

Blair McKenzie

2014 seems to be racing by. I'm sure that ISTRO members will be busy with all the usual, important commitments to research, writing, teaching and communication. Perhaps now is a good time to make an effort to pause and reflect on any resolutions made at the start of the year and what we can put in place to ensure commitments are met in the coming months.

As you will see in this issue there are a number of ISTRO working group meetings and branch conferences that are worthy of contribution and involvement. As we pause, we can all consider which of these are within our geographic and financial reach and note the deadlines for registration and abstract submission.

While September 2015 may seem distant, active participation in the triennial conference in Nanjing will not happen without preparation. I know ISTRO President Xinhua Peng and his team are working to ensure things are in place to welcome those attending but now is also a time for members to start some preparations. Here are a few things to consider:

Have I put the dates in my diary?

Are there colleagues that I could encourage to attend? If these are younger colleagues, I need to make sure that they are ISTRO members so that they will be able to apply for support to attend.

What do I need to do to have my abstract ready on time? Which session is most appropriate?

How will I get to Nanjing? I'll probably need a visa – so what are the procedures?

The other matter that members might reflect on is that the last call for board nominations is on this page. Two points come from this. First to be able to nominate candidates or to vote in any ISTRO election, membership subscriptions need to be paid up. I urge all those receiving this newsletter to make sure that subscriptions are current. If you are not sure the easiest way to check is simply to email Treasurer Allen Torbert (Allen.Torbert@ars.usda.gov). Membership subscriptions for ISTRO are modest and with modern payment methods it is not difficult to transfer any outstanding dues to Allen. Members

receive discounts to registration etc at ISTRO conferences and other meetings.

The second point is that here (below) is the last reminder for ISTRO board nominations. As ISTRO is an international organisation it is in all our interests that the board reflects the diversity of our membership.

☞ ISTRO board nominations – remain open

Nominations for two Board positions and for Assistant Secretary General are now being accepted from all ISTRO members in good standing. If a member wishes to nominate a colleague or even themselves, please send the name, a brief biographical statement outlining the candidate's qualifications for an ISTRO Board position, and an affirmation that the candidate is willing to be on the ballot and to serve if elected to Secretary General Doug Karlen on or before 30 June 2014. Please use the email address Doug.Karlen@gmail.com for this communication. Depending upon the number of nominations received, the current ISTRO Board members will identify two to four potential Board candidates and two Assistant Secretary General candidates. A ballot will be prepared and distributed to members in good standing around October 1, 2014. ISTRO members elected to these positions will assume their new positions following the 20th Triennial Conference in Nanjing, China in September 2015.

General requirements for Board members are to serve for a period of six years (2015 – 2021), to be available to attend pre- and post-conference Board meetings as well as a mid-congress Board meeting at the location of the 2018 and 2021 Triennial conference sites, to serve in various liaison positions to ISTRO Branch and/or Working Groups, and to actively participate in discussions and email exchanges associated with ISTRO business. Although funds for travel to ISTRO Board meetings are available, it really helps the Organization if the candidate has some mechanism to help cover a portion of their travel expenses so that ISTRO dues can remain at their very modest level. If you have any questions about any of these opportunities, please contact Doug Karlen (doug.karlen@gmail.com) or Blair McKenzie (Blair.McKenzie@hutton.ac.uk).

Editors Note: As members are aware there is a strong link between ISTRO and our journal Soil & Tillage Research. Following retirements in 2013, 3 new editors have been appointed. Even though some ISTRO members will know the recently appointed editors it seemed worthwhile in making sure that members know who they are, particularly for younger members who may deal with Soil & Tillage Research as they submit their first manuscripts.

✂ Introducing a new editor of Soil & Tillage Research



Warren Busscher

Warren Busscher trained as a physicist and soil physicist, receiving his doctorate in the USA at Penn State University. After a 35 year career, in 2011, he retired from the Agricultural Research Service of USDA where he was a Research Soil Scientist working on soil, crop, and tillage management. During his career, he served as Associate Editor for the Soil Science Society of America Journal (Soil and Water Conservation and Management Division); and as Research Editor and later on special projects for the Journal of Soil and Water Conservation. He has

been a long time member and supporter of ISTRO, attending five of our international conferences and publishing over a dozen papers in our journal. He reviewed papers for over twenty soil, water, and environmental journals including numerous papers for our journal: twenty-four after our review process went online. He worked with and published with researchers from several countries. Since retirement, he has been active working with his family and volunteering in his community and his online community. He looks forward to working with ISTRO members to advance soil and tillage research for the benefit of science and society as a whole.

Why did you take on being an editor of S&TR?

After retiring, I continued to work unofficially with colleagues on and off, and still do. But I wanted to do more. So I volunteered in our community and volunteered to develop some on-line soils classes. When the opportunity to become an editor came available, I thought it would be a better use of my training and experience and it would be a good opportunity to serve the soils community especially ISTRO. Over the years, ISTRO meetings and colleagues have been a good source of scientific information and cooperation. Though editing is more behind the scenes, it is an opportunity to continue to work with and for colleagues and for the scientific community. Unfortunately, like many retired people, I overcommitted my time and had to cut back; but not the editing.

One thing I like most about editing is the variety of papers and the broad education that it provides. One thing I like least about editing is finding reviewers; the average paper has at least 5 people decline to review before 1 will accept.

From your research what topic gave you the most satisfaction?

For many years, cooperators and I worked in plant development and root growth as effected by subsurface hard-layer soil strength and tillage in low fertility sandy soils. More recently, we focused on solving hard layer problems more permanently with amendments that can reduce soil strength and increase fertility such as biochars custom produced for the local problems.

Who inspires you?

From 9th grade to the end of undergraduate university, the Jesuits gave me a classical education and helped me develop as a person.

What motivated your career?

My first two degrees are in physics. After my MS, I taught as a volunteer for the Peace Corps in South America. On returning to the US, I decided to work in a more vital discipline and changed my major to Agronomy (Soil Physics).

What was the last non-work book you read?

The most interesting recent book that I read is *The Taste of War*; it is a treatise by a British author on how food helped the Allies win the Second World War. The book was not kind to the US but it explains how food and other supplies from the Americas and Australasia played an important part in keeping allies fed while the Axis troops became hungry and weak. It is one of many examples that make one realize how important a uniform food supply is. Before this book, I read books about the history of agriculture: how and where it got started and how it developed. The books, written by economists, historians, geographers, and anthropologists, explain how cultures such as the Greeks, Romans, Polynesians, and others developed the ability to feed their populations, not unlike us today. They also posit that geographic areas produced food until production ruined the soil; then populations dwindled and/or looked elsewhere for food. This insinuates that throughout history soils were unsustainable, not unlike a USDA report from the late 1930's by W.C. Lowdermilk written partly in response to the US dustbowl. Of course, sustainability is not something new. It is something that we in soil science and ISTRO argue about and research today. In recent years, it has come to the forefront because of population increases, improvement of diets of developing countries, and dwindling water supplies. Occasionally, a new book or report comes to light that offers solutions to the problem ranging from increased production to reduced meat in our diets. It would be nice if there were one simple solution. There probably isn't; but we can all provide improvements that will hopefully help feed and give food security to future populations.

Lowdermilk, W.C. 1953. Conquest of the land through seven thousand years. Agriculture

Information Bulletin No. 99. Washington, DC: USDA, Soil Conservation Service. (It was actually written in the late 1930's but not published until 1953.)

What 3 words sum you up?

Analytical, analytical, and analytical, though realizing the important roles that emotion and imagination play in thought and concept development.

What do you do in your spare time?

My wife and younger son are artists. We enjoy spending time in museums. My favorite artist is Monet, because of his impressionist water garden landscapes. My wife and son admire many artists, among them is Dali. We still talk about a time in the early 2000's when we happened on an impressively large Dali museum in the shadow of the London Eye.

Editors note: I met Warren at the conference in Izmir in 2009. I recall being impressed at how both he and his wife made a real effort to engage with younger members. It was great to see the genuine support and encouragement he offered.

☞ Hungarian Branch update

The Hungarian Branch has been busy updating its media and communications activities. As part of that they have replaced their old website which was out of date with a new one: <http://huistro.hu>

Further updates and postings are coming to this site.

☞ Kenyan Branch update

The Kenyan Branch was established and ratified at the ISTRO conference in Fort Worth, USA in 1996. After a period of activity it has been quiet for some years. The ISTRO board has recently ratified a new branch structure keen to engage with interested scientists and engineers in east Africa. The key office bearers are:

Saidi Mkomwa – Interim Branch President

(saidi.mkomwa@act-africa.org)

Mwamzali Shiribwa – Branch Secretary

(mwamzali@yahoo.com)

Joseph Mutua – Branch Treasurer

(joemutua@hotmail.com)

E. K. Biamah – Branch Past-President

⌘ Update of ISTRO Working Groups F and B, Visual Soil Examination and Evaluation and Subsoil Compaction joint meeting

Soil structural quality of tropical soils: Visual evaluation methods and soil compaction prevention strategies

To be held between the 26-30 May 2014 at Golden Ingá Hotel in Maringá, Paraná, Brazil

Final date for registration: 31 March 2014.

Outline Programme:

26 May – Oral presentations

27 May - Field day on clayey tropical soils

26 May – Oral presentations

27 May - Field day on sandy tropical soils

Objectives:

To discuss top and subsoil visual methods, with special focus on soil compaction.

To exchange experiences in using different visual methods.

To refine and to relate the visual methods to tropical soils.

To discuss compaction prevention strategies with special focus on tropical soils.

To identify ways of combining visual methods with soil compaction research and compaction prevention tools.

Registration and Payment:

These can be done directly on to the website www.pb.utfpr.edu.br/vsee-sc then follow the link to the ISTRO VSEE-SC Workshop 2014. Registration is easy – just complete the information for name, institution, email and other address. Workshop registration is US\$300 per participant (which includes lunches, coffee breaks and transport for the field days etc). Payment is easy by Paypal or by Bank transfer either from outside or within Brazil.

Travel advice and where to stay:

Travel agents can help with advice but again the main website gives useful information on connection from main international hubs in Rio de Janeiro or Sao Paulo. Local flight schedules are at (<http://www.voeazul.com.br/>).

The main conference hotel is the Golden Inga (<http://www.goldeninga.com.br/>), but a range of nearby hotels etc is available. Note participants receive a special price at the conference hotel. Further information is on the event website: www.pb.utfpr.edu.br/vsee-sc

Contact

VSEE

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⌘ Croatian branch conference

7th Scientific and Professional conference “Agriculture in Protection of Nature and Environment”

To be held 28-30 May 2014 in Vukovar Croatia. The conference is planned to coincide with World Nature & Environment Protection day. The website is at <http://www.pfos.unios.hr/~dsego/ftp/zss-2014%20eng.pdf> The conference was initiated by “Agroglas” a biweekly journal for agriculture, but from the beginning had involvement from ISTRO including the Croatian branch. Co-organizers are the Faculty of Agriculture in Osijek, Faculty of Agronomy in Zagreb, the Croatian Food Agency and the Croatian Extension Service.

Closing date for abstracts has just passed but if you are keen to attend and would like to submit an abstract please do so promptly to Dr Mirjana Baban (Mirjana.Baban@pfos.hr) head of the scientific committee or to Dr Bojan Stipešević (Bojan.Stipesevic@pfos.hr).

Registration is 80 Euro (or 600 HRK) which covers attendance, conference booklet and CD, trip and welcome cocktail. Payment procedures are on the website.

☞ Uruguayan Soil Congress 2014

VI Meeting of the Soil Science Society of Uruguay in association with ISTRO Branch Uruguay August 6-8, 2014

Registration and Abstract submission: April 30, 2014 (see Instructions for papers in www.suelos.com.uy).

The Soil Science Society of Uruguay (SUCS) and the ISTRO Branch Uruguay invite researchers, educators, public and private companies, professionals, farmers and students related to the study, management and use of the soil.

Keynote speakers include: Dr Walter Baetghen Columbia University; on Variability and change climate in the agricultural sector: Dr Miguel Cabrera University of Georgia; on Hormones and antibiotics in surface runoff: Dr Gervasio Piñeiro, University of Buenos Aires; on Following the dynamics of C and N in soil using stable isotopes: Dr Ariel Szogi; USDA Intensive animal production waste management and Dr Armen Kemanian; Pennsylvania State University and Dr Norbert Claassen; Universität Göttingen.

Topics for scientific or technical papers as oral presentations or posters can cover the following topics:

1. Physical, Chemical, Biochemical, and Biological Soil Properties.
2. Soil Fertility and Plant Nutrition.
3. Soil and Water Management and Conservation. Irrigation and Drainage.
4. Classification, Mapping and Soil Mineralogy.
5. Soil Quality and Environment.
6. Applied Technology: Precision Agriculture. Soil sampling.
7. Agronomic Systems. Bioenergy.
8. Climatology and modeling.
9. Use and handling of agro-industrial waste.
10. Teaching of Soil Science.

Early registration by 30 April is:

Members US\$150; students US\$100 and non-Members US\$200.

☞ 20th Triennial ISTRO Conference. Nanjing, China 14-18th September 2015



Please make careful note of the dates

Website now in operation!

<http://istro2015.csp.escience.cn/dct/page/1>

Abstract submission is now open! Guidelines for oral and poster abstracts now on the website

Registration is now open.

Scientific Program – Topics Announced

Soil erosion and degradation of soil quality in upland agriculture

Subsoil compaction: cause, effect and control

SOC sequestration and management

Soil biology and biodiversity:

Biophysics: the interaction between biology and soil architecture

Earth critical zone: coupled hydrological and nutrients transport across scales

Biogeochemical processes in paddy soils

Agricultural sustainability and Climate change

Tillage and seeding equipment design and modeling

Farmer and consultant's research experiences and needs

New book

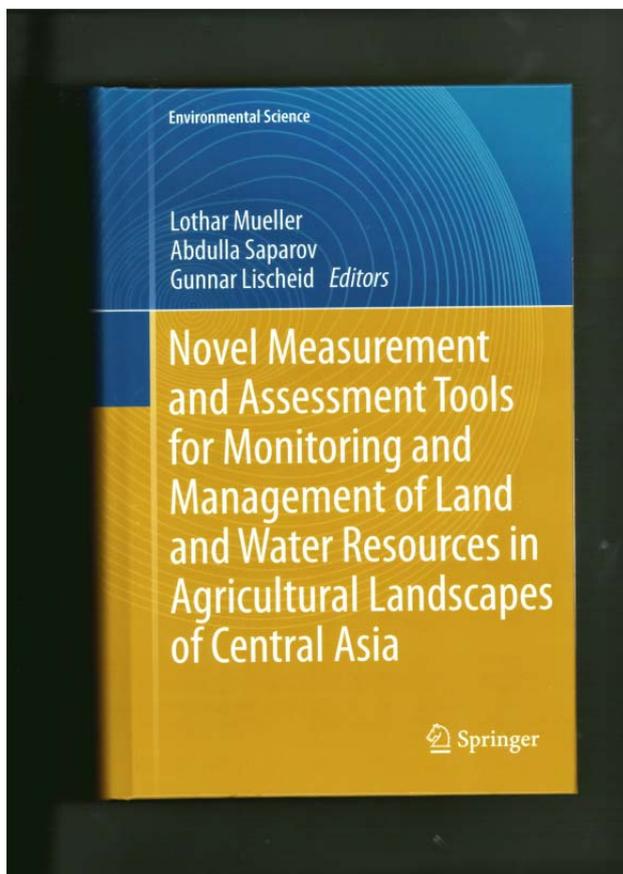
Novel Measurement and Assessment Tools for Monitoring and Management of Land and Water Resources in Agricultural Landscapes of Central Asia.

Eds Lothar Muller, Abdulla Saparov & Gunnar Lischeid

Springer Environmental Sciences

ISSN 1431-6250

ISBN 978-3-319-010116-



The book aims to initiate a sustainable use of land and water resources in Central Asia by the transfer of scientific methods. It deals with the most advanced methods worldwide for better monitoring and management of water and land resources. We offer an array of methods of measuring, assessing, forecasting, utilizing and controlling processes in agricultural landscapes. These are laboratory and field measurement methods, methods of resource

evaluation, functional mapping and risk assessment, and remote sensing methods for monitoring and modeling large areas. The book contains methods and results of data analysis and ecosystem modeling, of bioremediation of soil and water, field monitoring of soils, and methods and technologies for optimizing land use systems as well. The chapter authors are inventors and advocators of novel transferrable methods. The book starts with an analysis of the current state of water and land resources. Finally concrete proposals for the applicability of novel methods are given.

The book offers information and guidance on a wide range of methods applicable in almost any agricultural environment. It is neatly divided into 3 parts and an executive summary. Part 1 covers the importance of monitoring soil and water resources, considers important issues such as determining baselines, frequency of determinations and application with changes in land use. Part 2 covers in substantial detail novel methodologies from the hands-on assessment at single points then upscaling through the use of pedotransfer functions and into Geographic Information Systems. It covers methodologies for some real problems that are sometimes over-looked such as wind erosion while also providing up-to-date information on more common topics. These are carefully placed in the context of agriculture, particularly conservation agriculture, and suggests ways that modelling approaches and decision support could be deployed. Part 3 offers 13 neat, discrete case studies giving applications for soil quality, erosion, water processes, climate, waste water and pollution. It finishes with the executive summary and conclusions. Each chapter is discrete and the authors have affiliations from all over the globe including Europe, Russia, Asia, USA and Africa and are from universities, departments of agriculture and from the cooperative group centres.

It delivers on a number of levels from policy approaches to practical, inexpensive methodologies with examples of how these can be used.

Editors note: This book is an outcome of a meeting between Drs Lothar Muller and Mekhlis Suleimenov at the 18th ISTRO conference in Izmir in 2009 where they developed ideas for a related project.

⌘ Other upcoming meetings

The 20th World Congress of Soil Science (20WCSS)

While abstract submission has closed and authors have been notified about submitted abstracts there is still the opportunity for people to attend the 20th World Congress of Soil Science. Check the website for further information.

Homepage	www.20wcss.org
Secretariat	20WCSS Secretariat 1F Haeoreum Bldg., 748-5 Yeoksam-dong, Gangnam-gu Tel +82-2-566-5058, +82-2-557- 8422~3 Fax +82-2-566-6087 E-mail wcss@20wcss.org

***Sign up for 20WCSS to get the latest updates in www.20wcss.org.**



We are pleased to announce the first edition of the International Conference on *Engineering and Applied Sciences Optimization (OPTI 2014)* to be held in Kos Island, Greece on 4-6 June 2014.

The purpose of **OPTI 2014** is to bring together the scientific community working in the broader field of Engineering and Applied Sciences Optimization including problems formulation, computational methods and software development. OPTI 2014 will facilitate the exchange of ideas in topics of mutual interest and will serve as a platform for establishing links between research groups with complementary activities.

OPTI 2014 is organized under the auspices of the

International Society for Structural and Multidisciplinary Optimization (ISSMO), Transportation Research Board (TRB), European Community on Computational Methods in Applied Sciences (ECCOMAS), Hellenic Institute of Transportation Engineers (HITE), Greek Association for Computational Mechanics (GRACM) and John

Key Date: Deadline for presenting a one page abstract is October 31, 2013

Further information is available at URL: www.opti2014.org

The Proceedings of the conference will be indexed by ScienceDirect and SCOPUS of Elsevier.

25-28 February 2014

42nd Actual Tasks on Agricultural Engineering Opatija, Croatia
<http://atae.agr.hr/>

18-20 March 2014

4th International Conference on Machine Control and Guidance
Braunschweig, Germany
www.mcg2014@tu-braunschweig.de

27 April-02 May 2014 The General Assembly 2014 of the **European Geosciences Union** will be held in Vienna, Austria. There are several sessions that are relevant to ISTRO members including those detailed below. The deadline for abstract submission for all sessions is 16 January, 2014.

Invasive and non-invasive methods to characterize physical soil properties on various scales.

<http://meetingorganizer.copernicus.org/EGU2014/sessionprogramme>

It is a co-organized session which can be found within the disciplinary sessions SSS (Soil system sciences) 7.8, HS (Hydrological sciences) 8.3.16 and SM (Seismology) 4.8.

For abstract submission, please visit:

Conveners: Julia Krümmelbein and Anna Schneider

Issue: December 2013

Fluorescent organic matter in soil environments: new knowledge and/or non-resolved questions?

<http://meetingorganizer.copernicus.org/EGU2014/session/14882>

Link for the Abstract submission:

<https://administrator.copernicus.org/authentication.php>

Conveners: Mikhail Borisover , Co-Conveners: Stéphane Mounier , Débora Milori , Frédéric Coppin , Nicola Senesi

Modification of soils by plants: sustainability by design

<http://meetingorganizer.copernicus.org/EGU2014/session/14925>

Conveners: Paul Hallett, Rosario Garcia Moreno, Doris Vetterlein, Philip White.

Link for Abstract submission

www.egu2014.eu/abstract_management/how_to_submit_an_abstract.html

21-23 May 2014

2nd International Conference on Robotics and associated high-technologies and equipment for agriculture and forestry. Madrid, Spain

<http://www.rhea-conference.eu/2014/>

22-27 June 2014

6th World Congress on Conservation Agriculture in Winnipeg, Canada

<http://www.citc.oeg/WCCA>

ELS 2014 - the Earth Living Skin: Soil, Life and Climate Changes - the first Conference of a Series organized under the auspices of the Soil System Sciences Division of the European Geosciences Union. ELS 2014 will be held next 21 – 25 September 2014 in Nova Yardinia, Castellaneta Marina (TA), Italy.

The scientific program will be structured according to the proposed sessions, open to contributions. The call for abstracts was launched in November 2013. Please visit our web site at <http://www.els2014.eu>



<http://www.plantstress.net/plantstressdocument.php?doc=117&ln=eng>

Latin America Soil Science Congress, Cuzco Peru 9-15 November 2014 www.slsc.org.mx

Conference on Conservation Agriculture for Smallholders in Asia and Africa 7-11 December 2014

Bangladesh Agricultural University (BAU), Mymensingh Bangladesh

<http://www.scac2014.org/>

Final comments

The United Nations General Assembly has Endorsed Soils Day (5 December) and Soils Year (2015)

On 20 December 2013, the 68th session of the United Nations General Assembly (UNGA) decided to designate December 5th as *World Soil Day* and declare 2015 as the International Year of Soils. UNGA, in its decision, also invited FAO under the

GSP framework to support and facilitate the implementation of World Soil Day and the International Year of Soils, in direct collaboration with Governments, relevant regional and international organizations, civil society and the general public.

This is the result of two years of hard work from all the partners under the leadership of the Kingdom of Thailand and facilitation of the Global Soil Partnership in order to inform UNGA members that soil is a crucial resource that requires urgent attention if we are to successfully address the various global challenges ahead.

The full resolution is available and can be accessed at

http://www.un.org/en/ga/search/view_doc.asp?symbol=A/68/444

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