



# Bulletin

## International Association for Landscape Ecology

### NEW LANDSCAPE ECOLOGY BOOKS / JOURNALS



#### **Ecology of a Managed Terrestrial Landscape: Patterns and Processes of Forest Landscapes in Ontario (edited by Ajith H. Perera et al.)**

The growing popularity of the broad, landscape-scale approach to forest management represents a dramatic shift from the traditional, stand-based focus on timber production. Ecology of a Managed Terrestrial Landscape responds to the increasing need of forest policy developers, planners, and managers for an integrated, comprehensive perspective on ecological landscapes. The book examines the "big picture" of ecological patterns and processes through a case study of the vast managed forest region in Ontario. The contributors synthesize current landscape ecological knowledge of this area and look at gaps and future research directions from several points of view: spatial patterns, ecological functions and processes, natural disturbances, and ecological responses to disturbance. They also discuss the integration of landscape ecological knowledge into policies of forest management policies, particularly with respect to Ontario's legislative goals of forest sustainability. Ecology of a Managed Terrestrial Landscape is the first book to describe the landscape ecology of a continuously forested landscape in a comprehensive manner. It is written for instructors and students in forest management, wildlife ecology, and landscape ecology. Contents: Preface / Acknowledgments / Section I: Introduction to Landscape Ecology and Ontario's Managed Forest Region: 1 Landscape Ecology in Forest Management: An Introduction 2 Physical Geography of Ontario 3 Forest Vegetation of Ontario: Factors Influencing Landscape Change 4 Forest Vertebrates of Ontario: Patterns of Distribution 5 Spatial Patterns in the Managed Forest Landscape of Ontario Section II: Forest Landscape Ecological Processes 6 Influences of Climate on Ontario Forests.

*Impressum:* Ecology of a Managed Terrestrial Landscape – Patterns and Processes of Forest Landscapes in Ontario, edited by Ajith H. Perera, David L. Euler and Ian D. Thompson, UBC Press, ISBN 0-7748-0749-0, \$95



#### **In a photocopy form: Landscape Ecology, Theory and application by Z. Naveh & S. Lieberman**

The second edition of the Springer-Verlag monograph on the transdisciplinary science of landscape ecology, by Zev Naveh and Arthur S. Lieberman, is now out of print. However, the authors have publishers permission to photocopy the book. Therefore the book may be purchased in photocopied edition. A single copy of the book costs US\$ 30 (or equivalent in other currencies) plus mailing costs of US\$.3 for surface mail or US\$6 for airmail. Advance payment is required for all orders, regardless of geographic location. For North American purchasers, please send order to: Emer. Prof. A. Lieberman Rehov Shimkin, 21. Ahuza 34750, Haifa, ISRAEL  
For European, Asian and Latin American purchasers Emer. Prof. Z. Naveh, Faculty of Agricultural Engineering Technion-Israel Institute of Technology, Technion City 32000 Haifa, Israel (email: [znave@hotmail.com](mailto:znave@hotmail.com))



#### **Landwirt schafft Landwirtschaft. Umstellungspotential und landschaftliche Konsequenzen der ökologischen Landwirtschaft in Dänemark (Farmers Create The Landscape: The Potential for Conversion to Organic Agriculture in Denmark and its Consequences for Landscape) by Bärbel Tress**



The book gives a comprehensive overview of the phenomenon of organic farming and the relationship between farmers and the landscape. A holistic, system-theoretical approach makes it possible to shed light on neglected topics in organic farming such as for instance its effect on the landscape structure. The study

*continued on page 2...*

**Danish Landscapes.....***continued from p. 1*

is based on empirical surveys of about 800 conventional and organic farmers and mappings of agricultural areas.

*Impressum:* Forskningsrapport nr. 121 (German with English summary), Publikationer fra Geografi, Institut for Geografi og Internationale Udviklingsstudier, Roskilde Universitetscenter. ISSN 1395-1904. Can be ordered from the Centre for Landscape Research ([vlb@ruc.dk](mailto:vlb@ruc.dk)). Download more information and the summaries at: <http://www.geo.ruc.dk/vlb/bgt/phd.html>



**Die Ferienhauslandschaft. Motivationen, Umweltauswirkungen und Leitbilder im Ferienhaustourismus in Dänemark** (*The Summer House Landscape: Motivations, Environmental Consequences and Concepts in Summer House Tourism in Denmark*) by Gunther Tress

The book gives an overview of the phenomenon of summer house tourism in Denmark and its relationship with the landscape, using a holistic and system-oriented approach. It is based on a comprehensive study undertaken between 1996 and 1999, which surveyed about 1,000 Danish and German summer house tourists (guests and owners), mapped summer house areas, and interpreted aerial photographs.

*Impressum:* Forskningsrapport nr. 120 (German with English summary), Publikationer fra Geografi, Institut for Geografi og Internationale Udviklingsstudier, Roskilde Universitetscenter. ISSN 1395-1904. Can be ordered from the Centre for Landscape Research ([vlb@ruc.dk](mailto:vlb@ruc.dk)). Download more information and the summaries at: <http://www.geo.ruc.dk/vlb/bgt/phd.html>

**LANDSCAPE (ECOLOGY) JOURNALS**

There is new journal “**Basic and Applied Ecology**” - the first volume just arrived. It's the Journal of the German Ecological Society (articles in English). More information under <http://www.urbanfischer.de/journals/baecol/baecol.htm>



“**Landscape History**”: This is the international refereed journal of the Society for Landscape Studies. It offers a common meeting-ground for all concerned with the material and cultural evaluation of human use of the land. The ultimate intention is to secure a more penetrating comprehension of landscape evolution and an overall narrative account of landscape prehistory and history, together with an understanding of how this has influenced, and may usefully guide the management of, the present day landscape. For details see <http://www.britarch.ac.uk/sls/slsjour.html>



During its twenty-five years of publication, “**Landscape Research**”, the journal of the Landscape Research Group (<http://www.landscape-research.org.uk>), has become established as one of the foremost journals in its field. Landscape Research is distinctive in combining original research papers with reflective critiques of landscape practice. Contributions to the journal appeal to a wide academic and professional readership, and reach an interdisciplinary and international audience. For details see <http://www.tandf.co.uk/journals/carfax/01426397.html>

**UNIVERSITY HONORS**

Dr. Almo Farina, who served as the former Vice president and as the Secretary General of IALE, has been appointed as Associate Professor in Ecology and Landscape Ecology at the University of the Urbino, in Italy.

**DEADLINE FOR ARTICLES, MEETINGS ETC. IN THE NEXT BULLETIN IS NOVEMBER 15, 2000: Send to: [felix.kienast@wsl.ch](mailto:felix.kienast@wsl.ch)**

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:** Richard J. Hobbs (CSIRO Wildlife and Ecology, Private Bag, P.O., Wembley WA 6014, Australia), tel +61 8 9333 6442 fax +61 8 9333 6444 email [Richard.Hobbs@per.dwe.csiro.au](mailto:Richard.Hobbs@per.dwe.csiro.au); **Past President:** John A. Wiens (USA), email [jaws@lamar.colostate.edu](mailto:jaws@lamar.colostate.edu); **Vice Presidents:** Duning Xiao (China), email [Indscp@iae.syb.ac.cn](mailto:Indscp@iae.syb.ac.cn); Kathryn Freemark (Canada), email [kathryn.freemark@ec.gc.ca](mailto:kathryn.freemark@ec.gc.ca); Margareta Ihse (Sweden), email [ihse@natgeo.su.se](mailto:ihse@natgeo.su.se); Françoise Burel (France), email [francoise.burel@univ-rennes1.fr](mailto:francoise.burel@univ-rennes1.fr); **Secretary General:** Michael Moss (Faculty of Environmental Sciences, University of Guelph, Guelph, Ontario, N1G 2W1 Canada), tel +1 519 824-4120 ext.4800 fax +1 519 763-4686 email [mmoss@uoguelph.ca](mailto:mmoss@uoguelph.ca); **Bulletin Editor and Deputy Secretary General:** Felix Kienast (Swiss Federal Institute of Forest, Snow and Landscape Research WSL, CH-8903 Birmensdorf, Switzerland), tel +41 1 739 23 66 fax +41 1 737 40 80 email [felix.kienast@wsl.ch](mailto:felix.kienast@wsl.ch); **Treasurer:** Rob Jongman (WAO, Department of Physical Planning and Rural Development), Gen. Foulkesweg 13, 6703 BJ Wageningen, The Netherlands, tel +31 317 483 713 fax +31 317 482 166 email [R.H.G.Jongman@Alterra.wag-ur.nl](mailto:R.H.G.Jongman@Alterra.wag-ur.nl)

IALE on the Internet: IALE International: <http://www.crle.uoguelph.ca/iale/>

## IALE-GERMANY STARTS DISCUSSION ON PERSPECTIVES FOR CENTRAL EUROPEAN LANDSCAPES IN THE THIRD MILLENIUM

by Carl Beierkuhnlein

In July 2000 the German Section of the International Association for Landscape Ecology (IALE-D) (<http://www.iale.de>) held an important meeting at the Fachhochschule Nürtingen: More than 100 German landscape ecologists gathered to discuss perspectives for Central European landscapes and the status of landscape ecology at the beginning of a new century. This reflects the rapid development of the Association one year after its foundation.

The general philosophy of the first regional conference was to bring together different approaches and paradigms that have governed Central European landscape ecology in the past and present. To reach this target, the conference was designed so that there was enough time for discussion. IALE-D is a young scientific association and aims at creating a forum for German landscape ecologists who come from different schools, traditions or scientific disciplines such as geography, geoecology, biology or regional planning. So far most members of IALE-D are from the scientific community (mostly employed by universities or research institutes). Experts from private consulting companies or from the administrative level are relatively rare. After the opening address by Roman Lenz (organizing committee) and Jürgen Breuste (chair of IALE-D) plenary talks were presented on the definition and objectives of landscape ecology as well as on landscape theory and paradigms. These talks tried to integrate the historical traditions of landscape ecology with today's modern approaches. The subsequent papers dealt with different aspects of diversity in landscapes, quantitative analysis and assessments of human impacts. A major theme was the measurement and evaluation of landscape fragmentation. The first part of the conference was concluded with a paper on the holistic view in landscape ecology. In parallel sessions three workshops dealt with "urban landscapes", "communication between science and planning" and "landscape structure". Short talks were combined with open discussions. The workshop themes represented a considerable part of the 6 working groups presently active within the German section. During two poster sessions 30 posters were presented. Here again one could see the high diversity of landscape

ecological approaches in Central Europe. Methodological, theoretical and practical presentations dealt with the modern questions of climate change, with nature conservation and landscape development, with urban ecology and problems associated with new uses of land or land restoration.

It was generally appreciated by the participants that the meeting was designed to promote scientific communication and focussed much more on discussions. The Association is planning to continue and develop this approach during its next meeting in 2001 at the University of Oldenburg.

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## SPATIAL ANALYSIS OF LANDSCAPE RESOURCES IN SLOVAKIA

by Robert Búci

As a young, enthusiastic Ph.D. student I am happy to present some developments in spatio-temporal research in Slovakia. At the same time I would like to invite researchers with similar research interests to collaborate with our institution. I hope that the IALE audience understands the fact that I am a beginner and self-educator in this field. Hence I would really appreciate any comments, recommendations and/or help.

All natural processes and human activities have a spatial aspect, including environmental conflicts. Therefore we could stress the hypothesis that space and location should be treated as natural resources. However the majority of economic models are still based on the paradigm that natural resources are "masses and energies", neglecting the fact that the exploitation of any natural resource is strongly dependent on its spatial and locational features. These determine the price, extent, and accessibility of the resource and are therefore a vital component of the decision making process.

Bearing this theoretical framework in mind our study focuses on the relationship between the spatial and locational properties of the abiotic complexes and land use, for example water and mass flow and its impacts on the existing and proposed land use. This approach follows research performed by Miklos and Kozová. It is complementary to other spatially oriented landscape-ecological research in Slovakia that deals predominantly with the spatial distribution patterns of biotic landscape elements. Both are important prerequisites within the decision making process of land-use management.

*continued on page 4...*

**Slovak Landscapes.....***continued from p. 3*

In detail the project aims at achieving the following milestones: 1) constructing of a database detailing spatial representation of abiotic complexes (elementary run off areas, microbasins, natural regions); 2) quantitative analysis of spatial and locational properties of abiotic complexes and land-use; 3) proposing optimal land-use; 4) model implementation.

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**FOUND ON THE WEB.....****Biodiversity assessment**

<http://www.igc.org/wri/biodiv/gba-unpr.html>

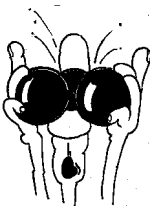
<http://www.unibas.ch/gmba/>

[http://www.environment.gov.au/life/general\\_info/biodiv\\_assess\\_intro.html](http://www.environment.gov.au/life/general_info/biodiv_assess_intro.html)

**Ecosystem evaluation**

On this site, you will find: a) Discussion of the purposes and context for ecosystem valuation; b) a non-technical explanation of the economic theory of ecosystem valuation; c) descriptions of specific valuation methods, including both monetary and non-monetary Measures; d) Case study illustrations of each method; e) practical considerations related to the methods, including when each method is most appropriate, and the strengths and limitations of each method; f) links to sources of related information; g) opportunities to provide feedback and share your experiences as you develop and use estimates of ecosystem benefits.

<http://www.ecosystemvaluation.org/>

**MEETINGS**

June 30-July 2 & July 3-6, 2001

**IALE European conference: Development of European landscapes**, Stockholm, Sweden and Tartu, Estonia.

The aim of the conference is to assist development and restoration of European landscapes at the regional and local level. Papers can be presented to the following topics:

1. THEORETICAL ASPECTS AND MODELLING
  - Landscape pattern and processes
  - Landscape modelling
2. SOCIO-ECONOMIC ASPECTS
  - Economy of European landscapes
  - Cultural heritage in changing landscapes

**MEETINGS (CONT.)****3. LANDSCAPE CHANGE**

- Monitoring of landscape changes
- Shaping the future landscapes

**4. LANDSCAPE MANAGEMENT AND RESTORATION**

- Management of biological and landscape diversity
- Ecological restoration of natural areas
- Ecological engineering in rural landscapes
- Stream and lake restoration, coastal zone management
- Management of archipelago landscapes

**5. URBAN LANDSCAPE ECOLOGY**

More information: <http://www.geo.ut.ee/IALE2001/>

April 25-29, 2001

The 16th Annual Symposium of the **US Regional Chapter of the International Association of Landscape Ecology (US-IALE): Pattern, Process, Scale, & Hierarchy: Interactions in Human-Dominated and Natural Landscapes**, Arizona State University, Tempe, AZ,

A major goal of landscape ecology is to understand the interactions between spatial pattern and ecological processes, the role of scale, and hierarchical linkages in heterogeneous landscapes that are increasingly shaped by human activities. This understanding is essential not only for unraveling how nature works, but also for developing a harmonious relationship between humanity and nature. The theme of the 2001 US-IALE Symposium will be understanding the interactions among pattern, process, scale, and hierarchy in human-dominated and natural landscapes, with a special emphasis on landscapes that have been profoundly modified by humans.

More information: <http://www.west.asu.edu/LEML/iale2001>

June 24-27, 2001

**3rd North American Forest Ecology Workshop: Issues of Scale in Forest Ecology – Theory to Practice**, Duluth, MN, USA

This workshop will bring together forest managers and researchers from Canada, Mexico and the United States to discuss issues of scale and how they relate to forest ecology and management. Workshop events include a plenary session, banquet, concurrent technical sessions, a poster session, and field trips. Proposed topics for concurrent sessions: scale linkages – from trees to landscapes, forest health, interactions between spatial patterns and wildlife, non-timber forest products, forest / surface water interactions, spatial assessment and decision tools for managing forested landscapes, and managing forests at regional scales. Registration information is available late 2000. Contact Mary Ann Hellman, 612-624-7222 or e-mail: [mhellman@forestry.umn.edu](mailto:mhellman@forestry.umn.edu).

More information: <http://www.cnr.umn.edu/cfc/outreach/NAFEW/nafew.html>