

INTECOL - Bulletin

International Association for Ecology

History of INTECOL

3

Board Members in the History of INTECOL

Global Forum

9

- a. Reflections on humankind, environment, and ecology
- b. Establishing new institute in Korea, "National Institute of Ecological Research"

Future of Ecology

12

Reconstruction of Urban Forests

Meeting Reports

14

The 52nd IAVS Symposium in Greece 2009 (Chania, Crete)

Meeting & Congress

15

EECA Registration: provisional schedule on line

A Past President Reflects

The long journey back from Brisbane has given me plenty of time to reflect on my involvement with INTECOL. I have gained many things: important scientific knowledge which has helped to advance my research; an understanding of many and varied ecosystems which I otherwise would not have visited; a knowledge of many countries and cultures; and most important of all, many new friends.

I missed the First International Congress of Ecology in The Hague because it clashed with a prior commitment, but I have been to all the other congresses and was chairman of the local organising committee for the 1994 Congress in Manchester. All these congresses have been memorable, including the congress that never was. I went to Warsaw in the late 1970's to help plan the Third Congress. There I met two of our past presidents for the first time, Frank Golley and George Knox who gave me my first lessons in international science diplomacy, and who remained friends until their fairly recent deaths. I also met the famous Polish ecologist Professor K. Petruszewicz, a former resistance fighter who had very narrowly escaped execution by the Nazis in the Second World War, and who subsequently became a minister in the Gomulka government. Those members with long memories will recall that the Congress

was cancelled because of the political unrest in Poland at that time.

The first congress I attended was in Jerusalem. This gave me an introduction to desert ecosystems and their use by humans over millennia. It also provided my first insight into the ecology of coral reefs and to the complexities of organising large scientific meetings. All the subsequent congresses have been very memorable in their own way. Many INTECOL members will remember the opportunities, skilfully provided by Almo Farina, which the Florence congress brought to combine important science with culture, as well as to improve their knowledge of Mediterranean ecosystems. The two congresses held in North America jointly with the Ecological Society of America at Syracuse and Montreal were exceptionally well attended and organised, the latter attracting the largest attendance for any ESA meeting to that date (2005). They both had brilliant plenary lectures, of which Tony Sinclair's in Montreal on his long term studies of the Serengeti was perhaps the one that stands out most for me. In general the plenary lectures have been an outstanding highlight of most congresses given as they have been by many of the leading ecologists of their day, Jane Lubchenco, Robert May, Thomas Rosswall and Hal Mooney for example. However, there was an



important landmark set in Brisbane where for the first time some of the plenaries were given by young scientists; I hope that this will be a feature of future congresses too.

Generally the congresses have been well attended and have had a high profile in the host country. For example there have been addresses from city mayors (in Jerusalem and Seoul), environment ministers (Brisbane and Seoul) and at least one president (Seoul). At the Yokohama Congress I had the great and unexpected privilege together with about ten other ecologists of an audience with the Emperor of Japan and his younger son. This caused me a little local difficulty as I had gone to Japan without a jacket and had to borrow one from my friend Alastair Fitter for the occasion. As I recall, it didn't fit me too well! Alastair is chair of the scientific organising committee for the 2013 London Congress.

The congress in Yokohama gave me my first insight into Asian ecosystems, and proved to be very important for me personally. There I met for the first time my good friends Byung-Sun Ihm and his wife Jeom Sook Lee. Subsequently they joined my research team in Manchester for a short while. Later, I met Byung-Sun in Florence at a Board meeting arranged by the Secretary General Almo Farina to find a location for the Eighth Congress when Byung-Sun and Sun-Kee Hong made a presentation on behalf of the Ecological Society of Korea. Fortunately the Board accepted this proposal because much of the most recent success of INTECOL can be put down to the commitment of the Ecological Society of Korea through its past president Byung-Sun and its current president Eun-Shik Kim. Eun-Shik was an important member of the local organising committee in Seoul and subsequently succeeded Almo as Secretary General. To him goes the great credit of completely reorganising and running INTECOL's administration giving us the web-based system we have today. Sun-Kee continues to play a major role as the founding editor of our relatively new e-Bulletin.

The Jerusalem Congress was important also for the

establishment of the Wetlands Working Group initially under the chairmanship of Professor V.J. Chapman. This led to the International Wetland Conferences the first held in New Delhi in 1980 and which continue to be highly successful to this day. They are held every four years in between the congresses; the eighth conference was held in Cuiaba, Matto Grosso, Brazil in 2008. I have only been able to attend one of these, the seventh in Utrecht, but this was another major and high profile meeting attracting over one thousand participants. Much of the success of the Wetlands Working Group is directly attributable to Gene Turner's commitment and skill, and all INTECOL members owe him a considerable debt of gratitude.

Gene was INTECOL treasurer for a number of years too. I have relied most heavily during my presidency on him and other officers past and present, notably Rebecca Sharitz, Bernd Markert, Helmut Lieth, Azim Mallik and Eun-Shik Kim. I have had great support from past presidents Akira Miyawaki, Wolfgang Haber and the late Frank Golley and George Knox. I have also been blessed by having outstanding vice-presidents during my tenure, Byung-Sun Ihm, Rebecca Sharitz and Craig James who have borne the full brunt of organising the three congresses under my watch. I also thank all Board members past and present for their ideas, support and encouragement. I would like to single out Rusong Wang who in encouraging us to co-sponsor the EcoSummit in Beijing in 2007 provided INTECOL with another important international forum to place alongside the congresses and wetland conferences.

Looking forward we are exceptionally fortunate to have such a distinguished ecologist as Alan Covich as our new president. He brings much experience and many new and exciting ideas for the development of INTECOL. I look forward very much to supporting him as I continue as past president on the Board.

John A. Lee



a. Greeting speech in the opening ceremony at INTECOL10



b. John as Symposium organizer in INTECOL10, Brisbane



c. John in the board meeting in INTECOL9, Montreal



History of INTECOL

Board Members in the History of INTECOL

INTECOL was formed in 1967, as the Ecology / Environmental Section of the International Union of Biological Sciences (IUBS).

INTECOL BOARD = EXECUTIVE COMMITTEES + MEMBERS-AT-LARGE

(Board members typically took office at the International Congresses of Ecology)

1967 - 1972

President: Prof. Arthur D. Hasler, Center for Limnology, University of Wisconsin, 680 N. Park Street, Madison, WI 53706, USA

Vice President: Prof. Charles Sauvage, Institut de Botanique-Faculte des Sciences, 5 Rue Auguste Broussonet, 34 Montpellier, France

Secretary General: Dr. F. H. Whitehead, Institute of Biology, 41 Queen's Gate, London SW7, UK

Treasurer: Dr. Maksim Todorović, Institute for Biological Research, 29 Novembra 142, Belgrade, Yugoslavia

Members-at-Large:

- Prof. W. H. van Dobben, Institute of Ecological Research, Kemperbergerweg 11, Arnhem, The Netherlands
- Prof. C. S. Hollings, Department of Zoology, University of British Columbia, Vancouver, BC, Canada
- Prof. Jürgen Jacobs, Department of Zoology, Technische Universität München, Luisenstrasse 14, München, Germany (FRG)
- Prof. George A. Knox, Department of Zoology, University of Canterbury, Christchurch 5, New Zealand
- Prof. R. D. Misra, Department of Botany, Banaras Hindu University, Varanasi-5, Uttar Pradesh, India
- Prof. E. Steelman Nielsen, Department of Botany, Danmarks Farmaceutiske Højskole, Universitetsparken 2, Copenhagen, Denmark
- Prof. P. B. Vipper, Laboratory of Biogeocenology, Gubkin-Str. 16, Korp. 2, KV 1, Moscow, W-222, USSR

1973 - 1974

President: Prof. Arthur D. Hasler, Center for Limnology, University of Wisconsin, 680 N. Park Street, Madison, WI 53706, USA

Vice President: Prof. Charles Sauvage, Institut de Botanique-Faculte des Sciences, 5 Rue Auguste Broussonet, 34 Montpellier, France

Secretary General: Prof. George A. Knox, Department of Zoology, University of Canterbury, Christchurch 5, New Zealand (beginning 1974)

Treasurer: Dr. Maksim Todorović, Institute for Biological Research, 29 Novembra 142, Belgrade, Yugoslavia

Members-at-Large:

- Prof. Francoise Bourlière, Faculty of Medicine, University of Paris, 45 Rue des St.-Peres, 75 Paris 6, France
- Prof. V. Delucchi, Entomologische Institut, Universitätstrasse 2, 8006 Zürich, Switzerland
- Prof. W. H. van Dobben, Institute of Ecological Research, Kemperbergerweg 11, Arnhem, The Netherlands
- Prof. C. S. Hollings, Department of Zoology, University of British Columbia, Vancouver, BC, Canada
- Prof. Amyan Macfayden, Department of Environmental Studies, The New University of Ulster, Coleraine BT52 1SA, Northern Ireland
- Prof. R. D. Misra, Department of Botany, Banaras Hindu University, Varanasi-5, Uttar Pradesh, India
- Prof. P. B. Vipper, Soviet-Mongolian Bio-Expedition, B. Odrynka 21/16, Moscow 113035, USSR



I. International Congress of Ecology, The Hague, The Netherlands, 8-14 September 1974. 'Structure, Functions and Management of Ecosystems,' organized by INTECOL and the Netherlands Ecological Society

1974 - 1978

President: Prof. Amyan Macfadyen, School of Biological and Environmental Studies, The New University of Ulster, Coleraine BT52 1SA, Northern Ireland

Past President: Prof. Arthur D. Hasler, Center for Limnology, University of Wisconsin, 680 N. Park Street, Madison, WI 53706, USA

Secretary General: Prof. George A. Knox, Department of Zoology, University of Canterbury, Christchurch 5, New Zealand

Treasurer: Dr. Livia Tonolli, Istituto Italiano di Idrobiologia, Pallanza (Novara) 28048, Italy

Members-at-Large:

- Prof. A. E. E. Abdoul-Nasr, Faculty of Science, Cairo University, Cairo, Egypt
- Prof. W. B. Banage, Department of Biology, University of Zambia, P. O. Box 2379, Lusaka, Zambia
- Prof. Michael Evenari, Department of Botany, The Hebrew University, Jerusalem, Israel
- Dr. Jan Kvet, Institute of Botany, ČSAV, Hydrobotany Department, Dukelská 145, 379 82 Třeboň, Czechoslovakia
- Prof. Jorge Morello, Ecología Agraria, Centro de Recursos Naturales, INTA-Casteler, Provincia de Buenos Aires, Argentina
- Prof. M. Numata, Laboratory of Ecology, Faculty of Science, Chiba University, Chiba 260, Japan
- Dr. K. Petruszewicz, Institute of Ecology, Polish Academy of Science, Dziekanów Leśny, 05-150 Lomianki, Poland
- Prof. Henry A. Regier, Department of Zoology, University of Toronto, Toronto, Canada

II. International Congress of Ecology, Jerusalem, Israel, 10-16 September 1978. 'The Future of Ecology,' organized by INTECOL and the Hebrew University of Jerusalem

1978 - 1982

President: Prof. George A. Knox, Department of Zoology, University of Canterbury, Christchurch 5, New Zealand

Past President: Prof. Amyan Macfadyen, School of

Biological and Environmental Studies, The New University of Ulster, Coleraine BT52 1SA, Northern Ireland

Vice President: Prof. R. Klekowski, Institute of Ecology, Polish Academy of Science, Dziekanów Leśny, 05-150 Lomianki, Poland

Secretary General: Prof. Staffan Ulfstrand, Institute of Zoology, University of Uppsala, S-751 22 Uppsala, Sweden

Treasurer: Prof. Frank B. Golley, Institute of Ecology, University of Georgia, Athens, Georgia 30602, USA

Members-at-Large:

- Prof. Michael Evenari, Department of Botany, The Hebrew University, Jerusalem, Israel
- Prof. José I. D. Furtado, Department of Zoology, University of Malaya, Lembah Pantai, Kuala Lumpur, Malaysia
- Prof. Arturo Gómez-Pompa, Instituto Nacional de Investigaciones sobre Recursos Bioticos, Jalapa-Veracruz, Mexico
- Prof. Wladyslaw Grodziński, Department of Animal Ecology, Jagiellonian University, Krupnicza 50, 30-060 Krakow, Poland
- Prof. Maxime Lamotte, Laboratoire de Zoologie, École Normale Supérieure, 46 Rue d'Ulm, 75005 Paris, France
- Prof. Otto L. Lange, Botanisches Institut der Universität Mittlerer, Dallenbergweg 64, D-8700 Würzburg, Germany (BRD)
- Prof. K. Petruszewicz, Institute of Ecology, PAN, PL-0515 Dziekanów Leśny, Poland
- Prof. George C. Varley, Oxford University, Oxford, UK

III. International Congress of Ecology, Poland, 1982 (cancelled due to political problems in Poland at the time)

1982 - 1986

President: Prof. François Bourlière, Medicine and Ecology, University of Paris, 15 Avenue de Tourville, F-75007 Paris, France

Past President: Prof. George A. Knox, Department of Zoology, University of Canterbury, Christchurch 5, New Zealand

Vice Presidents: Prof. Robert L. Burgess and Prof. Mohan K. Wali, College of Environmental Science and Forestry, State University of New York, Syracuse, NY 13210 USA

Secretary General: Prof. Frank B. Golley, Institute of



Ecology, University of Georgia, Athens, Georgia 30602, USA

Treasurer: Prof. Wladyslaw Grodziński, Department of Animal Ecology, Jagiellonian University, Krupnicza 50, 30-060 Krakow, Poland

Members-at-Large:

- Prof. Reinhard Bornkamm, Institute of Ecology, Technical University of Berlin, Rothenburgstrasse 12, D 1000 Berlin 41, Germany (FRG)
- Dr. Eric A. G. Duffy, Institute of Terrestrial Ecology, Monks Wood Experimental Station, Abbots Ripton, Huntingdon PE17 2LS, UK
- Dr. Eduardo Fuentes, Pontificia Universidad Catolica de Chile, Laboratorio de Ecologia, Casilla 114-D, Santiago, Chile
- Prof. José I. D. R. Furtado, Department of Zoology, University of Malaya, Lembah Pantai, Kuala Lumpur, Malaysia
- Prof. Radomir Lakusic, Ecological Societies of Yugoslavia, Vojrode Putnika 43a, 71600 Sarajevo, Yugoslavia
- Prof. Ma Shi-jun, Research Center of Ecology, Academia Sinica, 7 Zhongguancun Road, Beijing 100080, People's Republic of China
- Prof. Vladimir E. Sokolov, Institute of Evolutionary Morphology and Ecology of Animals, USSR Academy of Science, 33 Leninsky Prospekt, Moscow 117071, USSR
- Dr. Nils Chr. Stenseth, Zoological Institute, University of Oslo, Blindern, Oslo, Norway

IV. International Congress of Ecology, Syracuse, New York, USA, 10-16 August 1986. 'Global Connections in Ecological Theory and Practice,' organized by INTECOL and the Ecological Society of America

1986 - 1990

President: Prof. Frank B. Golley, Institute of Ecology, University of Georgia, Athens, Georgia 30602, USA

Past President: Prof. François Bourlière, Medicine and Ecology, University of Paris, 15 Avenue de Tourville, F-75007 Paris, France

Vice-Presidents: Prof. Hiroya Kawanabe, Department of Zoology, Kyoto University, Sakyo-Ku, Kyoto 606, Japan; Prof. Toshiro Saeki, Department of Botany, University of Tokyo, Hongo, Tokyo, Japan; Dr. Kinji Hogetsu, 2-5-13 Kinugaoka, Hachioji City, Tokyo, Japan; Prof. Akira Miyawaki, Department of Vegetation Science, Yokohama

National University, Yokohama 240, Japan

Secretary General: Prof. Paul F. Maycock, Ecological Laboratory, Erindale College, University of Toronto, Mississauga, Ontario L5L 1C6, Canada

Treasurer: Prof. Helmut Lieth, Fachbereich Biologie/Chemie, Universität Osnabrück, D-4500 Osnabrück, Germany (FRG)

Members-at-Large:

- Dr. Eric A. G. Duffy, Institute of Terrestrial Ecology, Monks Wood Experimental Station, Abbots Ripton, Huntingdon PE17 2LS, UK
- Dr. Eduardo Fuentes, Pontificia Universidad Catolica de Chile, Laboratorio de Ecologia, Casilla 114-D, Santiago, Chile
- Prof. José I. D. R. Furtado, Department of Zoology, University of Malaya, Lembah Pantai, Kuala Lumpur, Malaysia
- Prof. George A. Knox, Department of Zoology, University of Canterbury, Christchurch 5, New Zealand
- Prof. Radomir Lakusic, Ecological Societies of Yugoslavia, Vojrode Putnika 43a, 71600 Sarajevo, Yugoslavia
- Prof. Ma Shi-jun, Research Center of Ecology, Academia Sinica, 7 Zhongguancun Road, Beijing 100080, People's Republic of China
- Dr. H. Marinov, Department of Economical Ecology, Higher Institute of Finance and Economics, 5250 Svichtov, Bulgaria
- Dr. Jan Pinowski, Institute of Ecology, PAN, Dziekanów Leśny, Lomianki 05-150, Poland
- Prof. Vladimir E. Sokolov, Institute of Evolutionary Morphology and Ecology of Animals, USSR Academy of Science, 33 Leninsky Prospekt, Moscow 117071, USSR

V. International Congress of Ecology, Yokohama, Japan, 23-30 August 1990. 'Development of Ecological Perspectives for the 21st Century,' organized by INTECOL and the Ecological Society of Japan

1990 - 1994

President: Prof. Wolfgang Haber, School of Landscape Ecology, Munich University of Technology, Weihenstephen 8050, Freising 12, Germany (FRG)

Past President: Prof. Frank B. Golley, Institute of Ecology, University of Georgia, Athens, Georgia 30602, USA

Vice-President: Prof. John A. Lee, Department of Environmental Biology, University of Manchester,



Oxford Road, Manchester M13 9PL, UK

Secretary General: Prof. Rebecca R. Sharitz, Savannah River Ecology Laboratory, Drawer E, Aiken, South Carolina 29802, USA

Treasurer: Prof. Hiroya Kawanabe, Department of Zoology, Kyoto University, Sakyo-Ku, Kyoto 606, Japan

Members-at-Large :

- Prof. Eduardo Fuentes, Laboratoire de Ecologia, Pontificia Universidad Catolica de Chile, Casilla 114-D, Santiago, Chile
- Prof. Helmut Lieth, Fachbereich Biologie/Chemie, Universität Osnabrück, D-4500 Osnabrück, Germany (FRG)
- Prof. Harold A. Mooney, Department of Biological Sciences, Stanford University, Stanford, CA 94305, USA
- Prof. Lech Ryszkowski, Research Centre for Agricultural and Forest Environment, Polish Academy of Sciences, Poznan 60-809, Poland
- Prof. Vladimir E. Sokolov, Institute of Evolutionary Morphology and Animal Ecology, USSR Academy of Science, 33 Leninsky Prospekt, Moscow 117071, USSR
- Prof. Sir Richard Southwood, Department of Zoology, University of Oxford, South Park Road, Oxford, UK

VI. International Congress of Ecology, Manchester, United Kingdom, 21-26 August 1994. 'Progress to Meet the Challenge of Environmental Change,' organized by INTECOL and the British Ecological Society

1994 - 1998 / 1996 - 1998

President: Prof. Akira Miyawaki, Japanese Center for International Studies in Ecology. Shonan Village Center, 156039 Kami-Yamaguchi, Hayama-Machi, Kanagawa 240-01, Japan (1996-1998)

Past President: Prof. Wolfgang Haber, School of Landscape Ecology, Munich University of Technology, Weihenstephen 8050, Freising 12, Germany (FRG) (1996-1998)

Vice-President: Prof. Almo Farina, Laboratory of Landscape Ecology, Lunigiana Museum of Natural History, Fortezza della Brunella, I-54011 Aulla, Italy (1996-1998)

Secretary General: Prof. Rebecca R. Sharitz, Savannah River Ecology Laboratory, Drawer E, Aiken, South Carolina 29802, USA

Treasurer: Prof. Bernd Markert, Internationales

Hochschlinstitut Zittau, Markt 23, D-02763 Zittau, Germany

Members-at-Large:

- Prof. R. S. Ambast, Department of Botany, Banaras Hindu University, Varanasi 221005, India
- Prof. Valerie Brown, International Institute of Entomology, 56 Queen's Gate, London, SW7 5JR, UK
- Prof. Frank B. Golley, Institute of Ecology, University of Georgia, Athens, Georgia 30602, USA
- Prof. Helmut Lieth, Fachbereich Biologie/Chemie, Universität Osnabrück, D-49076 Osnabrück, Germany
- Prof. Peter Poschlod, Department of Biology, Nature Conservation, Philipps University, D-35032 Marburg, Germany
- Prof. Lech Ryszkowski, Research Centre for Agricultural and Forest Environment, Polish Academy of Sciences, 60-809 Poznan, Poland

VII. International Congress of Ecology, Florence, Italy, 19-25 July 1998. 'New Tasks for Ecologists after Rio,' organized by INTECOL and the Italian Ecological Society

1998 - 2002

President: Prof. John A. Lee, Department of Environmental Biology, University of Sheffield, Sheffield S10 2TN, UK

Past President: Prof. Akira Miyawaki, Japanese Center for International Studies in Ecology. Shonan Village Center, 156039 Kami-Yamaguchi, Hayama-Machi, Kanagawa 240-01, Japan

Vice-President: Prof. Byung-Sun Ihm, Department of Biology, Mokpo National University, Muan-Gun 534-729, Chonnan, Korea

Secretary General: Prof. Almo Farina, Faculty of Environmental Sciences, The University of Urbino, Sogesta, 61029 Urbino, Italy

Treasurer: Prof. R. Eugene Turner, Center for Wetlands Resources, Louisiana State University, Baton Rouge, LA 70803, USA

Members-at-Large:

- Prof. Valerie K. Brown, International Institute of Entomology, 56 Queen's Gate, London, SW7 5JR, UK
- Prof. Kazue Fujiwara, Graduate School of Environment and Information Science, Yokohama National University, Yokohama 240, Japan
- Prof. Richard J. Hobbs, School of Environmental



Science, Murdoch University, Perth, Western Australia 6150

- Prof. Bernd Markert, Internationales Hochschulinstitut Zittau, Markt 23, D-02763 Zittau, Germany
- Prof. Rebecca R. Sharitz, Savannah River Ecology Laboratory, Drawer E, Aiken, South Carolina 29802, USA
- Prof. Rusong Wang, Chinese Academy of Sciences, Beijing, People's Republic of China

VIII. International Congress of Ecology, Seoul, Korea, 11-18 August 2002. 'Ecology in a Changing World' organized by INTECOL and the Ecological Society of Korea

2002 - 2005

President: Prof. John A. Lee, Department of Animal and Plant Sciences, University of Sheffield, Sheffield S10 2TN, UK

Past President: Prof. Akira Miyawaki, Japanese Center for International Studies in Ecology, Shonan Village Center, 156039 Kami-Yamaguchi, Hayama-Machi, Kanagawa 240-01, Japan

Vice-President: Prof. Rebecca R. Sharitz, Savannah River Ecology Laboratory, Drawer E, Aiken, South Carolina 29802, USA

Secretary General: Prof. Eun-Shik Kim, Department of Forest Resources, Kookmin University, Songbuk-gu, Seoul 136-702, Korea

Treasurer: Prof. R. Eugene Turner, Center for Wetlands Resources, Louisiana State University, Baton Rouge, LA 70803 USA

Members-at-Large:

- Prof. Valerie Brown, Centre for Agri-Environmental Research, University of Reading, Earley Gate, P.O. Box 237, Reading RG6 6AR, UK
- Prof. Alan P. Covich, Institute of Ecology, University of Georgia, Athens, GA 30602 USA
- Prof. Almo Farina, Institute of Ecology and Environmental Biology, The University of Urbino, Sogesta, 61029 Urbino, Italy
- Prof. Kazue Fujiwara, School of Environment and Information Sciences, Yokohama National University, Tokiwadai 79-7, Hodogaya-ku, Yokohama 240-8501, Japan
- Prof. John Grace, Institute of Ecology and Resource Management, University of Edinburgh, Edinburgh EH9 3JU, UK
- Dr. Sun-Kee Hong, Environmental Planning Institute, Graduate School of Environmental Studies, Seoul

National University, Seoul 151-742, Korea

- Dr. Pavel Krestov, Institute of Biology and Soil Science, Vladivostok, 690022, Russia
- Prof. Azim U. Mallik, Department of Biology, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario P7B 5E1, Canada
- Prof. Bernd Markert, Internationales Hochschulinstitut Zittau, Markt 23, D-02763, Zittau, Germany
- Prof. Dan L. Perlman, Department of Biology, Brandeis University, 415 South Street, Waltham, MA 02454-9110, USA
- Prof. Rusong Wang, Center for Ecological and Environmental Research, Chinese Academy of Sciences, Beijing 100085, People's Republic of China

IX. International Congress of Ecology, Montreal, Canada, 7-12 August 2005. 'Ecology at Multiple Scales,' organized by INTECOL and the Ecological Society of America

2005 - 2009

President: Prof. John A. Lee, Department of Animal and Plant Sciences, University of Sheffield, Sheffield S10 2TN, UK

Past President: Prof. Akira Miyawaki, Japanese Center for International Studies in Ecology, Shonan Village Center, 156039 Kami-Yamaguchi, Hayama-Machi, Kanagawa 240-01, Japan

Vice-President: Prof. Craig James, CSIRO Sustainable Ecosystems, Alice Springs, NT 0871, Australia

Secretary General: Prof. Eun-Shik Kim, Department of Forest Resources, Kookmin University, Seoul 136-702, Korea

Treasurer: Prof. Azim U. Mallik, Department of Biology, Lakehead University, Thunder Bay, Ontario, P7B 5E1 Canada

Members-at-Large:

- Prof. Alan P. Covich, Institute of Ecology, University of Georgia, Athens, GA 30602, USA
- Prof. Almo Farina, Institute of Ecology and Environmental Biology, The University of Urbino, Sogesta, 61029 Urbino, Italy
- Prof. Bojie Fu, Bureau of Natural Resources and Environment, Chinese Academy of Sciences, Beijing 100864, People's Republic of China
- Prof. John Grace, Institute of Ecology and Resource Management, University of Edinburgh, Edinburgh EH9 3JU, UK
- Prof. Sun-Kee Hong, Institute of Islands Culture,



- Mokpo National University, Jeonnam 534-729, Korea
- Dr. Pavel Krestov, Institute of Biology and Soil Science, Vladivostok 690022, Russia
 - Prof. Bernd Markert, Internationales Hochschulinstitut Zittau, D-02763 Zittau, Germany
 - Prof. Dan L. Perlman, Department of Biology, Brandeis University, Waltham, MA 02454-9110, USA
 - Prof. Rebecca R. Sharitz, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29802, USA
 - Dr. Patrick Silan, French Ecological Society, CNRS Guyane, 97300 Cayenne, Guyane Française, France
 - Prof. R. Eugene Turner, Center for Wetlands Resources, Louisiana State University, Baton Rouge, LA 70803 USA
 - Prof. Jos T.A. Verhoeven, Section of Landscape Ecology, Utrecht University, 3508 TB Utrecht, The Netherlands
 - Prof. Rusong Wang, Ecological Society of China, Center for Ecological and Environmental Research,

- Chinese Academy of Sciences, Beijing 100085, People's Republic of China
- Prof. Takakazu Yumoto, Research Institute of Humanity and Nature, Kyoto 602-0878, Japan

X International Congress of Ecology, Brisbane, Australia 16-21 August 2009. 'Ecology in a Changing Climate: Two Hemispheres, One Globe,' organized by INTECOL and the Ecological Society of Australia in partnership with The New Zealand Ecological Society

This listing was prepared by Dr. Jorge Cancela da Fonseca, Directeur de recherche honoraire au CNRS, Paris, France, and by Dr. Rebecca R. Sharitz, Professor of Plant Biology, University of Georgia, USA (both members of INTECOL)



a. Brisbane, City of INTECOL10



b. John Lee, the president and Alan Covich, the next president of INTECOL



c. Board Meeting at INTECOL10



Global Forum

a. Reflections on Humankind, Environment, and Ecology

Wolfgang HABER
Prof. Munich University of Technology
Weihenstephen, Germany
A Past President of INTECOL

To safeguard the material, sociocultural and physical well-being of humankind today and in the future, the political strategy of sustainable development has been based on three pillars: - economy, social conditions and natural environment. From a scientific point of view, ecology as the "study of the organization of nature" is the discipline that deals with the natural environment. It is one of the most recent disciplines, and, because of its stormy development in the past few decades - which nevertheless was not free of misapprehensions and misinterpretations - and because of an increasing environmental awareness in society, it also became very popular. On the downside of things, however, this popularity also means that some think of ecology as a doctrine of salvation, with a tendency to turn assumptions into dogmas, which subsequently often conflict with scientific objectivity.

Life on this planet, two-thirds of whose surface is made up of water, sprang up some 3.5 billion years ago. Ecology investigates the interplay between animate and inanimate nature through a systemic approach on the different levels of scale and organization of life. Its most important discovery is the "economy of nature", which means the efficient use and reuse of the finite resources of our planet powered by permanently available solar energy, in combination with a self-organised development of diversity of life, based on an intricate yet uniform basic genetic code. Life is the evolutionary play in the ecological theatre, characterized by the continuous appearance and disappearance of always new actors. Some 7 million years ago, a very special kind of protagonist entered that stage in the shape of the early hominids. One of their kind, *Homo sapiens*, has remained on that stage ever since, and has come to dominate it.

Human beings are creatures who inhabit two worlds simultaneously: they are biological creatures, driven by the typical instincts for survival of all higher animals, and they are spiritual creatures as well, endowed with intelligence, foresight, the ability to become conscious of their feelings and the ability to control their biological instincts or even push beyond them. As a consequence, instinct and intellect are always in conflict, not only when interacting with others but also inside every single person. The intellect intentionally organizes and enriches human life. It is always striving for improvement and mastery of nature, but is also constantly led astray or into conflict by biological drives.

When humankind spread from Africa to all the other continents, it adapted to the natural conditions it encountered and subsequently altered them for its benefit. Different cultures thus developed, but they all had two things in common that ensured superiority over nature: first, the mastery and utilization of fire, which was (in addition to sunshine) a much more effective means of energy supply, and second, the change from a lifestyle of food hunting and gathering to cultivating plants and breeding livestock; in other words, agriculture. The consequences of both inventions were irreversible, massive, even destructive intrusions in the planet's nature. In addition, these inventions created permanent dependencies on certain resources: the dependency on fuel for fire or energy, the dependency on suitable soils for crop cultivation, and the dependency on pastures and feed for livestock. Because of their overall success, human population has multiplied and personal and collective demands on the finite resources of our planet have increased steadily.

The success story of farming paved the way for the development of villages, townships, and urban civilization which, in turn, took over the further cultural, technological and social evolution - but always remained dependent on agriculture. Life-supporting nature, however, impedes this development by posing



major problems that can be subsumed with terms such as heterogeneity, variety, unreliability, unpredictable dynamics providing merely temporary equilibriums, but also windows of opportunity. Moreover, people themselves cause further problems such as higher population densities leading to an increase in lethal epidemics, intolerance, conflict and war. The reasons for these problems are the fundamental principles underlying the organization of life: competition and opportunity, which of course also apply to human society and cannot be suspended by means of ethics or authoritarian rule.

The starting point of every human activity is the "land cover", primarily by plant growth and the soils subsequently created by the vegetation. The vegetation cover consists of grassy or herbaceous plants and, where precipitation and temperature permit, woody plants. The former supply most of our food and animal feed while the latter are chiefly used for energy (fuel) and biological building material, and only rarely for food. Human beings do need both types of plants as primary biological resources. Yet, they are not available everywhere and demand careful choice decisions. While forest must be cleared in woodland areas in order to cultivate crops, areas without natural forest (e.g. steppes) are characterized by a lack of fuel-wood and building materials. Only 10-15% of all continents (excluding the Antarctic and high mountain regions) are covered by soil that is suitable for farming. They are as crucial to human survival as a climate suitable for the cultivation of crops. Only six species of cereals provide the most important food sources for humankind, with nutrient-rich grains (caryopses) that can be harvested in large quantities, stored and transported. They are the only sources of mass-produced food commodities.

Throughout history, humankind has developed the following sequence of main land use types and purposes:

1. for the acquisition and production of food,
2. for the acquisition and production of non-food materials of biological origin (fibres, oil; wood and other raw materials),
3. for the erection of buildings for residential, industrial, commercial, administration, transport, education and religious use,
4. for the extraction and deposition of non-living materials (building material, energy sources), and, since the end of the 19th century
5. for leisure, recreation, sport, and

6. for nature conservation.

Each of these land use types and purposes gives rise to the subsequent uses - and each subsequent use influences its predecessors. More importantly, each of these types of land use (except no. 6) produces or results in new and partially irreversible environmental conditions.

It is the spatial arrangement and composition of land utilization types that produces "landscape". In addition to being managed, each area thus utilized can be acquired, invested in, passed on, sold, mortgaged, coveted for reputation or power, speculated on, fought over, conquered or defended.

Moreover, each type of land use has its own body of political representation and lobby, always quarrelling over land and space. To regulate and harmonize the different demands, governments have been installing land use and town and country (spatial) planning, and since the middle of the 20th century also landscape planning which, however, is mostly in the responsibility of nature conservation authorities. Agrarian and forest land uses created cultural landscapes including many aspects worthy of conservation, in particular in grassland areas, meadows and pastures. There are numerous controversies as regards nature and landscape conservation, with groups who chiefly focus on the remains of near-natural habitats which are commonly characterized by great biodiversity, and other groups who also consider the condition of the surrounding landscape, which is made up of cultivated and built-upon land that are often very far from natural, but could be designed appropriately.

From a global perspective, the types of land use for material provision - primarily forest and farmland, mining and extraction areas (nos. 1, 2 and 4) make up two thirds of all continental land. 15-20 % of the land is occupied by cities, industrial and transportation infrastructure and these types of land use keep expanding. These are the areas where most of the human population live, whose life and well-being depends on the extensive but much more sparsely populated areas under cultivation. As little as 10-15% of the land is unused, wild land (high mountains, wetlands, arid and polar deserts) and protected areas (nature reserves and parks) which, however, are often used for leisure and recreational purposes, but are likewise affected by pollution and the effects of anthropogenic climatic change. This challenging situation is aggravated by a



steady increase in population numbers and urbanization; although annual growth rates are currently in decline, experts still estimate a global population of 9 billion by 2050. The most important problem, however, is not the increase in the number of humans but the increase in human demands for a better life. It is this increase in demands for which the fossil and nuclear fuel-driven success story of the western industrial culture has set the standard, resulting in a permanent intensification of land use in the limited or even shrinking agricultural regions of the planet.

The foreseeable exhaustion of fossil fuels and the climatic change caused by them is forcing a change to renewable energy sources - which tend to require additional land. The greatest such demand for land is caused by the cultivation of vegetable biomass for energy and fuel production, which depends on agriculture and forestry - and can only be successful in suitable areas, which are limited. Competition with food production, albeit to a different extent in each region, is inevitable. What complicates matters further is the fact that agriculture and forestry have been organized to the demands of market economies in industrial countries, technically rationalized and standardized as regards ways of utilization. In industrial societies farming is particularly unattractive for many people today and has a poor standing; but since it is indispensable, governments offer hefty subsidies, supplemented by further grants for the cultivation of biomass for energy.

This development is leading to great changes in the landscapes we know and is causing further losses of near-natural parts and areas, as well as losses and extinctions of plant and animal species of alarming scope. In 1992, United Nations decreed an International Convention on Biological Diversity as a countermeasure, together with the conventions on sustainable development and on climate change, but they failed to coordinate and harmonize them. Though emotionally very arousing, the biodiversity convention ignores significant ecological facts, such as the fundamental distinction between green plants and microbes, which subsist on inorganic substances and solar or chemical energy (autotrophic), and all other

organisms that feed on plants or from each other (heterotrophic). Microorganisms, which are much neglected in the biodiversity debate, form the basis of most life processes, being responsible, for example, for the biological transformation of atmospheric nitrogen into nutrients for plants and the basis for proteins. Moreover, the convention ignores the structural diversity of the "land cover", for many important vital functions depend more on structures than on species; and the peculiarity and beauty of landscapes are determined by configurations and pattern.

The different land utilization types serving human purposes must therefore not be arbitrarily spread out over the land, but have to be carefully located and arranged, depending on issues of ecological and economical sustainability and social needs. This, in turn, will benefit biodiversity, too. Unfortunately, the models and concepts aiming to achieve such a differentiated land use are being met with strong resistance because of land property rights, static views of environmental protection and conflicting cultural attitudes. Aided by the recent idea of "ecosystem services", sustainable development could provide a means to overcome this resistance. In this context, however, it is difficult to set priorities and have them respected; because those services cannot be used everywhere and at any time, especially since they are not always compatible an aspect which similarly applies to sustainable development. After all, such development demands that certain elements or processes are maintained while others are developed, that means altered or abolished. Win-win situations are not the rule, and customary lifestyles, landscapes and nature will inevitably be among the losers possibly even people. It will therefore be necessary to negotiate and decide under competitive conditions on all levels of the organization of life, culture and society. Global reality teaches us every day how difficult this can be. In the end, two general political convictions are at stake here: to subject people to majority decisions on how to act sensibly ecologically, economically and socially, or to respect their freedom of choice and action. The production of biomass for energy provides a new and additional challenge in this process.



b. Establishing new institute in Korea, "National Institute of Ecological Research"

Eun-Shik Kim
Professor, Department of Forest Resources,
College of Forest Science, Kookmin University,
Seoul 137-702, Korea
President of The Ecological Society of Korea
Secretary General of INTECOL
E-mail: kimeuns@kookmin.ac.kr

We witnessed the success of the 10th INTECOL Congress, Brisbane, Australia, with the leadership and teamwork from Dr. Craig James, Vice president of INTECOL, on which I would like to extend warmest congratulations to the events finished last month.

Today, I am writing you to ask each of you a favor of helping me out in searching for information on governmental/federal ecological research institutes working on ecology including the issues of climate change & biodiversity conservation at your country or region.

To explain the background, the Ministry of Environment of Korea is establishing a brand new National Institute of Ecological Research at a

governmental/federal level working toward detecting ecosystem changes affected by climate & environmental changes and also toward the conservation of biodiversity conservation, especially for the endangered species. Consequently, the Institute is expected to play the central role on the advancement of the science of ecology in Korea in the years to come. In this, they are in need of the data and information on governmental/federal ecological research institutes working toward general ecology as well as on climate change & biodiversity conservation. If you could kindly provide me with the information on the issues, I will use the information for the purpose of suggestion of structure and function of new research institute for their internal consideration.

Please review the items below. I would be extremely thankful if you could send me the information on the institutes as you are aware of. Using the information I will also update the corner of the "Institute on Ecology" of our INTECOL website. Your kind response would be highly appreciated. Many, many thanks for your kind understanding and cooperation, in advance,

Questionnaire on the Structure and Function of Institute(s) focused on Ecological Aspects including the issues of Climate Change and Biodiversity Conservation at National and/or International Level(s)

Country:

Name of Institute:

Affiliation (Under the Ministry, Department, Agency, Service, Administration, etc.):

Major Missions of the Institute in Research:

Institutional Structure and Major Activities: Department(s)/Division(s)

Further Information: website(s), contact person(s), e-mail address(es)

Please describe separately for different institutes



Future of Ecology

Reconstruction of Urban Forests

Akira MIYAWAKI
Director, the IGES-JISE Research Institute
Yokohama, Japan
A Past President of INTECOL

Essence of environmental concern is "to protect life"

Today the world is full of materials and energies of which humans have never dreamt. We live a quite convenient, efficient and affluent life, though there are differences between regions. Still we work harder for material wealth, and develop sciences, technologies and economies. Meanwhile we observe nature destruction and environment problems going on

We tend to feel environmental problems are fuzzy and somebody else's issues because they have a wide range from hands-on to intangible aspects. What we have to bare in mind is that the essence of environmental concern is to protect life. As we humans possess intelligence and sensibility, we should strive so that all living things that coexist with humans including animals, plants and microorganisms, can live within the ecosystems on the earth.

Modern significance of forests

The field of ecology is so large and various. Besides existing analytical and metric approaches on individual research subjects, comprehensive and systematic studies are crucial.

Some parts of life and environments are unknown as yet, and cannot be seized through quantitative methods alone. We ecologists should contribute to solving environment problems by seeing various phenomena of nature in the context of the history of life on the earth. Our vegetation field researches show that the original vegetation including primeval forests in most areas in the world are altered into substitute vegetation or devastated to wasteland by human impacts. Multi-layered native forest is an important research subject as an environment for human existence. However, it has stuck out from the frame of analytic and quantitative science, and is sometimes ignored.

Forests indigenous to a given area have functions of regionally adapted environmental protection and disaster mitigation. They also maintain biodiversity, and by providing large carbon stores, help to prevent today's most pressing environmental issue, global warming. Reforestation can be ecologically built by planting seedlings which mimic indigenous forests chosen after the results of vegetation field studies. This reforestation is a practice anyone can participate in any time, any place.

Urban forests

Urban and industrial areas today are made up of non-biological materials such as iron, concrete and petrochemicals. A large amount of various energies are also consumed there. Children can grow up in a virtual world because of today's developed information technologies and many of them don't know the preciousness of real life.

It is in cities that green environment is certainly needed. But urban greenery until today means at most rooftop gardening, wall greenery and green spaces called parks with lawn and scattered adult trees. These green spaces are literally park landscapes which can indicate wasteland degraded after long-term overgrazing, seen in European countries and many other regions in the world. Any kind of green plant is of course important, but the most required green environments in urban and industrial areas now are multi-layered native forests, that protect all life as environment-protection, disaster-mitigation forests. We should preserve remaining indigenous forests and reconstruct quasi-natural forests where they have been destroyed.

Japan has a population of more than 120,000,000 in the area of 380,000 km². Japan is a mountainous country, and the population is concentrated on the plains along the seashore and riversides. Even in cities with a large population, there still remain forests called Chinju-no-mori, which represent the potential natural vegetation in an ecological vegetation perspective. We Japanese have protected, maintained and made Chinju-



no-mori in and around new villages and towns for centuries, though we on the other hand have destroyed forests in order to make agricultural fields and to build villages and towns.

The history of human civilizations and environments shows that the most prosperous cities and civilization declined after they completely destroyed their forests. Mesopotamian, Egyptian, Greek, and Roman civilizations are examples. Green plants are the only producers in the ecosystems on the earth, and we humans live as parasites of green plants. A multi-layered native forest is a collective entity of green plants. We should rebuild forests of native trees in urban and industrial areas to help us survive in the future.

Proposal

My approach has been to integrate ecology, the science of life and environment, and the Japanese traditional green environment, Chinju-no-mori. Based on field vegetation studies we identify the potential natural vegetation of a given area, and nurse potted seedlings with well-developed root system of as many indigenous species as possible, including the major tree species. We mix and plant them closely together following the system of a natural forest. In this way, we have already planted more than 30,000,000 seedlings at over 1600 sites both in Japan and abroad, with the help of far sighted private companies, national and local governments, and other organizations like NPO. The main participants in planting seedlings are local citizens. Fortunately we have succeeded in every case, and the planted seedlings have grown to form a quasi-natural forest at each site. However, the number of planted trees and sites are far from enough considering the global scale. I would like to propose that all INTECOL members help to promote the reconstruction of quasi-natural forests based on ecological researches in urban and industrial areas of your countries and regions.

Some Japanese companies began planting trees in barren land or tropical areas. But not all of them have succeeded. To regenerate green environments with living green materials, scientific knowledge, ecological field researches and biological time are needed.

Loose international project for regenerating urban forests

Many INTECOL members will be devoted to your own studies every day. However, I hope many of you

who are interested in the global environment and who live in cities, not only vegetation specialists but also ecologists in other fields with different approaches, will help to organize groups to regenerate and to reconstruct quasi-natural forests in urban and industrial areas in the world. In each region of each continent you are a scenario writer or a stage director of the drama of making quasi-natural forests, which protect life and culture, and coexist with the economy. The activity is future-oriented by exchanging ecological knowledge, and will be spread from you to more of the world.

References

- Miyawaki A (1981) Energy policy and green environment on the base of ecology. In: Fazzolare RA & Smith CB (eds.) Beyond the energy crisis, opportunity and challenge. pp. 581-587. Pergamon Press, Oxford, New York.
- Miyawaki A (1993) Restoration of native forests from Japan to Malaysia. In: Lieth H & Lohmann M (eds.) Restoration of Tropical Forest Ecosystems. pp. 5-24. Kluwer Academic Publishers, the Netherlands.
- Miyawaki A (1999) Creative Ecology: Restoration of native forests by native trees. Plant Biotechnology 16(1), 15-25. Tokyo.
- Miyawaki A (2004) Restoration of living environment based on vegetation ecology: Theory and practice. Ecological Research 19, 83-90. Blackwell.
- Miyawaki A (2007) A philosophical basis for restoring ecologically functioning urban forests: Current methods and results. In: Carreiro MM et al. (eds.) Ecology, Planning, and Management of Urban Forests. pp. 187-196. Springer, USA.
- Miyawaki A & Box EO (2006) The Healing Power of Forests; The Philosophy Behind Restoring Earth's Balance with Native Trees. 286pp. Kosei Publishing Co., Tokyo.
- Miyawaki A & Golley FB (1993) Forest reconstruction as ecological engineering. Ecological Engineering 2, 333-345. Elsevier, Amsterdam.
- Tüxen R (1956) Die heutige potentielle natürliche Vegetation als Gegenstand der Vegetationskartierung. Angew Pflanzensoziologie 13, 5-42. Stolzenau/Weser.

Meeting Report



The 52nd IAVS Symposium in Greece 2009 (Chania, Crete)

The 52nd IAVS Symposium held in Chania, Crete is now history and the new one in Ensenada, Baja California, México is *ante portas*. In this very successful and productive meeting (generally and commonly accepted) 265 friends and colleagues from 36 countries of all continents travelled in Crete in May and June 2009 to attend the IAVS annual symposium - first ever IAVS meeting in Greece.

Those four (4) full days (31st May till 4th June 2009), not including the opening day, and 2nd of June (mid-symposium excursions) were filled with 116 lectures (in 26 sessions), presentation of 100 posters (in 2 sessions), special management meetings.

Seven (7) plenary talks from our invited speakers (Erwin Bergmeier, Michael Barbour, Frederic Medail, John Halley, Christian Korner Alessandro Chiarucci, Meelis Partel) coming from 7 countries enriched and substantially contributed in giving the general framework of main theme of our IAVS symposium: "Vegetation processes and human impact in a changing world".

Summarizing the excursions we organized, they come up to seven (7) of which:

- two (2) pre-symposium field trips were organized in Eastern Crete (25-30 May 2009, 6 days, 36 participants) and Santorini (26-29 May 2009, 4 days, 25 participants),
- four (4) mid-symposium field trips (2nd June 2009, in Omalos plateau (more than 110 participants), Imbros gorge (about 30 participants), Amari-Thronos village (about 70 participants), Elaphonisos (about 45 participants),
- one (1) post-symposium excursion in Peloponnisos (4-9 June 2009, 6 days, 30 participants)

Organizing a meeting of this size and format (a symposium + 3 long field trips) was a gruelling experience. Undoubtedly all those thousands of emails, phone calls and hundreds of most unusual queries have hijacked our lives full time for about a year, but we have no regrets. It was great to have so many friends around to share our beautiful country with us.

During the preparatory phases of the 52nd IAVS symposium, all secretarial jobs was in the shoulders of Sandy Coles, but in items related with session's distinction and arrangement of talks and posters, I was assisted by a team of colleagues of my Faculty as the following: Thanasis Kallimanis, Nikolaos Koutsias, Maria Panitsa, Vasiliki Kati.

Our sincere thanks go to all above mentioned colleagues, as well as to Thanasis Kallimanis, Foula Nioti, Magda Pleniou who run the daily proceedings of the symposium in Chania. Our small symposium booklet was designed by friend George Terzis (owner of KATAGRAMMA publisher office) and edited by Sandy Coles and me. The publication of the book of abstracts was sponsored by Wiley-Blackwell and we thank them.

We hope you all had a good time in the island of Crete, seen some of the most beautiful natural areas in Crete, Santorini and Peloponnisos, made some new friends and expanded your networks. "Ευχαριστούμε" to all who came, seen, drunk and eat and simply enjoyed time with us.

Panayotis DIMOPOULOS
University of Ioannina, Greece
E-mail : pdimopul@cc.uoi.gr



Meeting & Congress

EECA Registration: provisional schedule on line On line application for poster dead line: 30 September 2009

The Ecosystem Engineering Application Group (Gaié - groupe d'application de l'ingénierie des écosystèmes) is organizing an international congress "Ecological Engineering: from Concepts to Applications" (EECA), 2- 4 December, 2009, Cité Internationale Universitaire de Paris, France.

The EECA congress objectives are to:

- Define the theoretical foundations of ecological engineering;
- Promote the development of the field;

Identify the most effective ways to connect scientists and management practitioners for developing and implementing techniques of ecological engineering and ecosystem management;

Foster and develop a more effective dialogue between scientists who use theoretical approaches and those focusing on developing and implementing applications.

Poster application:

Poster application dead-line is 30th September 2009.

Submit on line from: www.biologie.ens.fr/eeca
<<http://www.biologie.ens.fr/eeca>>

Provisional schedule on line at:
www.biologie.ens.fr/eeca
<<http://www.biologie.ens.fr/eeca>>

Key dates:

Pre registration: now!

Poster submission: by 30th September, 2009

Registration: From July 1st to 30th September, 2009

Late Registration: From 1st October to 31st October, 2009

EECA international Congress: 2nd to 4th December, 2009

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.

Officers and Executive Board Members

President: John A. Lee (j.a.lee@sheffield.ac.uk)

Past President: Akira Miyawaki (miyawaki-29@jise.jp)

Vice President: Craig D. James (craig.james@csiro.au)

Secretary General: Eun-Shik Kim (kimeuns@kookmin.ac.kr)

Treasurer: Azim U. Mallik (azim.mallik@gmail.com)

Executive Board:

Alan P. Covich (alanc@uga.edu), Almo Farina (farina@uniurb.it),

Bojie Fu (bjfu@cashq.ac.cn), John Grace (j.grace@ed.ac.uk),

Sun-Kee Hong (landhong@yahoo.co.kr), Pavel Krestov (krestov@vtc.ru),

Bernd Markert (markert@schlundmail.de), Dan L. Perlman (perlman@brandeis.edu),

Rebecca R. Sharitz (sharitz@srel.edu), Patrick Silan (psilan.sfe@univ-montp2.fr),

R. Eugene Turner (euturne@lsu.edu), Jos T. A. Verhoeven (j.t.a.verhoeven@bio.uu.nl),

Rusong Wang (wangrs@rcees.ac.cn), Takakazu Yumoto (yumoto@chikyu.ac.jp)

Website: <http://www.intecol.org>

Bulletin Editor: Sun-Kee Hong (landhong@yahoo.co.kr; intecol.bulletin@gmail.com)

Deadline for sending information for next e-Bulletin

- Vol. 3 No. 4: 30 November 2009