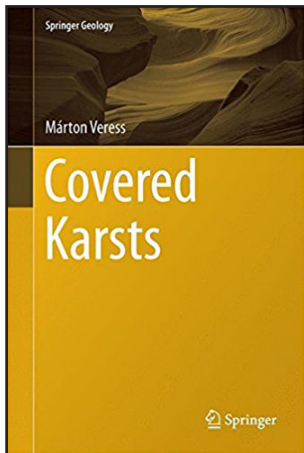


Márton Veress

Covered Karsts

2016, Springer Science + Business Media Dordrecht, 536 p., ISBN 978-94-017-7516-8
Hardcover, \$139; eBook \$109.



Márton Veress, a retired Professor of Physical Geography at the University of West Hungary, claims this book is the product of forty years of fieldwork and academic experience. Actually, his two previous books have established the framework for this one, in which the focus is mainly on the subsurface karst. The book contains the following 8 chapters:

1. General description of karst: The first chapter begins with analysis of karst hydrology, superficial karst features, and caves followed by the introduction of the karst types. The chapter discusses far too many perspectives on karst types and superficial karst fact that may overwhelm and become tedious for the reader.

2. Study areas: In the second chapter the regions under study (Bakony Mountains, Hungary and Atacama Desert) are introduced by using maps, table, and texts. A better method would have been to introduce the areas under study by using descriptive maps and tables at the end of the first chapter.

3. Methods: In the third chapter six approaches analyzing and comparing the forms of karst zones are presented. Useful methods acquired by the author through his fieldworks and laboratory surveys are introduced. This chapter can help many researchers in the field of karst to get acquainted with the tools and methods of investigation in karst regions.

4. Classification of covered karst: With regard to the wide variety of the terms and definitions for covered karst, the author has described covered karst as follows: " ... all kinds of karst where the karst rock is covered by non-karst rock under the soil, irrespective of the character of this rock - or where the non-karst rock governs or entirely controls the processes in the karst area" (p. 100). The three general criteria for distinguishing are: the characteristics of the coating, the type of the rock and the origin of the covering deposits, and the age of the karstification. One of the top qualities of this chapter is the geomorphologic maps, which are included to gain a better understanding of the subject.

5. Covered karst landforms: In this chapter, a review of buried karst landforms characteristics is presented. Underground karrens are analyzed with respect to their various origin and rock types. Caprock and subsidence dolines are another group of covered karst landforms explained through examples and illustrations, mostly from the karst regions of Hungary. The author has used the term "Depressions of Superficial Deposit (DSD)" for closed pits created in superficial covered karst deposits, similar to Ford's "bedrock closed depressions".

6. Covered karst processes: At high altitudes, water and snow melt water greatly affect the process of karstification. Swallow holes, shafts, and dolines have major influences on sedimentation and covered karst processes.

7. Landform evolution and development: This chapter begins with analysis of the formation of a variety of superficial, subsoil karrens and dolines. The origin of subsidence dolines and ponors is also presented. Some topics (e.g., DSD and remnant caves) are discussed again in this chapter from a different perspective, adding some confusion onto why the author chose to split these presentations in two separate chapters.

8. Evolution of covered karst surfaces: The beginning of this chapter is about the development of karst classification. The main titles are about the transformation of covered karst. No criterion is defined for this division. Furthermore, the explanation for each section and region is not consistent. For instance, the most emphasis is on temperate region karst, but the description for the karst region of Tundra and Taiga is very limited.

For a better understanding of the content, there are over 360 images that play an important role in teaching, studying, and learning the concepts. However, repeating some of the topics in different chapters has significantly increased the total number of pages in the book. The book's emphasis is on geomorphology, and although covered karst is strongly related to underground waters and caves, this topic is not discussed adequately in the book. Nevertheless, I recommended this book to all researchers in the karst field, especially geomorphologists and geologists. The presented topics can be useful for postgraduate and doctoral students.

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