NEWSLETTER

3/2009

ESSC EUROPEAN SOCIETY for SOIL CONSERVATION

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Runoff plots and soil conservation terraces in Zhigui, Hubei Province, China (photo from Anton Imeson, Amsterdam, The Netherlands).

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Contents

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

A World Soil Conservation and Protection Agenda for the ESSC
Soil Conservation To be or not ?

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What do the members of the Society think about European soil policy? This question was put to me by a leading person in the Chinese Soil Conservation Service, so this Guest Editorial is an opportunity to find out. Although we are a European Society, this is a time of globalization. Governments and industry has gone global in efforts to make use of the world's resources, so maybe we should follow their lead. Working with our colleagues in North America and China (and everywhere else of course), to find answers to some of the seemingly intractable problems we all face in soil conservation is a necessity. International organizations and governments have organized themselves in ways that have not yet resulted in the proper governance of world resources.

Inside the ESSC, we are aware that the answers all lie in the soil and ourselves. Should the Society be an observer reporting on the disappearance of the soil and its functions, as people drown in floods and get buried in landslides and think it is just climate change? Or should we take up arms against a soil of troubles, and by opposing can we end them?

Our Society is a source of scientific excellence and has great achievements in explaining and promoting sustainable land use and management. It has been proactive in identifying problems and organizing state-of-the art workshops which provide excellent knowledge that meet real world needs. Our data, knowledge and understanding and membership give the ESSC scientific legitimacy and the power to bring about changes for the common good. We could help set soil conservation goals and targets based on real data and indicators that actually involve restoring soil functions and reducing land degradation and desertification. We could develop verifiable alternatives to current indicators of biodiversity, carbon sequestration and desertification and thus contribute to a global monitoring programme for land degradation and soil conservation. In 2002 Hurni and Meyer gave us the vision of a World Soil Agenda, but since then the context has changed and the urgency has become greater as is explained in the findings at the Iceland conferences on soils and society (Arnalds and Arnalds, 2005). We have a great opportunity, because the public at large through the media has become aware of the consequences of the environmental impacts of deforestation, land use change and the impact of the things being done to the environment. People and society

will not put up with being perpetually flooded, because the soil now only absorbs 1 cm of water instead of 20 cm a few years ago, when they realize this has been done to them.

Many or most of us are engaged in policy relevant work. In our hearts we might feel that soil conservation will never work within the current framework of policies. The basic principles of soil conservation require an integrated catchment approach, such as that applied in China, Australia, New Zealand and of course the USA. To protect people from flooding, to prevent loss of biodiversity and to stop climate change and desertification, as well as to protect property and protect natural resources, a land and soil protection policy must come first and be detached from national and global politics by means of ethical arguments and humour. To make progress in this, we must work internationally.

The impact of our economy and life on the world's soils is immense and this has been demonstrated by many in the Society who have shown how recent erosion in Europe was a result of the recent implementation of industrialization in agriculture. John Boardman, Hans Rudolf Bork, Artemi Cerda, John Quinton, Mike Fullen, John Thornes, as well as many colleagues too numerous to list and whose names are recorded in the ESSC Directory (Rubio et al., 2005), Boardman and Poesen (2006), Fullen et al. (2006), in all of the Soil Strategy Task Groups (DG Environment Soil Technical Working Group, 2004) and in SCAPE (2006) (Imeson et al., 2007). Hundreds of their investigations have demonstrated in countless case studies how soil erosion is a consequence of soil degradation, soil compaction, remodelling the land and pollution. We were warned about this by Heidegger and many others about this. Ten years ago the 'UK Flood Studies Report' explained exactly what the causes of flooding and erosion were, but today the media explains flooding as being caused by heavy rainfall and climate change. Runoff from agricultural land and farmers fields is never explained as a cause.

Erosion and flooding could be stopped virtually overnight, or at least within five years if the hydrological functions of the soil and landscape were restored. With the support of insurance companies, the media, NGOs and the increasing understanding of citizens and the support of other many other allies, including those working on Transition towns, IBM (local energy provision), the IUCN Environmental Law and the media, we could all contribute to the development of new design paradigms which ethically legitimizes and requires real environmental protection that cannot be escaped.

Soil Change

A few months ago the American Society for Soil Science established a new Working Group on Soil Change. The next meeting will be in November 2009 and Susan Andrews can provide information. The soil changes they have in mind are recent ones caused by human activity. The initiative focuses on the causes and consequences of soil change in relation to soil function and quality. The USA and Europe face similar challenges and this Working Group could be a forum to develop joint programmes and hold joint meetings. For more information, please contact: susan.andrews@gnb.usda.gov. Those of us thinking of attending the November Conference might like to prepare a paper or contact Susan about this initiative, which is a great opportunity for us to help each other.

Soil Conservation and Protection in China

In China soil conservation and protection have been high on the agenda for thousands of years. The EUChina Rivers Project is an example of a programme supporting the exchange of experience between soil conservation and management practitioners between China and

the EU. It is interesting because the 'Water Framework Directive' and 'Soil Strategy for Europe' are more like responses to problems caused by agriculture and pollution (in which erosion, compaction, loss of organic matter and other things are somewhat cynically presented as threats). China has developed a high level of understanding of these issues:
http://www.euchinarivers.org/en/components0101.htm

The Changjiang Pearl River Watershed Rehabilitation Project (CPRWRP) is implementing and promoting soil conservation and land use change in the middle and upper Yangtze River basin. The EU China River Basin Management Programme (RBMP) is assisting the CPRWRP and promoting collaboration between the EU and China on integrated river basin management. As part of this collaboration an analysis was made by the RBMP of the experience on soil and water conservation in Europe that may be relevant for the Upper Yangtze Basin. The analysis identified areas in Europe that have or had similar problems and identified the best practises and policies that have been effective. Because similar physical processes and soil conditions are found in both regions and the methods of soil conservation and protection are universal, the European experience and practises may be valuable to China and vice-versa. It has become apparent that Europe does not have any integrated management that includes soil conservation and reducing sediment reaching rivers. There are 10 years of data on these and many other sites that are of great value for modelling or understanding processes. Chinese farmers are expert in managing erodible soils in ways that prevent sediment loss.

Soil conservation project in Yiling, Hubei Province, China (October 2008). Soil erosion occurred as a result of deforestation. An afforestation programme was implemented to decrease sediment reaching the river channel.

Wischmeier plots are being used in Zhigui, Hubei Province, China (October 2008) to study the effects of different kinds of terrace construction on erosion rates and processes.

Restoring the hydrological and aesthetic functions of soil and land in China and Europe

It is common knowledge that sediment yields are low from areas under natural or complete (≥75%) vegetation cover which is in an ecologically healthy condition. Today erosion and overland runoff are increasing problems that perhaps are being enhanced by climate change, but which are definitely mainly due to agricultural practises that make soil compact, degrades soil structure and leaves agricultural land without cover crops during critical periods of the year. There are many examples of successful practises that manage this. In China and Europe the benefits of extra water availability that is being provided as a benefit of soil conservation and protection can also be quantified. The benefit is also aesthetic and terraces are a form of landscape architecture that creates a harmonious experience of life. The Chinese do not construct plots like those in the photo as cheaply as possible. They try to make them beautiful and perfect, constructing the best they can.

The amount of water that can be stored in the soil and on the slopes is a key benefit. This can be measured in very many ways, ranging from remote sensing to field measurements using rainfall simulation or field experiments. Permeability, infiltration rate and soil depth are excellent indicators of how the soil water regulation function is being performed and how this relates to erosion and the soil water reservoir capacity. It was calculated by the Project office team (Andersen et al. 2009) that at least 10 times the amount of water is stored in the soils upstream of the great Three Gorges Dam Dam compared with the reservoir itself!

Land use and soil management policy should be carried out in ways that are harmonious with the maximization and optimization of the soil water regulation functions of the land. This would have the additional benefit that more water could be made available for power generation, as less would be needed for flood protection. The requirements of farmers and agriculture need to be managed by a soil conservation service who understand the processes and changes. Otherwise it is just like over-fishing and there will always be a 'tragedy of the commons.'

Conclusions

Soil and land conservation and protection are cross cutting issues that involve everyone. Our vision might include a Ministry of Soil, Water and Land Resources that makes sure that catchments regulate the provision of all kinds of services and resources in a sustainable way. Our vision could also seek inspiration from other countries such as China and New Zealand, where there are policies of integrated watershed management being developed with the aim of creating harmonious landscapes. On the other hand, we could learn from the USA, all the laws in the world won't make a difference if farmers are exempted from them!

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For further information, please consult:
3D Environmental Change: http://www.3d-ec.com

REQUEST TO ESSC MEMBERS

The Chinese Soil Conservation Service would like me to report on soil conservation at their Annual meeting in late September 2009. They want to know the opinion of ESSC members regarding European Soil Policy.

I would be grateful if you could therefore answer the following two questions and send your answers to: anton.imeson@gmail.com

Q.1. What is your opinion of EU policy on soil conservation and protection?
Q2. What do you think that the EU or your government could do to achieve better soil conservation and protection?

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DARWIN'S WORMS

(Opinion Column published in the Newspaper 'El Mundo,' 26 March 2009)

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'Old fox' or 'old astute' are names given to Charles Darwin by two of his most fervent admirers, Stephen Jay Gould and Richard Dawkins, in commenting on Darwin's last book dedicated to the activity of the worms in the soil. The book is entitled 'The formation of vegetable mould through the action of worms, with observations on their habits' and it was published in 1881, one year before Darwin's death. The positive evaluation and admiration of Gould and Dawkins does not attract the same level of appreciation as most of Darwin's writings. Of course, the most famous works are directly connected with the theory of evolution. In the writings on Darwin, the book on worms is seen as a "minutiae,""insignificant," "a curiosity" or "extravagant" or it is considered as an inappropriate final work of such a great thinker. But they are mistaken! Affable and astute Charles Darwin said goodbye, maybe with a final great wink accompanied by an ironic smile.

The book has two reading levels. In the most immediate, the author, with his masterful style of writing with simplicity and clarity, describes to us the work of worms in the creation of fertile land and in the immense importance of those scarce centimetres of soil in the creation of life on earth and in the operation of the biosphere. Darwin, starting from his ingenious and beloved experiments, meticulous and careful observations and from the information that he requested and received from an enormous net of collaborators, explains to us some simple, seemingly insignificant and hidden processes that happen under our feet. Worms pass tonnes of earth through their digestive tracts, this earth is excreted as richer and more fertile soil. This is the immediate level of the book. To Darwin, the seemingly insignificant work of some organisms is described in the slow creation and improvement of the land.

The second level, and more significant, is a model in which we can interpret the history of the world through the observation of minuscule processes, that largely pass unnoticed but have the enormous dimension of time to originate major changes. Darwin uses this brilliant example to reinforce one of the aspects most difficult to visualize in the evolution of life on

Earth. Since we lack the perception of deep time, we find it difficult to accept and understand the enormous changes that can be produced by repeated small actions throughout time.

Therefore, at the end of his life, the 'old fox' says goodbye, he closes the circle and it returns to the beginnings of his scientific activity and in his way of being. A great circle that he closed with the meticulous observation of the slow and imperceptible (as the worms in soil) to create one of the most transcendent explanations of life on Earth.

LAS LOMBRICES DE DARWIN

Viejo zorro o viejo astuto llaman a Darwin dos de sus más fervientes admiradores, Stephen Jay Gould y Richard Dawkins, por su último libro dedicado a la actividad de las lombrices en el suelo. El libro se titula "La formación de mantillo vegetal a través de la acción de las lombrices, con observaciones sobre sus costumbres" y fue publicado en 1881, un año antes de su muerte. La valoración positiva y de cómplice admiración de Gould y Dawkins no coincide con la apreciación de la mayoría de sus biógrafos ni con la displicente valoración general de éste, su último libro, en comparación con sus grandes y famosas obras más directamente conectadas con la teoría de la evolución. En los escritos sobre Darwin, el libro sobre las lombrices es visto como una "minucia", "insignificancia", "curiosidad", o "extravagancia" o es considerado como una obra no apropiada como colofón a la altura de un gran pensador. Pero se equivocan. El afable y astuto Charles Darwin se despidió con un gran guiño final quizás acompañado de una irónica sonrisa.

El libro tiene dos niveles de lectura. En el más inmediato, el autor con su magistral estilo de contar las cosas con sencillez y claridad, nos describe la labor de las lombrices en la creación de suelo fértil y en la importancia trascendental de esos escasos centímetros de suelo en la creación de vida sobre la tierra y en el funcionamiento de la biosfera. Darwin, a partir de sus ingeniosos y entrañables experimentos, de sus detalladas y amorosas observaciones y de las informaciones que solicitaba y recibía de toda una enorme red de colaboradores circunstanciales, nos explica unos procesos sencillos, aparentemente insignificantes y ocultos, que ocurren bajo nuestros pies. Las lombrices hacen pasar a través de su tracto digestivo toneladas de tierra que son excretadas en forma de suelo más rico y más fértil. Este es el nivel inmediato del libro. En él se describe la labor aparentemente insignificante de unos organismos en la lenta creación y mejora del suelo.

El segundo plano, y más significativo, es un modelo de cómo podemos interpretar la historia del mundo a través de la observación de procesos minúsculos que pasan desapercibidos pero que cuentan con la ingente dimensión del tiempo para originar cambios profundos. Darwin utiliza un ejemplo genial para reforzar uno de los aspectos más difíciles de visualizar en la evolución de la vida sobre la Tierra. Al faltarnos la dimensión del tiempo profundo nos cuesta trabajo aceptar y entender los enormes cambios que pueden producir pequeñas acciones repetidas a lo largo del tiempo.

Así pues, al final de su vida, el "viejo zorro" se despide, cierra el círculo y vuelve a los comienzos de su actividad científica y de su forma de ser. Un gran círculo que cerró con la minuciosa observación de lo lento e imperceptible (como las lombrices) para crear una de las más trascendentes explicaciones de la vida sobre la Tierra.

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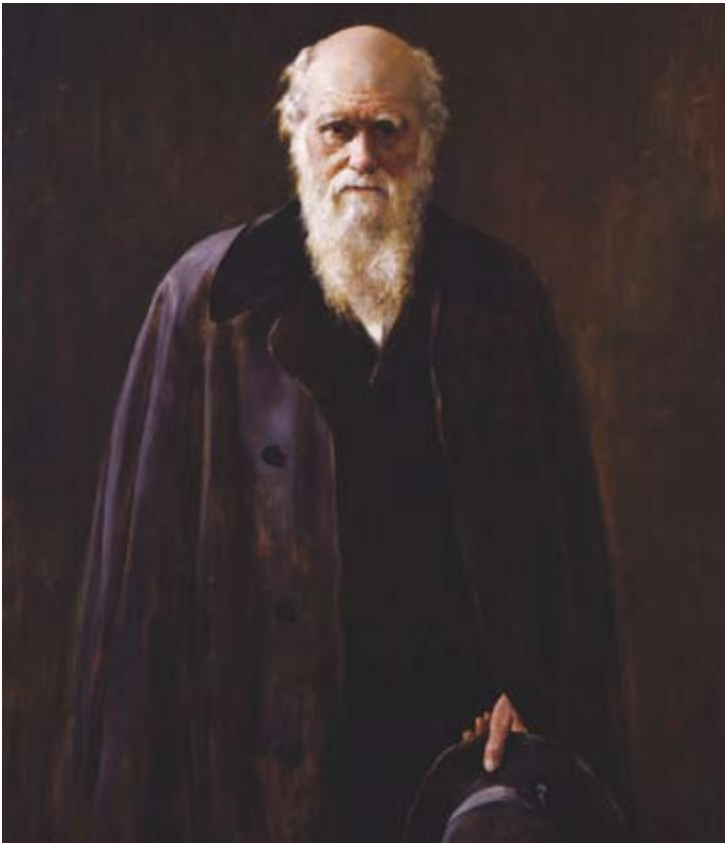

Portrait of Charles Darwin FRS in 1881.

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Editor's note

This is an apt time for a commentary on the contribution of Charles Darwin to Soil Science, as 2009 marks the second centenary of his birth. Charles Darwin was born on 12 February 1809 in Shrewsbury (UK) and died on 19 April 1882 in Downe, Kent (UK). His classic book 'The Origin of Species' in 1859 laid the foundations of evolutionary theory. After a State Funeral, Charles Darwin was laid to rest in Westminster Abbey (London), near Sir Isaac Newton.

FLAGS AS NATIONAL SYMBOLS OF SOIL

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It is perhaps paradoxical that while many countries pay little attention to their soil resources, soils are often used as representative symbols on national flags. For instance, black is often used to denote fertile soil. Red and, to a lesser extent, orange and yellow are also used to denote national soils. The most common colour is green, representing vegetated and fertile land. Therefore, of 260 flags of countries and territories listed on the 'Flags of the World web site,' 44 (16.9%) flags denote 'land resources' in some way. Perhaps soils play a more important role in national consciousness than we realize. Countries with these national colours are:

Black (Estonia, and the Commonwealth of Dominica).
Green (Bangladesh, Belarus, Benin, Bolivia, Burkina Faso, Djibouti, Ethiopia, Eritrea, Equatorial Guinea, Gabon, The Gambia, Grenada, Guinea, Guyana, Jamaica, Kuwait, Lithuania, Mali, Namibia, Nicaragua, Niger, Nigeria, Oman, Seychelles, Sierra Leone, Solomon Islands, St Kitts and Nevis, St Vincent and the Grenadines, Sudan, Suriname, Tajikistan, Togo, Uzbekistan, Vanuatu, Zambia, and Zimbabwe).
Orange (Armenia, Ivory Coast and Niger).
Red (The Gambia, Lithuania, and Trinidad and Tobago).
Yellow (Benin, Cameroon, Ecuador, Eritrea, Ukraine, and Venezuela).

Reference

For more information on vexillology (the study of flags), please consult the 'Flags of the world' web site:
http://flagspot.net/flags/

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The Newsletter and supporting Ph.D. research

Editor's note:

At the ESSC Council meeting in Lleida (Spain) in September 2006, the interactions between the ESSC and younger soil scientists were discussed (see Newsletter 2006/3, p. 5-8). It was decided that the ESSC should be more proactive in its support of younger scientists. As part of that initiative, we welcome articles from both Ph.D. researchers and supervisors. We would like to hear from recent Ph.D. graduates; what advice and experience do you have which you would like to share with your colleagues in earlier stages of their research? We would also like to hear from current Ph.D. researchers; what are the factors which both encourage and limit progress? What are the particular challenges facing part-time Ph.D. researchers? We also invite contributions from experienced Ph.D. supervisors. What experience would you like to share with less experienced colleagues? If you are a less experienced Ph.D. supervisor, what supervisory issues do you find challenging? In short, please tell us "what I know now, which I wish I knew then!"

New Ph.D. theses

Editor's note:

The citation details of Ph.D. theses by ESSC members since and including 2004 have been added as an additional page to the ESSC web site. To date, 46 Ph.D. theses are quoted. On the ESSC web site, please look under 'Publications.' Please forward the citation details of any additional Ph.D. thesis completed since the year 2000 by an ESSC member to any of the Editorial team. We will then add the thesis citation details to the web site. No additional Ph.D. theses have been reported for this issue.

Recent publications by ESSC members

Included are the citation details of papers and books produced by ESSC members. These provide a growing resource for exchange of valuable information to both research and teaching. The cumulative citation list is being added to and updated on the ESSC web site. Students of ESSC members (both undergraduate and postgraduate) are increasingly accessing this facility in their literature searches. Currently, the number of quoted publications cited on the web page is 463. 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.

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Book Announcements

New publication on Desertification, Land Degradation and Drought (DLDD)-Soil Security

Securitizing the Ground, Grounding Security (UNCCD Issue paper No. 2) was launched on 14 June 2009 at the event 'Land Degradation and Public Security,' during the 17th Session of the Commission on Sustainable Development (CSD, 17) in New York. The event was co-organized by the UNCCD and the Ministry of the Environment and Rural and Marine Affairs of Spain.

Securitizing the ground – Grounding Security is a study that posits a paradigm of **soil security** in the context of the present global crises and challenges.

Authors: Hans Günter Brauch and Úrsula Oswald Spring.

Scientific Reviewers: Gregoire de Kalbermatten, Jose L. Rubio, Elisabeth Huber-Sannwald, Tulio Arredondo Moreno, Marcos Montoiro, Sergio Zelaya.

The study can be accessed at:
http://www.unccd.int

EXECUTIVE SUMMARY

The present severe economic and financial crisis has resulted in the collapse of banks, insurance and industrial companies, shrinking world trade that trigger protectionist trends, leading to rising unemployment. Developing countries may again pay the highest burden due to lacking financial resources for job creation, credits and food imports. This is affecting rural communities and the urban poor, who are unable to obtain the resources for survival. Since 2007, the massive food price increases due to speculation and decline of food reserves have resulted in violent food riots in 2008 that caused at least 200 deaths. According to FAO another 40 million people have been pushed into hunger in 2008 and the number of undernourished people in the world reached 963 million. Over 24,000 people die of hunger-related causes daily and the financial and economic crisis could push even more people into hunger and poverty. Thus, food security has moved to the top of the international agenda.

As a result of population growth, demand for food will increase further, primarily in developing countries. In a 'business as usual' scenario of climate change food supply will decline especially in drylands as crop yields are expected to fall, but also due to drops in exports from major grain producing countries (USA, Canada and Australia). With the projected decline in fish stock due to overfishing and climate change impacts the demand for food grown on scarce fertile land will increase. Additional pressures include changes in the diet by growing meat consumption and the competition between the production of food and biomass for electricity generation and biofuels as substitutes for fossil energy sources. This has already triggered famines and an increase in forced migration from drylands that experience a major population growth and decline in food supply. Repeated famines and a decline in food security have resulted in violent clashes and/or civil wars (e.g. in Darfur that is both in the Sahel Zone and in the Nile Basin). The realization of the food-related Millennium Development Goals is in jeopardy.

During the 20th century the process of desertification has continued; the land and the quality of the soil have degraded. While GLASOD claimed that 15% of the land surface was degraded, the GLADA reports referred to 24%. In the 21st century, anthropogenic and climatic factors will further degrade the soil both due to poverty (overgrazing and overuse of the land), market-driven expansion of agricultural production and depletion of aquifers in drylands. As a result of climate change the number and intensity of droughts will increase and thus the vicious circle of drought, forced migration leading to political crises and conflicts may exacerbate threats for human, national and international security.

In the past century the world population tripled and water consumption increased six times. There is a high probability that climate change impacts, growing water stress, biodiversity loss and increasing desertification, land degradation and drought (DLDD) may all contribute to future food crises, unless extraordinary and innovative strategies, policies and measures are launched now for coping with these multiple security relevant challenges that may negatively reinforce each other threatening the survival of billions of people, most particular in drylands.

On the background of these dramatic trends, soil security emerges as a constitutive paradigm of human, national and international security. It calls for a political process of securitization of DLDD issues and the development of effective international strategies, national policies and local measures based on a diagnosis of complex interactions between natural and societal causes. In this study:

- **Securitizing the ground** implies creating a wider global political awareness of DLDD

and their societal consequences, making combating DLDD a key international political commitment and upgrading DLDD to the security realm.

- **Grounding security** includes reactive and proactive short-, medium- and long-term strategies for coping with soil insecurity by exposing its manifold societal, environmental and economic consequences.

Efforts towards a proactive security policy and related measures on DLDD are more effective for reducing the costs of potential political security threats that have been identified by institutions such as the UN, OSCE and NATO.

As DLDD may contribute to migration, societal crises and conflicts, violent societal outcomes may be avoided by addressing their causes, effects and impacts. Recognizing future challenges under current climate change scenarios and contributing to a process of political co-operation, anticipatory learning can forge tools of crisis prevention. This must be promoted through a conceptually-focused and policy-oriented intergovernmental debate of which the United Nations Convention to Combat Desertification (UNCCD) can be an important part. The subsidiary bodies of UNCCD (the Committee on Science and Technology (CST) and the Committee for the Review of the Implementation of the Convention (CRIC)) offer a suitable framework for independent scientific and expert assessment, dialogue and policy co-ordination.

Anticipatory learning requires a debate on longer-term challenges and a mutual understanding of relevant responses. The study advocates a multidisciplinary search for entry point strategies to cope both with the root causes of conflicts and their socio-economic implications. Partnership building measures must express political commitment to tackle the root causes of insecurity in the economic and ecological realm and should aim at:

- Creating awareness on these challenges among decision makers and the public.
- Analysing and monitoring in detail the complex interrelationships among key problem areas.
- Initiating regional impact studies and specific mitigation strategies against DLDD in support of existing regional programmes.

A political move by governments and international organizations to securitize DLDD should prioritize the upgrading UNCCD policy measures to enhance soil security with a rights-based approach in order to secure the livelihoods and survival of affected, often poor and marginalized people, primarily in developing countries whose source of livelihood is threatened by multiple crises and who often lack the financial and administrative capacities of a strong state.

The Parties to the Convention may consider, in an agreed timeframe, several proactive policies and regulatory measures such as:

- Demand management and efficiency improvements.
- Provide more opportunities for environmental services and food with fewer resources.
- Transition to alternative livelihoods and to a sustainable 'green' economy.
- Respond to environmentally-induced migration.
- Adopt mechanisms to prevent, avoid and resolve environmentally-induced conflicts.

Globally agreed active co-operation policies on sustainable development in agriculture, rural development, industry, tourism, transport and urbanization must factor in soil and land scarcity to address the global and regional challenges. At a national level, long-term oriented

and proactive local to national policies of sustainable development to combat DLDD require enhanced territorial governance to promote actions against soil erosion and desertification, to increase water management, to offer employment in rural areas and sustainable agricultural policies. Article 10 of the UNCCD treaty provides a blueprint for policy-guidance through action programmes. The global partnership and framework envisaged by the 10-Year UNCCD Strategy may yet become an effective policy platform for human and societal security in affected regions, contributing to conflict prevention and reducing the costs for coping with the consequences of missed opportunities for multilateral co-operative policies in the last decades.

Within its 10 years strategy, adopted in Madrid (2007), the UNCCD pursues five operational objectives which may be strengthened by the following policy recommendations on securitizing the ground and grounding security.

1. Networks of researchers on DLDD should be established in Africa, Asia and Latin America, besides ARIDnet and Desertnet, on the links of soil security and societal outcomes.
2. In the framework of the Earth System Science Partnership, a fifth science programme specifically addressing the research needs related to DLDD should be established.
3. An interdisciplinary scientific panel on DLDD should be established by the UN General Assembly to assess research and to publish an assessment of DLDD knowledge.
4. These proposals should strengthen the CST to translate knowledge into policy advice for action as part of a proactive strategy of sustainable development.
5. Specific studies should be initiated and funded by UNCCD member countries on:
   a) DLDD-induced forced migrations on desertification and migration.
   b) A systematic and integral study on soil security and societal outcomes, including forced migration, crises and conflicts by developing scenarios for coping with DLDD.
   c) A study on the cost of inaction in combating DLDD with estimates on the socio-economic costs of increased forced migration flows and of emergency measures coping with natural hazards, food and water insecurity and potential conflicts.
6. Dissemination of information on soil security issues of DLDD by the UNCCD Secretariat in co-operation with leading universities and research institutes.
7. Documentation of soil security hotspots by publishing research, best practises and experience as scientific papers and technological manuals that may support preventive actions
8. Establishment of an interagency land network that may lead to a new epistemic community on DLDD issues, to foster international co-operation among UN and other agencies.
9. International workshops and symposia contributing to an exchange of practical experiences and knowledge on the best forms of territorial governance to promote soil security.
10. International initiatives for coping with desertification and migration may be advanced by pro-active strategies on desertification and its impact on migration. The EU and USA may fund technological proposals on the potential of renewable energies in drylands.
11. The countries affected by DLDD may enact legislation on soil security issues that support improved agricultural and land management practises.
12. Strengthening capacity on soil security issues and balancing capacity building based on traditional and innovative knowledge.
13. Training on best practises for conflict settlement at the sub-regional and national levels and linked to the adjustment process of the UNCCD National Action Programmes.
14. International financial institutions, regional organizations and national donors may

identify thresholds and benchmarks of soil security for allocating financial resources for land and water development projects for local areas.

15. Climate-related finance mechanisms may offer additional resources for affected rural areas for mitigation and adaptation to climate change, thus contributing to soil security.
16. Local area development programmes in regions affected by soil insecurity should promote sustainable livelihoods and generate income (micro-credit, insurance, land use micro- investments) for vulnerable groups at risk of social destabilization due to DLDD.

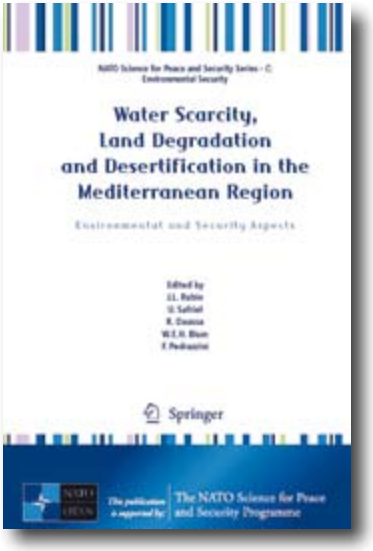
Water Scarcity, Land Degradation and Desertification in the Mediterranean Region. Environmental and Security Aspects

Proceedings of the NATO Advanced Research Workshop on Water Scarcity, Land Degradation and Desertification in the Mediterranean Region: Environmental and Security Aspects.

Valencia, Spain, 10-11 December 2007.

Series: NATO Science for Peace and Security Series.
Subseries: NATO Science for Peace and Security Series C: Environmental Security .

J.L. Rubio, U. Safriel, R Daussa, W.E.H. Blum, F. Pedrazzini (Editors). (2009), VI, 158 pp., Softcover. Springer, Berlin (ISBN: 978-90-481-2525-8).



This book is the outcome of an international workshop promoted and organized by the 'Organisation for Security and Co-operation in Europe' (OSCE) and by the 'Science for Peace and Security' Programme of NATO. Its focus is the emerging issue of environment and security aspects in terms of water scarcity, land degradation and desertification in the Mediterranean region. This region has been identified as one of the most vulnerable areas with respect to environmental security threats. Conversely, due to its climatic and topographic features, the cross-boundary dimension of the Mediterranean Basin, and its mix of cultural, political and economic diversity, the region also represents an area that poses the potential for social and political instability.

The Euro-Mediterranean Region is affected by frequent severe environmental events, such as forest fires, floods and landslides, droughts, torrential rains, heat waves and water scarcity. The southern and eastern shores of the Mediterranean undergo even

more harsh environmental impacts affecting the availability of water resources and soil quality and productivity. These environmental conditions contribute to the development of negative processes, such as social marginalization, conflicts and migrations. The book includes scientific analysis and evaluation on these topics, together with the views of policy-makers. The outputs of the discussions and recommendations of four Working Groups are provided as summaries of the dialogue and the exchange of ideas between experts and representatives from the affected countries and the international organizations competent in the matter.

Key topics:
NATO and OSCE dealing with environmental issues.
Natural and man-induced environmental stress in the Mediterranean region.
Consequences of environmental degradation on social and political stability.
Desertification and security in the Mediterranean region.
Factors affecting the environmental security in the Mediterranean region.
Land degradation.
For more information please visit:
http://www.springer.com/environment/book/978-90-481-2525-8

Book Review

Siegmar-W. Breckle, Aaron Yair and Maik Veste (Editors) (2008) Arid Dune Ecosystems. The Nizzana Sands in the Negev Desert. Ecological Studies 200, Springer, Berlin. (ISBN: 978-3-540-75497-8)

Sand dune deserts have captured the imagination and aesthetical images of human beings as a very special and unique terrestrial ecosystem. Dunes bring to our minds images of very harsh and extreme conditions for life. Connotations of scarce presence of living organisms, limited biotic processes and almost sterile lithological components, come to our minds as a first impression. But this is an erroneous perception. Dunes are dynamic, intriguing and interesting natural systems full of fascinating insights. They are not limited to arid zones of the world but are also developed in more humid biomes, as on many coastlines. There are many biophysical factors, circumstances and processes influencing dune systems and development. Dunes systems are the expression of the particular conjunction of specific conditions, such as climatic type, wind regime, geomorphological components, dynamic genesis and evolution, specific biodiversity, biological crust formations and the influence of human activities.

The Book edited by Siegmar-W. Breckle, Aaron Yair and Maik Veste offers a comprehensive view of the dune system of the Nizzana area situated in the eastern margins of the Sinai Desert (Israel). The Nizzanna Research site is a long-term research facility that has accumulated interdisciplinary knowledge through time. This publication gathers important

holistic information that can be considered as a case study for others dune systems around the world. The Book is organized into four main sections. The Part 1 covers the geological, geomorphological, pedological and climatological background of the Nizzana area, including land use and desertification processes. Part 2 is dedicated to ecosystem patterns, including the characteristics and spatial distribution of vegetation cover, the specialised fauna adapted to extreme low water availability conditions and the description of the biological topsoil crust and its important functions in terms of stabilization, improving nutrient cycling, assisting germination and regulating the water regime. Part 3 covers many ecosystem processes acting with different intensities and spatial patterns. The various chapters are dedicated to microclimatic characteristics, sand transport and dune movements, soil processes, erosion and runoff mechanisms, nutrients dynamics, biomass characteristics and modelling and the role of microbiotic soil surface crusts.

Section four is a summary-synthesis of the most relevant aspects presented in the Book. This part includes considerations on rehabilitation and conservation aspects, particularly in relation to the vulnerability of dune systems to desertification processes and climate warming trends. If you are scientifically, academically or professionally interested in desert dune systems or if you have the intellectual curiosity in the complex and fascinating world of dunes, this is a book you should not miss.

José Luis Rubio

Announcements

A humanitarian initiative of the ESSC in support the 'Maison Shalom' of Burundi

With the publication on the book of proceedings of the peer reviewed selected papers presented at the 5th International Congress of the European Society for Soil Conservation (Palermo, Italy, 25-30 June 2007), the Organizing Committee of the Congress, consisting of Carmelo Dazzi (Chairman), Vincenzo Bagarello, Edoardo Costantini, Vito Ferro, Lucio Gristina, Giuseppe Lo Papa, Salvatore Monteleone, Luigi Pirrone and Ignazio Poma, completed post-Congress tasks.

With great satisfaction, the Committee verified that the organization of the Congress was so carefully managed that it was possible to close the Congress with a positive budget of €1,245. On behalf of the ESSC, the Committee unanimously decided to award these funds to charity, specifically the 'Burundi Project.' This Charity is also supported by the Faculty of Agriculture of the University of Palermo.

At a simple ceremony on 19 May a cheque was delivered to Margherite Barankitse. In 1994 Margherite founded the 'Maison Shalom' in war-torn Burundi. This is a welcome house that since that time has given hospitality to over 10,000 children of different ethnic groups, religions and victims of the civil war, of poverty and of AIDS.

Carmelo Dazzi, Vincenzo Bagarello and Salvatore Monteleone hand the ESSC cheque to Margherite Barankitse.

Margherite's work has been widely recognized. She was recently awarded the prize from the children of the world, also known as the 'Children's Nobel Prize.' In 1998 she was awarded the French government's 'Human Rights Prize,' and in 2003 she was awarded the Second Prize Juan María Bandrés for her advocacy of asylum rights. In 2004, she was awarded an Honorary Doctorate by the Catholic University of Leuven in Belgium. Today, Marguerite Barankitse is a well known personality with great recognition around the world.

We believe this is the best way to use this small surplus. This will give some relief in the living condition of the children cared for in Margherite Barankitse's 'Maison Shalom.' These children are tackling the most severe form of degradation; that is social and cultural degradation.

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Winning Poster at the ESSC Conference in Průhonice (Czech republic), June 2009

I am pleased to inform you that the poster paper entitled: THE IMPACT OF DEGRADED PROCESSES ON THE PEDO-ECOLOGICAL INDICATORS OF SOIL QUALITY by Geanina Bireescu, Lazar Bireescu, Michele Vincenzo Sellitto, Cristinel Constandache, Lucian Raus and Costica Ailincai was selected as the winning poster at the International Conference of the ESSC (Protection of the Ecological and Productivity Functions of Soil in a Pan-European Context). The Conference was held in Průhonice (the Czech Republic), 23-25 June 2009, on the occasion of the 55th Anniversary of the foundation of the Research Institute for Soil and Water Conservation.

The poster paper is a constituent part of the Romanian National Research Programme (Research Excellence 2006-2008, Project No. 152 / 2006) aimed at:

1. Ecological assessment of soil resources in pasture agro-ecosystems degraded by water erosion in north-east Romania.
2. Monitoring of soil quality and the dynamics of soil resources.
3. Elaborating proposals and strategies for the protection of soil quality and conserving their sustainable use.

The complex ecological study of the soil is pointing out the utilization mode of the trophic potential in the zone and local ecological conditions. The main factors and ecological determinants have middle values and they assure a high favourability for agricultural crops and for pasture vegetation. Specific ecological criteria are pointed out as the main factors and ecological edapho-climatic stress determinants, through their absence or excess. In pasture ecosystems these determinants include summer drought, heavy soil texture, hard consistency in summer and low porosity.

Soil ecological diagnosis in a zone and local ecological context shows a high trophic fund (mega-trophic) in both studied ecosystems. In the case of the pasture ecosystem, the high potential of the soil (mega-trophic soil, with a synthetic trophicity index: PT = 181 points) is not used to the full genetic potential, because of the negative ecological impacts. These include summer drought, overgrazing, moderate water erosion and low soil aeration. In the case of agro-ecosystems arranged on agro-terraces, the high trophic potential (mega-trophic soil, PT = 141 points) is not fully exploited. Contributory factors include summer drought, heavy soil texture and mechanical soil compaction, especially on agro-terraces on hill-tops. The main factors and ecological zonal and local determinants that have negative impacts are anthropogenic, geoclimatic and pedo-physical. They determine a series of negative ecological effects due to the way in which the soil is used (for agriculture or in a pasture mode).

It is essential that adequate measures are applied to lands destined for agricultural use, for the improvement of degraded lands and soil conservation. Specifically:

1. The arrangement of sloping lands by agrotechnical and sylvicultural technologies which lead to prevention of soil erosion and promotes water retention on slopes and, on the other hand, promotes good drainage during high rainfall.
2. The use of agro-sylvicultural systems on slopes by planting forestry seedlings in combination with agricultural crops.

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Presentation of winning poster award to Dr Geanina Bireescu by ESSC President Professor José Rubio and Conference Organizer Dr Jana Podhrázská.

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Editor's note

On behalf of the ESSC we offer Geanina and her team our congratulations on their excellent success. A full report on the Průhonice Conference will be presented in ESSC Newsletter 2009/4.

Honour for our ESSC Vice-President and Editor-in-Chief Mike Fullen

I am happy to inform all of you about the recognition and appreciation made to Mike Fullen by the Lithuanian Academy of Sciences. The information below is taken from the latest WASWC Newsletter. The quiet, efficient and high-quality labour of our friend, Mike, deserves this kind of honour.

José L. Rubio, ESSC President

Lithuanian honour for Mike Fullen (our WASWC Councillor)

An academic has received a top honour from the prestigious Lithuanian Academy of Sciences. Professor Mike Fullen, from the School of Applied Sciences, University of Wolverhampton, UK, was elected as an Academician of the Lithuanian Academy on 18th March 2008. Mike, who is Professor of Soil Technology, gave his inaugural lecture in the Lithuanian Academy of Science Headquarters in Vilnius on 23rd September 2008. The open lecture was entitled 'SOIL – Sustainable Only If Loved.' A special reception was held in his honour on 22nd September 2008, hosted by His Excellency Mr. Simon Butt (the British Ambassador to Lithuania) in the British Embassy in Vilnius. Distinguished guests attending the reception included the Ambassadors of Belgium, China and Hungary to Lithuania. These countries are all research partners in the EU Project (BORASSUS), which Mike is co-ordinating.

Her Britannic Majesty's Ambassador to the Republic of Lithuania, His Excellency Mr. Simon Butt; Professor Zenonas Rokus Rudzikas (President of the Lithuanian Academy of Sciences) and Mike (slightly nervous!).

Web Based Bulletin Board

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

http://www.essc.sk

ESSC membership list and contact details

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

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

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

E-mail: i.kriegerova@vupop.sk

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

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

FORTHCOMING DATES FOR YOUR DIARY

FIRST ANNOUNCEMENTS

Colloque international
sur le thème

EFFETS DES TECHNIQUES ANTIÉROSIVES SUR LA PRODUCTIVITÉ DES TERRES TROPICALES

Port-au-Prince (Haïti), 19-24 octobre 2009

Appel à communications

Ce colloque est organisé par le réseau de chercheurs
Erosion et gestion conservatoire des eaux et des sols (EGCES)
de l'Agence universitaire de la Francophonie (AUF)

avec le soutien de
l'Université d'Etat d'Haïti
l'Université de Quisqueya
l'Institut de recherche pour le développement (IRD)
le SCAC de l'Ambassade de France en Haïti

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Ambassade de France en Haïti

Introduction

De nombreux pays d'Amérique latine connaissent un ensemble de circonstances ayant abouti à la dégradation du milieu naturel. Ce sont des milieux montagnards à forte population vivant sur un foncier insécurisé au point de manquer de produits de subsistances. Ils en sont arrivés à une dégradation accélérée des ressources naturelles et des systèmes forestiers, l'érosion et la dégradation du potentiel de production des terres, la pollution avec des conséquences parfois dramatiques sur la biodiversité, l'alimentation des populations et l'économie de ces régions aboutissant finalement au déséquilibre social.

De plus, la succession de plus en plus rapprochée des cyclones (peut-être en relation avec le réchauffement climatique) a entraîné l'appauvrissement extrême des populations rurales et urbaines. On peut se demander si les nombreux projets de lutte antiérosive qui ont été financés dans les Caraïbes et autres régions tropicales ont finalement réussi à préserver la qualité de l'eau au niveau des bassins versants et à améliorer la productivité des terres aménagées.

Par ailleurs, la conservation des sols n'est pas seulement un problème technique: le milieu humain qui va bénéficier des aménagements est directement concerné. Les aspects socio-économiques, administratifs et culturels des problèmes d'érosion vont orienter le choix des solutions, l'acceptabilité par les populations, la durabilité des aménagements.

Pour trouver des solutions acceptables, ces problèmes demandent des études intégrées interdisciplinaires couvrant diverses échelles: des parcelles qui subissent l'érosion, à travers les bassins versants jusqu'aux rives de l'océan où sont concentrés les polluants ainsi que les villes et les sites touristiques.

Le cas d'Haïti, mais aussi d'autres îles des Caraïbes nous semble très parlant: le défrichement des forêts pour la production de charbon de bois et de nourriture a accéléré la dégradation de la fertilité des sols, le ravinement des versants et la pollution des eaux qui vont inonder les plaines habitées et polluer les baies marines.

Compte tenu de l'extrême nécessité de revenus complémentaires pour répondre aux besoins des millions de petites exploitations familiales, la majorité des parcelles cultivées, sans sécurité foncière, le plus souvent sur forte pente, ne sont pas ou peu protégées des effets dévastateurs des pluies agressives, ce qui provoque une dégradation de la fertilité des sols, le ravinement des versants et parfois la pollution des eaux qui vont inonder les plaines et polluer les baies marines.

Nous proposons d'organiser en Haïti, milieu insulaire tropical francophone, un colloque international sur ce thème complexe de l'influence de l'érosion et de la lutte antiérosive (LEA) sur la restauration de la productivité des terres. Cette première annonce vise à informer les équipes de chercheurs, les enseignants des universités et les praticiens des divers programmes qui seraient intéressés à participer à un colloque de taille moyenne (100 à 150 participants).

Thèmes du colloque

Thème 1: Efficacité de la lutte antiérosive sur la restauration de la productivité des sols. Correction et valorisation des ravines, bilan des projets de la lutte antiérosive depuis 50 ans: analyse et perspectives.

Thème 2: Influence de la lutte antiérosive (techniques culturales, structures antiérosives et reboisement) sur la dynamique de l'eau de la parcelle au bassin versant: Fonctionnement hydrologique des bassins versants. Caractérisation des cyclones (fréquence, hauteur et intensité des pluies) et adaptation nécessaire des techniques de LAE. Stockage et recyclage du ruissellement: analyse de la valorisation des eaux de surface par les fossés, les banquettes, les terrasses, les seuils de ravines, les citernes et les lacs collinaires.

Thème 3: Les aspects agronomiques de la GCES: gestion de la biomasse, utilisation des litières en surface, fumures organique et minérale, rotations et cultures associées, billonnage et semis direct sous litière. Association agriculture - élevage: influences positive et négative des systèmes et des conduites d'élevage.

Thème 4: Rôle des arbres dans la GCES en fonction du bilan hydrique régional: reforestation des versants abruptes, agroforesterie, agro-vergers, production fourragère. Sélection d'espèces indigènes ou introduites.

Thème 5: Spatialisation des risques des différents types d'érosion (SIG, indicateurs, simulation): validation des modèles à partir de mesures de terrain.

Thème 6: Aspects socio-économiques de la lutte antiérosive: apports de la GCES à l'économie rurale des bassins versants, coût de l'érosion et des diverses techniques antiérosives, opportunités de développement, politique de subsides et encouragements divers, influence de la pression foncière et du mode de faire valoir sur l'acceptabilité des techniques de lutte antiérosive. Planification, participation et valorisation des aménagements. Rôles des politiques publiques dans la gestion de l'environnement.

Autres thèmes (lutte antiérosive en milieu urbain, spatialisation de risques d'érosion/inondation, aspects culturels de la lutte antiérosive, techniques traditionnelles de lutte antiérosive, érosion et pollution des eaux) qui pourraient apparaître de l'analyse des résumés proposés ou des problèmes propres aux Caraïbes.

Lieu

Port au Prince où sont concentrés les universités et les ministères concernés par la thématique. La présence d'un aéroport international permet aux chercheurs des pays voisins d'Amérique latine, d'Europe et d'Amérique du Nord de l'atteindre facilement. Par ailleurs, il s'y trouve des chercheurs motivés dans la tenue d'un tel colloque co-subventionné par l'AUF, l'IRD, les universités et la coopération internationale. Les nouveaux locaux de l'Institut de l'AUF à Pétionville rassemblent les conditions idéales pour accueillir cette manifestation.

Structure du colloque

Le colloque sera organisé en sessions plénières où chaque thème disposera d'une demi-journée pour exposer une synthèse introductive (invitation d'un expert, 40 min) et des exposés oraux (20 min par exposé) et des posters (4 jours d'exposition). Il est également prévu une sortie de terrain au milieu du colloque.

Langues du colloque

Le français est la langue principale, mais nous restons ouverts aux spécialistes anglophones et hispanophones (bien qu'il ne soit pas prévu de traduction simultanée systématique) du moment qu'il est fait un effort pour que les supports des conférences soient présentés en langue française.

Programmation

- 5 mars 2009: diffusion de l'appel à communications.
- 15 mai 2009: date de limite de réception des résumés (formulaire joint).
- 30 mai 2009: sélection des synthèses, exposés oraux et posters.
- 15 juin 2009: date limite de réception des textes complets (maximum 12 pages, police Arial, taille 12, simple interligne, 2.5 cm de marges, figures, tableaux et bibliographie, tout compris, prêt pour mise en ligne sur internet).
- 15 juillet 2009: élaboration des actes en format CD-Rom, à distribuer aux participants au colloque.
- 1er octobre 2009: édition d'un livret des résumés, des synthèses et du programme.
- Durant le colloque: réunion du comité de suivi du réseau E-GCES de l'AUF et évaluation du réseau par les experts désignés par le Conseil scientifique de l'Agence.
- Décembre 2009: sélection des meilleures communications par le Comité scientifique pour réaliser un ouvrage collectif sur le thème du colloque ou proposition des meilleurs articles à une revue internationale (Cahier d'Agronomie ou Sécheresse ou Revue développement et environnement).

Publications

- Livret des résumés et des synthèses distribué au colloque.
- Actes du colloque en CD-Rom.
- mise en ligne des Actes complets.
- Publication d'un ouvrage scientifique comprenant une sélection des meilleures communications sur le thème du colloque ou proposition des meilleurs articles à une revue internationale (Cahier d'Agronomie, Cahier SécheresseÉ).

Comité Scientifique

- Eric Roose, IRD-Montpellier (France).
- Hervé Duchaufour, Université d'Etat d'Haïti (Haïti).
- Abdellah Laouina, Univesrité Mohamed V – Rabat (Maroc).
- Pham Quang Ha, National Institut for Soils and Fertilizers (VietNam).
- Simone Ratsivalaka, Université d'Antananarivo (Madagascar).
- Dieter Köenig, Université de Koblenz (Allemagne).
- Georges De Noni, IRD-Bondy (France).
- Evens Emmanuel, Université de Quisqueya (Haïti).
- Chris Reij, Université Libre d'Amsterdam (Pays-Bas).
- Francis Shaxson, Kingston (Angleterre).
- Leo Stroosnijder, Wageningen (Pays Bas).
- Joseph Vernet, Ministère de l'environnement (Haïti).
- Jean Albergel, IRD-Kenya (Kenya).
- Alain Laraque, IRD-Martinique (France).
- Jean-Marie Fotsing, IRD-Guyane (France).
- Didier Orange, IRD-IMWI (Vietnam).
- Michel Brochet, CNEARC.
- Christian Valentin, IRD-Bondy (France).
- Khalef Boulkroune, Agence universitaire de la Francophonie (France).

Comité d'organisation

- Hervé DUCHAUFOUR, ATF, Faculté d'Agronomie et de Médecine vétérinaire, Université d'Etat d'Haïti (Haïti).
- Eric ROOSE, IRD-Montpellier (France).
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- Jacques BLAISE, Doyen de la Faculté d'Agronomie et de Médecine vétérinaire, Université d'Etat d'Haïti (Haïti).
- Kinvi LAGOSSAH, Directeur du Bureau Caraïbes de l'AUF (Haïti).
- Ophny Nicolas CARVIL, Vice–Doyen chargé de la Recherche à la Faculté d'Agronomie et de Médecine vétérinaire, Université d'Etat d'Haïti (Haïti).
- Jocelyn LOUISSAINT, Directeur des Affaires Extérieures à la Faculté d'Agronomie et de Médecine vétérinaire, Université d'Etat d'Haïti (Haïti).
- Bernard SMOLIKOWSKI, Attaché de coopération pour le développement, Scac/ Ambassade de France (Haïti).
- Khalef BOULKROUNE, Agence universitaire de la Francophonie (France).
- Ogé PIERRE LOUIS (MARNDR).
- Myrlène CHRYSOSTOME, USAID (Haïti).
- Yves DUPLAN, PNUD (Haïti).
- Gina PORCENA, Centre National de l'Information Géospatiale (Haïti).
- Jean Vilmond HILAIRE, Université de QUISQUEYA (Haïti).
- Paul VERMANDE, coordonnateur du Réseau Développement durable et Environnement/ AUF (France).

Inscription et envoi des résumés

Les chercheurs intéressés à participer au colloque sont invités à remplir le formulaire joint. Les résumés proposés, **d'une page,** doivent aborder la problématique, le milieu, la méthode, les résultats eu une discussion / conclusion. Le formulaire complété devra parvenir sous forme électronique, le **15 mai 2009, au plus tard,** à l'adresse:
colloque-haiti@auf.org

Les frais d'inscription:

- **Etudiants: 10 $.**
- **Professionnels du Sud non pris en charge par une institution ou une ONG: 20 $.**
- **Autres participants: 100 $ si paiement avant le 1er juillet, 150 $ après.**
- **Excursion: 20 $.**

Pour toute information sur le colloque, connectez-vous à l'un des sites:

www.auf.org
www.egces.auf.org

Invitation

International Conference on Soil Fertility and Soil Productivity, Two Features to be Distinguished 'Differences of Efficiency of Soils for Land Uses, Expenditures and Returns'

DATE: 17-20 March 2010.
LOCATION: Humboldt University, Berlin, Germany

ORGANIZED by:

- International Union of Soil Science (IUSS), Division 3 –Soil Use and Management, together with:
- German Soil Science Society, Commission 4 (Soil Fertility and Plant Nutrition).
- German Society of Plant Nutrition.
- German Crop Science Society.
- Working Group IOSDV (International Organic Nitrogen Fertilizing Trials).

SPONSORED by:

- ESSC (European Society for Soil Conservation).
- ECSSS (European Council of Soil Science Societies)

CONFERENCE TOPICS will characterize and discuss:

1) The concepts of 'soil fertility' and 'soil productivity' (contents, chances, limitations and contradictions).
2) The soil quality concept, and indicators with respect to soil fertility and soil productivity.
3) The soil properties for soil fertility, and for use of soil services.
4) Soil properties for soil productivity and soil investment-based services.
5) Limitations of the concepts of soil fertility and soil productivity.
6) Short-term investments for use of soil productivity.
7) Soil conservation measures to maintain and improve soil fertility and productivity.
8) Modelling soil fertility and soil productivity.
9) Soil changes and impacts by shift from the soil fertility concept to the soil productivity concept.
10) Soil management, and policy requirements with respect to soil fertility and soil productivity.
11) Future perspectives on the importance of soil fertility or soil productivity with respect to different domains of soil use.
12) Others aspects of soil fertility and productivity.

For further information, please see:
Homepage: http://www.uni-due.de//soil-fertility-productivity2010/index.shtml
and: http//www.IUSS.org

ESSC EUROPEAN SOCIETY for SOIL CONSERVATION

First International Conference of Soil and Root Engineering Relationships (LANDCON1005)

Ardebil Province, Iran
24-26 May 2010

http://www.landcon-ir.com/index.htm

International Company of Soil Eco-Engineering Research (ICSER), NO. 25, Shahid Yosri St., Ardebil, Iran
Postal Code: 56197-45344
E-mail: Landcon.ir@gmail.com
Tel: 00 98 451 2230505
Fax: 00 98451 3337023.

Deadlines:
Abstract submission: 15 November 2009.
Please send to: landcon.ir.abstract@gmail.com.
Notification of acceptance of abstract: 22 January 2010.
Full paper submission: 15 March 2010.

This Conference is the first in the series of LANDCON on soil and root engineering relationships. The aim of this meeting is to bring together scientific researchers, practitioners, geotechnical and civil engineers, biologists, ecologists, rangeland managers and foresters to discuss current problems in soil and root engineering relationships. Papers will be presented (both oral and posters) on mechanics of roots, wind loading on roots systems, slope instability, soil erosion by both water and wind, soil hydrology, mountain plant ecology, land use planning, modelling root reinforcement, failure criteria of roots, root-soil interactions, catchment management, ground bio-engineering, eco-engineering and modelling of root reinforcement.

The Conference Chair is:
Dr Ghassem HABIBI BIBALANI
Islamic Azad University (Shabestar Branch)
Iran.
E-mail: Habibibibalani@gmail.com

Supporting Institutions
International Company of Soil Eco-Engineering Research (ICSER).
World Association of Soil and Water Conservation (WASWC).
International Union of Forest Research Organizations (IUFRO).
European Geosciences Union (EGU).
Iranian National Retrofitting Center, North-West Branch.

EUROPEAN SOCIETY for SOIL CONSERVATION

6TH INTERNATIONAL CONGRESS OF THE EUROPEAN SOCIETY FOR SOIL CONSERVATION

"Innovative Strategies and Policies for Soil Conservation"

9-14 May 2011

NAGREF

EUROPEAN SOCIETY for SOIL CONSERVATION

Dear Colleagues

On behalf of the Organising Committee, I have the pleasure to invite you to the **6th International Congress of the European Society for Soil Conservation entitled *"Innovative Strategies and Policies for Soil Conservation".*** This event will be held in Thessaloniki, GREECE, from 9-14 May 2011. It is a golden opportunity to participate at a major scientific event where the latest research findings and scientific and technological developments will be presented in numerous thematic fields. Special focus is given in the multi-disciplinary coverage of the selected themes to be covered by the Congress and you are invited to honour the scientific sessions with your contribution. Scientists from all over the world will be participating in a scientific forum to deliver the state-of-the-art in the selected scientific themes, meet with old colleagues, make new friends and start new co-operations.

Thessaloniki is at the crossroads between East and West; a marvellous seaside city with quaint historic districts, museums, cultural heritage, night life, transportation infrastructure and good connection with other European countries and Athens. The blend of high quality scientific sessions with what the host city and its surroundings have to offer will ensure that your participation will be a memorable one. We do hope you will take this opportunity to contribute to the overall success of this Congress and invite you to fill in the attached pre-registration form. Details of the Congress will be soon available through the official web site of the Congress and the circulars that will be posted to all pre-registered participants.

We look forward to seeing you in Thessaloniki

Dr Theodore Karyotis

President of the Organizing Committee

PRE- REGISTRATION FORM

"Innovative Strategies and Policies for Soil Conservation"
9-14 May 2011
GRAND HOTEL PALACE***, Thessaloniki, GREECE**

First Name	
Surname	
Organization	
E-mail address	
Telephone Number	
Contact Address	
I intend to present a paper(s) under thematic unit(s)	
I will probably participate without a presentation	

Please complete the congress pre-registration form and send it by e-mail to karyotis@nagref.gr or karyotis@hellasnet.gr

The official website will be available soon.

THEMATIC Sessions

1. Policies and thematic strategies for soil protection.
2. Soil mapping and land evaluation for land use planning.
3. Forest fires impacts on natural resources.
4. Sustainable management of wetlands.
5. Policies and strategies for combating desertification.
6. Socio-economic aspects of land degradation.
7. Soil and water management under global climatic change scenarios.
8. New generation biofuels and their environmental effects.
9. Conservation and management of soil biodiversity.
10. Restoration and remediation of degraded lands.
11. Special session on 'Education in soil conservation and public awareness.'

Welcome to Thessaloniki

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

'Human Impact on Gully Erosion,' 20-25 April 2010, Lublin, Poland

Organized by the Institute of Earth Sciences, Maria Curie-Sklodowska University and the Association of Polish Geomorphologists.

Hosted by Maria Curie-Sklodowska University.

Scope and objectives

The formation and development of gullies is one of the most important geomorphological processes influencing agricultural landscapes all over the world. Human impact plays major roles in gully erosion and causes major on-site and off-site consequences.

Good recognition of factors influencing the intensity of gully erosion constitutes not only a scientific problem but also an applied one. In many regions it is a major impediment to the sustainable development of agricultural areas. That is why the number of scientific meetings focusing on the problem is progressively increasing.

The First Symposium on Gully Erosion was held in Leuven (Belgium) in 2000. This was followed by Symposia in Chengdu (China) in 2002, Oxford (USA) in 2004 and in Pamplona (Spain) in 2007. The present Symposium, planned for April 2010 in Lublin (south-east Poland), will focus on interactions between human activities and gully erosion.

Several topics will be discussed, including:

- Historical gully erosion all over the world.
- Present day intensity of gully erosion processes.
- Human impact on gully erosion, especially the role of land use.
- Prevention and restoration of gullies.

Please visit the Symposium website:
http://gullyerosion.org/

Wojciech Zglobicki

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

Reminder for the next issue:

Articles, reports, letters, views or comments on any aspect of soil erosion and conservation in Europe are always welcome.

We invite proposals for special thematic issues of the Newsletter. We also welcome any comments on the ESSC Newsletter and suggestions on how it can be improved and developed.

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

(i) Reviews of recent conferences.
(ii) Recent grant awards.
(iii) The citation details and abstracts of completed Ph.D. and M.Sc. theses.
(iv) Newly enrolled Ph.D. research students, title of their research topic and names of research supervisors.
(v) Recent staff institutional movements/promotions.
(iv) A reference list of your 'new' international refereed scientific journal papers, which have been published recently (since and including the year 2000).

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

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

Some Closing Thoughts:

"This planet is our home. Taking care of our world and our planet is like looking after our own home. In a way, one can say that the Earth is our mother. She is so good that whatever we do, she puts up with it. But now the time has come when our destructive power is so vast that our mother is obliged to call us to account. Isn't the population explosion alone not a clear sign of this? Nature itself has limits"

(His Holiness The Dalai Lama, 1996)

"Nothing is less expensive than the best possible tillage"

(Plinius Secundus, 23-79 AD)

"Should you shield the canyons from the windstorms, you would never see the beauty of their carvings"

(Elisabeth Kübler-Ross, 1997)

"Men acquire virtue, wisdom, capability and talent in adversity"

(Mencius (Meng Tzu), 372-289 BC)

"Scar tissue is stronger than ordinary skin tissue, even if it does not look so good"

(Conversation on BBC Radio 2)

"A man's transgressions are like an eclipse of the sun. When it happens, everyone can see it. And when it is corrected, everyone looks up in high regard"

(Confucius, 551-479 BC)

"Within ten days thou wilt seem a god to those to whom thou art now a beast and an ape, if thou wilt return into thy principles and the worship of reason"

(Emperor Marcus Aurelius, 121-180 AD)

"All that is composed will be decomposed, all that is yours will leave and become someone else's"

(Wayne W. Dyer, 2007)

"If we could read the secret history of our enemies we shall find in each man's sorrow and suffering enough to disarm all hostility"

(Henry Wadsworth Longfellow, 1807-1882)

"When you point the finger of blame – there are three pointing at us"

(Saying of the Seneca North American native tribe)

"Forgiveness is the fragrance the violet sheds on the heel that has crushed it"

(Mark Twain, 1835-1910)

"To laugh often and much; to win the respect of intelligent people and the affection of children; to earn the appreciation of honest critics and endure the betrayal of false friends; to appreciate beauty; to find the best in others; to leave the world a little better; whether by a healthy child, a garden patch or a redeemed social condition; to know even one life has breathed easier because you have lived. This is the meaning of success"

(Ralph Waldo Emerson, 1803-1882)

AIMS OF THE SOCIETY

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

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

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

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

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

ZWECK DER VEREINIGUNG

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

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

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

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

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

BUTS DE L'ASSOCIATION

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

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

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

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

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

OBJECTIVOS DE LA SOCIEDAD

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

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

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

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

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

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

MEMBERSHIP FEES

I wish to (please mark appropriate box):

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

Membership rates:

Standard Rates:

- One year € 25.00
- Three years € 70.00

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

- One year € 10.00
- 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
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- 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.

wim.cornelis@UGent.be