



Bulletin

International Association for Landscape Ecology

WHICH WAY DID YOU ENTER LANDSCAPE ECOLOGY?

- A personal comment to the IALE Mission Statement by Henri Décamps, past-president of IALE

The IALE Mission Statement describes Landscape Ecology as broadly interdisciplinary, and as having a conceptual and theoretical core effectively linking natural science with related human disciplines. Landscape ecologists are thus encouraged to transcend boundaries and to work together building theory and developing knowledge of landscape pattern and process. Thus, IALE aims at stimulating interaction across, and at bringing together expertise from, different disciplines.

In other words, the broadly interdisciplinary Landscape Ecology accommodates members who have expertise from diverse specific disciplines. At some stage of his/her scientific career, a well established and recognized expert in his/her discipline decides to join the difficult, complex and somewhat uncomfortable field of Landscape Ecology. Why on earth to engage in such a process? The question was asked at the last international Ph.D.-course on landscape ecology organized at the Roskilde University Center in Denmark, and it was suggested that the variety of answers would help in understanding better our strengths as an association.

The purpose of these lines is to submit for your consideration, as an example among many others, the way I entered Landscape Ecology, hoping that a collection of such examples will shed light on the true nature of our "meta-discipline".

My first experience in Science, some thirty years ago, was in aquatic ecology. I began working on the distribution of the caddis flies in high mountain streams in the Pyrenees. Why caddis flies? Because this highly diversified group of aquatic insects was poorly known. Why high mountain streams? Because this kind of habitat was supposed to be pristine and thus considered at that time as an ideal place to do ecology. On such a basis, it has been possible within the time frame of a PhD study to find "what" was the

identity of about sixty main species of pyrenean caddis flies, and to predict "where" they were living depending on substrate, current speed, temperature, stream orientation, and so forth. But aquatic ecologists quickly recognized that most of the "how" and "why" important questions in our field could not find answers just in this way. It was necessary to consider rivers as integral parts of their catchments, and their characteristics as a result of long histories of utilization by human societies.

Most of the issues concerning river ecology originate indeed at the catchment scale, particularly because of the impact of topography, geomorphology, and land cover on the hydrological cycle. And most of these issues have been more and more dependent on land and water use by humans for centuries¹. Hence the idea that it is not possible to understand the ecology of rivers just from the point of view of a specialist in hydrobiology. Only by transcending boundaries is it possible to answer most of the "why" and "how" questions in aquatic ecology: why is this river health so deteriorated and how can we improve its quality? Transcending boundaries applies to the limits between aquatic and terrestrial environments, as well as to the limits between disciplines in order to link natural science with related human disciplines, as formulated in the IALE mission statement.

Such an approach to landscape ecology, in the hope of answering questions that transcend specific disciplines, is probably widespread among members of IALE. It has several corollaries two of which I would like to evoke through two metaphors taken from biology.

My first metaphor relates to durable mutualistic interactions between species². In the experience described above, a newcomer in Landscape Ecology is at first a customer, a kind of parasite seeking advice from other disciplines in order to find solutions useful in his/her own

discipline. There must come a day when he/she has to decide what to offer in exchange. This is not just fair play, it is the wiser way to obtain more in the long term from Landscape Ecology. The successful strategy for such a sustainability is to change a purely host parasite interaction into a mutualistic one, and to help Landscape Ecology evolve for the benefit of component disciplines.

My second metaphor is that of the Red Queen, probably the most popular one in present time in evolutionary biology. If disciplines such as geography, ecology, sociology, and so forth evolve interactions within the framework of Landscape Ecology, they can be seen as species are seen in the "theory of the Red Queen"³: they have to continue running just to remain in adaptation with the others as in the novel by Lewis Carroll. And Landscape Ecology has indeed to advance to at least keep pace with its component disciplines. Together, they have to "provide the basis for a self driving perpetual motion". How to do that? Clearly the solution is in developing a conceptual and theoretical core for Landscape Ecology and in applying our improved knowledge for solving relevant problems.

It is of course more difficult to do than to say! The IALE Mission Statement may be a useful basis, particularly as it emphasizes proper appreciation of the outstanding possibilities opened by the diversity of our original expertises.

Accordingly, which way did you enter Landscape Ecology?

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¹ Naiman R.J., J.J. Magnuson, D.M. McKnight and J.A. Stanford. 1995.- *The Freshwater Imperative. A Research Agenda*. Washington D.C. Island. 165 pp.

² Combes C. 1995.- *Interactions durables. Ecologie et evolution du parasitisme*. Paris. Masson. 524 pp.

³ Van Valen L. 1973.- A new evolutionary law. *Evolution Theory* 1 : 1-30.

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Membership fee for a regional organisation (that might include membership fee for IALE-International) should be paid to your regional treasurer. In that case, you should only pay for the subscription of Landscape Ecology to Rob Jongman (normal price US\$65, student price US\$50), indicating that the IALE fee has been paid regionally.

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The IALE Bulletin is distributed six times a year to the members of the IALE. The IALE - International Association for Landscape Ecology was founded in 1982 to promote communication between scientists, planneve

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Deadline Bulletin volume 16 no 3 is April 10, 1998

INTERNATIONAL CONFERENCE ON LANDSCAPE ECOLOGY OF ASIA AND PACIFIC REGION ICLEAP '98

October 5-7, 1998, Shenyang, China

Organized by: IALE-China Branch, Institute of Applied Ecology, Chinese Academy of Sciences (CAS)

As a preparation for the IALE world congress in USA 1999, the IALE Executive Committee has decided to support a super-regional conference for Asia & Pacific Region in 1998 organized by the Chinese and Japanese IALE branches cooperatively. To enforce the development in developing countries, we need more contacts and exchange academic information.

The purpose of ICLEAP '98 is to present recent development in landscape ecology, both research and application. Theme of the conference is Landscape Planning and Ecological Construction for Sustainable Development.

Scientific Program:

1. Landscape Analysis and Landscape heterogeneity
2. Landscape Planning
3. Landscape Ecological Construction
4. Agriculture Landscape and Land use
5. Urban Landscape Ecology
6. Landscape Management and Conservation
7. Landscape Architecture

Pro Excursion: Wetlands in Liaohe River Delta. Post Excursion: Changbai Mountain. Office Language: English. Registration fees: US\$ 300.

A two-page abstract is needed to be sent to the Organization Committee. The deadline is May 1, 1998.

Applications should be sent by 1 August, 1998 to Dr. Li Xiuzhen, or Dr. Wang Xianli, P.O. Box 417, Shenyang, China
Tel: +86-024-3916291, Fax: +86-024-3843313
E-mail: lndscp@iae.syb.ac.cn

LANDSCAPE ECOLOGY AND LAND USE PLANNING FOR SUSTAINABLE DEVELOPMENT

-An international graduate course, 9-13 October 1998, arranged by International Association for Landscape Ecology (IALE)-China Branch. Research Center for Eco-Environmental Science, Chinese Academy of Sciences, China Department of Urban and Environmental Science, Peking University, China.

The course will focus on most aspects of the ongoing issues in landscape changing and land use planning wherever in the world, the broad contents of the developments in theories and methods in landscape ecology and land use planning for sustainable development, mainly,

1. Landscape ecological theories and methods for landscape analysis
2. Impacts of landscape pattern and process on biodiversity distribution
3. Land evaluation and land use planning for sustainable development
4. Landscape planning and ecological construction
5. Landscape architecture and urban landscape
6. Remote sensing, GIS and modelling in landscape ecology

Practical information and application:

Costs per participant US \$300. The application must contain address (private as well as university, phone, fax and/or E-mail), a CV including a short plan for the thesis (max 1 page), 2 pages abstract of a paper to be presented and discussed at the course.

The paper could deal with a subject relevant for the graduate study, but other subjects relevant for the graduate course will be accepted. If the application is accepted by the Selection Committee, a paper (max 10 pages) should be sent not later than 15 September, 1998 to the address mentioned below.

Applications should be sent by 1 August, 1998 to:

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IALE WORKING GROUP

LANDSCAPE SYSTEM ANALYSIS IN ENVIRONMENTAL MANAGEMENT

The consecutive meeting of our IALE working group took place in Nitra (Slovak Republic) on November 12-16, 1997, together with the 11th International Symposium on Problems of Landscape Ecological Research. The conference was perfectly organized and effectively conducted. In the framework of the conference the business meeting of the working group was held. Resulting from the discussion at the meeting, and also from the proposals presented later on, as well as the respective agreements, changes were introduced into the structure of the working group. Side by side with the previously existing work teams oriented at carrying out of the activities related to the main subjects of interest of the group several other teams appeared. The complete list is now as follows:

1. Methodology and techniques of landscape system analysis and their application in environmental management (Dr. Günter Schönfelder, Sächsische Akademie der Wissenschaften zu Leipzig, Karl-Taichnitz-Strasse 1, D-

04107 Leipzig, Germany; Phone:+4934 1711 5339, Fax:+4934 1711 5344

2. Landscape development and evolution from an historical perspective and its relevance to understanding of current conditions (Dr. Zdeněk Lipsky, Institute of Applied Ecology, Czech University of Agriculture, CZ-281 63 Kostelec nad Cernými Lesy, Czech Republic; Phone/Fax: 42 0203 97500);

3. The significance of ideas of landscape stability, integrity and health (Dr. Jerzy Solon, Institute of Geography and Spatial Organization, Polish Academy of Sciences, Twarda 51/55, 00 818 Warsaw, Poland, Fax: 48 22 697 8903, E-mail: J.SOLON@TWARDA.PAN.PL);

4. Landscape analysis as a critical basis for identifying zones of environmental stress/hazards (Professor A. J. Reteym, Faculty of Geography, Moscow State University, Vorobyovy Gory, 119899 Moscow, Russia; Fax: 7095 921 0980);

5. The importance of the perception and aesthetic value of landscapes and the significance of this in the people's approaches to, and their understanding of landscape (Professor Frans Snacken, Gaverlandstraat 23, 9031 Drogenen-Gent, Belgium; Phone: 3292 823 851);

6. Landscape ecological analysis of the marginal areas (Professor Jan Tesitel, Institute of Landscape Ecology, Na Sadkach 7, 370 05 Ceske Budejovice, Czech Republic; Fax: 4238 45719, E-mail: JANTE@DALE.UEK.CAS.CZ);

7. Landscape synthesis in environmental planning and management (Assoc. Professor Maria Kozova, Department of Landscape Ecology, Faculty of Natural Sciences, Comenius University, Mlynska dolina B-2, 84 215 Bratislava, Slovak Republic; Phone: 421 7 602 96 581, Phone/Fax: 421 7 654 28 938, E-mail: Kozova@fns.uniba.sk).

In accordance with the previous decisions the activities conducted by particular teams should aim at publication of the collective volumes forming the series linked with our Working Group. This aim ought to be served by the meetings and discussions conducted within the framework of the whole working group, as well as by the workshops organized with the purpose of exchange of experience among the persons collaborating in the realization of the individual subjects. There are also plans for the establishment of the network of information exchange within individual teams. This initiative was forwarded by Dr. Jerzy Solon and Professor Jan Tesitel. Those of you who are interested in this form of cooperation are kindly asked to get directly in touch with the persons mentioned.

There is, as well, a proposal of organizing a workshop in Gent (Belgium) in Autumn 1998 or Spring 1999, devoted

to landscape perception and scenery assessment. Professor Frans Snacken is the contact person for this meeting, and a promise of support for the organization of the workshop was given by Professor Marc Antrop from the University of Gent. During the conference in Nitra the bibliography was distributed concerning the subject of perception and aesthetic value of landscape, put together by Professor Snacken. Persons interested in this bibliography can obtain it either from Professor Snacken or from the undersigned.

The second workshop is planned for the beginning of 1999 in Kostelec nad Cernými Lesy (Czech Republic). Its leading theme will be landscape development and evolution, first of all from an historical perspective. The contact person for this workshop is Dr. Zdeněk Lipsky.

The conference of all the working group will be organized in October or November of the year 2000 in Slovakia. It will be connected with the 12th International Symposium on the Problems of Landscape Ecological Research. The team headed by Professor Maria Kozova will be the main organizing body of our meeting. Professor Florin Zigray promised on behalf of the Austrian Institute of East and Southeast European Studies an assistance in organization of this conference.

A subsequent conference is envisaged in Poland (in Warsaw or in its vicinity). It will be devoted to landscape stability and the policy of landscape management in the areas strongly transformed by human activity. The timing of this meeting was as yet not determined.

An opportunity for the meeting of the members of the IALE working group will be constituted by the international conference "Present and historical nature-culture interactions in landscape", to be held in Prague on 6-13 September 1998. The agenda of the conference accommodates the time for the business meeting of our working group.

I would like to encourage you all cordially to the activity and involvement in the work of the mentioned teams. I am convinced that the cooperation of the representatives of various schools and centers will contribute to the development of our discipline. We can do a lot together. Let me remind once again that participation in the activity of the working group on LANDSCAPE SYSTEM ANALYSIS IN ENVIRONMENTAL MANAGEMENT is not conditioned by any kind of formalities. All the members of IALE and interested in it are indeed welcome.

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