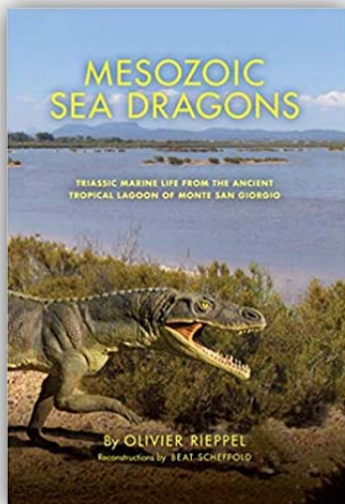


BOOK REVIEW
By Anthony R. Fiorillo



*Mesozoic Sea Dragons: Triassic Marine Life from the Ancient
Tropical Lagoon of Monte San Giorgio*

Olivier Rieppel

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Some years ago I was traveling with my family around Lago di Como in northern Italy. Because I was traveling with my family, I spent very little time looking at the stratified rocks exposed throughout the area, rather my attention was spent in search of gelato. As part of that hunt, we entered the village of Varenna and took a hike up to the thirteenth century castle, Castello di Vezio. To my surprise, wandering through this ancient castle I came upon an exhibit that included cast skeletal material on the even more ancient nothosaurid, *Lariosaurus*. At that moment, it finally occurred to me where I was and the tourist in me left, leaving me to think how much preparation I could have done ahead of our trip to this part of the world.

If I should find myself back in the area of northern Italy and southern Switzerland, certainly that preparation will include re-reading *Mesozoic Sea Dragons: Triassic Marine Life from the Ancient Tropical Lagoon of Monte San Giorgio* by Olivier Rieppel. This volume contains many high-quality images of the plethora of beautiful fossils found across this region, as well as numerous stories about those vertebrate fossils, certainly features one would expect from such a work. The story told here is rich, given the career spent by the author on the subject

matter. But with the clear attention also spent on the history of the fossil collecting, this book seems to be the result of a strong passion by the author. The attention spent on details puts life into some of the early workers for readers. For example, Rieppel reverently tells us about many of the important fossils Bernhard Peyer collected during his career. But rather than leave the story there, we are also told about a typical break in a field day, a break that includes Peyer stuffing his pipe and sipping espresso with Grappa di Ticino, touches that humanize Bernhard Peyer for us.

The book contains many wonderfully detailed reviews of aspects of the fossil record of fishes and marine reptiles found in these rocks. Some of the more interesting capsules are around topics such as the monophyly question regarding protosaurs, and a story involving Peyer and Franz Nopsca concerning why the correct genus name of one of these reptiles is *Macrocnemus*, and not *Macrochemus*. The discussion provided by Rieppel on the proper spelling for this fossil animal was somewhat reminiscent of another within the paleobotany world regarding the proper spelling of the cycad-like fossil plant, *Nilssonia*. Another personal favorite examination regards the

Thalattosauria, and also the issue of the group's monophyly. With respect to the enigmatic nature of the clade, Rieppel states, "understanding of its relationship among reptiles... follows a tortuous path of confusing research... and has not quite come to a conclusion even today." The statement not only left me smiling, but also left me wondering not if there was a dissertation project on the topic looming on the horizon, but how many? While most of the story told in this volume centers on life that lived in the ancient waters preserved by the rocks of this region, Rieppel does let the discussion wander onto the land in the form of an intriguing consideration of the rauisuchid *Ticinosuchus* and the likely relationship between this broader group of suchians and the classic ichnogenus *Chirotherium*. All told, this book is filled with delightful highlights of relevant paleontological problems and issues centered on the Triassic. And in these times, it was admittedly a pleasure to read that one of the preeminent scholars of Earth's natural history, Louis Agassiz, named a fossil fish after Mary Anning in 1837—affirmation that at

least some people of that time recognized Anning's significant contributions to science.

Also, while much of the volume is spent on the historical importance of the fossil record from this part of the world, representing the western Tethys, Rieppel continues by also framing the work now being done by many colleagues investigating the rocks representing the eastern Tethyan in China. These new discoveries are illuminating a larger biogeographic stage that includes the suggestion of Triassic provincialism among some marine reptile groups. But it is one thing to outline faunal provinces in paleobiogeography, it is another to provide plausible mechanisms to explain them. As such, I appreciated the discussion on the limited biogeographical utility of ichthyosaurs due to their 'superior dispersal capabilities' in comparison to other contemporary marine reptiles.

To summarize, as a reader of this work, I was left with a sense of anticipation of what is still to come in the study of the Triassic marine realm. As a single source on the subject, this is a much appreciated volume.

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