

Sponsors

Ministry of the Environment of the Slovak Republic
Slovak Association for Landscape Ecology – IALE-SK
Slovak Environmental Agency in Banská Bystrica
Comenius University in Bratislava, Faculty of Natural Sciences
Institute of Geography of the Slovak Academy of Sciences in Bratislava
Institute of Landscape Ecology of the Slovak Academy of Sciences in Bratislava
Slovak University of Technology in Bratislava, Faculty of Architecture
Technical University in Zvolen, Faculty of Ecology and Environmental Sciences

Authors

Ingrid Belčáková, Martin Boltížiar, Vladimír Čaboun, Marta Dobrovodská, Ján Drdoš, Oľivia Ďugová, Pavol Eliáš, Vladimír Faltan, Maroš Finka, Jana Gajdová, Igor Gallay, Anna Grešková, Lucia Grotkovská, Juraj Hreško, Tatiana Hrnčiarová, Mikuláš Huba, Mária Chocholová, Peter Chomjak, Zita Izakovičová, Peter Jančura, Ján Julény, Róbert Kanka, Pavol Kenderessy, Anton Kollár, Jozef Kollár, Monika Kopecká, Mária Kozová, Ján Králik, Zdena Krnáčová, Anna Kršáková, Blanka Lehotská, Milan Lehotský, Ľubica Lešinská, Juraj Lieskovský, Rudolf Midriak, László Miklós, Zuzana Miklošovičová, Pavlína Mišíková, Regina Mišovičová, Zuzana Moravčíková, Milena Moyzeová, Branislav Olah, Július Oszlányi, Ján Oťaheľ, Eva Pauditšová, Peter Pavličko, Katarína Pavličková, František Petrovič, Zuzana Pucherová, Tamara Reháčková, Zdena Rózová, Milan Ružička, Jana Ružičková, Peter Sabo, Dagmar Sláviková, Jaroslava Sobocká, Ivan Šimonides, Vojtech Šimonovič, Jana Špulerová, Jozef Šteffek, Dagmar Štefunková, Mikuláš Tekeľ, Peter Tremboš, Marta Záhumenská, Ľubica Zaušková, Hubert Žarnovičan, Florin Žigrai

© Ministerstvo životného prostredia Slovenskej republiky, Slovenská asociácia pre krajinnú ekológiu – IALE-SK, Bratislava, 2007

© Ministry of the Environment of the Slovak Republic, Slovak Association for Landscape Ecology – IALE-SK, Bratislava, 2007

Ministry of the Environment of the Slovak Republic
Slovak Association for Landscape Ecology – IALE-SK



Landscape Ecology in Slovakia

Development, Current State, and Perspectives

Chosen Chapters (Draft)

Editors

**Mária Kozová, Tatiana Hrnčiarová, Ján Drdoš, Maroš Finka,
Juraj Hreško, Zita Izakovičová, Ján Oťaheľ, Milan Ružička, Florin Žigrai**



Monograph represents contribution of the Slovak landscape ecologists at the occasion of the IALE World Congress (8 – 12 July 2007, Wageningen, the Netherlands) and the 25th Anniversary of the IALE foundation

Bratislava ■ 2007

C o n t e n t s

Preface (J. Izák)

1. Introduction (M. Kozová, T. Hrnčiarová) .

2. Beginnings of Landscape Ecology in Slovakia
(Responsible Editors: M. Ružička, J. Hreško.

2.1. University, academic and resort departments focused on landscape ecology, ecology and environmental studies

2.2. International symposia as an input of Slovak landscape ecologists to international cooperation and IALE activities

2.3. Slovak Association for Landscape Ecology and its activities

2.4. Landscape ecological research and international co-operation

3. Contribution of Scientific Disciplines to the Development of Landscape Ecology (Responsible Editors: F. Žigrai, J. Drdoš)

3.1. Contribution of metascience to the development of landscape ecology

3.2. Contribution of geography to the development of landscape ecology

3.3. Contribution of ecology as a science to development of landscape ecology

4. Landscape Ecology – Approaches and Methods
(Responsible Editors: J. Oťahel', Z. Izakovičová)

4.1. Landscape as research subject

4.2. Landscape-ecological and environmental research

Landscape structure in the context of environmental assessments

Landscape perception assessment (visual quality, emotional quality, landscape identity, habitat quality) .

Ecological optimization of the territory – methodology (LANDEP)

Landscape potential assessment and landscape synthesis

Conceptions of landscape planning and sustainability

Ecological carrying capacity

Ecological networks and landscape stability

Hydrological systems and landscape revitalization

Landscape as the basic concept in environmental impact assessmen

Integrated landscape management – basic tool for implementation of the sustainable Development

5. Landscape Ecology and Practice

(Responsible Editors: M. Kozová, M. Finka, J. Drdoš)

5.1. Landscape ecology, spatial development of the society and planning

5.2. European Landscape Convention and legal framework of landscape planning

European Landscape Convention and its implementation in the Slovak Republic

Starting points of legal framework of landscape planning – vision of instrument for ensuring landscape protection, planning, management and its creation

5.3. Landscape ecology and current tools of landscape management

Landscape-ecological/landscape plan based on LANDEP methodics

Land consolidation and their impact on land management

Forest management plans

Water management planning

Management of protected areas

Management of protection of the characteristic landscape appearance

Environmental impact assessment of activities and strategic documents

Geographic Information Systems and digital maps in landscape ecology

5.4. Academic education on protection, planning, creation and management of landscape.

6. Application of Landscape-Ecological Research

(Responsible Editors: T. Hrnčiarová, P. Tremboš)

6.1. Evaluation and interpretation of landscape structure with respect to abiotic components

6.2. Evaluation and interpretation of landscape structure with respect to biotic components

6.3. Land use changes

6.4. Territorial system of ecological stability and biodiversity

6.5. Ecological carrying capacity

6.6. Landscape-ecological planning and landscape management

6.7. Environmental impact assessment

6.8. Application of landscape ecology in the teaching and education

7. List of Authors