



# Bulletin

## International Association for Landscape Ecology

### LANDSCAPE ECOLOGY IN MEXICO: CURRENT SITUATION, POTENTIAL AND FUTURE

by *Leonardo Cabrera-Garcia*<sup>1</sup>

The discipline Landscape Ecology has quite an ambiguous status in Mexico. There is a kind of uncertainty, confusion and even polemic among the scientific community when referring to this topic. However when it comes to the tools employed by Landscape Ecologists, the overall acceptance is much higher. Thus topics like spatial analysis, digital maps and GIS systems, land use change and habitat fragmentation enjoy high academic interest. It seems that many academics and scholars talk about technical aspects of Landscape Ecology, but only a few do landscape ecological research in a comprehensive and holistic sense (Cabrera and Ochoa, 2003; Velazquez, pers. comm.).

As a consequence of attending both the Summer School and the World Congress 2003 of Landscape Ecology in Australia, I asked myself why so few Mexican students or academics participated in such an important event? I don't have a precise answer yet, but I could imagine that these are the reasons: a) Australia is not around the corner; b) financial support within Mexico is limited, c) information about the congress and the summer school wasn't distributed widely in Mexico (IALE Bulletin and Web announcement is probably not sufficient in a region with only 8 members). So how could the interest be fostered? What is the special situation of Landscape Ecology in Mexico? In order to obtain some answers to these questions, my colleague Susana Ochoa and myself decided to devote some effort into generating information about the situation of Landscape Ecology in Mexico and present it at a National Congress organized by the Sociedad Mesoamericana para la Biología y la Conservación (November 3<sup>rd</sup> to 7<sup>th</sup>, 2003, Tuxtla Gutierrez, Chiapas,

Mexico). This meeting usually attracts the scientific community from Mexico and Central America (and those living abroad but still with a Latin American focus) dedicated to the issues of biological conservation. Thus, we prepared a brief questionnaire of 10 questions to get an understanding of how Landscape Ecology is conceptualized, how landscape-ecological research is oriented and what the limitations to its progress are.

Main findings show that, according to Potschin's graph, Mexican Landscape Ecology is in a hybrid stage (Klink, et al., 2003). As a matter of fact, we find on the one hand biologically oriented basic research with a limited problem-solving potential, on the other hand we find geographic research oriented towards application. As a general trend Mexican Landscape Ecology is dominated by the biologists' perspective, which implies a merely reductionist view of complex problems associated with biological conservation.

The Mesoamerican congress gave the impression that the „protect to save“ paradigm is dominating research and extension in the area concerned. Top-down planning approaches for biodiversity conservation still seem to be prevalent in Mexico and Central America. Participatory planning via the involvement of local actors is at least conceptualized in some models but the question remains, at

#### ADDRESS FOR ARTICLES TO BE PUBLISHED IN THE IALE-BULLETIN

Felix Kienast, Swiss Federal Institute of Forest, Snow,  
and Landscape Research (WSL)  
CH-8903 Birmensdorf, Switzerland  
Tel. +41 1 739'23'66 Fax. +41 1 739'22'54  
E-Mail: [felix.kienast@wsl.ch](mailto:felix.kienast@wsl.ch)

<sup>1</sup> Leonardo Cabrera-Garcia, McGill University, Montreal, Canada, [lcabre@po-box.mcgill.ca](mailto:lcabre@po-box.mcgill.ca)

...continued from page 1

what stage of a project participatory methods should come in. There were good talks given by young students about habitat fragmentation and its effects on species mobility as well as about the description and analysis of habitat fragmentation.

I can see a big potential for Landscape Ecology in Mexico and in Latin America in general. There are many people interested in issues of biological conservation, mainly with a focus on endangered species and habitats. There is a great potential to unify these research findings with those working in the field of rural development. I think Landscape Ecology can be a platform for integrated scientific exchange and activities for academics and scholars. A formal IALE chapter "Latin America" has been set up at the congress in Australia (2003) with the assistance and collaboration of IALE International (represented by Rob Jongman). The IALE chapter is coordinated by Jean Paul Metzger (Brasil) and I think it can represent a platform for scientific exchange for those interested in the discipline as well as for those who find Landscape Ecology an ideal playground to dream out visions for biological conservation.

#### References

- Cabrera, L. and S. Ochoa. 2003. Landscape ecology: current situation and perspectives for Mexico. Conference presented at Congreso Mesoamericano para la Biología y la Conservación. Tuxtla, Chiapas, Mexico. November, 2003.
- Cabrera, L. and S. Ochoa-Gaona. *In progress*. Landscape ecology in Mexico: a current assessment of realities and potentials.
- Klink, H., M. Potschin, B. Tres, G. Tress, M. Volk and U. Steinhardt. 2003. Landscape and landscape ecology. In Development and perspectives of Landscape Ecology. Ed. Olaf Bastian and Uta Steinhardt. Velazquez, A. Senior Landscape Ecologist, UNAM, Mexico.

#### Acknowledgements

I want to thank Rob Jongman and IALE for the financial support for the Mexican conference. Thanks to my colleague Susana Ochoa-Gaona for co-authoring the conference, to Richard Hobbs (IALE), Thom Meredith (McGill University) and Gilles Seutin (Parks Canada) for the financial support to attend the IALE World 2003 Congress and The Summer School, to Marion Potschin for being there.

## IALE-SLOVAKIA ESTABLISHED

On January 15, 2004 the Slovak chapter of IALE has been (re)founded. With the partition of Czechoslovakia into two separate republics in 1993 the once famous IALE chapter was separated. It was once one of the leading centers for Landscape Ecology and the birthplace of IALE at the Piest'any conference in 1982. Therefore it is a milestone for all Landscape Ecologists that in the year 2004 both Czech and Slovak IALE are active IALE chapters.

The Slovak IALE has about 80 members and has organised a number of working groups. A Web site will facilitate internal and external exchange and communication. The board of IALE-Slovakia consists of:

- Chair: Maria Kozová, [kozova@fns.uniba.sk](mailto:kozova@fns.uniba.sk)
- Vice chair: Tatiana Hrnčiarová, [tatiana.hrnciarova@savba.sk](mailto:tatiana.hrnciarova@savba.sk)
- Secretary: Juraj Hresko, [landscape.eco@post.sk](mailto:landscape.eco@post.sk)
- Treasurer: Peter Trembos, [trembos@atlas.sk](mailto:trembos@atlas.sk)

## PhD MASTER CLASS

### Integrative research for the planning and management of sustainable landscapes

The course will be held in the Netherlands from 1-6 June 2004. It offers opportunities for PhD students to be exposed to and actively discuss a range of methodological approaches from the natural sciences to landscape design with a team of international landscape researchers. Techniques for overcoming practical and theoretical problems of inter- and transdisciplinarity will be presented by experts in the field and discussed in relation to the real projects of the participants.

The PhD master class has two main objectives:

- provide insights into the different concepts and theories of Landscape Research that govern sustainable landscape management.
- give an overview of integrative approaches (interdisciplinarity and transdisciplinarity) and discuss how these can be applied successfully in Landscape Research.

PhD students from all countries that are involved in Landscape Research are invited to participate and will be tutored by a number of leading international Landscape Researchers. The course is organised by Bärbel Tress, Gunther Tress, Paul Opdam, and Gary Fry in cooperation with two Dutch Graduate Schools. The participation is limited to 25-30 participants. For detailed information and registration please refer to <http://www.wur.nl/delta/phd2004.html> or send an e-mail to [tress@tress.cc](mailto:tress@tress.cc) (Bärbel Tress & Gunther Tress, Alterra Green World Research Wageningen University and Research Centre, Landscape Centre, P.O. Box 47, NL-6700 AA Wageningen, The Netherlands, Phone: +31-317-474616, Fax: +31-317-419000).

## ENULE: EUROPEAN NETWORK ON URBAN LANDSCAPE ECOLOGY

Quite a few European scientists are involved in Urban (Landscape) Ecology. Some of them are active members of national networks, some participate in European research networks such as Cost E12 (Urban forestry) or Cost C11 (Urban green). Since the goals of these international programs are rather broad, many researchers do only have national contacts to discuss their research. ENULE tries to fill this gap by providing a platform to exchange knowledge on Urban Landscape Ecology and to deepen the views on the subject.

### The objectives of ENULE are:

- support and improve the exchange of information among scientists concerning Urban (Landscape) Ecology.
- form a European network on Urban Landscape Ecological Research.
- act as a contact organisation to similar international organisations in other regions.
- form a basis to generate proposals for EU-research.
- create a distinct profile for Urban Landscape Ecology incl. links and overlaps with other ecological disciplines.

### Becoming an ENULE-member

- *ENULE-membership has many benefits:* you will be in contact with an international group of scientists in the field of Urban Landscape Ecology; you are invited to discuss your research questions with other experts in the field at special discussion events and you will probably know much earlier and easier about e.g. relevant EU-calls for research in Urban Landscape Ecology.

- *ENULE-membership is free for everybody:* however, since ENULE is an official IALE-working group, only IALE-members (we welcome non-European members!) can join. IALE-membership is inexpensive and has of course many other advantages. For details concerning IALE-membership please consult <http://www.landscape-ecology.org>.
- *Joining ENULE is easy:* Just send an e-mail with your name and address to the ENULE-coordinator Robbert Snep ([Robbert.Snep@wur.nl](mailto:Robbert.Snep@wur.nl)). He'll send you a form, where you fill in your specific research fields and your (local or national ) network within Urban Ecology. The data will enable ENULE-members to have an overview of on-going activities and research in Urban Landscape Ecology. After receiving a completed form and the confirmation from the IALE headquarter that you (or your group) are a member of IALE, you will become a member of the European Network on Urban Landscape Ecology (ENULE).
- If you agree, your name will be added to the discussion list (see activities below). Names, addresses and other data will be exclusively used for ENULE-activities. They are not accessible for commercial use.

### ENULE activities in 2004

ENULE has a steering committee that will work out a strategy to fulfil the objectives mentioned above. Members of this committee are Robbert Snep, Jürgen Breuste and Jari Niemelä (for addresses, see below). To establish a European network a contact person for every European country is needed. At this moment there are contacts to Belgium, Finland, France, Germany, Italy, Netherlands, Poland, Slovakia, Sweden and the United Kingdom.

An interactive platform will be established that provides a discussion forum for ideas and information

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, planners and interdisciplinary scientific research. IALE Executive Committee: **President:** Bob Bunce 2003-2007, ALTERRA Green World Research, Wageningen UR, Postbox 47, 6700AA Wageningen, The Netherlands, [bob.bunce@wur.nl](mailto:bob.bunce@wur.nl); **Secretary General:** Marion Potschin 2003-2007, School of Geography, University of Nottingham, Nottingham NG7 2RD, [Marion.Potschin@unibas.ch](mailto:Marion.Potschin@unibas.ch) or [Marion.Potschin@nottingham.ac.uk](mailto:Marion.Potschin@nottingham.ac.uk); **Treasurer:** Rob Jongman 1995-2007, ALTERRA Green World Research, Wageningen UR, Postbox 47, 6700AA Wageningen, The Netherlands, [Rob.Jongman@wur.nl](mailto:Rob.Jongman@wur.nl) or [rob.jongman@planet.nl](mailto:rob.jongman@planet.nl); **Past President:** Richard J. Hobbs 2003-2007, School of Environmental Science, Murdoch University, Murdoch, WA 6150, Australia, [rhobbs@essun1.murdoch.edu.au](mailto:rhobbs@essun1.murdoch.edu.au); **Vice Presidents:** Françoise Burel 1997-2005, Lab. Evolution, Université de Rennes 1, Campus de Beaulieu, 35042 Rennes Cedex, France, [francoise.burel@univ-rennes1.fr](mailto:francoise.burel@univ-rennes1.fr); Margareta Ihse 1997-2005, Department of Physical Geography, Unit of Ecological Geography, Stockholm University, SE-106 91 Stockholm, Sweden, [ihse@natgeo.su.se](mailto:ihse@natgeo.su.se); Louis R. Iverson 2003-2007, USDA Forest Service, 359 Main Rd., Delaware, OH, 43015, USA, [liveron@fs.fed.us](mailto:liveron@fs.fed.us); Nobukazu Nakagoshi 2003-2007, Hiroshima Univ., Dept of Environmental Studies, 1-7-1 Kagamiyama, Higashi-Hiroshima 739-8521, Japan, [nobu@hiroshima-u.ac.jp](mailto:nobu@hiroshima-u.ac.jp); **Bulletin Editor and Deputy Secretary General:** Felix Kienast 1999-2007, Swiss Federal Institute of Forest, Snow and Landscape Research, Division of Landscape Dynamics and Management, 8903 Birmensdorf, Switzerland, [felix.kienast@wsl.ch](mailto:felix.kienast@wsl.ch); **Chairman of Council:** Jesper Brandt 1995-2007, Roskilde University, P.O. Box 260, DK 4000 Roskilde, Denmark, [brandt@ruc.dk](mailto:brandt@ruc.dk)

IALE on the Internet: IALE International: [www.landscape-ecology.org](http://www.landscape-ecology.org)

...continued from page 3

(<http://groups.yahoo.com/group/ENULE/>). A database will be set up that includes names and addresses of experts in the field. We have plans to set up a small workshop in 2004. This workshop should be adjacent to a more general meeting, e.g. the annual meeting of the German Urban Ecologists in Berlin in October 2004. More information will follow. We hope to be present with papers and workshops at the next European IALE Congress in 2005 in Faro and at the IALE world congress 2007.

#### Steering committee of ENULE:

- Robbert Snep (co-ordinator), Alterra - Green World Research, Wageningen University and Research Centre, the Netherlands.
- Jürgen Breuste, Institute for Geography and Applied Geo-informatics, University of Salzburg, Austria.
- Jari Niemelä, Department of Biological and Environmental Sciences, University of Helsinki, Finland.

**Information:** [Robbert.snep@wur.nl](mailto:Robbert.snep@wur.nl)

## MEETINGS

December 2-4, 2004 **CALL FOR PAPERS**

**From knowledge of landscapes to landscape action**, Bordeaux, France

This conference marks the conclusion of a French national research programme started in 1998 and will focus on a comparison of the programme's results with those attained in other European countries through similar studies.

More information and registration: <http://landscape.lyon.cem.agref.fr/>

September 15-21, 2004

**The 21st session of the Permanent European Conference for the Study of the Rural Landscape. One Region, Many Stories: Mediterranean Landscapes in a Changing Europe**, Myrina, Limnos and Molyvos, Lesvos, Greece

More information and registration: <http://www.aegean.gr/geography/PECSRL2004/>

June 21-24, 2004 **(EXTENDED REGISTRATION!!)**

**IALE-UK meeting, Landscape Ecology of Trees and Forests**, Cirencester, Gloucestershire

The annual IALE(UK) meeting will take part in the Royal Agricultural College in Cirencester between 21 and 24 June, 2004. The meeting has a full programme with international speakers, so not only will the conference be interesting, it will be a good opportunity to meet and discuss how IALE and esp. IALE(UK) is progressing. As the organiser is looking for a bigger room now the bookings deadline for the Woodland Conference has been extended to 16th. April, so you still have time to register, if you have not done so. Although the slots for the oral presentations are fixed there is still an opportunity to submit abstracts for

a poster directly to [RichardSmithers@woodland-trust.org.uk](mailto:RichardSmithers@woodland-trust.org.uk). More information: [http://www.woodland-trust.org.uk/iale\\_conference/](http://www.woodland-trust.org.uk/iale_conference/)

## CALL FOR PAPERS

**Landscapes of the Heart, Expanded Edition, Narratives of Nature, Environment and Self**

Scholars, writers and environmentalists are invited to submit manuscripts for consideration in an expanded edition of the book *Landscapes of the Heart* – one that will cross the boundaries of ecology, economics, law, culture, health, the social sciences and the humanities. Individuals already involved in this project include E.O. Wilson (Biology, Harvard; winner of two Pulitzers), Noam Chomsky (MIT) and others.

More information: <http://www.telusplanet.net/public/aleksiuk/homepage>

## MEETINGS

March 29- April 2, 2005 **CALL FOR PAPERS**

**Landscape Ecology in the Mediterranean. Inside and outside approaches**, Faro, Portugal

This is the first call for papers for the European IALE Congress 2005 in Faro/Portugal. Deadline for abstracts is May 31, 2004. If you have any problems do not hesitate to contact the congress organiser at [euro2005@apep.pt](mailto:euro2005@apep.pt). The following symposia will be offered:

- *Mediterranean coastal habitats under pressure*; João Alveirinho Dias (coordinator), Rui Santos
- *Theoretical Approaches to European Landscape Ecology*; Uta Steinhardt (coordinator), Almo Farina
- *Disturbance, Biodiversity and Function in Mediterranean-type Ecosystems: Theory and Evidence*; Anke Jentsch (coordinator), Carl Beierkuhnlein
- *Land degradation and desertification*; Maria José Roxo (coordinator), Nuno Cortez
- *The Landscape Ecology of Mediterranean Mountains*; Jose García Ruiz (coordinator), David Nogués Bravo, Paloma Benlloch, Juan Fernández, C.López Alados
- *Changes in land use, biodiversity and cultural landscape character*; Jacques Baudry (coordinator), Richard Aspinall, Almo Farina. Breuste Juergen, Burghard Meyer, Francisco Moreira
- *Conservation of Mediterranean Landscapes*; Linda Olsvig-Whittaker (coordinator), Didi Kaplan, Zev Naveh
- *Landscape values, perceptions and aesthetics*; Graça Saraiya (coordinator)
- *Local management, policies and stakeholder involvement*; Teresa Pinto-Correia (coordinator)
- *Young Landscape Ecologists Symposium*; Jaques de Smidt (coordinator), Bob Bunce
- *Landscape Ecological Monitoring with special reference to the Mediterranean*; Bob Bunce (coordinator), Rob Jongman

More information: <http://www.apep.pt/>

Deadline: April 30, 2004



Deadline: May 31, 2004



Deadline: April 16, 2004