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Participants of the ESSC Tartu Conference, Estonia The picture was taken by Prof. Raimo Kőlli (Tartu, Estonia)

E.S.S.C. NEWSLETTER 2/2005

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Minutes of the Council Meeting of the ESSC held in Tartu, Estonia, 25 May, 2005

- Present: J. Rubio, W. Spaan, M. Azevedo Coutinho, C. Dazzi, M. Fullen, P. Sklodowski, L. Oygarden, R. Kőlli, P. Strauss, P. Bielek
- Apologies: E. Constantini, S. Tobias, T. Karyotis, J. Poesen, M. Dumitru, G. Govers, P. Schjonning, D. Torri, L. Stroosnijder, T. Scholten, D. Gabriels, N. Fohrer, W. Cornelis, I. Plá, A. Rodriguez.

Agenda:

- 1. Welcome and introductory remarks
- 2. Report by the Treasurers
- 3. Report by the Secretary
- 4. Report by the Editor-in-Chief
- 5. 5th ESSC Congress
- 6. EU Soil Thematic Strategy
- 7. Soil conservation in Nordic Regions
- 8. Continuing discussion on ESSC mission, vision and priorities of actions
- 9. Various information and future sponsored and co-sponsored actions
- 10. Any other items.

1. Welcome and introductory remarks:

J.L. Rubio, President of the ESSC, welcomed all participants and thanked R. Kőlli for the excellent organization and arrangements of the ESSC Conference on 'Soil Conservation Issues in Nordic Countries' (25 – 26 May 2005, Tartu, Estonia).

R. Kőlli informed the Council on the possibilities to publish full papers of conference presentations in the journal 'Archives of Agronomy and Soil Science'. These papers should not exceed 12 pages and should be sent to R. Kőlli by 15 July 2005. R. Kőlli will send this information to all participants by e-mail.

2. Report by the Treasurers

Participants received two written reports: the Report of the Treasurers by W. Cornelis and the Finance Report (2002 - 2005) by former Treasurer K. Helming. Both were accepted.

The Council unanimously approved to disband the ESSC German-registered society and the translation to the "new" ESSC Belgian-registered society.

According to the Financial Report 2002 – 2005, we are increasing our budget and this now represents \notin 12,890. This has been transferred to the new ESSC bank account in Ghent (Belgium). The remaining amount of \notin 1,074 will be transferred to the new bank account as soon as it is properly established. The Müncheberg bank account will then be closed.

The President of the ESSC will ask the Treasurers to send invoices to all members of the ESSC who owe their membership fees. It was decided for the non-paid memberships not be included in reduced fees for conferences and other activities organized by the ESSC.

C. Dazzi and other council members did not agree with the new revised membership, published in the last Newsletter (2005/1). The Secretary, in collaboration with the Treasurers, will revise and publish a new version of the list of the members. In the same way, some discrepancies published in the last Newsletter must be corrected.

The Secretary informed the Council that the new list of members was received as a result of revisions by national representatives. W. Spaan (as a national representative) informed the Council about problems concerning membership revision at the national level.

3. Report by the Secretary

P. Bielek informed the Council of administrative and dissemination activities. He asked for reimbursement of shipment and mailing expenses for delivery of newsletters to members. The President of the ESSC promised to ask Treasurers to reimburse Professor Bielek's institution.

4. Report by the Editor-in-Chief

M.A. Fullen informed the Council of the status of the new newsletter (2005/2). He assumed that the final version of the next issue would be sent to print in late June. There were initial delays in the production of the first newsletter (2004/3) by the new Editorial team. However, the aim was to publish four newsletters per year. The deadlines for text will be 1 January, 1 April, 1 July and 1 October. It is hoped there can be more diverse information. This should include recent publications by members, news items and project reports. Increased involvement of policy-makers and government officials is also welcome. Inevitably, there are delays between receipt of reports and publication in the Newsletter. However, the Bratislava team are actively developing the ESSC website and this is being increasingly used as a medium of rapid communication.

5. 5th ESSC Congress

C. Dazzi presented written and powerpoint versions of the first announcement of the 5th International Congress of the ESSC under the title 'Changing Soils in a Changing World: the Soils of Tomorrow'. The Congress will be held in Palermo (Italy) from 25 – 30 June 2007. Moreover, he informed the Council about all local conditions, excursions and other technical information related to the Congress. The Council thanked and congratulated C. Dazzi for his splendid efforts and for the excellent overview of the 5th ESSC Congress. During the discussion, J. Rubio, P. Sklodowski and P. Bielek made some comments and suggestions regarding the Congress. All members of the Council were invited to send proposals to C. Dazzi regarding the main Congress topics, Lectio Magistralis subjects and presenters and key speakers and any other suggestions. The Secretariat was asked to place the 2nd Announcement of the Congress on the ESSC web-side.

6. EU Soil Thematic Strategy

President J.L. Rubio informed the Council about the preparation of the EU Soil Framework Directive and the expected developments until its completion during 2007. He emphasized the importance of this EU initiative and asked for active participation of ESSC members to contribute to the development of the strategy.

7. Soil conservation in Nordic Regions

L. Oygarden informed the Council about the main activities focused on soil protection in the Nordic region (mainly in Norway, Sweden, Finland and Denmark). She presented several interesting views on soil protection priorities, especially information on the latest political decisions affecting soil protection problems (such as soil sealing by construction, soil erosion and water protection against agricultural pollution). President J.L. Rubio recommended the presentation of the report in the next ESSC newsletter.

8. Continuing discussion on ESSC mission, vision and priorities of actions

In summary, President J.L. Rubio emphasized that we:

- Need to reactivate the Council members activities and participation.
- Need to activate the national levels of Society.
- Need to establish stronger linkages between our Society and other international organizations and institutions.
- Must increase our interests in relation to EU activities on soil protection.
- Need to keep our identity among other societies.

A discussion followed, with the participation of several Council members, particularly P. Strauss and C. Dazzi.

9. Various information and future sponsored and co-sponsored actions

Information was presented by J.L. Rubio. The following items were emphasized:

- We are co-operating with EU representatives on actions related to soil conservation.
- The Directory of European Organizations and Persons Working on Soil Protection (ESSC- SCAPE) is in an advanced stage of development and soon will be edited.
- 2006 has been declared by the UN the 'Year of Desert and Desertification'. Many initiatives are in preparation. Among other activities, UNCCD and UNESCO are preparing conferences on the review of the desertification situation in Tunisia, which will have the collaboration of the ESSC.
- The 'International Workshop On Strategies, Science and Law for the Conservation of the World's Soil Resources' (Final SCAPE Workshop) will be held in Reykjavik, Iceland, 14 18 September 2005, where J.L. Rubio will represent the ESSC.
- In 13 16 November 2006, a First World Conference of Representatives of International Soil Organizations on 'New Soil Science Paradigms' will be held in Valencia, Spain, organized by the ESSC and other international associations and national institutions. The Conference will focus on global understanding of the soil and new conceptual reflections on soil functions and roles. The Conference aims to strengthen the links between international soil associations.
- Professor Dr R.P.C. Morgan was proposed (by J.L. Rubio and M.A. Fullen) and accepted by the Council as a new ESSC Honorary Member. M.A. Fullen report the nomination in ESSC Newsletter 2005/2 and the Secretary will prepare the Diploma.
- From 12 15 September 2006 in Lleida (Spain) a ESSC meeting will be held on 'Soil Conservation and Land Use Change', organized by I. Plá.
- The 14th ISCO Conference will be held in Marrakech, Morocco, 14 19 May 2006 under the title of 'Water and Soil Conservation Management in a Semi-Arid Environment'. ESSC is actively participating in the preparations. It is an important initiative and J.L. Rubio emphasized the scientific importance of the main topic of the Conference and encouraged European participation, taking advantage of the geographical proximity of Marrakech.
- Discussions are in progress regarding improved collaboration between the IECA and ESSC.

- There are also conversations between WASWC and ESSC on developing further co-operation.
- The 'Initiative for Science in Europe' (ISE) had a meeting in Lisbon on 4 June 2005 and the ESSC was represented by M. Azevedo Coutinho.

10. Any other items

The next ESSC Council meeting will be held during the ISCO Conference in Marrakech (14 – 19 May 2006).

In conclusion, J.L. Rubio thanked all participants. Again, he congratulated R. Kőlli for the excellent arrangements.

Article by Pavol Bielek (Tartu, May 25, 2005) ESSC Secretary Following a proposal by J.L. Rubio and M.A. Fullen, the ESSC Council, at its meeting held in Tartu on 25 May 2005, unanimously decided to nominate Professor Roy Morgan as an ESSC Honorary Member.

Professor Dr Morgan was one of the small group of researchers that founded the ESSC in Leuven in November 1988. Roy was one of the first Vice-Presidents and became ESSC President from 1992 to 1996. In 2000, during the ESSC Third Congress in Valencia, Spain, he received the 'Gerold Richter Award'. Roy was Editor-in-Chief of the ESSC Newsletter from 1996 to 2004.

Besides Roy's important contributions to our Society, he is one of the most important world researchers dedicated to soil conservation.

Roy received his first degree (BA Honours in Geography) from The University of Southampton in 1964, his MA from The University of London in 1967 and his PhD from The University of Malaya in 1973.

Currently, Roy is Emeritus Professor of Soil Erosion Control at the National Soil Resources Institute, Cranfield University at Silsoe, Bedfordshire, UK. Previous posts include being Deputy Director of the National Soil Resources Institute, Cranfield University (2002 – 2003) and The Dean, Faculty of Agricultural Engineering, Food Production and Rural Land Use at Cranfield University from 1999 to 2003. Posts at Cranfield have included Professor of Soil Erosion Control, Reader in Applied Physical Geography, Senior Lecturer and Lecturer. From 1968 to 1971, Roy was Assistant Lecturer in the Department of Geography at The University of Malaya.

Roy's research interests include soil erosion processes; mechanics of water and wind erosion; the role of vegetation in soil erosion control and slope stabilization and soil erosion modelling. Roy has supervised 15 PhD and 5 MPhil students to completion. He has published widely, in terms of books, editor of books and author of papers in international refereed journals. A selection of his publications is reported below. He has travelled widely and been involved in research projects in Austria, Belgium, Denmark, Ecuador, Ethiopia, Hungary, Iceland, India, Italy, Kenya, Mexico, Nepal, The Netherlands, Norway, Malaysia, Thailand, Swaziland, Venezuela and the USA.

Roy is married and has two sons. Roy has many interests and is a Member of the Association of Cricket Statisticians and Historians, Cricket Society and Old Emanuel Association. His interests include the history of cricket, baroque and classical music and current affairs (especially European Community, South-East Asia and Latin America).

Books: Author

- Morgan, R.P.C. 1979. Soil erosion. Longman, London. Reprinted 1980.
- Morgan, R.P.C. 1986. Soil erosion and conservation. Longman, Harlow, Reprinted 1988, 1990, 1991, 1993. English Language Book Service Edition, 1988.
- Morgan, R.P.C. 1995. Soil erosion and conservation. Longman, Harlow. Second edition. Reprinted 1996. Spanish translation (Mundi-Prensa, 1997)
- Morgan, R.P.C. 2005. Soil erosion and conservation. Blackwell, Oxford. Third edition.

Books: Edited

- Kirkby, M.J. and Morgan, R.P.C. 1980. Soil erosion. Wiley, Chichester. Spanish translation (Limusa, 1984), Russian translation (Kolos, 1984).
- Morgan, R.P.C. 1981. Soil conservation: problems and prospects. Wiley, Chichester. Chinese translation (1984).
- Chischi, G. & Morgan, R.P.C. 1986. Soil erosion in the European Community. Balkema, Rotterdam.
- Morgan, R.P.C. and Rickson, R.J. 1988. Erosion assessment and modelling. Commission of European Communities Report No. EUR 10860 EN.
- Morgan, R.P.C. and Rickson, R.J. 1995. Slope stabilization and erosion control: a bioengineering approach. E & F N Spon, London.

Recent scientific papers

- Morgan, R.P.C., Mirtskhoulava, Ts.E., Nadirashvili, V., Hann, M.J. and Gasca, A.H. 2003. Spacing of berms for erosion control along pipeline rights of way. Biosystems Engineering 85: 249-259.
- Morgan, R.P.C., Hann, M.J., Shilston, D., Lee, E.M., Mirtskoulava, Ts.E., Nadirashvili, V., Topuria, L., Clarke, J. and Sweeney, M. 2004. Use of terrain analysis as a basis for erosion risk assessment: a case study from pipeline rights-of-way in Georgia. Proceedings, International Conference on Terrain and geohazard

challenges facing onshore oil and gas pipelines. Institute of Civil Engineers, London (in press).

- Morgan, R.P.C. and Mngomezulu, D. 2003. Threshold conditions for initiation of valley-side gullies in the Middle Veld of Swaziland. Catena 50: 401-414.
- Wood, G., Morgan, R., Walling, D. and McHugh, M. 2003. Erosion risk of catchments in England and Wales. Environment Agency R&D Technical Report.
- McHugh, M., Wood, G., Walling, D., Morgan, R., Zhang, Y., Anthony, S and Hutchins, M. 2002. Prediction of sediment delivery to watercourses from land. Phase 2. Environment Agency R&D Technical Report No. p. 2-209.
- Morgan, R.P.C. and Nearing, M.A. 2002. Soil erosion models: present and future. In Rubio, J.L., Morgan, R.P.C., Asins, S. and Andreu, V. (Eds), Man and Soil at the Third Millennium. Geoforma Ediciones, Logrono, 187-205.
- Quinton, J.N., Morgan, R.P.C., Archer, N.A., Hall, G.M. and Green, A. 2002. Bioengineering principles and desertification mitigation. In Geeson, N.A., Brandt, C.J. and Thornes, J.B. (Eds), Mediterranean desertification: a mosaic of processes and responses. Wiley, Chichester, 93-105.
- McHugh, M., Harrod, T. and Morgan, R. 2002. The extent of soil erosion in upland England and Wales. Earth Surface Processes and Landforms 27: 99-107.
- Morgan, R.P.C. and Quinton, J.N. 2001. Erosion modelling. In Harmon, R.S. and Doe III, W.W. (Eds.), Landscape erosion and evolution modelling. Kluwer, New York, 117-143.
- Melville, N. and Morgan, R.P.C. 2001. The influence of grass density on effectiveness of contour grass strips for control of soil erosion on low angle slopes. Soil Use and Management 17: 278-281.
- Morgan, R.P.C. 2001. A simple approach to soil loss prediction: a revised Morgan-Morgan-Finney model. Catena 44: 305-322.

Professor Roy Morgan becomes only the Second recipient of Honorary Membership of the ESSC. The First recipient was His Royal Highness, Prince Felipe, Crown Prince of Spain. Prince Felipe graciously accepted the award at the ESSC Congress in Valencia in 2000.

Article by Mike Fullen

(Editor-in-Chief of the ESSC Newsletter) RIATec, The University of Wolverhampton, UK

Initiative for Science in Europe (ISE) Appeal for the creation of an European Research Council (ERC)

As decided during the ISE meeting in Lisbon (4 June 2005), the ISE steering committee has drafted an appeal to policy makers to decide in favour of the creation of a European Research Council (ERC), which is independent and whose budget is commensurate to their needs. Please see below, the text of this appeal has been endorsed by the ESSC.

The appeal will be distributed to the ministers of the 25 EU member states who are members of the Competitiveness Council, the CREST Advisory Committee, the Commission and the members of the research committee of the European Parliament. It will also be submitted for publication as a letter to the Editor of The Financial Times.

Similar to the ISE appeal published in the journal 'Science' last summer, we feel that this appeal would have a much deeper impact if a large community of European scientific organizations endorsed the document. The text of the appeal is the following:

INVESTING IN FRONTIER RESEARCH IS INVESTING IN EUROPE'S FUTURE

Europe has made great strides towards agreeing on a genuine new mechanism to fund frontier research, the European Research Council (ERC). This is a cornerstone for achieving the ambitions of the European Council (Lisbon Agenda) to increase substantially Europe's innovativeness and competitiveness. The aim is to boost fundamental research as a means to be a winner in a world-wide knowledge-based economy.

What has been collectively achieved over the past three years by a coalition of many organizations of scientists in Europe, research councils and politicians is impressive and commendable. The Initiative for Science in Europe (ISE) was established last year to unify over 50 European organizations representing all scientific disciplines in their support of the ERC, and a manifesto stating the position of the scientific community was published in <u>Science on 6 August, 2004</u> (www.initiative-science-europe.org). The time has now come for the European Competitiveness Council, the European Parliament and the European Commission to ensure that the ERC clears the last remaining hurdles and receives a strong budget commitment and a statute guaranteeing its independence.

The ERC will strengthen Europe's science base by challenging the best and most original European scientists to develop ideas for breakthroughs at the frontiers of science, without the limitations existing in national funding systems or the targetoriented Framework Programmes. Science, taking its starting point in curiosity to understand something no one else understood so far, has always advocated <u>a fertile</u> <u>soil</u> ⁽¹⁾ and a necessary condition for long-term economic growth, employment and for improving the quality of life of our citizens. Europe has suffered from creating a contradiction between funding the science base and financing targeted research,

⁽¹⁾ The emphasis is from J.L. Rubio.

and left the first to national prerogatives. We need both frontier research and targeted research, as there is no application without a discovery. A Euro spent on frontier research will trigger multiple Euros spent by industry. Important efforts elsewhere testify to this conviction with very significant increases in funding in the life sciences and nanosciences in the USA and, for example, in the Asian countries. Here, the creation of new funding organizations in these countries based on the National Science Foundation (NSF) and the National Institutes of Health (NIH) are leading to a huge increase in basic science research.

Because the ERC will set new standards for the promotion of frontier research, it will also create considerable momentum and inspiration for national research councils by challenging them to work with each other and with the ERC to create the best conditions for Europe's science. Moreover, by providing a funding source that is freely, and under the same conditions accessible, to scientists from across Europe, it creates a strong incentive for universities and research organizations to establish a stimulating working environment for promising young scientists and for large groups of the best and brightest. It is the best possible boost to the European university system.

To achieve all this, the ERC has to dispose of a budget that is commensurate with the socio-economic expectations. It should quickly become of the order of the budget of the larger national research councils, i.e. between \$ 1.5 and 2 Billion per year, otherwise its impact would not be felt. The annual budgets in the USA of NIH (\$ 28 Billion) and NSF (\$ 5 Billion) illustrate what it takes to make a continent-wide impact. Finally, for the ERC to be effective it must be totally independent. Within an overall framework of public accountability its governing body, consisting of high-level and respected scientists, must be free to determine policy, including which areas to support, which funding instruments to use, or which categories of scientists to focus on. Any appearance of dependence by subjugating it to a higher bureaucratic decision body is counter-productive and hence unacceptable.

The Council of the European Union has re-committed itself to keep Europe on the track of strengthening its economy through investing more in knowledge and being more effective in reaping the benefits created by this knowledge. The member states must realize that they cannot therefore be penny-wise and pound-foolish, and curtail national research budgets as the ERC's rises. We must all work together. Reducing budgets or placing inappropriate restrictions on the scope of national councils is definitely not the way forward.

The Competitiveness Council, which during its Cardiff meeting will receive and discuss the recommendations of the Identification Committee for the ERC governing body (chaired by Lord Patten), has the historic opportunity and obligation to create an ERC that is fully independent and that has a budget commensurate with its promise for Europe's economic and social future. This essential investment must be protected.

José L. Rubio

President of the European Society for Soil Conservation, Valencia, Spain

Putting soil policy into practice: Conservation agriculture for environmental protection in Europe

R.J. Rickson, National Soil Resources Institute, Cranfield University, U.K.



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Policy drivers such as the forthcoming Soil Framework Directive, the 6th Environment Action Programme and the recent Communication on Soil Protection emphasize the need for environmental protection in the European Union. How such policies might be put into practice is the objective of a joint EU LIFE Environment/ Syngenta funded demonstration project entitled 'Soil and surface water protection using conservation tillage in Northern and Central Europe' (SOWAP). Some of the other organizations involved in the project include the University of Leuven, the Hungarian Academy of Sciences (Geographical Institute), ISRIC, Cranfield University, Harper Adams University College, the Royal Society for the Protection of Birds, the Ponds Trust, the National Trust and the agricultural machinery manufacturer, Vaderstad.

The 3½ year project aims to demonstrate:

- □ The viability and effectiveness of 'conservation oriented' arable land management systems in protecting soil resources, improving catchment water quality and promoting biodiversity.
- □ The environmental, ecological, economic and social benefits of 'conservation oriented' land use practices.
- □ The environmental impacts associated with 'conventional' arable land use practices, where intensive soil management can lead to degradation of soil resources, water pollution, reduced biodiversity and less carbon sequestration.
- □ How a unique database can be disseminated successfully at the local, regional, national and EU level via workshops, multi-media, field visits, publications and the internet.

The project, started in June 2003, is being carried out in pilot areas in Belgium, the UK and Hungary. Conventional and conservation-oriented soil management practices are applied at the farm-scale. This scale of implementation allows a full ecological, economic and environmental evaluation to be carried out on the different land use systems. The land management applied is based on 'state of the art' research and practical experience of soil protection, in close collaboration with the participating land managers.

In addition to the farm-scale demonstration, smaller, instrumented plots have been installed on the conservation- and conventionally-managed fields (Plate 1). These plots generate high resolution, quantified data of the environmental impacts of the different land use systems, using recognized environmental and novel indicators to compare the conventional and conservation management practices. On-site indicators include physical, chemical and biological soil properties. Off-site indicators include soil loss (volume; physical and chemical composition) and runoff (volume; sediment concentration; chemical composition). The observed indicators are detailed in soil protocols, specially devised for the SOWAP Project.



Plate shows the erosion plot layout at Loddington, Leicestershire, UK.

One special feature of SOWAP is the consideration of soil erosion at a variety of scales, from the process of individual soil aggregate breakdown at the smallest spatial scale, through to rainfall simulation plot trials, through to field scale erosion and runoff plots, representing the sub-catchment scale. It is hoped that the observations of soil loss at these different scales will provide insights to help explain the variability of erosion due to spatial scale effects. Also, this research aims to provide data that can provide direct links between the diverse range of interested parties; from scientists, interested in sub-process level modelling, to agencies involved in implementing EU land management policies.

Evaluation of the different land use practices will integrate the environmental, ecological, social and economic results from the farm- and plot-scale studies. This will create a unique database covering all aspects of land use management from implementation of practice through to economic returns gained from the different systems. This database will be a concrete deliverable of the project, which is being disseminated via workshops, multi-media, field visits, publications and web pages at the local, regional, national, and EU level.

It is hoped that the results of SOWAP will be valuable to many end users. Land managers can use the database to evaluate the effectiveness of the conservationorientated practices. Policy makers may use the results not only as evidence of the environmental consequences associated with continuing support of conventional land use practice, but also as evidence of the potential of more conservation-oriented land use approach.

Further details of the SOWAP Project can be found at: <u>www.sowap.org</u>

In Memoriam Dr Pavel Jambor 1938 – 2005



On 9 June 2005, a few days before the opening of the 'Fourth Pedological Days' in Slovakia, the long-term scientific worker of the Soil Science and Conservation Research Institute in Bratislava (Slovakia), excellent applied soil scientist and former President of the Slovak Soil Science Society (Societas pedologica slovaca) Dr Pavel Jambor, PhD,

died. The Slovak soil science community lost one of its outstanding scientists, who contributed much to soil science development and land management in Slovakia.

Born in Potvorice, at the Vah River valley, Pavel Jambor started his career studying at the Agronomy Faculty of the Slovak Agricultural University in Nitra (1957 – 1962). There he attained his PhD degree in 1974. In the years 1964 – 1971 he worked in the Soil Science and Plant Nutrition Institute in Bratislava as soil surveyor at the General Soil Survey of Agricultural Soils of the former Czechoslovakia. Thereafter, in the years 1971 – 1975, he was briefly employed as technical specialist at the State Melioration Service in Bratislava. Since 1975 he was based in the Soil Science and Conservation Research Institute in Bratislava (SSCRI) until his death. He was entrusted by several significant posts in the SSCRI, as a head of the scientific information service (library), as a leading person in the Pedological Consultation Centre and three times as a Deputy Director of the Institute. He retired in 2001, but continued to actively contribute to scientific research and the Institute's activities.

Dr Jambor was elected President of the Slovak Soil Science Society (Societas pedologica slovaca) for various periods between 1992 and 2005. He was a founding member of the Pedological section of the Slovak Society for Agricultural, Forest, Food and Veterinary Sciences at the Slovak Academy of Sciences (1973), a member of the Czechoslovak Agricultural Academy (1964 – 1989) and a member of the Slovak Academy of Agricultural Sciences (1993).

Dr Jambor also chaired the Soil erosion working group in COST actions and in the ARGEDONAU international programme. He was a co-ordinator of international and national scientific projects investigating physical soil degradation, a prominent specialist in soil erosion and soil protection and author of the manual for anti-erosion and control agricultural technology systems. In his work, there was a very fruitful symbiosis of pure soil science and practical soil and land assessment with good dialogue and services for farmers. He was famous for his newspaper articles on agricultural practice. Besides, he acted as an editor for many scientific proceedings of the Institute. He was author and co-author of approximately 120 scientific publications. These contributions include four books: Main factors of land production potential (1984), Soil and plant nutrition (1985), Methodology for anti-erosion land management (1998) and Aspects of the Erosion by Water in Austria, Hungary and Slovakia (2003). There also remains his incomplete four-language pedological dictionary, which will be issued in memoriam, after editing.

Dr Jambor's high reputation as a special applied soil scientist was acknowledged in the award both of the Fandly Memorial Medal (2005) and the Diploma for Soil Science Development of the Slovak Academy for Agricultural Sciences. He was active in the membership of several scientific institutes` boards and international societies (IUSS, ECSSS, as well as ESSC).

We regret to have lost Pavel Jambor. His memory remains with us and his work will be a source of inspiration for those that will follow in his steps.

Article by Jaroslava Sobocka

President of Societas pedologica slovaca

45th Jubilee of the 'Soil Science & Conservation Research Institute' (Bratislava, Slovakia)

The year 2005 has considerable significance for soil science in Slovakia. It is the year of the forty – fifth anniversary of the Slovak scientific institution dedicated to soil research, the Jubilee of the Soil Science and Conservation Research Institute (SSCRI). The history of the Institute is an integral part of the history of soil science in Slovakia.

The first signs of soil research in Slovakia date back to past centuries. Austrian Empress Maria Teresia initiated an inventory of agricultural land and its owners in the 18th Century. However, it was necessary to wait almost another 100 years until the Hungarian Royal Geological Institute in Budapest conducted the first soil survey in Slovakia. A milestone in development was the year 1918. The newly formed Czech-Slovak Republic launched scientific activities in this area. State Research Institutes of Agriculture were established as the first scientific institutions for soil research in the Czech-Slovak Republic. The structure consisted of several organizations, overseen by a directing office. Bratislava and Košice were seats of the Agro-pedology and Bioclimatology Institute. Despite these developments, Slovakian soil science was still in its infancy.

Major changes and progress followed World War II. Political changes brought new attitudes toward soil functions. Self-sufficiency and higher agricultural production became very important issues. Thus, in the 1960, the Laboratory of Soil Science was established in Bratislava. It was a specialized independent Slovak scientific institution. Later, the Institute's name changed several times. At present, the Institute is known as the 'Soil Science and Conservation Research Institute' (SSCRI). It secures activities for a complex set of governmental and non-governmental institutions, municipalities and individual farmers. Beyond its public responsibilities, it has been the leading force in soil research in Slovakia.

Since the establishment of the SSCRI, several major achievements have been attained. First, the general survey of Slovak agricultural soils was carried out in the period 1960 – 1970. The density represented 1 pit per 14 ha of agricultural land. Over 180,000 soil profiles were described and sampled. Beyond the survey, a whole set of soil maps were created. This enabled the evaluation and interpretation of soil productivity. Later, the data were used as fundamental background information for the development of digital Soil Information Systems.

At the beginning of the 1990s, activities slowly shifted toward new trends and outputs. Besides soil agrochemical mapping resulting in a futher database, soil information systems, geochemical maps and soil-monitoring networks were developed. The aim of the monitoring was and is to examine soil pollution, soil acidification, soil alkalinization and salinization, available nutrients, soil organic matter contents, soil compaction and soil erosion in agricultural and forest soils.

The new millennium brought new objectives for the SSCRI. Digitalized orthophotos were the first step to develop the Land Parcel Information System (LPIS). The system supports control of EU agricultural subsidies to Slovak farmers, as well as regional inventories of agricultural crops and yield forecast by remote sensing techniques. In relation to LPIS, INFOSERVIS has been developed to provide information to farmers and other land users. Moreover, the Institute is studying climate change and its impact on agricultural production. Internationally, the SSCRI co-ordinates activities as the National Focal Point of the UN OECD. The Institute's accredited laboratory (ISO/IEC 17025, ISO 9002) detects the hygiene state of soil. Currently, the soil conservation service has been launched to provide advice on environmental impacts and to serve everyone needing help with soil issues.

Since its establishment, the Soil Science and Conservation Research Institute has successfully conducted several major tasks and launched and developed new systems and helpful tools for the public. The SSCRI has always tried to push forward soil research and similarly serve everyone search for answers to soil issues. On the whole, the Institute's jubilee can be characterized as the jubilee of scientific soil research in Slovakia and its progress.

Article by Zuzana Tekelova, BSBA

Soil Science and Conservation Research Institute, Bratislava, Slovakia On the 85th Birthday of Professor Ts. E. Mirtskhoulava

25 July 2005 saw the 85th birthday of the great scientist Tsotne Evgenevich Mirtskhoulava. His achievements range from forecasting and the prevention of soil erosion, increased resistance of soil to degradation processes, the author of the theory of reliability of reclamation constructions, Director of both the Institute of Engineering Ecology and Water Economy of the Academy of Sciences of Georgia, Academician of the Russian Academy of Agricultural Sciences and Academy of Sciences of Georgia, the Honoured Worker of Science and Technology in Georgia and Winner of the State Premium of Georgia.

Ts.E. Mirtskhoulava is the leader in field of hydromechanics, hydrotechniques, soil conservation and head of the hydromechanical scientific school in the field of erosion process research. He developed the mechanism of cohesion ground wash-out for the first time and proposed the formula for the calculation of the critical (non-scouring) velocity of water flow taking into consideration physics and mechanical properties of grounds and pulsation character of stream action. He worked out experimentally-theoretical model of the water (rain) erosion of soil in view of the different contributory factors (including slope parameters, soil properties, intensity and duration of rain, vegetation type and agricultural practices). Two of his monographs were published abroad.

Friends and the colleagues wish Ts.E. Mirtskhoulava sound health, new creative successes and a long and happy life!

Dokuchaev Soil Science Society Lomonosov Moscow State University

THERE ARE FIVE NEW PH.D. THESES IN THIS ISSUE:

One abstract from the Universitat de Lleida (Spain).

Four abstracts from Wageningen University (The Netherlands). The full text of these Ph.D. theses is available as a "Tropical Resource Management Paper". For further information, please contact: Dr ing. Wim P. Spaan, Erosion and Soil and Water Conservation, Nieuwe Kanaal 11, 6709PA Wageningen, The Netherlands; Tel: 00 31 317 482764; Fax: 00 31 317 486103; E-mail: Wim.Spaan@wur.nl

Xiomara Del Carmen Abreu

Universitat de Lleida

Evaluation of the effects of hydrological properties and management system on the susceptibility on surface and mass erosion of stony soils in dryland vineyards of the Priorat region (Catalonia, Spain). (2005)

Abstract

The Priorat, and particularly the portion known as the 'Geologic or Palaeozoic Priorat', is a region of Spain well known internationally for the high quality of its wines. The main characteristic of the 'Geologic Priorat' are the soils, called 'licorelles', which are developed on slates and Palaeozoic schists, and are mainly responsible for the very high quality of the wines produced from the vineyards growing on them. In the last decade, there has been increasing interest by wine producers to make new investments in the area, to increase and to improve the vinevards. There have been transformations of the old plantations, and new plantations, often associated to building of bench terraces on the very steep lands of the region. In some cases, the surface stony soil in the terraces is mechanically grinded to have a smoother surface. These drastic transformations have been made only considering productivity, without a previous evaluation of the potential environmental problems that could derive from them, related to climate, soils and topography. Nowadays, in some of the older terraced lands, there is evidence of some degradation problems manifested through gullies and landslides. It is evident that the drastic transformations of the land surface by terracing, and the earth movements associated with it, may lead to changes in the hydrology, in situ and at watershed levels, with related effects on erosion processes. Based on that, the research, whose preliminary results are presented in this thesis, was directed to study the physical and hydrological properties of these soils, in relation to their susceptibility to surface erosion and mass movements, under the traditional and new management practices of dryland vineyards. The specific objectives were to evaluate: 1) The effect of different soil fractions, stone cover and slope on the sediment production under simulated rainfall; 2) Selected physical, hydrological, chemical and mineralogical characteristics of the soils; 3) The effects of terracing on the soil hydrology and on the production of water and sediments; 4) The risks of erosion by mass movement in the stony soils of the area integrating in a simulation model based on processes the hydrologic information obtained through laboratory and field measurements, and historic climate information. The results show that most of the soils in the area are very stony, with a sandy loam fine (<2 mm) fraction, with low clay content, mainly montmorillonitic, which increases with depth and between the exfoliated slates under the soil. This clay is the main responsible of the soil water retention, which is anyway low due to the high proportion of sand in the fine fraction and the stony character of most of the soils. These mechanical characteristics of the soils are also the responsible of the very high infiltration rates, higher in the non-terraced soils with stone cover, which in any case permits the infiltration of most of the rainfall water, even in very intense storms. In some occasions, especially in terraced land, frequently with unstable non-cohesive soil material in the very steep back slopes; the infiltrated water may lead to conditions where mass movements may occur. This would happen when concentrated rainfall occurs after a period of continuous rainfall, maintaining the soil close to field capacity. This is more common during fall and early winter, every 5 - 10years, when that concentration of rainfall occurs. In any case, unless the concentrated rainfall continues for several days, which is not very frequent, the good internal drainage of most of these soils reduce the period of moisture conditions on the soil favourable for mass movements. In the shallower soils of non-terraced slopes the excess of infiltrated water may flow laterally in the less permeable subsoil and fractured schist and therefore the risks of mass movements are lower. The two main conclusions of this research are: 1) Most of the traditional methodologies for evaluating hydrological properties and susceptibility to surface and mass erosion in soils have to be modified, or substituted by others adapted to the very stony soils in very steep lands like the ones in the Priorat region; 2) Using the hydrological information properly evaluated under laboratory and field conditions, together with simulated measurements and simulation hydrological models, it is possible to evaluate and preview the risks of soil and land degradation when extraordinary rainfall events occur, under the traditional and new terraced system of vineyards in the Priorat region. This is the basis for guiding the best land management to prevent or reduce those risks.

Coping with drought: Options for soil and water management in semi arid Kenya (2005)

Abstract

In semi-arid Kenya, episodes of agricultural droughts of varying severity and duration occur. The occurrence of these agricultural droughts is associated with seasonal rainfall variability and can be reflected by seasonal soil moisture deficits that significantly affect crop productivity. The aim of this study was to analyse agricultural drought, and to evaluate soil and water management options for sustainable crop production in drought-prone semi-arid Kenva. Research was conducted at an experimental site in Katumani and in liuni watershed, both in Machakos district. First the occurrence of dry and wet spells in liuni was modelled using a Markov model. The study revealed that the short rains (October-December) are more reliable for crop production than the long rains (March – May). A literature review on tillage methods for soil and water conservation in eastern Africa showed the importance of appropriate tillage practices and the benefits of residue management for improved soil moisture conditions. In particular, conservation tillage techniques were found to be promising for the improvement of crop productivity under semi-arid climatic conditions. Moreover, farm yard manure application in combination with tillage appeared effective in reducing surface runoff from a crusting and compacting soil, especially during the early stages of the rainy season. At the watershed scale, the AGNPS model was applied to evaluate the effects of land use changes on watershed runoff volume. Changes in land use covering a period of nearly 20 years were significant, with a dramatic increase in the area for crop cultivation, but this did not have a significant effect on the hydrology. The reason is the widespread adoption of soil and water conservation measures (mainly bench terracing) that occurred during the same period. The last part of the thesis deals with suitable options for watershed conservation in semi-arid Kenya. Apart from technical solutions, the enabling conditions to farmers at various hierarchical policy levels are discussed. A few of these enabling conditions that are elaborated upon include agricultural policy; focus on smallholder agriculture; and public-community partnerships.

A multi-scale approach for erosion assessment in the Andes (2005)

Abstract

Common knowledge of Andean soil erosion is often criticized because of a lack of guantitative data. The erosion processes are poorly understood and few studies had been carried out during the last years. Therefore, a multiscale methodology was applied in La Encanada watershed, northern Peru. At the small plot scale, erosion processes like infiltration, interrill and rill erosion under simulated rain were studied. At the runoff plot scale the combined effect of rill and interill erosion under natural rainfall was measured. Data collected in these two initial phases served to validate the hillslope version of the Water Erosion Prediction Project (WEPP) model for this watershed. The third scale consisted in the measurement of suspended sediment load of the river at three different points. Further, we are presenting an interface called Geospatial Modeling of Soil Erosion (GEMSE): a tool that integrates any GIS with the WEPP model in order to obtain runoff and soil loss maps. Though these maps do not give the runoff and erosion at watershed level, they can be used to identify hotspots in the area. We found that erosivity of rainfall as well as the erodibility of soils was low. These are the main reasons why both, measured and predicted erosion from agricultural fields were low (<1 mm runoff and <0.5 Mg ha⁻¹ soil loss per event). The river analysis showed that little sediment in suspension was lost during the year under evaluation (<10 g l^{-1}) with one exception (50 g l^{-1}). This shows that sediment load came from rare events and from sources other than agricultural fields, like abandoned fields, roads and small rural roads as well as built-up areas that show low infiltration capacity caused by soil compaction and absence of vegetation.

Farmers' indicators for soil erosion mapping and crop yield estimation in central highlands of Kenya (2005)

Abstract

The central highlands of Kenya is characterised by abundant rainfall and fertile volcanic soils that support agricultural activities but problems of soil erosion are widespread in the region. Past efforts to control the soil erosion problems were through application of regulations that enforced adoption of soil and water conservation measures. Despite many decades of campaigns to have farmers embrace the recommended conservation measures, the success was low and soil degradation continued to increase. Various methodological gaps were identified in the currently applied Catchment Approach concept for soil and water conservation planning. Among these was the lack of simple infield tools to assess soil erosion prior to recommending conservation measures. Currently assessment of soil erosion is largely dependent on expert-experiences and conventional approaches that are resource demanding and hardly simulate local conditions. The aim of this study was to develop a tool for participatory soil erosion mapping at field and catchment scales. This tool is based on the farmers' knowledge and perceptions of soil degradation and uses farmers' indicators for soil erosion and sedimentation. Research was conducted in a representative area of the humid highlands of the central Kenya in Gikuuri catchment in Embu District. Through household interviews and focused group meetings the study established that farmers were aware of the on-going soil erosion problems and they knew various conservation measures despite low adoption. Through their widescale knowledge of the erosion indicators, they were able to present the soil erosion scenario maps comparable to scientific assessments. Crop yield losses were closely correlated to soil erosion indicators as well as to soil erosion status. By reflecting on the catchment soil erosion status map, the farming community resolved to undertake planning of soil and water conservation measures at both the field and catchment scales because they were able to easily pinpoint fields or hillslopes that were severely eroded. The study concluded that lack of involving farmers greatly reduced their motivation to participate in soil and water conservation activities and that using their knowledge of topsoil profile characteristics led to simple approaches of quantifying soil productivity. The last part of this study presents a tool that could be applied to engage farmer(s) to map the extent of soil erosion and through which participatory soil and water conservation planning could be realised within the framework of the current Catchment Approach. widely adopted in the East African highland regions.

Olga Vigiak Wageningen University

Modelling spatial patterns of erosion in the West Usambara Mountains of Tanzania (2005)

Abstract

Prompt location of sources and sinks of sediment within a catchment would allow more effective Soil and Water Conservation (SWC) planning. Distributed erosion models are valuable tools for watershed planning, but the guality of spatially distributed model predictions is seriously hampered by the natural complexity and spatial heterogeneity of the landscape system, coupled with limited spatio-temporal datasets of sufficient accuracy. This study aimed at developing a semi-empirical, spatially distributed erosion model to locate sources of sediment within a catchment in data scarce environments. In the experimental catchment of Kwalei, in the West Usambara Mountains of Tanzania, the spatial distribution of erosion and erosion factors was observed during two rainy seasons. In the catchment, overland flow was of dynamic Hortonian type: it was triggered by short and intense showers, but as it moved downward, it quickly reinfiltrated. These observations and measurements at the catchment outlet were used to build a hydrologic model to predict event-based overland flow depth that accounted for rainfall characteristics, land use, field topology, and reinfiltration length, i.e. the average travel distance of overland flow. The hydrologic model was coupled with the sediment phase of the Morgan, Morgan and Finney model to estimate field erosion rates. The best model simulations predicted correctly around 75% of erosion pattern, but the uncertainty of model prediction due to sediment transport parameterisation was high: 10% of fields were either classified as subject to severe or slight erosion depending on the sediment transport parameters. Analysis of the spatial patterns of erosion and erosion factors showed that in the Kwalei catchment the location of severely eroded areas was correlated to crust and vegetation cover, but the spatial extent of erosion depended upon the overland flow travel distance. Moreover, the spatial scale of the distribution of some farmers' indicators of erosion, i.e. signs that farmers use to assess erosion in their fields, was very close to that of eroded areas and overland flow distribution. Farmers' indicators of erosion were used to build a classification tree to predict the distribution of erosion. The resulting Farmers' Indicator Tree was the best among several erosion models tested in the area in predicting the spatial pattern of erosion. These findings open up possibilities to integrate more effectively farmers' knowledge into distributed modelling of hydrology and erosion.

Keywords: erosion modelling; spatial patterns; overland flow distribution; Dynamic Hortonian hydrologic regime; farmers' knowledge; catchment scale.

Review of the ESSC Tartu Conference: Soil conservation issues in Nordic Countries (25 – 26 May 2005) Estonia

Main topics and themes of presentations

Although the ESSC has nearly 17 years of productive activity in soil conservation research, the ESSC Tartu Conference was the first to focus on topics related to Nordic countries. Themes of the ESSC 2005 Conference concentrated on soil policy and case studies of soil conservation practice and multifunctional land use in Nordic rural areas, as well as pedoecological, theoretical and socio-economic aspects of soil conservation. In three of the four conference sessions 17 oral papers were presented. One session was devoted to poster presentations.



Plate shows the conference organizers (left) and conference delegates 'out in the field' studying a soil pit (right).

President of ECSSS, Professor W.E.H. Blum emphasized in his foreword in the book of abstracts of the ESSC Tartu Conference that this event... "is an important step forward in the development of soil protection activity in the north European countries, with very specific physio-geographical, social and economic conditions".

The success of soil conservation in Europe depends to a substantial extent on political decisions and the efficacy of soil policy. Thus, the European Strategy for Soil Protection was analysed from several levels (J.L. Rubio, W.E.H. Blum). A basis of regionally suitable soil policy and development of multifunctional land use is a relevant and available soil information system. During the conference, these questions were exemplified by case studies in the Slovak Republic (P. Bielek).

Erosion is one of the most important and widely recognized attributes of arable soil degradation. Therefore, soil erosion was justifiably popular and reported in many presentations. Comparative data on water erosion rates on the basis of long-term field investigations were presented for Kaltinenai (Lithuania) and Shropshire (U.K.; B. Jankauskas, M.A. Fullen). In many European countries (The Netherlands, Estonia) soil erosion is not a major soil degradation issue but, more likely, localized 'hot spots' of water and wind erosion may cause substantial damage (W. Spaan, R. Kőlli). According to P. Strauss (Austria) to achieve the best control over erosion in land management, soil information must be available at the local (farm) and watershed level. Very special for Nordic areas is soil erosion during winter (snowmelt erosion, R.M. Skjevdal, Norway).

In most presentations, soil degradation was discussed in relation to soil cover composition and properties, land use practice, local meteorological conditions and physiography. Presentations were made on peat soil degradation (A. Gronlund, Norway), soil acidification (B. Jankauskas, Lithuania), soil compaction (T. Keller, Sweden; E. Reintam, Estonia) and heavy metal pollution (R. Vaisvalavicius, Lithuania).

The common feature of the degradation of most soils, but manifesting itself in different ways in different soils, is some loss of soil functions or weakening of soil cover functioning capacity. Several presentations were made relating to this theme. These included the balance of plant nutrients in arable soils (A. Astover), subsoil compaction (T. Keller), fertilizer applications (J. Kuht, T. Teesalu, A. Toomsoo, M.A. Fullen) and changes in soil biological activity (K. Vorišek, R. Vaisvalavicius, M. Truu, L. Szajdak). Methods for amelioration or remediation of soils (liming, fertilization, mulching, crop rotation) and some new possibilities (plantation forestry, H. Tullus) were also discussed at the Conference.

A very promising approach for developing the theoretical basis for soil conservation is the matching of pedodiversity with biodiversity (J.J. Ibañez, J.L. Rubio) and/or soil cover with plant cover (T. Köster). Many authors argued that the environmental protection ability of soils should be increasingly taken into account and relevant information disseminated. Complications remain due to differing protection abilities related to different soil types and land use.

Conclusions and main outcomes of the Conference

The Conference identified important differences between the north and south of Europe in terms of soil protection policy and practice. Nordic soils have particular soil degradation processes. Generally, Nordic soils have a relatively thinner soil cover, shorter biologically active (frost-free) period, more areas with soil waterlogging, more possibilities for leaching of soils and lesser and/or shorter periods for soil rapid drying. In Nordic areas, some soil degradation processes present generally within Europe are practically absent, such as soil desertification and salinization. In Nordic areas, both soil forming and soil restoration processes become retarded towards Polar areas.

Main outcomes of the ESSC Tartu Conference:

• The soil cover is protected and sustainable land use is achieved in circumstances where soil fertility and soil functions are maintained in accordance with soil type. To achieve this requires prevention, mitigation, control and regulation of such degradation processes as soil acidification, erosion (water, wind, snow-melt, tillage) and leaching. These can be achieved by adopting ecologically proper land use, soil remediation (liming, fertilization, drainage, inputs of organic matter), equilibrated nutrition element balance and locally adapted conservation agriculture technology (minimum tillage, mulching).

- Organic soils represent natural assets and pools of sequestrated organic carbon. These must be protected from intensive mineralization and decomposition. This should override the interest of short-term profit in agriculture and thus avoid the negative organic carbon balance in organic and strongly gleyed histic soils. Therefore, for these soils suitable plant cover and land uses must be selected.
- The best agricultural soils of any Nordic locality must be protected from reforestation and soil sealing by construction. This is especially important in areas where arable lands form only 1/4 – 1/3 of total territory.
- The philosophy of soil conservation should be much more refined and scientifically validated on the basis of local ecological conditions and detailed mapping of local soil taxonomic units. Successful regional soil conservation strategy therefore depends on ecological (matching soil and plant covers) and local socio-economic conditions, and should be profitable for local society.

Oral presentations of the ESSC Tartu Conference are presented on the homepages of ESSC (<u>http://www.essc.sk</u>) and of the Department of Soil Science and



Plate shows some of the delegates who gathered for the ESSC conference in Tartu, Estonia.

Agrochemistry, EAU (<u>http://www.eau.ee/~muld</u>). The Conference results were relatively well covered in the Estonian media, which gave an important signal to Estonian society about the importance of soils and their protection in multifunctional land use.

The ESSC Tartu Conference may also be described as a 'twin conference' as it partly overlapped with the Conference of the 'Landscape Tomorrow' European research network. This was achieved by joint events (joint welcome party, field trip, conference dinner, use of the same infrastructure) and themes (multifunctional land use). For more information on the 'Multifunctional land use. Meeting future demands for landscape goods and services' Conference, visit: <u>http://www.geo.ut.ee/Ltconference/</u>

Article and photos by Raimo Kőlli, Tartu, Estonia

Review of the 5^{TH} International Conference on 'Ecosystems and Sustainable Development' in Cadiz, Spain (03 – 05 May 2005)

The historic Andalusian city of Cadiz (souh-west Spain), whose history stretches back three thousand years, provided the delightful backdrop for the 5th International Conference on 'Ecosystems and Sustainable Development'. The Conference was organized by the Wessex Institute of Technology, the University of Cadiz and the University of Siena; in collaboration with the 'International Journal of Ecodynamics'.

According to legend, Hercules founded Cadiz. However, ancient and archaeological evidence indicate the Phoenicians founded the city in 1100 BC, making it the oldest city in the western world. Nowadays, the city boasts elegant buildings (legacies from the 18th and 19th centuries), which contrast with the many parks and gardens and the enormous expanse of sandy beaches. Well worth a weekend city break!!



Plates show the magnificent stature and architecture of the Town Hall (built 1799), in Plaza San Juan de Dios (left) and the Cathedral (built 1853), Plaza de la Catedral (right).

Professor Carlos Brebbia, of the Wessex Institute of Technology, gave the opening conference address. Conference topics included Thermodynamics and ecology; Sustainability indicators; Mathematical and system modelling; Ecosystem modelling; Biodiversity; Sustainability development studies; Conservation and management of ecological areas; Economic issues; Energy conservation and generation; Environmental and ecological policies; Environmental management; Environmental risk; Natural resource management; Recovery of damaged areas; Remote sensing; Landscapes and forestation issues; Soil and agricultural issues; Water resources; and Sustainable waste management.

Most notable papers, of probable interest to the ESSC readership, were:

- (i) Sustainable agriculture in the West African savannah: considerations for modern crop promotion in traditional farming systems (contact: Dr Beth Polidoro; <u>beth8402@uidaho.edu</u>).
- (ii) Environmental and socio-economic contributions of palm-leaf geotextiles to sustainable development and soil conservation (contact: Dr Colin Booth; <u>c.booth@wlv.ac.uk</u>). These and other conference papers have been published in a hardback book entitled:
- Ecosystems and Sustainable Development V, 2005. E. Tiezzi, C.A. Brebbia, S.E. Jorgensen and D.Almorza Gomar (Editors), published by Wessex Institute of Technology (WIT) Press, Southampton, U.K., 755 pp. (ISBN 1845640136).

The next 'Ecosystems and Sustainable Development' conference will be held in 2007 (precise dates and location to be confirmed).

Article by Colin Booth

(Assistant Editor of the ESSC Newsletter) RIATec, The University of Wolverhampton (U.K.) Tsotne Evgeny Mirtskhoulava (2000). Soil Erosion, Science, Tbilisi (Georgia), 422 pp. (ISBN 99928-835-1-00).

Protection of soils from erosion is a complex and multifaceted problem. Its effective solution is hardly possible without fairly reliable quantitative prognostic calculations. In studying erosion, one can hardly restrict oneself to qualitative assessment, i.e. verbal characterization of separate processes. An attempt is made in the work to identify the basic interrelations between the indices of erosion and the parameters describing this process, to systematize the regularities of erosional processes, to develop methods of constructing approximate engineering models for the prediction of individual stages of erosion, and to study the behaviour of the topsoil under the impact of natural and artificial forces. At the stage of slope development, the future of topsoil on sloping lands can be judged only through calculation.

Basic tasks of the studies described lay in obtaining recommendations that would consider the main factors causing erosion and that could be used rationally to establish measures for combating erosion. The main findings of the studies given in the work may be formulated as follows:

- 1. The mechanism of water erosion is discussed on the basis of extensive, theoretical, laboratory and field studies; the factors causing erosional processes have been systematized.
- 2. The fatigue theory of erosion has been further developed, as well as methods of assessing the anti-erosional stability of soils and techniques of determining the limiting minimum velocity of slope runoff at which erosion begins (non-scouring flow velocities). The analysis shows that the fatigue theory of erosion may serve as the basis for modelling erosion processes.
- 3. Methods of prognostic erosional calculations have been developed on the basis of the fatigue theory of erosion, including prediction of erosion intensity, with account of the principal factors determining the process (length, steepness and slope concavity, rainfall intensity, vegetative cover, initial humidity and agrotechnical methods). The simplicity and adequacy, confirmed by the data of field studies under diverse slope use conditions, allow recommendations on practical methods. The presence of numerical examples renders the given method simple to use and handy in carrying out calculations.
- 4. Analytical methods of assessing the parameters of scour have been developed on the basis of the general theory of probabilistic and random processes and by recourse to techniques of Markov processes. Due consideration is given to the randomness and indeterminate of the factors responsible for erosion processes. The method of linearization of the factors of deterministic dependencies is used to facilitate the solution of tasks of prediction, with maximum account of random factors causing erosion.

- 5. Assessment methods of the parameters of splash erosion have been developed on the basis of the theories of impact and explosion.
- 6. Assessment methods of permissible scour of soils are proposed, as well as techniques for calculating allowable irrigation erosion and permissible discharges of irrigation jets. A method is recommended for determining the optimum techniques of irrigation along furrows.
- 7. An approximate method of modelling erosional processes is proposed on the basis of the general theory of physical modelling.
- 8. A method has been developed, on the basis of the reliability theory, for estimating the qualitative indices of the reliability and longevity of topsoil, as well as a technique of assessing soil viability.
- 9. A method is proposed for assessing the means of protecting soil from erosion, on the basis of the theory of optimum solutions. To this end, an analysis is made of benefit and damage. A mathematical model is proposed for qualitative estimation of the decisions taken in carrying out soil protection measures.
- 10. A method is described for determining the pollution of water facilities by sewage waters from farmlands and other areas and a method for assessing pollution risk is proposed.
- 11. Along with the reliability and longevity of topsoil, the specificities of estimating the quality and resource of soil are presented, taking into consideration its change in time.
- 12. Methods of predicting the aggravation of erosional processes, the frequency of occurrence of mudfloods of catastrophic nature are presented on the basis of the reliability theory and the use of the potentialities of the theory of random processes.
- 13. The policy of soil preservation is presented in brief, as well as a list of prospective trends of research of erosion processes, including both perfection of methods of prediction and a more extensive study of corresponding physical processes, searches for ways of coupling hydraulic calculations with properties of soils and their change.

Although, in reading the work, one may get the impression that the degree of study of various methods is dissimilar and that there are still appreciable information gaps between them; there are also questions whose solutions are lacking, with only approximate assessments possible. However, the proposed models may find practical application in designing, selecting and planning measures for protecting soils from erosion.

Findings of the studies carried out, notwithstanding the need for their further perfection, will, I believe, help predict erosional processes with reasonable accuracy. In unfavourable conditions, these can assume disastrous character and have a detrimental impact on the ecological situation of whole regions. Extension

of knowledge in the sphere of erosion, generalization and analysis of erosional stability with wider applications of modern achievements of related fields of science, development of perfect methods of prediction, to which this book is devoted, will contribute to a more correct choice of measures towards protecting soil resources, preservation of ecological equilibrium and prevent drastic loss of soil fertility due to wash-out of nutrients. Owing to the complexity and insufficient study of the erosion process, a number of views advanced in the work may appear debatable. Creation of the next generation of calculation methods will obviously need further in-depth theoretical research and experimental studies.

Tsotne Evgeny Mirtskhoulava

W.G. Kepner, J.L. Rubio, D.A. Mouat and F. Pedrazzini (Eds.) (2005). **Desertification in the Mediterranean Region.** A Security Issue. Proceedings of the NATO Mediterranean Dialogue Workshop, held in Valencia, Spain, 2 – 5 December 2003. NATO Security Through Science Series, Volume 3. 605 pp. (ISBN (Hardback) 1-4020-3758-9; (Paperback) 1-4020-3759-7)].

Editors: W.G. Kepner (U.S. Environmental Protection Agency, Office of Research and Development, Las Vegas, Nevada, USA); José L. Rubio (Centro de Investigaciones sobre Desertificacion-CIDE, Valencia, Spain); David A. Mouat (Desert Research Institute, Division of Earth and Ecosystem Sciences, Reno, Nevada, USA); Fausto Pedrazzini (NATO Public Diplomacy Division, Science Committee, Brussels, Belgium).

Desertification in the Mediterranean Region. A Security Issue Proceedings of the NATO Mediterranean Dialogue Workshop, held in Valencia, Spain, 2 – 5 December 2003

This book focuses on two basic concepts: security and desertification in the Mediterranean Region and their linkages. It emerged from a single meeting of the 'Workshop on Desertification in the Mediterranean Region. A Security Issue' held in Valencia, Spain, on 2 – 5 December 2003, which was sponsored by the NATO Science Committee and NATO Committee on the Challenges of Modern Society. Desertification is recognized as a process of land degradation in arid, semi-arid and dry sub-humid areas of the world that is the result of natural phenomena (e.g. climate variation) and anthropogenic factors. The outcome of this type of degradation has typically been considered to be either a reduction or a loss of both biological and economic productivity. The scope of the book includes the identification of the physical processes of desertification specific to both the north and south Mediterranean Region. Additionally, it specifically questions how changing environmental conditions may potentially reduce stability and peace in the world and thus affect 'environmental security'.

During the workshop an array of government diplomats, security specialists and social and physical scientists from the Middle East, North Africa, Europe and North America reviewed the actions of past and current Mediterranean land use practices, especially in regard to environmental security, environmental consequences and challenges for the future. The book is divided into six special topical areas dealing with Linking Environmental Condition to Security; Assessing Regional Conditions; Assessing Land Use Change Relative to Human-induced and Natural Causes; Opportunities for Regional Co-operation and Information Sharing; Soil and Vegetation Monitoring; Development of Regional Desertification Indicators and Forecasting Techniques. This book provides a multi-lateral forum for co-operation, information exchange and dialogue among the environmental, development, foreign and security policy communities within the Mediterranean Region and thus may provide a precedent for further co-operation and partnership, including other more advanced conferences and publications, on assessing the condition of the entire region and the subsequent impacts and linkages to environmental security.

2005. X, 605 p., Book.

NATO Security Through Science Series, Volume 3 Hardcover. EUR 199.00, Ł138.00, USD 219.00 Paperback EUR 79.00, Ł55.00, USD 87.00 ISBN HB 1-4020-3758-9 / ISBN PB 1-4020-3759-7

RECENT PUBLICATIONS BY ESSC MEMBERS

It is intended to include citation details of papers and books produced by ESSC members. This should provide a growing resource for exchange of valuable information to both research and teaching. The citation list will be added to the web site. A cumulative list will also be developed and this will be added to the web site. 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.

PAPERS

- Barton, A.P., Fullen, M.A., Mitchell, D.J., Hocking, T.J., Liu Liguang, Wu Bo Zhi, Zheng Yi and Xia Zheng Yuan 2004. Effects of soil conservation measures on erosion rates and crop productivity on subtropical Ultisols in Yunnan Province, China. Agriculture, Ecosystems & Environment 104, 343-357.
- Foster, I.D.L., Fullen, M.A., Brandsma, R.T. and Chapman, A.S. 2000. Drip-screen rainfall simulators for hydro- and pedo-geomorphological research: the Coventry experience. Earth Surface Processes and Landforms 25, 691-707.
- Fullen, M.A. 2000. Evolving perspectives, policies and recommendations on soil erosion in the U.K. p. 225-251 In: E.L. Napier, S.M. Napier and J. Tvrdon (Eds) Soil and Water Conservation Policies and Programs, Successes and Failures. Soil and Water Conservation Society, CRC Press (Boca Raton, Florida).
- Fullen, M.A., Mitchell, D.J., Barton, A.P., Hocking, T.J., Liu Liguang, Wu Bo Zhi, Zheng Yi and Xia Zheng Yuan 2000. Soil erosion and conservation in Yunnan Province, South-west China p. 279-292 <u>In</u>: T. Cannon (Ed.) China's Economic Growth. The Impact on Regions, Migration and the Environment. Macmillan Press, London.
- Fullen, M.A. 2001. Multidisciplinary approaches to soil conservation in the highlands of South China and Thailand, p. 139-145 <u>In</u>: K. Helming (Ed.), Multidisciplinary Approaches to Soil Conservation Strategies, ZALF (Zentrum für Agrarlanschaftsund Landnutzungsforschung e.V.), Müncheburg, 191 pp.
- Fullen, M.A. 2002. Improving crop productivity and agro-environmental sustainability on fragile slopes in the highlands of South China and Thailand, p. 319-330 <u>In:</u> J.L. Rubio, R.P.C. Morgan, S. Asins and V. Andreu (Eds.), 'Man and Soil at the Third Millennium' Vol. 1, Proceedings of the 3rd International Congress of the European Society for Soil Conservation, Geoforma Ediciones, Logroño, 1115 pp.
- Fullen, M.A. 2003. Soil erosion and conservation in Northern Europe. Progress in Physical Geography 27(3), 331-358.

- Fullen, M.A. 2004. The development of sustainable cropping systems on red soils in the highlands of South China. p. 261-274 <u>In:</u> M.J. Wilson, Zhenli He and Xiaoe Yang (Eds.) 'The Red Soils of China: Their Nature, Management and Utilization'. Springer Publishers, Dordrecht, The Netherlands.
- Jankauskas, B. and Fullen, M.A. 2002. A pedological investigation of soil erosion severity on undulating land in Lithuania. Canadian Journal of Soil Science 82, 311-321.
- Jankauskas, B., Jankauskiene, G. and Fullen, M.A. 2004. Erosion-preventive crop rotations and water erosion rates on undulating slopes in Lithuania. Canadian Journal of Soil Science 84(2), 177-186.
- Milne, E., Wu Bozhi, Fullen, M.A., Hocking, T.J. and Mitchell, D.J. 2004. Erosion rates and crop productivity on a red soil experimental site in Yunnan Province, p. 137-150 In: M.J. Wilson, Zhenli He and Xiaoe Yang (Eds.) 'The Red Soils of China: Their Nature, Management and Utilization'. Springer Publishers, Dordrecht, The Netherlands.
- Mitchell, D.J., Fearnehough, W., Fullen, M.A. and Trueman, I.C. 2002. Boundary zone gradients between mobile and stabilised dunes in Ningxia, China, p. 647-657 In: J.L. Rubio, R.P.C. Morgan, S. Asins and V. Andreu (Eds.), 'Man and Soil at the Third Millennium' Vol. 1, Proceedings of the 3rd International Congress of the European Society for Soil Conservation, Geoforma Ediciones, Logroño, 1115 pp.
- Mitchell, D.J., Barton, A.P., Fullen, M.A., Hocking, T.J., Wu Bo Zhi and Zheng Yi. 2003. Field studies of the effects of jute geotextiles on runoff and erosion in Shropshire, U.K. Soil Use and Management 19(2), 182-184.
- Panomtaranchagul, M., Sukkasem, C., Peukrai, S., Fullen, M.A., Hocking, T.J. and Mitchell, D.J. 2001. Comparative evaluation of cultural practices to conserve soil and water on highland slopes in northern Thailand, p. 147-152 <u>In</u>: K. Helming (Ed.), Multidisciplinary Approaches to Soil Conservation Strategies, ZALF (Zentrum für Agrarlanschafts- und Landnutzungsforschung e.V.), Müncheburg, 191 pp.

Institutional movements and promotions of ESSC members

After many years as Reader in Soil Technology, Dr Michael A. Fullen (Editorin-Chief of the ESSC newsletter) of the Research Institute in Advanced Technologies (RIATec), at The University of Wolverhampton (U.K.), has been awarded a Professorship in Soil Technology.

ESSC membership list and contact details

As is usual practice after an ESSC Congress, we have published the full membership details (see ESSC Newsletter 2005/1). These details are also 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 will 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. Please send updated information to Zuzana Tekelová at: tekelova@vupu.sk

Announcements

The European Science Foundation (ESF) has published a new call for proposals for ESF/EMBO Symposia for the years 2006 and 2007. The link is: http://www.esf.org/esf_genericpage.php?section = 10&language = 0&genericpage = 2231

The European Union Joint Research Centre (JRC) has opened a very informative web site, compiling a soil atlas of Europe. This is available at: <u>http://www.jrc.cec.eu.int/soil-atlas</u>

A new soil assessment manual is available on-line. <u>Visual Soil Assessment (2005)</u> was developed by the Landcare Research Institute of New Zealand and co-published by Vaederstad, a Swedish farm machine manufacturer and Soil Management Initiative, a UK company. The publication is 21-pages long and can be freely downloaded from:

http://www.smi.org.uk/publications/index.html.

You need an Adobe Acrobat Reader to read this pdf file.

Professor Ion Ionita (Iasi University, Romania) is preparing a review of the manual, which will be reported in the next Newsletter.

THE INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) Scholarship Fund

Each year IECA strives to bring international and US students to the annual conference. The conference scholarship pays for the students' travel, lodging, food, conference registration fees and a one-year student membership to IECA. Students are given the opportunity to meet with industry professionals, learn new techniques and explore career options within the erosion and sediment control community.

Information is available online at: http://www.ieca.org/education/scholarship/applyscholarship.aspx http://www.ieca.org/Education/SpotlightOnEducation.asp http://www.ieca.org/Conference/Annual/LongBeach06.asp. http://www.ieca.org/Resources/Documents/PR060305.pdf

This last file can be accessed from the following page: http://www.ieca.org/Resources/PressRoom.asp

The deadline for scholarship applications for the February 2006 Conference has now passed. However, we will report in detail on the next round in forthcoming issues of the Newsletter. If you would like information to be sent direct to you, please contact the IECA. For further information, please contact:

Kimberly Walker

Association Promotions Co-ordinator International Erosion Control Association kimberly@ieca.org Tel. 00 1 879 3010, extension 25. Forthcoming Dates for Your Diary...

First Announcement



INTERNATIONAL SYMPOSIUM

Reorganizing field and landscape structures in a context of building strategies for water and soil protection



Lublin, Poland 15 – 17 September 2005



Symposium Organizers

COST 634 'On and Off-site Environmental Impacts of Runoff and Erosion' (Chair: Anne-Veronique Auzet; Co-chair: Katharina Helming)

WG1: 'Policy issues in the implementation of sustainable land use' (Co-chairs: John Boardman and Johannes Schuler)

WG2: 'Sustainable Farm-Scale Management' (Co-chairs: Preben Olsen and Jerzy Rejman).

WG3: 'Catchment integration of On and Off-site Effects' (Co-chairs: Victor Jetten and Mike Kirkby).

Objectives and scope

The effectiveness of best management practices in reducing the on- and offsite environmental impact of runoff and erosion depends to a large degree on organization of field and landscape structures in catchments. The relation between field and catchment size plays a crucial role in the final success of applied measures. Whilst field organization seems to be a deciding factor in smaller catchments, the importance of landscape structures increases with catchment size. The responsibility for environmental protection is thus moved from farmer to community level, the latter being dependent on social demand and policy.

Although both field and landscape structures seems to be rather stable, in many regions field organization has undergone changes connected with the tendency to increase farm size and its economic efficiency, and especially, in the new EC countries with development of new road infrastructure. The main aim of the Workshop is to better understand the effect of landscape structures on environmental aspects of runoff and erosion and identify organization strategies for the organization of field and landscape structures based on previous experiences with land consolidation and partition.

The Workshop will focus on the following issues:

- How and to what degree field and landscape structure organization affects runoff and erosion and the application of conservation measures.
- If there is an optimal field and landscape organization (size and location) in the catchment and how to evaluate its effectiveness.
- Methodology and indicator utilization to localize the most erosion sensitive areas in the catchment.
- The possibility of reorganizing fields and landscape structures to limit runoff and erosion.
- Consideration of field and landscape organization in land use planning at community and policy level.

Draft Programme:

14 September:	Arrival and registration Ice-breaking reception	16 September:	WG1 Plenary Session
Wednesday		<i>Friday</i>	WG3 Plenary Session
15 September:	WG2 Plenary Session		Poster session
Thursday	Poster Session		Generally Discussion
,	Steering Committee meeting	17 September: <i>Saturday</i>	Field trip Closing reception, including dinner
		18 September: <i>Sunday</i>	Departure.

Scientific Committee:

Anne-Veronique Auzet (France), John Boardman (UK), Katharina Helming (Germany), Victor Jetten (The Netherlands), Anna and Czesław Józefaciuk

(Poland), Marian Harasimiuk (Poland), Mike Kirkby (UK), Preben Olsen (Denmark), Stanisław Pałys (Poland), Jerzy Rejman (Poland), Johannes Schuler (Germany), Tomasz Stuczyński (Poland), Ryszard Walczak (Poland).

Organizing Committee:

Jerzy Rejman, Andrzej Mazur, Jan Rodzik, Wojciech Zgłobicki, Jan Jadczyszyn.

Host institution:

Agricultural University of Lublin, str. Akademicka 15, 20-950 Lublin, Poland



Location:

Lublin is located 150 km south-east of Warsaw, it is the largest Polish city east of the River Vistula.



Symposium Place at Lublin Agricultural University, Str. Akademicka 15

Registration:

The registration fee includes meals (reception, lunch and two refreshment breaks per day during the two first day and lunch and dinner on the 3^{rd} day) as well as a notebook, a book of abstracts and a pen.

The registration fee is:

€ 120 for ordinary participants before 15 August 2005

€ 100 for PhD students before 15 August 2005

€ 140 for all participants after 15 August 2005

(the same price at the registration desk).

Further information:

For further information please contact:

Jerzy Rejman

Phone: 00 48 81 7445061 Fax: 00 48 81 745067 e-mail: <u>rejman@demeter.ipan.lublin.pl</u> The following web-site contains updated information: http://www.soilerosion.net

UNIVERSITY OF FORESTRY

Announcement of the Symposium on

FOREST IMPACT ON HYDROLOGICAL PROCESSES AND SOIL EROSION

40 years of the foundation of the Experimental Watershed Research Basin

'Yundola 2005'

5 - 8 October 2005

Bulgaria

Co-organized by

- University of Forestry, Sofia, Bulgaria
- Forest Research Institute, Sofia, Bulgaria
- Sofia University 'St. Kliment Ohridski,' Sofia, Bulgaria
- Ministry of Environment and Water, Bulgaria
- Ministry of Agriculture and Forests, Bulgaria

In co-operation with

- World Association of Soil and Water Conservation (WASWC)
- Bulgarian National Water Association
- European Research Basins Program, Friend-AMHY

Background

The Ecological Watershed Research Basin (EWRB) is a long existing field site of the University of Forestry, Sofia; it can be dated back to the middle of the 20thC. It has given a basis for research, education and training of students, working on the site for collecting proper data.



The EWRB is located on the Yundola locality, 1,500 – 1,600 m asl, which is on the watershed divide between the Rhodopes and the Rila mountains. Because the place is far away from industrial areas and in the heart of a mountainous area, it suits very well as a hydrometeorological and forest area reference data source. The total area, which includes several small catchments with different exposition, is 321 ha. The area is covered with mixed coniferous forests.

The EWRB 'Yundola' has provided regular observations since 1964 – 65. It is a good place for research on soil erosion, forest cover, forest regeneration, runoff formation, river sediment load, spatial variation and chemistry of precipitation and the influence of logging technology on water supply. The main purpose of EWRB is the systematic study of the processes of liquid and solid runoff formation with special emphasis on the role of forest ecosystems and the factors of coniferous forest management.

Conference Venue

Yundola locality is approx. 120 km from Sofia, the capital of Bulgaria and it is 15 km from the town of Velingrad, a famous spa resort. The EWRB runs as an annual student training campus in forest management. Recently a large-scale modernization of the facilities was done, with a nice and comfortable hotel built by the University of Forestry. They allow all the year round research on the field, especially for young people and students.

The EWB is the right place for international collaboration and development of joint research projects and student training works. The weather in October is usually rather dry and mild. The surrounding nature is beautiful.

Conference topics

- Runoff formation in forested areas
- Forest impact on water quality
- Afforestation and deforestation
- Soil erosion and sediment load formation in forested areas
- Erosion control measures, rehabilitation of forest, land and water protection
- Indigenous practice and experience in soil and water conservation, forest management
- Mathematical modelling of the processes by the use of GIS
- Water and soil management practices.

Local Organizing Committee

N. Ninov, Rector of University of Forestry, President of OC N. Pipcov, University of Forestry A. Aleksandrov, Forest Research Institute G. Rafailov, University of Forestry S. Yurukov, University of Forestry Eng. I. Zivripanov, TEFE Yundola.

Registration

Registration fee € 120, paid by cheques, Visa card, cash

Accompanying persons: € 80

Students: € 50

- Participation fee includes: Icebreaker, coffee breaks, conference dinner, transportation (Sofia-Yundola) and proceedings
- Accommodation: The participants will be offered accommodation at the place of the Symposium at € 20 40 per day. Guests may ask to be accommodated in the near (15 km) spa town hotels (3* 4*) at circa € 50 per day.

Excursions

- One-day field trips to Western Rhodopes focusing on coniferous forest management and water protection.
- Other excursions will be organized to several historical and cultural places, e.g. excavations on the ancient towns of Plovdiv, Hisar and Starosel, or to Rila Monastery by special request.

Preliminary programme

05 October (Wednesday)

09.00 -	18.00	: Registration
19. ³⁰ –		: Icebreaker

06 October (Thursday)

Scientific conference

09.30 -10.00: Opening ceremony10.00 -11.00: Invited lectures11.15 -13.00: Paper presentations13.00 -14.30: Lunch14.30 -16.30: Paper presentations16.45 -18.00: Paper presentations

07 October (Friday)

Scientific conference

09.00 -	11.00	: Paper presentations
$11.^{15} -$	13.00	: Paper presentations
13.00 -	14.30	: Lunch
14. ³⁰ –	18.00	: Field trip to Yundola Experimental Station. Coffee will be served at the site
19. ³⁰ –		: Conference dinner

08 October (Saturday)

Excursions: Please point the trip you might join. Additional information will be provided once the groups are identified.

Temporary accommodation by special request for participants for 04 October and after the Conference will be provided in Sofia for about \in 40.

Buses from University of Forestry will provide transportation to Yundola for all participants at 09.⁰⁰ and 13.⁰⁰ on 05 October. The transportation from Yundola back to Sofia will be organized accordingly.

Please contact:

Mrs. Elena Rafailova University of Forestry 'Kliment Ohridski Blvd. 10' 1756 Sofia, Bulgaria erafailova@yahoo.com Yundola2005@yahoo.com

Professor Georgi Rafailov University of Forestry 'Kliment Ohridski Blvd. 10' 1756 Sofia, Bulgaria grafailov@abv.bg

Professor Georgi Gergov g_gergov@internet-bg.net Georgi.Gergov@meteo.bg

International Symposium on 'Water and Land Management for Sustainable Irrigated Agriculture'

Adana, Turkey, April 4 - 8, 2006

Dear Colleagues

The International Symposium on Water and Land Management for Sustainable Irrigated Agriculture will take place from 4 – 8 April 2006 in Adana, Turkey. The Symposium is organized by Cukurova University and co-sponsored by CIHEAM/ Mediterranean Agronomic Institute of Bari and Kahramanmaras University, along with CIGR, The Turkish Scientific Research Council, Turkish Society of Agricultural Engineers and RIHN (Research Institute for Humanity and Nature), Kyoto, Japan.

You are herewith invited to participate in the Symposium and submit abstracts. For further details, please consult the Symposium web site:

http://symp2006.cu.edu.tr

Information can also be obtained from the Symposium Secretariat:

yazarat@cu.edu.tr symp2006@cu.edu.tr

We are looking forward to seeing you at this meeting!

Yours sincerely,

Professor Dr Attila YAZAR On the behalf of the Organizing Committee

Cukurova University Irrigation and Agricultural Structures Department 01330 Adana Turkey

e-mail: <u>yazarat@cu.edu.tr</u> Fax: 090 322 3386386 Tel: 090 322 3386516.

First Announcement

Romanian National Society of Soil Science bd. Mărăști 61, 011464 București 32, ROMÂNIA

 Bank account lei: RO 58 RZBR 0000 0600 0066 7291

 Bank account USD: RO 77 RZBR 0000 0600 0423 8780

 RAIFFEISENBANK - AG. DOROBANŢI

 Fei: +40-21-224.17.90/128

Fiscal code: 5.441.911 Fax: +40-21-2225979 E-mail: snrss2000@yahoo.com

The XVIIIth Conference of the Romanian National Society of Soil Science **'100** years of Soil Science in Romania': Complex management and multipurpose use of soil resources, environment protection and rural development in the North-North Western part of Transylvania, Romania.

FIRST CIRCULAR

The National Romanian Society of Soil Science has the pleasure of inviting you to attend our XVIIIth National Soil Conference to be held in Cluj, Romania from 21 – 26 August 2006.

The contact persons are:

Executive President SNRSS: Professor Dr Guş Petrul: <u>petru.gus@email.ro</u>_ Tel: 00 40 264 596384/206; 204 Fax: 00 40 264 443467

Dr Rusu Teodor E-mail: <u>rusuteodor@yahoo.com</u> Tel: 00 40 264 596384/204

Conference Secretary: Dr Valentina Coteţ E-mail: <u>snrss2000@yahoo.com</u> Fax: 00 40 21 2225979

Dr dr h. c. Ioan Munteanu President of the Romanian National Society of Soil Science.

First Announcement





International ESSC Conference on

'Soil and Water Conservation under Changing Land Use' Lleida (Catalonia, Spain)

September 12 - 15, 2006

(http://www.udl.es/serveis/sedai/sigtel/ESSC2006.html)

Department of Environmental and Soil Sciences University of Lleida Lleida, Spain

Background

Land degradation is affecting directly or indirectly all the vital processes on the earth's surface, which mainly depend on the conservation of soil and water in adequate places, amounts and gualities. Economical and social problems, associated to changes in population, markets and price of the products, technology, etc, may induce drastic and sudden changes in land use and management, which may increase the hazard of land degradation and environmental side-effects. Global climate changes may increase negative influences of these changes. This is especially true in the South European countries, where the recent abrupt and generalized changes in land use and management, involving in some cases abandonment of previous agricultural lands, and in others intensification of agricultural land use or utilization of land for other purposes, is leading to different environmental impacts, with immediate or future negative effects. Those effects include problems of loss of biodiversity, decreased supply and quality of available water, and increase in surface erosion, landslides, flooding, etc, all of them with strong social and economic effects in both the short and long term. In arid and semiarid regions these effects may lead to irreversible land desertification.

Objectives and topics of the Conference

The objectives of the Conference will be to analyse and discuss the most recent cases and results of studies and research in relation to soil and water conservation problems associated with changes in land use and management.

The main topics will be related to the evaluation, prediction, diagnosis and prevention of the environmental impacts derived of specific cases of changes in land use and management.

<u>General Programme</u> (to be detailed in the 2nd announcement)

Monday 12 September

- Registration
- Inauguration Ceremony
- Keynote Inaugural Presentation
- Session Topic I (oral and poster presentations):
 - 'Land use changes affecting soil and water conservation. Case studies'
- ESSC Council meeting

Tuesday 13 September

- Sessions Topic II (oral and poster presentations):

'Processes of soil and water degradation under changing land use and management'

- Conference Dinner

Wednesday 14 September

 Field tour to close by areas with vineyards, where recent drastic changes in land use and management have lead to different environmental impacts. Places of touristic interest will also be visited during the tour.

Thursday 15 September

- Session Topic III (oral and poster presentations):
 - 'Soil and water conservation practices under changing land use and management'
- ESSC Council meeting
- Closing ceremony.

The presentations in each session will include: Keynote presentation (45 minutes); Oral presentations (20 minutes); Poster exhibitions (the whole day) and presentations (one hour)

Key dates

September 30, 2005:	Intention to participate
December 31, 2005:	$2^{\rm nd}$ Announcement. Deadline for reception of abstracts and Preregistration form
February 28, 2006:	Notice of acceptation of abstracts
March 31, 2006:	Deadline for registration with reduced fee
May 31, 2006:	Deadline for reception of extended abstracts and registration fee for accepted participations
June 30, 2006:	Publication of the preliminary programme.

Registration fees

	Before March 31 2006	After March 31 2006
Participant	€ 300	€ 350
Members ESSC	€ 270	€ 320
Students (ID require	d) €150	€ 200

(Registration fee includes: Welcome cocktail, coffee breaks, conference book of abstracts, proceedings in CD, access to all sessions, conference dinner and field tour)

Abstracts

- Should not exceed one A4 page (2.5 cm margins)
- Title: Centred, Times New Roman 14 point font, capital letters, bold font
- Authors name: Centred, Times New Roman 12 point bold fonts
- Affiliation (Institution, City, Country): Centred, TNR 12 point Italic fonts
- E-mail (main author): Centred, TNR 10 point font
- Text: Justified, Times New Roman 12 point font.

(Instructions for extended abstracts and details about field tour and lodging will be included in the 2^{nd} Announcement).





International ESSC Conference on 'Soil and Water Conservation under Changing Land Use' Lleida (Catalonia, Spain)

September 12 - 15, 2006

Department of Environmental and Soil Sciences University of Lleida Lleida, Spain

PRE REGISTRATION FORM

Name	
Institution	
Mail address	
Fax E-mail	
Intention to make a presentation: Oral	Poster
Preliminary title of presentation:	





Environmental change, geomorphic processes, land degradation and rehabilitation in tropical and subtropical highlands

19 – 25 September 2006

Mekelle University, Mekelle, Ethiopia

Symposium organized by

Professor J. Poesen

Physical and Regional Geography Research Group E-mail: jean.poesen@geo.kuleuven.ac.be

Professor Mitiku Haile

Mekelle University E-mail: mekelle.university@ethionet.et

Professor J. Deckers

Laboratory for Soil and Water Management E-mail: seppe.deckers@biw.kuleuven.be

Themes to be discussed

- 1. Changing environments and geomorphic process intensities in tropical and subtropical mountains since late Pleistocene times; changes in vegetation cover, climate, hydrology, hillslope and fluvial processes, tufa dam development and landsliding.
- 2. Land degradation in tropical and subtropical mountains: natural and anthropogenic controls; on-site and off-site consequences (soil erosion, landsliding, degradation of vegetation cover, hydrological processes and reservoir siltation).
- 3. Soil and water conservation in tropical and subtropical mountains; effectiveness and efficiency of traditional and recently introduced techniques and their implementation in rural societies.

Aims

This **scientific congress** aims to show to the international science community the excellent research that has been conducted at Mekelle University and in the Tigray hinterland in the field of land degradation and rehabilitation. Much of this research has already alerted the international community through peer-reviewed publications and congress presentations. By hosting this international congress on the theme at Mekelle we aim to exchange views with international experts in the farmers' field and to provide international scientists an opportunity to discuss in the field with Ethiopian farmers themes which have been published in formal journal papers.

The stakeholders' forum brings under one roof all actors (scientists, stakeholders and beneficiaries) with the following aims:

- To discuss project and conference findings with stakeholders.
- To bring stakeholders in contact with international scientists for mutual benefit.
- To formulate recommendations from stakeholders towards future research.

Invited participants are international scientists, leading farmers and experts from governmental and non-government organizations. Scientists, representatives of donor organizations and decision-makers are particularly invited to have an exchange of views with the farmers and experts.

Objectives

- Evaluate past research efforts in land degradation and rehabilitation in Northern Ethiopia.
- Streamline future scientific efforts in support of sustainable livelihood in the Tigray Region.
- Draw recommendations for capacity building in land management throughout the Tigray Region.

Questions to be addressed

- 1. How have changing environments impacted the type and intensity of geomorphic processes in tropical and subtropical mountains since late Pleistocene times?
- 2. Which factors control land degradation, its on-site and off-site impacts in tropuical mountains?
- 3. What is the effectiveness and efficiency of traditionally and recently introduced soil and water conservation techniques?

Submission of abstracts

An abstract should not be more than 250 words and must include objectives, materials and methods, results and conclusions. The abstract could be for a paper or poster presentation.

Accepted abstracts will be published in the Book of Abstracts, which will serve as conference proceedings.

Accepted papers will be peer-reviewed and submitted to a refereed journal as a special issue.

- Deadline: submission of titles: 15 September 2005
- Deadline submission of abstracts: 15 December 2005.

Feedback

Please inform Mrs. Sofie Bruneel, by e-mail or fax,

(sofie.bruneel@biw.kuleuven.be / 00 32 16 329760), your intention to participate in the Symposium and the tentative title of your paper or poster as soon as possible. Based on replies, the organizing committee will try to secure travel grants for African researchers.

More information:

http://www.kuleuven.ac.be/geografie/frg/

http://www.agr.kuleuven.ac.be/lbh/

The total number of participants will be limited to 50; persons will be admitted on a first come first served basis.

Dear colleague,

I am pleased to announce that the '5th International Congress of the EUROPEAN SOCIETY for SOIL CONSERVATION' will be held in <u>Palermo (Italy)</u>, 25 – 30 June 2007.

The general subject of the congress will be: 'Changing Soils in a Changing World: the Soils of Tomorrow'. The objective is to promote exchange and discussion about the problems that affect the soils due to the pressure of Man on Soils and the Landscape, that year after year is becoming increasingly evident and to stimulate soil awareness in civil society. The Congress is open for soil scientists, educators and policymakers. It will consist of invited lectures, scientific sessions with oral and poster presentations and field excursions and will attempt to advocate interest in soil awareness at all societal levels.

The main topics of the Congress are indicated below. However, we welcome suggestions from prospective participants that may be of general interest: Soil erosion; Soil contamination; Soil sealing by construction activities; Soil compaction; Soil biodiversity; Soil salinization; Soil consumption; Soil policy; Anthropogenic soils.

The Congress will take place in Palermo, at the University Campus. Palermo, whose history dates back to the Phoenicians, is located on the north coast of Sicily and is one of the main cities of Italy. It has a beautiful beach area (Mondello) and can be reached by air, rail and bus from the major cities of Europe. The region has a Mediterranean climate with hot and dry summers and mild and rainy winters and shows many unique historical and tourist attractions with artistic and natural beauties. As a result of these, Sicily receives many tourists.

Take note, A WEB PAGE WITH THE FIRST CIRCULAR AND ALL THE INFORMATION REGARDING THE CONGRESS is being circulated.

In the meantime all correspondence should be sent to:

Professor Carmelo Dazzi

Dipartimento di Agronomia Ambientale e Territoriale Facoltà di Agraria Università di Palermo Viale delle Scienze 90128 Palermo Italy Tel.: 00 39 091 6650247 Fax: 00 39 091 6650229 E-mail: dazzi@unipa.it

We look forward to seeing you in Palermo!

Professor Carmelo Dazzi

ESSC Vice-President

Second Announcement

Under the auspices of: The High Commissioner for Water, Forestry and Desertification Control

The Moroccan Network of Soil and Water Conservation The Moroccan Association of Soil Sciences The Moroccan Association of Geomorphology

Organize

The 14th Conference of ISCO

INTERNATIONAL SOIL CONSERVATION ORGANISATION MARRAKECH

14 to 19 May 2006

In partnership with

The Ministry of Agriculture, Rural Development and Fisheries; The Secretariat of State in Charge of Water; The Secretariat of State in Charge of the Environment; The National School of Forestry Engineers, Salé; Hassan II Institute of Agronomy and Veterinary Sciences, Rabat; The National School of Agriculture, Meknès; The National Institute for Agronomic Research, Rabat; The UNESCO Chair in Sustainable Development, Mohamed V University, Rabat; Faculty of Sciences Semlalia, Marrakech; Faculty of Sciences and Techniques, Marrakech; The Cadi Ayad University, Marrakech.

Information

The Organizing Committee of the 14th Conference of the International Soil Conservation Organization (ISCO) takes great pleasure to invite you to participate in ISCO 2006, which will take place in Marrakech, Morocco, on 14 – 19 May 2006.

This Conference will be a common global forum for experts in various disciplines related to sustainable management of soil and water, particularly in semi-arid environments. Researchers, professors, developers, decision-makers and stakeholders representing public and private institutions and non-governmental organizations (NGOs) will meet to exchange their experience and ideas on soil and water conservation and sustainable development.

The 'sustainable management of soil and water in semi-arid environments' subject matter of the Conference engenders many challenges in terms of sustainable management of natural resources for the planet and adequate food production for a perpetually growing population. The substantial disturbance of natural habitats, which occurred during the 20th Century, reveals the extent of the challenge humanity will face during the new millennium.

Research works, development actions and collaborative activities in relation to sustainable management of soil and water in semi-arid environment will come upon a common ambition to share experiences and thoughts during one week in Marrakech.

We count on you and on your active participation in the 14th ISCO Conference.

We hope to see you in Marrakech, Morocco, in May 2006.

The Organizing Committee of ISCO 2006

SUGGESTED TOPICS OF THE CONFERENCE:

Topic 1. Water Management in semi-arid environments:

- Quantification and modelling of the hydrological balance: estimation of resources in semi-arid environments.
- New technologies for water use rationalization.
- Traditional strategies for water management and future evolution.
- Harvesting and management of runoff waters in semi-arid and arid areas.
- Effectiveness of water storage.

Topic 2. Desertification

- Factors and processes of desertification.
- Consequences of desertification.
- Control of desertification.

- **Topic 3.** Agro-pastoral transformations and land degradation:
 - Changes in soil cover and land use and their effects.
 - Land use and hydrological soil behaviour.
- **Topic 4.** Indicators, measurements and modelling of the various erosion processes in semi-arid environments:
 - Measurement techniques of erosion.
 - Modelling of the ground and soil fertility losses.
 - Follow-up of the processes and the impacts.
- Topic 5. Specific erosion processes and anti-erosion control:
 - Ravine erosion and stabilization of ravines and wadis.
 - Mass movements in semi-arid mountains and watershed stabilization.
 - Wind erosion, sanding and desertification.
- Topic 6. Management, preservation and rehabilitation of soils:
 - Rehabilitation of degraded soils.
 - Organic and mineral fertilization.
 - Farming techniques and land productivity.
 - Agroforestery and soil rehabilitation.
- **Topic 7.** Economic evaluation of land degradation, efficiency and cost of anti-erosive structures:
 - Socio-economic repercussions of land degradation.
 - Evaluation of the LAE techniques, cost/efficiency.
- **Topic 8.** Environmental effects of soil degradation:
 - Safeguarding of resources, landscapes and biodiversity.
 - Safeguarding of water quality.
 - Erosion and silting of storage dams.
 - Relationship between soil erosion and global changes.
 - Desertification.
- **Topic 9.** Institutional, legislative and socio-economic aspects of soil and water conservation:
 - Institutional organization of water and soil conservation.
 - Social, economic and legal problems of soil and water conservation.
 - Management and farming systems and soil and water conservation.
 - Watershed agencies and upstream-downstream solidarity.
 - Training, research and the GCES.

SCIENTIFIC COMITEE

M. SABIR and M. QARRO, ENFI, Morocco; M. BADRAOUI and F. BENCHAKROUN, IAV Hassan II, Morocco; R. BOUABID, ENA Meknès, Morocco; A. LAOUINA, Université Mohamed V, Rabat, Morocco; R. MRABET, INRA, Morocco; Ouafae CHERIFI, Un Cady Ayad, Marrakech, Morocco; J.

ALBERGEL and G. DENONI, IRD, Montpellier, France; J. Dumanski, President and CEO, Canada; S.A. EL-SWAIFY, ISCO Board of Directors, University of Hawaii, USA; J.L. RUBIO, ISCO Board of Directors, Spain, President of ESSC; E. ROOSE, Réseau Erosion et GCES, AUF, France; M.A. NEARING, ISCO Board of Directors, Purdue University, USA; M. GRUNDY, ISCO Board of Directors, Australia; Bob STEWART, ISCO Board of Directors, USA; H. HURNI, ISCO Board of Directors, Switzerland; He WENYUAN, ISCO Board of Directors, P.R. China; R. CASAS, ISCO Board of Directors, Argentina; M.G. COOK, ISCO Board of Directors, USA; S.C.F. DECHEN, ISCO Board of Directors, Brazil, IUSS; F. HOLZWARTH, ISCO Board of Directors, Germany; I. Pla SENTIS, ISCO Board of Directors, Spain; E. REINZI, ISCO Board of Directors, Argentina; D.W. SANDERS, ISCO Board of Directors, UK, WASWC. Max SCHNEPF, ISCO Board of Directors, USA, NRCS; S. SOMBATPANIT, ISCO Board of Directors, Thailand, WASWC; K.G. TEJWANI, Board of Directors, India.

LANGUAGE: The languages during the Conference will be both English and French.

KEY DATES:

 Date for receipt of the intention to participate: 	28 February 2005,
• Deadline for receipt of abstracts and registration bulletin:	30 June 2005,
Notice of acceptance of abstracts:	30 September 2005,
 Deadline for registration at reduced fee: 	30 November 2005,
 Deadline for receipt of accepted articles: 	31 December 2005,
Publication of preliminary programme:	28 February 2006.

REGISTRATION FEES:

•	Northern countries:	
	Early registration:	€ 455
	Late registration:	€ 545
•	Southern countries:	€ 270
•	Northern country students:	€ 200
•	Southern country students:	€ 100.

The fees cover:

- Welcome cocktail,
- Conference proceedings (Abstracts of papers),
- Proceedings on CD-Rom medium,
- Access to different sessions of the Conference,

- Four lunches (on-site buffet),
- Coffee breaks,
- Mid-conference excursion (bus, meal, documentation),
- Translation (English/French/English).

The payment terms and conditions will be specified afterwards.

EXCURSIONS:

- A mid-conference excursion, included in the programme will be arranged on 17 May 2006. This excursion will address aspects related to water, soil fertility and watershed management and desertification in semi-arid environments.
- Ante and post-conference excursions, payable by the participants will be organized during 8 – 12 May and 22 – 26 May 2006. The ante-conference excursion (Marrakech-Taroudant-Agadir-Massa through Tizi N'Test) will tackle the conservation of nature in the High Atlas and Souss regions. The post-conference excursion (Marrakech-Ouarzazate-Zagora-Mhamid through Tizi N'Tichka) will concentrate on water management and desertification in arid environments (valleys of southern flanks of the High Atlas).

ASSOCIATIONS SUPPORTING ISCO 2006 include:

Réseau Erosion et GCES, AUF, Paris; European Society for Soil Conservation (ESSC).

CONTACT ADDRESS:

The organizing committee: <u>isco2006@wanadoo.net.ma</u> Telephone and Fax: 00 212 37861149;

Information about Marrakech: cherifi@ucam.ac.ma

Web site: http://enaweb.enameknes.ac.ma/~isco-06/

SUSTAINABLE PLANNING 2005 SECOND INTERNATIONAL CONFERENCE ON SUSTAINABLE PLANNING AND DEVELOPMENT, 12 – 14 September 2005, Bologna, Italy

Introduction

Following the success of the 'First International Conference on Sustainable Planning and Development' held in Skiathos, Greece in 2003, the decision was made to reconvene the second conference in Bologna from 12 – 14 September 2005.

The Conference will address the subjects of sustainable planning and regional development in an integrated way as well as in accordance with the principles of sustainability. It has become apparent that planners, environmentalists, architects, engineers, policy makers and economists have to work together in order to ensure that planning and development can meet our present needs without compromising the ability of future generations.

In recent years, there has been in many countries an increase in spatial problems that has lead to planning crises. Planning problems are often connected with uneven development, deterioration of the quality of urban life and environmental destruction. The increasing urbanization of the world coupled with the global issues of environmental pollution, resource shortages and economic restructuring, demand that we make our cities places worth living in. On the other hand, problems of environmental management and planning are not restricted to urban areas. Environments such as rural areas, forests, coastal regions and mountains face their own problems that require urgent solutions in order to avoid irreversible damage. The use of modern technologies in planning, such as geographical information systems and remote sensing, give us new potential to monitor and prevent environmental degradation.

Effective strategies for management should consider planning and regional development, two closely related disciplines, and emphasize the demand to handle these matters in an integrated way. This Conference provides a common forum for all scientists, specializing in the range of subjects included within sustainable planning and development.

Who should attend

The Conference will be of interest to planners, environmentalists, engineers, architects, ecologists, economists, policy makers and other government officials, researchers and academics involved in the field of sustainability.

Benefits of attending

- Keep up-to-date on the latest advances in the field.
- Present your research within a unique forum.
- Collaborate with experts from around the world.
- Your conference paper will be reviewed by members of the International Scientific Committee and other colleagues, and once selected, will be rapidly published in book form by WIT Press.
- Your paper will also be permanently archived in the Transactions of the Wessex Institute on our e-Library site, where it will be available to the international scientific community.

Location

Bologna is the capital city of Emilia-Romagna and houses over 400,000 inhabitants. Situated on the south-eastern side of the Po Valley in the foothills of the Apennines, it is only one hour by train from Florence and two hours by train from Venice. The international airport is approximately 15 minutes from the hotel by car or taxi. Few European cities show such a contrast between picturesque medieval times and busy modern commercial life as vividly as Bologna. Characterized by long porticoes, mediaeval towers, XIII – XVII century palaces, monumental churches and the warm red colour of the brick buildings, this is interspersed with old arcade streets lined with busy shops, modern theatres and office buildings.

Accommodation

Special accommodation rates have been negotiated at the 'Royal Hotel Carlton' on behalf of our delegates. You should make your reservation as soon as possible in order to benefit from these rates.

Conference Venue

The Conference will be held at the 'Royal Hotel Carlton', located in the historic and commercial centre of Bologna. This superior first class hotel is surrounded by graceful gardens and is in a prime location 100 m from the Central Railway Station and just 5 km from Bologna International Airport. The hotel boasts rooms with a range of luxury facilities.

Registration and conference Fees

http://www.wessex.ac.uk/conferences/2005/spd05/index.html

SMIA05: 2ND INTERNATIONAL CONGRESS WITH INNOVATION FAIR, SUSTAINABLE MANAGEMENT IN ACTION (SMIA), 19 - 20 September 2005, University of Geneva, Switzerland

The Association Sustainable Management in Action (SMIA), Lausanne and the University Centre of Geneva for Human Ecology and Environmental Sciences (CUEH) are pleased to invite you to attend the 2^{nd} International Congress with Innovation Fair, Sustainable Management in Action (SMIA05). The event will take place from 19 - 20 September 2005 at The University of Geneva, Switzerland.

The benefits of sustainable management are becoming increasingly evident: in companies it enhances competitiveness, human capital, innovating capacity and business strategies. In national economies and across the globe it sets up a sustainable framework for economic and social development.

During an intensive two days, SMIA05 will promote deeper understanding of sustainable management, while presenting promising actions and aspects:

Entrepreneurial development, stimulation of employees, economies of scale provided by the Internet, SME-development, sustainable management systems; win-win management in developing countries, innovative environmental technologies, sustainable financing, marketing and tourism.

It will provide a unique source of essential information and expertise, while stimulating constructive interaction between delegates. Please join our innovative event and meet change leaders from practice and science from all over the world. Attending SMIA05 will also be an opportunity to discover a city of unique charm with a rich cultural tradition and a long tradition as an international meeting-place in the field of sustainability.

Plenary Sessions

- <u>Concepts and strategies in sustainable management</u>: climate change, corporate governance, dialogue with NGOs, co-operation and development networks, market mechanisms, sustainability conscious shareholders and regulations.
- <u>Tools of sustainable management</u>: Benchmarking, eco-design, eco-efficiency, ecolabels, life cycle assessment, management of biodiversity, risk minimization, sustainable procurement, sustainable reporting, sustainable management of personnel and of their health, sustainable management systems.

- <u>Technological innovations in sustainable management</u>: Clean production, energy- and material efficiency, renewable resources, protection of air and water, noise protection and recycling.
- Forum for Small and Medium Enterprizes (SMEs): Benefits of sustainable management.

Workshops

Sustainable management systems and certification, sustainable management in developing countries, sustainable funds and financing, sustainable energies, innovative environmental technologies, e-innovation (Internet), sustainable SMEs, hospitality and tourism sustainability, sustainable marketing.

Registration and conference Fees:

http://www.smia.info/index.html

Reminder for the next issue:

Do not forget to send in your details of the following information:

- (i) Reviews of recent conferences.
- (ii) Recent grant awards.
- (iii) Newly enrolled Ph.D. research students, title of their research topic and names of research supervisors.
- (iv) Recent staff institutional movements/promotions.
- (v) A reference list of your 'new' international refereed scientific journal papers, which you have recently published (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.

NOTE: The deadline for material for the next Issue is 01 October 2005

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 cidessus, 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 científicos, 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
٠	Three years	€ 25.00

Students:

50 % reduction on above rates for three years

Your supervisor must provide written confirmation of student status

I wish to pay my membership contribution by (please mark appropriate box):

 Eurocard / Mastercard
 Visa Card
 Visa Card
 Bank Transfer
 Branch address: Fortis Bank, Zonnestraat 2, B-9000 Gent, Belgium; International transaction codes: IBAN - BE29 0014 5139 8064 and BIC - GEBABEBB; Account name: European Society for Soil Conservation; Account number 001-4513980-64
 CARD NO.
 EXPIRY
 Amount: €
 Date:
 Signature:
 NAME:
 ADDRESS:

E-MAIL:

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.