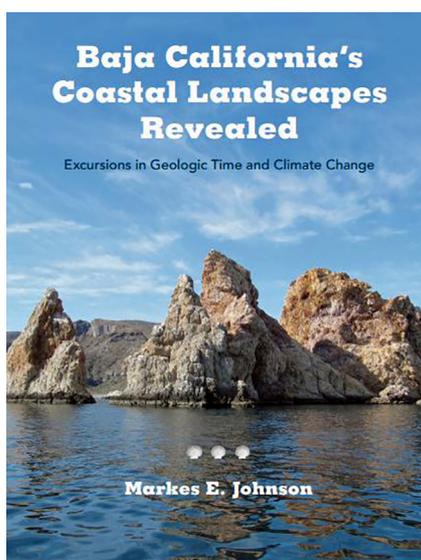


**Baja California’s coastal landscapes revealed: excursions in geologic time and climate change**, by Markes E. Johnson, 2021. The University of Arizona Press, Tucson, 237 pages. Paperback: price \$22.95, ISBN 978-0-8165-4252-9.



There are places that look like an encyclopedia of geology, geologists who are able to turn the pages of such an encyclopedia, and printed books that are even more exciting than any encyclopedia of nature. All this embraces the geological landscapes of Baja California, Professor Markes E. Johnson, and his new tome on that huge Mexican peninsula with its unprecedented geodiversity and multiple geological enigmas. Indeed, this is more than a regular book on unique geological domains. In fact, it is a synthesis of current knowledge of some geological wonders, of issues predestined for further investigations and of a source of unlimited inspiration. And, of course, this is a ready guide for all those who are interested in geological processes along the continent-ocean transition of North America and the Pacific. Subjects such as stratigraphy, sedimentology, volcanology, tectonics and palaeogeography can be found in this volume, as well as geomorphology and climate change; moreover, it transfers the very spirit of Baja California with its unique nature and culture. The book demonstrates strong logic and focuses on a definite set of interconnected phenomena.

Johnson’s book consists of a preface, ten chapters and several technical sections. The first chapter discusses hurricanes and storms, geological history and contemporary climate change (“global warming”). Each of the next eight chapters offers excursions to particular places in Baja California; these virtual excursions are based on the author’s experience in the field (which means that these can be judged as geotourist excursion templates). In all cases, the author starts with general descriptions of a locality, followed by characteristics of particular phenomena (these sections are referred to as “Feature events”) and rounded off by some far-reaching scientific interpretations. For instance, chapter 5 is devoted to Carmen Island (Isla del Carmen), in the Gulf of California, where Johnson informs us about Pliocene-Pleistocene limestones and enigmatic gravel beds and explains the local geological setting and history. Note that the author does not offer us ready solutions, but guides us through his own observations and interpretations, which permits us to understand how geological questions are tackled. Carbonate deposition, mega-delta formation, hurricanes and related large clasts, geomorphological evolution and local tectonic activity are discussed and put in a general frame. Each chapter is rich in highly diverse information. In particular, igneous and volcanic rocks, megaclast deposits, coral reefs, palaeoenvironmental changes and catastrophic events are considered. Chapter 10, on the southern point of Baja California, also serves as a kind of conclusion. The author writes about the development of the Pacific rim, storm activity, and ongoing climate change and explains how deciphering the geological records sheds light on our future.

Indeed, this book is highly informative and relevant to many issues currently debated in contemporary geosciences. For instance, the Pliocene warm world offers a possible scenario for the future. In addition to the present tome, Johnson published a notable review on this subject (Johnson, 2021) and data on sculptured granites from Baja California augments our global knowledge of the geomor-

phology of granite domains (Migoń, 2021). Finally, what is this book if not an excellent contribution to studies of geoheritage and geotourism? Such works will allow to promote these studies and also to overcome some relevant barriers (Williams et al., 2020).

Johnson's book has a reader-friendly style with personal storytelling, but without oversimplifications, complications and redundant phrases. Importantly, it is organised very logically and includes a good list of references, glossary and subject index. The book is illustrated very profusely, with photographs, maps, explanatory drawings as well as colour plates illustrating the wonders of Baja California. All these graphics do not look like a chaotic collage, but, in contrast, are well thought through, standardised and in balance with the text. This is a great example of how geological information should be illustrated. From the technical side, this book is perfect – a true success story for author and publisher alike!

After reading Johnson's book, beginners will have lost their doubts about making a career in geology, and professionals will have received fresh ideas and only positive emotions. In other words, this book is a 'must read' for anyone involved in

the earth sciences, irrespective of whether you are professor, student or amateur. It teaches what geology is and how this looks in the field; if even you have not had a chance to visit Baja California (and, worse, if you have not heard about it), the author's intellect and passion will work for you anyway.

## References

- Johnson, M.E., 2021. Geological oceanography of the Pliocene warm period: a review with predictions of the future global warming. *Journal of Marine Science and Engineering* 9, 1210.
- Migoń, P., 2021. Granite landscapes, geodiversity and geoheritage – global context. *Heritage* 4, 198-219.
- Williams, M.A., McHenry, M.T. & Boothroyd, A., 2020. Geoconservation and geotourism: challenges and unifying themes. *Geoheritage* 12, 63.

Dmitry A. Ruban  
K.G. Razumovsky Moscow State University  
of Technologies and Management  
(the First Cossack University), Moscow, Russia  
e-mail: ruban-d@mail.ru