Cornucopia


The Late Jurassic (Kimmeridgian) localities of the Swabian Alb (Baden-Württemberg), Germany, have yielded a diverse flora and fauna including, in some cases, spectacularly complete, richly informative specimens. One of the oldest known localities is the Nusplingen Plattenkalk of Egesheim near Nusplingen. Since its discovery in 1839 this locality has yielded some of the most spectacular fossil finds, such as the pterosaurs described by Oskar Fraas and Friedrich August Quenstedt in 1855. Such finds raised hopes for further discoveries which led to many attempts to excavate the rich petrified treasures of the Nusplinger Plattenkalk.

A new book published by authors affiliated with the Staatliches Museum Für Naturkunde Stuttgart, describes the latest and most successful, scientific excavation at this famous locality that has been continuing since 1993. From that time more than 7000 specimens have been found and over 250 kinds of plants and animals described, among them the title monkfish a shark similar to a skate, sea crocodiles, pterosaurs, crayfish and land plants of exquisite preservation. The new excavations have benefitted tremendously from the application of modern methods and more comprehensive approaches that have included contributions by sedimentologists and taphonomists. This has shed new light on the fossil finds. One can only hope that other institutions will follow Staatliches Museum Für Naturkunde Stuttgart example and will return with these new methods to the many other localities which were initially discovered and excavated in past centuries. The book begins with an extensive review of the history of the locality. This is followed by descriptions of the geological setting, methods of excavation and fossil preparation. Paleogeographic maps and reconstructions of the environments enable the reader to imagine the realm of the monkfish. The overview of the past fossil finds includes flora and fauna: sponges, mollusks, arthropods, brachiopods, bryozoans, echinoderms, fishes and reptiles. Coprolites are mentioned also. A listing of all the Nusplingen Plattenkalk biota is provided. The protected area of the excavation (“Nusplinger Plattenkalk”) is briefly described.

In the second part of the book, the importance and scientific meaning of selected finds is explained. Some specimens are presented with exceptional detail. The excellent color photographs of the fossils, drawings of important elements, together with accurate descriptions and sometimes pictorial restorations enable the reader to imagine the biology of the organisms and to understand their life style. Various, moderately preserved radiolarians are also very well presented. The authors provide many detailed descriptions and photographs of some of the many species of ammonites, crustaceans, and fishes. A vast bibliography completes the work; there is no index, however.

In summary, this book provides a comprehensive overview of the present state of paleontological research at this famous locality. It was written by specialists, but it should appeal both to the professionals and to the general public interested in natural history. This volume thus serves the dual function of providing an extremely useful, single-source compendium of previous results, and, because of the many splendid illustrations, an object of great esthetic value. It can thus serve as a great gift for professional paleontologists, amateur enthusiasts of paleontology, and the general public.

Tomasz Salej [salej@twarda.pan.pl], Instytut Paleobiologii PAN, ul. Twarda 51/55, PL-00-818 Warszawa, Poland.