

Volume 20, Number 3

July – September 2004

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Publishing Partner: Science Publishers, Inc., P.O. 699 Enfield NH 03748, USA. info@scipub.net, www.scipub.net

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NEWSLETTER

Reporting global SWC news to you quarterly

WASWC Vision: A world in which all soil and water resources are used in a productive, sustainable and ecologically sound manner.

WASWC Mission: To promote worldwide the application of wise soil and water management practices that will improve and safeguard the quality of land and water resources so that they continue to meet the needs of agriculture, society and nature.

IN THIS ISSUE

- ▶ **President's Message 1**
 - 13th ISCO Conference 1
- ▶ **Association News 7**
- ▶ **New Officers 8**
- ▶ **Members' Forum 10**
- ▶ **Regional News 10**
 - Soil Degradation and Conservation in Mexico 10
- ▶ **Features 11**
 - Vetiver Highlights 11
 - Landcare Highlights 11
 - WOCAT Highlights 12
- ▶ **Research News and Abstracts 14**
- ▶ **Announcements 15**
 - Meetings in Thailand, China, Brazil, Philippines
- ▶ **Summary Reports 17**
 - Conservation of Hillside Agriculture, Colombia 17
 - Symposium of East African-Austrian Water Assoc. 17
- ▶ **Publication Reviews 18**
 - Earth from Above 18
 - Soils of the Tropics 19
- ▶ **Information Sources 20**
- ▶ **News in Brief 21**
- ▶ **List of Worldwide Officers 25**

The World Association of Soil and Water Conservation Newsletter is sent quarterly to WASWC members. The newsletter seeks to keep conservationists worldwide informed of new developments in the field of soil and water conservation and land management issues. Please send editorial contributions to WASWC President Samran Sombatpanit at sombatpanit@yahoo.com.

PRESIDENT'S MESSAGE

Samran Sombatpanit

13th ISCO Conference

Once again the ISCO (International Soil Conservation Organization) Conference, the 13th, took place and succeeded admirably from July 4-8, 2004 in the beautiful city of Brisbane, Queensland, Australia. We offer all involved in the organizing of this conference our most sincere congratulations. Michael Zoebisch, our Deputy President, myself and some other 35 existing WASWC members attended this important event.



My message this time will be somewhat different from those in the past as it will cover most of the events that took place at the ISCO Conference. The contents of this section are as follows:

1. Origin of ISCO conferences
 2. Report from the 13th ISCO
 3. WASWC at the 13th ISCO
- * WASWC Forum
 - * Announcement of Honorary Membership Awards
 - * Announcement of Norman Hudson Memorial Award and presentation of Norman Hudson Memorial Lecture by Prof. Calvin Rose
 - * Presentation of the paper "WASWC and its role in promoting international SWC"

1. Origin of ISCO conferences. The ISCO Conferences started in Hawaii, the USA, in 1983 when an international conference on soil conservation was organized by Prof. Samir El-Swaify, a staunch founding member of WASWC. Since then conferences have been organized - with an interval of 2-3 years - in Venezuela, Thailand, Kenya & Ethiopia, Australia (Sydney), India, Germany, the USA, Argentina, China. Moreover, at the Hawaii conference, it was decided that the two international soil and water conferences previously held in Belgium (1978) and the UK (1980) would also be considered ISCO Conferences.

At the Brisbane Conference, the WASWC and ISCO worked together very closely. Several functions of WASWC were incorporated into the conference program and by the end of the meeting the number of WASWC members has increased by several hundreds – thanks to the generosity of the organizers who used some of the registration fee to sign ever participant up as a member.

ISCO Conferences have become highly regarded and many academics and professionals working in soil and water conservation try to attend wherever and whenever it is held. Unfortunately, the cost of travel and participation has increased steeply during the years so the number of participants for each event has stayed at between 400 and 750. Also, the organizers find it increasingly difficult to obtain donor funding to support participants from developing countries.

I used to think of the ISCO Conferences as a kind of open market where those involved in SWC come to meet and exchange views, learn new innovations, meet new friends and renew existing friendships. Moreover, as the venue changes every time, the organizers always try hard to provide the best for their visitors in the way of 'nature and culture'. Pre-, mid- and post-conference tours have been organized to enable the delegates to fully absorb the nature of landscape, land management and conservation and lifestyle of the people on the routes.

Apart from being the place where the 'ice' among participants breaks, these tours provide the best opportunity for students or young researchers to get to know some well known and experienced professionals who may inspire them in their future work. Those who attended the Beijing ISCO in 2002 will remember those young and energetic university students, both boys and girls, who came to escort participants during the mid-conference tour to the Great Wall. I can still remember very well a rather young Ethiopian academic from Debre Zeit University of Agriculture participating in the 6th ISCO in Addis Ababa in 1989, who a few years later emerged as the Minister for the Environment in the new Ethiopian government!

Long-time ISCOers would still remember each of the Conference dinners that have always been held at a prestigious place where local dishes were served, traditional performing arts displayed, winners of poster awards announced and, notably, when an interesting address is given to the attentively listening audience – that happened in New Delhi in 1994 when Dick Arnold told us what he had done and still cherished during his long service in the Soil Conservation Service of the US Department of Agriculture.

For this highly successful 13th ISCO I would like to draw your attention to the following conference report.

2. Report from the 13th ISCO. 13th International Soil Conservation Organisation (ISCO) Conference, Brisbane, Queensland, Australia. July 4-8, 2004. Mike Grundy, ISCO President (photo in p. 1), and Philippa Tolmie, member of the Organizing Committee.

The Australian Society of Soil Science (ASSSI) and the International Erosion Control Association (IECA) – Australasian Chapter, hosted the 13th ISCO Conference. A large and active organizing committee included representatives from government agencies, universities and consultancies, who are all involved in research, development or extension in land management and policy.

The conference theme, "Conserving soil and water: Sharing solutions", was chosen to give a positive direction to the meeting i.e. solutions and strategies rather than a focus on problems. The pro-

gram was designed around three key areas:

1. Science and information on the conservation of soil and water resources;
2. Effective communication, learning and sharing environments; and
3. Examples and case studies of strategies that operate across social, environmental and political boundaries, empowering people and communities.

Over 390 delegates from 36 countries attended a wide range of concurrent sessions, including: Management Strategies in Forestry Systems, Urban and Infrastructure Management; Soil Erosion Modelling, Measurement and Control; Soil Health; Arid and Semi-arid Rangelands; Carbon Management; Catchment Management; Mine Spoil and Water Management Technologies; Management Strategies in Agricultural and Horticultural Systems; Social and Cultural Aspects; Controlled Traffic; Economics and Policy; Soil Suitability and Capability; Information Management and Networks; Acid Sulfate Soils; and Salinity Management.

Special sessions were also held on Economic Lessons for Soil Conservation Incentives, Carbon Management and Soil Biodiversity (a FAO sponsored session).

Central to the theme of "Sharing Solutions", were the pre-, mid- and post-conference tours, which allowed delegates to see first hand how soil and water are being managed for sustainability and profit in Australia and to share their expertise with other participants at the conference. The tours generated considerable media interest in the regions they passed through, helping to raise the profile of land management issues.

A highlight of the week was the conference dinner, at which Professor Calvin Rose, Griffith University Queensland, was awarded the inaugural Norman Hudson Memorial Award of the World Association of Soil and Water Conservation (WASWC) for services to soil conservation. Professor Rose then presented the 2004 Norman Hudson Memorial Lecture, "An introduction to soil conservation research in Central and East Africa". Reverend The Honourable Pat Comben gave a thought-provoking after-dinner address, entitled "How do professional scientists make things happen within the political process?"

In summing up the conference on the last day, Conference Convener Mike Grundy outlined the conference organizing strategy, "We aimed to get in the right mix of papers; organize them so that the themes were clear and the connections possible; encourage breadth and diversity; value the papers and posters (by providing full papers at the conference and supporting the poster sessions, e.g. with poster awards); arrange good, diverse keynotes and plenaries; provide opportunities to mix and communicate; encourage media reporting; and provide variety, fun and relaxation."

He remarked that the key outcomes of the conference were the cross fertilization of ideas and disciplines, finding new ways of doing old things, identifying some specific solutions and empowering the people. There were abundant examples of these, including:

- * Carbon sink investment can underwrite soil and water conservation; its implementation can improve soils (Dumanski, McKell)
- * New opportunities can come from unusual sources, e.g. plants in waste spoil can change the character of the waste in favorable directions (Kopittke et al.), thus providing solutions for a number of situations, or "noble weeds" which won't compete with crops can protect very steep lands (Obando-Moncayo)
- * Soil scientists, engineers and environmental scientists are finding new places and new ways to come together, e.g. roads infrastructure (Biggs & Mahony, Schmidt & Michael)

Many keynotes and session papers emphasized the benefits which come from empowering the people who manage the land and do the work. In many countries, it is happening (and producing outcomes), or, it was argued, should be happening, so that effective change can be achieved. Examples were presented from most continents and at a number of scales, e.g. from farm to catchment, from urban to rural, from broad scale to intensive. As Claire Rodgers, an Australian member of a community organization, said, "Trust comes from 10 years of working together".



Finally, at the closing session, a discussion on the roles of international organizations, including WASWC, IECA and IUCN, led to the suggestion that ISCO2004 should express the need for an understanding of soil and water conservation to be fundamental in the new directions being pursued by the IUCN. We left with the fascination and promise of the 14th ISCO which will be hosted in May 2006 by the Kingdom of Morocco in Marrakech, under the chairmanship of the 14th ISCO President Prof. Mohamed Sabir.

3. WASWC's activities at the 13th ISCO

WASWC Forum. As we had held a successful meeting at the Beijing ISCO in 2002 that resulted in our Vision and Mission statement, it seemed appropriate to arrange similar meetings at all subsequent ISCO conferences. This time the forum was held at the main hall, with around 40 people participating.

An issue raised by several members and discussed at length was the potential of WASWC for training and education, and exchange of technical information among members. One proposal was to develop a set of academic courses that could be taught at several institutions. This way, WASWC could demonstrate its scientific competence. Other suggestions were made to develop short-course programs and to engage on distance education using the Internet. This could also earn some revenue. For these activities, "joining hands" and a lot of volunteer time are required.

It was also discussed how national decision makers could be more involved with WASWC in order to improve the thrust of WASWC's activities in the regions. In this context, it was stressed by a number of members that WASWC should place more emphasis in its activities on the socioeconomic aspects of resource degradation and conservation.

Another issue discussed at some length was how the exchange of conservation technologies between countries and institutions could be strengthened and what role WASWC could play. A number of members felt that there is a multitude of local technologies that could be useful for other areas but there is a lack of exchange. In this context, the WOCAT network was mentioned that provides a large database for conservation technology testing and exchange.

A query came up as to why WASWC and ISCO did not merge. The answer was always the same as before: we are sister organizations, with the same ultimate goal of preserving soil and water resources worldwide, but we run differently in both style and mechanism. Nevertheless, the connection between ISCO and WASWC is very close and there are a number of people who belong to the governing bodies of both organizations.

Speech Announcing the Recipients of Honorary Membership Award

Prof. Dr. Georgi Gergov*, Bulgaria

Prof. Gergov was educated in Bulgaria and has been working for more than 40 years at the National Institute of Meteorology and Hydrology, Sofia. He has academic experience in hydrology in Bulgaria, Italy, Russia, and the USA. He got his PhD from the State Hydrological Institute of Russia and a DSc degree from Sofia Civil Engineering University. He teaches Hydrology at the Biological Faculty at Sofia University, but also lectures in the USA, the UK and Italy.

Prof. Gergov has published around 200 papers and several books in collaboration. He has been Vice President of WASWC for 8 years, as well as of the Bulgarian National Water Association for 5 years and Bulgarian Ecological Society also for 5 years. He is a member of many national and international professional and ecological NGOs. He organized the conference on "Politics and Future Perspectives for Solving Ecological Problems of SWC in the Balkan Region" in Sofia in July 2003. For his good and useful work over the past several years the WASWC would like to present to him Honorary Membership for the year 2004.

Prof. Dr. Miodrag Zlatic*, Serbia and Montenegro

Miodrag Zlatic is Associate Professor of "Watershed Management Economics" and "Sustainable Development of Degraded Areas" at the Faculty of Forestry, Belgrade University and Co-chairman of the Department of Erosion Control, the Faculty of Forestry, Belgrade University. M. Zlatic is National Representative of WASWC for Serbia and Montenegro. During a period of 3 years in this position, the number of members has increased from three up to sixty. He held briefing WASWC meetings at several institutions in Serbia and Montenegro, with members from different occupations: from students to engineers of forestry, agriculture, civil engineering and professors.

He organized the International Conference: "Natural and Socio-Economic Effects of Erosion Control in Mountainous Regions" under the International Year of Mountains, held in Belgrade/Vrujci Spa, December 2002. This Conference led to another important WASWC meeting for the Balkans in Sofia, and to recent activities involving regional initiatives for the rehabilitation of degraded mountain regions, supported by UNU. He is presently involved in the WOCAT program as coordinator for Serbia and Montenegro which is progressing well.

For his work during the past three years WASWC would like to present to him Honorary Membership for the year 2004.

* Profs Gergov and Zlatic were not present at the conference.

Dr. Ian Hannam, Australia, Member and Vice President (Australasia), WASWC, and Member, IUCN Commission on Environmental Law and International Law Association

Mike Grundy and Ian Hannam



Ian has a 39-year career in soil conservation - beginning with his scholarship from school to university to study agricultural science as a NSW Soil Conservation Service trainee in February 1966. After graduating in 1970, his early days were spent in catchment planning and soil conservation extension work before returning to university to study earth sciences and hydrology, obtaining a further Science degree and Master's degree at the University of New England.

He became more involved in land assessment and land evaluation issues and helped develop various land capability and classification systems to determine the impacts of the pressures to change rural land into non-rural uses, which brought Ian into contact especially with the legal discipline, thus making Ian's involvement and interest in environmental law grow and he undertook his Doctor of Philosophy degree in law at Macquarie University Sydney.

This was a major turning point in his career and soon opened up an extensive international involvement in legal and institutional reform in soil conservation, land management and ecosystem restoration in Australia and different parts of the world. Ian was elected to the WASWC in 1996 as Vice President for Australasia and has worked extensively with the WASWC Council preparing the new WASWC Constitution and assisting with its move to China.

In 1999 Ian was invited to become a Member of the IUCN Commission on Environmental Law, to represent soil conservation legal interests, and soon became its Chair for Soil Law. Ian played a major role in drafting the "Amman Soil Resolution" which was passed by the World Conservation Congress in 2000 – to undertake a detailed global study of soil and water conservation law and policy and help pave the way for a new international law on "sustainable soil". He has since undertaken most of the legal research and development work for this important global environmental initiative. Ian is now widely accepted as the most authoritative person in the world on this subject.

Ian has undertaken special studies in over 20 countries (all continents now!) including – Iceland, Thailand, China, the Czech Republic, Brazil, Serbia – to name a few, and undertaken visiting fellowships at the International Environmental Law Centre in Bonn, Germany on a number of occasions. Ian is preparing to reform Chinese law to manage and control land degradation in the dry-land ecosystems of China in the next four years.

For having carried out this important and useful work over the past 7 years, the WASWC Council would like to bestow on him Honorary Membership in 2004.

Speech Announcing the Recipient of Norman Hudson Memorial Award and presentation of Norman Hudson Memorial Lecture by Prof. Calvin Rose

Mr. Chairman, Ladies and Gentlemen,

Norman Hudson was one of the greats of modern soil and water conservation.

He was one of the founders of ISCO and the WASWC. He was President of ISCO, responsible for the organization of the second ISCO conference in Silsoe, UK. He was the second President of the WASWC for 3 years. He made innumerable contributions to both organizations.

Norman first made his name as Senior Research Engineer with the Soil Conservation Service of the former Federal Government of Rhodesia and Nyasaland in Africa. Here, between 1951 and 1964, he was a pioneer of research on soil conservation in the tropics. Much of this early work formed the basis for what has been done in the tropics since.

In 1964 he moved to the National College of Agricultural Engineering, Silsoe, as Director of Studies where he remained until 1984. During these years he was responsible for training many young soil conservationists from all over the world – and I am sure that a number of his former students must be with us today. From then until his death in 1996, Norman worked as an international consultant and writer. He is probably best known for his classic textbook, "Soil Conservation" – a book that sits prominently among the reference books of most of us.

Norman Hudson's contribution to modern soil conservation through research, teaching, writing and advisory work was immense and probably only a few of us here today have not been influenced

– directly or indirectly – by what he did and by the approaches that he pioneered.

Mr. Chairman, Ladies and Gentlemen,

In view of this outstanding contribution to soil and water conservation, the WASWC Council decided last year to establish the Norman Hudson Memorial Award as the highest honour to be bestowed upon an individual by the Association.

I am now very pleased to be able to formally announce that the first person to receive this award is Calvin Rose, Emeritus Professor of Environmental Sciences at Griffith University.



Calvin Rose's background is different from most soil conservationists as he started his working life as an aeronautical engineer. However, wishing to make a contribution to the developing world, Calvin joined Makerere College in Uganda in 1954 as a lecturer in physics. This brought him into contact with agriculture as his duties included advising research stations.

Herbert Fairbrother at Makerere stirred his interest in soil management and Calvin built a rainfall simulator to study soil erosion. During this time Norman Hudson and Calvin became very friendly colleagues and so began his passion for understanding soil erosion and its linked processes of nutrient movement.

After 9 years in Africa, Calvin and his family returned to Canberra after some wanderings that took him to the Waite Institute in South Australia and the Round Tower at Wexford, Ireland, where he built another rainfall simulator.

Calvin spent the period from 1963 to 1973 with the Division of Land Use Research, CSIRO, working at Katherine, Kununurra and Humpty Doo. His most important work at this time was on infiltration of northern Australian tropical soils.

In 1973 he was appointed Foundation Chair and Professor of the School of Australian Environmental Sciences at Griffith University here in Brisbane. Throughout the 1980s and until 1995, Calvin held various positions, culminating in Dean of the Faculty of Environmental Sciences and Professor of Environmental Sciences. Under Calvin's watchful eye, new buildings were erected, laboratories equipped, courses designed and, not surprisingly, a new "hi-tech" rainfall simulator built!

This period coincided with a phase of serious land degradation and rapid expansion into the semi-arid lands of Australia and Calvin exhibited great skills in building a Faculty that turned out graduates well equipped to meet these challenges.

Throughout this phase of his career, Calvin led the way by example with a heavy teaching load. His command of English made him an effective teacher and his humility endeared him to his students. He has shown a great capacity to guide overseas students with empathy and a firm hand through their studies and many countries now benefit from the graduates he helped produce.

Calvin has published four books, more than 150 articles and 40 book chapters. As a Project Leader in Malaysia, the Philippines, Thailand and Australia, he has demonstrated his innovative ideas for the modelling of soil erosion, land management and nutrient movement.

While Calvin's work is well known, few people know of the truly humanitarian life that Calvin and his wife, Mavis, have lived. The personal assistance that he and Mavis have provided, especially to overseas students and their families, is the mark of a truly generous and compassionate person.

For more than 50 years Calvin has been an outstanding scientist and has made a significant contribution to our understanding of soil erosion. It is fitting, Ladies and Gentlemen, that Calvin Rose should be the first person to receive the Norman Hudson Memorial Award and it is our great pleasure to ask the ISCO President, Mike Grundy, to present this Award to him.

Prof. Calvin Rose then presented the Norman Hudson Memorial Lecture on "An Introduction to Soil Conservation Research in Central and East Africa", the contents of which will be published at a later date.

Presentation of the paper "WASWC and its role in promoting international SWC"

I had a chance to present a paper of the above title in the closing session of the meeting as the representative of WASWC, along with presentations from the representatives of IECA (Ben Northcutt) and IUCN (Ian Hannam). The history, philosophy, vision & mission of WASWC were briefly described

and the course of action of the past few years was given in some detail, with extrapolated projection of our future operations.

As we are a sister organization and working closely with ISCO, I took the opportunity to announce the names of persons who have attended every ISCO conference, which now has narrowed down to just one - Prof. Samir El-Swaify of the University of Hawaii. We wish you good health in order to support and attend many more ISCO conferences to come, Samir!

In closing, I would once again like to congratulate the organizers of 13th ISCO for an excellent conference and thank them for their generous support of WASWC. We look forward to continuing this relationship and working with the organizing committee of 14th ISCO!

ASSOCIATION NEWS

Nominations Committee's announcement

As mentioned in the last issue of the newsletter, we have appointed a Nominations Committee to propose names for four posts in the Council which will become vacant in January 2005. The Committee comprises Bill Moldenhauer, Hans Hurni and David Sanders, with the present President as ex officio. The Committee has finished its task and would like to inform all members that the following persons have been nominated to stand for election in October this year:

1. Prof. **Martin Haigh**, Oxford Brookes University, Oxford, UK, as **President**
2. Prof. **Miodrag Zlatic**, Belgrade University, Belgrade, Serbia & Montenegro, as **Deputy President**
3. Prof. **Jiao Juren**, formerly Director General of the Department of Water and Soil Conservation, Ministry of Water Resources, Beijing, P.R. China, as **Executive Secretary** (he has held this post since April 1, 2003)
4. Dr. **John Lafen**, formerly of the USDA's National Soil Erosion Research Laboratory at Purdue University, as **Treasurer**

Their pictures will be posted on our photo website <http://community.webshots.com/user/waswc> at the album Waswc97 from early September onward.

However, members are welcome to nominate persons of their choice, by submitting a petition signed by five or more Individual and/or Institution members and endorsed by the candidate(s). Such nominations should be sent by letter or fax to the Executive Secretary by September 30, 2004. If there are no additional nominations, the candidates in the above list will automatically be elected and the new Council will take office in January 2005. The results will be announced in the last issue of WASWC newsletter of this year.

Photo competition – with use of WASWC Photo Website

Since we opened our new WASWC photo website 2 months ago at <http://community.webshots.com/user/waswc> we have posted more than 700 photos on it and there have been more than 2,000 viewings so far. We have separated the site into several albums, now 41, each of them accommodating up to 100 photos, with the condition that the total will not exceed 3,000. We invite all members to send in digital photos that fit into the theme of the existing albums. Photos on paper can also be used but they need to be scanned into a digital jpeg file before sending to us by e-mail. Photos posted on the website will be useful for members and non-members worldwide, as they can be downloaded directly from the Internet.

Now, the Council has initiated a program to encourage more participation by members by opening up a photo competition, with cooperation from our publishing partner, the Science Publisher, Inc. USA. Members are invited to send in photos of soil and water conservation and related fields, with a 15-30-word caption, that fits well the themes of albums Waswc11 to Waswc56. Photos received will be posted on the album Waswc99 and by the end of each quarter the juries (to be appointed) will choose the best photo(s) and the winning members will receive one book of their choice as the prize. The average number of book prizes would be 3 per quarter, depending on the number of entries. The winner can choose the book of her/his choice from the Science Publishers website at www.scipub.net as well as in the album Waswc60 of our website. The first batch of photos sent to us at sombatpanit@yahoo.com by **September 25** will be judged at the end of September and the names of the first winners will be announced in the WASWC newsletter issue 20(4). Additionally, members are requested to send in their photos to post on the albums Waswc65 to Waswc69 as a way to introduce themselves.

WASWC signs Letter of Agreement with Publishing Partner “Science Publisher, Inc. USA”

In July 2004 WASWC signed a Letter of Agreement (LoA) with the Science Publisher, Inc. USA (SPI), recognizing the latter as the publishing partner. Science Publisher has been publishing books

for WASWC since 1995 and is going to publish a book series on Natural Resource Management for WASWC from this year onward. In brief, the LoA indicates that WASWC will use the services of SPI when publishing books and help publicize SPI books at meetings, while SPI will help publicize WASWC through their books, give 40% discount to WASWC members when buying SPI books, and, importantly, give 12 books a year to the winners of the photo competition held on the WASWC photo website. From our photo website, <http://community.webshots.com/user/waswc>, there is a direct link to their website, www.scipub.net, at the left of our page.

Special Publication No. 2 is now available

We brought a number of the Special Publication (SP) No. 2 on Carbon Trading, Agriculture and Poverty to the 13th ISCO Conference and distributed them to all participants, as well as asking some delegates to carry them to other WASWC members in their countries. We will soon send the book out by mail to other members.

SP No. 3 will concern no-tillage technology and the issue will be distributed to all members by early 2005. Members are welcome to contribute towards the cost of printing/ distributing it. Industries are also welcome to advertise in the pages of this SP; please contact our secretariat for the rates.

WASWC Newsletter in Spanish will be available soon

Claudio Kvolek, Eduardo Rienzi



The WASWC Newsletter will be translated into Spanish by our Argentinean editorial team, Claudio Miguel Kvolek (kvolek@agro.uba.ar) and Eduardo Rienzi (rienzi@agro.uba.ar – NR for Argentina), with institutional support from the Faculty of Agronomy, University of Buenos Aires. Members from Latin America, Spain and all other Spanish-speaking countries/ territories can choose to receive the newsletter in either Spanish or English edition. Members willing to translate the newsletter into other languages will please contact the Council.

How is the Decentralization Program (DP) progressing in your country?

The number of countries now following DP is 23, i.e. Albania, Argentina, Bangladesh, Botswana, Bulgaria, Chile,

China, Ethiopia, India, Indonesia, Iran, Japan, Kenya, Lithuania, Nepal, Nigeria, Philippines, Romania, Russia, Serbia & Montenegro, Tanzania, Thailand and Uruguay. The total number of members involved is about 600 or around one-half of the total number of paying members. These countries manage the distribution of the newsletter by themselves and collect membership dues in local currencies. In order to learn the progress of DP in various countries we would like to ask the countries listed above to send a short report on how they are progressing to us by September 20, 2004. Then it will be summarized and presented to the members in the last issue of the newsletter this year. In the report, both progress and obstacles should be clearly shown.

Have you paid your membership dues for 2004 yet? How about for 2003? You may see from the above that we are carrying out a number of activities, all useful for members and society at large. But all these activities need money. Up to now, only around 40-50% of the members have paid their dues. Those who have not yet paid are therefore kindly requested to do so. You may check your payment records with our Secretariat at waswc@icrts.org.

NEW OFFICERS

At the 13th ISCO Conference in Brisbane, Australia, we met people who we feel would be a strong force in the future, so we have invited them to be our officers as follows:

Mohamed Sabir, WASWC Vice President for Africa, responsible for the northern part of the continent sabirenfi@wanadoo.net.ma

Prof Sabir is Director of the National School of Forest Engineers, President of the Moroccan Network of Soil and Water Conservation and recently became the President of the 14th ISCO.

Dr. Mohamed Sabir is Professor of Soil and Water Conservation (SWC) and Agroforestry at the National School of Forest Engineers. He received his BSc degree in Agricultural Engineering from the Hassan II Agronomic and Veterinary Institute (Institut Agronomique et Vétérinaire Hassan II – IAVHII), Rabat, in 1980 and his MSc in Forestry from the same institute in 1982. He obtained a DEA diploma in Hydrology from Paris XI University (France) in 1986 and his PhD degree in Soil Conservation in 1994 from Georgia (USA).

He is leading several research projects and is presently conducting research on hydrological modelling of watersheds and indigenous SWC strategies. He is also teaching hydrology, SWC and agro-forestry courses at the National School of Forest Engineers, and at the Mohamed V University. He has published several papers in different journals, book chapters, and conference proceedings and has been an active participant in numerous conferences, traveling to Tunisia, Cameroon, Kenya, Canada, USA, Spain, France and Belgium for presentations. He is a member of the Moroccan Association of Soil Sciences, the International Erosion Network of French-speaking Professionals (AUF), and the WASWC. As the president of the 14th ISCO he is going to organize the next conference in Marrakech in May 2006. He enjoys discussions with small farmers and walking in the High Atlas Mountains.

Philippa Tolmie, WASWC National Representative for Australia

philippa.tolmie@nrme.qld.gov.au

Philippa Tolmie graduated from the University of Sydney in 1990 with a Bachelor of Science in Agriculture (Soil Science). Following her degree she worked with New South Wales Department of Agriculture in soil physics research, before joining Southern Cross University as a Research Assistant and part-time academic. She is now a Research Scientist with Queensland Department of Natural Resources, Mines and Energy, investigating water balance and drainage issues in southeast Queensland. Philippa was an active member of the organizing committee for ISCO 2004, held in Brisbane July 2004. She is also Newsletter Editor for the Australian Society of Soil Science (Queensland branch). Philippa is completing her doctoral studies through Southern Cross University as a part-time, external student.

When she is not writing her thesis, Philippa spends her spare time gardening, reading and watching rugby.

Benedict J. Kayombo, National Representative for Botswana bkayombo@bca.bw

Prof. Benedict Kayombo received his PhD degree in Agricultural Engineering (Soil Tillage and Traffic) from the Sokoine University of Agriculture (SUA), Tanzania, in 1986. Currently he is an Associate Professor of Soil and Water Engineering at the Botswana College of Agriculture - an Associate Institution of the University of Botswana. He is also the National Coordinator of the Desert Margins Programme (DMP). The overall objective of DMP is to arrest land degradation in Africa's desert margin areas through demonstration and capacity building activities. Prof. Kayombo is also involved in Precision Agriculture and No Tillage research.

He has published four chapters in books dealing with indigenous conservation tillage systems, soil conservation and the sustainability of agricultural systems in Sub-Saharan Africa, responses of tropical crops to soil compaction, and soil compaction control in the tropics. He has also published over 35 scientific papers in international journals and proceedings. He is an active member of WASWC and the International Soil Tillage Research Organization (ISTRO).

Hassan Rouhipour, National Representative for Iran rouhi@rifr-ac.ir

Dr. Hassan Rouhipour received his first degree in Soil and Water from Ahvas Agricultural College, Shahid Chamran University of Ahvaz in 1971. He first worked on developing drip irrigation systems in Iran. He then became interested in land degradation and desertification and, in 1973, joined the Research Institute of Forests and Rangelands and did research in the south of Iran on soil erosion and combating desertification. During his employment in RIFR he completed a MSc degree in Soil Science at the University of Shahid Chamran (Ahvaz). In 1991 he participated in a Graduate Course in Hydrology at the University of New South Wales. He was then granted an Iranian student scholarship and completed his studies for a PhD in 1996 at Griffith University, Australia. Dr Rouhipour is currently Head of the Soil Erosion Group at the Desert Division of RIFR and is leading a national research project entitled "Water Balance in Sand Dune Systems and Plant Growth". He also teaches soil erosion and conservation courses at the two Iranian Universities for post graduate students. He has published three books on soil erosion and water balance and numerous scientific papers. He is an active member of the Iranian-Soil Erosion and Sedimentation Committee as well as the Iranian Society of Soil Science. He enjoys reading Iranian literature, scientific discussions and swimming.

Photos of all four officers can be viewed at our photo website, WASWC Officers' album.

MEMBERS' FORUM What members say about our new photo website:

I like the WASWC photo webpage very much. Congratulations!
L.F. Molerio León, NR for Cuba

The website is great - I have sent the URL to workmates and we may use it as part of our community education program.
Don Miller, New Zealand

Let's find a slogan for WASWC

Again, we need your help - and none will be more memorable than this!

Early in July this year I visited Australia in connection with the 13th ISCO Conference and I had discussions with a number of people. We agreed that an organization or movement is better remembered if it has some kind of slogan. So, we need a short slogan that shows what we do and attracts more members at the same time. As a start, we have come up with the following:

"Conserving soil and water together - join WASWC"

"Conserving soil and water worldwide - join WASWC"

"Help conserve soil and water resources - join WASWC"

"The WASWC - bringing soil and water conservationists together - join now!"

We would therefore like to ask for your help and when you come up with something attractive, please let us know. Let us know if you like any of those mentioned above. We want to see the best slogan, both eye-catching and effective in expanding membership. And when we get the best one, we will ask an artist to design our slogan to become even more eye-catching. Hope to hear from you soon, Samran

REGIONAL NEWS

Soil Degradation and Conservation in Mexico

Gerardo Bocco and Helena Côtler, National Institute of Ecology, Mexico (gbocco@ine.gob.mx)

Between 1976 and 2000 agricultural expansion in Mexico progressed rapidly. Rainfed agriculture spread over about an additional 40,000 km². This was mostly on rolling to hilly terrain with a high erosion hazard. During this time, irrigated agriculture has increased by about 23,000 km², mostly on plains and gently sloping foothills. Cultivated grasslands have been introduced over nearly 85,000 km² at the expense of natural vegetation in hilly to mountainous regions, a potential for soil erosion. This land use change has been triggered by the economic needs of an impoverished population and by public policies aimed at a non-sustainable rural development, based on the use of chemicals, but without provision for technical assistance and soil and water conservation.

Recent studies using the GLASOD method at 1:250,000 indicate that man-induced soil degradation processes are affecting 45% of the entire territory of Mexico. The major impact is due to chemical degradation, followed by loss of fertility, especially in areas of irrigated agriculture in the northwest. Physical degradation, basically soil compaction, affects 6% of the entire country, while wind erosion is detected in 9.4%, especially in the arid and semi-arid areas.

According to the same source, soil erosion by water affects 11% of the country, especially in areas of rainfed agriculture. No data exist that differentiate between the progress of different types of water erosion (gullying vs. inter-rill and rill erosion). Gullying is included with the category severe erosion although gully erosion may start and develop differently from other forms of erosion, especially in the temperate, volcanic terrain that occupies large areas of Central Mexico, where most of the population and economic activities are located. Here, gullies are widespread on land with very gentle to medium slopes. Research has indicated that different types of erosion follow different types of hydrologic processes (surface vs. sub-surface) and micro-landslides, both controlled by the stratification of recent ash deposits.

Soil conservation in Mexico, as in many other countries, has moved from purely mechanical intervention aimed at the control of runoff, towards a more integrated approach, aimed at protective land

cover (especially the natural vegetation), through the control of land use changes, as well as promoting the use of minimum tillage operations. The general framework is adapting land use to land suitability at the local scale.

To this end, the Federal Government is promoting experiments at 21 field stations in different eco-geographic regions to test different conservation programs and techniques that are later applied at the parcel or micro-basin level. The programs include, besides mechanical techniques, deforestation control, re-vegetation and reclamation.

Measurable results are still awaited. In any case, decentralization of public policy, resources and capacity building prevail as major challenges for both the government and society. Applied, interdisciplinary research (social and natural science in a geographic perspective) plays a key role in this context.

FEATURES

Vetiver Highlights

The Vetiver System – A Unique and Wide Ranging System of Environmental Improvement

Dick Grimshaw (dickgrimshaw@vetiver.org), Chairman of the Board of The Vetiver Network.

I have been asked to write a regular feature on different aspects of the Vetiver System for the use of vetiver grass as a bioengineering tool. Knowing that most of the readers of this newsletter are soil scientists and engineers, I acknowledge from the outset that most of you know more about soils and their conservation than I do. I also acknowledge that there are a lot of different applications, both

“hard” and “soft”, for conserving soil. Having said this I am not ashamed to promote Vetiver System applications for soil conservation and stabilization, because it is indeed a proven application using a unique plant – *Vetiveria zizanioides* – vetiver grass. It is also a system that is low cost, simple and very effective.

What makes vetiver grass so interesting is that it has a range of remarkable properties that is rarely found in just a single species. The grass can be applied to a very wide range of applications relating to soil and water conservation. In this first article I will try to summarize some of these properties and applications, as a basis for more detailed citations of applications in later editions of the newsletter.

The cultivated variety of *Vetiveria zizanioides*, with its center of origin in southern India, has hydrophilic characteristics, but thrives under upland, non-wetland conditions. The very basis of the Vetiver System is that when vetiver grass is planted as a hedgerow across a slope, it forms a very dense barrier that slows down and spreads rainfall runoff. Pretty simple!! Then combine this with a very deep and strong root system (average tensile strength of 75 Mpa), a wide range of pH tolerance from about pH 3 to pH 11, a high tolerance to most heavy metals, an ability to remove from soil and water large quantities of excess nitrates, phosphates and farm chemicals, and an attribute of sterility and non-invasiveness, we have a plant that, with some modifications to its application, can be used for soil and water conservation, engineered construction site stabilization, pollution control (constructed wetlands), and most other uses where soil and water come together. This should be exciting news to those who have to find solutions for improving degrading and polluted soils and water supplies and maintenance of earth based structures.

There is a comprehensive source of information about the Vetiver System and vetiver grass at <http://www.vetiver.org>. I also draw your attention to a very recent paper: Vetiver System for Erosion and Sediment Control by P.V.N. Truong and R. Loch that can be found at: http://www.vetiver.org/AUS_Sediment.pdf. Their paper provides an excellent background to this article.

If readers have questions or comments please feel free to use the Vetiver Network Discussion Board, <http://www.vetiver.org/discus> – you should receive a quick response and perhaps further the debate about this remarkable plant.

Landcare Highlights

Sue Marriott and **Victoria Mack**, Secretariat for International Landcare (SILC) Inc., Hamilton, Victoria, Australia. Phone: +61-3-52505252, smarriott@silc.com.au, vmack@silc.com.au

This is the first in a series of articles reflecting on the achievements of the Australian Landcare Program, and what it might become in the next decade and beyond.

Over the next 5 issues SILC articles will cover:

- * Landcare people, including the role of women in Landcare – case studies;
- * How the funding flows – the private and public funding mix;

- * The challenges and the stakeholders – are there winners and losers?
- * The planning process – how does national planning work?
- * The future – the evolution of the Landcare process and is there time?

Between 1986 and 1989, the word 'landcare' in Australia spread rapidly, reflecting landholder and community recognition of the environmental damage that had occurred over many decades of ignorance about the impact of agricultural and industrial practices on the health of the natural resource base. It also reflected the desire to fix the problems, including vegetation loss, erosion and degraded water supply.

Significantly, Landcare was driven by people not by government, although the latter was quick to catch up once it saw the benefits of supporting this volunteer army of enthusiasts. It is also significant that Landcare happened on both private and public land.

Today, Landcare in Australia, and increasingly in many other countries, is regarded as best environmental practice, a remarkable change in less than 20 years. This change is supported by widely held agreement by the community of the need to protect and enhance the environment on which all Australians depend. It has only come through enormous effort, and commitment, by tens of thousands of Australian volunteers.

In 1989, Landcare was formally recognized by policy makers as a highly significant nationwide 'grass-roots' movement. National programs were funded and Landcare entered a new phase. Over 4500 groups were formed over 10 years across the nation.

Some history

Australia was colonized by the British in 1788. Australian agriculture was based on British and European Agricultural systems. The Australian pioneers of the 19th and 20th Centuries were kept busy. They extensively cleared the land of its natural vegetation for agriculture, diverted waterways for electricity and irrigation, and introduced foreign animals and plants, many of which were quickly to become uncontrollable pests and weeds. Over 200 hundred years of white settlement, on soils 'hit' by totally inappropriate agricultural techniques, created lasting damage which may take as many years to reverse.

However, since the 1980s, many landholders and citizens have become the 'new' pioneers, learning by trial and error how to reverse land and water degradation. As there was limited 'off the shelf' education available, they explored environmental repair 'on the job' – how to establish trees and shrubs efficiently and effectively, how to halt erosion, and how to develop land and, with their neighbors, whole-of-catchment (watershed) management plans. They utilized science and new technologies and lobbied government for help.

The journey to achieve sustainable resource use and repair degraded land, water, air and coastal ecosystems has only just begun. Australia's present and future challenges include loss of species and biodiversity, worsening salinity, top-soil loss, land clearing (which unfortunately is still an issue), and a raft of coastal and marine concerns.

As one of the driest continents on earth, water is one of Australia's most over-allocated and scarce resources. The nation is facing hard decisions about the equitable allocation, and price, of water for agriculture, the environment and urban needs. Water is high on the national political agenda, and its scarcity will be exacerbated if climate change forecasts are correct.

A National Plan

Over the last two years, recognizing the serious environmental consequences of 'doing nothing', Australia embarked on a massive national project - planning natural resource management Australia wide - border to border - using thousands of volunteers to prioritize NRM projects in their sub-regions. It is doubtful if any other country on earth has embarked on such an endeavor. The result will be accredited, and funded, plans for all catchment regions across Australia.

Earlier this year, SILC was involved in a qualitative research project investigating the direction that this planning process is taking and its impact on grass-roots people. The final report has both positive and negative themes. The positive is that people understand that management of natural resources has to evolve, and the negative is that the bureaucratization of NRM risks a revolt in the volunteer ranks. Australian Landcare can provide valuable lessons for any country wishing to mobilize its own.

WOCAT Highlights

Godert van Lynden (godert.vanlynden@wur.nl) and
Gudrun Schwilch (Gudrun.Schwilch@cde.unibe.ch)

In THE WOCATEER, No. 9 – June 2004, there are many interesting pieces of news this time.

Following is an excerpt from it for interested WASWC members. The full newsletter can be accessed at www.wocat.net.

* **9th Annual WOCAT Workshop and Steering Meeting (WWSM9)**, 8-14 November 2004, Yichang, China. Invited to this meeting are those involved in the coordination of WOCAT activities at the global, regional or national level, and/or involved in any of the WOCAT Task Forces. Invitations will be sent out in August.

* The **WOCAT CD-ROM Version 3.0 is now ready**. It illustrates the WOCAT methodology and contains an introduction to WOCAT; databases of SWC technologies, approaches and maps; questionnaires; addresses; guidelines; a slide presentation; various reports and a glossary. The CD-ROM is an update of WOCAT CD-ROM v. 2 (FAO's Land and Water Digital Media Series No. 9) and will be distributed to all WOCAT collaborating institutions. A big effort was made to translate the menu (which is the same as the website navigation) and the improved databases into French and Spanish. These translations will allow the WOCAT website to be available in three languages in due course. After the test version last year, new datasets were included from Bolivia, Ethiopia, Nepal and Switzerland as well as updates from South Africa.

Ask for your copy at: Wolfgang Prante, FAO, AGLL, B710, Viale delle Terme di Caracalla, 00100 Rome, Italy. Phone: +39 06 570 55085, Fax: +39 06 570 56275, wolfgang.prante@fao.org. For comments please contact WOCAT at wocat@giub.unibe.ch.

* **WOCAT Training in Bangladesh**, Kagrachari / Rangamati (Chittagong Hill Tracts - CHT), March 9-17, 2004. A WOCAT training course was conducted on the initiative of S.K. Khisa (khisask@bttb.net.bd) of the CHT Development Board (CHTDB). 25 participants from a wide background (national and local government, NGOs and universities) attended the training. Godert van Lynden was the resource person, assisted by Sanjeev Bhuchar, Madhav Dhakal, and Jose Rondal. The fact that the participants had been able to familiarize themselves with the questionnaires beforehand proved a great advantage, resulting in 4 Technologies and 4 Approaches being documented entirely in less than two days. The choice of the identified technologies shows an interesting trend to use WOCAT not only for documentation (and evaluation) of SWC but of production systems in general, with or without beneficial conservation effects. In this case the documentation of "jhum" (shifting cultivation) and "traditional rice paddy terraces on valley floor" are a good illustration of this, their main objective being production and not conservation (in the case of jhum even with some negative effects).

The CHT consist of parallel ranges of low but often steep hills (in this region 200-400 m, further south rising to 1,400 m) with flat valley floors where paddy rice is often cultivated if seepage water is sufficient. The green paddy fields form a striking contrast with the surrounding hillsides.

Overall, the results from evaluation were positive, but with a wider variation in replies and on average less positive than the previous training workshop in Nepal. Participants, however, verbally emphasized the usefulness of WOCAT and expressed their satisfaction with the training.

* **Regional WOCAT meeting for C. and S. Asia**; 20-26 March, Kathmandu, Nepal. The meeting was to address those WOCAT issues that are specifically relevant for the region (Hindu Kush / Himalayas + C. Asia + India) but, particularly for WOCAT, global at the same time. The meeting was attended by delegates from the HKH region, in particular from the PARDYP project (Nepal, Pakistan, India) and ICIMOD region in general (Bangladesh), China (national rather than just HKH), S. India (Karnataka) and Central Asia (Kyrgyzstan, Tajikistan).

On March 21, an excursion was made to the field site of the PARDYP project in the Jikhu Khola watershed, just east of the Kathmandu valley. The PARDYP project has done extensive and interesting long-term research in this watershed, partly showing the usefulness of some applied research but also uselessness of some previous research (showing the effect of grass strips on a completely bare soil which is ultimately degraded anyway and without querying what should be done with it). Similar research sites exist in India, Pakistan and China. Several WOCAT case studies have been documented for the Jikhu Khola watershed and the map methodology (QM) will also be used in the coming months to assess the spatial extent of SWC. Discussions were held on regional issues and tasks.

A full report of this meeting can be found on the WOCAT Website at:

www.wocat.net/ftp/HimcatMarch04.pdf.

* The **3rd plenary project meeting of SOWAP** (SOil and Surface WAtER Protection Using Conservation Tillage in Northern and Central Europe) was held during February 24-26, 2004 in Leuven, Belgium. The key objectives for this meeting were to: a) Review project progress to date, b) Identify any outstanding issues, c) Confirm organization charts and roles and responsibilities for each country, d) Plan the agronomy for each country for the lifetime of the project, e) Finalize plans for project launches in Belgium and Hungary, and f) Discuss and generate a plan for dissemination of project outcomes at local, country and EU level.

Meanwhile an official project launch meeting for the general public took place in Leuven, Belgium, attended by the press, farmers and scientists. A similar meeting was held at the Lodding site in the UK in October 2003 and another launch event will soon take place in Hungary. As part of the SO-

WAP project, some of its staff were trained at a WOCAT training course at Leuven, Belgium during April 20-23, 2004.

Note: See also "Confluence and WOCAT" in the Information Sources section.

RESEARCH NEWS AND ABSTRACTS

Abstract: Modeling Nutrient Losses by Wind and Water Erosion in northern Burkina Faso, Saskia M. Visser, (sasvis@zonnet.nl) PhD Dissertation of Dept of Environmental Sciences, Erosion and SWC Group, Wageningen University and Research Centre, Wageningen, The Netherlands, 2004, 169 pp. jolanda.hendriks@wur.nl, www.dow.wau.nl/eswc/

In the semi-arid environment of northern Burkina Faso the processes of wind and water erosion occur simultaneously and may cause severe soil degradation. Especially in the rainy season when soils are bare and unprotected, violent winds preceding high intensity rainfall result in substantial sediment transport by both wind and water. This PhD project aims at quantifying and modeling wind and water erosion processes, their interaction and related nutrient flows in a Sahelian environment.

The source code of EUROSEM and the stand-alone erosion sub-model of WEPS are translated into the dynamic modeling language PCRaster, further adapted to be applicable to the Sahelian situation and extended with nutrient components. From field measurements and modeling results it is concluded that, for water erosion, rain splash is the most important detaching agent at the scale of a field and that, despite the large volumes of overland flow, erosion transport capacity is limited due to the generally low slopes. The material detached by water erosion is available for wind-blown transport.

Due to the absence of non-eroding boundaries, intense mass transport under the influence of violent winds does not always result in erosion. Depending on wind direction, cover and crust type, net deposition may occur. Further, due to the large spatial variation in wind erosion controlling parameters, areas with erosion and deposition can be identified within a field.

Based on model results, it is concluded that wind erosion is responsible for the loss or deposition of large amounts of fine sediment and nutrients attached to these sediments. Though, compared to wind erosion, the nutrient losses caused by water erosion are small, these losses should not be underestimated; these nutrients flow to the nearest stream and are forever lost to the catchment.

Due to the interaction between wind and water, nutrient and soil erosion at field scale may be large, but are limited at village scale. Provided there is good management of natural resources, such as tree and shrub cover and a wise distribution of cultivated and fallow fields around the village, long-term productivity is not at risk in the southern Sahelian zone.

Abstract: Maize-sesame Intercropping in SE Tanzania: Farmers' Practices and Perceptions, and Intercrop Performance, Goeffrey S. Mkamilo, PhD Dissertation of the Dept of Plant Sciences, Crop and Weed Ecology Group, Wageningen University and Research Centre, Wageningen, The Netherlands. 2004, 112 pp. cwe@wur.nl, www.dpw.wau.nl/cwe/

In Farming System Zone 8 of SE Tanzania, the major food crop maize is often inter-seeded with the cash crop sesame. Despite the fact that 90% of farmers in this area are growing the crops as an intercrop, recommendations are merely based on results in pure stands. In this research, a farm household study was conducted to understand farmers' motives for adopting maize-sesame intercropping systems. Additionally, three years of cropping experiments were conducted to evaluate the agronomic performance of the system. The survey revealed that farmers consider maize the more important crop, as it should secure the basic food requirements of the household, whereas sesame offers diversification of their cash income. Growing sesame in pure stands is considered too risky, while an intercrop, apart from risk avoidance, also places less demand on labor and fertile land. The experiments show that maize and sesame are partially complementary in resource acquisition, an observation in line with the notion of farmers that the two crops are good companions. Further experiments focused on the influence of management options, like relative sowing time, fertilization and spatial arrangements on the performance of the intercrop. The results of this study clearly indicate that recommendations for intercropping cannot simply be based on extrapolated results obtained with pure stands of the respective component crops. Combining socioeconomic and technical research proved mutually beneficial, and for that reason it is recommended that future projects should put emphasis on participatory research to stimulate co-innovation.

ANNOUNCEMENTS

Postgraduate Course in Hydraulics, Water Resources and Environment

The University of Coimbra, Coimbra, Portugal offers a course for a Master of Science Program (MSc) in Hydraulics, Water Resources and Environment (2004/2006).

The program, conducted in Portuguese, is aimed at students with a degree in civil or environmental engineering or an equivalent degree. More information is available on www.ci.uc.pt/mhidro/index.html or contact: Prof. Dr. João Pedroso de Lima, Department of Civil Engineering, Faculty of Science and Technology, Polo 2 - University of Coimbra, 3030-290 Coimbra, Portugal. plima@dec.uc.pt

International Conference on Interdisciplinary Curriculum and Research Management in Sustainable Land Use and Natural Resource Management

Chaophya Park Hotel, Bangkok, Thailand August 17-19, 2004

Organized by: Thai University Consortium on Environment and Development – Sustainable Land Use and Natural Resource Management (TUCED-SLUSE)

Contact: Piya Duangpatra at agrpyd@ku.ac.th

International Workshop on “Integrated Lake Management”

Venue: JB Hotel, Hat Yai, Thailand August 19-21, 2004.

Agenda:

- Changes in water quality, nutrient loads, flood risks and drought relief.
- The needs of natural parks, nature preservation, wetlands, biodiversity and ecotourism.
- The benefits/ detrimental effects of agro-industry, shrimp farming, fisheries, rubber and oil palm industry.
- Changing use of land resources, land use management plan, rehabilitation of land disturbed by shrimp farming, soil erosion.
- The needs for legal and institutional arrangements, plans and policies, co-ordination, implementation and monitoring, and public participation.

Contact: Charlchai Tanavud, Prince of Songkhla University, Hat Yai, Songkhla 90112, Thailand.

Phone: +66-74446824, Fax: +66-74446825, tcharl@ratree.psu.ac.th

International Conference on Innovative Practices for Sustainable Sloping Lands and Watershed Management (SSWM 2004)

Venue: Chiang Mai Hill Hotel, Chiang Mai, Thailand 5-9 September 2004

Theme: Sustainable Smallholder Land and Water Management in Sloping Upland Areas for Food, Livelihoods and Nature

The conference will be convened in the following sessions:

- Key aspects of land and water management on sloping lands for sustainable agriculture.
- Innovative sloping upland practices tested in SE Asia.
- Technology transfer of management principles/ options.
- The challenge of achieving adoption.
- Policy and socio-economic factors in sloping land management.
- The role of impact assessment in quantifying adoption.

Contact: Kukiatt Soitong, Secretariat of SSWM 2004, c/o DOAE, Phaholyothin Road, Chatuchak, Bangkok 10900, Thailand, Phone: 662-5791981, Fax: 662-9406123, sswm@doae.go.th, sswm2004@hotmail.com, agriman22@doae.go.th, <http://sswm.doae.go.th>

**2004 CIGR International Conference
(Olympics in Agricultural Engineering)**

Venue: Beijing, China October 11-14, 2004

There are sessions in:

- Land and Water Management: Decision Tools and Practice
- Bioproducts Processing and Food Safety
- Information Technology for Agriculture
- Conservation Tillage and Sustainable Small Farming
- Modern Agricultural Equipment and Facilities

See full conference program in www.2004cigr.org

Contact: Xiaoyan Wang, Secretary, P.O.Box 46, Dept. of Agricultural Engineering, China Agricultural University, East Campus, 17 Qinghuadonglu Rd., Haidian District, Beijing, 100083, P.R. China. Phone: 86-10-62337300, xywang@cau.edu.cn

**International Workshop on Integrated Ecosystem Management (IEM)
Partnership in Combating Land Degradation in Dryland Ecosystems (OP12 PRC-GEF)**

Venue: Beijing, China November 1-2, 2004

Major topics of the Workshop are:

- 1) IEM Concepts and Practices;
- 2) IEM at the regional and river basin levels;
- 3) How to Improve Enabling Environment for an IEM approach to Combating Land Degradation in China; and
- 4) Putting IEM into Practice – Provincial Views and Workshop Overview.

Contact: Zhang Weidong, Project Management Office, PRC-GEF Partnership in Land Degradation in Dryland Ecosystems (OP12), Rm 428, Debao Hotel Bldg., Xicheng District, Beijing, 100044 P.R. China, Phone: 86-10-68334597, Fax: 86-10-68334527, zhangweidong@gefop12.cn

**International Symposium on Sustainable Highland Development and Networking:
Lessons Learned from the Royal Project of Thailand**

Venue: Chiang Mai, Thailand 8-10 December 2004

Organizers: The Royal Project Foundation, Thai Ministry of Agriculture and Cooperatives and Chiang Mai University

The objectives of the symposium are to allow the exchange of experience of highland development, to present and analyze the achievements of the Royal Project, and to launch a new collaborative network to share highland development knowledge. Delegates from countries with highland development and/or drug-crop production issues from Asia, Latin America and Africa will be joined by representatives of such organizations as FAO, the UN Office on Drugs and Crime (UNODC), USAID, SDC, the Rockefeller Foundation, ADB and the ASEAN, along with numerous representatives of NGOs and development projects.

Confirmed program highlights include: Headline addresses by Her Royal Highness Princess Chulabhorn, Jacques Diouf, the Director-General of the FAO, and Chaturon Chaisang, Thai Deputy Prime Minister, Akira Fujino, Regional Representative of the UNODC for East Asia and the Pacific, and the Royal Project Representative. This will be followed by a panel discussion, "An Exchange of Experience and Perspectives on Sustainable Highland Development" and a field trip to Royal Ang Khang Research Station, to allow delegates to observe the work of the Royal Project in person.

Contact: Marcus at marcus@highlandssymposium.net, & more info in www.highlandssymposium.net

**International Symposium on Land Degradation and Desertification
(Simpósio de Degradação de Terras e Desertificação)**

Venue: Uberlândia, Brazil May 16-22, 2005

Contact: Sílvio Carlos Rodrigues, Instituto de Geografia - Universidade Federal de Uberlândia
silgel@ufu.br and comland2005@ig.ufu.br, www.ig.ufu.br/comland/index.htm

International Symposium on "Sustainability of Paddy Farming Systems"

Venue: Manila, Philippines June 20-25, 2005

Oral and poster presentations are welcomed on any of the following topics:

1. Food Security
 2. Multi-functionality of Paddy Farming
 3. Soil and Water Environment
 4. Food Safety
- Extended abstract should be in by January 15, 2005.

Contact: Jose Rondal at joserondal@yahoo.com

SUMMARY REPORTS

International Seminar on Conservation of Hillside Agriculture, November 26-28, 2003, Manizales, Colombia

The Seminar was sponsored by the University of Caldas, the Caldas Enterprise Foundation and the Temporary Union Sosandinos (Sustainable Systems for Management of Tropical Andean Soils). It took place at the Recinto del Pensamiento Jaime Restrepo Mejía. There were about 200 professionals and university students attending.

The purpose of this seminar was to examine innovative experiences in conservation that could be relevant to the betterment of hillside agriculture. Twenty-four presentations were made in the first two days by representatives of Colombia, Venezuela, Brazil and Peru. The third day there was a field visit to see research being done by the Caldas University with movable rainfall simulators. The beautiful scenery surrounding Manizales is impressive. The area is part of the Colombian "coffee axis" (eje cafetalero). Lands of relatively high non-abrupt and gently rolling relief, completely covered by green and dense vegetation, indicating deep and fertile soils, were observed. The humid tropical conditions, about 2,000 mm rainfall, which correspond to this area, are characterized by the lower temperatures caused by elevations of 2,000 m asl. There was no erosion or land being mismanaged. These conditions would be highly erosive if the land were not well managed.

Thus, papers presented could concentrate on improving production technologies while providing for continued conservation. Technologies and practices about agroforestry, soil biology, tillage, special plants, and winter cover crops were presented. Some presentations dealt with practices like minimum tillage, animal traction, and the special effects of roots on slope stability. Models to select best land use were also discussed. Special consideration was given to USLE's new developments. Tropical semi-arid conditions were the focus in some presentations about areas of Colombia, Venezuela, Peru, Central America and the Caribbean. Semi-arid conditions, together with hillside agriculture, are the worst enemies of soil conservation. Further information is available from the chairman of the Organizing Committee, Prof. Franco Obando-Moncayo of the Caldas University, fobando1@yahoo.com.
– Manuel Paulet-Iturri, WASWC Representative for Peru

Meeting and Symposium of the East African–Austrian Water Association, (EAWA), December 11-13, 2003, Mukono, Uganda

The inaugural meeting and symposium of the East African–Austrian Water Association (EAWA) took place in Mukono, Uganda. EAWA was set up to serve as an international dialogue and exchange platform, a springboard for research and project activities, and a forum for intensifying network activities in the field of freshwater research and freshwater ecosystem management. The theme of the symposium was "Linking water experts for networking and partnerships, getting active together to meet the challenges of water resources management in East Africa". The aim of the association is to foster information exchange to strengthen international networking, and to stimulate cooperation and collaboration within East Africa in the water and education sectors. There were over 130 participants representing Uganda, Kenya, Tanzania, Zambia, Ethiopia, Austria, Netherlands and Nepal in the meeting. The participants from the African region were mainly made up of the current and former recipients of the Austrian Academic Exchange Service (AD) scholarship. The inauguration ceremony

was presided over by the mayor of Mukono Town Council Mr. Ssenyonga. The topics covered in the symposium were grouped under the following subjects:

1. Freshwater ecosystem management
2. Freshwater ecosystem functioning
3. Freshwater resource management
4. Water quality and ecosystem quality
5. Fisheries and aquaculture

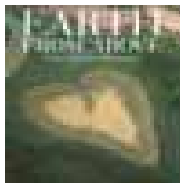
I presented a paper on "Effectiveness of Vegetative barriers in the control of Crop Nutrient Loss and Water Pollution". The paper gave findings of a study in which the performance of narrow strips of vetiver and napier grass in reducing nutrient losses was evaluated using runoff plots. As can be seen from the subjects indicated above, most of the presentations dealt mainly with the problems of freshwater sources, wetlands, limnology and aquaculture. Thus, most of the papers presented covered the problems facing freshwater ecosystems, with emphasis on pollution, the influence of human activities on freshwater resources and limnological parameters on the fish population in the East African water resources.

We also had an excursion to study the water issues in Kampala city area. During the tour we visited Nakivubu Channel, a wastewater treatment plant, a water-quality lab, Nakivubu wetlands, drinking waterworks and a fingerponds project site. During the tour it became apparent that the pollution problem in this area emanated from chemicals in the effluents from the sewage treatment plant and wastewater from the factories in town. The problem of sediment pollution did not appear to be serious, most probably due to the good vegetation cover, which was present on most of the slopes and in the wetlands within this area.

– James Owino, WASWC Representative for Kenya

PUBLICATION REVIEWS

Earth From Above, Yann Arthus-Bertrand (www.yannarthusbertrand.com) Harry N. Abrams, Inc., New York. August 2002. 464 pp. 262 x 359 mm. 177 color photos. ISBN 0-8109-3495-7 US\$45 (www.abramsbooks.com) (at Amazon.com US\$31.50 + freight) and La Terre vue de ciel, La Tierra Vista desde Cielo ISBN 2732425230, €45 (www.lamartiniere.fr)



Stunning pictures from around the world! This large coffee-table book is full of oblique angle photos taken from small planes and helicopters. It stitches together ecosystem states and dynamics both from an undisturbed standpoint and with the influence of global humanity.

The book is organized into 12 chapters on topics such as urban landscapes, farmers, biodiversity, climate change and sustainable development. Each chapter starts with an essay from an expert in the topic such as Jean-Marie Pelt (biodiversity), Hervé Le Bras (population and the environment), Reiner Klingholz (renewable energy) and Lester Brown (eco-economy). Surrounding each essay are fold out half-pages that contain thumbnail pictures of the corresponding, large full page or two-page spread photographs in the book. The captions with the thumbnails show the location of the photo and provide the context and significance of the photographs.

There are aerial photographs of the biologically rich delta/lake habitats in Venezuela and Kenya, mountain scenery of Argentina and La Réunion. We are shown different views of famous landmarks such as Versailles and the Taj Mahal. Examples of the impact of the environment on humanity are buried villages below Mount Pinatubo or dunes covering roads in Egypt. Human impact on the environment is also shown with various housing developments, refuse dumps and remnants of war.

The book ends with a chapter, "the earth in numbers" which presents data supporting most of the themes in the book. Throughout the book, the captions contain informative statistics of the context of the pictures in a global situation. This results in something much more substantial than an artistic picture book. It presents the art of ecology with the facts of science that illustrate the need for conservation.

With substantial support from UNESCO and corporate sponsors, the book costs less than half a textbook and it is three times the size and weight. It can be obtained from large bookstores and Internet-based bookstores at a discount. Be careful of the shipping costs though, due to its considerable weight. The Earth From Above is well worth the cost for scientists in need of a pleasingly larger perspective or a library intent on educating and motivating students.

Soils of the Tropics (2 publications)

Tropical soils - properties and management for sustainable agriculture, by **A.S.R. Juo and K. Franzluebbers**. Oxford University Press, 2003. Hardback, 281 pp. ISBN 0195115988. £45.

Properties and management of soils of the tropics, by **A. van Wambeke and F. Nachtergaele**. CD Rom, FAO Land and Water Digital Media Series 24, 2003. ISBN 9251050074. US\$44.

There are several textbooks on soils of the tropics of which "Properties and management of soils in the tropics" by Pedro Sanchez from the mid 1970s is probably best known. Other major reference books that have their focus on the soils of the tropics by Lal (1987) and van Wambeke (1992) are somewhat different, reflecting the interests and experiences of the different authors. For example, van Wambeke puts much more emphasis on the soil orders of Soil Taxonomy whereas in Lal's book there is much information on tillage and farming systems. But there are also some similarities. Each starts with a description of the tropical environment, including the effects of climate and vegetation on the soils of the tropics. Now there is a new book by Juo and Franzluebbers on tropical soils as well as a CD Rom version of van Wambeke's book. What are these about?

The book of Juo and Franzluebbers is in two parts. In the first, basic considerations (sic) of soil science are discussed and these include: the environment, mineralogy, soil chemistry, soil physics, soil biology and microbiology, soil fertility and soil formation and classification. These chapters are straightforward and comprise a readable introduction. The authors rely somewhat on existing soil science textbooks but present several examples from their own work. Chapter 7 discusses soil formation and classification, describing the 11 orders in Soil Taxonomy, the 26 soil classes of FAO-Unesco, the INRA/ORSTOM system, and the Soil Fertility Capability Classification, which was recently updated.

In Chapter 8, the authors propose a descriptive grouping of major soils in the tropics based on clay mineralogy. The main purpose of the grouping is to provide field workers, especially those who are not familiar with other classification systems, with a simple framework for planning soil management strategies. The scheme classifies major arable soils in the tropics into four groupings according to the dominant clay mineralogy: kaolinitic soils, oxidic soils, allophanic soils and smectite soils.

Kaolinitic soils are deeply weathered with a sand, loamy sand, or sandy loam topsoil and clayey subsoils dominated by kaolinite. Oxidic soils are strongly weathered, red and yellowish, fine-textured soils that typically have low bulk density and large amounts of stable microaggregates. Low water holding capacity, low soil fertility and high P-fixation are major constraints. The allophanic soils are dark-coloured and young soils derived from volcanic ash with low bulk density, high water retention and contain predominantly allophanes, imogolite, halloysite and amorphous Al in the clay fraction. The last group are the smectite soils that are loamy to clayey alluvial soils containing moderate to large amounts of smectite. Each of these four groups has a chapter that discusses their properties, use and management as well as constraints. The approximate equivalent in Soil Taxonomy is given for each of the mineralogy groupings. Several examples are given of how these soils should be managed. In the last chapter some ecological considerations of soils and sustainable agriculture are discussed.

In summary, this book discusses some of the main properties and processes in soils of the tropics followed by a grouping of soils based on clay mineralogy. That is certainly an unusual, if not idiosyncratic, approach. Given that we have accepted and fairly widely used soil classification schemes in which this differentiation (amongst others) is made, one wonders what the advantages are of such a one-eyed distinction. It excludes certain groups of soils and for many soils the soil mineralogy is not always known. There is much useful information in this book but the unusual structure and the index of only 7 pages make it hard to find.

The CD Rom version of van Wambeke's book from 1992 contains text (as PDF), slides and PowerPoints including hyperlinks. The text of the first five chapters focuses on the tropical soil environment and has not changed much, although some references on the World Reference Base (WRB) have been inserted. There is a PowerPoint attached to most chapters that have figures explained in the main text. If you are not bewildered by PowerPoint animations, e.g. text rolling in from all sides (should be forbidden by law), then some of these figures and text summaries are useful and illustrative. Chapter 4 focuses on soil horizon formation and it has been rewritten using WRB terminology. The second part of the book originally covered the Soil Taxonomy soil orders, but on the CD Rom, it has been replaced by the WRB Soil Reference Groups. In Chapter 6, the rationale and principles of the WRB are explained and the text is a nice introduction for those who are only familiar with Soil Taxonomy or still use the old FAO-Unesco legend. Since 1998, the WRB system has been recommended by the IUSS and the shift from Soil Taxonomy to WRB seems sensible.

In the following ten chapters, 15 of the 30 Soil Reference Groups are described: Ferralsols, Nitisols, Acrisols, Lixisols, Alisols, Luvisols, Cambisols, Umbrisols, Andosols, Vertisols, Gleysols, Plinthosols, Fluvisols, Arenosols and Podzols. Obviously these are important soils in tropical regions but one wonders why, for example, Histosols and soils common in semi-arid climates (e.g. Calcisols, Solonchaks) were not included. Each Soil Reference Group is described in terms of definitions, representative soil profile data, genesis, management properties and land use. There is also a PowerPoint attached to each chapter that contains further explanations, pictures and diagrams. Furthermore, there is a glossary that is an extract and update from the SSSA Glossary of Soil Science Terms and includes many WRB terms. At last, 17 full descriptions of soil profiles are given including some notes on soil analytical methods.

In summary, this CD Rom contains half the original text of van Wambeke's book from 1992. The other half (Soil Taxonomy) has been replaced by the World Reference Base and there are PowerPoint presentations attached to each chapter. In essence, it is a text from the late 1980s combined with WRB information that is also available in other forms (CD Roms, books, reports).

Although we should be pleased that books are being published that are solely devoted to the soils of the tropics, there is a void that remains to be filled. More emphasis should be given to environmental aspects of soils now, as in many urban areas soil pollution is also common. Moreover there is a range of topical themes like climate change, food security and land-use change that form perfect entry points for a major reference work on soils in the tropics. (Full version of this review will be published in the upcoming issue of *Catena*.)

- Alfred E. Hartemink, ISRIC, Wageningen, The Netherlands, alfred.hartemink@wur.nl

INFORMATION SOURCES

Announcements or reviews for the WASWC newsletter may be sent to the President or any other Council member. Please state clearly if a publication is available free or priced (including or excluding delivery). Also please indicate the e-mail address and website.

Books, Proceedings & Reports

- **Research for Impact: Annual Report 2003**, this highly informative, well illustrated, 60-page annual report of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), a well known Future Harvest institution, reporting its development of crops in semi-arid regions of the world during 2002/2003, including all other activities, can be obtained by writing to Information Resource Management Program, ICRISAT, Patancheru-502 324, Andhra Pradesh, India, icrisat@cgiar.org.

- **Vetiver and Water: An Eco-Technology for Water Quality Improvement, Land Stabilization and Environmental Enhancement**, by Paul Truong and Xia Hanping, eds. This 614-p proceedings from the Third International Conference on Vetiver (ICV-3) in Guangzhou, China in October 2003 is published by the China Agriculture Press and is obtainable from Luo Fuhe, Guangdong Academy of Agricultural Sciences, Wushan, Guangzhou 510640, China. faogass@public.guangzhou.gd.cn.

Journals, Magazines & Newsletters

- **IUSS Bulletin** is now available online at no cost. Click <http://www.iuss.org/pages/bulletins.htm>. Besides the Bulletins from issue 99 to 104, there are also Newsletters of the Commission for History, Philosophy and Sociology of Soil Science and of the Commission Pedometrics as well as soil science book reviews for the period 1999-2004. Hard copy of the Bulletin costs \$25 a copy.

Institutions and Websites:

Confluence and WOCAT. "Degree Confluence Project" (DCP) started in 1996. A common interest with WOCAT is that digitized photographs of impressive tracts of land may now be accessed online at www.confluence.org in addition to www.wocat.net.

The DCP coverage is much more complete, especially in the industrial countries, where mosaics of "thumbnail" images cover most of the USA and Western Europe. The Republic of South Africa is the only developing country with an almost continuous coverage. DCP requirements of site reports are far less demanding than the "ideal" WOCAT QT or QA descriptions. Compromise is obviously needed in both cases.

WOCAT has a more representative cover in East and North Africa and parts of South America, the Philippines and Thailand. However, the DCP information is much more accessible and interactive up front. Information is added in image and text form without the constraint of a database interrogation. The gaps are evident and addressing those gaps is the obvious goal. The peer edit group can easily add new layers of information.

The attractive visual effect could be supplemented with in-depth scientific facts as desired, for instance, geological origins, soil types and associations, wet or dry season variants to the existing theme, water resources, vegetation descriptions and other natural resource attributes. This could be done initially for the confluence site, then in concentric squares of increasing surface area such as the 15-minute and 30-minute confines surrounding the full degree longitude/latitude point confluence. That phase would be of greater interest at the national unit level than for the global mosaic.

The common factor is that DCP and WOCAT are both depending on volunteers to add new information, with the slight difference being that DCP have sales of T-shirts and other extras to address basic costs. DCP volunteers simply have to follow clear rules to file a site report.

A combination of degree confluence rules and WOCAT guidelines could be used to enrich the onsite DCP information to enhance both project outputs.

Degree confluences do not necessarily occur in convenient places. See Indonesia 6°S 106°E, where access was not permitted to the steelworks complex on the site near Cilegon, Jawa Barat. DCP rules also allow offshore secondary sites with a potential view of land on the horizon, where monitoring of land use change is hardly an option!

For both projects, the problem of obtaining high quality photographs onsite remains a constraint. Some guidelines should be established in this discipline. Image manipulation in Photoshop or similar software cannot always make up the shortfall from poor photos in the field. Micro-relief tends to disappear with wide-angle lenses. Midday sun or overcast conditions give an appearance of two rather than three dimensions. The aim should be for a scientific rather than a touristy presentation, where elements of landscape are given optimum detail.

– Rod Gallacher, FAO, Rome

NEWS IN MEETINGS BRIEF

The organizers of meetings in the field of SWC and related subjects are invited to send announcements for publishing in the WASWC Newsletter.

2004

- August 2-6, 2004. Int'l Symposium on Sediment Transfer through Fluvial System, Moscow, Russia. Contact: Duke de Boer at deboer@duke.usask.ca, <http://duke.usask.ca/~deboer/ICCE/>
- August 4-6, 2004, 4th International Symposium on the Tibetan Plateau, Lhasa Tibet (plus post symposium filed excursions). This symposium is being hosted by the Chinese Academy of Sciences (CAS) and the People's Government of Tibet Autonomous Region of China. This symposium will provide a forum for scientists, who are concerned with the Tibetan Plateau. Contact: Feng Xuehua, Phone: +86-10-6485-6498 Fax: +86-10-6488-9769, fengxh@igsnr.ac.cn
- August 16-20, 2004. World Water Week. The 14th Stockholm Water Symposium: Drainage Basin Management – Regional Approaches for Food and Urban Security, Stockholm, Sweden. Contact: Stockholm International Water Institute, Hantverkargatan 5, SE-11221 Stockholm, Sweden. sympos@siwi.org, www.siw.org
- August 17-19, 2004. Int'l Conference on Interdisciplinary Curriculum and Research Management in Sustainable Land Use and Natural Resource Management, Bangkok, Thailand. Contact: Piya Duangpatra at Phone: +66-29428763, Fax: +66-29438763, agrpyd@ku.ac.th
- August 19-21, 2004. Int'l Workshop on "Integrated Lake Management", Hat Yai, Thailand. Contact: Charchai Tanavud, Prince of Songkhla University, Hat Yai, Songkhla, 90112, Thailand. Phone: +66-74446824, Fax: +66-74446825, tcharl@ratree.psu.ac.th, rjongjit@hotmail.com
- *September 1-4, 2004. Conference on Integrated Agricultural Research for Development – Achievements, Lessons Learnt and Best Practice, Kampala, Uganda. Contact: NARO Conference Organizing Committee, c/o Director SAARI, P.O. Sordi, Uganda. Phone: +256-77-221351/ 702553, Fax: +256-77-280351/ 250553, naroconf@narosaari.org. See more details in Announcement section issue 19/4.
- September 4-12, 2004. 2nd Congress of EUROSOL, Freiburg-im-Breisgau, Germany. Contact: Thorsten Gaertig, Phone/Fax: +49-761-2039144, Thorsten.Gaertig@bodenkunde.uni-freiburg.de. See more details in Announcement section, 19(4) issue.
- September 5-9, 2004. Int'l Conference on Innovative Practices for Sustainable Sloping Lands and Watershed Management (SSWM 2004), Chiang Mai, Thailand. Contact: Kukiatt Soitong, Phone: 662-5791981, Fax: 662-9406123, sswm@doae.go.th, sswm2004@hotmail.com, agriman22@doae.go.th,

<http://sswm.doae.go.th>

- September 7-9, 2004. Second National South African LandCare Conference, Cape Town, South Africa. Contact Francis Elsenburg at francis@elsenburg.com.
- September 8-10, 2004. Int'l Symposium on Earth System (ISES 2004), Istanbul, Turkey. Contact: ODS Congress Management, Yildiz Cicegi 12/1 34337 Etiler, Istanbul, Turkey. Phone: +90-212-2875800, Fax: +90-212-3522660, secretariat@earthsystem2004.org. See more details in Announcement section, 19(4) issue.
- September 12-17, 2004. 4th Int'l Conference on Land Degradation (ICLD4), Cartagena, Murcia, Spain. Contact: Gregorio García, icld4@upct.es, www.upct.es/icld4/. See more details in Announcement section issue 19/4.
- September 13-17, 2004. Int'l Conference on Eco-engineering: The Use of Vegetation to Improve Slope Stability, Thessaloniki, Greece. Co-organized by ESSC, WASWC and IUFRO. Contact: Alexia Stokes, Phone: +33-5-57122836, Fax: +33-5-56680713, stokes@lrbb3.pierroton.inra.fr, www.ecoslopes.com, www.lrbb3.pierroton.inra.fr. See more details in Announcement section, 19(3) issue.
- September 15-17, 2004. Int'l Workshop on Digital Soil Mapping, Montpellier, France. Contact: Philippe Lagacherie at lagacherie@ensam.inra.fr
- September 15-17, 2004, 1st Int'l Conference on Soil and Compost Eco-biology, León, Spain. Contact José María Gómez Palacios, Phone: +34-91-3560181 Fax: +34-91-3556228, jmgomez@bpeninsular.com, www.bpeninsular.com
- September 20-22, 2004. Int'l Conference on Land Resource Management and Ecological Restoration in the Loess Plateau: Rural Development Strategy in China, Yangling, Shaanxi, China. Contact: Li Rui at lirui@ms.iswc.ac.cn. See more details in Announcement section, 20(2) issue.
- September 26-October 1, 2004. XII Conference of Colombian Society of Soil Science & XVI Latin American Conference of Soil Science, "Soil, Environment and Food Security", Cartagena de Indias, Colombia. Contact: Alvaro García, President of Colombian Society of Soil Science, scsuelo@cable.net.co, scsueloagarcia@uniweb.net.co
- September 27-October 1, 2004. 4th Int'l Crop Science Congress, Brisbane, Australia. www.cropscience2004.com
- September 27-October 1, 2004, Int'l Conference on Ecoagriculture, Nairobi, Kenya. Contact: Sara J. Scherr, Phone: +1-301-4058360, +1-703-7582548, Fax: +1-301-3149091, sjscherr@aol.com, sscherr@futureharvest.org. See more details in Announcement section, 19(3) issue.
- September 29-October 1, 2004. 2nd Int'l Conference on Waste Management and the Environment, Rhodes, Greece. Information available in www.wessex.ac.uk/conferences/2004/waste04/index.html
- October 4-6, 2004. Int'l Seminar on Ecotechnology for Sustainable Development – Ecotech 2004, Post Graduate and Research Department of Zoology, the New College, Chennai – 600 014, India, October 4-6, 2004. Contact: S. Dawood Sharief, Organizing Secretary, Phone: 91-44-28352584, Fax: 91-44-2835288, Mobile: 91-9840182319, seminar2k4@hotmail.com, sdawoodsharief@yahoo.co.in. See more details in Announcement section, 20(2) issue.
- October 11-14, 2004. 2004 CIGR Int'l Conference "Olympics in Agricultural Engineering", Beijing, China. Contact: Xiaoyan Wang, Secretary, P.O.Box 46, Dept. of Agricultural Engineering, China Agricultural University, East Campus, 17 Qinghuadonglu Rd., Haidian District, Beijing, 100083, P.R.China. Phone: 86-10-62337300, xywang@cau.edu.cn, www.2004cigr.org
- October 18-21, 2004. 9th Int'l Symposium on River Sedimentation: Interaction Between Fluvial Systems and Hydroprojects and Their Impact, Yichang, China. Contact: Hu Chunhong, Phone: +86-10-68415522/684156576/68413372, Fax: +86-10-68411174, irtces@public.bta.net.cn, irtces@95777.com
- October 20-24, 2004. Agroenviron-2004: Role of Multi-Purpose Agriculture in Sustaining Global Environment, Udine University, Udine, Italy. Contact: Guiseppe Zerbi, Phone: +39-328-0908099, Fax: +39-043-2558603, zerbi@dpvta.uniud.it, www.dpvta.uniud.it/~agroenv, or Sajid Mahmood, Phone: +92-300-6607290, Fax: +92-41647846, smahmoodpk@yahoo.com
- October 31-November 4, 2004. Annual Meeting of the Soil Science Society of America, Seattle, Washington, USA. See details in www.asa.cssa.sssa.org/anmeet/
- November 1-2, 2004. Int'l Workshop on Integrated Ecosystem Management (IEM): Partnership on Combating Land Degradation in Dryland Ecosystems (OP12 PRC-GEF) Beijing, China. Contact: Zhang Weidong, Project Management Office, PRC-GEF Partnership on Land Degradation in Dryland Ecosystems (OP12), Rm 428, Debao Hotel Bldg., Xicheng District, Beijing, 100044 P.R. China, Phone: 86-10-68334597, Fax: 86-10-68334527, zhangweidong@gefop12.cn
- November 2-6, 2004. World Engineers' Convention 2004: Engineers Shape the Sustainable Future, Shanghai, China. Contact: WEC2004 Secretariat, No. 86, Xueyuan Nanlu, Haidian District, Beijing 100081, China. Phone: +86-10-62173499, Fax: +86-10-62180142, wec2004@sino-meetings.com,

www.wec2004.org

- November 7-14, 2004. 9th Int'l Annual WOCAT Workshop and Steering Meeting (WWSM9), Yichang, China. Contact: Xu Feng (xufeng@mwr.gov.cn) and Godert van Lynden (godert.vanlynden@wur.nl)
- November 17-25, 2004. 4th IUCN World Congress "People and Nature – Making the Difference", Bangkok, Thailand. www.iucn.org, <http://www.iucn.org/about/wcc/wcc.pdf>
- November 27-28, 2004. Int'l Symposium on Participatory Strategy for Soil & Water Conservation, Tokyo, Japan. Contact: Rokuro Yasutomi, Organizing Chairman, Institute of Environment Rehabilitation and Conservation (ERECON), 2987-1 Onoji Machida-shi, Tokyo 195-0064, Japan. Phone/Fax: +81-42-7368972, erecon@nifty.com, <http://homepage3.nifty.com/erecon/symposium.htm>. See more details in Announcement section issue 20/4.
- December 5-9, 2004. SuperSoil 2004, University of Sydney, Australia. Contact: ASSSI, phone: +61-2-92903366, supersoil@icms.com.au, <http://www.asssi.asn.au>
- December 8-10, 2004. Int'l Symposium on Sustainable Highland Development and Networking: Lessons Learned from the Royal Project of Thailand, Chiang Mai, Thailand. Contact: Marcus at marcus@highlandsymposium.net, www.highlandsymposium.net
- December 8-12, 2004. 4th Congress on Water Planning and Management, (IV Congreso Ibérico sobre Gestión y Planificación del Agua - Ciencia, técnica y ciudadanía: claves para una gestión sostenible del agua), Tortosa, Cataluña, Spain. Contact: João Pedroso de Lima, Phone: +351-239-797-183; Fax: +351-239-797-179/ +351-239-797-123, plima@dec.uc.pt, www.us.es/ciberico. See more details in Announcement section issue 20/1.
- December 20-22, 2004, 2nd Int'l Symposium on Land Use Change and Geomorphic, Soil and Water Processes in Tropical Mountain Environments, Luang Phrabang, Lao PDR. Contact: Christian Valentin at valentinird@laopdr.com. Source of fund to provide travel assistance to a limited number of participants are currently being sought. Participants needing travel support should contact the committee soonest.

2005

- January 18-20, 2005 Int'l Conference "Education for a Sustainable Future (ESF), Ahmedabad, India. Contact: ESF Secretariat, Phone: +91-79-26858002, Fax: +91-79-26858010, esf@ceeindia.org, www.ceeindia.org/esf
- February 23-25, 2005. Int'l Conference on Integrated Assessment of Water Resources and Global Change: A North-South Analysis, Bonn, Germany. Contact: Eric Craswell, Global Water System Project (GWSP), Walter-Flex-Str. 3, D-53113 Bonn, Germany, eric.craswell@uni-bonn.de, waterconference@uni-bonn.de, www.giwa.net. See more details in Announcement section, 20(2) issue.
- March 29-April 6, 2005. Int'l Conference on Global Soil Change: Time-scale and Rates of Pedogenic Processes, Montecillo, Mexico. Contact: Elizabeth Solleiro-Rebolledo, solleiro@geologia.umam.mx
- April 2-9, 2005. Int'l Symposium on Regional Hydrologic Impacts of Climate Variability and Change With an Emphasis on Less-developed Countries, Foz do Iguacu, Brazil. More information on the symposium at <http://iahs.info>, and on the organizer, ICCLAS, at www.hwr.arizona.edu/icclas/.
- April 25-27, 2005. Int'l Study Forum on Managing Saline Soils and Water: Science, Technology and Social Issues, Riverside, CA, USA. Contact: Donald Suarez, Phone: +1-909-3694815, dsuarez@ussl.ars.usda.gov
- May 16-22, 2005. International Symposium on Land Degradation and Desertification (Simpósio de Degradação de Terras e desertificação), Uberlândia, Brazil. Contact: Sílvio Carlos Rodrigues, Instituto de Geografia, Universidade Federal de Uberlândia, Brazil, silgel@ufu.br, comland2005@ig.ufu.br, www.ig.ufu.br/comland/index.htm
- *June 20-23, 2005. VI Headwater Control Conference: Hydrology, Ecology and Water Resources in Headwaters, Bergen, Norway. Contact: Martin Haigh (mhaigh@brookes.ac.uk) and Josef Krecek (krecek@cesnet.cz). See more details in Announcement section issue 20/2.
- June 20-25, 2005. Int'l Symposium on "Sustainability of Paddy Farming Systems", Manila, Philippines. Contact: Jose Rondal at joserondal@yahoo.com
- July 30-August 4, 2005. Soil and Water Conservation Annual and International Conference. Rochester, New York, USA. Contact: Nancy Herselius, Phone: +1-515-2892331, nancy.herselius@swcs.org, www.swcs.org
- September 7-11, 2005. 6th Int'l Conference on Geomorphology: Geomorphology in regions of environmental contrasts, Zaragoza, Spain. Contact: Organizing Secretary, Geomorphologia, Edificio C. Facultad de Ciencias, Univ. de Zaragoza, Zaragoza, Spain. Fax: +34-976-761106, iag2005@posta.unizar.es, <http://wzar.unizar.es/actos/SEG>

- September 10-18, 2005. 19th Int'l Congress on Irrigation and Drainage (ICID), Beijing, China. Contact the Chinese National Committee on Irrigation and Drainage, Phone: +86-10-68415522/68416506, cncid@iwhr.com, www.icid.org/index_e.html
- September 19-21, 2005. XXXI CIOSTA-CIGR V Congress on Increasing Work Efficiency in Agriculture, Horticulture and Forestry. University of Hohenheim, Stuttgart, Germany, www.uni-hohenheim.de/ciosta-cigr.
- October 3-7, 2005. III World Congress on Conservation Agriculture, with a theme, "Linking Production, Livelihoods and Conservation", Nairobi, Kenya. Contact: Melanie Mostert, Phone: +263-4-882107, Fax: +263-4-885596, actnetwork@africaonline.co.zw, www.act.org.zw, www.fao/act-network
- October 5-8, 2005. "Yundola 2005", Forest Impact on Hydrological Processes and Soil Erosion: 40 years of the foundation of Experimental Watershed Research Basin, Yundola, Bulgaria. Contact: Elena Rafailova, erafailova@hotmail.com, Georgi Gergov, g_gergov@internet-bg.net

2006

- March, 2006. 4th World Water Forum: Local Actions for a Global Challenge, Mexico City, Mexico. See http://www.cna.gob.mx/publica/doctos/eventos/Cuarto_Foro_Mundial/Paginas/Inicio_ingles.htm
- July 9-15, 2006. 18th World Congress of Soil Science. Frontiers of Soil Science: Technology and the Information Age, Philadelphia, Pennsylvania, USA. Contact The Organizing Executive Committee at 18wcoss@soils.org, www.18wcoss.org. First Announcement is available at www7.nationalacademies.org/usnc-ss/WCOSS_First_Announcement.html.

2010

- July 2010. 19th World Congress of Soil Science. Brisbane, Australia.
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