NEWSLETTER

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ESSC EUROPEAN SOCIETY for SOIL CONSERVATION

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Water harvesting in Jessour, Tunisia
(photo from Donald Gabriels, University of Ghent, Belgium).

E.S.S.C. NEWSLETTER 1/2009

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Editor-in-Chief: M. A. Fullen
School of Applied Sciences
The University of Wolverhampton
Wulfruna Street, Wolverhampton WV1 1SB, U.K.
m.fullen@wlv.ac.uk

Assistant Editor: C.A. Booth, Wolverhampton, U.K.
c.booth@wlv.ac.uk

Co-Editor: A. Rodríguez Rodríguez, La Laguna, Canary Islands, Spain

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Contents

This issue of the ESSC Newsletter presents the eighth of our 'Guest Editorials.' This is an opportunity for leading authorities in the soil science community to offer their perspectives on issues relating to soil conservation. This contribution is from Donald Gabriels (Ghent, Belgium). Eventually, we envisage this collection of essays developing into an authoritative book.

Priorities in research on soil degradation and desertification

Donald Gabriels
Department of Soil Management
Ghent University
Belgium

More research? More models? More theory? More data? More indicators? More measurements? More scientific publications? More success stories? More applications? More funding? Who pays?

A role for soil conservationists?

Starting with this Guest Editorial I like to refer to:
(1) A previous Guest Editorial by Roy Morgan (ESSC Newsletter 2008/1, pages 3-7).
(2) A reaction to the latter by Frans Kwaad (ESSC Newsletter 2008/3, pages 7-8).

With this Editorial I am also taking the opportunity to open, in a personal way, a debate on the items listed above in the title of this Editorial. I would also like to refer to the **'Tunis Declaration 2006'** where research priorities on desertification were proposed, some of them adapted by the **'UNESCO Chair on Eremology'** inaugurated in January 2008 (see separate story) with a base at the International Centre for Eremology (ICE) of Ghent University, Belgium.

UNESCO Chair at the International Centre for Eremology (ICE), Ghent University, Belgium

The International Centre of Eremology (ICE) (Director: Professor Donald Gabriels) has received the honour to be selected for the establishment of a UNESCO Chair of Eremology (science of drylands and desertification).

The establishment of this UNESCO Chair is a result of long-standing co-operation with UNESCO in science. The ICE supports UNESCO in implementing activities in such scientific programmes as the Intergovernmental Oceanographic Commission (IOC), the International Hydrological Programme (IHP), and Man and Biosphere (MAB). This is achieved through a dedicated science Flemish trust fund. Within the MAB Project, the programme SUMAMAD (SUstainable MAnagement of MArginal Drylands), focuses on better land and water management in arid and semi-arid areas, with special attention to improving the livelihood of the populations living in these drylands. A second UNESCO/PHI/Flanders Trust Fund Project

is CAZALAC. This is based in La Serena (Chile) and special attention is given to research and education in the drylands of Latin America and the Caribbean.

Inauguration at the Aula: Professor D. Gabriels (left) is congratulated by Professor Van Cauwenberghe, Rector of Ghent University (right).

UNESCO recognized these efforts by the establishment of the UNESCO Chair in Eremology at the University of Ghent. The inauguration ceremony took place on 22 January 2007 at the Aula of the University of Ghent. There were representatives of the 'Intergovernmental Panel of Climate Change' (IPCC), UNESCO, EU-DG Research, UNEP, development co-operation agencies and the Belgian government. The keynote Speaker was Professor Filippo Giorgi, Vice-Chair of Working Group 1 of the 'Intergovernmental Panel on Climate Change.' Professor Giorgi is also joint winner of the 2007 Nobel Peace Prize.

This Chair opens possibilities for international co-operation and projects within the framework of problems of climate change, causes of desertification and land degradation. It promotes active participation in world programmes, including 'the Intergovernmental Panel for Climate Change' and the 'UN Convention for Combating Desertification' (UNCCD). The inauguration of the Chair was followed by a conference on desertification, which paid special attention to recent research findings, including methods and means to combat desertification.

The debate over research priorities

Before tackling the problem of land degradation and desertification and the research priorities related to it, I wish to refer to my reaction of our ESSC colleague Frans Kwaad to Roy Morgan's Editorial on **'A future for soil erosion research.'** This reaction forces me to act and react as a 'referee' with my personal perspectives on the matter!

On the one hand, I agree with Frans' disagreement about Roy's statement: *'it is wrong that erosion control is now a socio-economic problem.'* However, I do agree with Frans: *'It is a socio-economic problem!'* This applies both in Europe and throughout the world. Soil degradation and desertification (of which 'soil erosion' is one type) are as never before becoming increasingly socio-economic and political problems and so is the control of erosion and the strategies to combat soil degradation and desertification. Furthermore, it is not only a farmers' problem. But on the other hand, Roy Morgan mentioned it correctly in the first paragraph of his Guest Editorial by stating that: *"erosion is related to the way the land is used, which, in turn is conditioned by social and economic factors."*

Erosion and erosion control are socio-economic problems

Soil erosion and its control in Flanders (Belgium) are also related to socio-economic issues. I will try to illustrate this with examples from recent personal experiences. In Flanders we are finalizing an 'erosion plan' (RUSLE based) assessing 'on site' erosion of each individual parcel of agricultural land. 'Critical' sites are indicated in co-operation with 'stakeholders,' these being the farmers, landowners and regional and community leaders and experts.

From many discussions, I learnt that soil degradation (and its control) is felt as a community (social) problem if it harms the community… **Off-site deposition of soil losses by erosion can be considered a community problem… on-site erosion is not… it is a soil's problem and a farmer's (or the landowner's?) problem.** Correct me if I am wrong, but I do wish to further open the debate (as suggested by our Editor). Further reasoning leads to: **'Keep the soil within the field…**not necessarily in place! Soil can move within the field (by tillage erosion, for example), thus partially decreasing its quality, but the quantity should remain in the field. Protecting and maintaining soil quality is, in the first place, the task of the farmer (also of each of us, as soil conservationists). Of course, research can and should help! The tools and methods are there and known, they need to be applied (and, of course, adapted to specific situations) and be proven that the cost of inaction is higher than the cost of action. Thus, it is a complex economic problem!

In part, I do agree with Frans Kwaad that it is well known how to protect soil from erosion; there are ways and means to do it! But: 'no money, no soil conservation,''no laws, no soil conservation,''no off-site damage, no community or political interest in soil conservation.' Thus, it is a socio-economic and political issue. **Keep the soil in the field!**

More research?

Grass-buffer strips, properly designed and placed at the foot of the slope, can stop off-site erosion and here our colleague Roy Morgan is right: *"any erosion control measure needs to be designed."* We probably need more research (models?) for determining buffer strip dimensions. But does this mean that we have to wait until that problem is solved before putting in buffer strips? Do we have to wait for more research findings to make 'the' optimum medicine against one or other disease before trying other (less?) effective ones? Roy was also right when he stated that: *'the design work needs to be informed from the outset by the socio-economic constraints affecting the land user.'*

Recently I was called as an 'erosion control expert' (what's in a name!) to a Flemish court as 'referee' in a discussion about the damage caused by soil eroded and transported from a potato field, entering drainage ways, roads and neighbouring fields. A social problem! Finally, an agreement was made between the parties that the farmer can keep on cultivating potatoes but has to put a buffer zone (strips) at the bottom of his field in order to prevent soil leaving the field. Soil conservationists can help in determining the dimensions of the buffer zone. The farmer will eventually receive subsidies (from the region and community) for installing grass-buffer strips. For the damage already caused by soil leaving his field, the farmer can be penalized to pay the costs for repairing the damage.

Another similar case brought before the Court of Justice was related to the same problem: off-site damage caused by deposition of eroded soil in neighbouring gardens. A social problem! The solution? An (gentlemen) agreement was reached in which the farmer decided to put his entire field under grassland for several years as soil protection and erosion

control (*'Bennett knew this already decades ago!!'* said Frans Kwaad). Do we need more research on that subject? Also a topic for debate!

Another example forces me to agree again with Roy Morgan that we still need more research in assessing on-site and off-site erosion by better defining and evaluating the parameters affecting the erosion process and the transfer of soil from the field to ditches, rivers and reservoirs. *'Are we overestimating on-site erosion'* as claimed by Kristof Van Oost (See ESSC Newsletter 2008/2, pages 15-16). A reaction and comment on the paper by Kristof Van Oost *et al.* (in 'Science 2007': pages 626-629) and, hence, putting too much blame on soil erosion from agricultural fields for its contribution to global carbon emissions. Is the verdict too hard? A new insight into the effect of erosion on the carbon cycle and the results of the study show that erosion control should be pursued for its environmental and agronomic benefits, but will not play a major role in the currently needed potential to offset fossil fuel emissions. Certainly a topic for further debate and discussion!

Flanders 'Erosion Plan'

There are many more examples of (off-site) erosion as socio-economic problems, and not only in Flanders. In Flanders we have an 'Erosion Plan' and a 'Code for Good Farming' (not a law) and there are ways and means to control erosion and protect the soil, with or without financial compensation for the farmer. Frans Kwaad also stated that we have to be more 'conservationist.' Indeed, but who will pay? After the assessment of on-site soil erosion is made and each individual parcel assigned a 'soil loss' value, soil erosion control measures (cultural and structural) will and should be taken, starting with the most 'dangerous' sites. The main purpose of those measures is to reduce the amount of sediment on roads and in ditches and rivers and to prevent 'mudflows' in the valleys. This is both a socio-economic and political problem.

For two of the Belgian provinces of East and West Flanders, respectively, 23 and 30 'erosion plans' were made covering 74,785 and 92,430 ha, respectively. The costs for making the erosion plans were €959,823 for East Flanders and €1,220,037 for West Flanders. Recently, seven erosion control projects were subsidized in each province by €291,224 for East Flanders and €436,450 for West Flanders.

Priorities for desertification research

The problems of desertification and combating soil degradation were put forward at recent meetings and conferences, in May 2008 at the UN Headquarters in New York and at the 'Public Hearing on Desertification' in the European Parliament in Brussels (also in May 2008) and in December 2008 at the Ben Gurion University of the Negev in Israel (Conference on Drylands, Deserts and Desertification). At these meetings I gave presentations on 'UNESCO research priorities on desertification: the Tunis Declaration.'

Research Priorities to Promote Sustainable Development in Drylands: The Tunis Declaration

In an attempt to define future paths of dryland research for sustainable development, several themes were identified as priority issues at an International Scientific Conference 'The Future of Drylands,' organized in Tunis (Tunisia) in June 2006. This Conference took place in the context of the '2006 International Year of Deserts and Desertification' and celebrated 50 years of dryland research in the UN system. The following research priorities were proposed:

(1) Conservation of cultural and biological diversity.
(2) Integrated management of water resources.
(3) Assessing dryland ecosystem dynamics.
(4) Agriculture and pastoralism.
(5) Coping with natural and man-made disasters.
(6) Global change.
(7) Education and knowledge sharing.
(8) Reversing environmental degradation.
(9) Costs of 'inaction.'
(10) Renewable energies.
(11) Ecosystem services and their trade-offs.
(12) Viable dryland livelihoods.

The scientific community was invited to increase the involvement of young people and women in research, innovation and education programmes.

The 'Tunis Declaration' is very ambitious and full of good intentions, but it is now time for action, and to select priorities from the priorities. But who will pay? It was striking to hear during the conference in the European Parliament in Brussels, when the only politician present in an audience of over 100 'desertification experts' stated that we, soil conservationists, urgently need to translate our scientific results, our academic publications and reports, into a language 'understandable' for 'stakeholders' and decision makers…preferably in less than one page…and also preferably at the beginning of a new legislative term.

Just recently a mayor of a small community in Flanders started distributing his 'community priority actions' in local pubs on a regular basis on small flyers (cardboard beer glass under layers)…a direct message in only a few lines! Enough stuff for local community discussions! Reports are not read anymore! More action is need in the field than on paper! Do we need more research on land degradation and desertification? More indicators to better describe the desertification process? More *'how to do it'* than 'do it'?

Convention on Combating Desertification: too complicated?

During the December 2008 Conference in Israel the question was asked why the Rio conventions on 'biodiversity' and 'climate change' received more attention (from the general public and hence from donors) than the convention on 'Combating Desertification.' The answer given was rather simple, as it lies at the core of the ways the processes are described, assessed and presented to the 'general public.' The 'Convention on Combating Desertification' is still on its way to define more and more indicators. It has an excessively complicated language and perhaps the impacts are not well explained. Does this challenge 'soil conservationists' in their combat against soil degradation? Do we need an 'Al Gore' soil conservationist? Probably it is easier and simpler to explain 'biodiversity' in terms of one indicator being 'vegetation cover' and to explain 'climate change' in terms of 'climate' with two mean indicators being temperature and precipitation. These are indicators that each individual, and community, can 'feel.'

Soil is complex and so are the soil degradation processes, both physical and chemical. In addition, there are so many soil indicators and functions, not to mention the other factors (with their indicators) affecting soil degradation processes. We may lose the opportunity to collaborate with the other conventions (i.e. 'Biodiversity' and 'Climate Change'). Unfortunately, our Society lost a great man, Peter Bullock, our soil man in the climate convention, sharing the Nobel Prize, but sadly passing away in 2008.

The ultimate goal of our Society is conserving, preserving and protecting soil resources. In relation to our goal a 'Thematic Strategy for Soil Protection' was adopted in 2006 by the European Commission. This embraced principles for the protection and sustainable use of soils, to preserve soil functions and to restore degraded and contaminated soils. All those principles were put forward in view of an EU Soil Framework Directive. This is still under discussion and not yet transferred into law.

It is time for our Society of soil conservationists to show to the general public our executed soil conservation actions (success stories) and to set priorities for further and future conservation research, taking into account socio-economic aspects and translate the 'scientific wishes and goals' and the results of actions into an understandable language. 'Task forces' should be defined again, as was done in the initial years of the ESSC. ESSC members are also invited to use their Newsletter as a medium to report on 'Soil conservation' actions (with costs) taken in their region. Or do we still need more *'how to do it'* than *'do it'?* The floor is open!

Donald Gabriels
Chairholder UNESCO Chair on Eremology
Department of Soil Management
Ghent University
Belgium.
E-mail: donald.gabriels@ugent.be

Photo: Water harvesting in Jessour, Tunisia (photo from Donald Gabriels).

Robert (Bob) Evans
Anglia Ruskin University
Cambridge
UK

I went to a recent conference on soil protection, and was told by a colleague that soil scientists are always whingeing – mainly about not getting enough money to do research. That might be right but soil scientists, especially those working on erosion and runoff, should be more positive. We are making progress. Here I will briefly outline that progress and then outline some topics where I think we should be making more progress. My comments are made in the context of my work in England but, I think, have a wider relevance than just to that country.

Soils are much higher on the agenda than they were, especially soil protection, both within the European Union and within individual countries of the Union. The Water Framework Directive (WFD) or, as a former Environment Agency of England Chief Executive once put it, the 'Land Framework Directive' - because many of the aims of the WFD, an important one being that water quality should not deteriorate - can only be achieved if we look after the land better and more sustainably. The Department of Environment, Food and Rural Affairs (Defra) of England produced its Soil Action Plan in 2004, and the Environment Agency produced its own 'State of Soils' Report the same year and in August of 2008 published its updated 'Best Farming Practises' to help farmers protect their land. The EU has produced its 'Soil Thematic Strategy' and the devolved countries of the United Kingdom (England, Scotland, Wales, Northern Ireland) are preparing their own Strategies, with that of England to be published shortly. Although the EU's Soil Framework Directive has been sent back by the Commission for reconsideration, its delay (hopefully) is probably not likely to be for long.

In England since 2005, to receive subsidy (the Single Farm Payment from the Rural Payments Agency (RPA)) farmers and land managers have had to comply with certain regulations, one of which is that the land should be kept in "Good Agricultural and Environmental Condition." There is good guidance to help them to do that, both in the RPA's 'Guidance for Soil Management' and in the Defra publications which tell how to recognize and combat erosion and runoff. There are Stewardship Schemes which also include incentives for farmers and land managers to stop erosion and runoff.

We are now thinking of our soils in a much more holistic way in the knowledge that if we protect our soils from runoff and erosion we will help protect our property from muddy floods and our water courses from being polluted by sediment, enrichment by nitrate (N) and phosphorus (P), pesticides and faecal material washed off the land. These impacts cost insurance and water companies hundreds of millions of Euros a year to cover the cost of flood damage and to make water drinkable.

Another reason for progress in the UK, as well as those outlined above, which are aimed at the immediate impacts of not protecting our soils well enough, is the realization that

erosion removes what is in reality a finite resource. We will need another ice age to replenish our lowland soils of the windblown deposits which have mostly been eroded away! And that seems very unlikely if the earth's climate continues to warm.

Especially because of the widespread field-based assessments of erosion, mostly made in the 1980s and 1990s, as well as some plot experiments, we have a good idea of the extent, frequency and rates of erosion in England, Wales and Scotland. When the extent of erosion was realised and its impacts were costed, in a preliminary way in the mid-1990s and in a better and more comprehensive way some years later; that put erosion firmly on the agenda. Those costings spurred political action and drove things forward. Questions in Parliament about the impacts of erosion and runoff helped to get soil erosion higher on the agenda. Non Governmental Organizations (NGOs), such as 'Friends of the Earth' and the 'Campaign to Protect Rural England' also played important roles. Possibly most important of all was the publication in late 1996 of the '19th Report of the Royal Commission on Environmental Pollution – Sustainable Use of Soil', and the establishment also in 1996 of the Environment Agency, which quickly realised the importance of soil. From the late 1990s, the then Ministry of Agriculture (now Defra) adopted a pro-active stance on soil erosion.

Progress is also being made in the coming together of researchers like myself, who have gathered data on channel erosion in farmers' fields, with those who work for better understanding of erosion processes by carrying out plot experiments, and with those who model erosion primarily from plot data. Caesium 137 studies, as well as sediment 'footprint' studies, are further adding good information to our understanding. In England, data collected from the field has been used to validate models and is also now being incorporated into models. However, though we have made good progress in the UK there is still much to do. In Britain (England, Scotland and Wales) we have much field-based data, but much of this was obtained a decade or two ago. We need to continue collecting such data, both in the lowland arable and improved grassland landscapes and in the uplands. How we do that is up for discussion.

The collection of information on channel erosion in arable fields has uncovered a paradox. It was expected that sheet wash, which leaves little sign of its activity, was of little importance because the amounts transported are very low. Hence, when we first started assessing erosion in the field we concentrated on rills and gullies, because they were easily seen and measured, as were the sandy deposits below them. We have now realised that the amounts transported in channels and the fine material, rarely the sand, carried out of fields is insufficient to explain the amounts of sediment being transported in streams and rivers. It is likely that the small amounts carried by wash are what might be called the 'background' rate of erosion and wash has probably increased in extent and rate over the last few decades as land use has intensified. These soil fines carry attached pollutants as well as the runoff transports pollutants (N, P, pesticides) in solution. Now that we have the skill to recognize the evidence in the field for wash and we make sure we visit the field when runoff is occurring so that we can see the turbid runoff, we can fully comprehend its importance. We need to tackle sheet wash, but this will not be easy for it occurs over a much larger part of the landscape and, once soils are saturated at the surface, can occur many times a year especially where soils are compacted, particularly down tractor wheelings.

Progress needs to be made in partitioning sources of sediment reaching water courses. In my experience in East Anglia (England), none or very little sand moving down

streams and rivers and seen as bars or berms in the channel, is from eroded fields, as it is rare for sand particles to be transported out of fields. The in-channel sandy deposits are from other sources such as the channel itself, especially after cleaning out when the banks are left bare of vegetation; or from farm tracks which are forever being rutted and widened by tractors of ever-increasing size; and from the verges of narrow country roads used by commuters from village to town or city, which become damaged when passing vehicles have to take to the grass verge. The fine material, deposited in pools in water courses or on floodplains or coastal marshes or carried out to the sea, will be from all these sources.

Progress needs to be made on partitioning sources of N and P in water courses. It seems unlikely from work completed in East Anglia that all the N and P in water courses is washed or leached from farmers' fields. In East Anglia, in summer, it is likely much N and P comes from small sewage treatment works (STWs) or from septic tanks belonging to dwellings. Indeed, in places in summer, stream flow only occurs below the outfalls of such small STWs. If it is high concentrations of N and P in summer that are the reason for excessive algal growth, growth of macrophytes and eutrophication of water bodies, the blame for this cannot be laid at the farmer's door.

Can we have more research, in the laboratory, on plots and especially in farmers' fields on the extent and severity of soil compaction? There is anecdotal evidence that with minimal tillage soils are getting more compact in the surface layers, either in the drill layer when soils are drilled in autumn when soils are wetting up, or just below the drill layer in spring when soils are drying out. Tractors, harvesters and other equipment are getting heavier and there is evidence of soil compaction at depth, with wetter topsoils lying above drier horizons. Compaction can also be seen in heavily stocked fields, both of cattle and sheep, and this can be in the uppermost few millimetres of the soil where most roots are found, as they are confined to this very shallow layer by compaction. All these types of compaction will lead to more runoff and wash of fine particles, organic matter and, in grazed fields, faecal material.

Will conservation agriculture, either as reduced or minimal tillage or no till, remain viable if petroleum products become more expensive or weeds become more resistant to herbicides leading to the re-introduction of the plough? If that happens the major reason for the uptake of such techniques - the reduction in costs to the farmer – disappears. Although there is much evidence that such techniques reduce erosion, the evidence for reducing runoff is equivocal, and that is serious for wash is important in transporting fine sediment and other pollutants to water courses. With regard to modern, intensive agriculture this is a major question, with serious implications if the answer is not in the affirmative.

Can we model land use scenarios to assess if some uses may be more sustainable in terms of soil and water? For example, what will be the outcome in terms of resources and costs if we move to smaller fields, lighter equipment, more grass in the arable rotation, and lighter animal stocking densities? All of these changes might lead to less soil compaction, runoff and erosion. And can such schemes be made viable economically both for the farmer and for the consumer of food and fibre produced from the land? This is probably the key question of all those posed here. Although we do need research to protect our soils, particularly in the directions I have indicated, we have a good idea of the answers to many of these research questions. The difficulties in protecting our soils lie not in defining

how land use should be made more sustainable so that there is less erosion and runoff, we can probably do that now, but in how we devise the policies to bring about the political, economic and social changes that will lead to more sustainable land use practises.

Robert (Bob) Evans
Anglia Ruskin University
Mellish Clark Building, Room MEL 105
East Road
Cambridge CB1 1PT.
UK
E-mail: Robert.evans@anglia.ac.uk.

The Newsletter and supporting Ph.D. research

Editor's note:
The citation details of Ph.D. theses by ESSC members since and including 2004 have been added as an additional page to the ESSC web site. To date, 45 Ph.D. theses are quoted. On the ESSC web site, please look under 'Publications.' Please forward the citation details of any additional Ph.D. thesis completed since the year 2000 by an ESSC member to any of the Editorial team. We will then add the thesis citation details to the web site. Two new Ph.D. theses and two Dr Habilitatus theses are reported in this issue.

The full text of the next two Ph.D. theses from Wageningen University is available as 'Tropical Resource Management Papers.'

Dr. ing. W.P. (Wim) Spaan
Land Degradation & Development Group
Wageningen University
Soil Science Center
P.O. Box 47,
6700AA Wageningen
The Netherlands
Tel: 00 31 317 482764
E-mail: Wim.Spaan@wur.nl

Luuk FLESKENS
Wageningen University
The Netherlands

Conservation scenarios for olive farming on sloping land in the Mediterranean (2007). Ph.D. thesis, 219 pp. (ISBN 978-90-8504-717-9)

Olive farming has an impressive history in the Mediterranean. For the major part of that history, olive cultivation was environmentally and economically sustainable. On sloping and mountainous land, often with shallow and stony soils, the rustic olive tree was adapted to its environment. However, several developments have threatened the olive orchards in these disadvantaged zones in a relatively short time frame: depopulation of rural areas, integration in the market economy with fierce competition, and technological innovation. Moreover, EU production subsidies have significantly changed the face of olive farming. These profound changes have created a stratification of olive productions systems, to the extent that they now show variable environmental and economic performance, with an especially ambiguous record in soil erosion. This stratification has important consequences for the future development of olive farming. The thesis explores these issues within a framework of function assessment. Dealing uniquely with olive production systems on sloping land, it first establishes a typology of such systems. Subsequently, it is shown how the functions of a particular system can be assessed during the 'house of functions' concept developed especially for the purpose. The soil conservation function is the topic of an in-depth analysis. Scenario analysis is applied to define the prospects for olive farming in several regions and the further consequences for the natural resource base. Conservation scenarios are presented as a tool to develop adaptive management strategies that enhance the multiple functions of olive production systems and minimize environmental impact under variable circumstances.
E-mail: luukcarla@gmail.com

Monique F.W. SLEGERS
Wageningen University
The Netherlands

Exploring farmers' perceptions of drought in Tanzania and Ethiopia (2008). Ph.D. thesis, 217 pp. (ISBN 978-90-8585-240-7)

Abstract
Development actions focusing on land degradation in Sub-Saharan Africa have not been particularly successful in changing farmers' agricultural practices towards a more sustainable use of natural resources. Over time, programs have become more localized and participative, which is a positive step forward. However, these programs still depart from the productivity-reducing problems that are identified and perceived by scientists. Subsistence farmers in

this region believe that other problems, such as drought, are bigger constraints to them. Very little is known about how subsistence farmers in semi-arid East Africa perceive drought. The aim of this research is to bridge this gap between farmers and scientists to improve the impact of interventions aimed at improving agricultural productivity. The research focuses on two study areas within Tanzania and Ethiopia, where during the period between 2004 and 2006, sociological and biophysical studies were conducted.

Both case studies demonstrate the inter-relationship of human and natural systems. This is also part of farmers' knowledge. Farmers' perceptions of drought relate to the scientific concept of agricultural drought. Rainfall patterns are perceived to be negatively affected by deforestation, while soil erosion and continuous cultivation diminish soil fertility and a soil's capacity to retain water. Farmers recognize that one has to be an active farmer to be productive and to withstand drought conditions. No 'one-size-fits-all' solution exists for which SWC strategies to use, or for strategies to deal with climate variability and drought. Actions have to be area-specific and focused on local practices and the constraints that farmers have to deal with. Farmers' strategies for dealing with the insecurity of the rains are multifocal. Interventions should target these multiple sectors and spheres in which people are engaged. The seemingly different problems of land degradation and drought are linked. Rather than "bridging a gap," the issue is to find where both paths are connected. To achieve this, emphasis should lie on integrated studies and on improving the interaction between farmers and scientists.

E-mail: Monique.Slegers@wur.nl

New Habilitatus theses

Eugenija Bakšienė
The Lithuanian Institute of Agriculture
Voke Branch, Lithuania

Application of lake sapropel for improving the fertility of light textured soils (2008). Dr Habilitatus procedure thesis, 30 pp.

Abstract

Research conducted at the Lithuanian Institute of Agriculture from 1991-2007 is reviewed. The main aim of investigations was to solve the question about increasing the selection of organic fertilizers, to estimate the duration of action and influence on chemical, physical and microbiological properties of various types of sapropels and its mixtures with manure and mineral fertilizer applications on light textured Haplic Luvisols and Eutric Cambisols. The following experimental tasks were established: to study the main soil quality indicators (pH, absorbed bases, content and qualitative composition of humus, total nitrogen, available phosphorus and potassium), effects of soil physical properties on plant growth and cultivation, nutrient budgets, to evaluate sapropel application as fertilizers and crop yields and inter-relationships between agrochemical indicators, fertilization with various types of sapropel, to compare the efficiency of sapropel with the

efficiencies of manure and sapropel-manure mixtures and calcareous sapropel efficiency with limestone.

The work estimated the long-term influence of lake sapropel on soil properties in south-east Lithuania. Large, integrated investigations were performed, to validate the improvement system of light textured soils using various types of sapropel for soil fertility improvement.

Application of sapropel of various chemical composition for fertilization of Haplic Luvisol and Eutric Cambisol produced positive effects on the suppression of soil acidification and increases in the amount of total nitrogen and humus in soil. Sapropel contains humic substances, and during fertilization they enter into the soil system. Humic substances of the sapropel are stable. As sapropel is introduced into soil, the humic substances are gradually decomposed. The newly formed regenerated humic acids are analogous to the acids existing in soil.

The investigated sapropels contained only small amounts of phosphorus and potassium. Therefore, when sapropels of various chemical composition are used for fertilization, additional fertilization with phosphorus and potassium mineral fertilizers is needed. Changes in soil chemical properties are confirmed by measurements of the balance of chemical elements in soil. In all sapropel field experiments, positive balances of nitrogen, calcium, magnesium and negative balances of phosphorus and potassium were revealed.

The research results show that the organic matter of sapropel and viscous particles of colloidal composition are very good agents for improving the physical properties of light textured soils. Fertilization of Eutric Cambisol loam soil with sapropel of various chemical composition effected changes in soil humidity, density and porosity. These properties were most efficiently improved in cases of organic and silicon sapropel, which comprise higher amounts of organic matter. Carbonate sapropel was significantly more efficient than limestone powder.

When lake sapropel is used for fertilization, the components and function of soil biological systems is changed. For instance, increased numbers of bacteria were revealed. Certain micromycete species disappear and are substituted by others. More evident changes in micromycete species composition is recorded in soil fertilized with sapropel-manure mixtures. The changes in species composition mostly depended on the degree of decomposition of organic matter. Sapropels of various composition affect the abundance and species composition of soil micro-organisms and act as strong ecological influences.

Plant yield in soil fertilized with sapropel depended on soil chemical, physical and microbiological conditions and the amount of matter introduced into soil with fertilizers. Application of carbonate, organic and silicon sapropels for improvement of light textured soils produced diverse effects on plant yield.

Long-term positive effects of various rates of carbonate sapropel was most evident in the case of grain yields, while negative effects were observed in potato yields. Probably this impact could be produced by excess calcium ions introduced into soil with rather high (400-800 t ha^{-1}, calculated using natural humidity conditions) sapropel rates. Various rates of organic sapropel increased crop yields by 4-20%. However, the most effective were 40 t ha^{-1} of sapropel and sapropel-manure mixture, which increased yields by 22 and 25%, respectively.

The impact of manure equalled the effect of lower rates of sapropel and sapropel-manure mixtures. During a crop rotation, the 50 and 100 t ha^{-1} rates of silicon sapropel increased the yield of fodder units by a similar amount as manure, i.e. by 18-27% and 25-30%.

The research updates our knowledge in the sciences of agriculture, agrochemistry, and soil science and is relevant to increasing our understanding of application of lake sapropel for fertilization and in the fulfilment of general agronomic tasks in Lithuania. On the basis of research, practical recommendations for the application of the new research knowledge are formulated.

The material of study has been presented in research events arranged by international organizations, including the European Society for Soil Conservation (ESSC), the International Soil Conservation Organization (ISCO) and the International Yellow River Forum (IYRF). It is envisaged we will continue and deepen research on this subject, seeking better fulfilment of agricultural and ecological research tasks.

Publications

Research findings have been published in 56 refereed scientific articles (one book, four in the ISI Master Journal List, 25 in the list approved by the Lithuanian Science Board and indexed in international databases, and 26 articles have been published in refereed scientific journals).

Main publications

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Dr Eugenija Bakšienė
Lithuanian Institute of Agriculture (Voke Branch)
Traku Voke
Vilnius LT-02232
Lithuania.
E-mail: eugenija.baksiene@voke.lzi.lt

Editor's note

The Dr Habilitatus system is unique to some European countries. It consists of a summary of publications usually produced over a period of at least 10 years since the completion of a Ph.D. thesis.

A garlic field of reclaimed sapropel, Lake Erhai, Yunnan Province (China), January 2008 (photograph by Dr Madhu Subedi, University of Wolverhampton, UK).

Saulius Marcinkonis
The Lithuanian Institute of Agriculture
Voke Branch, Lithuania

Regional research on factors influencing sustainable soil use (2008). Dr Habilitatus procedure thesis, 24 pp

Abstract

Scientific research conducted since acquisition of the Ph.D. in 2000 is reviewed. Experimental work was performed at several institutions, both in Lithuania and abroad. These included The Lithuanian Institute of Agriculture, The Institute of Geology and Geography, The Institute of Soil Science and Plant Nutrition (PB FAL, Braunschweig, Germany) and Agrifood Research MTT (Jokioinen, Finland).

The common aim of the investigations was to improve sustainable soil use planning and maintain soil functionality, based on scientific approaches. The main topics included: improving soil evaluation and research methods through investigating soil status and assessing soil degradation risk; the development of scientific approaches for fertilizing and

liming naturally-acid light textured soils; investigations on the potential use of biointensive agriculture and soil recovery practises; and improving the evaluation of both point and non-point pollution of agricultural soils. The research both expanded the application of novel agronomic methods (i.e. geochemical evaluation and geostatistical modelling) and abstracted research findings from long-term field and lysimeter experiments. These allowed the accumulation of unique datasets, enabling complex evaluation of the current state of agricultural soils and exploring new knowledge on soil system dynamics. Such comprehensive data empower complex evaluation of agricultural landscapes, their change and the efficiency of applied soil management. On the basis of the research and their conclusions, it is possible to tackle actual soil use problems and to make prognoses for their use, substantiated by sustainable environmental management principles developed in East Lithuania.

The review material covers 2001-2008. During this time, 18 scientific articles were published in scientific journals. Papers were presented at over 20 scientific events (conferences, symposia and congresses) in Lithuania and other countries.

Dr Saulius Marcinkonis
Lithuanian Institute of Agriculture (Voke Branch)
Traku Voke
Vilnius LT-02232
Lithuania.
E-mail: saulius.marcinkonis@voke.lzi.lt

The Ph.D experience

ZU Yanqun
Yunnan Agricultural University
Kunming 650201
Yunnan Province
P.R. China

As a younger soil scientist, I recently graduated from Gembloux Agricultural University (Belgium) and obtained the degree of Ph.D. in September 2008. I would like to share some advice and experience with colleagues in earlier stages of their research.

What are the factors which both encourage and limit progress?

I work in China. My normal life has not changed and I still live with my family. Everything is going well. However, I have to work at the same time. There are many normal jobs which need attention. As a teacher, I give lectures to my students and as a mother, I take care of my child.

My research area is familiar to me. It is easy for me to understand the relief and landscape. The soil properties are clear to observe and describe. It is also convenient to obtain geological and topographic maps and satellite imagery. In the field, it is very

interesting to have discussions with farmers and to investigate information about fertilizers, pesticides, irrigation techniques, harvest sequences, crop rotation systems, vegetable yields and socio-economic issues.

References written in Chinese are easy for me to understand. There are many references in China about the current situation in China's cultivated land and agricultural product security, soil and vegetable trace element contamination, assessment systems of vegetables and soil quality and relative research progress. This information is plentiful and there are ranges in Chinese scientific thinking of these issues. However, it is difficult to translate to comparative international systems, as different systems are used in China and internationally. There are no absolute similar items to correlate. For instance, the Soil Classification System of China (CST, 1999) partly correlates with the international soil classification system (WRB, 1998). Argosols in CST are Luvisols and Alfisols in WRB. References using the Chinese soil classification system are not easy to compare with others, such as the international and US soil classification systems.

I worked 14 years before I began to be a Ph.D student. I had been in charge of some research programmes and delivered lectures for many years. I thought I knew how to organize my Ph.D. programme and how to be a good research student. However, I was wrong! This work experience made me to think about things in certain ways, and to search more widely and accept new knowledge. I had to make some choices and give up some unsuitable habits, which created some anguish!

What are the particular challenges facing part-time Ph.D. researchers?
As a part-time Ph.D. researcher, the challenges for me mainly included:

1. Course learning was effective for me during the early stages. First, I met the professors who are in charge of the courses. Professors gave me advice and asked me to prepare a literature review. Then, I read many references. I discussed these with my professors by e-mail. Finally, I sent the review to them and obtained the course records. Although I just met my professors twice, I discussed many things with them many times. However, I still stayed in Gembloux for one month to prepare the 'Diplome d'Etudes Approfondies' (DEA, Diploma of Advanced Study) documentation and presentation. It is necessary to spend an entire month to finalize the DEA. I had detailed discussions with my supervisors and learnt how to organize the DEA thesis and solve some difficult problems. We would work together on properly formulating questions, solving them and writing up solutions, so that I could obtain an overview of the whole process. By then I was sufficiently advanced that I could find my own questions and answers.
2. Field investigations were conducted in China in spring in two years. Field surveys were conducted before the new semester started. It was necessary for me to cost enough time in the field and, thus, avoid disrupting my normal job.
3. Pot and field experiments were conducted in summer and autumn in two years. This research work cost much time. The most critical stages were the treatment arrangement and vegetable harvest. I should have paid more attention to these stages. The other stages could be completed with the assistance of some students, and farmers proved consistent and helpful guidance.
4. Co-operation with some students is important and necessary. M.Sc. and undergraduate students worked with me. They had sufficient time for analysis and they also had discussions with me, so I could help them to finish part of their related

research work. Accompanying the Ph.D. programme, some other programmes could be finished together. Good research needs a social context. We can learn better and produce more by interacting with others. Of course, a good balance had to be found between my own pace and that of others.

5. Travel visas were another challenge to travel to Europe and exchange ideas with my supervisors. In order to exchange some research progress and ideas with my supervisors, I had to go to Europe several times. The visa usually arrived just in time, but involved considerable time in preparing documentation.
6.

How to exchange ideas with scientists from different counties?

I am lucky, because I had two supervisors, one from France (Christian Schvartz) and one from Belgium (Laurent Bock). They are intelligent scientists and have plenty of experience. But they have different cultural backgrounds and research disciplines. It was a very interesting and a good experience to have discussions with them.

At the beginning, I was just like a 'sponge' absorbing knowledge from them. However, with the progression of discussions, I found there were many different ideas surrounding the same question. First, I thought I was right. I felt so confused whether I should accept or refute their ideas. Finally, I understood there was no absolute 'right' or 'wrong.' I could consider the same question in different ways and to get the solution more widely. Working together is fun and I enjoyed it.

Thinking and thinking again are so important for Ph.D. students. Supervisors are leaders in the Ph.D. research area. Their suggestions will be very useful to solve some questions, although sometimes I did not immediately understand. Do not refute their ideas immediately. It is necessary to think thoroughly and to try to find more references to confirm specific points. The first rule of research is to think and think again. Never hesitate to throw your mind at any issue. If you solve it, you will have improved your understanding.

How to organize the Ph.D. thesis?

I took almost one year to prepare my Ph.D. thesis. I would like to share my experience about how to organize the Ph.D. thesis. There are some things which should be avoided!

1. According to my understanding about the Ph.D. thesis structure, I organized my Ph.D. thesis, including literature review, general methodology, results, discussion and conclusions. However, the format demanded by my host university was different. I had to cost more time to modify the structure. So it is necessary to organize the thesis according to the correct structure and it is useful to consult the Ph.D. theses of other researchers from the same university.
2. In order to have a suitable thesis structure, it is important to prepare a 'budget' of total pages and their distribution in each chapter. The structure balance in each chapter is very important, especially the results chapters. Sometimes, there are more data about one topic of results. It is necessary to choose which data to present and to give up some data, even if it cost much time to obtain it.
3. How to choose data? Having a logical thought sequence is the first step. Data should be reported in the thesis only when directly supporting the main idea. Exchanging ideas with supervisors as much as possible is useful, because they could possess the main clues. Choosing suitable statistical software is also important and helpful.
4. It is very nice experience to prepare your draft thesis as early as possible, such as writing the literature review and general methodology. This leaves sufficient time to modify the draft. That will save time, enabling more attention to be paid to the results and discussion.

How to improve the language?

Really, a Chinese person writing a Ph.D. thesis and exchanging scientific ideas with supervisors in English, in French-speaking countries is a major challenge!

1. Learning French is very useful to understand the French pronunciation of English. It was very important for me to exchange ideas with my supervisors, whom do speak English, but their mother language is French.
2. My supervisors, Professor Bock and Professor Schvartz made huge efforts to improve my English writing and I modified the thesis sentence-by-sentence and word-by-word according to their suggestions. Professor Mike Fullen, who is an English person, helped me to modify my thesis word-by-word and even punctuation mark-by-punctuation mark. I obtained a lot of help.
3. Writing in English way is important. It is necessary to have some references which have similar analysis and research topics. The results can then be written in a similar way and adopting similar structures and sentences. I learnt how to write by studying other papers. 'Thinking in English' is also very useful and helpful.

Self-confidence affects performance and success in research and all walks of life. Experience from Ph.D. research is unique. I have learned how to do research. Future research is going to be more interesting because I know much more about how to do it, so I will have more freedom and fun. I now have confidence in my research ability. It is very clear that Ph.D. thesis research is still the best way to develop powerful research. It is necessary to get a sense of confidence in the power of rational thought and the confidence and inclination to question all around and seek out new ways of doing or seeing your research question. A Ph.D. should give the confidence to jump into a new area, pick it up quickly, and have something interesting to say about it. It also makes me unwilling to unquestioningly accept conventional standards and norms.

In summary, the Ph.D. experience is the best investment for becoming a successful researcher. I have obtained many experiences which I share with all newcomers. I hope every newcomer can achieve wonderful research and enjoy everything during their Ph.D research time.

Reference

ZU Yanqun (2008). Trace elements in soils and vegetables in a periurban market garden in Yunnan Province (P.R. China): evaluation and experimentation (2008). Ph.D. thesis, 236 pp.

E-mail: zuyanqun@yahoo.com.cn

Editor's note

The Ph.D. abstract of Dr ZU Yanqun is presented in Newsletter 2008/4 (p. 25-27).

EUROSOIL 2008, 25-29 August 2008, Vienna, Austria

EUROSOIL 2008 was held in Vienna (Austria) from 25-29 August 2008, in co-operation between the soil science societies of Austria, Croatia, the Czech Republic, Hungary, Slovakia, Slovenia and Switzerland. The venue was the University of Technology, Vienna Karlsplatz 13, 1040 Vienna. The Conference was organized by Professor Winfried Blum, University of Natural Resources and Applied Life Sciences (BOKU), Vienna, with its Secretariat being the Vienna Medical Academy Mirjam Uebelhoer Alser Strasse 4, 1090 Vienna. About 1500 participants from 77 countries attended the Congress. There were about 650 oral and about 750 poster presentations. EUROSOIL 2008 comprised about 30 Symposia, 13 Workshops and three 1-3 day technical excursions in Central, Eastern, Southern and Western Europe.

The Congress also organized several business meetings, such as the European Confederation of Soil Science Societies (ECSSS) Council meeting, World Reference Base (WRB) for Soil Resources Business meeting, European Society for Soil Conservation (ESSC) Council meeting, The European Soil Bureau Network (ESBN) meeting and the European Soil Bureau Network Steering Committee (ESBN-SC) meeting. Some 26 Presidents of national soil science societies or their representatives participated in the Council Meeting of ECSSS, with the main outcome being the selection of the next venue. EUROSOIL 2012 will be held in Bari (Italy) and be hosted by the Italian Soil Science Society. The next President and Vice-President of ECSSS will be Professor Nicola Senesi and Professor Teodoro Miano, respectively, both from the University of Bari. We, on behalf of all members of the ESSC, congratulate both Professors Senesi and Miano! For EUROSOIL 2016, the Polish Soil Science Society presented its bid for the City of Olsztin, in Masuria (north-east Poland).

The 10 best posters were awarded a prize from the organizers. Out of all presented posters one or two (depending on the overall number of posters per Symposium/Topic) for each Symposium/Topic was/were nominated by the respective convenors. The selected posters were exhibited in a special 'Poster Award Finalists' area. Judging criteria were: *Content* (relevant, original, up-to-date), which carried 50% of total marks, *Experimental plan and techniques* (controls, replicates, accuracy of the used techniques) that carried 25% of total marks and *Presentation* (design, clarity) that carried 25% of total marks. The Poster Committee (comprised of Professors Martin Gerzabek, Ferdo Basic, Erika Micheli and Rainer Schulin) then selected the 10 best posters out of the 'Poster Award Finalists' area. The authors of these 10 posters received a diploma and €200 Prizes were awarded in the Closing Session on Friday 29 August. The winning posters are listed at the end of this report.

An additional prize was provided by the international journal 'Biology and Fertility of Soils' (Springer). The award was given to a young scientist (≤35 years old) who presented the poster at the following symposia of EUROSOIL 2008: Soil Organic Matter, Soil Ecology-Soil as Living Space, Organo-mineral Interactions, Rhizosphere Processes, Soil and GMOs, The influence of soil quality on human health and food security and Soil fertility and Environment. The Convenors of each of these sessions nominated the best poster of the specific session presented by a young scientist. Then a four-member committee nominated by the Editor-in-Chief of the Journal and the Organizer of EUROSOIL chose the best poster among the overall

nominations. The judging criteria and weighting of criteria were the same as the best poster award. The winner received all issues of the journal in 2009 and free access to the journal web site. The winning poster was:

15N-DNA Stable isotope probing and active soil microbial community in plant residue decomposition process

M. Espana[1, 2], T. Brune[3], B. Rodriguez[2], E. Kandeler[3], G. Cadisch[1]

[1]Institute of Plant Production and Agroecology in the Tropics and Subtropics, University of Hohenheim, Stuttgart, Germany.

[2]National Institute of Agricultural Research (INIA), CENIAP, Maracay, Venezuela.

[3]Institute of Soil Science, Soil Biology Department, University of Hohenheim, Stuttgart, Germany.

The Congress organized several symposia. Topics included: Soil Organic matter, Soils and Climate Change, Soil Erosion, Soil Compaction, Soil Desertification and Salinization, Soil and Water-Theory, Soil and Water- Practical Applications, Soil Ecology-Soil as Living Space, Forest Management and Soils, Advances in Soil Monitoring, Management of Contaminated Soils (1): Practical Applications, Buffering Functions of Soils, Organo-mineral Interactions, Soil Information Systems, Soil Indicators, Rhizosphere Processes, Land Use and Soil Protection, Urban and Anthropogenic Soils, Soil Forming Processes and Soil Morphology, Soil Fertility and Environment and Soil Classification. Some novel topics were also included in the Congress. These were: Management of Contaminated Soils: Concepts and Policy Development, Regionalization of Soil Data Including Soil Associations, Society's Demands for and Perceptions of Soil Conservation, Soils and Societies in History, Education in Soil Science and Raising Public Awareness, Soils and GMOs, Memory Function of Recent and Palaeosols, Pedometrics and Digital Soil Making, The Influence of Soil Quality on Human Health and Food Security, Time Scales of Pedogenic Processes for Predicting Soil Changes in Time and Micromorphological and Mineralogical Features (Evidence) of Soil Environmental Change.

Detailed outcomes of one symposium (Symposium 16; Soil Indicators) is mentioned in particular. In the keynote lecture, which set the political framework, it was stated that for achieving more comparable soil information in Europe soil indicators or 'common criteria' are needed and harmonization of methodologies should be brought forward. Different indicator sets at European and national level were presented and indicators for specific soil functions and threats were introduced. Then new approaches and methodologies for indicator development and the needs and challenges for future indicator development were raised and discussed. It was agreed that: (i) further indicators are needed to cover pressures and impacts (e.g. erosion, compaction and soil biodiversity), (ii) It is necessary to validate these indicators throughout Europe, (iii) Measurements should be standardized and relevant reference data should be determined. (iv) There is also a need of soil indicators reflecting soil functions and services. In particular, the role of soils in mitigation of climate change, adaptations of agricultural and forestry management, as well as health risk, require complex indicators and many relationships. (v) All considered indicators should be soil function related, as soil protection focuses on soil functions, and (vi) Soil indicators should answer the questions raised by the decision-makers. Indicators should be: simple, suitable, reliable, inexpensive and reproducible.

Out of 13 workshops organized in the Congress, some notable workshops were: International and EU Soil Politics, Human as an Ecological Indicator, Contaminant Dynamics in Periodically Flooded Soils, SoilCritZone -Soil Sustainability in Europe, Integrating Pollutant

Flux Management into Spatial Development and Greenhouse Gas Budgets of Soils- Hotspots of Emissions/Cost 639. The three excursions were: Soils under the so-called Austrian semi-arid climate in the Weinviertel region, forest landscapes and a cross-section of northern landscapes in Lower Austria. Each excursion was of one day duration.

A special challenge for this Congress was to keep momentum in the European development of soil protection, including the establishment of legal instruments in the form of the 'European Framework Directive for Soil Protection,' similar to existing ones, such as for example the 'Water Framework Directive.' A motion in support of the 'European Framework Directive for Soil Protection,' prepared by the French Soil Science Society, was unanimously accepted by the Council of ECSSS and unanimously backed by the participants of the Congress at the Closing Ceremony. The 'Motion to support the EU Framework Directive on soils' reads as follows:

Soil is a vital, non-renewable resource, providing essential goods and services to human-life and ecosystems. For instance, soil plays a major role in climate change, food, fibre and energy supply, water regulation, biodiversity and human health. Therefore, it is essential to maintain and preserve the soil functions for the sustainable development of our societies. Long-term soil sustainability is endangered by numerous threats that have been listed in the proposal of a European Directive for Soil Protection. The over 1500 participants of the EUROSOIL Congress, soil scientists from 77 countries, including the representatives of the 43 European national soil science societies, consider that a unique legal and political framework for soil protection is an absolute necessity to preserve soil resources at the European level.

This Congress certainly marked a turning point in the European soil science community, establishing a well consolidated scientific basis for soil protection in Europe. All participants, therefore, urged the French Presidency to resume the discussions aiming to reach a political agreement in the Environmental Council. All requested the five Member States that could not agree with the Portuguese Compromise text on 20 December 2007 to reconsider their position for the sake of preserving this precious natural resource.

Further information on the EUROSOIL Congress can be obtained from:
http://www.ecsss.net/web/frontend/view.php?MENUEID=230

Dr Roland Poss
Président de l'Association Française pour l'Etude du Sol
IRD, SupAgro Bt 12, 2 place Viala
34060 Montpellier cedex 1
France.
Tel.: 00 33 4 99 61 21 47
E-mail: roland.proland.poss@ird.fr

Ranjan Bhattacharyya
Ph.D. Student (School of Applied Sciences, University of Wolverhampton, UK and Scientist Soil Science/Soil Physics/Soil and Water Conservation) on study-leave from the Vivekananda Institute of Hill Agriculture (Indian Council of Agricultural Research), Almora 263601, India.
E-mail: ranran_vpkas@yahoo.com

Winning Posters at EUROSOIL 2008

Subalpine-alpine soil formation during lateglacial period? Results from the archaeological site Ullafelsen in the Fotscher Valley (Tyrol, Austria)
C. Geitner[1], D. Schäfer[2]
[1]Österreichische Akademie der Wissenschaften, Innsbruck, Austria.
[2]University of Innsbruck, Innsbruck, Austria.

Forest Soils of Switzerland: how to use the data for practical applications
P. Lüscher, L. Walthert, J. Luster, S. Zimmermann, P. Blaser
Swiss Federal Research Institute WSL, Birmensdorf, Switzerland.

CH4 uptake of soils of a temperate deciduous forest with different abundance of European beech (*Fagus sylvatica L.*)
H. Flessa, A. Guckland
Soil Science of Temperate and Boreal Ecosystems, Göttingen, Germany.

Do-It-Your-Soil, a virtual course of applied pedology
G. Bullinger-Weber[1], R. Benz[1], A. Schönborn[2], E. Havlicek[1], J. Gobat[1]
[1]Laboratory Soil & Vegetation, University of Neuchâtel, Neuchâtel, Switzerland.
[2]Armadillo-media GmbH, Lucern, Switzerland.

Chronosequential alterations of properties of postagrogenic sandy southern taiga soils of Russia under self-restoration
O. Kalinina[1], S.V. Goryachkin[2], N.A. Karavaeva[2], D.I. Lyuri[2], L. Giani[1]
[1]IBU, Oldenburg, Germany.
[2]Institute of Geography, Russian Academy of Sciences, Moscow, Russian Federation.

Compost amendments affects on retention and leaching of isoproturon in soil versus pots
P. Benoit, V. Etievant, N. Bernet, S. Houot
INRA (AgroParisTech), Environment and Arable Crops, Thiverval-Grignon, France.

Digital mapping of trace metal concentrations in regional top soils in the Swiss Plateau
K. Rehbein[1], A. Keller[1], R.G. Meuli[1], A. Papritz[2]
[1]Agroscope Reckenholz-Tänikon Research Station (ART), Zürich, Switzerland.
[2]Institute of Terrestrial Ecosystems (ITES), ETH Zürich, Switzerland.

An evaluation of the impact of climate change on soil water balance in a catchment in north-eastern Germany - a case study
M. Wegehenkel, K. Kersebaum
Centre of Agricultural Landscape Research, Muencheberg, Germany.

Effect of agricultural activity on soil deformation on Estonian grasslands
E. Reintam, K. Trükmann, A. Selge, J. Kuht, V. Eremeev, K. Krebstein
Estonian University of Life Sciences, Tartu, Estonia.

Editor's note

We thank Professor Blum for providing the poster information. The opportunity to progress the Soil Directive was not taken under the French EU Presidency.

The International Scientific Conference to commemorate the 50th Anniversary of the Lithuanian Soil Science Society

SOIL IN A SUSTAINABLE ENVIRONMENT, 24-26 September 2008, Kaunas, Lithuania

This three-day Conference plus field trip was held in September, at the Lithuanian University of Agriculture in Kaunas, Lithuania. The event celebrated the 50th Anniversary of the Lithuanian Soil Science Society (LSSS). The Society is a voluntary public organization for people engaged in soil science and plant nutrition and unites over 100 members from universities, research institutes and land service organizations. It is an associated member of the International Union of Soil Sciences (IUSS) and the European Union of Soil Sciences (EUSS).

Surveying a soil profile on the field trip: "praying for science and praying for soils."

At the opening of the Conference the Vice-President of the Lithuanian Academy of Sciences (LAS) Academician Veronika Vasiliauskienė and the Rector of the Lithuanian University of Agriculture Professor Romualdas Deltuvas, congratulated the Conference participants. Professor Dr Habil. Algirdas Motuzas (President of the Society and Expert Member of the LAS) welcomed participants and gave a short overview of the history and activities of the LSSS.

The Conference discussed many topics in soil science: from soil pedogenesis, erosion and spatial variability, through classification and soil mapping questions to land use and soil related policies. The Conference programme is available on the website: www.lzuu.lt/file.doc?id=22024

Eight oral presentations were given during the Plenary Oral Session by leading soil scientists from Austria, Byelorussia, Estonia, Latvia, Poland, Russia and the UK. Global scale issues were discussed by Professor Winfried Blum (Vienna) in his presentation entitled 'New research concepts bridging between science and politics.' This was complimented by several national scale presentations from Lithuania and neighbouring countries. An excellent example of international co-operation was demonstrated in the presentation by the newly elected member of the LAS Professor Michael Fullen (Fullen M.A, Jankauskas B., Booth C.A., Jankauskienė G., and Šlepetienė A. Carbon sequestration in Lithuanian soils: experiences from the Kaltinenai Research Station of the Lithuanian Institute of Agriculture). In the three Conference Symposia there were altogether 30 oral and 28 poster presentations.

The main activity of the second and the third day of the Conference was to explore the North Lithuanian karst region (Biržai and Pasvalys regions), particularly the interactions between the landscapes, soils and culture of this unique territory. Here environmental protection (i.e. protection of karst-water from pollution and the reduction of human impact on the vulnerable karst landscape) is now official Government policy. The rich field trip programme combined with lovely sunny days encouraged unforgettable impressions and fruitful discussions. I believe that discussions on the challenges and diversity of soil genesis and classification were stimulated by useful field examinations of soil profiles. Such discussion and debate is contributing to the development of modern soil science.

Dr Saulius Marcinkonis
Lithuanian Institute of Agriculture (Voke Branch)
Traku Voke
Vilnius LT-02232
Lithuania
E-mail: saulius.marcinkonis@voke.lzi.lt

The International Conference and Field Workshops on Soil Classification, Santiago (Chile), 9-18 November 2008

From 9-18 November 2008 the Soils and Engineering Department of the Agronomy Faculty, University of Chile, with the University of Concepción and the SAG (Servicio Agrícola y Ganadero, Ministry of Agriculture of Chile), organized the 'Third International Conference and Field Workshop on Soil Classification.'

The Conference, attended by over 50 participants representing 25 Countries, was held at the University of Chile (Santiago) from 12-14 November, and involved five oral sessions (with 21 oral and 25 posters presentations) on the following topics: a) Soil classification and people; b) Soil classification in the Americas; c) Extreme soils; d) World Reference Base for Soil Resources; and e) Practical applications of soil classification.

In the first session, Victor Targulian (Institute of Geography, Moscow, Russia) analysed the concepts of soil and soil-like systems and bodies, underlining the necessity to expand the horizons of soil science to include and classify both old traditional and new unusual soil and soil-like systems and bodies. In the second session, Pavel Krasilnikov (Universidad Nacional Autonoma de Mexico) presented an interesting case study about the WRB classification of podzols in the montane forests of Mexico. In the same session, C. Ditzler (USDA-Natural Resources Conservation) proposed to revise Soil Taxonomy to better address subaqueous soils. Two new suborders have been proposed within the Entisols and Histosols. They are Wassents and Wassists. In the third session, Tomas Reinsch (National Survey Center, USA) presented the new standard methods for describing soils with high gypsum concentrations. During the fourth session, C.W. van Huyssteen (University of the Free State, South Africa)

Participants of the International Conference and field workshops on Soil Classification (Santiago (Chile), 9-18 November 2008).

proposed discussions on whether it is possible to adopt a hydropedological order in the WRB, concluding that would offer sufficient differentiation to allow for hydropedological interpretations. In the final session, Carmelo Dazzi (University of Palermo, Italy) explained a proposal for the classification of anthropogenic soils due to large scale farming, introducing the 'geomiscic' horizon.

A Pre-Conference Tour was organized from 9-11 November, moving from Santiago to the north, in the Coquimbo Region of Chile. The final destination was Tongoy Bay, on the Pacific Ocean. During this trip nice examples of Arenosols, Durisols, Vertisols and Solonetzs were presented.

The Post-Conference Tour was organized from 15-18 November, travelling from Santiago to the south, spending some time in the beautiful thermal baths of Chillan. During this trip the participants had the opportunity to study excellent examples of Cambisols, Andosols, Alisols, Lixisols and Phaeozems.

During both tours the Soil Survey Laboratory of the United States Department of Agriculture (T.G. Reinsch and C.A. Ditzler, Lincoln, Nebraska, USA), provided complete soil analytical data to the participants, allowing better comprehension of the soil descriptions and classifications.

Dr Michele Freppaz
University of Turin (Torino)
DIVAPRA-Chimica Agraria e Pedologia
Via Leonardo da Vinci 44,
10095 Grugliasco
Turin
Italy
E-mail: michele.freppaz@unito.it

Plenary Meeting of the European Soil Bureau Network (ESBN), Paris (France) 17-19 November 2008

The ESBN is a scientific network establishing and maintaining the European Soil Database. Furthermore, the network gives technical support to the European Commission on soil related topics. This year, the Network had its Plenary Meeting in Paris. The first two days were used for internal business and information exchange. On the third day, an open workshop was organized under the title: 'Soil Framework Directive: A real need to protect soil!" For the open workshop EIONET members and representatives of the French EU Presidency and member states were invited.

The conclusions of the workshop and the plenary meeting are:

1. The Soil Thematic Strategy and Soil Directive are most needed. Policies concerning air and water are in place. Policy on soils is the missing link, securing our most important resources (water-air-soils) governs prosperity and human welfare. The newly raised

Soil gives life. Life gives soil.

items like climate change, food security and bio-energy production make a powerful soil policy even more necessary.

2. Awareness of soils and their importance for everybody's daily life is a neglected element. Education and information should be important elements for future action. The ESBN will establish a Working Group on this item.
3. Soil degradation can only be solved by studying problems within an interdisciplinary framework. Societal developments often force land owners and farmers to take inappropriate land management decisions. Over a shorter or longer time span, irreversible thresholds may be passed, resulting in environmental damage, desertification, land abandonment and poverty.
4. Regulations are needed as a catalyst, but they should be supported both by authorities and stakeholders. All should be aware that everybody is able to contribute to the reversal of soil degradation.
5. Biomass production should be realised in a sustainable way. Elements like landscape quality, biodiversity and product quality should be considered. Maybe not every soil, which is now used for biomass production is suitable for that land use? New ways of land management should be envisaged and investigated.
6. Many soil processes are not fully understood. Focused research programmes are needed, together with model development and supported by monitoring programmes.
7. The soil science community needs to become much more society oriented and focused on translating soil information into daily life information.
8. Society needs to develop a new view on land use and land management. The soil is a 'living organism' and poor treatment will result in economic damage.
9. Not achieving an agreement on the Soil Directive will mean a major step backwards

and is worse than agreeing on a weak Soil Directive. We wish our European politicians the wisdom to look further into the future and take the right decisions. The soil is not our property, but we rent it from our future generations.

Arnold Arnoldussen
Chair ESBN
Norsk institutt for skog og landskap (Norwegian Forest and Landscape Institute)
Seksjonsleder Jordbruk (Head of Agriculture Section)
PB 115
N-1431 Ås
Norway
Tel: 00 47 64949780
Fax: 00 47 64948001
Internet: www.skogoglandskap.no
E-mail: Arnold.Arnoldussen@skogoglandskap.no

Book review

Asunción Romero Díaz and Francisco Belmonte Serrato (2008) Erosion in afforested terraces in semiarid environments: Region of Murcia.

Published by Ediciones de la Universidad de Murcia, Murcia, Spain
(ISBN: 978-84-8371-739-4). Price €25.

The book presents an in-depth study on the effectiveness of the afforestation combined with terracing technique which is widely implemented in the Iberian Peninsula. The technique has been largely recommended for areas with little soil depth or poorly developed soils, deficient in water and subject to active erosion. These areas are common in eastern Spain, including the Region of Murcia, where the research presented in the book was developed. The study was conducted in three forested locations for over 30 years, with various lithologies (predominantly marls, schists and conglomerates). The authors analysed erosion processes in both afforested and non-afforested areas. The assessment considered mechanisms and methodologies to obtain erosion rates; plant cover densities, and soil physico-chemical properties and evolution.

The Book is organized into seven chapters, plus sections for agreements, references and indexes:

Chapter 1 focuses on research backgrounds with issues relating to the research structure of the book, the history of afforestation in Spain, the afforestation context in the Region of Murcia, terms and definitions, Major general objectives pursued by afforestation policies, Outlines of afforestation techniques in general and the terracing approach in particular, and the environmental impact of afforestation.

Chapters 2, 3 and 4 are concerned with research objectives, history and the study area, respectively.

Chapter 4 is dedicated to describing the methodological structure of the research, Data gathering (including cartographic methods and field work), data analysis and laboratory techniques.

Chapter 6 presents results, with a profound discussion of the major research findings. The major items addressed are the effects of afforestation on soil erosion, soil properties, vegetation (plant type, composition and structure) and water regime.

Finally, Chapter 7 presents six pages of conclusions, organized into 17 major points.

The 30 year analysis presented in the book sheds light to some crucial aspects and myths of afforestation techniques used for decades in semi-arid regions in Spain. Although the research is geographically located in the Region of Murcia, the results have broader applicability. Generally, afforestation with terracing techniques have not met the goal of soil protection.

Juan Antonio Pascual Aguilar
Centro de Investigaciones sobre Desertificación-CIDE (CSIC)
Valencia
Spain
E-mail: juan.a.pascual@uv.es

Recent publications by ESSC members

Included are the citation details of papers and books produced by ESSC members. These provide a growing resource for exchange of valuable information to both research and teaching. The cumulative citation list is being added to and updated on the ESSC web site. Students of ESSC members (both undergraduate and postgraduate) are increasingly accessing this facility in their literature searches. Currently, the number of quoted publications cited on the web page is 432. Please e-mail the citation details of papers in international refereed journals since and including the year 2000 to any member of the Editorial team.

As mentioned in the report on recent Ph.D. theses, the citation details of Ph.D. theses by ESSC members since and including 2000 have been added as an additional page to the ESSC web site. To date, 45 Ph.D. theses are quoted. On the ESSC web site, please look under 'Publications.' Please forward the citation details of any additional Ph.D. thesis completed since 2000 by an ESSC member to any of the Editorial team. We will then add the thesis citation details to the web site.

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Professor Andrei Canarache R.I.P. (1927-2008)

The Romanian National Society of Soil Science announces the sad news that one of its leading members, the outstanding and internationally acknowledged soil scientist, Andrei Canarache, passed away on 30 July 2008 after a long and dramatic battle with a severe and merciless illness.

Dr Andrei Canarache was born in Bucharest on 19 February 1927 from an illustrious intellectual family. In 1949 he graduated from the Faculty of Agronomy of the Polytechnical Institute, Bucharest, and obtained his Ph.D. in 1962.

From March 1949 until October 1956 he worked as Assistant Lecturer within the Soil Science Department of the Institute of Agronomy, Bucharest. Starting from 1956 until his retirement in 1992, he was involved in scientific research, firstly within the framework of the Institute of Agricultural Research of Romania (until 1970) and then at the Research Institute for Soil Science and Agrochemistry (RISSA), Bucharest. After retirement until his last days he continued to work in the same institute.

The scientific achievements of Dr Andrei Canarache are very impressive. His contribution to the development of Romanian Soil Science in the 20th century is outstanding. He pioneered soil physics research in his country, being the founder of the first laboratory in this field from Romania. His book 'The Physics of Agricultural Soils' is an example of harmonizing theoretical research in soil physics with agricultural practises and crop management.

The topics within soil physics that benefited from the contribution of Dr Canarache are very diverse. They include physical characterization (properties and regimes) of Romanian soils; methods for measuring physical soil properties; use of mathematical statistics and informatics in soil survey and soil physics; applications of soil physics in irrigation and drainage problems; changes of soil physical properties under the influence of different cropping systems; use of soil physics data in soil tillage work; study of soil compaction processes under mechanized agricultural conditions; aspects of soil physics concerning soil degradation processes, desertification and drought.

Although focused mainly on soil physics, Dr Canarache was also interested in many other fields of soil science. These included soil conservation and soil improvement, use of soil maps for agricultural purposes and soil amelioration, soil and terrain evaluation for agricultural crops and the prevention and combating of drought and desertification.

Dr Canarache is one of the main contributors to the development of soil informatics in Romania. He initiated and co-ordinated the organization of the 'Romanian Soils Profiles Database' (PROFISOL) and the application of GIS techniques for the pedological micro-zoning of Romania. He is the author of a complex system of pedotransfer rules for inferring soil physical properties where these are missing.

Dr Canarache was co-ordinator of many research projects, both at national and international level. Among the last ones, it worth mentioning the co-ordination of the Concerted Action Project investigating soil compaction in Eastern Europe.

Dr Canarache has been invited professor at the Agricultural University, Bucharest, and Doctor Honorius Causa of the 'Ovidius' University of Constanta. Dr Canarache was a prolific author of scientific papers published in national and international soil science journals, such as Catena and Soil & Tillage Research. He holds a distinctive place in the Elsevier Soil Science Dictionary (published in co-operation) that provides the international soil science community with the most circulated (earlier and actual) terms (over 9,000) used in soil science and related fields.

He was also doctorate co-ordinator for soil science at The Academy of Agricultural and Forestry Sciences (1994-2008). In same period, he worked as an invited researcher in the USA (Universities of Urbana-Illinois and Davis-California) and Germany (Kiel).

During his long career he also held other important scientific and academic positions. These included Deputy Director of RISSA, Full Member and President of Soil Science and the Land Improvement and Environment Protection Section of the Academy of Agricultural and Forestry Sciences. He was a founding member of the Romanian National Society of Soil Science. Dr Andrei Canarache was a well known, very active and internationally recognized scientific personality. He has been a member of many international professional societies, such as the International Union of Soil Science Societies (Secretary of the Ist Commission 1990-1994, Vice-President of the VIth Commission, 1986-1990); International Soil Tillage Research Organization, Honorary Member and Member in the Committee for East-West Relationships (1991-1997); Honorary Member of the Hungarian branch of the same organization; European Society for Soil Conservation; European Society of Agronomy, and the International Organization for Water and Soil Conservation. He was a member of several journal editorial boards, including 'Soil & Tillage Research' (1980-1994). He has been awarded with the Romanian Academy Prize (Ion Ionescu dela Brad) and with the 'N.C. Cernescu' Prize of the Academy of Agricultural and Forestry Sciences. One of the last, but not least, great merits of Dr Canarache was his untiring endeavour to globally promote the achievements and personalities of Romanian soil science.

In personal relationships, both private and professional, Dr Canarache was a man of high moral quality. He was a gifted person with an unusual ability of understanding and capacity for hard work. As a scientific researcher, Dr Canarache was a model for all his younger colleagues and collaborators. His death is a great loss for the whole soil science community, both national and international. All who knew him will miss him. However, his scientific heritage and his memory will last as long as interest in understanding soil physical properties endure.

Professor Dr Mihail Dumitru
President of the Romanian National Soil Science Society
E-mail: mdumitru@icpa.ro

Dear Members of the ESSC

I would like to invite you to visit a website that I have made with the title 'Soil conservation in Europe'. The URL of the site is:

http://www.kwaad.net/SoilConservation.html

On the site, I give links to sites in which information is given on the current state of soil erosion control in several European countries. I think that this collection of links can be helpful to those who are seeking information on practical aspects of soil conservation in Europe (including regulations and legislation). I also mentioned the site in my reaction in ESSC Newsletter 2008/3 on the Guest Editorial of Professor Roy Morgan in Newsletter 2008/1.

I also have some suggestions aimed at giving more attention to practical conservation work in Europe:

(1) To publish reports on the state of soil erosion control in one or two European countries in each issue of the ESSC Newsletter in the coming years.
(2) To publish these country reports under a separate heading on the ESSC website.
(3) To convene an ESSC meeting on the state of soil erosion control in Europe.

Kind regards,

Frans J.P.M. Kwaad,
Former Lecturer in Geomorphology
Department of Physical Geography and Soil Science
University of Amsterdam
The Netherlands
E-mail: frans.kwaad@tiscali.nl

Staff changes in Bratislava.

We welcome Ida Kurincová Kriegerová, who has taken over responsibility for liaising with the ESSC membership concerning ESSC publication issues. Please contact Ida regarding membership information and accessing the ESSC web-based bulletin board. Ida's e-mail address is: i.kriegerova@vupop.sk

Introduction to IDA KURINCOVÁ KRIEGEROVÁ

My name is Ida Kurincová Kriegerová and I became a new scientific manager of the Soil Science and Conservation Research Institute (SSCRI) in Bratislava (Slovakia) and, at the same time, a new member of the ESSC Editorial team.

Within ESSC activities I intend to continue in Agata´s successful assistance to ESSC Secretary, Professor Pavol Bielek, with respect to correspondence, the website, registration and Newsletter distribution. I welcome any ideas, comments or questions to keep in touch with readers as well as editors and thus continuously enhance the quality of both the ESSC website and Newsletter.

Besides my new job at SSCRI, I am finalizing my Ph.D. thesis concerning regional flood frequency analysis of small and mid-sized catchments in Slovakia, at the Department of Land and Water Resources Management, Slovak University of Technology.

My leisure activities involve reading, photography, travelling, web design and programming.

I believe this new experience gives me opportunities to meet great people, obtain new knowledge and useful information and, of course, enjoy an interesting job!

E-mail: i.kriegerova@vupop.sk

Web Based Bulletin Board

The ESSC wishes to rapidly disseminate information to its members. Please forward information to the ESSC web site to be placed on our ESSC Bulletin Board. These could include searches for potential collaborators for research proposals, calls for research proposals, job opportunities, research studentship opportunities, impending conferences and other items of important information for rapid dissemination. Of course, we will also continue the regular circulation of information via our Newsletter. The ESSC web site is:
http://www.essc.sk

ESSC membership list and contact details

The full ESSC membership list is held on the ESSC web site. Under 'members' you can get a full listing. Also under 'members' you can click on any member country and find a listing of members in the selected country.

We are trying to keep the membership list on the web site up-to-date. Please check your details and let us know if there are any necessary correction(s). If your details change, also please let us know. Some members have requested that we do not add their e-mail addresses to the web site, to avoid uninvited 'spam' e-mails. Of course, we respect this request. Therefore, while we retain a list of the e-mail addresses of ESSC members, this list will not be available on the web site.

Editorial matters in Bratislava are handled by Ida Kurincová Kriegerová. In terms of membership lists, contact details and the ESSC web site, please send updated information to Ida at:

E-mail: i.kriegerova@vupop.sk

Please also use and refer to the 'Directory of European Organizations and Persons Working on Soil Protection' as a reference source for European colleagues, both members and non-members of the ESSC. This publication contains the e-mail addresses of most ESSC members and will be subject to periodic updates. The reference citation is:

Rubio, J.L., Imeson, A.C., Bielek, P., Fullen, M.A., Pascual, J.A., Andreu, V., Recatala, L. and Ano, C. (2006). Directory of European Organizations and Persons Working on Soil Protection. Soil Science and Conservation Research Institute, Bratislava, 190 pp. (plus CD-Rom).

FIRST ANNOUNCEMENTS

First Announcement and Call for Papers

INTERNATIONAL CONFERENCE ON "LAND CONSERVATION"
LANDCON 0905

Initiated by: World Association of Soil and Water Conservation – WASWC
Faculty of Forestry, Belgrade University, Serbia

GLOBAL CHANGE – CHALLENGES FOR SOIL MANAGEMENT
- FROM DEGRADATION - THROUGH SOIL AND WATER CONSERVATION -
TO SUSTAINABLE SOIL MANAGEMENT

May 26 - 30, 2009
Tara Mountain/Serbia

BACKGROUND

Soil, like air and water, is essential to support life on earth. Over 90% of all human food and livestock feed are produced from the land and from soils which vary in quality and extent. Of the earth's 13,000 million hectares of ice free-land surface, only 3% is covered with highly productive soils, just 6% with moderate productive, and 13% with slightly productive soils. The remaining 78% of the land has limitations that inhibit the sustainable cultivation of its soils and sometimes even for grazing. However, it is in such marginal lands that most land and soil degradation occurs (Hurni *et al.,* 1996). It is from this context that we launch this International Conference of the Land Conservation (LANDCON 0905) with the hope to discover new and better ways of counteracting the effects of land degradation and building more secure and self-sustainable patterns of agricultural land husbandry.

CONFERENCE TOPICS

- *Topic 1: Global Change and Soil Degradation*
- *Topic 2: Water Management*
- *Topic 3: Soil Erosion, Sediment Transport and Sedimentation Processes*
- *Topic 4: Erosion and Torrent Control in Environmental Change*
- *Topic 5: Desertification*
- *Topic 6: Socio-economic, Legal and Institutional Aspects of Soil and Water Conservation*
- *Topic 7: Implementing Global/Regional Projects*
- *Topic 8: Work of Younger Scholars*

Important deadlines
Abstract and registration submission: 15th December 2008
Abstract acceptance: 15th January 2009
Full paper submission: 20th February 2009

Contacts to Conference Organizers:
Prof. Dr. Miodrag Zlatic[1]
E-mail: miodrag.zla@sbb.rs; mizlatic@yahoo.com
Prof. Dr. Nada Dragovic[2]
E-mail: nadad@verat.net
Mirjana Todosijevic[2], M.Sc., assistant
E-mail: mntodos@verat.net

[1] President of WASWC, Faculty of Forestry, Belgrade University, Kneza Viseslava 1, 11030 Belgrade, Serbia; Phone: +381 11 3053 990/905; Fax: +381 11 2545 485
[2] Faculty of Forestry, Belgrade University, Kneza Viseslava 1, 11030 Belgrade, Serbia; Phone: +381 11 3053 990/948; Fax: +381 11 2545 485

All present informations regarding Conference can be found at:
www.sfb.bg.ac.rs/erosion2009

Geoarchaeology Conference, Sheffield (UK), 15-17 April 2009

We are very happy to announce that registration and abstract submission is now open for the Geoarchaeology Conference to be held in Sheffield (UK) from 15-17 April 2009. Full details about this Conference, how to submit abstracts, how to register, information about getting to Sheffield and where to stay are all on the Conference website:
http://www.shef.ac.uk/scidr/geoarchaeology2009

Keynote speakers include Professor Iain Stewart on 'Seismic Faults and Sacred Sanctuaries-cultural responses to earthquakes in Antiquity,' Professor Tony Wilkinson on 'Theoretical perspectives on the role of human agency in Landscape Geoarchaeology' and Professor Michael R. Waters.

The Conference Organizing Committee looks forward to you registering for what we hope will be an exciting and stimulating conference and to welcoming you to Sheffield. Please contact us with any questions at:
Geoarch@sheffield.ac.uk

Best wishes

Gianna Ayala
Mark Bateman
John Wainwright

John Wainwright
Department of Geography
The University of Sheffield
Winter Street
Sheffield
S10 2TN
UK

Tel: 00 44 114 222 7951 fax: 00 44 114 279 7912

ROMANIAN NATIONAL SOCIETY OF SOIL SCIENCE

INVITATION

19th NATIONAL SOIL SCIENCE CONFERENCE
Iaşi, Romania, 23-29 August 2009

EVALUATION AND USE OF SOIL RESOURCES, ENVIRONMENTAL PROTECTION AND RURAL DEVELOPMENT IN NORTH-EAST ROMANIA

(Iaşi, Vaslui, Neamţ and Suceava Counties)

TOPICS

1. Soil genesis and classification; soil mapping and geography.
2. Soil physics, chemistry and mineralogy.
3. Soil biology, microbiology, biodiversity and ecology.
4. Soil tillage and water conservation (ISTRO).
5. Organic matter, soil fertility and plant nutrition.
6. Soils and extreme climatic phenomena (floods, landslides, severe droughts, desertification).
7. Forestry in relation to soils and forestry stations.
8. Soil evaluation and land use planning.
9. Soil conservation.
10. Soil degradation (natural or human induced processes), remediation and amendment technologies.
11. Soils and land improvement measures.
12. Soils and environment, interactions within the ecosystem, soil quality.
13. Soils and human health.
14. Education regarding soil's importance for society and public awareness.
15. Mathematical modelling and informatics in soil science.
16. Land use and soil protection policies in Romania; European perspectives.
17. Rural development.

Conference programme

Sunday August 23	Participants' arrival and accommodation ('Ion Ionescu de la Brad' University of Agricultural Sciences and Veterinary Medicine, Iaşi, M. Sadoveanu Alley nr.3).	
Monday August 24	08.00-8.30	Breakfast at USAMV Iaşi Restaurant.
	10.00-11.45	Opening ceremony in Aula Magna U.S.A.M.V. Iaşi.
	12.15-13.30	Plenary presentations in Aula Magna U.S.A.M.V. Iaşi.
	15.00-17.00	Topic sessions
	17.00-19.00	
Tuesday August 25	09.00-11.00	
	11.30-13.00	
	15.00-17.00	Visiting Iasi: the City and the Botanical Garden.

August 26 – 29 – FIELD APPLICATIONS

Wed. August 26	**Moldavian Plateau** (central-eastern part): Four soil profiles, sightseeing. Accommodation in Iasi.
Thursday August 27	**Moldavian Plateau** (northern part): Three soil profiles, sightseeing. Accommodation in Iasi.
Friday August 28	**Moldavian Plateau** (central part), **Moldavian Sub-Carpathians, Eastern Carpathians** (Stânişoarei Mountains): Two soil profiles, sightseeing. Accommodation in Târgu Neamţ.
Saturday August 29	**Moldavian Plateau** (Sucevei Tableland), **Eastern Carpathians:** Three soil profiles; sightseeing. Accommodation in Vatra Dornei.

Venue: 'Ion Ionescu de la Brad' University for Agricultural Sciences and Veterinary Medicine, Iaşi, Mihail Sadoveanu Alley nr. 3.

PARTICIPATION FEES

Participation fee (€) / term	1 March 2009	1 July 2009
Conference only	150	225
Conference plus field trip	350	475

The registration fee covers:
Admission to all scientific sessions, the conference volume, map, badge.
The guide of the field trip (only for participants).
Breakfast, lunch and dinner.
Festive dinner in Iaşi.
Festive dinner in Vatra Dornei.
Transportation for the field trip.
Accommodation during the Conference and the transportation to and from Iasi will be paid separately by each participant.

Estimated prices for accommodation (€)*

Location	Hotel***		Hotel****		Boarding house***
	single	double	single	double	double
Iaşi	45	60	80	100	-
	50	70	110	140	-
	60	80	-	-	-
Târgu Neamţ	30	40	-	-	30-40
	40	50	-	-	
Vatra Dornei	40	60	-	-	-

For students or Ph.D. students accommodation will be available in hostels (USAMV Iasi) at an estimated price of €20.

REGISTRATION FORM

Name:	
surname:	
Institution:	
Address:	
Telephone	Fax
E-mail	
Paper title:	
Presentation form: Oral	Poster
Necessary equipment (video projector, laptop, etc.)	
Accompanying persons: Yes /No	

Please confirm your participation by 15 February 2009, by sending the registration form to one of the following postal or e-mail addresses:

Universitatea de Ştiinţe Agricole şi Medicină Veterinară Iaşi
Aleea Mihail Sadoveanu nr. 3, Iaşi, Cod 700490, ROMÂNIA

Tel: 00 40 0232 407435
Fax: 00 40 0232 260650

Contact persons	Telephone	E-mail:
Feodor Filipov	00 40 723147848	ffilipov@univagro-iasi.ro
Moca Valeriu	00 40 740626733	valmoca@univagro-iasi.ro
Rusu Constantin	00 40 232201482 00 40 744525635	cvrusu@uaic.ro cvrusu69@yahoo.com

Presentation format

- Plenary sessions: **15 minutes + 10 minutes discussion.**
- Topic sessions: **10 minutes + 5 minutes discussion.**
- Poster dimensions: **90 cm width, 110 cm height.**

During the paper presentations adequate electronic equipment will be available.

A maximum one-page abstract (in English) should be sent by e-mail to the Conference Secretary by **15 April 2009.**

The notification regarding paper acceptance will be sent to the authors before **15 May 2009.**

The presented materials will be published in the Conference volumes (in the subsequent 4–6 months).

Scientific committee

- **Professor Gerard Jităreanu,** Executive President of RNSSS, Rector of 'Ion Ionescu de la Brad' Iaşi University of Agricultural Sciences and Veterinary Medicine.
- **Professor Mihail Dumitru,** President of RNSSS, Director of National Institute for Research and Development in Pedology, Agrochemistry and Environmental Protection (ICPA) Bucharest, Member of the Agricultural and Forestry Studies Academy, Bucharest.
- **Professor Constantin Rusu,** Executive Vice-President of RNSSS; Faculty of Geography and Geology, University 'Al.I.Cuza' Iaşi.
- **Eng. Ioan Munteanu, Ph.D.,** Honorary Vice-President of RNSSS, Member of the Agricultural and Forestry Studies Academy, Bucharest.
- **Professor eng. Valeriu Moca,** President of Iaşi Branch of RNSSS, University of Agricultural Sciences and Veterinary Medicine.
- **Conf. Feodor Filipov,** Vice-President of Iaşi Branch of RNSSS, University of Agricultural Sciences and Veterinary Medicine.
- **Prof. Nicolae Florea,** National Institute for Research and Development in Pedology, Agrochemistry and Environmental Protection (ICPA) Bucharest.
- **Professor Radu Lăcătuşu,** Faculty of Geography and Geology, 'Al. I. Cuza' University of Iaşi; Member of the Agricultural and Forestry Studies Academy. Bucharest.
- **Constantin Crăciun, Ph.D.,** National Institute for Research and Development in Pedology, Agrochemistry and Environmental Protection (ICPA) Bucharest.
- **Daniela Răducu, Ph.D.,** National Institute for Research and Development in Pedology, Agrochemistry and Environmental Protection (ICPA) Bucharest.
- **Ion Râşnoveanu, Ph.D.,** National Institute for Research and Development in Pedology, Agrochemistry and Environmental Protection (ICPA) Bucharest.
- **Valentin Coteţ, Ph.D.,** National Institute for Research and Development in Pedology, Agrochemistry and Environmental Protection (ICPA) Bucharest.

INTERNATIONAL CONFERENCE ON DESERTIFICATION IN MEMORY OF PROFESSOR JOHN B. THORNES, 16-18 SEPTEMBER 2009

ORGANIZED BY THE GEOGRAPHY DEPARTMENT AT MURCIA UNIVERSITY AND THE Spanish Geomorphological Society

Objectives

The Physical Geography Group at the Murcia University and the Spanish Geomorphological Society are organizing an International Symposium dedicated to the memory of Professor John B. Thornes. The Symposium will be held from 16-18 September 2009.

Professor Thornes (1940-2008), Professor of Physical Geography and Head of the Geography Department at King's College, University of London, was an exceptional researcher and Physical Geographer. He had a very special relationship with Spain throughout his life. In 1967 he completed his Doctoral Thesis on the Upper Duero and since then he conducted numerous research projects, especially in the Mediterranean area. Several institutions and universities from different countries have distinguished him with honours, including scientific societies, universities and research centres in Spain. In 1998 the Spanish Geomorphological Society named him 'Honour member' and in 2006 the University of Murcia also awarded Professor Thornes the title of 'Doctor Honoris Causa.'

With this Symposium we want to offer a deserved tribute both to this person of enormous human qualities, as well as a serious, rigorous and innovative researcher. This is reflected in the numerous publications of Professor Thornes and in the memories of those he met and worked with. All those people who worked directly with Professor Thornes, and those who did not but are investigating some of the research subjects that he developed, are invited to participate in the Symposium.

Organizing Committee

Professor Francisco López Bermúdez. University of Murcia (Spain).
Professor Asunción Romero Díaz. University of Murcia (Spain).
Dr Francisco Alonso Sarria. University of Murcia (Spain).
Dr Francisco Belmonte Serrato. University of Murcia (Spain).
Dr. Ramón García Marín. University of Murcia (Spain).

Scientific Committee

Professor Juan Albaladejo Montoro. CEBAS, C.S.I.C., Murcia (Spain).
Dr Erik Cammeraat. University of Amsterdam (The Netherlands).
Professor Victor Castillo Sánchez. CEBAS, C.S.I.C., Murcia (Spain).
Dr Artemio Cerdá Bolinches. University of Valencia (Spain).
Professor José María García Ruíz. Instituto Pirenaico de Ecología, C.S.I.C., Zaragoza (Spain).
Dr Javier Gracia Prieto. President of the Spanish Geomorphological Society (Spain).
Professor Mateo Gutierrez Elorza. University of Zaragoza (Spain).
Professor Anton C. Imeson. University of Amsterdam (The Netherlands).

Professor Mike J. Kirkby. University of Leeds (United Kingdom).
Dr José Martínez Fernández. University of Salamanca (Spain).
Prof. Joaquín Meliá Miralles. University of Valencia (Spain).
Professor Roque Ortiz Silla. University of Murcia (Spain).
Professor Jean Poesen. University of Leuven (Belgium.).
Professor Juan Puigdefábregas Tomás. EEZA, C.S.I.C., Almería (Spain).
Professor Maria José Roxo. New University of Lisbon (Portugal).
Professor José Luis Rubio. CIDE, C.S.I.C., Valencia (Spain).
Dr José Damián Ruíz Sinoga. University of Málaga (Spain).
Dr Susana Schnabel. University of Cáceres (Spain).

Topics

Several topics have been selected, which all relate to the research areas that Professor Thornes developed throughout his life:

1. Modelling in physical geography.
2. Soil erosion and desertification.
3. Fluvial geomorphology.
4. Relations between water, land and vegetation.
5. Impact of livestock and agriculture on terrestrial ecosystems.

Abstracts

Authors wishing to submit contributions to the Symposium should send an abstract as soon as possible to: arodi@um.es

After receipt of abstracts and their acceptance by the Scientific Committee, authors will be invited to send the full texts. Abstracts should not exceed one-page. Abstracts should be in block letters 'Arial' font and single-space, DIN-A4 paper and 2.5 cm margins on all sides. Tables, figures, references or plates should not be included.

The format is as follows:

Title in capital letters, centred and with font size 12. The title will be both in English and Spanish.

Separated by a blank line, indicate the name of the author(s) with initials and then name(s) (i.e. J.B. Thornes) in font size 11.

With a blank separating line and with font size 10, indicate the author(s) institution and then the mailing and e-mail addresses.

After another two blank lines, there should be the abstract (font size 11 and full justification).

Keys words: 4-6 keywords.

It is requested that author(s) indicates the topic in which the contribution should be included (see the six options above). In Annex 1 there is a standard format (template).

Papers

Communications will have a maximum length of 4 single-spaced pages. The format for submissions will be indicated shortly. The Scientific Committee will select those communications which will be presented orally or as posters. Presentations will have a maximum of 10 minutes. All communications, posters and oral presentations will be published in the Conference Proceedings.

Regardless of the Proceedings of the Symposium, the Spanish Geomorphological Society plans to edit a Special Issue of the journal 'Cuaternario y Geomorfología' (Quaternary and Geomorphology). Those who wish to do so, after their presentation at the Symposium, may send a definitive manuscript following the author's guide of the journal. The papers will be peer-reviewed following the 'Cuaternario y Geomorfología' journal system.

Posters

Posters will have a maximum size of 80 cm wide and 100 cm height.

Language

All papers and communications of the Symposium can be sent and presented in either English or Spanish. The Organizers do not plan to have simultaneous translations. The detailed scientific programme will be circulated shortly.

Schedule of contributions

Abstract submission deadline: **31 January 2009.**
Review and suggestions by the Scientific Committee for authors: **28 February 2009.**
Full text submission deadline: **31 April 2009.**
Full-text review by the Scientific Committee: **30 May 2009.**

Registration

The registration form must be completed and e-mailed to: arodi@um.es. Please send the completed registration form as soon as possible. Registration payment must be made through a cash payment or transfer to bank account No. 00496670492916006326 of the Bank of Santander. The receipt of the transfer or deposit should be sent by mail or fax.

REGISTRATION FEES

CATEGORY	Registration fees (€) until 30 June 2009	Registration fees (€) after 30 June 2009
General	100	110
Member of the SEG	75	85
Students (with justification)	50	60
Closing dinner (optional)	30	30

Web links of interest:

University of Murcia: http://www.um.es/
Spanish Geomorphological Society: http://www.geomorfologia.es/
Spanish Journal 'Cuaternario y Geomorfología' (Quaternary and Geomorphology): http://tierra.rediris.es/CuaternarioyGeomorfologia

Contact

Asunción Romero Díaz
Departamento de Geografía | Campus de La Merced | E-mail: arodi@um.es
Facultad de Letras | 30.001-Murcia | Tel: 00 34 968 36 31 44
Universidad de Murcia | Spain | Fax: 00 34 968 36 76 83
Symposium web site: http://fobos.bio.um.es/thornes/doku.php

Annex 1:

ABSTRACT SUBMISSION FOR THE INTERNATIONAL SYMPOSIUM IN MEMORY OF PROFESSOR JOHN B. THORNES AND HIS CONTRIBUTION TO SPANISH GEOGRAPHY

F. Belmonte Serrato[(1)], J.D. Ruiz Sinoga[(2)]

(1) Department of Geography, University of Murcia, Campus de La Merced, 30.001 Murcia (Spain). E-mail: franbel@um.es

(2) Department of Geography, University of Malaga, Campus de Teatinos, 29.071 Málaga (Spain). E-mail: sinoga@uma.es

ABSTRACT

This paper is an example of the format in which the abstract should be submitted to the "International Symposium in memory of Professor John B. Thornes and his contribution to Spanish Geography" to be held from 16–18 September 2009 at the University of Murcia (Spain).

The abstract should not exceed one page. It should be written in block letters "Arial" and a space, DIN-A4 paper and 2.5 cm in all its sides. It should not include tables, figures, references or pictures.

The title should not be very long and the abstract should contain clear and concise objectives, content and conclusions of the research work.

At the bottom of the page it should indicate the topic in which the author considers that must be included their contribution to the symposium

Topic:

International Symposium in memory of Professor John B. Thornes and his contribution to Spanish geography

REGISTRATION FORM

PERSONAL INFORMATION	
Title	
Name	
Surname	
Address	
City	
Country	
E-mail	
Telephone	
Fax	

PRESENTATIONS	
Oral. Authors	Title
Poster. Authors	Title
Field trip attendance	
Closing dinner attendance	

If you want proof of payment of registration, please complete the following data

FISCAL DATA	
Company	
NIF/CIF	
Address	

Please send this form as an attachment to: arodi@um.es

International Symposium on Soil, Sediment and Dust Magnetism (SoilSEDUMA) 29 June-1 July 2009

Venue: Upper Silesia (southern Poland): exact location will be given late 2008.
Registration fee: €180.

Target group: scientists who study problems of:
Magnetic properties of soils and sediments, occurring as a result of both anthropogenic or technogenic (urban and industrial pollution) and natural processes (caused by pedogenic, geogenic or sedimentary features); magnetic properties of urban and industrial dusts and magnetic pollutions in living organisms.

Organizers: Institute of Environmental Engineering, Polish Academy of Sciences; Zabrze, Poland; Opole University, Poland.

Aims of the Symposium:

- Presentation of scientific results of studies conducted in different laboratories in the fields of soil, sediment and dust magnetism, and magnetic pollutants in living organisms.
- Exchange of experiences of scientists from different disciplines (geophysics, geochemistry, soil science, environmental geology and geography, biology, archeology, medicine) and analysis of new trends in this field of study.
- Possibility of practical application of magnetic methods and techniques for assessment of ecological state and changes of natural environment, pollution monitoring and health related problems.
- Building of scientific platform (working group) for promotion of magnetic methods as a complementary method supporting classical chemical and geochemical analysis in studies of soil, sediment and dust environments.

Contact:

Doc. dr hab. Tadeusz Magiera
Institute of Environmental Engineering
Polish Academy of Sciences
Zabrze
Poland

Tel: 00 48 32 271 64 81
Fax: 00 48 32 271 69 50
E-mail: magiera@ipis.zabrze.pl

Preliminary Symposium Programme

29 June 2009	
Session I: Pedogenic and geogenic soil magnetism.	
Possibility of practical application.	Open discussion
Session II: Anthropogenic soil magnetism.	
Possibility of practical application.	Open discussion
30 June 2008	
Session III: Magnetism of lake and river sediments.	
Possibility of practical applications.	Open discussion
Session IV: Magnetic particles in industrial and urban dusts.	
Possibility of practical application.	Open discussion
1 July 2008	
Session V: Magnetic pollution in living organisms.	
Possibility of practical application.	Open discussion

Deadlines:
ASAP Expressions of interest.
15 January 2009: Initial registration and abstract submission.
30 April 2009: One page abstract submission.
31 May 2009: Final registration and payment of registration fee.

Registration Form:
If you are interested in this event, please complete and send ASAP by e-mail to:

Tadeusz Magiera
Fax: 00 48 32 271 69 50
E-mail: magiera@ipis.zabrze.pl
Keyword (for mail): SoilSEDUMA Symposium

Please note that, wherever possible, information about this Conference will be sent by e-mail

Title	(Prof/Dr/Mr/Mrs/Ms)
Initial	Surname
Organization	
Address	
Telephone	
Fax	
E-mail	

Participation: Please mark the session of your interest
Session I: Pedogenic and geogenic soil magnetism. Session II: Anthropogenic soil magnetism. Session III: Magnetism of lake and river sediments.
Session IV: Magnetic particles in industrial and urban dusts.
Session V: Magnetic pollution in living organisms.
Title and form of your contribution (oral/poster):

Your specialization:

	Geophysics
	Geochemistry
	Environmental geology
	Environmental geography
	Soil science
	Biology
	Medicine
	Archeology
	Other (please specify)

Dear Colleagues

We are pleased to invite you to the special session on:
'Fire Effects on Geomorphology and Environmental Processes' at the **7th International Conference on Geomorphology, 7-12 July 2009, Melbourne.** (See session description below). The IAG meeting is ideally placed to bring together the global research community on wildfire impacts.

Wildfire can lead to considerable geomorphological and environmental change, both directly by weathering bedrock surfaces and changing soil structure and properties, and indirectly through the effects of changes to the soil and vegetation on hydrological and geomorphological processes. Thus, for example, investigations of accelerated hillslope erosion and post-fire debris flow have been at the forefront of fire impact research in recent years. A recent surge in these and related areas of fire research highlights the challenges faced by researchers and land managers in predicting and addressing the on-site and off-site effects of fires. This surge has accompanied a trend of increased fire activity with particularly destructive fires in many parts of the world, which is likely to continue with climate change for the foreseeable future. Notwithstanding this need to focus on contemporary fire impacts, fires have influenced landscape development in various ways over many millions of years as a recurring agent in most environments that produce sufficient biomass to sustain a burn.

We welcome presentations on all aspects of wildfire-related research addressing geomorphological and broader environmental processes at any spatial or temporal scale.

This session focuses on:

(i) The understanding, predicting and mitigating of fire effects in contemporary environments.

(ii) The role of fire as an agent in shaping landscapes and their ecosystems over medium- or geological timescales.

http://www.geomorphology2009.com

With best wishes,

Stefan Doerr and Artemi Cerda

E-mail: S.Doerr@Swansea.ac.uk

The 5th International Symposium on Gully Erosion, Lublin (Poland), 20-25 April 2010

Dear Colleagues

The Institute of Earth Sciences of Maria Curie-Sklodowska University (Lublin, Poland) and the Association of Polish Geomorphologists are pleased to invite you to participate in the '5th International Symposium on Gully Erosion.'

The meeting will be held in Lublin (south-east Poland) from 20-25 April 2010.

Please visit the symposium website with the preliminary information and the preliminary registration form:

http://gis.umcs.lublin.pl/gullyerosion2010/

We kindly ask you to distribute information about the Symposium to your colleagues.

On behalf of the Organizing Committee

Wojciech Zglobicki
E-mail: zglobek@hektor.umcs.lublin.pl

THIRD AND FOURTH ANNOUNCEMENTS

The International Conference of the ESSC

'Protection of The Ecological and Productivity Functions of Soil in a PAN European Context'



Held on the occasion of the 55th Anniversary of the foundation of the Research Institute for Soil and Water Conservation

Congress and Education Centre 'Floret'
Průhonice, Czech Republic
23-25 June 2009





Auspices

Ministry of Agriculture of the Czech Republic.
Ministry of Environment of the Czech Republic.

Organizers

Research Institute for Soil and Water Conservation.
European Society for Soil Conservation
Czech Society of Soil Science.

Co-organizers

Czech University of Life Sciences Prague.
Mendel University of Agriculture and Forestry in Brno.

Organizing Committee

Jiří Hladík (Czech Republic).
Michaela Budňáková (Czech Republic).
Jarmila Čechmánková (Czech Republic).
Jana Doležalová (Czech Republic).
Ivo Hauptman (Czech Republic).
Karel Jacko (Czech Republic).
Marcela Rohošková (Czech Republic).
Jana Uhlířová (Czech Republic).
Radim Vácha (Czech Republic).

Scientific Committee

Jana Podhrázská (Czech Republic).
Pavol Bielek (Slovak Republic).
Carmelo Dazzi (Italy).
František Doležal (Czech Republic).
Ivan Holoubek (Czech Republic).
Sigbert Huber (Austria).
Ádám Kertész (Hungary).
Josef Kozák (Czech Republic).
Jiří Kulhavý (Czech Republic).
Pavel Novák (Czech Republic).
Alois Prax (Czech Republic).
José Luis Rubio (Spain).
Jaroslava Sobocká (Slovak Republic).
Milan Sáňka (Czech Republic).
Jaroslav Staňa (Czech Republic).
Ivan Suchara (Czech Republic).
Bořivoj Šarapatka (Czech Republic).
Miodrag Zlatič (Serbia).

Topics

1. Soil sealing (e.g. brownfields, urban development and transport construction).
2. Soil degradation (e.g. contamination, erosion, floods and drought).
3. Soil reclamation (e.g. drainage, irrigation, and improving the retention ability of agricultural and forest soils).
4. Methods of soil monitoring.

Preliminary programme

22 June 2009	Arrival of participants
Registration	
Welcome party	
23 June 2009	Registration.
	Opening ceremony.
	Oral and poster presentations.
	Castle park: guided walk.
24 June 2009	Oral and poster presentations.
	Conclusions.
Social dinner	
25 June 2009	Field excursion.
26 June 2009	Optional cultural-historical excursion to Prague.

Conference fees

On or before 28 February 2009 **after 28 February 2009**
€260 **€290**

The conference fee includes the following items:
- Conference programme, book of abstracts and Conference proceedings (on CD).
- Admission to the Conference rooms.
- Welcome party. • Coffee breaks. • Two lunches.
- Conference excursion (including bus, lunch and excursion guide).

The conference fee does not include:
- Social dinner on 24 June: €45.
- Optional cultural-historical excursion to Prague on 26 June: €60 (including lunch).

Excluded items may be paid together with the conference fee.

Cancellations and refunds

Registration fees to be refunded as follows: On or before 30 April 2009 50% refund,
After 30 April 2009 no refund.

Deadlines

30 September 2008	2nd announcement with the registration form and call for abstracts.
30 November 2008	Registration, abstract submission.
10 February 2009	Notice of abstract acceptance.
28 February 2009	Payment of reduced conference fee.
30 Apri 2009	Payment of non-reduced conference fee, hotel reservation, full papers submission, last announcement and final programme.

Field excursion

The Excursion will be to West Bohemia and focus on soil conservation, soil degradation and anthropogenic influences on soil and land reclamation. Details will be provided later.

Accommodation

Accommodation is provided by Anthony Production, s.r.o. Rooms can be booked exclusively through the Agency on the following e-mail address: anthony@anthony.cz.

Offered hotels Hotel Floret: www.floret.cz,
Parkhotel Průhonice: www.park-hotel-prague-pruhonice.cz
Hotel Magnolia: www.magnoliahotel.cz.

Travel

For information about transport or transfer e-mail: anthony@anthony.cz .

Informations and contacts

Research Institute for Soil and Water Conservation
Dep. for Land Use Planning
Lidická 25/27, 602 00 Brno
Czech Republic
www.vumop.cz
Ing. Jana Uhlířová
uhlirova@vumopbrno.cz
Ing. Jana Podhrázská, Ph.D
podhrazska@vumopbrno.cz

Anthony Production, s.r.o
Počernická 96, 108 00 Praha 10
Czech Republic
Mgr. Jana Doležalová
anthony@anthony.cz

Federal Ministry of Education and Research

COMMISSION ON LAND DEGRADATION & DESERTIFICATION

INTERNATIONAL CONFERENCE ON LAND AND WATER DEGRADATION: PROCESSES AND MANAGEMENT

6–9 September 2009

There is an urgent need to improve our practical and theoretical understanding of land and water degradation processes; in particular the physical, chemical and biological deterioration of soils and water bodies in various regions of the world. This Conference will bridge the gap between land and water and will bring together scientists from various disciplines with different methodological backgrounds.

Topics

- Nutrient dynamics in the land-sediment-water system.
- Function of buffer strips and floodplains for catchment health.
- Physical, chemical and biological processes of soil degradation.
- Methodological approaches to estimate and regionalize non-point source pollution.
- Spatial heterogeneity, variation and prediction of land degradation.
- Methods to review outcomes of mitigation strategies and catchment management.
- Regional studies of land and water degradation, especially in industrialized and urbanized areas, cold climates and Mediterranean regions.

Field trip

The *mid-conference field trip* will focus on land and water management problems in the vicinity of Magdeburg.

The *post-conference field trip* (10-13 September) will introduce general environmental characteristics of the region and will focus on:

- Farm management under changing environmental and socio-economic conditions with visits to a loess region, a low mountain area and the lowlands of north Germany.
- Water and catchment management, with emphasis on mining lakes, mining activities and visits to a low mountain region and a research mine.

Keynote lectures

John Quinton, Lancaster University, United Kingdom.
Rattan Lal, Ohio State University, USA.

Web site: www.ufz.de/comland2009

16th N Workshop

University of Turin
University of Milan

Connecting Different Scales of Nitrogen use in Agriculture

The 16th Nitrogen Workshop will be held in Turin (Italy), from 28 June–1 July 2009.
The Workshop is jointly organized by the Department of Crop Science of the University of Milan and by the Department of Agronomy, Forest and Land Management of the University of Turin.

Themes to be discussed include:
- Soil biology and the N cycle.
- Physiology of N in plants and soil micro-organisms.
- Gaseous losses.
- Short and long term modelling of N and C.
- N management at the cropping system scale.
- N management at farm and regional scales.
- Assessment of N efficiency and diagnostic tools.
- N management and crop quality.
- Sustainable N use in horticulture, viticulture and tree crops.
- Manure processing for sustainable N management.
- Integrated management of N and other nutrients.
- Education, dissemination and demonstration.

General programme:
Sunday 28 June (afternoon): Registration and Welcome 'Aperitivo.'
Monday 29 June: Workshop sessions.
Tuesday 30 June: Workshop session, field trip and Workshop Dinner.
Wednesday 1 July (morning): Working groups and closing session.

Workshop website: www.nitrogenworkshop2009.org
For further information, please contact us at the e-mail address: info@nitrogenworkshop2009.org

To subscribe the workshop mailing list, please send an empty e-mail to: sympa@liste.unimi.it with Subject: SUBSCRIBE nitrogenworkshop2009

Reminder for the next issue:

Articles, reports, letters, views or comments on any aspect of soil erosion and conservation in Europe are always welcome.
We invite proposals for special thematic issues of the Newsletter. We also welcome any comments on the ESSC Newsletter and suggestions on how it can be improved and developed.

Do not forget to send in your details of the following information:
i) Reviews of recent conferences.
ii) Recent grant awards.
iii) The citation details and abstracts of completed Ph.D. and M.Sc. theses.
iv) Newly enrolled Ph.D. research students, title of their research topic and names of research supervisors.
v) Recent staff institutional movements/promotions.
vi) A reference list of your 'new' international refereed scientific journal papers, which have been published recently (since and including the year 2000).

Send these details to either:
Professor Mike Fullen: m.fullen@wlv.ac.uk
or
Dr Colin Booth: c.booth@wlv.ac.uk
and they will include this information in the next issue.

PLEASE NOTE:
We publish four Newsletter issues per year. The deadlines are:
10 January; 1 April, 1 July and 1 October.

Some Closing Thoughts:

Critias by Plato (circa 427-347 BC), written 360 BC, translated by Benjamin Jowett

"Many great deluges have taken place during the nine thousand years, for that is the number of years which have elapsed since the time of which I am speaking; and during all this time and through so many changes, there has never been any considerable accumulation of the soil coming down from the mountains, as in other places, but the earth has fallen away all round and sunk out of sight. The consequence is, that in comparison of what then was, there are remaining only the bones of the wasted body, as they may be called, as in the case of small islands, all the richer and softer parts of the soil having fallen away, and the mere skeleton of the land being left. But in the primitive state of the country, its mountains were high hills covered with soil, and the plains, as they are termed by us, of Phelleus were full of rich earth, and there was abundance of wood in the mountains. Of this last the traces still remain, for although some of the mountains now only afford sustenance to bees, not so very long ago there were still to be seen roofs of timber cut from trees growing there, which were of a size sufficient to cover the largest houses; and there were many other high trees, cultivated by man and bearing abundance of food for cattle. Moreover, the land reaped the benefit of the annual rainfall, not as now losing the water which flows off the bare earth into the sea, but, having an abundant supply in all places, and receiving it into herself and treasuring it up in the close clay soil, it let off into the hollows the streams which it absorbed from the heights, providing everywhere abundant fountains and rivers, of which there may still be observed sacred memorials in places where fountains once existed; and this proves the truth of what I am saying."

"If you have land, you should make better use of it than the person who had it before"
(Richard Templar, 2006)

"Every secret is told,
Every crime is punished,
Every virtue is rewarded,
Every wrong redressed,
In silence and certainty." *(Ralph Waldo Emerson)*

"It is impossible to make anything foolproof because fools are so ingenious"
(David Baird, 2000)

"A rock pile ceases to be a rock pile the moment a person contemplates it, bearing within them the image of a cathedral" *(Wayne W. Dyer, 2001)*

"Seven days without laughter makes one weak" *(Joel Goodman).*

"In this Universe, nothing happens until something moves" *(Albert Einstein)*

AIMS OF THE SOCIETY

The ESSC is an interdisciplinary, non-political association, which is dedicated to investigating and realizing soil conservation in Europe. The ESSC pursues its aims in the scientific, educational and applied sectors by:

Supporting investigations on soil degradation, soil erosion and soil conservation in Europe,

Informing the public about major questions of soil conservation in Europe,

Collaborating with institutions and persons involved in practical conservation work in Europe.

The ESSC aims at co-ordinating the efforts of all parties involved in the above cited subjects: research institutions; teachers and students of geosciences, agriculture and ecology; farmers; agricultural planning and advisory boards; industries and government institutions.

ZWECK DER VEREINIGUNG

Die ESSC ist einer interdisziplinäre, nicht politische Vereinigung. Ihr Ziel ist die Erforschung und Durchführung des Schutzes der Böden in Europa. Die ESSC verfolgt dieses Ziel auf wissenschaftlichem, erzieherischen und angewandtem Gebiet:

durch Unterstützung der Forschung auf den Gebieten der Boden-Degradierung, der Bodenerosion und des Bodenschutzes in Europa,

durch Information der Öffenlichkeit über wichtige Fragen des Bodenschutzes in Europa,

durch Zusammenarbeit mit Institutionen und Personen, die an der Praxis des Bodenschutzes in Europa beteiligt sind.

Die ESSC will alle Personen und Institutionen zusammenführen, die sich für die genannten Ziele einsetzen: Forschungsinstitutionen, Lehrer und Studenten der Geowissenschaften, der Landwirtschaftswissenschaften und der Ökologie, Bauern, landwirtschaftliche Planungs- und Beratungsstellen, Industrieunternehmen und Einrichtungen der öffentlichen Hand.

BUTS DE L'ASSOCIATION

L'ESSC est une association interdisciplinaire et non politique. Le but de l'association est la recherche et les réalisations concernant la conservation du sol en Europe. L'ESSC poursuit cette finalité dans les domaines de la recherche scientifique, de l'éducation et de l'application:

en encourageant la recherche sur la dégradation, l'érosion et la conservation du sol en Europe,

en informant le public des problemes majeurs de la conservation du sol en Europe,

par la collaboration avec des institutions et des personnes impliquées dans la pratique de la conservation du sol en Europe.

L'ESSC souhaite favoriser la collaboration de toutes les personnes et institutions poursuivant les buts définis ci-dessus, en particulier: institutions de recherche, professeurs et étudiants en géosciences, des agriculteurs, des institutions de planification et des conseil agricole, de l'industrie, et des institutions gouvernementales.

OBJECTIVOS DE LA SOCIEDAD

La ESSC es una asociación interdisciplinar, no-politica, dedicada a la investigación y a la realización de acciones orientadas a la conservación del suelo en Europa. La ESSC persigue sus objectivos en los sectores cientificos, educacionales y aplicados, en al ámbito europeo:

promocionando la investigación sobre degradación, erosión y conservación de suelos,

informanto al público sobre los principales aspectos de conservación de suelos,

colaborando con instituciones y personas implicadas en la práctica de la conservación de suelos.

La ESSC aspira a coordinar los esfuerzos, en los temas arriba mencionados, de todas las partes implicadas: centros de investigación, profesores y estudiantes de geo-ciencias, agricultura, selvicultura y ecología, agricultores, servicios de extensión agraria, industrias e instituciones gubernamentales.

Visit the ESSC Website: http://www.essc.sk

MEMBERSHIP FEES

I wish to (please mark appropriate box):

- Join the ESSC
- Renew my membership of the ESSC
- Know whether I have outstanding membership contributions to pay

Membership rates:

Standard Rates:

- One year € 25.00
- Three years € 70.00

Members in Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia and Ukraine:

- One year € 10.00
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50 % reduction on above rates for three years
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MEMBERSHIP NUMBER (if known): M0 .....

Please send this form to: ESSC Treasurer, Dr Wim Cornelis, Department of Soil Management and Soil Care, Coupure links 653, B-9000 Gent, BELGIUM.

wim.cornelis@UGent.be