



# Bulletin

## International Association for Landscape Ecology

### THE FUTURE OF OUR LANDSCAPES

#### Reflections on the 1995 Congress of the International Association for Landscape Ecology

by Richard T.T. Forman, Harvard University, Graduate School of Design, Cambridge, MA 02138, USA

More than 250 people from over 35 nations got out of bed on August 27th with their adrenaline flowing. Within hours they would join to talk landscape ecology without electronics, and get to know the people producing publications.

Europe was well represented, from Finland to Spain and from Greece to Estonia. The Dutch came in strength. The French contribution grows rapidly, but too few neighbors came over the Pyrenees. Strong interest continues in Eastern Europe despite enormous changes since our last congress. The numbers from Latin America, Africa, Asia, Australia, and North America were disappointing, and yet the participants from these continents probably had the most to gain from this congress. With the core of landscape ecology now coalescing, a window of opportunity exists to learn from Africans, Asians, Latin Americans, and their landscapes.

We met in Toulouse in the sunny south or Midi of France, where life is more relaxed. People are warm, and French is spoken deliberately to the delight of foreigners. We were immersed in culture, not of our frequently studied countryside, but of a major historical, regional and commercial city. Try exceptional caviar, chocolate adventures, impressionist murals, a sung mass in an 11th C. basilica, outside restaurants until all hours, or simply dancing (over an impressive fish ladder) to French New Orleans jazz on the moonlit Garonne River.

The heart of the superbly organized meeting was a 40-m long "patch" in a university building, where juice, coffee, and croissants regularly appeared. Everyone moved through it, so encounters were rampant. IALE Executive Committee members Almo Farina, Joan Nassauer, Paul Opdam, Gray Merriam, Jesper Brandt and Henri Décamps, i.e., our leaders, were always ready to chat. A "corridor" led to nearby rooms for sessions, and lunch was a short stroll through the green "matrix". Posters were along one side, book publishers at one end, and desks with always helpful organizers at the other. Interactions were terrific.

We also came to Toulouse to see posters and hear papers presented. The eighty posters got more exposure than the verbal presenters. Posters were up the whole time, in convenient small enclosures along the meeting room.

The organizing theme also drew us. What will future landscapes look like and how will they function, based on existing landscape ecology principles and today's global environment? And what will be their structure and function based on commonly predicted changes, such as global climate change, regional wars, and rampant suburbanization? Surprisingly, such questions were too daunting.

On the opening day of the Congress President Henri Décamps welcomed and challenged us. Monica Turner's opening address was a model of critical landscape-ecology science, as well as an interesting view of the widely known Yellowstone Park. Presentations on the topic of future European landscapes filled the day. Many were very informative on past human activities that have molded today's landscapes. A wide range of specific insights also came to light. The expected, or recommended, form of future landscapes in Europe, based on landscape ecology principles, however, remained obscure.

Presentations in days two and three transcended Europe and represented a richness of approach for everyone. Short presentations in subject areas were rushed and highly variable in quality, but very valuable for take-home nuggets. Linkages among dis-

#### FOR MEMBERS OF THE LOST LIST!

##### IALE 1995 Toulouse - Clear Cut Logging - Visual Impacts

At the Wednesday afternoon session of *Human Perception* several people left their names and addresses with me. I said I would send them copies of two publications. The *Visual Landscape Design Manual* by Simon Bell, and the *Visual Impact Assessment Guidebook*, April 1995. Unfortunately I have lost the list of people who asked for these, so I cannot respond. However, all is not lost. You can obtain them directly from **The Recreation Branch, Ministry of Forests, 610 Johnson Street, Victoria, B.C. Canada, V8W 3E7.** My apologies.

Hubert Bunce

ciplines were commonly present, but preliminary. Some papers elucidated pattern without showing how important it is ecologically. The overall quality seemed only slightly stronger than in preceding congresses, a surprise considering the rapid recent development of core concepts, principles and theory in the past decade. I returned with a list of specific insights, i.e., useful things that I never thought of before, on the scale of lists from other professional meetings. Everyone surely left with a wide range of insights, approaches, knowledge, and ideas.

The final morning comprised summary reports and discussions on the poster and paper presentation sessions. Richard Hobbs' closing congress talk was excellent, mixing summary perspectives on the congress, great levity, interesting glimpses of south-western Australia, and many tractable challenges to landscape ecologists.

The pre- and post-congress activities enriched people (unlike me) who have a >3 day physiology for meetings. Early arrivers had pre-congress meetings, a lecture with global perspectives by F. di Castri, and a buffet. After the congress some lucky participants headed for the Camargue on the Rhone delta, with its wild white horses, mammoth marshes - and mosquitoes - and historical communities. One car-load of participants headed for an afternoon in the Pyrenees (reportedly, due to a mix-up at the rental agency, they had to drive a red Alpha-Romeo), and at 21.00h met another car full of participants trying all the wines in Saint Bertrand. Other participants had stories of Toulouse and Carcassonne.

At the General Assembly on the third day the IALE accomplished its business. Few procedures were evident, but good will and common purpose kept discussions on track. We approved nominations for officers. The idea of revising definitions arose and subsided. We learned that working groups generally have not been successful in the IALE, although contacts among members have flourished, so we differentiated contact groups from working groups. We approved an increase in dues though the IALE's finances persist as a problem needing clarification and planning. The *IALE Bulletin* Editor, Jesper Brandt, will continue for another term. The frequency of opportunity to write for, and

*continuation on page 4*

## POST-CONGRESS EXCURSION

*by Dr. Olaf Bastian, Saxon Academy of Sciences, Augustusstr. 2, D-01067 Dresden, Germany*

The IALE post-congress excursion was arranged in an exemplary manner by J. Aronson, J. Blondel and E. LeFloc'h (CEFE-CNRS, Montpellier) and the travel agency "Avec Plaisir". We visited the rapidly evolving Mediterranean woodlands, shrublands (Garrigue) and agricultural areas, but also archaeological and historical sites (a grave find and a Roman bridge) in the Hérault region. Vegetation succession studies were demonstrated and problems of landscape change due to marginalization were discussed. Woodland management in abandoned areas is necessary to keep biodiversity, aesthetic values and negotiability of the Garrigue by human beings, but also to reduce fire hazard risks. The first day ended in the Medieval city of Aigues-Mortes, with a wine-tasting and a very interesting explanation of wine-growing under complicated conditions caused by the high level of the salt water table.

On the next day we visited the Camargue, one of the most famous wetlands in Europe. Rice fields, salt vegetation, marshes, flat water bodies, black bulls, white horses and waterfowl (i.e., flamingos, herons, waders, ducks) are impressive. The Tour-de-Valat Research Station is dealing with the investigation of birds, wetland hydrology, plant and fish ecology, and conservation, management and monitoring programs. Visits to nature reserves with bird-watching and to the big salines of Salin de Giraud completed our trip.

The comparison of the Garrigue and the Camargue as ecosystems gave valuable experiences. Both areas have been essentially influenced by man for many centuries (even millenia), and the limiting or driving ecological factor is water: in the Garrigue the drought, in the Camargue the balance between fresh and salt water and between sedimentations of the Rhone river and the floods caused by the Mediterranean Sea (recently hindered by dikes). Both landscapes are very vulnerable and need urgent comprehensive management and conservation plans to reduce conflicts between different land-users and to maintain their natural potentials.

The IALE Bulletin is distributed six times a year to the members of IALE. 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 Décamps (France); Past-President Gray Merriam (Canada); Vice-Presidents Joan Iverson Nassauer (USA), Eduardo R. Fuentes (Chile), Paul F.M. Opdam (The Netherlands), Vaclav Mejstrik (Czech Republic). General Secretary Almo Farina, Lunigiana Museum of Natural History, 54001 Aulla, Italy, Phone: (+39.187) 400 252, Fax: (+39.187) 420 727. Deputy General Secretary and Bulletin Editor Jesper Brandt, Inst. Geography & International Development Studies, Roskilde University, P.O. Box 260, DK-4000 Roskilde, Denmark, Phone: (+46) 757 711, ext. 2463, Fax: (+46) 754 240, E-mail: brandt@ruc.dk. Treasurer: James F. Thorne, The Nature Conservancy, Pennsylvania Chapter, 1211 Chestnut Street, 12th floor, Philadelphia, PA 19107 4122, USA, Phone: (+1.215) 963 1400.

**Deadline Bulletin Volume 13.6: December 1, 1995**

**11th Annual U.S. Landscape Ecology Symposium  
INTEGRATION OF CULTURAL AND NATURAL  
ECOSYSTEMS ACROSS LANDSCAPES**

**Application of the science**

*Galveston, Texas, March 26-30, 1996*

Landscape ecology emphasizes large areas and effects of the spatial patterning of the ecological systems. Spatial patterning of ecosystems has broad-reaching consequences for biodiversity, ecosystem stability, human support, and maintenance costs. Practitioners of landscape ecology must address potential interactions between the different ecosystems and predict consequences of changes within and between the spatial elements of the landscape. Although landscape ecology is relatively new as a practiced science, principles and applications are emerging from it that are finding their way into ecosystem management and environmental planning. The 11th Annual U.S. Landscape Ecology Symposium will focus on the interactions between cultural and natural ecosystems and the application of techniques to address relevant questions and problems. For example, urban-rural interfaces, plantation and natural forests, recreation and natural areas, and wetland-terrestrial systems all develop complex patterns of flows of energy, materials and organisms between them. Thus, there exists a need to address the relationship between these and many other ecosystems in a landscape framework.

The symposium will consist of three days of contributed papers, workshops, posters, plenary sessions and field trips.

You are invited to submit abstracts for contributed papers and posters covering any aspect of landscape ecology, although those dealing with the above theme are encouraged. We strongly encourage the submission of abstracts for poster presentations as the posters will be displayed throughout the meetings and the number of concurrent oral presentations will be limited. Oral presentations will be limited to a total time of 20 minutes.

Abstracts can be submitted in a number of machine-readable formats, including WordPerfect or Word for PC or MacIntosh, or ASCII on diskette, or by E-mail. E-mail is preferred. Abstracts should be limited to 300 words and *must* adhere to the following format to be considered:

Johnsen, Thomas F.1, and Laurie B. Geary2. Co-existence of mining and recreational areas in the southern Colorado mountains: impacts on the landscape. 1University of California, Berkeley, CA and 2University of Wyoming, Laramie, WY.  
[Now begin text of abstract] ....

The corresponding authors should include their full mailing address, phone and fax numbers, and E-mail addresses. Authors should be confident of attending the meeting before the submission of an abstract, as withdrawals create planning problems for the meeting. If the paper or poster is to be considered for Best Student Presentation award, notice must be given at the time of

abstract submission. Deadline for abstracts is Friday, November 24, 1995.

Abstracts should be submitted to: Dr. Jeffrey M. Klopatek (Program Chair - IALE '96), Department of Botany, Arizona State University, Tempe, AZ 85287 1601, USA, Phone: (+1.602) 965 4685, Fax: (+1.602) 965 6899, E-mail: klopatek@asu.edu.

For additional conference information please contact: Dr. Robert N. Coulson (Local Host - IALE '96), Department of Entomology, Texas A&M University, College Station, TX 77843, USA, E-mail: coulson@igis3.tamu.edu.

**IALE International Conference  
LANDSCAPE TRANSFORMATION IN EUROPE  
Practical and theoretical aspects  
Warsaw, Poland, October 9-12, 1996**

The conference will be organized by the Polish Association for Landscape Ecology and the Faculty of Geography and Regional Studies of the University of Warsaw. The official language is English. We expect that the conference will be attended by scientists interested in the scope of transformations of European landscapes (including Eastern Europe). One of the objectives of the meeting is to revive and establish new contacts among scientists in East, Central and West Europe.

The objective of the conference is to provide an international forum to discuss scientific requirements and issues, to analyze problems and effects of identifying changes of heterogeneous European landscapes. The conference is appointed to accelerate international collaboration in landscape research and management and to make bilateral and multilateral co-operation more effective.

**TOPICS TO BE ADDRESSED**

- landscape of towns
- social landscapes
- dwelling landscapes
- conditions and consequences of economic transformations of natural landscapes
- cartography, GIS and other methods to research heterogeneous landscapes in Europe
- landscape classification
- management of landscape

A preliminary program of the conference, conditions of participation and accommodation, registration fee and registration form are given in Circular No. 1, that can be ordered at the following address: Dr. Ewa Malinowska, Faculty of Geography and Regional Studies, University of Warsaw, Krakowskie Przedmiescie 30 St., P-00-927 Warsaw, Poland. Phone: (+48.2) 620 0381, ext. 644, 633; (+48.22) 269 871, Fax: (+48.22) 261 965, E-mail: GZK01 at PLEARN.BITNET, or IN%GZK01 at PLEARN (from USA and Canada).

## DIARY

- Galveston, Texas, USA, 26-30 March 1996. 11th Annual U.S. Landscape Ecology Symposium. Integration of Cultural and Natural Ecosystems across Landscapes. Contact: Dr. Robert N. Coulson, Dept. of Entomology, Texas A&M University, College Station, TX 77843, USA. E-Mail: coulson@igis3.tamju.edu
- Budapest-Veszprém, Hungary, 9-12 April 1996. Geomorphology and Changing Environments in Europe. IAG. Dénes Lóczy, Geographical Research Inst., Hungarian Academy of Science, P.O. Box 64, Budapest, H-1388 Hungary. Phone/Fax: (+36.1) 111 7814
- Jerusalem, Israel, 30 June - 4 July 1996. 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. Phone: (+972.3) 531 8571; Fax: (+972.3) 771 088
- Copenhagen, Denmark, 19-23 August 1996. 10th International Symposium on Ecological Modelling. Contact: S.N. Nielsen, Royal Danish School of Pharmacy, DK-2100 Copenhagen Ø. Phone: (+45) 3527 0850, ext. 455; WWW-server: <http://info.dfh.dk/ECOSUM96>
- Warsaw, Poland, 9-12 October 1996. IALE International Conference: Landscape Transformation in Europe. Contact: Ewa Malinowska, Faculty of Geography and Regional Studies, University of Warsaw, Krakowskie Przedmiescie 30 St., P-00-927 Warsaw, Poland. Phone: (+48.2) 620 0381, ext. 644, 633; Fax: (+48.22) 261 965, E-mail: GZK01 at PLEARN.BITNET, or IN%GZK01 at PLEARN (from USA and Canada).

to receive, the increasingly successful *Bulletin* increases from four to six times a year.

The President pointed out (while far-off thunder was reported) that our journal, *Landscape Ecology*, is the most important thing we do collectively. The quality is high; it can be higher, and we owe great credit for its success to the Editor-in-Chief, Frank Golley. We approved a committee to focus on the broad area of the IALE and publication.

I gave a brief tribute to Henri Décamps at the banquet. He and his charming and accomplished academic wife, Odele, were ever present and helpful. He is a gentleman, exactly the kind of

person one wants for a friend. He has worked with members and the Executive Committee for four years, guiding the IALE to greater strength and a brighter future. He brought his work on the ecology of river system landscapes into landscape ecology, and continues to raise the level of consciousness about the critical importance of landscape ecology to society. And this year he was elected a member of the world-class Académie Française, an honor and humbling experience to be grouped with Marie and Pierre Curie, Louis Pasteur, and Voltaire.

Let me close with some thoughts I presented to the congress on opening day. I have gained much from all the international landscape ecology congresses (1981 in Veldhoven, The Netherlands; 1982, Piestany, Czechoslovakia; 1984, Roskilde, Denmark; 1987, Münster, Germany; and 1991, Ottawa, Canada), plus all ten annual meetings of the U.S. section of IALE: (1) The core body of theory or principles in landscape ecology has grown and coalesced rapidly, along with its empirical foundations. (2) The quality of work has systematically increased. (3) The early chasm, e.g., between landscape ecologists in Europe and North America, has gradually narrowed, as the younger dynamic generation everywhere has designed and accomplished critical studies elucidating the ecology of landscapes. And (4) Applications in land-use problem-solving using the field's conceptual core continue to grow in both number and breadth.

This is an ideal period to be active in landscape ecology, the best time of the century. Major changes in landscapes parallel human history, and will continue. Deserts march on. Suburbia oozes outward. Agriculture intensifies. Woody vegetation sometimes expands. Forests are deforested. Soil erodes away. Water disappears. However, right now some communities, some regions, and some nations welcome land-use planning. And for the first time landscape and regional ecology can show the world a core of principles important in planning, conservation, design, management, and policy. This field also contains an embryo, a possible basis for optimism for the future.

## IALE-GIS (working group)

In the pre-congress meetings of the IALE '95 Congress in Toulouse, the announced meeting of the IALE-GIS working group received primary interest from 12 people. It was decided that a joint meeting should be held together with the working groups on "landscape planning" and "ecological networks", and subsequently a separate discussion was held, which came to the following conclusions:

- Despite the existence of many related networks, it remains useful to maintain the AILE-GIS working group to serve as a network for exchanging experiences and ideas related to the application of GIS in landscape ecological studies.
- The working group will continue to focus its attention on landscape planning issues and to closely cooperate with the working group on landscape planning in that respect.
- The working group should investigate and promote the function of GIS as a tool in landscape ecology education.

For more information on the activities of the IALE-GIS working group please contact its chairman: Dick van der Zee, c/o ITC, P.O. Box 6, 7500 AA Enschede, The Netherlands. Phone: (+31.53) 874 273, Fax: (+31.53) 874 399, E-mail: [WOLTERS@ITC.NL](mailto:WOLTERS@ITC.NL).