

D. G. Green, N. Klomp, G. Rimmington, S. Sadedin: COMPLEXITY IN LANDSCAPE ECOLOGY. - Springer, Landscape Series, Volume 4, Niger, Paperback, 2009, 208 p., ISBN 978-90-481-2391-9.

The book reflects the struggle of present generations of scientists to find rather simple research subjects and to use for their study sophisticated apparatus than to ask for complex causalities where every working tool has only weak interpretative power. Complexity is typical feature for higher level of nature organization levels – such as landscapes. Standardized experimental way of answering the questions doesn't find basic assumptions including the possibility of numerous repetitions: any „sample“ of landscape is unique (at least due to specific geographical coordinates). However, the authors of this book want to stimulate the interest in complicated ecological phenomena through explanations with general (and simple) ecological principles. This is the reason why the book could serve as eligible introduction to a complex topic (see also Kovář 2008).

The main aim is to communicate by intelligible way how understand patterns of plants and animals in a landscape with all their interactions with each other, and with their environment. Final interpretations emphasize networking of ecosystems as the highest degree of natural complexity. The book provides the first overview of the recent research about structures and processes in ecosystems and landscapes and/or environmental complexity for wide educated public. Topics such as connectivity, feedbacks, networks and their influence on the stability and predictability of any ecological dynamics are presented in the publication. All through the book authors present a new perspective through the attempt for synthesis of traditional ecology. The understanding of ecological complexity is crucial in today's globalized and interconnected world. Only combinations of restoration aspects in management ecosystem complexity, biodiversity, parameters of the environment with geographic and socioeconomic datasets could lead to the success in our global stewardship.

The key terms are explained from variety of viewpoints and declared by many questions used as headings of partial chapters in the book: What is complexity? What makes ecosystems complex? Why study ecological complexity? A new ecology for a new millennium? Is there a balance of nature? Who eats whom? Do ecological communities exist? Is there a balance of nature? What is artificial life? Also the answers indicated in the subchapter headlines bring fresh stimulants of thinking: From informatics to e-ecology; The Game of Life; Transients and attractors; Turtle geometry; Daisyworld, etc. In this context, the absence of Index with the most frequent and substantial terms or assemblages of words with new terminological colours is something to be recommended for future re-editions.

The key subjects of the authors' communication priorities are treated hierarchically along the main axis of the book disciplinary field. Attributes of ecological complexity across organizational levels used for the nature cover: structuring shapes (fractals, networks, tangled web, etc.), processual imbalance (paradox of stability, feedbacks in food web, etc) or architecture of building stones of complexes (populations, neighbours' interactions, genetic elements, etc.). Symptomatic approach consists of simulation models and virtual worlds manifested and the authors use the appropriate part of their book for easy-to-read text (may be the paradox for some consumers). Chapter 11 (the last one) called „The global picture“ is more practical in the sense of conclusions for possible scenarios of the future of Earth (cf. Kovář 2011), however, the well known controversial debates are slightly shifted

to the level: Is global warming happening? But the final message is highly serious: it declares the necessity of resolving such important issue the global change represents.

The paperback *Complexity in Landscape Ecology* is an interesting reading recommendable to anybody who needs a simple introductory insight into the named complex topic of landscape ecology.

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REFERENCES

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KOVÁŘ P. (2011): Lee Hannah: *Climate change biology*.- AP Elsevier, Amsterdam etc., 2011, 402 p., ISBN 978-0-12-374182-0. - *Journal of Landscape Ecology*, 4(2): 76-77.

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