

Lóczy, D., Stankoviansky, M. and Kotarba, A. (eds): **Recent landform evolution. The Carpatho-Balkan-Dinaric Region.** Springer Geography, Dordrecht, 2012. 460 p.

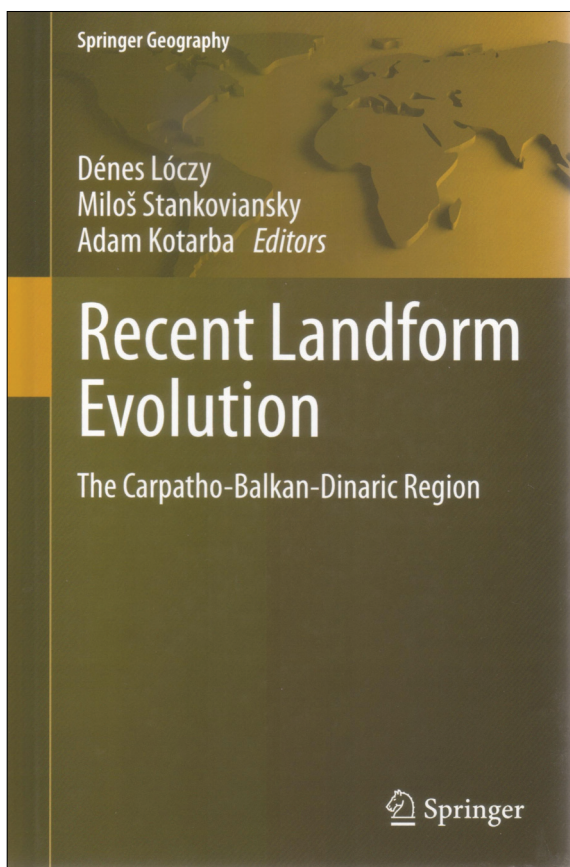
Present day geomorphologic processes have special interest in physical geographic research. The continuously growing knowledge on landscape formation is the basis of a successful spatial planning. Each country needs exact data on surface morphology and particularly on surface processes to manage the environmental resources and problems.

The whole surface of Earth is always changing due to the results of different landform evolution events, accordingly both draft and detailed description of surface formation and its related processes are complicated and they are basically scale-dependent. This monograph published as part of the Springer Geography series solves that problem by outlining the development directions of the surface of the study site. As it was also emphasized by the editors, the study area boundaries are not ordinary ones since they follow physical borders on one place and political borders on the other. This unusual location and shape of the research area are the results of some former cooperation among the national research groups of the region. The volume can be interpreted as a late outcome of the Carpatho-Balkan Geomorphological Commission and the International Association of Geomorphologists Carpatho-Balkan-Dinaric Regional Working Group. The cooperation

within the framework of the mentioned groups has long traditions. Lóczy, D. the recent president, highlighted the importance of the collection of national investigations on geomorphology.

The volume contains three main parts. Part I is a general description of the main environmental circumstances of the region, however, the actual boundaries are hardly comparable with those drawn from a physical point of view. Four chapters highlight the role of the most important factors in recent land formation, namely geology, climate, rivers and land cover/use. In subchapter "Geology" and "Rivers" the text division follows the spatial units of the region, while the others focus on separate parameters of climate (i.e. zonation, temperature, precipitation etc.) and the processes of land use (change).

The second part is a collection of national studies on surface formation. That part accounts for nearly 90% of the whole volume. Altogether 11 countries (Bulgaria, Croatia, Czech Republic,



Hungary, Macedonia, Poland, Romania, Slovakia, Slovenia, Serbia and Ukraine) present their results excluding Austria. The editors made efforts to uniform at least the structure of the studies, but because of the mentioned differences between political and natural borders, the chapters are varied. The general national chapter begins with an abstract followed by the introduction focusing on the historical presentation of investigations. The authors discuss the most important landscape forming processes in individual subchapters step by step according to their country attributes and traditions. In some cases the classification and description of the landforms are the basis of the study structure. Each subchapter is compiled by one or two geomorphologic expert on the topic; accordingly every single subchapter is independent from each other. Most of the country studies have a separate subchapter on soil erosion, fluvial landscape formation, eolian, periglacial and karst processes and mass movements. Unfortunately, the list of contents contains only the main titles of the national chapters while the subtitles can only be found in the text.

The roles of biological and especially human impact on surface formation are emphasized to different degrees in the separate country reports. For instance, in the Hungarian chapter that part concentrates on mining and does not underline the influence of agriculture and infrastructure development, however, they have critical importance. Broadly speaking, the approach of the studies is mainly descriptive; the authors let the reader to conclude the results of the facts. That kind of presentation is very good for experts and researchers but for students, further interpretation would be needed in some cases. Furthermore, the monograph exceeds 480 pages in present form, so additional information could reduce its usability.

The third part is the conclusion but it doesn't contain any general conclusions in a usual way. Instead, the editors briefly summarise the history of the above mentioned cooperation and discuss the traditions and research directions of the different schools and countries. Traditional differences and high diversity of the region cause the hard comparability of the results and the lack of a general conclusion.

Although I did not find the price of the monograph printed in the volume, copies for around 180 USD are available on the web. That cost sounds badly for an average Hungarian undergraduate and even a researcher of our region considering buying a copy. I presume that the copies of public libraries will be very popular. I fully agree with the editors who emphasize that the most important achievement of the monograph is the revelation of the significance of "mutual learning starting with the unification of terminology and finishing with the creation of international teams in thematic research". I believe that this volume is not only a useful resource for today and future geomorphologists of the region but could be a basic work for everyone who is interested in physical geography.

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