world. He was responsible for the construction of new laboratories for the Division at Canberra and Perth and, for the first time, a substantial soil research laboratory was established by the Division in the tropical north of Australia, at Townsville. In 1971 he was seconded to be Australia's Chief Scientific Liaison Officer in London. On his return in 1973 he was made the Chairman of the Land Research Laboratories, which embraced three CSIRO Divisions, the Division of Soils in Adelaide, the Division of Land Use Research in Canberra, and the Division of Land Management in Perth, and he served in this capacity until his retirement in 1978. It was during this period (1976) that he married Merrily Ramly in Adelaide.

On retirement from CSIRO he returned to England as Professorial Fellow at the University of Sussex Science Policy Unit and established his home away from home at Blackboys, near Uckfield in Sussex. On his return to Australia he and Merrily built a new home annexed to an historic home on the Old Belair Road at Mitcham, South Australia.

During his long and distinguished career he was appointed to many national and international Scientific Advisory bodies. He was appointed Director of the "Save Our Soils" project of the International Federation of Institutes of Advanced Studies (IFIAS); President of the International Society of Soil Science 1964-68 and

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was made an honorary life member in 1986; Fellow of the World Academy of Arts and Science; a Foundation Fellow of the Australian Academy of Technical Science and Engineering and a member of the Académie d'Agriculture de France . He was Scientific Adviser to Prime Minister Malcolm Fraser and Australia's first representative on the O.E.C.D. Committee on Science Policy. He was an external examiner for the West Indies University.

Dr. Hallsworth was honored by many countries for his scientific contributions. He was awarded the Dokuchaev Medal by the All Union Society of Soil Science (USSR), the Prescott Medal by the Australian Society of Soil Science and the Schermerborn Medal from the International Training Centre, Groeningen, Holland. He published or edited many books on Soil Science, Experimental Pedology, Nutrition and Conservation. The quality and eminence of the scientists he trained in Australia and overseas will be his greatest memorial. During his retirement he wrote the monograph "*Anatomy, Physiology and Psychology of Erosion*".

Gordon will be sadly missed by his wife Merrily, his stepson Paul, his daughter Cherry and two sons Peter and Michael, his stepdaughter Kartini and his nine grandchildren and two great-grandchildren.

Dr R.M. Taylor and Dr K. Lee

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## **OBITUARY**

### **Professor Charles Alexander (Lex) Parker**

#### **1916-2001**

Professor Lex Parker inspired many throughout his distinguished career. His academic work was preceded by a period farming the family farm. He never lost touch with his farming background and was well respected for the time he dedicated to issues of importance to the farming community. He continually searched for scientific understanding of soil microbiology. Lex was equally at home at the laboratory bench and the paddock. He was renowned for never giving up on ideas that were not fashionable. Indeed, he was often ahead of his time.

Lex commenced his academic career at The University of Western Australia in 1959 and was later appointed to a personal Chair. He inspired undergraduate students to pursue interests in soil and plant microbiology. He supervised a distinguished group of postgraduate students and encouraged his international postgraduate students in research that was very relevant in their own countries.

Lex was a leader in the area of symbiotic as well as non-symbiotic nitrogen fixation. His subsequent research on root pathogens was instrumental in drawing attention to the dimensions of this problem in Western Australia and he inspired others as they addressed the problem nationally. Later, his interests moved to the roles of soil fauna, an area that he fought hard to get funded, but with little success. However, he had loyal support within the farming community and he never gave up in his attempt to raise awareness of the importance of soil biology.

Many of us greatly benefited from Lex's kind-heartedness, intuitiveness and enthusiasm.

Lyn Abbott



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**Centre for Land  
Rehabilitation**

**Check web site for training courses:  
<http://www.clr.uwa.edu.au>**

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# CONFERENCES

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**14 - 21 Aug 2002** 17th World Congress of Soil Science Confronting New Realities in the 21st Century Bangkok Thailand [www.17wcss.ku.ac.th](http://www.17wcss.ku.ac.th)

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**25 - 30 Aug 2002** The 5th International Acid Sulfate Soils Conference "The sustainable management of acid sulfate soils" Tweed Heads, NSW

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**29 April - 1 May 2002** Clay Mineral Society Canberra

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**25 - 29 November 2002** The Golden Jubilee Conference of the New Zealand Soil Science Society will be held at Victoria University, Wellington.

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**2-6 Dec 2002** National Soils Conference Australia Soc. Soil Sci Inc.Future Soils  
[www.agric.uwa.edu.au/soils/futuress/index.html](http://www.agric.uwa.edu.au/soils/futuress/index.html)

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**Jan 2003** Soil Science Society South Africa - 50th Anniversary Congress [www.soils.org.za](http://www.soils.org.za)

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

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

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**ASSSI Student Travel Award  
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Two \$500 Awards available from Federal  
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Send applications to  
Richard Harper by June 15th 2002

[richardh@calm.wa.gov.au](mailto:richardh@calm.wa.gov.au)

**Selection Criteria:**

1. Submitted Abstract
2. Abstract must have been accepted for oral/poster presentation
3. Explanation of expected benefit gained by attending Congress

Not available to recipients of ASSSI Branch Travel Awards

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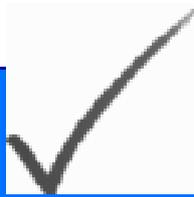
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