



ISTRO INFO

**A Publication of the
International Soil Tillage Research Organization**

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Dr. Douglas L. Karlen
Assistant Secretary General, ISTRO
2110 University Blvd.
Ames, IA USA 50011

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ISTRO INFO – September 2008

Greetings from the U.S. Corn & Soybean Belt! I hope this issue of ISTRO-INFO finds everyone putting the final touches on your abstracts for the 18th ISTRO triennial conference that will be held June 15-19, 2009, in Izmir, Turkey. ISTRO President Engin Carraker and his team have begun to assemble an excellent program and I would certainly like to see this be one of the best ISTRO Conferences ever! The deadline for submission of Abstracts is October 15, 2008. Each Abstract should be 250 words or less and submitted as a Microsoft Word file. Please send it as an attachment to the Congress website of the congress (www.istro2009.ege.edu.tr) or an e-mail to istro2009@mail.ege.edu.tr. Please name the file attachment with your last and first name.

In addition to preparing and submitting your Conference Abstract, it is also time to submit your nominations for the four scholarships that the ISTRO Board has once again unanimously approved. The Cees van Ouwerkerk scholarship is open to young scientists from all countries. The other three scholarships are open to researchers from all countries except those classified as being "high-income." Please see the website http://www.worldbank.org/data/countryclass/classgroups.htm#Low_income for a list of eligible "low-income" countries. The scholarships will cover the costs of airfare (lowest cost possible) and the package deal (€ 650) for registration, lodging (shared double room), all meals, the banquet dinner, field day tour, and CD. Scholarship candidates must be current members of ISTRO themselves and be nominated by current members of ISTRO. This is an excellent way to recognize our younger members and to ensure the life-blood of ISTRO is continually being renewed.

As always, please be sure to share this information with all your friends and co-workers.

Doug Karlen
Assistant Secretary General

18th Triennial Conference Information

For the most current information on the 18th Triennial ISTRO Conference please see the Congress website at: www.istro2009.ege.edu.tr. The Conference will be held June 15-19, 2009, in Izmir, Turkey and will include various technical sessions, Working Group meetings, tours and displays. Two different tours will also be offered. They are for a Field Day & City Tour on June 17th and Historical Site: Ephesus – House of Virgin Mary on June 18th. The critical dates to remember are:

Date	Critical Action
October 15, 2008	Deadline for abstract submission
December 1, 2008	Notification of authors
December 15, 2008	Deadline for early registration
January 31, 2009	Deadline for submission of full papers
March 15, 2009	Notification of Oral and Poster venues

Conference Themes under which oral and poster presentations are to be submitted are:

1. Conservation tillage, direct seeding & no-till applications
2. Sustainable forest management
3. Rehabilitation of degraded areas
4. Soil compaction: Causes, effects, & control
5. Soil dynamics & traction
6. Soil Management as a tool to reduce erosion, nutrient leaching and greenhouse gas emission
7. Production of bio-fuel
8. Soil biological quality & health

Abstracts of 250 words or less should be submitted by **October 15, 2009**, as a Microsoft Word file on the Congress website (www.istddro2009.ege.edu.tr) or in an email to istro2009@mail.ege.edu.tr. Please name the file attachment with your last and first name.

The Conference will be held at Surmeli Efes Hotel & Resort in Selcuk, Izmir. This site is located about 60 km from the Adnan Menderes International Airport and is very close to the city centre. For more information about the venue, please view their website at: <http://www.surmelihotels.com/eng/SurmeliEfes/default.asp>. Registration and lodging as a package that also includes meals, banquet dinner, field day tour, and CD is:

Registration for:	Conference Only		Lodging & Conference	
	Early*	Late	Early*	Late
Members	€350	€450	€650	€750
Non-members	€400	€500	€700	€800
Students	€250	€350	€550	€650
Partners			€500	€600
Children (age 6-12)			€400	€500

*Early registration ends 12/15/2008. Also, hotel room prices are for one bed shared in double bed rooms. For single room, please add €25 per day to the room price.

Registration fees should be paid through the website (<http://www.istro2009.ege.edu.tr>) or directly to the following banking account: **AKBANK** (Euro Account) (Office of Ege University, **Office Code: 940**), Account Number: **940-07772**; IBAN Number: **TR40 0004 6009 4003 6000 0077 72**.

Young Researcher Scholarships

The ISTRO Board unanimously agreed to once again help young researchers attend the 18th Triennial ISTRO conference by sponsoring four (4) scholarships. Note that young scientists are defined as those being under the age of 40 and having demonstrated superior research accomplishments. The Cees van Ouwerkerk scholarship is open to young scientists from all countries. The other three scholarships are open to researchers from all countries except those classified as being "high-income." See www.worldbank.org/data/countryclass/classgroups.htm#Low_income for a list of the eligible "low-income" countries. Nominating your former students, young

scientists within your laboratories, or institutions or other colleagues is a wonderful way to provide recognition of others within our organization and to also increase the overall membership in ISTRO.

The scholarships will cover the costs of airfare (lowest cost possible) and the package deal of the ISTRO2009 conference (www.istro2009.ege.edu.tr). This package deal for registration and lodging (shared double room), all meals, banquet dinner, field day tour and CD is valued at € 650. Scholarship candidates must be current members of ISTRO themselves and be nominated by current members of ISTRO. Nominations, including supporting material documenting their research activities (e.g., two recent journal or conference publications), a curriculum vitae listing education and all publications, presentations and teaching activities, and the Abstract for a paper to be presented at the 2009 ISTRO Conference, must be submitted to the Assistant Secretary- General (Doug Karlen, doug.karlen@ars.usda.gov) by **December 31, 2008**. The selection committee will consist of the three new Board Members (Totka Mitova-Trifonova, John Fielke, and Mekhlis Suleimenov). 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.

SOWAP Final Report Issued

SOWAP (**SO**il and **WA**ter **P**rotection) is a collaborative project involving industry, NGOs, academic institutions and farmers designed to address the environmental, economic, and social concerns arising from the practice of conventional agriculture. Following a three-year evaluation of conservation tillage on arable farms in Belgium, Hungary and the UK, where a variety of arable crops (wheat, oilseed rape, oats, maize, sugar-beet, potatoes, and sunflower) were grown on soils ranging from sandy loam to clay, several important conclusions can be drawn.

First, by reducing soil disturbance and covering the soil with crop residue, conservation tillage can protect our precious soil resource by dramatically reducing erosion; for example, soil losses from fields planted with sugar beet and maize were reduced by

80%. Conservation tillage also showed biodiversity benefits both above and below-ground. Water quality was improved because run-off from conservation tillage fields contained lower levels of nutrients and sediment. As a result, the aquatic invertebrate and plant life in conservation tillage catchments can be enriched. These environmental benefits were delivered without negatively affecting farmers' income provided losses in crop yield, compared to conventional systems, were offset by reduced crop establishment costs.

Unfortunately, conservation tillage is not widely practiced in Europe. Estimates put adoption rates at only 15% across Europe with an estimated 7% in Belgium, 11% in Hungary but higher at 46% in the UK. The study clearly showed that decisions by farmers to adopt conservation tillage are dependent on complex interactions between the practice's agronomic, environmental, economic, and social costs and benefits. Conservation tillage may not be applicable or appropriate everywhere, especially if soil type and climate are important constraints. The key findings were that:

- **Conservation tillage reduces crop establishment costs**
 - Conservation tillage, especially no-tillage, can substantially reduce crop establishment costs compared to mouldboard ploughing.
- **Conservation tillage can reduce crop yield**
 - Yields of a range of arable crops were often lower from conservation tillage than from mouldboard ploughing.
 - Cereal and maize yields were more sensitive to soil management than broad-leaved crops.
 - Conservation tillage did not impact crop quality.
 - The presence of difficult-to-control weeds like blackgrass (*Alopecurus*) and cleavers (*Galium*) in conservation tillage areas may have contributed to the impact on yield of winter-sown crops.
- **Conservation tillage can be more profitable**
 - The reduction in crop establishment costs using conservation tillage often offsets the decrease in yield to increase overall profitability.

For more information go to <http://www.sowap.org/results/yieldsandcosts.htm>.

U.S. Senate Shines Spotlight on Soils

Thanks to the visionary action taken by Senator Sherrod Brown and his colleagues in the U.S. Senate, a resolution was passed on June 23, 2008, to help usher in legislation that recognizes soils as an "essential" natural resource. This resolution now places soil on par with water and air. Senator Brown was joined by co-sponsors Senators Kent Conrad (D-ND), Charles Grassley (R-IA), Russ Feingold (D-WI), Tom Harkin (D-IA), Ken Salazar (D-CO), and George Voinovich (R-OH) who successfully passed Senate Resolution 440. This resolution also highlights the "critical role" that soil professionals play in managing the nation's soil resources.

"This resolution comes at a time when soil is widely undervalued," says Rattan Lal, Ohio State University, ISTRO member and recent Past President of the Soil Science Society of America (SSSA). "Soil, and specifically sound soil management, is essential in our continued quest to increase the production of food, feed, fiber, and fuel while maintaining and improving the environment, and mitigating the effects of climate change. Being the essence of all terrestrial life and ecosystem services, we cannot take the soils for granted. Soil is the basis of survival for present and future generations."

The U.S. Senate resolution passed six months after the European Union's Soil Protection Framework was tabled due to irreconcilable differences among Parliament membership. "My years growing up working on our family farm taught me the value of hard work and the importance of soil," says Senator Brown. "Often overlooked, healthy soil is vital to maintaining our natural resources and feeding our nation. This resolution is an important first step in cultivating awareness of our nation's soil policies."

The Resolution also acknowledges the work of soil scientists and soil professionals to continue to enrich the lives of all Americans by improving stewardship of the soil. It recognizes the importance of their efforts to combat soil degradation and to ensure the future protection and sustainable use of our air, soil, and water resources.

Estonia Branch to Host International Conference

The Estonia Branch of ISTRO will be a sponsor of an international conference entitled **“Risks in Agriculture: Environmental and Economic Consequences”** on June 8-10, 2010 at Tallinn, Estonia. For conference details and instructions on how to participate please see the following website: <http://www.eria.ee/index.php?page=3>.

Smithsonian Soil Exhibition opens in Washington D.C., USA

There are more living creatures in a shovel full of rich soil than human beings on the planet. Yet more is known about the dark side of the moon than about soil. These are just a few of the fascinating facts visitors can learn at the National Museum of Natural History’s new exhibition, “Dig it! The Secrets of Soil,” that opened at the Smithsonian’s National Museum of Natural History. The 460 square meter exhibition reveals the complex world of soil and how this ecosystem underfoot supports nearly every form of life on earth. “Dig It!” includes interactive displays, hands-on models, videos, and 54 soil monoliths.

World Reference Base for Soil Resources – Now in German

In 1998, the World Reference Base for Soil Resources (WRB) became the official soil classification system of the IUSS. In order to improve access of the WRB for German speaking scientists and administrators, it was proposed during the 18th World Congress of Soil Science in 2006 to provide a German edition. The Bundesanstalt für Geowissenschaften und Rohstoffe (BGR) decided to prepare such a German version and the translation was done by Peter Schad of the TU München. The German edition of the WRB is available at the following website:

http://www.bgr.bund.de/cIn_101/EN/Themen/Boden/Boeden_in_der_Flaeche/WRB_deutsche_Ausgabe_en.html.

For more information or a paperback (as long as the supply lasts), please send an e-mail to Info@bgr.de or Rainer.Baritz@bgr.de.

National Geographic – Cover Story on Soils

The September issue of the National Geographic Magazine has a cover story on soils, entitled: Where food begins. Inside the magazine there is a long article: “Our Good Earth - The future rests on soil. Can we protect it?” with stories from North and South America, Africa and China and as always, with nice pictures. There is also story on soil degradation in Haiti. Both the article and pictures can be viewed free online at www.nationalgeographic.com. The website also contains an interactive quiz. The English edition of the National Geographic is read by 40 million readers – but there are editions in many languages and all have the Soil story on the cover!

Soil & Tillage Impact Factor Increases

The journal Impact Factor for Soil & Tillage Research increased in 2007 to 1.846 compared to 1.619 in 2006. This rating, published by Thomson Reuters, is a measure of the frequency with which the average article in a journal has been cited in a particular year. For example, the 2007 Impact Factor is citations received in 2007 to all articles published in 2006 and 2005, divided by the number of "source items" published in 2006 and 2005. This increase reflects the improving quality of the manuscripts being submitted and the use of the published information by your colleagues.

International Symposium Opportunity

The federal state of Berlin, represented by the Senate Department for Urban Development, the International European Position Determination System (EUPOS) Steering Committee, the International Committee on Global Navigation Satellite Systems, and the United National Office for Outer Space Affairs is sponsoring the “International Symposium on Global Navigation Satellite Systems, Space-based and Ground-based Augmentation Systems and Applications” in Berlin, Germany, on November 11-14, 2008. For more information please see the website:

http://www.eupos.org/index.php?option=com_content&task=view&id=70&Itemid=134.

Successful ISTRO Branch Conference in Brno, CZ

Be sure to check out the photographs from the 5th International Soils Conference in Brno, CZ. They are available at:

http://picasaweb.google.com/Lukas.MZLU/080630ISTRO_cz_2008BrnoPicasa?authkey=J0JdQj2qrFQ.



Final Comments

Please be sure to continue sending information that can be shared with your fellow ISTRO members and to share your copy of this newsletter with others who may be interested in our activities. Remember too to promptly complete and submit your Abstract for the 18th Triennial Meetings in Izmir. Let's make this the most successful ISTRO Conference ever!

Cheers,

Doug Karlen

Assistant Secretary General