# ΠΕΔΟΜΕΤRΟΝ



Issue 16 Gainesville, FL August 2004

Commission 1.5 Pedometrics Div. 1 of the International Union of Soil Sciences (IUSS)

www.pedometrics.org

Chair: Gerard Heuvelink

Vice Chair & Editor: Sabine Grunwald

### 1. From the Chair

Dear Pedometricians!

In this issue of Pedometron you will be informed about important developments that took place during the first half of 2004 and about upcoming events and plans of our commission.

Of course the most important development of the past half year is that we have been 'upgraded' from a working group to a commission of the IUSS. Elsewhere in this newsletter I will report about the IUSS intercongress meeting in April in Philadelphia, where the decision was made. At last an end has come to a process that started in Ghent in 2001, and for which so many of us have worked so hard. Congratulations to all of us!

Pedometrics to become a commission of the IUSS is important for a number of reasons:

 Working groups are informal groups that address a specific topic for a limited period of time. Commissions have a much more permanent character and take responsibility for a significant part of soil science. Thus, for pedometrics to become a commission creates stability;

#### INSIDE THIS ISSUE

- 1. From the Chair (Gerard Heuvelink)
- 2. Impressions from the IUSS Inter-Congress Meeting
- 3. Pedometrics WebMaster
- 4. World-Wide Activities in Pedometrics
- 5. Upcoming Meetings

- 2. It signifies that pedometrics has matured into a discipline within soil science that can face up to established disciplines such as soil physics, soil geography and soil microbiology, to name a few. Pedometrics will receive much more exposure and this will, in due time, be reflected in themes for soil science conferences, in soil science text books, soil science curricula and in national and international soil science research agendas;
- It increases our visibility within the IUSS. It opens up possibilities to increase co-operation with other groups within the IUSS, to familiarise them with our work, and even to start new working groups;
- It is a signal from our fellow soil scientists within the IUSS and its leadership that they recognise the importance of pedometrics and welcome us as a full member of the 'family'. This signal is well-received.

One of the immediate consequences of pedometrics to become a commission of the IUSS is that we are entitled to organise three symposia at the 18<sup>th</sup> World Congress of Soil Science in 2006, two of which will be oral symposia. The themes of 'our' symposia are 'Diffuse Reflectance Spectroscopy, Soil Sensing, Remote Sensing and Image Analysis', 'Soil Sampling in Space and Time' and 'Interdependency of Soils and Soilscapes'. The 18th World Congress of Soil Science (WCSS) is an ideal opportunity for us to present ourselves to the larger IUSS community and it is important that we make use of this opportunity. The call for abstracts will be announced later this year. Please visit the conference website (www.18wcss.org) regularly for the latest information and please consider attending the conference and present your work, either

Pedometron No. 16

at one of our symposia or at any of the many other symposia.

One other immediate consequence of being a commission is that we now have three chairpersons instead of two. These are the chair, the vice-chair and the second-vice chair. Also, the election process of a commission is more formal than that of a working group. This is all written down in the statutes and byelaws of the Union (interesting reading material, really!), see www.iuss.org. In Philadelphia, the Council decided that until the next election in 2006, I would be interim chair and Sabine interim vice-chair of the Pedometrics commission. The position of second-vice chair will remain vacant until 2006. Next year, the election process for new chairpersons will commence. In the meantime, if you have an interest in taking up one of these positions or wish to recommend someone, please do not hesitate to contact Sabine or me.

Let us make maximum use of the new opportunities that the status of a commission gives us. If you have any comments, ideas or suggestions, please share them with us in the next Pedometron!

Gerard gerard.heuvelink@wur.nl

### 2. Impressions from the IUSS Inter-Congress Meeting

From 25 to 28 April 2004 I attended the IUSS Inter-Congress Meeting in Philadelphia, USA. I participated as the official representative of the Dutch Soil Science Society (which gave me voting rights!), but I also acted as chair of the Pedometrics Provisional Commission. There were about 60 people present at the meeting, mainly comprising IUSS officials, representatives of national soil science societies and chairpersons of IUSS divisions and commissions.

The main purpose of the Inter-Congress meeting is to discuss IUSS business affairs. The Council of the

IUSS, which is its supreme body, gathers at the meeting and takes decisions. The IUSS is a transparent organisation and the full minutes of the Council meeting are included in the latest IUSS bulletin (number 104), which is downloadable from <a href="https://www.iuss.org">www.iuss.org</a>. Let me only repeat the essentials here and highlight the topics that are of particular interest to pedometricians.

Although the main purpose of the meeting is business, there were two 'scientific' presentations. The first was by Ken Kemner, Argonne National Laboratory, Illinois (http://www.mesg.anl.gov/), on 'The use synchrotron-based techniques to address geoscience research frontiers', the second by Marc Imhoff from NASA's Goddard Space Flight Center, Maryland (http://ltpwww.gsfc.nasa.gov/bsb/Home.html), 'NASA's earth observing system: assets for Earth science'. These were very interesting presentations that addressed opportunities of new measurement techniques for soil science. It struck me that these presentations would fit perfectly well in a pedometrics meeting. Marc Imhoff also mentioned some web sites that may interest some of you: <a href="http://terra.nasa.gov/">http://terra.nasa.gov/</a>, http://earthobservatory.nasa.gov, and http://visibleearth.nasa.gov.

The main topics on the agenda of the Council meeting were:

- 1. IUSS and the International Council of Science (ICSU). ICSU (http://www.icsu.org/index.php) is a non-governmental organisation that aims to strengthen international science for the benefit of society. The IUSS has recently become a full member of ICSU. Among other advantages, the membership facilitates communication with other GeoUnions, with which meaningful initiatives are being developed to promote activities in the Earth and Environmental Sciences. One example of such an initiative is the 'Year of the Planet Earth', see <a href="http://www.esfs.org">http://www.esfs.org</a> for more information.
- 2. Scientific programme of the 18<sup>th</sup> World Congress of Soil Science. The main task was to select the symposia from the list of proposals that was submitted prior to the inter-congress meeting. A rule was developed in which each of the four IUSS divisions would organise two (semi-)plenary symposia, each commission two oral symposia, and each working group one oral symposium.

Pedometron No. 16 2

- 3. Changes in statutes and bye-laws. This took a lot of time and concerned, among many other items, the election process of IUSS officials including division and commission chairs, the selection of honorary members and financial affairs.
- 4. Proposals for changed status of Working Groups. It was proposed that three working groups become a commission. Among these was our own Pedometrics group, which was proposed to become a commission of Division 1 ('Soils in Space and Time'). I was given the opportunity to 'present our case' in a short presentation, which, incidentally, you can download from www.pedometrics.org. Next there was a discussion. The proposal received much support from the secretary general, the former secretary general and from many other leading soil scientists. At some point Victor Targulian (Russian Academy of Sciences, and chair of the Soil Genesis commission of Division 1) even said "I am sure that ten years from now Pedometrics will be a Division of the IUSS!" (Was it irony? I guess so. In any case, the message that Pedometrics is a 'rising star' among pedological subdisciplines did come across). Overall, the Council was impressed by the many activities that we undertake and our ability to interest young scientist for a career in soil science. There were some conservative voices that expressed concern about changing the structure of the IUSS by establishing new commissions, but when it finally came to a voting the motion for Pedometrics to become a new commission of Division 1 was smoothly passed. The other two working groups (Paleopedology and Soil Interfacial Reactions) were also established as commissions.
- 5. Election of honorary members. This was the only point on the agenda where the voting was done using a secret ballot. Nine out of the thirteen proposed candidates were elected.
- 6. Establishment of IUSS prizes. The Council accepted that two prizes will be awarded each four years. These are the IUSS Dokuchaiev award for basic research in Soil Science and the IUSS Liebig award for applied research in Soil Science. I proposed that in addition to this, the IUSS should also establish prizes for young soil scientists, and after some discussion it was decided that the Committee on Prizes should look into this and report about it at the next Council meeting in 2006.

The Inter-Congress meeting was very well organised and perfectly chaired by Donald Sparks, the IUSS President. Before the meeting, I was not very keen on going because I thought I would be bored by so many business affairs. However, this turned out not to be the case. We had pleasant and efficient meetings and discussed worthwhile topics, at least I felt so. I wonder, is this a sign? Can it be true, am I turning from a researcher into a manager, a professional official, a 'meeting tiger', as they say in Dutch?

Gerard

### 3. Pedometrics WebMaster

Please let me take the opportunity to introduce myself. My name is Sanjay Lamsal. I am a PhD student at the Soil and Water Science Department, University of Florida (major advisor: Dr. Sabine Grunwald). My research involves the development of holistic quantitative soil-landscape models for the Santa Fe River Watershed in north-east Florida. I received my M.S. in Physical Land Resources, Ghent University, Belgium and B.Sc. in Agricultural Science, Tribhuvan University, Nepal.

I am very pleased to be a member of the Pedometrics Commission. It is indeed fascinating to engage in such a maturing discipline of soil science.

For the coming few years, I am volunteering as the website administrator for the pedometrics web site (<a href="http://www.pedometrics.org">http://www.pedometrics.org</a>). Please feel free to email me your contributions and suggestions. My email address is slamsal@ufl.edu.

I wish you all a very successful teaching and research career, and look forward to meeting you all at the Pedometrics 2005 meeting in Naples, Florida.

Thank you

Sanjay Lamsal

Pedometron No. 16



Fig. 1. Sanjay Lamsal, WebMaster Pedometrics.



Fig. 2. http://www.pedometrics.org.

Check it out – in the section "Historic Pedometrics Documents" on the pedometrics web site you can find annotated handwritten drafts written by Alex McBratney addressed to ISSS to set-up a pedometrics working group.

In addition Alexs' lecture notes of his first course on pedometrics can be found on the pedometrics web site.

# 4. World-Wide Activities in Pedometrics

Annamaria Castrignano has taken the initiative to formalize activities in Italy. If you are interested in to plan and coordinate activities in Italy and adjacent regions related to pedometrics please contact Annamaria (Email: <a href="mailto:annamaria.castrignano@tin.it">annamaria.castrignano@tin.it</a>).

## Open letter "Call for new pedometricians in developing countries" from Ronald Vargas Rojas

Lecturer/Researcher

San Simon University-CLAS project

Email: vargasrojas@alumni.itc.nl;

vargas@clas.umss.edu.bo Cochabamba-Bolivia

In developing countries like Bolivia, soil science has been focused on rural and agricultural development. International donors have been providing support to apply methods and techniques; however, many questions regarding their usefulness has been raised.

Still many conventional soil science studies consider soil as a discrete body mapping soils unit by unit. While other studies using emerging technologies consider soil as a continuum. Pedometrics is a discipline that offers many methods/tools reducing costs and labor to map soils more rapidly. In particular, the developing world like Latinamerica needs those methods to adress growing problems of soil degradation and soil quality.

Traditional trained soil scientists are urged to update their knowlege in using innovative soil mapping technologies. Young soil scientists should take the opportunity to make use of pedomtrical techniques to solve problems in the developing world.

I am one of those young soil scientists that like to become more involved in pedometrics in Latinamerica and form a working that share common interests – curiosity, talent and dedication to learn and employ pedometrical techniques.

This is a call for all Latinamerican soil scientists to join me in this effort. Please, take this opportunity and contact me.

Ronald Vargas Rojas

Pedometron No. 16

### 5. Upcoming Meetings

#### **Eurosoil**

http://www.forst.uni-freigburg.de/eurosoil/ in Freiburg i. Brsg., Germany Sept. 4-12, 2004.

Global Workshop on Digital Soil Mapping <a href="http://sol.ensam.inra.fr/DSM2004">http://sol.ensam.inra.fr/DSM2004</a> in Montpellier, France, September 15-17, 2004.

### **Geostats Congress**

http://www.geostats2004.com/ in Banff, Alberta Sept. 26, 2004.

### **Pedometrics 2005 - Frontiers in Pedometrics**

Biannual Meeting of Commission 1.5 Pedometrics, Div. 1 of the IUSS in Naples, Florida, USA, Sept. 12-14, 2005.

http://conference.ifas.ufl.edu/pedometrics

Pre-Conference Workshop (Sept. 9-10, 2005) Quantitative Visible and Near-Infrared Diffuse Reflectance Spectroscopy for Soil Characterization. Post-Conference Field Trip: Everglades, Florida, USA (Sept. 15, 2005).

For additional information contact Sabine Grunwald <a href="mailto:SGrunwald@mail.ifas.ufl.edu">SGrunwald@mail.ifas.ufl.edu</a>.

### World Congress of Soil Science (WCSS)

http://www.18wcss.org

Philadelphia, Pennsylvania, USA, July 9-15, 2006. Abstracts due August 1, 2005.

Symposia (co)organized by the Pedometrics Commission:

- Diffuse Reflectance Spectroscopy, Soil Sensing, Remote Sensing and Image Analysis
- (2) Soil Sampling in Space and Time
- (3) Interdependency of Soils and Soilscapes.

Pedometron No. 16 5