

# **International Association for Landscape Ecology**

# THE IALE MISSION STATEMENT AND CHINESE LANDSCAPE ECOLOGY

by Xiao Duning, vice-president of IALE

The new IALE mission statement explicitly described the character and core themes of landscape ecology. It will help landscape ecologists from various backgrounds have a common understanding about the same subject.

Chinese scholars and students first encountered the term "landscape ecology" only about ten years ago, when Troll's paper was translated. Their understanding of this term differ from one to another. Some take it to be "ecology on the landscape", i.e., a "magnified ecosystem ecology", while others consider it to be interdisciplinary science between geography and ecology. Still some others think it to be a transdisciplinary science between natural and social science. Only recently has a paper on the framework of landscape ecology appeared in Chinese (Xiao, 1998). It proposes the following concepts as the "core" of landscape ecology: the integrity of landscape systems and heterogeneity at the landscape scale, mosaics of landscape structure, spatial aggregation of ecological flow, the physical and cultural nature of landscape, irreversible and human dominated landscape evolution, and the multi-value of landscape.

My own research activity has for years been dominated by land resources and land use study. I was deeply impressed by the concepts of landscape planning and optimum land use design when I first participated the IALE symposium held in Europe 1987. We had found that scaling problems were often encountered when we worked in the field. The theoretical basis was also inadequate when we attemted regional land use planning. The theory and methodology of landscape ecology helped us a lot in solving these kinds of problems. Theories such as the interaction between pattern and process are the evaluation of the scale of human activity and disturbance, were especially useful.

China has a long history of civilization, and excessive agricultural land use has become a main problem in most

areas. This brings about great difficulty in ecological rehabilitation and landscape construction. It will be a great challenge to Chinese landscape ecologists applying the theories of landscape ecology to the Chinese situation, and in integrating oriental cultural customs with landscape management, planning and design. The Chinese Academy of Sciences is now willing to support a new subject called Landscape Construction Ecology, developed by myself and my colleagues. It is an ecological science based on the study of landscape pattern and ecological processes at the landscape scale. By modifying the spatial structure of landscapes through landscape planning and landscape design, it will ultimate improve landscape functions. The aim of this subject is to improve the functions of stressed and damaged landscapes, increase total landscape productivity and sustainability, and to reflect upon the multiple value (economic, ecological and aesthetic) of the landscape as the human being's living environment. It should harmonize human activities with the natural environment at the macro-scale. The main components of landscape construction ecology include:

- \* Landscape spatial relationships, mainly the functions and interactions of ecosystems.
- \* Quantitative research on human activities at the landscape scale
- \* Research on the values of landscapes, including the evaluation of landscape values (economic, ecological and aesthetic), and by providing the scientific bases of how to reflect these values in landscape planning and design.
- \* The prediction of landscape change, including research on landscape dynamics and the effects of landscape construction.
- \* Landscape planning and designing

Landscape ecology is a rapidly developing subject in China with extensive potential for application. Chinese landscape ecologists will have much work to do in putting theoretical ideas into reality.

# IALE Germany - Strengthening of Landscape Ecology world-wide!

IALE Germany was founded on the third of April, 1998 in Leipzig as the regional organisation of German Landscape Ecology with the provisional seat in Leipzig. The following members were voted into the provisional executive committe:

Jürgen Breuste, Centre for Env. Research Leipzig-Halle Franz Dollinger, Department of the Salzburg parliament Friedrich Duhme, Technical University Munich Roman Lenz, FH Nürtingen Marion Potschin, University of Basel Günther Schönfelder, Saxon Acad. of Sciences Leipzig Uta Steinhardt, Centre for Env. Research Leipzig-Halle Otto Stüdemann, University of Rostock Ralf-Uwe Syrbe, Saxon Academy of Sciences Dresden Armin Werner, ZALF Müncheberg

Our aim is to gain as many enthusiastic scientists and landscape planners as members as possible before the official founding meeting in early 1999 so that we can take a firm seat in the international IALE organisation. The secretariat will at first be situated in the Centre for Environmental Research, Leipzig-Halle.

The members of the executive committe are thereby entrusted to draft a statute as well as to formulate the goals and tasks of the organisation. The exact date and the programme of the founding meeting will be made known to all interested parties before autumn of this year and will be published in the relevant scientific journals.

A German regional organisation will give added strength to the IALE due to the support given by representatives of internationally important schools of landscape ecology - Heinz Ellenberg, Ernst Neef, Carl Troll and Heinrich Walter, amongst others.

With this background we would like to call upon all those who are interested in a constructive exchange of ideas and opinions, both landscpae ecologists from research and practice, as well as representatives from other related disciplines, to actively participate in this organisation.

Address of the secretariat: IALE Germany c/o Uta Steinhardt, UFZ - Centre for Environmental Research Leipzig-Halle, Department of Applied Landscape Ecology, P.O.Box 2, D - 04301 Leipzig, Phon: +49 341 235-2678, Fax: +49 341 235-2511, e-mail: stein@alok.ufz.de

# 1999 Open meeting og the human dimensions of global environmental change research community

June 24-26, 1999, Shonan Village, 1560-39, Kamiyamaguchi, Hayama, Kanagawa 240-0115, Japan

An increasing number of researchers are interested in the human causes and impacts of global environmental change, as well as recognizing that local and regional scales are critical for their studies. Following two successful international meetings held at Duke University in 1995 and at IIASA in 1997, the 1999 Open Meeting aims to promote exchanges of information on current research and teaching and to encourage networking and community building in this emerging field.

Plenary talks and commentaries on the following topics are planned:Conflict and the Environment - the interaction between conflict prevention and resolution and environmental issues; Lifestyles, Attitudes and Behavior - their role in driving global environmental change and the potential role of alternative development paths; Decisionmaking Processes in Response to Global Environmental Change - in particular the linkages between the international, national and local scales and the obstacles to the transfer of policy instruments and norms from one region to another; Land Use and Land Cover Change - the social dimensions of changing land use, human settlements and land cover patterns; Valuation of Ecosystem Services current thinking on the values that can be attributed to services such as climate regulation, water supply and recreation; Demographic Change and the Environment - the relationships between population growth and other demographic factors, for example migration, and environmental change. In addition to plenary talks, there will be a large number of sessions devoted to the presentation of research results. Practical information, see the diary.

The IALE Bulletin is distributed six times a year to the members of the IALE. The IALE - International Association for LandscapeEcologywas founded in 1982 to promote communication between scientists, planners and interdisciplinary scientific research. IALE Executive Cornmittee: President, John A. Wiens (USA), Fax: +1 970 491 0649, e-mail: jaws@lamar.colostate.edu; Past President, Henri Decamps (France); Vice-Presidents. Joan Iverson Nassauer (USA). Paul F.M. Opdam (The Netherlands), Almo Farina (Italy), Xiao Duning (China); Secretary General, Michael Moss. Faculty of Env. Science, Blackwood Hall, Trent Lane, University of Guelph, Ontario NIG 2W1, Canada, Tel: +1 519 824 4120, Fax: +1 519 763 4686, e-mail: mike@envsci.uoguelph.ca; Deputy Secretary General and Bulletin Editor, Jesper Brandt, Dept. of Geography and International Development Studies, Roskilde University, P.O. Box 260, DK-4000 Roskilde, Denmark, Tel: +45 46 74 24 63, Fax: +45 46 74 30 32, e-mail: brandt@geo.ruc.dk; Treasurer. Rob Jongman, WAU, Dept. of Physical Planning & Rural Development, Gen. Foulkesweg 13. NL-6703 Wageningen. The Netherlands, Tel: +31 317 483 713, Fax: +31 317 482 166, e-mail: robjongman@plano.rpv.wau.nl.

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# IN MEMORIAM



It is with the deepest sorrow that we have to announce the death of Mr. Angel Ramos, Emeritus Professor of the Department of Projects and Rural Planning in the Technical School of Forestry, Madrid Polytechnic University, at Madrid, on 2nd January, 1998.

Doctor of Forestry, Professor Ramos was full member Academic of the Royal Academy of Physics and Natural Sciences, and of-the Academy of Engineering in Spain.

The outstanding figure of Mr. Ramos is identified with the careful use of natural resources as well as the commitment to nature conservation. His work which developed as a private activity, was pioneered during the 60's when he promoted and directed the first environmental reclamation projects as well as landscape improvement projects to public works in Spain.

Afterwards, and particularly during more than 25 years of active life at University, Angel Ramos worked, with increasing prestige, on the conceptualization and the

methodological technological development of fields like physical planning, forest area integral planning, landscape analysis and evaluation, environmental impact assessment and reclamation of degraded areas.

Professor Ramos was an affectionate friend and collaborator of the late Professor Gonzalez Bernaldez. Together they directed the first work on ecological and physical planning in Spain. Their school led from a positive standpoint, not an obstructionist one, to human actions and development, in order to adapt technological intervention to the environment. The multiplier effect of that school has been significant in going deeply into the scientific basis of nature consevation engineering. Angel Ramos never avoided public discussion in defense of these ideas, surrounded sometimes by an insensitive and not very receptive social and professional environment.

His work resulted in numerous publications. Among them should be emphasized his work "Natural landscape Evaluation" (1969), in which he advanced ideas and concepts that many years later became universal. It is Significant too his address for admission to the Royal Academy of Sciences: "Why Nature has to be conserved?" (1993), that represents a conceptual approach concerning that responsibility man to Nature.

Angel Ramos was tireless collaborator with other workers from other Universities, both national and foreign, and in teaching-and scientific projects. In this sense Professors Carl Steinitz, Richard Smardon, Arnold Weddle, Meto Vroom and Francisco Caldeira Cabral became some of his close colleagues and friends in other countries.

He was member of editorial boards of specialized Journals such as Landscape Ecology, in which he took part from 1987. He was, especially, a model teacher, always concerned about his students education: "that it is not only collecting information", he said. In this way, he directed at the Department, more than 50 PhDs, reflecting a continuous work in stimulating, demanding and listening to his disciples.

His dedication to work, his deliberation in judgement, his honesty and intellectual integrity are unforgetable to all of us that had the good fortune to know him.

May he rest in peace.

Members of the Department of Projects and Rural Planning Escuela Te'cnica Superior de Ingenieros de Montes Universidad Polite'cnica de Madrid Madrid

# **Diary**

## 1998

## 19-25 July

The VII International Congress of Ecology is organized by the International Association for Ecology (INTECOL) in conjunction with the Italian Ecological Society (SItE) Contact Almo Farina, Lunigiana Museum of Natural History, Fortezza della Brunella, 54011 Aulla, Italy. Tel.:+39-187-400252, fax:+39-187-420727, e-mail:afarina@tamnet.it web site: http://www.tamnet.it/intecol.98

### 23-29 August

Pre-Regional Conference Workshop organized by Commission on The Sustainability of Rural Systems (IGU/SRS), Department of Geography and Regional Planning (New University of Lisbon), ADIRN (LEADER group). Contact Ana Firmino, Departamento de Geografia e Planeamento Regional, Universidade Nova de Lisboa, Av. de Berna, 26-C, P-1050 Lisboa. Portugal, Tel.:+351-1-7933519, Fax:+351-1-7977759, E-mail:am.firmino@fesh.unl.pt

## 25-30 August

Second International Conference on Restoration Ecology in the 21st century, Groningen, The Netherlands. Contact Restoration Ecology Symposium Secretariat, Laboratory of Plant Ecology, University of Groningen, P.O.Box 14, 9750 AA Haren, The Netherlands, Fax: +31 50 3632273, E-mail:RE.symposium@biol.rug.nl or at Internet (http://www.biol.rug.nl/ploec/restecol)

# 30 August-2 September

Ponds and Pond Landscapes of Europe: appreciation, conservation, management. International Conference of the Pond *Life* Project will be held in Vaeshartelt Castle Conference Centre, Maastricht, NL. Contact Dr. John Boothby, Pond *Life* Project, Liverpool, John Moores University, 15-21 Webster St. Liverpool L3 2ET, UK. E-mail:j.boothby@livjm.ac.uk

## 2-6 September

European IALE Congress, Lancashire, UK. Contact the IALE (UK) General secretary: Dr. Peter Dennis, Macaulay Land Use Research Institute, Craigiebuckler, Aberdeen, AB 15 8QH, UK. Tel.: 01224 318611, Fax.: 01224 311556, e-mail: mi360@mluri.sari.ac.uk

# 6-13 September

Czech IALE Conference on "Present and Historical Nature-Culture Interactions in Landscapes". Contact Czech IALE (Regional) Conference Faculty of Sciences, Charles University, Benátská 2, 128 01 Praha 2, Czech Republic, Fax: +420-2-21953125, +420-2-24914803, Email:ele98@prfdec.natur.cuni.cz, home page: http://www.natur.cuni.cz/confer.htm

## 7-11 September

The permanent European conference for the study of the rural landscape. 18th session in Røros and Trondheim, Norway, 1998. Contact lecturer Gunhild Setten, Department of Geography, University of Trondheim, N-7055 Dragvoll, Norway. Fax: +47-73591878, Email:Gunhild.Setten@sv.ntnu.no, home page: http://www.sv.ntnu.no/geo/

#### Oct. 5-7

Asia and Pacific Region IALE Conferance will be held in Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, 110015. Contact Prof. Xiao Duning, Inst. of Applied Ecology, Academia Sinica, Shenyang, 110015, Fax: 86-024-3843313 E-mail: lndscp@iae.syb.ac.cn,

#### Oct. 8-12

International Ph.D student courses will be held in Ecoenvironmental Research Center, Chinese Academy of Sciences in Beijing. Contact Prof. Xiao Duning, Inst. of Applied Ecology, Academia Sinica, Shenyang, 110015, Fax: 86-024-3843313 E-mail: lndscp@iae.syb.ac.cn,

### Oct. 15-17

IV. International Conference on Culture and Environment, "Cultural Landscapes for Ecological Networks", in Banská Stiavnica, Slovakia. Organized by the UNESCO-Chair for Ecological Awareness of the Technical University in Zvolen, Austrian Institute for East and Southeast European Studies, and the Institute of Landscape Ecology of the Slovak Academy of Sciences. Contact: UNESCO-Chair, Akademicka 13, 969 00 Banská Stiavnica, Slovakia. Tel/fax: +42 1 859 621 065. E-mail: unchair@zv.sanet.sk

## 1999

### June 24-26

1999 Open meeting of the human dimensions of global environmental change research community- organized by The International Scientific Planning Committee - will be held in Shonan Village, Kanagawa, Japan. Contact the IGES Web Site (http://www.iges.or.jp/), or send an e-mail to hdgec@iges.or.jp, or mail/fax your inquiry to Mr. Yasushi Itoh, IGES at Shonan Village Center. (Fax: +81 468 55 3709)

### July 29-August 3

1999 IALE World Congress will be held in Snowmass Village, Colorado. Contact IALE President John A. Wiens, Fax: +1 970 491 0649, e-mail: jaws@lamar.colostate.edu NB! Look at the web site for the IALE Congress: http://lamar.colostate.edu/-iale/Congress.htm