



Bulletin

International association for landscape ecology

A LANDSCAPE ECOLOGICAL GUEST VISIT TO CHINA

- RICHARD FORMAN HELPS CHINA WITH ITS ADVANCE IN LANDSCAPE ECOLOGY

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For over one year, the Geography Department of Peking University in Beijing, the Shengyang Institute of Applied Ecology of the Chinese Academy of Sciences (CAS) in Changchun, Jinlin Province, and the Ecological Society of China (ESC) in Beijing jointly worked to bring Dr. Richard T. T. Forman, the PAES Professor of Landscape Ecology at Harvard University, Cambridge, Massachusetts, USA, to China. He finally put his feet on the land of China on March 28 of 1992 and then for 11 days he left his stimulating thoughts about landscape ecology as well as his footprints on the diverse landscape of the North China region around Beijing, the capital city of the People's Republic.

Dr. Forman, mainly from his enlightening publications on landscape ecology, was already well known by his Chinese colleagues long before he came and learned about the development of landscape ecological studies in China. In fact, it seems that not until the late 1980s had landscape ecology begun to draw attention here in China from a wide range of interests such as integrated physio-geography (land-science), geobotany, forestry, and landscape architecture, etc., nor had it acquired substantial advancement. The Chinese interest was largely due to the availability of Forman & Godron's book *Landscape Ecology* (1986), which has proved very successful in providing an effective conceptual framework that serves as the cohesive core or "paradigm" for a more established academic field of landscape ecology than ever before.

For these reasons, Dr. Forman's greatly appreciated visit, though relatively short, was carefully planned and well organized through the work of a special reception committee chaired by Dr. Chen Changdu, both the ESC President and a Peking University Professor. The committee also included Prof. Huang Runhua of Peking University, Prof. Xiao Duning of the Shengyang Institute of Applied Ecology of CAS, Prof. Fu Bojie of the Environment Research Center of CAS, Mr. Wang Jian from the Beijing Association of Environmental Sciences, and others, who collaborated with Dr. Forman himself in planning this visit. A rather intense agenda, including four lectures, three seminars, and two field trips as well as some sight seeing and cultural entertainment, was followed. Altogether there were more than 100 interested scholars and graduates from various institutions and universities throughout China participated in these activities, which were very helpful and rewarding for all participants as we

EUROPEAN IALE MEETING 1994

FRAGMENTATION IN AGRICULTURAL LANDSCAPES

PRESTON UK 12-14 SEPTEMBER 1994

Habitat fragmentation is one of the most pressing issues, particularly in essentially agricultural landscapes where the conflicting pressures of nature conservation, farmland economics, urban sprawl and transport policies converge.

What are the implications for organisms at the landscape scale? Can they cope, will they be exterminated or hang on with help? Should fragmentation be considered a wholly negative phenomenon - are there gains?

Session themes:

- Genetic implications of fragmentation
- Landscape sensitivity and change
- Ecotones (Transitional habitats)
- Landscape dynamics in time and space
- Pattern, process and change
- Dispersal and isolation
- Sustainable landscapes in a changing environment

Contact: Dr. J. W. Dover, Myercough College, Bilberraw, Preston PR3 0RY, UK. Tel: 0995 640611, Fax: 640842.

see it now.

In his four lectures delivered at the Peking University New Geoscience Building from March 30 through April 2, Dr. Forman presented to the eager audience a clear picture of what American landscape ecologists have achieved and what they were then most concerned about. He drew chiefly upon some of his classical studies in basic landscape ecology as well as on some more practically concerned case studies which were still in progress. The titles of these lectures in order of presentation were:

- 1) Fragmentation and Land Transformation: Determining the Ecologically Optimum Pattern of Land Mosaic.
- 2) Spatial Configuration and Ecological Movements: Fluxes in Land Mosaics.
- 3) Boundary Form, Patch Shape, and Their Effects on Wildlife.
- 4) Some Thoughts on Creating Ecologically Sustainable Landscapes.

After each lecture, the audience raised up a number of questions of either conceptual, methodological or technical

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ACTIVITIES IN LANDSCAPE ECOLOGY IN CZECH REPUBLIC FOLLOWING THE DIVISION OF CZECHOSLOVAKIA

By Pavel Kovár & Handrij Härtel, Faculty of Science, Charles University

In the IALE Bulletin vol. 10.1 (Kovář et Hasková 1992), we made an attempt to survey the history of the landscape-ecological activities in Czechoslovakia. In those days - not long after the "velvet revolution" - the further development remained open and predictable only with difficulties. Transformation of the economic and political systems has greater impact on the Middle Europe than we all proposed.

In June 1992 citizens in Slovakia elected with a large majority of votes those representatives who had the independence of Slovakia in their political program. The newly elected Czech representatives accepted this will of Slovaks, and two independent states originated within the Czechoslovakian territory: Czech Republic and Slovak Republic. The economic space operative for the reforms thus decreased, and the latest development suggests that the post-communism recovery would take much longer than expected. The economic reforms have touched also the managing of science and universities, some fields of science will be certainly restricted. Some symptoms of low certainties have already appeared in the last meeting of IALE (Rennes, June 1993), resulting from the different development of the two separated Mid-European areas - also in the fact that there were only two persons present from the Slovak Republic, seven people from the Czech Republic (expenses connected with the participation at the European congress was predominantly covered by the participants from their private sources since the institutions are not wealthy enough).

The latest events in the science and education of Czech Republic influence also the regional IALE activities. In Roskilde (1991) the new director of Institute of Landscape Ecology, Cs. Acad. Sci., Dr. V. Mejstrik, was suggested for the IALE vice-president which became

truth in Ottawa (1991). Radical pressure from the side of Czech government on decreasing the size of Academy of Science in 1993 caused that 20 institutions of the Academy were abolished (with about 2 500 people), among whose also the Institute of Geography and Institute of Landscape Ecology (from several remains of different institutions, a new "institute of Landscape Ecology" - with minor change in its Czech name, was restored, settling in Brno, Moravia, whose vitality will be proved with time). From all these reasons, the international IALE meeting already being prepared in the Czech part of the area behind the previous "iron curtain" and supposed to deal with the new changes in the boundary landscape, had to be voided. Dr. Mejstrik retired and is expected to deal with private activities connected with the landrestitutions. Since further changes are expected, especially in the process of integration of science and the university education, a reliable support for the co-ordination of the regional IALE activities is lacking at present.

In the already mentioned contribution for the IALE Bulletin, we have anticipated origin of new ecological organizations relating the previous Ecological section of the Czechoslovak Biological Society. Actually, two voluntary successional organizations were founded, each of them with a rather different concept. The Society for Sustainable Development, is lead by the former federal minister of environment, ing. Josef Vavrousek. This organization possesses a rich spectrum of environmental activities and is focused on the wide public, both Czech and Slovak. The second organization, Ecological Circle, is lead by the first Czech minister for the environment, Dr. Bedrich Modan. It is selective, composed of the leading Czech experts in many disciplines and focuses especially on strategically important expertise in the field of

environment, especially for the members of Parliament. The two organizations cooperate in many aspects.

Besides that, also Section for Landscape Ecology, Czech Botanical Society, continues with its activities (as mentioned in the IALE Bulletin vol. 10.1), with a newly elected committee composed of representatives of different scientific and university institutions (P. Kovar - Charles University, H. Rambousková - Institute of Applied Ecology, J. Sofron - West-Bohemian Museum, J. Jakrlová - Institute of Landscape Ecology, J. Guth - South-Bohemian University, O. Rauch and H. Härtel - Institute of Botany). Its latest event prepared is the conference for Czech people interested: "Field botany in landscape ecology", in spring 1994.

Concluding this information, we would like to express our hope that science on landscapes, especially ecology, would successfully overcome those barriers that were created by politics in the Middle-European territory, and that our colleagues from western countries would help us to overcome the difficulties of the transient time whose real length we do not dare to assess yet.

CONTRIBUTIONS INVITED

We encourage submission of articles to the Bulletin concerning the activities of landscape ecologists and landscape ecological organizations. Topics include announcements of conferences, symposia and workshops, books, society publications, honors, research accomplishments, annual goals and achievements.

Articles may range from a brief paragraph to approximately 1.5 pages. We encourage you to submit your contributions by E-Mail or on floppy-disks in any format.

Deadline for the next Bulletin: 15th of April 1994.

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, Tel: +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 Decamps (France), Past-president Gray Merriam (Canada), Vice-presidents: Joan Iverson Nassauer (USA), E.R. Fuentes (Chile), Paul F.M. Opdam (Netherlands), Vaclav Mejstrik (Czechoslovakia General Secretary Almo Farina (Italy), Lunigiana Museum of Natural History, 54001 Aulla, Italy Tel: +187 42 03 74, Fax: +187 420727. Deputy General Secretary & Bulletin editor Jesper Brandt (Denmark), Treasurer: James F. Thorne (USA), Univ. of Pennsylvania, PA 19104-6311, Fax: (215) 898-9215

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concerns followed by much discussions. Many of these questions appeared to be somewhat relevant to the problem of a more accurate understanding of what landscape ecology itself actually is and where it should go in the future. Dr. Forman thus made some observations about the state of the art and the future advancement of landscape ecology in China and in the World. At the conclusion of his last lecture, he especially stressed that (1) the core of landscape ecology lies in the ecology of the land mosaic, such as studies of the flows of materials, energy, and species in and between the heterogeneous landscape made up of at least two different types of ecosystems; and

(2) researchers should try to formulate some basic questions, either large or small, from their own curiosity, and then conduct research to answer them, which will help establishing the concepts, theories, and principles of what could be referred to clearly as landscape ecology, even by colleagues from other disciplines; while doing this,

(3) we ought to keep our minds open i.e. to be inclusive rather than exclusive, toward research, basic or applied, or toward just practical studies conducted by scholars in other fields related to landscape ecology. He also highly recommended the on-going interdisciplinary as well as international exchange of information and viewpoints.

On April 3, when it was still early spring in Beijing with most plants leafless, Dr. Forman accompanied by Prof. Chen Changdu and ten other participants took a field trip to the Small Dragon Gate (Xiao-Long-Men) Temperate Forest Ecosystem Research Station of CAS, located in the Northern Taihang Mountains about 100 km. west of Beijing. Again on April 5-6 together with Prof. Huang Runhua of Peking University, Prof. Fu Bojie of the Eco-environment Research Center of CAS and the senior author of this article, Dr. Forman went by rail to the magnificent Imperial Mountain Villa (Bi-Shu-Shan-Zhuang) of the Qing Dynasty (1644-1911) at Chengde, Hebei Province, about 230 km. northeast of Beijing. On the way to and around Chengde area, he showed some surprise that shrubs had been deliberately eliminated and most forests and woodlots consisted

of trees of the same species wherever reforestation had been undertaken. He understood that the main reason for this was a precaution against the prevalent wild fire danger especially during North China's dry and windy spring, or else as a method to promote rapid growth of the tree. Dr. Forman pointed out that the replanting of a multi-species forest with a complete understory of shrubs and grasses would be more preferable ecologically for the interests of wildlife species and pest-control, etc. He also suggested some empirical landscape ecological studies of phenomena associated with types of reforestation which should contribute greatly to landscape ecology and the reforestation itself.

On his agenda for April 7, the day before he was to leave China, Dr. Forman visited the ESC headquarters and had his last seminar with its leaders including the President, Prof. Chen Changdu, the Vice-President, Prof. Wang Zhuwang, the Secretary-General, Prof. Xu Rumei, the former President, Prof. Sun Ruyong as well as other ESC members. As former Vice-President of the Ecological Society of America (ESA) Dr. Forman together with his Chinese counterparts exchanged information and views about the state of the art and the future development in both countries of each of the branches within modern ecology, including landscape ecology. He was also able to visit the Zoological Museum at the Institute of Zoology of CAS, where the ESC headquarters is located. A farewell banquet was given in his honor at the conclusion of his greatly appreciated visit.

PROCEEDINGS - LANDSCAPE & CULTURE

Proceedings from the 2nd international conference arranged by the IALE-Working group: Culture and Landscape, in Zdar, Czechoslovakia, 7.-10. September 1992 have been published: Hana Svobodová & Jan Uhde (Ed): Place in Space - Human Culture in Landscape. Pudoc, Wageningen, Netherland. ISBN: 90-220-1089-9. US\$ 65.

A small report from the meeting was brought in the Bulletin vol. 10.3-4 and we hope to bring a review in a coming number.

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THE 1ST WORKSHOP ON GEOECOLOGICAL LANDSCAPE PLANNING IN LATINAMERICA.*I Taller sobre Ordenamiento Geocologico de los Paisajes*

in Havana, Cuba, 15 - 20 November 1993.

The workshop was organised by the Faculty of Geography of the University of Havana with support of IALE. It was structured in five master conferences, four round table conferences, discussion sessions in six commissions, and two scientific excursions, one to the biosphere reserve Sierra del Rosario and one to the National Botanical Garden.

The themes of the commissions were: 1) Landscape Ecology, Theoretical/Methodological Problems, 2) Bio-indicators; Landscapes and Regional Studies; 3) Cartography, Remote Sensing and GIS and the Geocological Planning of Landscapes; 4) Environmental Analysis of the Socio-economic Activities in the Landscape; 5) Geocological Planning of Landscapes; 6) Landscapes and Tourism. The contributions in general were on a high level and the discussions were enthusiastic. At the end of the conference the foundation of a Latin-American branch of the IALE was announced, with the intention to convoke a regional conference within two years, again in Havana.

DECLARATION FROM THE 1ST WORKSHOP ON GEOECOLOGICAL LANDSCAPE PLANNING

From 15 to 20 November 1993 the FIRST WORKSHOP ON GEOECOLOGICAL LANDSCAPE PLANNING took place in Havana, Cuba, convoked by de University of Havana with the support of the International Association for Landscape Ecology (IALE).

The workshop aimed at the ample and comprehensive discussion of Landscape Ecology in the context of the implementation of geocological planning and environmental management. 30 specialists from 9 countries attended. The workshop was organized in five master conferences, four round tables and two scientific excursions. The discussion sessions were conducted in six commissions. In total there were 88 presentations.

The workshop concentrated its discussions on the theoretical concepts, the procedures and methods for the geocological analysis of landscapes. Special emphasis was placed on the discussion of problems raised by the optimization of the exploitation of the landscapes in the Latin-American region. The actually predominant context of economic and social adjustment, in addition to the intentions of regional integration,

put the necessity to reinforce the utilization of the knowledge of the Ecology of the Landscapes and the solution of the problems of the region in the first place.

Starting from the premises mentioned, the participants in the Workshop agree on the following:

1. Create a Latin-American branch of the IALE with the aim to contribute to the expansion of the knowledge on landscape ecology, to interchange ideas and experiences and to serve as a common platform for the intraregional scientific integration and for the relations with the other regions in the world.
2. Convoke within two years in Havana a regional Latin-American IALE conference with the aim to analyze specific problems with respect to landscape ecology.
3. Solicit the IALE for support for the diffusion and consolidation of the knowledge of landscape ecology and its incorporation in the urgent tasks of implementation of sustainable development in the Latin-American region.

Given in the National Botanical Garden, the City of Havana, on the 20th of the month November of 1993.

DIARY

- Tucson, USA 23-26 March 1994
Ninth Annual U.S IALE.Landscape Ecology Symposium: Spatial and Temporal Models for Analysing Pattern and Process in Landscapes. Contact: Dr. Margaret M. Moore, Program Chair, School of Forestry, Box 15018, Northern Arizona University, Flagstaff, AZ86011 fax: 602-523-1080; phone 602-523-7457)
- Coventry, United Kingdom 18-20 April 1994 Field Margins - integrating Agriculture and Conservation
Contact: Conference Associates and Services Ltd FMS, Congress House, 55 New Cavendish Street, London, UK W1M7RE
- Ontario, Canada 22-23 April 1994
Wetlands: Environmental Gradients, Boundaries and Buffers.
Contact: Wetland Research Centre, Environmental Studies Building 1, University of Waterloo, Waterloo, Ontario, Canada N2L3G1
- Geraldton, Australia 15-20 May 1994
Nature Conservation: The role of Networks.
Contact: Denis Saunders, CSIRO Division of Wildlife and Ecology, LMB No.4, PO Midland, Western Australia 6056, Australia

- 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
- 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, Metherlands
- 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