

INTECOL - Bulletin

International Association for Ecology

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Greetings from Past President, Alan P. Covich



Dear INTECOL Members,

Thank you all for your support of INTECOL and for the opportunity to serve as your President for the past four years. I have enjoyed meeting many new colleagues and in learning more about the many national and international organizations who are working with INTECOL. The Board and I have continued to discuss ways to further enhance our ability to build our international connections.



Our 11th INTECOL International Congress of Ecology in London this past August brought many members together in an exciting celebration hosted by the British Ecological Society that highlighted their 100th anniversary. The theme of this historic centenary was “Advancing Ecology and Making it Count.” INTECOL Vice President Alastair Fitter helped organize the many discussions that focused on the next 100 years. We need to keep thinking about the progress already made and the global challenges that remain as we move ahead with our planning for 2017 and 2021. Ecological science is growing stronger as we expand our international connections and generate new ideas on resolving many new environmental problems.

The attendance of more than 2,000 participants in London was an exceptional opportunity to interact with our colleagues. Members enjoyed many excellent plenary talks and over 40 symposia and 20 workshops as well as diverse contributed paper and poster sessions on a wide range of research and policy issues. In addition, we were able to host a luncheon meeting with the Presidents of the National Ecological Societies and International Ecological Societies. We appreciate their continued help in sustaining INTECOL. Their suggestions on how INTECOL can assist in improving international coordination will be helpful as we plan for our next Congress in Beijing, China in 2017 hosted by Ecological Society of China. We will also value our collaboration with the national ecological societies as we prepare for the next INTECOL International Wetlands Conference in China in 2016 and the 5th International EcoSummit in 2016, in Montpellier, France. In early 2014 we will be accepting bids for our 2021 Congress and will look forward to enhanced global communication with an expanded website.

Our progress has benefitted greatly from help by our Board members and their efforts to implement the strategic plan aimed at expanding interactions with national and international organizations. I especially want to thank our Secretary General, Eun-Shik Kim, Past President John Lee, Vice President Alastair Fitter, Treasurer Azim Mallik, and e-Bulletin Editor Sun-Kee Hong. We expanded our Board membership to include representatives from the International Network of Next Generation Ecologists (INNGE) and from South

America and Asia. INTECOL could not function without the Board’s enthusiasm and willingness to volunteer their time and expertise.

The Board did a great deal to prepare for the London meeting and to generate new ideas on how INTECOL can continue to grow. Our wetlands working group, with leadership by Gene Turner and Jos Verhoeven, organized a highly successful INTECOL International Wetlands Conference in Orlando, Florida, USA in June 2012. The co-sponsorship of the 4th EcoSummit in Columbus, Ohio, USA was another important opportunity to collaborate with our colleagues from around the globe to discuss how we can contribute to world-wide activities associated with INTECOL goals. This fall, INTECOL co-sponsored the 2013 International Long Term Ecological Research (ILTER) Annual Meeting in Seoul, Korea and continues to connect our members with this rapidly growing global network. Discussions reviewed progress by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Several INTECOL Board members participated in the initial meetings of this group and are studying the importance of diverse species functions in sustaining ecosystem services. The Board also reviewed preliminary plans for a meeting of major international scientific societies focused environmental impacts of Climate Engineering-Principles and Ethics to be held at the U.S. National Academy of Sciences, Washington, D.C. The INTECOL Board will continue to seek ways to help coordinate activities of interest to our members and to communicate their suggestions for future collaboration.

Our new President, Shona Myers, and Vice President, Bojie Fu, together with our Board will provide the leadership to move forward with many new ideas and initiatives. We will all be needed in helping to build connections with our associated national ecological organizations and related regional and international groups who have done so much to build INTECOL. As a new INTECOL Past President I am anxious to help learn how we can continue to discover big new ideas through collaboration!

Alan P. Covich



Photo 1. INTECOL Board at the London Congress. (from left to right, standing) John Grace, UK; Alan Covich, USA; Shona Myers, New Zealand; Manuel Maass, Mexico; Craig James, Australia; John Lee, UK, Eun-Shik Kim, Korea; Jos Verhoeven, The Netherlands; (from left to right, front): Sun-Kee Hong, Korea; Bernd Markert, Germany; Naupaka Zimmerman, USA; Azim Mallik, Canada; Peter Søggaard Jørgensen, Denmark.



Photo 2. Alastair Fitter, Programme Chair of INTECOL 2013, London



Photo 3. John Lee and Bojie Fu at INTECOL 2013

News from INTECOL Board Member

Retirement of Professor Jos Verhoeven



Jos Verhoeven has been focused on the diversity and functioning of wetland ecosystems as a biologist. Learning more about these fascinating habitats is an ongoing, lifelong objective for him. Wetlands have a prominent role in many landscapes, where they occupy a strategic position in between the uplands and the aquatic ecosystems. They are often of great importance for the hydrodynamics and biogeochemical functioning of the landscape. Jos Verhoeven worked as a tenured staff member at the Department of Biology at Utrecht University since December 1979. He was promoted to Professor of Landscape Ecology in November 2001. Together with his colleagues, Jos developed a research program focusing on the nutrient dynamics of freshwater wetlands (fens and wet heathlands) in landscapes with human impacts such as eutrophication and water table draw-down. Over the years, his interest in wetlands has broadened and he has become involved in nutrient-related studies of fens, bogs, river floodplains, freshwater tidal wetlands, lake marginal wetlands and mangroves. He is particularly interested in the interactions between the cycling of carbon, nitrogen and phosphorus in wetlands and how these affect their botanical species composition. Further, the impacts of nutrient loading of wetlands on water quality and on greenhouse gas emissions have his special attention.

Jos strongly values international collaboration

between scientific researchers and has become involved in several long-term cooperative research projects. His collaboration with Prof. Dennis Whigham from the Smithsonian Environmental Research Center in Edgewater, MD, USA and Prof. Rijs Laanbroek of NIOO-KNAW has grown into a long-term research project in mangroves in Florida, USA, studying plant-microbe interactions related to the nitrogen cycle.

Jos organized the 7th INTECOL International Wetlands Conference in Utrecht, The Netherlands in 2004, together with his research group. Since then, he is on the executive board of INTECOL and serves as Advisor to Working Groups. Since June 2012, he is the President of the Society of Wetland Scientist's European chapter. In The Netherlands, he is the chairman of the Center for Wetland Ecology, a consortium of 20 research groups in the Netherlands and Flanders providing a scientific platform and having spin-offs in collaborative research projects, e.g. PEATCAP Volgermeer and NMIJ (Natuurlijker Markermeer and IJmeer). Jos is also the coordinator of the Hotspot "Shallow waters and peat meadow areas" of the Netherland national research program Knowledge for Climate. Although he will be retired in January 2014, his active research and outreach will be on going as an emeritus at Utrecht University.



Report of Congresses and Meetings

1. The 2nd Plenary of Intergovernmental Science-Policy Platform on Biodiversity & Ecosystem Services (IPBES)

9-14 December 2013, Antalya, Turkey

On 9-14 December 2013, the second plenary of the Intergovernmental Science-Policy Platform on Biodiversity & Ecosystem Services (IPBES) was held in Antalya, Turkey. IPBES is an independent intergovernmental agency, similar to the Intergovernmental Panel on Climate Change (IPCC). It was officially established in Panama in April 2012 with its secretariat in Bonn, Germany. It has now 115 member states.

Biodiversity is another globally hot issue after climate change. IPBES connects biodiversity with ecosystem services. Through strengthened interaction between science and policy, IPBES enhances the connection of scientific research and decision-making process, which is significant to the conservation of global biodiversity and ecosystem services, welfare of human beings and sustainable development. There are four functions of IPBES, which are knowledge generation, assessment, policy support and capacity building. The Platform identifies and prioritizes key scientific information needed for policymakers at appropriate scales and catalyses efforts to generate new knowledge by engaging in dialogue with key scientific organizations, policymakers and funding organizations, but should not directly undertake new research. The Platform performs regular and timely assessments of knowledge on biodiversity and ecosystem services and their inter-linkages, which should include comprehensive global, regional and, as necessary, sub-regional assessments and thematic issues at appropriate scales and new topics identified by science and as

decided upon by the Plenary. These assessments must be scientifically credible, independent and peer-reviewed, and must identify uncertainties. There should be a clear and transparent process for sharing and incorporating relevant data. The Platform maintains a catalogue of relevant assessments, identifies the need for regional and sub-regional assessments and helps to catalyse support for sub-regional and national assessments, as appropriate. The Platform supports policy formulation and implementation by identifying policy-relevant tools and methodologies, such as those arising from assessments, to enable decision makers to gain access to those tools and methodologies and, where necessary, to promote and catalyse their further development. The Platform prioritizes key capacity-building needs to improve the science-policy interface at appropriate levels and then provides and calls for financial and other support for the highest-priority needs related directly to its activities, as decided by the Plenary, and catalyses financing for such capacity-building activities by providing a forum with conventional and potential sources of funding.

The meeting discussed the initial work programme, rules and procedures, financial and budgetary arrangement, and stakeholder engagement. The meeting is attended by representatives from member states, UN institutions and NGOs.

Bojie Fu
Vice President of INTECOL



2. International Conference on Water-Energy Nexus and Waste Treatment for a Sustainable Arab World

6-7 December 2013, Beirut, Lebanon

Bernd Markert^a, Simone Wuenschmann^a, Elias Baydoun^b, Isam Janajreh^c, Sohail Murad^d

^a *Environmental Institute of Scientific Networks, Germany*

^b *Arab Academy of Science, American University of Beirut, Lebanon*

^c *Masdar Institute of Science and Technology, Abu Dhabi, United Arab Emirates*

^d *University of Illinois at Chicago, USA*

An International Conference on “Water-Energy Nexus and Waste Treatment for a Sustainable Arab World” was held from 6th to 7th of December, 2013 in Beirut, Lebanon. It was organized by The Arab Academy of Sciences (AAS), the Petra University, Jordan; the AAS of the University of Beirut, Lebanon; the UNESCO Regional Bureau for Education in the Arabic States; The Future University, Khartoum, Sudan; The University of Illinois at Chicago, USA; and Masdar Institute of Science and Technology, Abu Dhabi, United Arab Emirates. The conference was attended by 56 delegates from around the world, and included 26 invited talks.

Goal of the Conference

Production of energy via non-renewable fossil fuels results in an immense consumption of water in power plants. Vice versa the production of water (for example by reverse osmosis, distillation, etc.) results in excessive consumption of energy resources. The goal of the conference was to highlight existing technologies, and facilitate the development of new - optimized (bio) technologies for reducing the strong nexus between water and energy.

Conference organisers and collaborators

- Adnan Badran, Arab Academy of Sciences, Petra University, Amman, Jordan.
- Elias Baydoun, Arab Academy of Science, American University of Beirut, Lebanon.
- Hamed Alhamani, UNESCO Regional Bureau for

Education in the Arab States - Beirut, Lebanon.

- El-Tayeb Mustafa, The Future University, Kartoum, Sudan.
- Sohail Murad, Chemical Engineering Department, University of Illinois at Chicago, USA.
- John Hillman, Consultant in R&D Development, Former CEO of the SCRI Group, United Kingdom.
- Isam Janajreh, Masdar Institute of Science and Technology, Abu Dhabi, United Arab Emirates.

Content of the Conference

The Conference was divided into three sessions:

1. Innovative Water Treatment Technologies for the Arab World,
2. Alternative and Efficient Energy Systems for the Arab Middle East, and
3. Environmental Remediation Strategies.

Results of the Conference

Intensive panel discussions after plenary and session talks demonstrated that in the Arabic World, mainly in the MENA (Middle East and North Africa) region more and effective renewable energy technologies, such as wind, photovoltaic, geothermal, etc. have to be developed to address local challenges. In addition to classical energy production technologies a sustainable mix of all available energy sources, needs to be created.

In addition, especially considering that water in arid areas will become more and more limited for sustaining life including humans, animals, plants and

microorganisms, innovative fresh water system has to be developed. Modified reverse osmosis technologies will optimize desalination processes in the future. Innovative new technologies such as electro-deionization, or approaches mimicking water use efficiencies of nature (bionic), are additional strategies to minimize water losses from sustainable water use technologies.

Finally all above mentioned techniques should be evaluated for the effectiveness, while also considering their potential to pollute or harm the environment. Latest techniques such as bio-indication and bio-

monitoring have to be used to regularly provide information on the quality of the environment. Intelligent techniques adapted from nature - such as phyto-technologies for cleaning atmosphere, water and soil pollutions - are THE techniques of the future to ensure more and more harmony of nature and man.

The conference in Beirut has promoted the activity and wellbeing of scientists and students by facilitating a strong intercultural exchange. The social highlight of the meeting was a dinner at invitation by the President of the Arab Academy of Sciences at a typical Lebanese (AL-DIWAN) Restaurant in Beirut.

Prof. Dr. Bernd Markert
A member of INTECOL Board
E-mail: markert@eisn-institute.de



Photo 1. Group photo of participants at the conference.



Meetings and Congresses

1. DFG/ICSU/ISSC Young Scientists Networking Conference on Integrated Science

Ecosystems and human wellbeing in the green economy

25-31 May 2014, Lake Como, Italy

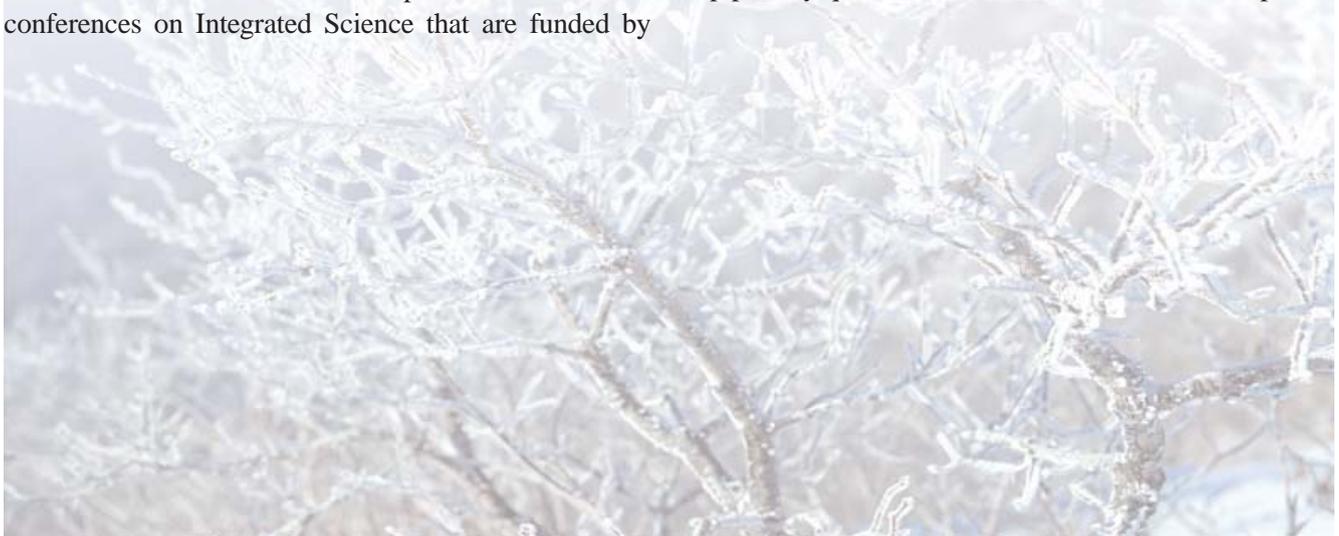
A key theme of the Rio+20 United Nations Conference on Sustainable Development, held in June 2012, was the promotion of a “green economy”. Future Earth, launched during Rio+20, is an ambitious new 10-year research programme which will provide the knowledge we need to tackle the most urgent challenges of the 21st century related to global sustainability, and that includes issues relating to transformations towards green economies.

The International Social Science Council (ISSC) and the International Council for Science (ICSU), in collaboration with the International Network of Next Generation Ecologists (INNGE) and Institute for New Economic Thinking’s Young Scholars Initiative (INET YSI), are planning to assemble a group of early career researchers with diverse backgrounds and research perspectives to reflect on ecosystems and human wellbeing in the transition towards green economies and debate relevant issues as part of a series of conferences on Integrated Science that are funded by

the German Research Foundation (DFG).

The aim is to bring together creative multidimensional, interdisciplinary and trans-disciplinary perspectives to address the complex topic of how future societies deal with ecosystems and human wellbeing. Young scientists will debate issues relating to the topic, questioning key assumptions, theories and models underlying the current research on ecosystems, human wellbeing, and the transformation towards green economies; dynamics of governance, justice, authority at global and local levels; and the development of research methodologies to assess change in the transformations towards sustainability.

The Networking Conference is open to post-doctoral researchers interested in the collaboration between the social and the natural sciences. The conference will bring together senior and leading scientists and researchers with a diversity of perspectives to identify top priority questions for future research on the topic.





2. *The 11th European Dry Grassland Meeting (EDGM)*

European Steppes and Semi-natural Dry Grasslands: Ecology, Transformation and Restoration

5-15 June 2014, Tula, Russia

The European Dry Grassland Meetings are organised annually by the European Dry Grassland Group (EDGG, <http://www.edgg.org>), a network of dry grassland/steppe researchers and conservationists from all disciplines. EDGG is affiliated with the IAVS (International Association for Vegetation Science) as a Working Group as well as with the EFNCP (European

Federation for Nature Conservation and Pastoralism), and membership is free of charge.

There will be also a special feature organised selecting primarily from the conference proceedings in one of the ISI journals of the field strongly linked to Eurasian steppes.

Registration deadline: 31 January 2014

Conference homepage with online registration: http://www.edgg.org/edgg_meeting_2014.html

Contact persons: Elena Volkova (convallaria@mail.ru)

Michael Vrahnakis (mvrhna@teilar.gr)



3. *The 2nd International Conference on Water Resources and Wetlands*

11-13 September 2014, Tulcea, Romania

The Romanian Limnogeographical Association (RLA) in collaboration with the Polish Limnological Society (PLS), Czech Limnological Society (CLS) and the Danube Delta Biosphere Reserve Authority

(DDBRA) would like to invite you to take part in the 2nd International Conference on “Water resources and wetlands” set to take place during 11-13 September, 2014 in the “Delta Hotel” in Tulcea, Romania.

Deadline for Registration and Abstract Submission: 30 January 2014

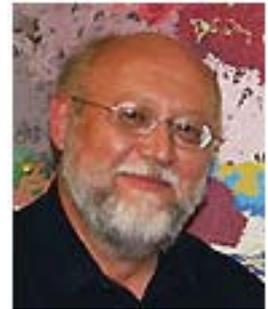
Homepage: www.limnology.ro/water2014



4. The 57th Annual Symposium of International Association for Vegetation Science (IAVS)

Biodiversity & Vegetation: Pattern, Process, Conservation

1-5 September 2014, Perth, Australia



In 1990 IAVS came for the first time to Australia. The legendary Dr. John S. Beard AO organized an IAVS Field Excursion to his adopted homeland of Western Australia. There are many of us (though, unfortunately, not myself as I was just pushing my life reset button in the free West after having escaped communist Czechoslovakia) who still recall this wonderful trip featuring weird flowers, strange vegetation types, and mesmerizing dry landscapes full of eucalypts.

In 2014, IAVS is coming to Australia again - this time to hold its yearly symposium in Perth. For a couple of weeks in August and September Australia will become the focus of vegetation scientific interest as the University Club of the University of Western Australia will host the 57th Annual Symposium of IAVS. Australia is far from almost everywhere, and the 'tyranny of distance' drives our lives more than national politics. Despite the distance, we expect to attract many colleagues from overseas.

We are also committed to make the long trip worth taking for many young people. We want to be it a

'young' symposium: dominated by young people with fresh ideas and, therefore, most of the invited key - note lectures will be given by young up?coming scientists.

The Local Organizing Committee is looking forward to seeing you in Australia and proudly showing you around our country. Four excursions flanking the symposium (two in Western Australia and two on the East Coast featuring New South Wales and tropical northern Queensland) will offer ample opportunity to marvel at the beauty of our plants and vegetation. Come and join us - to push the envelopes of scientific theory, to boost the image of our scientia amabilis, to make new friends and perhaps find a new job or research partner, and at the same time, just to have a hell of a good time. Vegetation scientists like to meet, value a good drink and something (and lot of it!) nice to eat, and talk shop the whole day long. All that, and more, is guaranteed!

Welcome to Australia, welcome to Western Australia - the home of black swan and the home of vegetation science for 2014.

Laco Mucina
Chair of Local Organizing Committee
E-mail: Laco.Mucina@uwa.edu.au



INTECOL, International Association for Ecology

INTECOL is affiliated with the ICSU family of scientific organizations as the section responsible for general ecology within the International Union of Biological Sciences (IUBS). The association will assist and/or support the development of the science of ecology and the application of ecological principles to global problems, especially by assisting international cooperation; the collection, evaluation and distribution of information about ecology; national, regional and international actions which will serve ecological research, training of personal, coordination of general publications of ecological principles and the recognition of the importance of ecology for economy and society; the organization of conferences, meetings, symposia, programs and projects, conduct of speaking-series, publication of manuscripts, and measures which are deemed necessary to reach the goals of the association.

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