



# Bulletin

International association for landscape ecology

## MEETING OF THE IALE WORKING GROUP "LANDSCAPE SYSTEM ANALYSIS IN ENVIRONMENTAL MANAGEMENT"

Warsaw, Poland: October 6 to 9, 1993

The inaugural meeting of the new IALE Working Group was held from October 6 to 9 in Warsaw, Poland. The meeting was organized by the Faculty of Geography and Regional Studies of the University of Warsaw and the Polish Association for Landscape Ecology. Indeed, this was also a "first" for the Polish Association since it only formally came into existence at a meeting, also held in Warsaw, on October 6th, 1993. The meeting of the Working Group attracted 43 registrants from 17 different countries.

The meeting was organized around two days of plenary sessions and separate paper and poster presentations. The third day was devoted to a field excursion to the north and north-west of Warsaw to examine the Kampinos National Park, the Gostyninski Landscape Park and the ancient city of Plock.

The meetings took place in the splendid Staszic Palace, now the home of the Polish Academy of Sciences. The first plenary session consisted of topics as ecosystem health, landscape aesthetics, techniques in landscape analysis, theoretical questions of landscape stability and the role of landscape analysis and management, particularly in the reconstruction of eastern Europe. The second day of papers was divided into several sections, the first being presentation by Polish colleagues focusing on their research into, and the implementation of landscape parks. Another group of papers dealt with the more theoretical and applied aspects covering issues from landscape perception and cultural landscapes to some very practical landscape and environmental planning problems at scales from small floodplains to major concerns of national planning.

The second day of papers ended with a business and organizational meeting. The work of the Working Group will revolve around 5 themes identified by the Group but falling within the mandate approved by IALE. It is expected that each member of the Working Group will become actively involved in one or more of these theme areas. The following are the major themes:

1. methodology and techniques of landscape systems analysis and their application in environmental management,
2. landscape development and evolution from a historical perspective and its relevance to understanding current conditions,

Continues p.2.....

Toulouse 1995

## IALE CONGRESS 1995: . THE FUTURE OF OUR LANDSCAPES. PRELIMINARY INSCRIPTION

Enclosed this Bulletin you will find a preliminary inscription form for the IALE Congress, that will be held in Toulouse, France from Sunday 27th to Thursday 31st August, 1995. Please return the preliminary form to

Henri Decamps  
Centre d'Ecologie CNRS  
29 rue Jeanne Marvig  
31055 Toulouse Cédex, France

by 1st October 1994.

The following different sessions (with the name of the contacted chair persons) will be organized:

Tuesday 29: Three parallel sessions:

- Future landscapes (F. Golley)
- Goals for future landscapes (P. Opdam)
- Planning landscapes (L. Miklos)

Wednesday 30: Six parallel sessions

- Landscape system analysis (M. Moss)
- Human perception of change and the role of culture in creating landscapes (J. Nassauer)
- Multiscale approach (F. Burel)
- Agricultural approach (J. Baudry)
- Restoring landscapes (B. Green)
- Education (A. Farina)

## 10TH INTERNATIONAL SYMPOSIUM ON PROBLEMS OF LANDSCAPE ECOLOGICAL RESEARCH

SMOLENICE (SLOVAKIA) 21-24 NOVEMBER 1994

The jubilee symposium will be held on the main theme "Present state and new trends in landscape ecology". The symposium should summarize the results of the last decades development in theory, applications, environmental policy and the history of landscape ecology in Slovakia and abroad. It is worth to mention that it was at the 6th of these symposiums that IALE was established in Piestany in 1982.

Further information: Institute of Landscape Ecology, Slovak Academy of Science, P.O.Box 254, 81499 Bratislava, Slovakia. Phone: +42 7 334311 or 335435, Fax: +42 7 332560

.....Continued from p.1

3. the significance of ideas of landscape stability, integrity and health, particularly in regions of rapid socio-economic change,
4. landscape analysis as a critical basis for identifying zones of environmental stress/hazards,
5. the importance of the perception and aesthetic value of landscapes and the significance of this in people's approaches to, and their understanding of landscape.

The aim of these 5 subgroups will be to produce, for the international IALE meeting in Toulouse in 1995, a "state-of-the-art" paper on each of these themes and to develop a specific research agenda for subsequent years.

Each of the 5 working sub-groups elected one member to act both as group coordinator and to serve on the committee of the Working Group. Those members are: Prof. Dr. Günter Schönfelder, Halle, Germany (group 1) Dr. Jorge F. Cervantes, Mexico (group 2) Dr. J. Tesitel, Czech Republic (group 3) Dr. J. Drdos, Slovakia (group 4) and Dr. F. Snacken, Belgium (group 5) Dr. Michael Moss (Canada) was appointed Chair of the Working Group and Dr Andrzej Richling (Poland), Vice-Chair.

Further information on this Working Group can be obtained from Dr. Michael Moss, Faculty of Environmental Sciences, university of Guelph, Guelph, Ontario N1G 2W1, Canada.

*Michael Moss & Andrzej Richling*

### NEW POLISH IALE-NEWS-LETTER

The Polish Association for Landscape Ecology, PALE, pol. PAEK) has initiated a new polish-linguaged Bulletin "Biuletyn PAEK". It is edited by IALEs regional contact person in Poland Maciej Pietrzak, Dept. of Geography of Tourism, ul. Rybaki 19, 61-884 Poznan Fax +48 61 33 00 87

### REPORT ON THE 9TH ANNUAL MEETING OF THE US-IALE

Tucson, Arizona, 22-26 March 1994

The meeting organized by the US-IALE branch in Tucson, Arizona was focusing on the spatial and temporal models for analysing pattern & process in landscapes.

A rich participation of landscape ecologists (more than 200) from many states (34) and from 7 foreign countries (The Netherlands, United Kingdom, Italy, Mexico, Canada, Sweden, Germany) has created a very favourable environment for an interesting debate.

The theme of the symposium has been debated by 70 oral communications, 62 posters, 3 plenary lectures, 1 blue ribbon panel. The contributions were regarding the vegetation patterns (2 sessions), modelling (3 sessions), wildlife habitats, riparian wetlands and aquatic lands, remote sensing, GIS and land assessment, spatial analysis and index (2 sessions), fire size, fire history, and vegetation patterns, and use, analysis and remote sensing.

The blue ribbon panel has been organized with the contribution of Frank Golley, Richard Forman, Joan Nassauer, Monica Turner. The aim of this panel, as recommended by the 1992 annual meeting, was to assure the most efficient transfer of landscape principles to effect policy.

During the half day presentation and the final public debate the role of Landscape Ecology and the capacity of this science to meet the need of the different societies have emerged.

The high quality of oral and poster presentation, the homogeneity in terms of principles of landscape ecology confirm once again the "mature" approach of the US landscape ecologists to consider complicate and multiscale ecological processes. The specific theme of the symposium has affected in part the participation of other contributions more related to the planning and the land management. I am sure that these arguments will be discussed with more detail in the next meeting in Minneapolis 22-26 April 1995 dedicated to the "working in a world dominated by the human kind" and organized by Joan Nassauer. A series of interesting field trips have allowed to appreciate the beauty of the Sonora desert, the vegetation patterns along altitudinal and edaphic gradients and to use the exquisite entertainment of the local people.

*Almo Farina*

### IALE WORKSHOP, FEBRUARY 1995: LAND USE CHANGES IN EUROPE AND ITS ECOLOGICAL CONSEQUENCES

A workshop for the preparation of one of the themes of the IALE congress in Toulouse in 1995 will be organized in Wageningen, The Netherlands, 1-3 February 1995.

Due to economic processes like the privatization in central and eastern Europe, the GATT negotiations, the changes in the agricultural and forestry policy in the EU land use is now changing more and more rapidly in Europe. Social factors like preference for living in urban areas, changes in communications, sub urbanization and mechanization are enforcing this process. In several regions in Europe environmental restrictions are becoming increasingly important as a driving factor in land use policy. These changes in land use and land use policy have important implications for the ecology of the landscapes involved.

The workshop aims to analyse the ecological consequences of land use changes in Europe. For the workshop land use is defined as the activities for the exploitation of land carried out by man. That means that emphasis is laid on landscapes dominated by agricultural land use and afforestation.

For further information contact: Rob Jongman, Dept. of physical planning and Rural Development, Wageningen Agricultural University, Gen. Foulkesweg 13, 6703 BJ Wageningen, The Netherlands, Fax +31 8370 89111, Phone +31 8370 82050.

The IALE BULLETIN is distributed 4 times a year to the members of IALE. IALE Bulletin Editor : Jesper Brandt, Inst. Geography & Computer Science, Roskilde University Center, P.O.Box 260, DK-4000 Roskilde, Denmark, Phone: +46 75 77 11 ext. 2463, Fax: +46 75 74 01 E-mail: brandt@ruc.dk. Layout Erling Andersen. IALE - International Association for Landscape ecology - was founded in 1982 to promote communication between scientists and planners and interdisciplinary scientific research. IALE executive committee: President Henri De-camps (France), Past-president Gray Merriam (Canada), Vice-presidents: Joan Iverson Nassauer (USA), Eduardo R. Fuentes (Chile), Paul F.M. Opdam (Netherlands), Vaclav Mejstrik (Czech Republic) General Secretary Almo Farina (Italy), Lunigiana Museum of Natural History, 54001 Aulla, Italy Phone: +187 42 03 74, Fax: +187 420727. Deputy General Secretary & Bulletin editor Jesper Brandt (Denmark), Treasurer: James F. Thorne (USA) The nature Conservancy, Pennsylvania Chapter, 1211 Chestnut Street, 12th floor, Philadelphia, PA 19107-4122, Phone: 215-963-1400

Deadline Bulletin 12.3: 1st September 1994

## GCTE/IGBP-Spain Workshop: Global Change & Landscape Dynamics in Mediterranean Systems

On November 15-18th, a workshop on Global Change and Landscape Dynamics in Mediterranean Systems was held in Toledo, Spain. The meeting was jointly organized by the Global Change and Terrestrial Ecosystems (GCTE) core project of the International Geosphere-Biosphere Program (IGBP) and the IGBP Committee of Spain (IGBP-Spain). The workshop was sponsored by the Commission of the European Communities and the Spanish General Secretariat of the National Plan for R&D. The meeting was attended by about forty scientists from the Mediterranean region proper, other countries of the European Union, the USA, South Africa and Australia.

The objectives of the meeting were:

- to examine the relevance of major approaches currently used in landscape ecology and examine their relevance to global change studies;
- to suggest approaches for a quantitative analysis of human-driven changes to landscapes;
- to review the efforts being made within the Mediterranean region in order to identify gaps and develop the appropriate strategy and use the Mediterranean region, and similar ecosystems in other parts of the world (e.g. Western Australia, California, Chile, South Africa), as an initial focus for developing an international research effort;

The first part of the meeting was devoted to update workshop participants on current approaches to landscape research global change studies, and on ongoing studies in Mediterranean-type and related areas. The second part was devoted to discussions in working groups on: 1) processes for which landscapes are important; 2) linking social sciences and natural sciences in landscape and global change studies; 3) experiments and methodology to examine the effects of human driven changes; and 4) data collection, and monitoring for detecting change:

The workshop identified three main subjects where a significant interaction may be expected as a consequence of changing the size and/or spatial arrangement of patches: 1) forest fires; 2) biodiversity; 3) soil erosion, desertification and

water yield. A set of hypotheses for research was laid down as well as the major knowledge gaps identified. Furthermore, field experiments and methods were indicated to pursue this research. The workshop noted also the need to strengthen the relationship between social sciences and natural sciences. The examples presented revealed the causal relationship of processes acting in either field. Finally, the needs, types, time and spatial scales of data for monitoring and detecting global change in the region were identified.

The conclusion of the workshop was that the Mediterranean region, due to its long history and its fine grain structure caused by intense human use, its rapid land use change in the recent past due to socioeconomic changes, its contrasts between the North and South, and its sensitivity to global change, either climatic, of the composition of the atmosphere and of changes in land use, could serve as a good case study for investigating and detecting global change. It was decided to establish a network of research on Mediterranean landscapes within the frame of GCTE and it was proposed to develop a pilot study of the effects of changes in socioeconomic policies (such as the set aside policy of the European Union, the GATT agreements, etc.) on land use, and landscape patterns and processes.

In addition, the workshop recognized the need to strengthen the cooperation with countries from Northern Africa. This cooperation should as well promote training and education. Furthermore, it was recommended that the link between the various Mediterranean-type areas of the world should be continued and specifically developed for landscape and global change studies.

For further information contact:

José M. Moreno  
Chairman, IGBP Committee of Spain  
Departamento de Ecología  
Facultad de Biología. Universidad Complutense  
28040 Madrid

**REGIONAL CONTACTS OF IALE:** **Australia** G.W. Arnold CSIRO Division of Wildlife and Rangel and Reserves P.O. Midland 6056 **Belgium** Hubert Gulincx Univ. of Leuven Fac. of Agric. Science Dept. of Land and Forest Man. B-3030 Leuven **Bulgaria** Jekaterina Pavlova Nauchniy centr po ochrane prirodnej sredy i vodnykh resursov ul. Industrialna 7 Sofia **Canada** Michael R. Moss Dept. of Geography Univ. of Guelph Guelph, Ontario N1G 2W1 **Chile** E.R. Fuentes Fac. de Ciencias Biológicas Univ. Católica de Chile Casilla 114-D Santiago **China** Xiao Duning Inst. of Applied Ecology Acad. Sinica P.O.Box 417 Shenyang **Columbia** A. Etter INCITEC Cra 60A nr 127B-23 Bogota 10 **Czech Republic** Hana Rambouskova CSc. Inst. of Applied Ecology CS-281 63 Kostelec n.C.I. **Denmark** J. Brandt Roskilde Univ. House 19.2. Box 260 4000 Roskilde **Germany** K.-F. Schreiber Inst. für Geographie Westfälische Wilhelms-univ. Robert Kochsstrasse 26 D-W-4400 Münster **Finland** Osmo Kontturi Finnish IALE P.O.B. 381 SF-80101 Joensuu **Estonia** Ülo Mander Dept. of Physical Geography Univ. of Tartu. 202400 Tartu **France** Françoise Burel Muséum national d'histoire nat. Lab. d'évolution des systèmes Avenue du Général Leclerc 35042 Rennes Cédex **Guatemala** L. Alegria Rubio c/o Hesse, 15 Ave. 'A' 19-25 zona 13 Guatemala City **Hungary** P. Csorba Geographical Inst. Lajos Kossuth Univ. H-4010 Debrecen **India** Majid Husain Dep. of Geography Jamia Millia Islamia New Delhi - 110025 **Ireland** Darius J. Bartlett Dept. of Geography Univ. College Cork **Israel** Maxim Shoshany Bar-Ilan Univ. 52900 Ramat-Gan **Italy** Almo Farina Lab. di Ecologia del Paesaggio c/o Museo di storia Natural della Lunigiani Fortezza della Brunella I-54011 Aulla (MS) **Japan** Nobukazu Nakagoshi Hiroshima Univ. Dept. of Enviro. Studies Higashi-senda, Naka-tu Hiroshima 730 Japan **Latvia** A. Krauklis Latvijas Universitate Raina bulv. 19 226098 Riga **The Netherlands** Jolanda Rensen WLO-secretariat P.O.Box 9201 NL-6800 HB Arnhem **Nigeria** J.O. Adejuwon Dept. of Geography Univ. of Ife-Ife **Peru** C.Z. Jimeno Of. Nac.d.Evaluacion d.Rec.Nat. Calle Diecisiete 355 Urb.El Palomar - San Isidro, Ap.4992 Lima **Poland** Andrzej Richling Inst. of Geography and regional studies Univ. of Warsaw ul. Krakowskie Przedmiescie 30 P-00-927 Warszawa & Maciej Piertzak Instytut Srodowiskowych Podstaw Turystyki i Rekreacji, Ul. Rybaki 19 61-884 Poznan **Slovak Republic** Mária Kozová Inst. of landscape Ecology Slovak Acad. of Sciences P.O.B. 23/B 949 01 Nitra **Sweden** Per Angelstam Forskningsstationen Grimsö Statens Naturvårdsverk S-770 31 Ridderhyttan **Switzerland** Felix Kienast Swiss Federal Inst. of forest research CH 8903 Birmensdorf **Thailand** Parida Kunepong Dept. of Land Development Bankhen Bangkok 10900 **United Kingdom** R.G.H. Bunce I.T.E. Merlewood Research Station LA 11 6JU Cumbria **United States of America** Scott Collins National Science Foundation 4201 Walson Boulevard Arlington Virginia 22230 **CIS** N. Lebedeva Inst. Geografii AN SSR Staromonetnyi 29 Moscow 109017 **Vietnam** Tran Van Y Inst. of Geography and Natural Resources NCSR of Vietnam Nghia do Tu liem Ha noi

## BOOKS OF INTEREST

**Zev Naveh & Arthur Lieberman: Landscape Ecology - theory and Application.** Second edition. Springer-Verlag. 360 p. + 75 p. of supplement. ISBN 0-387-94059-6 and ISBN 3-540-94059-6

The first edition from 1984 of Naveh & Liebermans widely used textbook on Landscape Ecology has long been out of print. Instead of a revision after 10 years, the authors have chosen to add supplementary chapters to the four parts of the book, discussing: 1) Recent developments in landscape ecology, 2) Conceptual and theoretical basis of landscape ecology as a Human Ecosystem Science, 3) Remote sensing, GIS and Landscape Ecology, and 4) Dynamic Conservation management of Mediterranean landscapes.

At a first glance it might look as a second-to-best solution compared with a total revision, but it is quite the opposite: In fact, it enhances the dynamic character of landscape ecology as an emerging branch of applied science, since the supplements works as an up-to-date and very engaged dialogue with contemporary literature of relevance for the future development of landscape ecology.

Where the first supplement almost present the history of IALE, the second concentrates on a highly interesting settlement with the 'mechanistic' view of the Mac Arthur school, limiting the treatment of landscapes as complex hierarchically ordered wholes with unique natural and cultural properties.

The third concentrates on presenting new examples of applied landscape ecology using RS and GIS. By leaving out the rapid development within the analytical tools related to remote sensing, GIS and especially their integration, part 3 of the book remains the weakest, not following up the somewhat outdated detailed technical information especially on Remote Sensing.

The last supplement gives up-to-date information on the in-depth-study of Mediterranean landscapes.

*Jesper Brandt*

**Publications from the Canadian Society for Landscape Ecology and Management**

**Landscape Ecology and Management**

Proceedings of the First national Symposium, 1988  
*Edited by Michael R. Moss*

- Landscape Ecology and its Canadian Dimension
  - Global Issues: Implications for Canadian Landscape Management
  - Analysis and Management in Canadian Landscape Management
  - Landscape Ecology: Experience, Education and Public Awareness
- ISBN 0-921317-12-3. Price \$25.00 plus \$8.00 postage

**Landscape Approaches to Wildlife and Ecosystem Management**

Proceedings of the Second National Symposium, 1992  
*Edited by G. Brent Ingram and Michael R. Moss*

- Surveying and Inventorying
  - Monitoring Frameworks
  - Planning and Design
  - Policy Development
- ISBN 0-921317-40-9. Price \$32.00 plus \$8.00 postage

**Sustainable Landscapes**

Proceedings of the Third National Symposium, 1993  
*Edited by John S. Marczyk and Denis B. Johnson*

- Agricultural and Forested landscapes
  - Urban and Corridor Landscapes
  - Preserving Biodiversity
  - The Role of Information
- ISBN 0-921317-43-3. Price \$36.00 plus \$8.00 postage  
(All prices in Canadian dollars)

Available from: Polyscience Publications Inc. P.O.Box 148  
Morin Heights Quebec Canada J0R 1H0

## DIARY

- Ottawa, Canada 19-23 June 1994. 1st international symposium on Ecosystem Health & Medicine - Integrating Science, Policy and Management. Contact: Carol Portland, 143 Johnston Hall, University of Guelph, Guelph, Ontario, Canada N1G 2W1. Tel: (519) 824-4120 ext. 2967. Fax: (519) 767-0758.
- Manchester, UK 24 June - 3 July 1994. Global Forum 94: Cities and Sustainable Development. Contact: Global Forum 94, Eastgate, Castle Street, Castlefield, Manchester M3 4LZ, UK. Tel: (44-61) 234 3741. Fax: (44-61) 234 3743
- Jerusalem, Israel 25-29 June 1995. 6th International Conference on Preservation of Our World in the Wake of Change. Contact: Yosef Steinberger, Dept. of Life Sciences, Bar-Ilan University, Ramat-Gan 52900 Israel. Tel: (972-3) 5318571 Fax: (972-3) 771088
- Manchester, England 20-26 August 1994. Ecological Progress to meet the Challenge of Environmental Change - VI INTECOL Congress of Ecology. Contact: The Secretary, The Manchester Conference Center, UMIST P.O.Box 88, Manchester, M60 1QD, UK

- Prague, Czech Republic 22-26 August 1994. IGU Conference 1994: Environment and Quality of Life in Central Europe. Contact: IGU RC, Albertov 6, 128 43 Praha 2, Czech Republic Tel: +42 2 203608 Fax: +42 2 296025
- Grignon, France 1-3 September 1994. Remote Sensing Society conference: Image Quality and Interpretation for Mapping. Contact: RSS, dept. of geography, University of Nottingham, Nottingham NG7 2RD, UK. Phone: +0602 515435, fax: +0602 515249
- Ceske Budejovice, Czech Republic 6-9 September 1994. International conference: Ecology and Democracy - the challenge of the 21st century. Contact: Institute of Landscape Ecology AS CR, Na sadkach 7, 370 05 Ceske Budejovice, Czech Republic. Phone: +42 38 817 ext. 517, fax: +42 38 40 183
- Preston, United Kingdom 12-14 September 1994. Europa Iale Meeting 1994: Fragmentation in agricultural landscapes. Contact: Dr. J. W. Dover, Myercough College, Bilsborrow, Preston PR3 0RY, UK. Tel: 0995 640611, Fax: 640842.

- Wageningen, Netherlands 12-15 September 1994. 5th anniversary symposium of the Winand Staring Centre. Scenario studies for the rural environment. Contact: International Agricultural Centre, Section OCC, P.O.Box 88, 6700 AB Wageningen., Netherlands
- Delft, Netherlands 24-26 October 1994. EARSel Workshop: Remote Sensing and GIS for Coastal Management. Contact: R. Allewijn, Survey Department, P.O.Box 5023, NL-2600 GA Delft, Netherlands
- San Jose, Costa Rica 24-28 October 1994. Down to Earth: Practical applications of ecological economics. Contact: Sylvia Tognetti, Maryland International Institute for Ecological Economics, P.O.Box 38, Solomons, MD20688, USA
- Bressanone, Italy 1-2 December 1994. International symposium: Remote sensing in forest studies and management. Contact: Dr. Maurizio Dissegna, Regione Veneto, Via Torino 110, 30172 Venezia-Mestre, Italy. Phone: +041 5495460, Fax: +041 5310492