





ISTROINFONewsletter of the International Soil Tillage Research Organisation

Issue: September 2011

Editorial

Following my request for comment on the new format for ISTROINFO - I had several members making suggestions. Two issues were identified. First the desire to keep the ISTRO logo prominently displayed. The second was that the background to the main header was of soil left bare from mouldboard ploughing. It was suggested (very politely by past president Jeff Tullberg) that this was not consistent with much of the work going on in ISTRO and that while mouldboard ploughing was still used in some places the future of farming was more with controlled traffic, stubble retention, protecting the soil surface etc. Using a picture supplied by Jeff I have re-done the main header on this page (and left the previous version on other pages).

I am slowly learning how to apply headers etc and would like to keep the ISTRO logo in the centre but have a different picture for each issue – to represent different aspects of soil management, crop production etc? Do members have photos they would be willing to send me for use as a header? My challenge to branches, working groups and all members is to provide pictures of something that fits with their location or interest while remaining consistent with our mission. Contributions welcome.

As I write the rugby world cup is being held in New Zealand. Many of you will wonder how this may be connected to ISTRO? Four teams from the southern hemisphere (Argentina, Australia, New Zealand, and South Africa) remain in the completion – although this will have changed by the time you read this. Starting next August (the month prior to the Montevideo conference) these teams will play a four nations home and away competition! A southern

hemisphere colleague has suggested to me that the new competition is leading to some extra capacity on flights to South America from elsewhere in the southern hemisphere. As we prepare for Montevideo it may be worth contacting your travel agent early to see what travel options are available.

I trust that members received the notice of scholarships to support young researchers to attend the 19th triennial conference in Montevideo next September? The information along with new important information on nominations for ISTRO board membership is set out later in this issue. Whenever I email ISTROINFO or other information to members a small proportion bounce or are declared undeliverable. If you are about to change your email address or know of ISTRO colleagues who have changed theirs please let Allen Torbert our treasurer or me know and we will try to ensure that communication is maintained.

I noted above that a proportion of the emails to members are not deliverable. In following up the reasons for a returned email I recently was saddened to learn that Prof Guy Mehuys passed away in February 2010, aged 64. I have great memories of discussions with Guy at the evening at Ephesus at the ISTRO conference in Izmir. Because so much time has elapsed since his passing and my becoming aware of it – I have not sought a full obituary. For anyone that would like to see a summary of the Prof Mehuys many achievements can be found at the McGill University website. Vale Guy.

Indirectly I have learned from Mary Beth Kirkham of the pasing for Wilford R Gardner in May this year. While not an ISTRO member many readers will be aware of Wilford's contributions to soil physics.

ISTRO INFO is the newsletter of the **International Soil Tillage Research Organisation**. (www.istro.org).

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For more information, please contact: Dr. Blair M. McKenzie, Assistant Secretary General, ISTRO, The James Hutton Institute, Invergowrie, Dundee, DD2 5DA, UK.

ISTRO INFO

ISTRO Important Notices

¥ ISTRO Board nominations.

An ISTRO Nominating Committee, chaired by Past-President Engin Cakir, is being formed and is now ready to accept nominations. According to our constitution, the ISTRO Board is to consist of no more than 10 members, so for the next election we will need to select two candidates for the standard 6-year term (2012 - 2018) and one for a 3-year term (2012 - 2015). These newly elected persons will replace John Fielke, Totka Mitova and Mekhlis Suleimenov who were elected in 2006. Three members were added to the Board in 2006 because Allen Torbert had agreed to become our Treasurer and we needed to fill his position on the Board. One of those persons should have been elected for only a three-year period, but an error was made. In 2009, only one new member (Jean-Roger Estrade) was added to the Board. Therefore, at the midconference ISTRO Board meeting in 2010, there was consensus that to correct the rotation (i.e. two new Board members every three years) and for continuity, either John, Totka, or Mekhlis should be appointed by the Secretary General and then confirmed by acclamation for the 3-year term. After due deliberation, John Fielke has been appointed to fill the 3-year position and therefore the ballot will only ask for your confirmation of the 3-year position.

This means that the two 6-year vacancies are open for nomination by all members in good standing of ISTRO. The Nominating Committee is also accepting nominations for President-elect from the host country for the 21st Triennial conference to be held in 2018 and for a "treasurer-in-training" who will work with Allen Torbert until the 2015 conference and then assume those duties. If you would like to nominate someone, please contact the individual and have them send you a confirming email that they are willing to serve the Society. After receiving your nominee's agreement, forward it and a short summary of the individual's career and service to ISTRO to engin.cakir@ege.edu.tr. This information should be submitted to Engin no later than 31 December 2011.

X Scholarships for young researchers.

The ISTRO Board is again supporting <u>young</u> <u>researchers</u> who are <u>ISTRO members</u>. We are sponsoring four (4) scholarships to support attendance at the 19th Triennial ISTRO conference from 24-28 September 2012 in Montevideo, Uruguay. Scholarship candidates must be current members of ISTRO themselves and be nominated by current members of ISTRO.

The Cees van Ouwerkerk scholarship is open to young (defined as being <u>under the age of 40</u>) scientists or engineers from all countries who have demonstrated superior research accomplishments. The Cees van Ouwerkerk scholarship will cover the costs of airfare (lowest cost possible), registration, the Conference Dinner and a contribution of 100 EURO per day toward the hotel accommodation.

The other three scholarships are open to researchers from all countries except those classified as being "high-income." Excluded high-income countries can be found at: http://www.worldbank.org/data/countryclass/classgroups.htm

This classification is the same as used to determine the level of fee for ISTRO membership. The allocation of these three scholarships and the level of support will be based on academic merit, location of the applicant at the time of application and on the geographic spread of applicants. The amount of each award is expected to sufficient for those successful to fully participate in the 19th ISTRO conference.

Nominations including supporting material documenting their research activities (e.g. two recent journal or conference publications), a curriculum vitae listing education publications, presentations and teaching activities, and the Abstract for a paper to be presented at the 2012 ISTRO Conference must be submitted to the Assistant Secretary- General (Blair McKenzie) by December 31, 2011. The selection committee will consist of the three most-recently elected members of the ISTRO Board. After the selection, all applicants will be informed by the Assistant Secretary-General who will also notify the Conference Organizers to help make the final arrangements.

Applications should be emailed to

blair.mckenzie@hutton.ac.uk

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ISTRO Triennial Conference

3 19th ISTRO Conference Montevideo Uruguay

http://www.congresos-rohr.com/istro2012/



24 - 28 September, 2012 Radisson Victoria Plaza Hotel in Montevideo, Uruguay

Abstract submission by 10 December 2011 – Prepare now – submit soon

The abstract submission is available as an easily completed form at the website.

Early bird registration by 31 March 2012, which is also the date for complete paper submission.

Accommodation update: The conference is being held at the Radisson Hotel where accommodation is available. The Radisson is located on a central square in Montevideo. Around the square in close proximity to the Radisson is a range of hotels covering all price points. There is even a nearby Youth Hostel. As soon the hotels have prices available for September 2012 they will be included on the conference website. In the meanwhile for help with accommodation please contact the conference secretariat at prohr@rohrsa.com.uy

Pre- & Post conference tours: September is springtime in the Southern Hemisphere and temperatures range from 12 to 21°C. During spring, days are longer, and crops, pastures and forests are at their best – so a real opportunity to see South American agriculture in action.

SPEAKERS CONFIRMED

Several keynote speakers are now confirmed including:

Dr Richard M Cruse on Agriculture and Climate Change.

http://climate.engineering.iastate.edu/ResearchTeam/CruseRick.html

Dr Alan J Franzluebbers on Soil Organic Carbon Evolution under different Production Systems.

http://www.ars.usda.gov/pandp/people/people.htm?personid=1823

Ing Agr Roberto Alvarez on Soil Organic Carbon Stock: Change associated to tillage and cropping systems in Pampean soils.

http://epg.agro.uba.ar/docentes/roberto-alvarez

Prof Rainer Horn on Forest soil degradation due to harvesting and replantation.

http://www.soils.uni-

kiel.de/deutsch/mitarbeiter/pers-horn.shtml

Dr Blair M McKenzie on Spatial and temporal variability in soil physical conditions for root growth: interactions for sustainable agriculture. http://www.hutton.ac.uk/staff/blair-mckenzie

Dr Douglas Karlen on Sustaining or improving soil quality while striving to produce sustainable feedstock for lignocellulosic biofuel production. http://www.sust.ag.iastate.edu/gpsa/faculty/karlen.html

Dr Daniel Rodriguez on Modelling supported discussions for co-learning.

http://www.qaafi.uq.edu.au/profile-dr-daniel-rodriguez

Check the website for full details and if you have questions contact the secretariat by using the email address found on the webpage.

Meeting Reports

The ISTRO CZECH Branch conference was held in Pruhonice near Prague from 30 August to 2 September, 2011.



Participants of conference in Pruhonice

The topic of 6th international conference was "Crop management practices adaptable to soil conditions and climate change". During two days 40 contributions were presented as lectures or posters for 45 participants from 6 countries. All scientific papers were reviewed by members of scientific committee and published in proceedings. The attention was paid to the section "Changes of soil fertility" with lectures focused on soil quality in relation to different soil tillage systems.



Discussion during conference

Fruitful discussion was about improvements of tillage in connection with water erosion. The reduction of water erosion is up-to-date topic not only in the Czech Republic with typically hilly landscape, but also in other European countries. According to EU policy it is necessary to develop new methods of crop management practice, including tillage system, which will protect soil and will be acceptable for farmers from ecological and economical points of view.



Jean Roger Estrade (ISTRO board member) and Vladimir Smutny (president of ISTRO CZ)

Official scientific program was amended with commercial presentations, HALDRUP company (Germany) presented special machinery for field experiments (plot seeders, plot harvesters, laboratory threshers) and FARMET company (Czech Republic) introduced portfolio of machinery for soil tillage.

In the third day of conference a field trip was organized with the intent to combine professional and cultural programme. In the morning we visited a summer residence of Karel Capek, the writer, and the chateau in Dobříš with its famous French Park built in rococo garden design. After delicious lunch in chateau restaurant we continued to the village of Krásná Hora nad Vltavou, the place of a successful agricultural cooperative. The company is specialized in dairy and meat production, they raise more than 4000 head of cattle. The farming area of 5000 hectares (68% is arable land) is used mainly for fodder production. The company agronomist shared his experience with growing of maize in altitude of 450 m above sea level and under very variable soil conditions. Since maize is the most important crop

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for the company, every year they establish a field trial with hybrids for silage production. To solve the problems with livestock wastes, in 2008 they built a biogas station for electric power production.



Chateu Pruhonice

The last stop was at the brewery in Velké Popovice with guided tour through brewhouses and tasting of Velkopopovický Kozel beer in a tradition Czech pub.

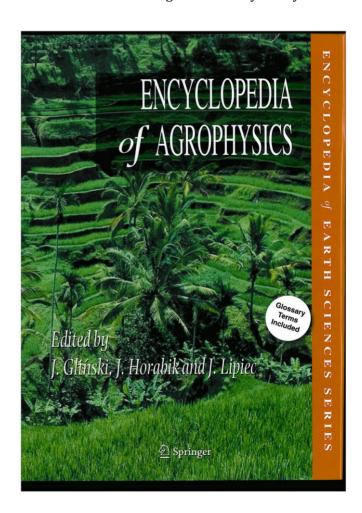
Thanks to comfortable grounds of Floret Education and Information Centre, where the conference was held, the event had a very friendly atmosphere. We, as organisers, just hope that all participants enjoyed their stay in Průhonice and its beautiful surroundings.

More information is at www.istro.cz

ℜ New book with substantial ISTROinput

The Encyclopedia if Agrophysics is now out as part of the Encyclopedia of Earth Sciences series. Our ISTRO colleague Jerzy Lipiec was one of the editors. Many ISTRO members contributed chapters including: Thomas Anken, Marta Birkas, Warren Busscher, Isabelle Cousin, Ewa Czyz, Alvaro da Silva, Anthony Dexter, Alan Franzluebbers, Horst Gerke, Paul Hallett, Rainer Horn, Douglas Karlen, Julia Krummelbein, Miroslav Kutilek, Rattan Lal, Birl Lowery, Wibke Markgraf, Blair McKenzie, Lothar Muller, Marcello Pagliai, Xinhua Peng, Stephan Peth, Randy Raper, Guy Richard, Bing So, and Ole Wendroth.

I apologise if I have omitted any ISTRO member from the list – but as you can see ISTRO members have made substantial contributions to this volume. Consider recommending it to a library near you.



ISTRO sponsored and other related meetings forthcoming

X Second Human Impacts on Soil Quality Attributes in (Semi-) Arid Regions



Following on from the first meeting in 2005, HISQA2 at Isfahan University of Technology starts on 14 May 2012 and is organized in conjunction with the Iranian Branch of ISTRO

HISQA2 (http://hisqa.iut.ac.ir/) will consider ongoing human induced soil degradation, including salinization, alkalization, nutrient depletion, desertification, and physical, chemical and biological deterioration. The conference will address approaches and technologies that can be implemented to manage and correct unsustainable conditions impacting human life.

Registration is 500 Euro (400 for delgates from developing countries) which includes participation in the scientific program, conference proceeding, CD, welcome reception, meals (Breakfast, Lunch and Dinner), tea (coffee) breaks, and professional field trip.

The call for abstracts is now open with a deadline for abstract of 31 October 2011.

EUROSOIL 2012



The 4th International Congress of the European Confederation of Soil Science Societies (ECSSS) will be held in Bari, Italy, from 2 to 6 July 2012, organized by the Italian Society of Soil Science (SISS) The Congress to be held at the University of Bari, will focus on and develop the various aspects of fundamental and applied soil science and technology, field approaches and social, economical and political implications in relation to the present and future needs and emergencies of mankind and environment. Any interested person should see the congress website (www.eurosoil2012.eu)

Julia Kruemmelbein an ISTRO member who many will recall as the recipient of the Cees Van Owerkerk scholarship at the Izmir conference has asked that I draw to member attention the 3rd main topic "Land Degradation" and inparticular that Julia and Annika Badorreck are convening symposium S3.5 on "Soil Deformation".

The session will focus on soil deformations (compressive, shear), their effect of soil funcitons, their acquisition with approved and new field and laboratory methods and their preventions and alleviation. The session description can be found at:

The session description can be found at: http://www.eurosoil2012.eu/d/33/3.Land_Degrad ation/ and to submit and abstract for this session please visit the congress website http://www.eurosoil2012.eu/d/54/Call for Abstracts/

The deadline for submission is October 31, 2011.

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ℜ Nordic Association of Agricultural Scientists

Soil compaction - effects on soil functions and strategies for prevention

6 - 8 March, 2012 the House of Science and Letters (Tieteiden talo), Helsinki, Finland

Extended abstract submission by 15 January 2012

Last date of registration 15 February 2012 BACKGROUND AND OBJECTIVE

Traffic by agricultural machinery imposes a stress field in the soil profile, which may create persistent deformation of the soil. Soil compaction is a global problem, which affects several important soil functions relevant to crop production. environmental. and socio-economic issues. Increase in wheel loads has increased the magnitude of stresses reaching subsoil layers, thus increasing the risk of long-term or even permanent soil compaction. A solution to the compaction problem calls for cooperation between authorities. stakeholders, farmers and scientists. We need to improve the empirical basis for modelling and decision support tools. Models for the compaction process and for compaction impact on soil functions are need to be refined and incorporated in modern ICT decision support tools. The overall objective of this seminar is to bring together researchers, governmental authorities and stakeholders for reviewing state-of-the-art knowledge concerning (sub)soil compaction, its short- and long-term effects on soil functioning, and the strategies and measures for the prevention of compaction.

SEMINAR TOPICS

Societal concern and upcoming regulations
Understanding of soil compaction processes
Soil functions – crop production
Soil functions – environmental impacts
Soil compaction prevention strategies

Johan Bouma, The Netherlands Anna-Maija Pajukallio, Finland

Thomas Keller, Switzerland

CONFIRMED SPEAKERS

Jerzy Lipiec, Poland Nick Jarvis, Sweden

Peter Weisskopf, Switzerland

IMPORTANT DATES

Submission of abstracts for oral and poster presentations 15 January 2012

Notification of acceptance for presentations 1 February 2012

Final registration 15 February 2012

REGISTRATION FEES

NJF members 240 EUR

Non-member 350 EUR

The seminar will address the compaction problem in a worldwide context and is open to all. The seminar language is English.

Check the website for full details http://www.njf.nu/

Please ask the seminar secretary, Laura Alakukku (<u>laura.alakukku@helsinki.fi</u>) for more information if needed.

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Other Scientific meetings forthcoming

International Society for Root Research



26 –29 June 2012 Dundee UK (note the date change from that previously advertised. UK Keynote speakers include Jonathan Lynch, Malcolm Bennett Michelle watt, Philippe Hinsinger, Bob Sharp, Fusuo Zhang, Heljä-Sisko Helmisaari and Peter Gregory Updates and more information on the ISRR website (www.rootresearch.org/) Registration and the call for abstracts are now open.

Joint ASSSI and NZSSS Soil Science Conference



Wrest Point Hotel and Convention Centre, Hobart, Tasmania, Australia, 2-7 December 2012 (<u>www.soilscience2012.com</u>)