# ISTROINFO NEWSLETTER of the International Soil Tillage Research Organisation

Lars J. Munkholm

I will start this ISTROINFO issue by introducing myself as the new editor. As the new Assistant Secretary, I have taken over the editorial responsibility from Blair McKenzie (the new Secretary General) as part of my new duties. I recognize ISTROINFO as a key element in meeting the ISTRO objective "to promote contacts among scientists undertaking research in soil tillage and field traffic and their relationship with soil environment, land use and crop production". Fortunately, I will be assisted by a PhD student, Peter Bilson Obour, in this work.

First of all, I would like to thank Blair for taking excellent care of ISTROINFO for the past 6 years. The change in editor will not lead to marked changes in the format or the publication frequency of ISTROINFO. I plan to continue circulating ISTROINFO quarterly (January, April, July and October). You are most welcome to send me inputs on this e-mail: <a href="mailto:lars.munkholm@agro.au.dk">lars.munkholm@agro.au.dk</a>, e.g. news from meetings/workshops, announcements of upcoming events and reports from branch/working group meetings.

ISTROINFO has for many years been sent out to a large number of persons who do not necessarily hold a present membership of the organization. In the future ISTROINFO will only be circulated to paid-up members. If you are in doubt about whether subscriptions are up-to-date please contact new treasurer Steve Prior

(Steve.Prior@ars.usda.gov). ISTROINFO will still be published online on the ISTRO homepage (www.istro.org).

## **X** Nanjing 20<sup>th</sup> Triennial Conference 14 − 18 September 2015

Congratulations to Xinhua Peng and his team for organising a successful 20th ISTRO conference in Nanjing. The conference included 80 oral presentations, and numerous poster presentations from authors from 35 countries. There were also Working Group meetings and an author workshop on "How to publish your research in a top journal" delivered by Soil & Tillage Research Editors-in-Chief.

Unfortunately, the number of participants was lower than initially expected due in part to the large number of competing meetings to celebrate International Year of Soils. The conference included two mid-week tours: one to the FACE station and the other to the Changshu field station.



Group photo from the opening day of the conference



Prof. Xinhua Peng, Prof. Renfang Shen and Dr. Blair McKenzie at the opening of the conference



Conference participants attending an oral presentation

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ISTRO members (Xinhua Peng, Nicholas Holden and Jeremy Emmet-Booth) in a talk at a coffee break.



Conference dinner

## **★ Secretary General report to the 14th**General Assembly

The Secretary-General's report was delivered by Blair McKenzie (recent past Assistant Secretary-General). Douglas Karlen was absent as he was attending the USDA-ARS Annual Award celebration. He received the USDA-Agricultural Research Service's 2015 Distinguished Senior Research Scientist. In his report, Blair thanked Douglas Karlen for his inputs in updating the constitution and bylaws. Blair also gave a brief summary of the activities of the 5 (very) active branches: Croatia, Czech Republic, Hungary, Nigeria and Uruguay. The number of inactive branches was noted and the ISTRO board was to put in place a strategy to either energize or wind down the inactive branches. Blair noted that this strategy was likely to involve individual board members taking on mentoring roles. It was emphasized that the working groups on Soil Structure, Subsoil Compaction, Controlled

Traffic Farming and Visual Soil Examination and Evaluation have all conducted activities after the conference in Montevideo – in most cases several activities had been held. Lastly, Blair reported that ISTROINFO has been circulated quarterly by email.

#### **# Changes to constitution**

The proposed changes to the constitution were approved at the 14th General Assembly. It is important to notice that none of the proposed changes alter the way the ISTRO Organization is currently functioning. They were proposed to bring the Constitution and By-Laws up-to-date.

### ★ Scholarship winners of the 20<sup>th</sup> ISTRO conference

ISTRO sponsored 4 scholarship winners to participate in the Nanjing conference. The winners were: Daniel Uteau Puschmann (Cees van Ouwerkerk award), Rachel Guimarães, Mansonia A. Pulido-Moncada and Mojtaba Naderi-Boldaji.



The scholarship winners together with past and present ISTRO Board members. Rachel (first row 2<sup>nd</sup> from left), Mojtaba, Daniel and Mansonia are standing next to Rachel on the right.

#### **# Working groups**

At the Nanjing conference working group meetings were held. Some of you may be unfamiliar with our ISTRO working groups. They are simply groups of ISTRO members who are interested in exchanging ideas and collaborating on a particular ISTRO-relevant topic. Any ISTRO member is welcome to join any of the working groups (there is no cost) and can do so simply by contacting the Chair or

Secretary of that working group. Currently there are three active working groups.

Working group B, Subsoil compaction has Chair Thomas Keller (thomas.keller@art.admin.ch) and Secretary Mathieu Lamandé (mathieu.lamande@agrsci.dk).

Working group F, Visual Soil Examination and Evaluation has Chair Rachel Guimarães (rachelguimaraes@utfpr.edu.br) Lars I. Munkholm (lars.munkholm@agro.au.dk).

Working group K, Controlled Traffic Farming is organised by Tim Chamen (Tim.Chamen@btconnect.com). This group runs its own website (linked to the main ISTRO website) at www.controlledtrafficfarming.com with reports, newsletters and links to their own facebook page.

A new working group on Discrete Element Modelling of Soil Tillage was suggested at the conference by John Fielke (John.Fielke@unisa.edu.au). Please contact John if you are interested in joining this working group

#### **₩ New ISTRO Board**

At the end of the Nanjing conference, the ISTRO board for 2015-2018 met and started planning for the coming years.



From left: Hubert Boizard, Treasurer Steve Prior, (hidden behind Steve: Assistant Secretary General Lars J. Munkholm and Ranjan Bhattacharyya), José Terra, President-elect Nicholas Holden, Past-President Xinhua Peng, Secretary General Blair McKenzie, Young Wu (Elsevier) and President Jean Roger-Estrade. Joshua Olovae was present at the meeting but not when the picture was taken.

#### **¥ 21st ISTRO Conference, Paris, France**

The 21st ISTRO Conference will be held in centre of Paris. France in summer 2018. Initial information will be included in the next ISTROINFO.

#### **₩ Obituary Johan Arvidsson**



Johan Arvidsson, an active member of ISTRO and a member of the Editorial Board of Soil & Tillage Research, died on 9 August 2015 at the age of 52. Johan was born on 15 June 1963. His parents owned a farm in the county of Östergötland in Sweden, and growing up on the farm had a large influence on his professional life. Johan studied at the Swedish University of Agricultural Sciences (SLU) in Uppsala, and received an MSc degree in agronomy and soil science in 1987. His initial plans were to become a farmer and return to his parents' farm, but during the studies, Johan developed his scientific curiosity and interest in research related to soil tillage and soil compaction, and decided to become a scientist. He joined the Soil Management Research Group within the Department of Soil & Environment at SLU, where he was a researcher for almost 30 years during which he had a great influence on the research direction of the group. Johan obtained his PhD from SLU in 1997. His thesis was entitled 'Soil compaction – from soil stress to plant stress' and earned him an award for an eminent thesis from the Royal Swedish Academy of Agriculture and Forestry.

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In 2008, Johan become Professor in soil management with emphasis on the physical and mechanical basis for soil tillage and soil fertility and the effects of cultivation on the environment. He also served as external collaboration specialist at SLU since 2012.

Iohan was an innovative scientist, and his research always had a clear relevance for practical farming. His earlier work focused on soil compaction, while more recent work also included energy consumption and fragmentation due to tillage, and environmental and agronomic consequences of reduced tillage. He also carried out research on seedbed properties and crop establishment. Many of his studies are published in Soil & Tillage Research. Johan focused on studying processes in the field, be it on stress distribution below agricultural vehicles or impacts of tillage systems on soil functions and crop performance, and he run many field experiments related to research questions on seedbed properties, tillage intensity, and soil compaction. He developed methods for in situ measurements of soil stress and vertical displacement, draught force of tillage implements, soil surface properties, and more. Moreover, he developed various computer models, e.g. tools that help farmers and agricultural advisers to estimate the risk and costs of soil compaction and the costs of soil tillage. The practical relevance of his research was very important to Johan. His work was not only recognized by the scientific community, but also highly appreciated by Swedish farmers, agricultural advisers and the agricultural industry. Johan's work has significantly influenced tillage practices and compaction prevention in Sweden. He was therefore frequently invited to give lectures and do field demonstrations at field days, training courses and seminars for farmers, advisers and the agricultural industry, and Johan has written numerous popular science articles and given interviews in farmers' magazines and newspapers. His work on knowledge transfer was awarded with the Torbjörn Lovang price in 2015.

Johan was an excellent teacher, and he was involved in many undergraduate courses at SLU. The students appreciated his lectures, due to his pedagogical skills and because the lectures always had a clear link to practice. Some lectures were held in the field, and the students were involved in ongoing research through project work. Excursions to

farms and to tillage implement manufacturers were an important part of the courses. The evaluation of Johan's courses was often among the best of the whole university. As a consequence, many students were interested in doing their MSc theses in soil management, and Johan was a supervisor to many of them. Johan has also supervised PhD students during the last 15 years, and introduced his PhD students to many of his colleagues and taught them how to become an independent scientist.

Johan was a family person and a proud father. He was genuinely interested in football and other sports, and actively engaged in the local football club as coach of children teams. Besides football, he actively played floorball and enjoyed cross-country skiing in winter. He was a very social person with a great sense of humor. Johan is survived by his wife Helen and his four children Ingrid, Åsa, Erik and Anders.

Johan is deeply missed, as a friend, as a colleague and as a scientist. Our thoughts are with his family.

Thomas Keller, Ararso Etana, Tomas Rydberg and Inge Håkansson

#### **₩ Reviewing for Soil & Tillage Research**

Soil & Tillage Research and the ISTRO Board strongly encourage members of ISTRO to review for the journal. If you want to serve as a reviewer, please reply to the Journal Manager (Shahid Hussain, <a href="mailto:s.hussain.1@elsevier.com">s.hussain.1@elsevier.com</a>) with your full name and fields of expertise.

Soil & Tillage Research was initiated by ISTRO in 1981 and is published by Elsevier as you probably know. There continues to be strong links between ISTRO and Soil & Tillage Research as highlighted at the Nanjing conference. The journal is ranked as one of the top soil science journals. High quality reviewing is fundamental for continued top performance of the journal.

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#### ₩ Upcoming meeting in Uruguay

IV National Symposium of Agriculture and the VII Meeting of the Soil Science Society of Uruguay.

"Seeking the path for sustainable intensification of agriculture" is the topic of this biennial scientific and professional symposium organized for the 4th time by the Facultad de Agronomia of the University of Uruguay and the International Plant Nutrition Institute -Latin America Southern Cone. This year the faculty will collaborate with the Soil Science Society of Uruguay (SUCS) & Uruguayan ISTRO Branch, the Minister of Livestock, Agriculture, and Fisheries of Uruguay (MGAP) & FAO, and the National Institute of Investigation in Agronomy (INIA). It will be held in Paysandú, Uruguay on 28-29, October 2015. One of the international speakers confirmed is Dr. Andrew Sharpley (USA). For more information contact

Dr Mónica Barbazán in the Departmento de Suelos y Aguas, Facultad de Agronomia Universidad de la República on <a href="mailto:mbarbaz@fagro.edu.uy">mbarbaz@fagro.edu.uy</a>

#### **₩** Other upcoming meetings

Global Soil Partnership (GSP) Side event at the COP 12 UNCCD, October 23, 2015, Ankara, Turkey. <a href="http://www.fao.org/globalsoilpartnership/news-events-archive/gsp-events/detail/en/c/330834/">http://www.fao.org/globalsoilpartnership/news-events-archive/gsp-events/detail/en/c/330834/</a>

October 18-23, 2015 Dubrovnik, Croatia. The 9th International Symposium on Plant-Soil Interactions at Low pH. <a href="http://www.agroekologija.eu/9thpsilph/">http://www.agroekologija.eu/9thpsilph/</a>

2<sup>nd</sup> International Symposium on Forest Soils: "Linking Soil Processes to Forest Productivity and Water Protection under Global Change?" on October 24 - 28, 2015 at Fuzhou, China. http://isfs2015.com/index.asp

2015 International Annual Meeting of Soil Science Society of America (SSSA) on November 15-18, 2015 at the Minneapolis Convention Centre. The theme is "Synergy in Science: Partnering for Solutions".

#### https://www.soils.org/meetings/annual-meeting

Seminar on "Agricultural biodiversity for healthy soils and people", November 16, 2015 at FAO HQ, Rome, Italy.

http://www.fao.org/globalsoilpartnership/news-events-archive/gsp-events/detail/en/c/332740/

World Soil Day 2015, December 4, 2015 at FAO HQ, Rome, Italy.

http://www.fao.org/globalsoilpartnership/world-soil-day/en/

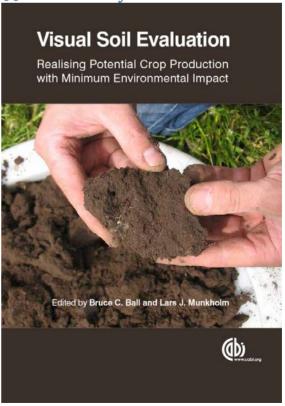
8th International Acid Sulfate Soil Conference, College Park, Maryland, USA, July 17-23, 2016.

http://www.midatlanticsoilscientists.org/acidsulfate-soils-conference

2018 21st World Congress of Soil Science, Rio de Janiero, Brazil.

2018 21st ISTRO Conference, Paris, France.

#### **X** New Book by ISTRO members



Available in hardback, paperback and as an e-book. The main focus of the book is to provide readers

with simple methods to assess soil quality for crop performance. The book also discusses the potential of different land types for carbon storage, greenhouse gas emissions and nutrient leaching.

### **# Book launch by the Intergovernmental Technical Panel on Soils (ITPS)**

As part of the International Year of Soil 2015 celebration on December 4, 2015 at FAO HQ, the final version of the first ever report on the "Status of the World Soil Resources" (SWSR) by ITPS members and renowned scientists will be launched. The objectives of the book are to provide scientific assessment of current and projected global soil conditions, to explore the implications of soil conditions and food security, climate change, water quality, biodiversity, and human health and wellprovide knowledge being. and to and recommendations relevant to policy makers and other stakeholders.

#### **♯ PhD scholarship**

Aarhus University has a vacant PhD position in "Stress-strain relationship of structured unsaturated soil subjected to transient loads: Do we need a new conceptual framework?" (http://talent.au.dk/phd/scienceandtechnology/opencalls/). For more information please contact Mathieu.Lamande@agro.au.dk.

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

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